

AIR CONDITIONING SYSTEMS

CITY MULTI

FULL PRODUCT LINEUP CATALOGUE

R32 R410A

WD
2025



▲PUHY-M200YNW-A1

R32

R32 CITY MULTI

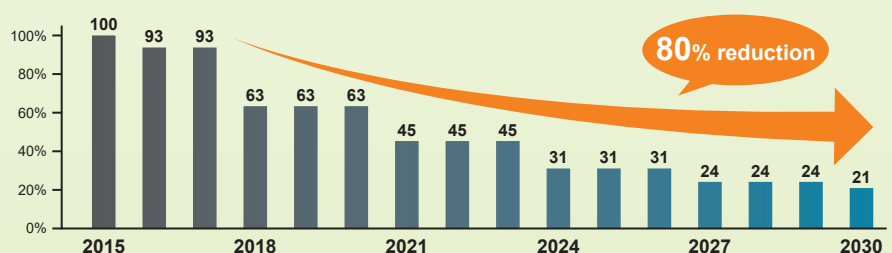
Mitsubishi Electric offers an environmentally conscious VRF system utilizing low GWP R32 refrigerant.

Global warming is a concern for the entire planet and is caused by an increased use of the greenhouse gases such as CO₂, methane, and fluorocarbons (F-gas). To reduce the greenhouse gas emission and mitigate climate change, the F-gas regulation was put into force to reduce use of HFCs with high Global Warming Potential (GWP). The target is to reduce total HFC (a type of fluorocarbon) amount by approximately 80% by the year 2030.

This has led to the demands to reduce the amount of refrigerant and for the use of refrigerants with lower GWP.

F-gas/HFC phase down program (CO₂ equivalent)

Reference value (100%) - average value from 2009 to 2012





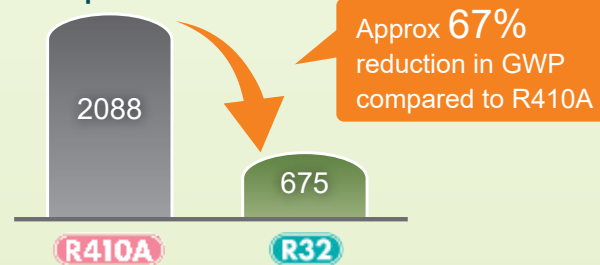
series

Approx 67% lower GWP*1

The CITY MULTI series using R32 reduce GWP by approx 67% compared to R410A.

*1. Source: IPCC 4th Assessment Report, global warming potential (GWP) 100-year value.
Comparison of 2088 (R410A) and 675 (R32).

• Comparison of GWP



*For more details of the R32 series, please refer to page 17.

*For precautions of the R32 series installation, please refer to page 230.

Our Products

► Outdoor Units

Y-Series

R32

Standard

PUHY-M YNW-A1(-BS)

High efficiency

PUHY-EM YNW-A1(-BS)

R410A

Standard

PUHY-P Y(S)NW-A2(-BS)

High efficiency

PUHY-EP Y(S)NW-A2(-BS)



P.11

*This image shows the R410A standard type.

R2-Series

R32

Standard

PURY-M YNW-A1(-BS)

High efficiency

PURY-EM YNW-A1(-BS)

R410A

Standard

PURY-P Y(S)NW-A2(-BS)

High efficiency

PURY-EP Y(S)NW-A2(-BS)



P.13

*This image shows the R410A standard type.

ZUBADAN-Series

R410A

PUHY-HP Y(S)NW-A



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S-Series

R410A

1-fan type

PUMY-SP VKM2(-BS)

PUMY-SP YKM2(-BS)



R410A

2-fan type

PUMY-P VKM6(-BS)

PUMY-P YKM5(-BS)

PUMY-P YKM3(-BS)

PUMY-P YBM2(-BS)



P.81

Unparalleled Mitsubishi Electric air conditioning systems

Mitsubishi Electric is a globally-renowned household name with a solid reputation for excellent products and services. The company was founded in 1920 and is known by its present name of Mitsubishi Electric. Since our foundation, we have risen to the very pinnacle of the air conditioning industry and we continue to maintain that position. The company is proud of its achievements in providing some of the most energy-efficient systems on the market.

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► Indoor Units

Ceiling cassette

R32 R410A 4-way airflow

PLFY-M VEM-E
PLFY-M VEM6-E



P.105

Ceiling concealed

R32 R410A Medium static pressure

PEFY-M VMA(L)-A
PEFY-M VMA(L)-A1



P.125

► Remote Controller

Centralized remote controller

AE-C400E



P.190

Wired MA remote controller

PAR-41MAA



P.196

Outdoor Units

Mitsubishi Electric offers a wide range of products in order to meet air-conditioning needs for both new constructions and existing buildings.



R32 Air-Cooled Units

Air cooled

Y-Series

Cooling or Heating Heat pump

Standard: 8-12HP High efficiency: 8-12HP



- R32 refrigerant lineup
- Standard and high-efficiency models up to 12HP
- Two-pipe refrigerant system, which allows for system changeover from cooling to heating

P.11

R2-Series

Simultaneous Cooling and Heating Heat recovery

Standard: 8-12HP High efficiency: 8-12HP



- R32 refrigerant lineup
- Standard and high-efficiency models up to 12HP
- Simultaneous cooling and heating operation with a two-pipe system available only from Mitsubishi Electric
- Energy-efficient with heat-recovery feature

P.13

R410A Air-Cooled Units

Air cooled

Y-Series

Cooling or Heating Heat pump

Standard: 8-54HP High efficiency: 8-54HP



- A two-pipe refrigerant system allows for a system changeover from cooling to heating, and ensures that a constant indoor climate is maintained in all zones

P.11

R2-Series

Simultaneous Cooling and Heating Heat recovery

Standard: 8-44HP High efficiency: 8-44HP



- Simultaneous cooling and heating operation with a two-pipe system available only from Mitsubishi Electric
- Energy-efficient with heat recovery feature

P.13

R410A Units for Cold Climate

Air cooled

ZUBADAN-Series

Cooling or Heating Heat pump

8-20HP



- Provides superior heating performance in cold climates
- Maintains rated heating capacity even with an outside temperature of -20°C
- Operable in extremely cold outside temperatures down to -30°C

P.73

R410A Horizontal Airflow Units

S-Series





Cooling or Heating Heat pump

1-fan type: 4.5-6HP 2-fan type: 4.5-12HP





- Lineup expanded up to 12HP
- Compact design that allows individual air conditioning in small-scale buildings and stores

P.81

Refrigerant	R32			
System	Air cooled			
Type	Heat pump		Heat recovery	
Model name	Y-Series Standard	Y-Series High efficiency	R2-Series Standard	R2-Series High efficiency
	PUHY-M YNW-A1(-BS)	PUHY-EM YNW-A1(-BS)	PURY-M YNW-A1(-BS)	PURY-EM YNW-A1(-BS)
Model	 size S	 size S	 size S	 size S
modules HP	S	S	S	S
8HP P200	8	8	8	8
10HP P250	10	10	10	10
12HP P300	12	12	12	12
14HP P350				
16HP P400				
18HP P450				
20HP P500				
22HP P550				
24HP P600				
26HP P650				
28HP P700				
30HP P750				
32HP P800				
34HP P850				
36HP P900				
38HP P950				
40HP P1000				
42HP P1050				
44HP P1100				
46HP P1150				
48HP P1200				
50HP P1250				
52HP P1300				
54HP P1350				

* Indicates single modules and indicates combination modules.




*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

Refrigerant	R410A											
System	Air cooled											
Type	Heat pump						Heat recovery					
Model name	Y-Series <div>Standard</div>			Y-Series <div>High efficiency</div>			R2-Series <div>Standard</div>			R2-Series <div>High efficiency</div>		
	PUHY-P YNW-A2(-BS) PUHY-P YSNW-A2(-BS)			PUHY-EP YNW-A2(-BS) PUHY-EP YSNW-A2(-BS)			PURY-P YNW-A2(-BS) PURY-P YSNW-A2(-BS)			PURY-EP YNW-A2(-BS) PURY-EP YSNW-A2(-BS)		
Model	<div></div> <div>size <div>S</div> size <div>L</div> size <div>XL</div></div> <div>*These images show the standard type.</div>						<div></div> <div>size <div>S</div> size <div>L</div> size <div>XL</div></div> <div>*These images show the standard type.</div>					
modules	S	L	XL	S	L	XL	S	L	XL	S	L	XL
HP												
8HP P200	8			8			8			8		
10HP P250	10			10			10			10		
12HP P300	12			12			12			12		
14HP P350		14			14			14			14	
16HP P400	8 8	16		8 8	16		8 8	16		8 8	16	
18HP P450	8 10	18		8 10	18		8 10	18		8 10	18	
20HP P500	10 10		20	10 10		20	10 10		20	10 10		20
22HP P550	10 12			10 12			10 12		22	10 12		22
24HP P600	12 12			12 12			12 12			12 12		
26HP P650	10	16		10	16		12	14		12	14	
28HP P700		14 14			14 14			14 14			14 14	
30HP P750		14 16			14 16			14 16			14 16	
32HP P800		14 18			14 18			16 16			16 16	
34HP P850		16 18			16 18			16 18			16 18	
36HP P900		18 18			18 18			18 18			18 18	
38HP P950	10	14 14		10	14 14			18	20		18	20
40HP P1000	10	14 16		10	14 16				20 20			20 20
42HP P1050	10	16 16		10	16 16				20 22			20 22
44HP P1100		14 14 16			14 14 16				22 22			22 22
46HP P1150		14 16 16			14 16 16							
48HP P1200		16 16 16			16 16 16							
50HP P1250		16 16 18			16 16 18							
52HP P1300		16 18 18			16 18 18							
54HP P1350		18 18 18			18 18 18							

* Indicates single modules and indicates combination modules.

*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

*For combination modules, be sure to check the complete module's model name including the last part of the model name (e.g.: -A2). Please refer to the "Set Model" rows in the "SPECIFICATIONS".

Refrigerant	R410A		
System	Air cooled		
Type	Heat pump		
Model name	ZUBADAN-Series	S-Series 1-fan type	S-Series 2-fan type
	PUHY-HP Y(S)NW-A(-BS)	PUMY-SP VKM2(-BS) PUMY-SP YKM2(-BS)	PUMY-P VKM6/YKM5/ YKM3/YBM2(-BS)
Model	 size L		
modules	L	-	-
HP			
4.5HP P112		4.5	4.5
5HP P125		5	5
6HP P140		6	6
8HP P200	8		8
10HP P250	10		10
12HP P300			12
14HP P350			
16HP P400	8 8		
18HP P450			
20HP P500	10 10		
22HP P550			
24HP P600			
28HP P700			
30HP P750			
32HP P800			
34HP P850			
36HP P900			

Y-Series

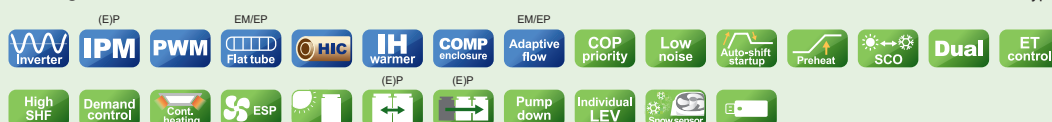
R32
R410A

Cooling or Heating **Heat pump**

- Features P.17 - P.21
- Specifications
 - R32**
 - Standard **PUHY-M YNW-A1(-BS)** P.22
 - High efficiency **PUHY-EM YNW-A1(-BS)** P.23
 - R410A**
 - Standard **PUHY-P Y(S)NW-A2(-BS)** P.24 - P.35
 - High efficiency **PUHY-EP Y(S)NW-A2(-BS)** P.36 - P.47
- Optional parts P.48
- Technologies and functions P.153



*This image shows the R410A standard type.

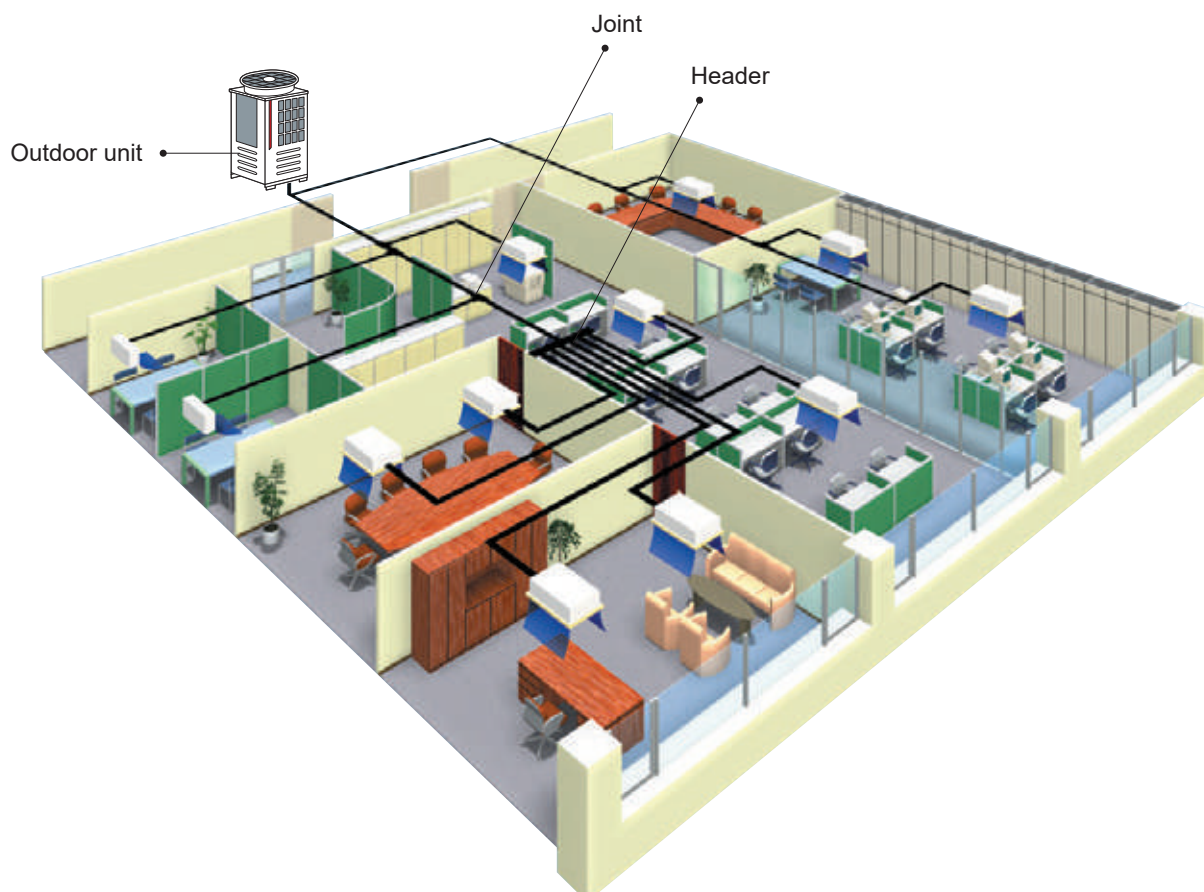


A two-pipe zoned system designed for heat pump operation

The CITY MULTI Y-Series (for large applications) makes use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes an inverter-driven compressor for effective energy use.

With a wide lineup of indoor units connected to a flexible piping system, the CITY MULTI Series can be configured to suit diverse applications. Up to 50 (Y-Series) indoor units can be connected with up to 130% connected capacity to maximize engineering design options. This feature allows easy air conditioning in each area with convenient individual controllers.

- Installation image (R410A Y-Series)

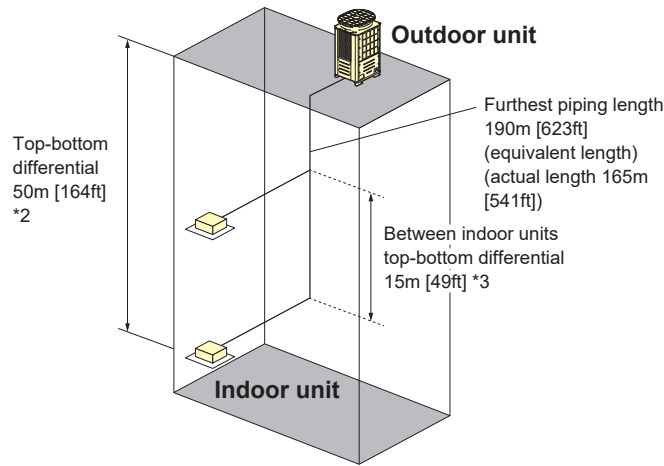


*For details of the installation restrictions, refer to the DATABOOK.

R32

• System Pipe Lengths [(E)M200–(E)M300]

Refrigerant Piping Lengths	Maximum meters [Feet]	Vertical differentials between units	Maximum meters [Feet]
Total length	1,000 [3,280]	Indoor/outdoor (outdoor higher)	50 [164]*1
Maximum allowable length	165 (190 equivalent) [541(623)]	Indoor/outdoor (outdoor lower)	40 [131]*1
Farthest indoor from first branch	40 [131]	Indoor/indoor	15 [49]*3

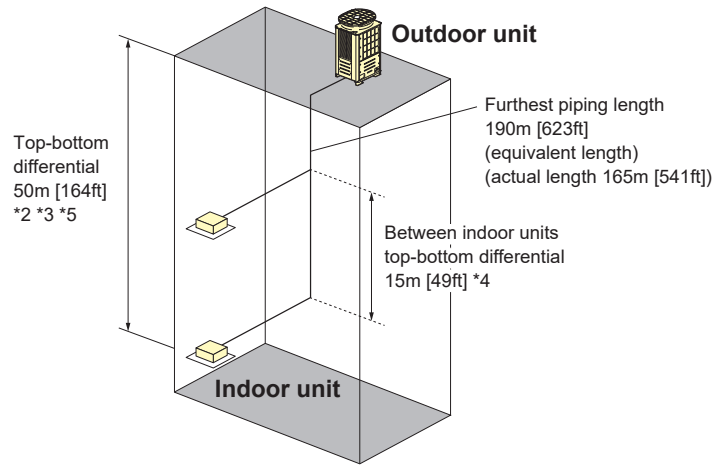


- *1 The maximum total height difference between the 1st joint and each indoor unit varies depending on the installation position of the 1st joint. Please refer to the DATA BOOK for details.
- *2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
- *3 30m is available. If the height difference between indoor units exceeds 15m (but does not exceed 30m), use one-size larger pipes for indoor unit liquid pipes.

R410A

• System Pipe Lengths [(E)P200–(E)P1350]

Refrigerant Piping Lengths	Maximum meters [Feet]	Vertical differentials between units	Maximum meters [Feet]
Total length	1,000 [3,280]	Indoor/outdoor (outdoor higher)	50 [164]*2
Maximum allowable length	165 (190 equivalent) [541(623)]	Indoor/outdoor (outdoor lower)	40 [131]*3
Farthest indoor from first branch	40 [131]*1	Indoor/indoor	15 [49]*4



- *1 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.
- *2 90m [295ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
- *3 60m [196ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
- *4 30m [98ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one size larger pipes for indoor unit liquid pipes.
- *5 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

R2-Series

R32
R410A

Simultaneous Cooling and Heating Heat recovery

- Features P.15 - P.21
- Specifications
 - R32**
 - Standard **PURY-M YNW-A1(-BS)** P.49
 - High efficiency **PURY-EM YNW-A1(-BS)** P.50
 - R410A**
 - Standard **PURY-P Y(S)NW-A2/TR2/RU2(-BS)** P.51 - P.60
 - High efficiency **PURY-EP Y(S)NW-A2/TR2/RU2(-BS)** P.61 - P.71
- Optional parts P.72
- BC controllers P.93 - P.101
- Technologies and functions P.153



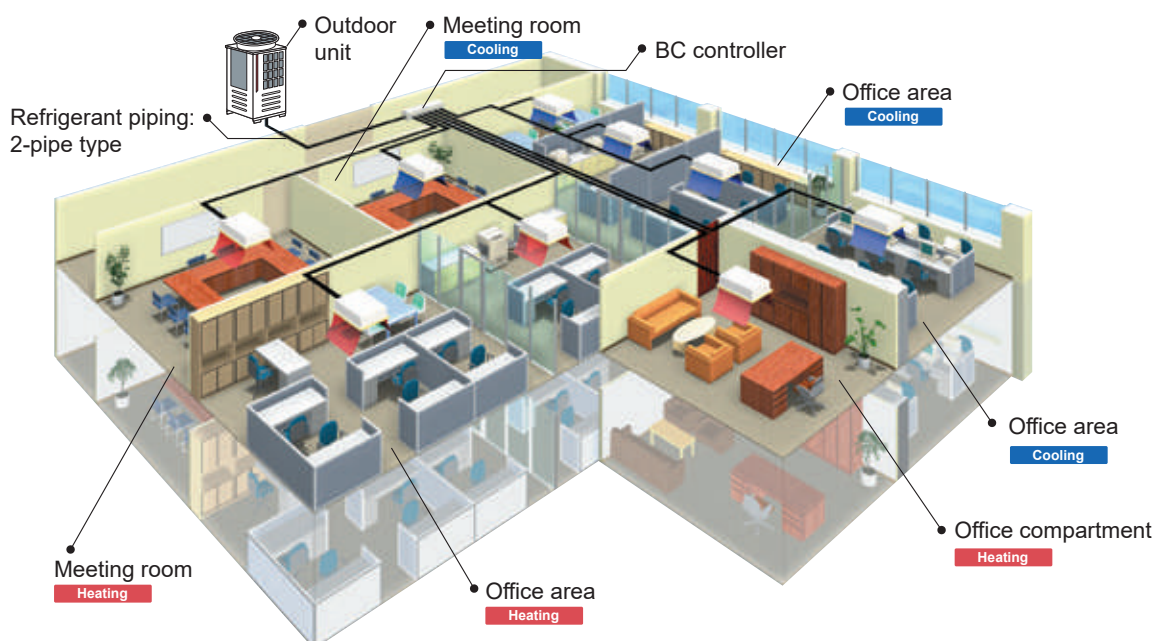
*This image shows the standard type.

The world's first two-pipe system that simultaneously cools and heats

The CITY MULTI R2-Series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. It is the technological heart of the CITY MULTI R2-Series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe.

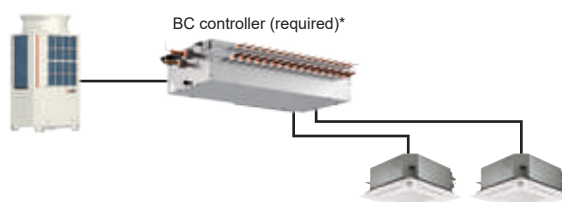
This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity.

- Installation image (R410A R2-Series)



*For details of the installation restrictions, refer to the DATABOOK.

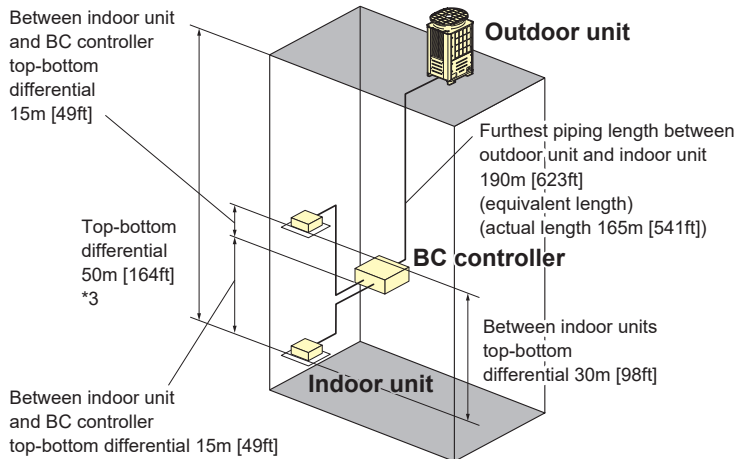
- System example



*R2-Series systems require the use of a BC controller.

- System Pipe Lengths [(E)M200–(E)M300]

Refrigerant Piping Lengths	Maximum meters [Feet]	Vertical differentials between units	Maximum meters [Feet]
Total piping length	550 [1,804]*1	Indoor/outdoor (outdoor higher)	50 [164]*4
Maximum allowable length between outdoor unit and indoor unit	165 (190 equivalent) [541(623)]	Indoor/outdoor (outdoor lower)	40 [131]*4
Maximum length between outdoor unit and single/main BC controller	110 [360]*1	Indoor/BC controller (single/main)	15 [49]
Maximum length between single/main BC controller and indoor unit and sub-BC controller*2	60-90 [197-295]	Indoor/indoor	30 [98]
		Main BC controller/Sub-BC controller	15 [49]

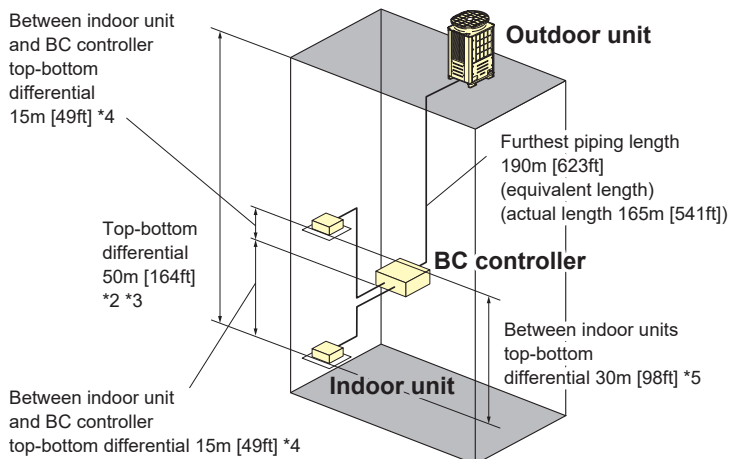


- *1 Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC controller.
- *2 When you install a sub-BC controller, please refer to DATABOOK for full details.
- *3 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
- *4 The maximum total height difference between Main BC and each indoor unit varies depending on the installation position of the Main BC. Please refer to the DATA BOOK for details.

R410A

- System Pipe Lengths [(E)P200–(E)P100]

Refrigerant Piping Lengths	Maximum meters [Feet]	Vertical differentials between units	Maximum meters [Feet]
Total piping length		Indoor/outdoor (outdoor higher)	50 [164]*3
(E)P200–(E)P300	550 [1,804]	Indoor/outdoor (outdoor lower)	40 [131]*3
(E)P350–(E)P550 (single module)	600 [1,968]	Indoor/BC controller (single/main)	15 [49]*4
(E)P400–(E)P600	750 [2,460]	*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.	
(E)P650	800 [2,624]	Indoor/indoor	30 [98]*5
(E)P700–(E)P1100	1,000 [3,280]	Main BC controller/Sub-BC controller	15 [49]
Maximum allowable length	165 (190 equivalent) [541(623)]		
Maximum length between outdoor and single/main BC controller	110 [360]		
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC controller.			
Maximum length between single/main BC controller and indoor and sub-BC controller*1			
	40-90 [131-295]		



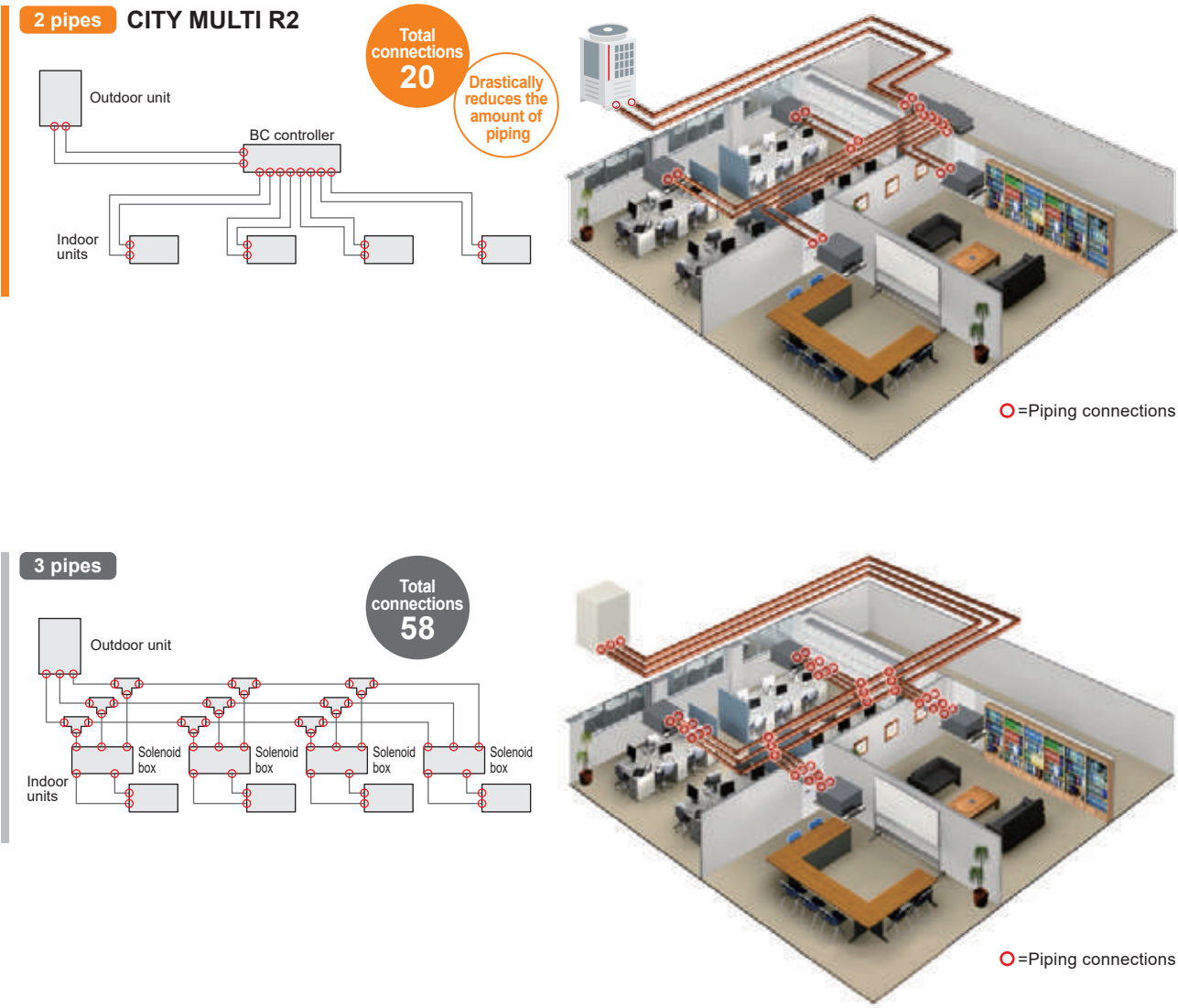
- *1 When you install a sub-BC controller, please refer to DATABOOK for full details.
- *2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
- *3 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.
- *4 Distance of Indoor sized P200, P250 from BC must be less than 10m [32ft], if any.
- *5 Distance of Indoor sized P200, P250 from BC must be less than 20m [65ft], if any.

Benefits of the R2 system

Unique to Mitsubishi Electric, our heat recovery technology uses just two pipes, as opposed to the market conventional three. Our R2 system, designed for effective simultaneous heating and cooling, offers substantial savings on installation and annual running costs.

Mitsubishi Electric 2-pipe R2 system: less piping/connections compared to a 3-pipe system

- Comparison example of piping connections



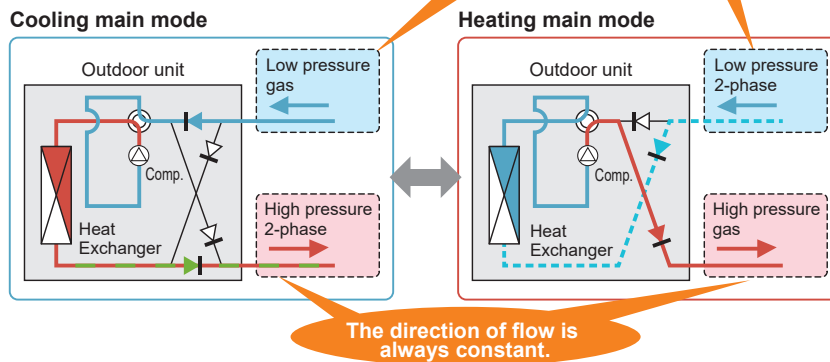
Lineup & Functions
Y-Series
R2-Series
ZUBADAN -Series
S-Series
BC Controllers
Ceiling cassette type
Ceiling concealed type
Ceiling suspended type
Wall-mounted type
Floor standing type
Functions
LOSSNAY System
Remote Controller
Hot Water Solution

Cooling/heating modes can be switched without stopping operation

When cooling/heating mode switches

- There is no need to stop the compressor.
- The refrigerant noise that is generated when the refrigerant flow is switched can be lowered.

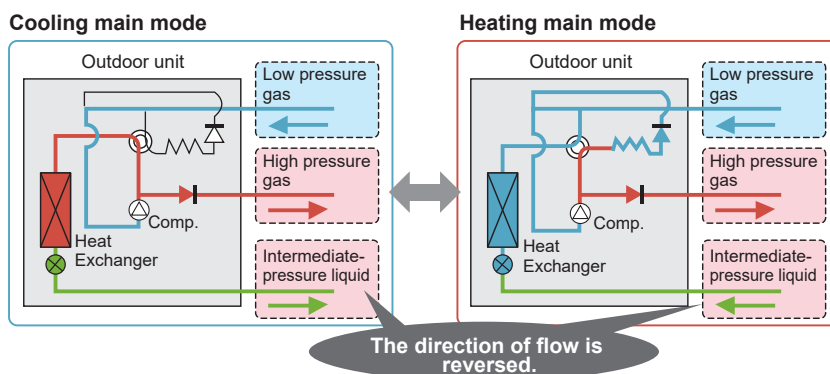
2 pipes CITY MULTI R2



When cooling/heating mode switches

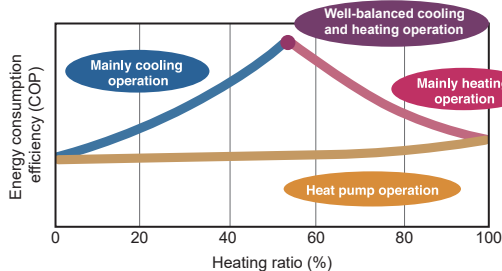
- Compressor shuts down.
- All indoor units stop for a few minutes.

3 pipes



Heat recovery operation for greater energy savings

- COP of the heat recovery system



COP of the heat recovery system

The more frequently cooling and heating are performed simultaneously, the greater the energy saving effect.

R32 CITY MULTI-Series

R32



CITY MULTI series utilizing R32 refrigerant. The lower GWP R32 model is a solution to reduce fluorocarbon emissions.

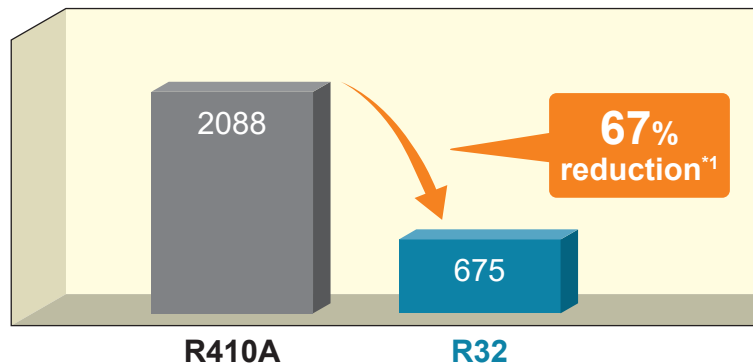
Low-GWP refrigerant

Adoption of R32 refrigerant

CITY MULTI series uses R32 with a 67% lower GWP than R410A to be more environmentally friendly.*1

*1. Source: IPCC 4th Assessment Report, global warming potential (GWP) 100-year value. Comparison of 2088 (R410A) and 675 (R32).

- Comparison of global warming potential



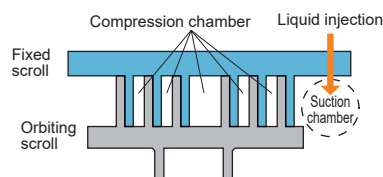
Development of compressor for adopting R32 refrigerant

Stable operation with suction chamber injection mechanism

To suppress rises in discharge temperature, Mitsubishi Electric has developed a compressor that adopts a suction chamber injection mechanism. This solves the problem that R32 has a higher discharge temperature than R410A.

- A mechanism for injecting

This mechanism suppresses the temperature rise of the discharge gas and supports operation in a wide temperature range.

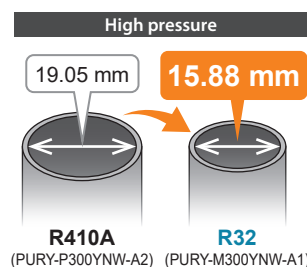


Reduced the amount of refrigerant

Reduced piping diameter

Compared to R410A, R32 is less susceptible to pressure-loss. This characteristics helps to reduce the refrigerant pipe size, reducing the refrigerant amount and the installation cost.

- Comparison of refrigerant piping diameter





Lineup



R32 outdoor can be connected to the BC controller (Heat recovery R2-Series only) and indoor units introduced in this page.

• Outdoor unit

Heat pump Y-Series



System	Model name	Model	8HP	10HP	12HP
			(E)M200	(E)M250	(E)M300
Air cooled	PUHY-M YNW-A1(-BS) Standard	 size S	●	●	●
	PUHY-EM YNW-A1(-BS) High efficiency	 size S	●	●	●



Heat recovery R2-Series

System	Model name	Model	8HP	10HP	12HP
			(E)M200	(E)M250	(E)M300
Air cooled	PURY-M YNW-A1(-BS) Standard	 size S	●	●	●
	PURY-EM YNW-A1(-BS) High efficiency	 size S	●	●	●



● : Available lineup

• BC controller

	Model name	Model	Number of branch
Main-BC	CMB-M104V-J1		4
	CMB-M106V-J1		6
	CMB-M108V-J1		8
	CMB-M1012V-J1		12
	CMB-M1016V-J1		16
	CMB-M108V-JA1		8
	CMB-M1012V-JA1		12
	CMB-M1016V-JA1		16

	Model name	Model	Number of branch
Sub-BC	CMB-M104V-KB1		4
	CMB-M108V-KB1		8

• Indoor unit

Type	Model name	Model	W	20	25	32	40	50	63	71	80	100	125	140
			kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Ceiling cassette 4-way airflow type	PLFY-M VEM-E PLFY-M VEM6-E			●	●	●	●	●	●	●	●	●	●	
Ceiling concealed medium static pressure type	PEFY-M VMA(L)-A PEFY-M VMA(L)-A1			●	●	●	●	●	●	●	●	●	●	●

● : Available lineup

Key features of YNW-Series

The 4-face air induction structural design and core components, such as compressor and fan, realizes energy-saving performance.

Energy Saving

Various key components have been equipped, improving energy-saving performance and meeting customers' requirements.

Flexible Noise Setting

All models in the series are equipped with low-noise operating mode as a standard feature. Choose from five different patterns for the optimum setting to meet the low-noise requirements.

Design

The modern design blends in well with most building architectures.

BC controller

Up to 11 sub-BC controllers can be connected to the main BC controller.

Flexible Noise Setting

Y-Series EP Y-Series P R2-Series EP R2-Series P

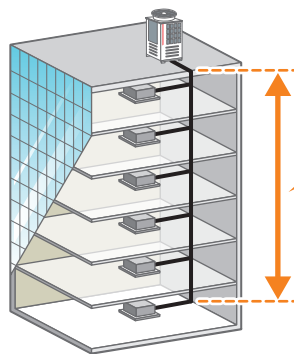
The low-noise mode, which conventionally only had one pattern, has been increased to four patterns so that a mode can be selected from a total of five patterns, including the rated pattern. The low-noise mode has four patterns 85%, 70%, 60% and 50% in respect to the fan speed. This can be set with the outdoor unit's dip switch. The pattern can be selected according to the customer's requests when low-noise operation is required.

*In the low noise mode, the capacity will reduce.

Usable in an application with a large vertical separation of up to 90 meters

Y-Series EP Y-Series P R2-Series EP R2-Series P

A height difference of up to 90 m from the outdoor unit to the indoor unit can be supported with no extra-cost options. This increases design flexibility and facilitates installation of these units even in high-rise buildings.



Height difference from outdoor unit to indoor unit:
The system can be configured with a height difference of up to **90 m with no extra-cost options.**

- * Whether the system can be configured with such a height difference varies depending on the model.
- * The maximum height difference is 60 m when the outdoor unit is located lower than the indoor unit.
- * Requires switch settings.

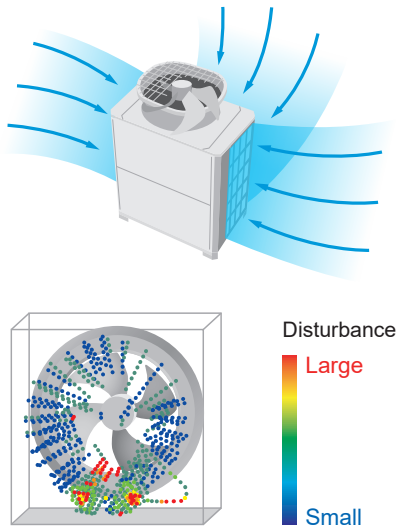
Key Components of YNW-Series

Four-way suction structure

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P

• Air suction structure

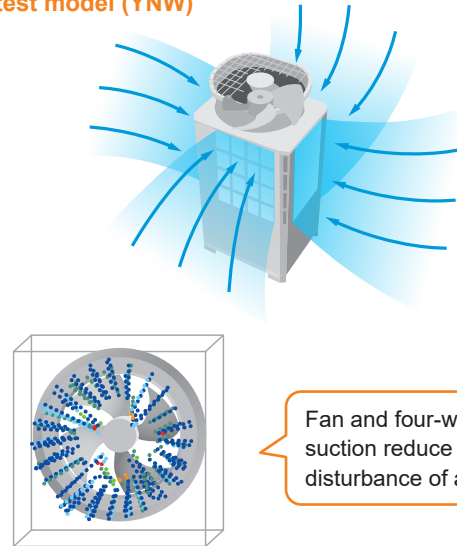
Conventional model (YLM)



Visualization of air flow of fan

Conventional three-way suction structure has caused a disturbance of air flow in the fan area on the panel side that has no heat exchanger.

Latest model (YNW)

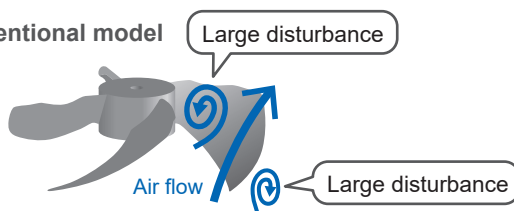


Visualization of air flow of fan

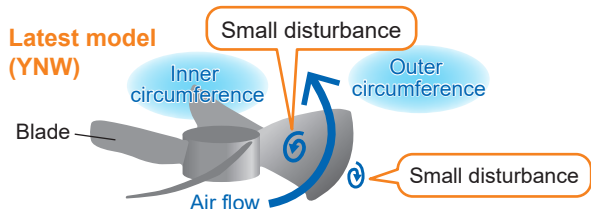
The four-way suction structure allows heat exchange without causing a disturbance of air flow in all directions.

• Fan structure

Conventional model (YLM)



Latest model (YNW)



Concave-shaped blade of the propeller fan allows to change the orientation (normal vector) of the blade surface from the outer circumference direction to the inner circumference direction as air flows from upstream to downstream. This enables air to flow along the outer circumference of the blade while reducing a disturbance of air flow that occurs in the upstream and downstream of conventional propeller fans, resulting in reduction of power consumption of the fan motor and air blow noise.

Furthermore, the change of the orientation of the fan blade from the outer circumference direction to the inner circumference direction reduces air leakage from the outer circumference and sends more air to the upstream of the fan.

Compressor with centrifugal force canceling mechanism

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P

The compressor, known as the heart of the air conditioner, has been developed. A centrifugal force canceling mechanism and a multi-port mechanism have been developed. In addition, we have mounted a high-efficiency motor. The synergetic effect of these latest technologies increases the compressor performance and efficiency, and also helps to improve the performance of the outdoor unit.

Centrifugal force canceling mechanism (8 to 14HP)

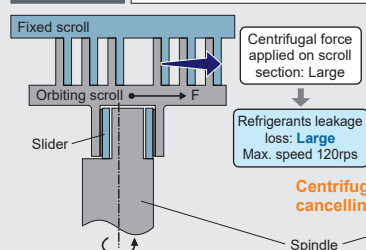
The structure of the scroll compressor causes a centrifugal force during operation. Conventionally, that centrifugal force is applied onto the scroll section. This causes refrigerant to leak, and restricts the increase in rotational speed to a maximum of 120rps.

With the latest compressor, the latest structure (centrifugal force canceling mechanism) has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps.

This mechanism also speeds up the start of operation, and enables operations such as preheat defrost operation and the smooth auto-shift startup mode.

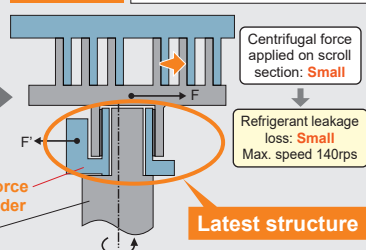
Conventional mechanism

Large loss Vortex pressing load (F) is high.

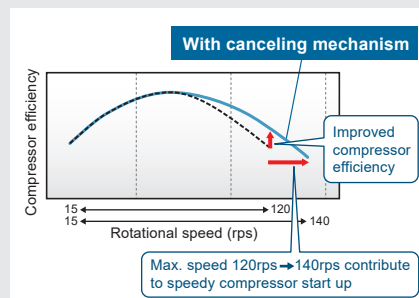


Centrifugal force canceling mechanism

Small loss Vortex pressing load (F-F') is low.



F: Centrifugal force applied on scroll section F': Centrifugal force applied on cancelling slider

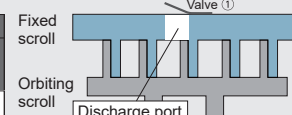


Multi-port mechanism

Efficient partial load operation is realised by avoiding over-compression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The latest compressor is equipped two sub-ports in addition to the conventional discharge port to reduce this over-compression loss during low loads. In operation conditions having a low compression rate, the distance in the compression process is kept short by that successfully avoiding unnecessary compression, and contributing to efficient partial load operation.

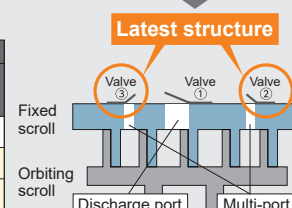
Conventional structure

Operation pattern		Fixed scroll	Orbiting scroll
Partial load	Rating, high pressure difference		
Main port	Valve ①	Open	Open



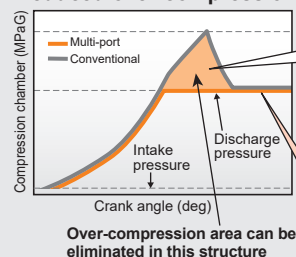
Multi-port structure

Operation pattern		Fixed scroll	Orbiting scroll
Partial load	Rating, high pressure difference		
Main port	Valve ①	Open	Open
Sub-port	Valve ②	Open	Closed
	Valve ③	Open	Closed



The sub-port is opened during partial load operation to discharge the over-compressed gas.

Reduced over-compression loss (multi-port)



Conventional model

Conventionally, gas refrigerant is compressed to a set pressure, and then lowered to the target discharge pressure at which it is discharged. This causes drive losses from over-compression.

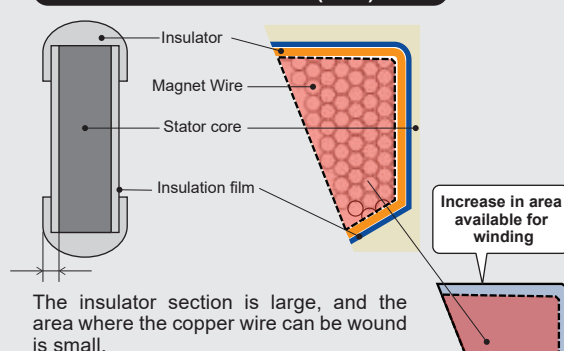
Multi-port

When the target discharge pressure is reached, the multiport opens, and the gas refrigerant is discharged. This reduces drive losses caused by over-compression.

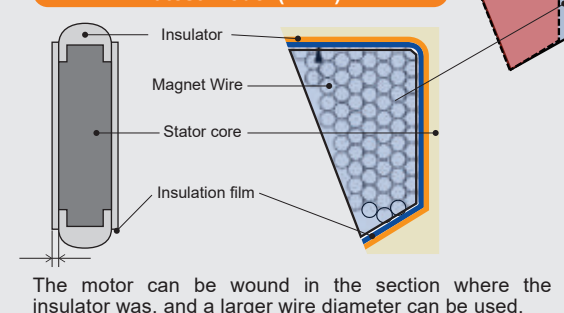
Improved high-efficiency motor

The insulator section that traditionally created a dead space is eliminated by insulating the motor's stator film. Since winding can be set in that section, the winding area can be increased by approx. 9%. The wire diameter has also been increased by two ranks, so the resistance between terminals is reduced, and the insulation distance is shorter. This improves the motor's operation performance and contributes to high-efficiency operation of the compressor.

Conventional model (YLM)



Latest model (YNW)



Y-Series

Standard

R32

PUHY-M YNW-A1(-BS)



Model			PUHY-M200YNW-A1 (-BS)		PUHY-M250YNW-A1 (-BS)		PUHY-M300YNW-A1 (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1	kW	22.4		28.0		33.5			
		BTU/h	76,400		95,500		114,300			
	Power input	kW	6.03		9.62		11.31			
	Current input	A	7.9-7.5-7.2		11.7-11.1-10.7		14.4-13.6-13.2			
	EER	kW/kW	3.71		2.91		2.96			
	SEER	kW/kW	7.65		6.90		6.70			
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)			
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)			
Heating capacity (Max)	*2	kW	25.0		31.5		37.5			
		BTU/h	85,300		107,500		128,000			
	Power input	kW	5.08		7.14		8.33			
	Current input	A	8.5-8.1-7.8		12.0-11.4-11.0		14.0-13.3-12.8			
	COP	kW/kW	4.11		3.71		3.64			
	(Nominal)	*3	kW	22.4		28.0		33.5		
		BTU/h	76,400		95,500		114,300			
		Power input	kW	5.18		7.01		8.74		
		Current input	A	7.3-6.9-6.6		10.0-9.5-9.1		11.8-11.2-10.8		
		COP	kW/kW	4.32		3.99		3.83		
		SCOP	kW/kW	4.35		4.39		4.12		
Temp. range of heating	Indoor	D.B.	15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)			
	Outdoor	W.B.	-20.0~15.5 °C (-4~60 °F)		-20.0~15.5 °C (-4~60 °F)		-20.0~15.5 °C (-4~60 °F)			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity			
	Model / Quantity		M20~M140/1~8		M20~M140/1~10		M20~M140/2~12			
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>		58.0 / 59.0		60.0 / 61.0		61.0 / 64.5	
Sound power level (measured in anechoic room)		*4	dB <A>		75.0 / 78.0		78.0 / 80.0		80.0 / 83.5	
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed			
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed			
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1			
	Air flow rate	m³/min	170		185		240			
		L/s	2,833		3,083		4,000			
		cfm	6,003		6,532		8,474			
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1			
	*6	External static press.	0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)			
	Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
Starting method		Inverter		Inverter		Inverter				
Motor output		kW	3.5		5.3		6.5			
Case heater		kW	-		-		-			
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740			
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16			
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection			
	Compressor		-		-		-			
	Fan motor		-		-		-			
Refrigerant	Type x original charge		R32 x 6.5 kg (15 lbs)		R32 x 6.5 kg (15 lbs)		R32 x 6.5 kg (15 lbs)			
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit			
Net weight		kg (lbs)	222 (490)		222 (490)		223 (492)			
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*4 Cooling mode/Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*7 R32 is flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.

For detail, refer to the section in the Databook on installation restrictions.

Y-Series

High efficiency

R32

PUHY-EM YNW-A1(-BS)



Model			PUHY-EM200YNW-A1 (-BS)		PUHY-EM250YNW-A1 (-BS)		PUHY-EM300YNW-A1 (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	22.4			28.0		33.5		
		BTU/h	76,400			95,500		114,300		
	Power input	kW	5.51			8.21		9.68		
	Current input	A	7.3-7.0-6.7			10.7-10.1-9.8		12.5-11.9-11.5		
	EER	kW/kW	4.06			3.41		3.46		
		SEER	kW/kW	7.76			7.51		7.26	
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)			15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)		
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)			-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)		
Heating capacity (Max)	*2	kW	25.0			31.5		37.5		
		BTU/h	85,300			107,500		128,000		
	Power input	kW	4.94			6.92		7.94		
	Current input	A	8.3-7.9-7.6			11.6-11.0-10.6		13.4-12.7-12.2		
	COP	kW/kW	4.21			3.87		3.81		
	(Nominal)	*3	kW	22.4			28.0		33.5	
			BTU/h	76,400			95,500		114,300	
		Power input	kW	5.01			6.84		8.27	
		Current input	A	7.1-6.8-6.5			9.8-9.3-9.0		11.2-10.6-10.3	
	COP	kW/kW	4.47			4.09		4.05		
SCOP	kW/kW	4.36			4.40		4.12			
Temp. range of heating	Indoor	D.B.	15.0~27.0 °C (59~81 °F)			15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)		
	Outdoor	W.B.	-20.0~15.5 °C (-4~60 °F)			-20.0~15.5 °C (-4~60 °F)		-20.0~15.5 °C (-4~60 °F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity		M20~M140/1~8			M20~M140/1~10		M20~M140/2~12		
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>		58.0 / 59.0		60.0 / 61.0		61.0 / 64.5	
Sound power level (measured in anechoic room)		*4	dB <A>		75.0 / 78.0		78.0 / 80.0		80.0 / 83.5	
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed			9.52 (3/8) Brazed		9.52 (3/8) Brazed		
	Gas pipe	mm (in.)	22.2 (7/8) Brazed			22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		
FAN	Type x Quantity		Propeller fan x 1			Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m³/min	170			185		240		
		L/s	2,833			3,083		4,000		
		cfm	6,003			6,532		8,474		
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1			0.92 x 1		0.92 x 1		
	*6 External static press.		0 Pa (0 mmH₂O)			0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		
	Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
Starting method		Inverter			Inverter		Inverter			
Motor output		kW	3.4			5.1		6.0		
Case heater		kW	-			-		-		
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740			1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16			73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor		-			-		-		
	Fan motor		-			-		-		
Refrigerant	Type x original charge		R32 x 6.5 kg (15 lbs)			R32 x 6.5 kg (15 lbs)		R32 x 6.5 kg (15 lbs)		
	Control		LEV and HIC circuit			LEV and HIC circuit		LEV and HIC circuit		
Net weight		kg (lbs)	228 (503)			228 (503)		229 (505)		
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB/45°F DB/43°F WB	7.5m (24-9/16ft.)	0m (0ft.)

*4 Cooling mode/Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*7 R32 is flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.

For detail, refer to the section in the Databook on installation restrictions.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

Standard

R410A

PUHY-P YNW-A2(-BS)



Model			PUHY-P200YNW-A2(-BS)		PUHY-P250YNW-A2 (-BS)		PUHY-P300YNW-A2 (-BS)		
Power source			3-phase 4-wire 380~400~415 V 50/60 Hz		3-phase 4-wire 380~400~415 V 50/60 Hz		3-phase 4-wire 380~400~415 V 50/60 Hz		
Cooling capacity (Nominal)		*1	kW	22.4	28.0		33.5		
			BTU / h	76,400	95,500		114,300		
		Power input	kW	6.03	9.62		11.31		
		Current input	A	10.1-9.6-9.3	16.2-15.4-14.8		19.0-18.1-17.4		
		EER	kW / kW	3.71	2.91		2.96		
		SEER	kW / kW	7.65	6.90		6.70		
Temp. range of cooling		Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		
Heating capacity (Max)		*2	kW	25.0	31.5		37.5		
			BTU / h	85,300	107,500		128,000		
		Power input	kW	6.08	8.49		10.30		
		Current input	A	10.2-9.7-9.3	14.3-13.6-13.1		17.3-16.5-15.9		
		COP	kW / kW	4.11	3.71		3.64		
		(Nominal)	*3	kW	22.4	28.0		33.5	
				BTU / h	76,400	95,500		114,300	
			Power input	kW	5.18	7.01		8.74	
			Current input	A	8.7-8.3-8.0	11.8-11.2-10.8		14.7-14.0-13.5	
			COP	kW / kW	4.32	3.99		3.83	
SCOP	kW / kW	4.35	4.39		4.12				
Temp. range of heating		Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
		Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable		Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
		Model / Quantity		P10~P250, M20~M140/1~20		P10~P250, M20~M140/1~25		P10~P250, M20~M140/1~30	
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	58.0/59.0		60.0/61.0		61.0/64.5	
Sound power level (measured in anechoic room)		*4	dB <A>	75/77		78/80		80/84	
Refrigerant piping diameter		Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed	
			Gas pipe	22.2 (7/8) Brazed		(12.7 (1/2) Brazed, total length >= 90 m)		(12.7 (1/2) Brazed, total length >= 40 m)	
FAN		Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
		Air flow rate	m³/min	170		185		240	
			L/s	2,833		3,083		4,000	
			cfm	6,003		6,532		8,474	
		Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
		Motor output		0.92 x 1		0.92 x 1		0.92 x 1	
		*6 External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
Compressor		Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
		Starting method		Inverter		Inverter		Inverter	
		Motor output	kW	3.5		5.3		6.7	
		Case heater	kW	—		—		—	
External finish				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD			mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740	
			in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	
Protection devices		High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
		Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor		—		—		—	
		Fan motor		—		—		—	
Refrigerant		Type x original charge		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)	
Net weight		kg (lbs)		213 (470)		213 (470)		226 (499)	
Heat exchanger				Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Optional parts				Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YNW-A2(-BS)



Model	PUHY-P350YNW-A2 (-BS)			PUHY-P400YNW-A2 (-BS)			PUHY-P450YNW-A2 (-BS)			PUHY-P500YNW-A2 (-BS)								
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling capacity (Nominal)		*1	kW	40.0			45.0			50.0			56.0					
			BTU / h	136,500			153,500			170,600			191,100					
			Power input	kW	13.98			17.57			18.86			21.05				
			Current input	A	23.6-22.4-21.6			29.6-28.1-27.1			31.8-30.2-29.1			35.5-33.7-32.5				
			EER	kW / kW	2.86			2.56			2.65			2.66				
			SEER	kW / kW	6.35			5.85			6.48			6.32				
Temp. range of cooling			Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)				
			Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)				
Heating capacity (Max)		*2	kW	45.0			50.0			56.0			63.0					
			BTU / h	153,500			170,600			191,100			215,000					
			Power input	kW	12.32			14.20			16.51			17.89				
			Current input	A	20.7-19.7-19.0			23.9-22.7-21.9			27.8-26.4-25.5			30.2-28.6-27.6				
			COP	kW / kW	3.65			3.52			3.39			3.52				
			(Nominal)	*3	kW	40.0			45.0			50.0			56.0			
					BTU / h	136,500			153,500			170,600			191,100			
					Power input	kW	10.20			12.00			13.77			14.85		
					Current input	A	17.2-16.3-15.7			20.2-19.2-18.5			23.2-22.0-21.2			25.0-23.8-22.9		
					COP	kW / kW	3.92			3.75			3.63			3.77		
		SCOP	kW / kW	4.33			4.00			4.31			4.04					
Temp. range of heating			Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)				
			Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)				
Indoor unit connectable			Total capacity			50~130% of outdoor unit capacity			50~130% of outdoor unit capacity			50~130% of outdoor unit capacity			50~130% of outdoor unit capacity			
			Model / Quantity			P10~P250, M20~M140/1~35			P10~P250, M20~M140/1~40			P10~P250, M20~M140/1~45			P10~P250, M20~M140/1~50			
Sound pressure level (measured in anechoic room)			*4, 5	dB <A>	62.0/64.5			65.0/67.0			66.5/71.0			63.5/65.5				
Sound power level (measured in anechoic room)			*4	dB <A>	80/84			82/86			84/90			82/85				
Refrigerant piping diameter			Liquid pipe	mm (in.)	12.7 (1/2) Brazed			12.7 (1/2) Brazed			15.88 (5/8) Brazed			15.88 (5/8) Brazed				
			Gas pipe	mm (in.)	28.58 (1-1/8) Brazed			28.58 (1-1/8) Brazed			28.58 (1-1/8) Brazed			28.58 (1-1/8) Brazed				
FAN			Type x Quantity		Propeller fan x 2			Propeller fan x 2			Propeller fan x 2			Propeller fan x 2				
			Air flow rate	m³/min	270			300			305			365				
				L/s	4,500			5,000			5,083			6,083				
				cfm	9,534			10,593			10,770			12,888				
			Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor				
			Motor output	kW	0.46 x 2			0.46 x 2			0.46 x 2			0.92 x 2				
					External static press.			0 Pa (0 mmH₂O)			0 Pa (0 mmH₂O)			0 Pa (0 mmH₂O)				
Compressor			Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor			Inverter scroll hermetic compressor			Inverter scroll hermetic compressor				
			Starting method		Inverter			Inverter			Inverter			Inverter				
			Motor output	kW	8.6			11.4			11.7			13.3				
					Case heater		—			—			—			—		
External finish					Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>				
External dimension HxWxD				mm	1,858 (1,798 without legs) x 1,240 x 740			1,858 (1,798 without legs) x 1,240 x 740			1,858 (1,798 without legs) x 1,240 x 740			1,858 (1,798 without legs) x 1,750 x 740				
				in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16			73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16			73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16			73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16				
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)						
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection			Over-heat protection, Over-current protection			Over-heat protection, Over-current protection						
	Compressor		—			—			—			—						
	Fan motor		—			—			—			—						
Refrigerant			Type x original charge		R410A x 9.8 kg (22 lbs)			R410A x 9.8 kg (22 lbs)			R410A x 10.8 kg (24 lbs)			R410A x 10.8 kg (24 lbs)				
Net weight			kg (lbs)		277 (611)			277 (611)			293 (646)			334 (737)				
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube						
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G						

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P400YSNW-A2 (-BS)	PUHY-P450YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	44.8	50.4
		BTU / h	152,900	172,000
		Power input	12.47	15.94
	EER	Current input	21.0-19.9-19.2	26.9-25.5-24.6
		kW / kW	3.59	3.16
		kW / kW	7.42	7.03
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	50.0	56.5
		BTU / h	170,600	192,800
		Power input	12.16	14.56
	COP	Current input	20.5-19.5-18.7	24.5-23.3-22.5
		kW / kW	4.11	3.88
		kW / kW	4.48	50.4
(Nominal)	*3	BTU / h	152,900	172,000
		Power input	10.37	12.20
		Current input	17.5-16.6-16.0	20.5-19.5-18.8
	COP	kW / kW	4.32	4.13
		kW / kW	4.35	4.37
		D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Temp. range of heating	Indoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	61.0/62.0	62.0/63.0
Sound power level (measured in anechoic room)	*4	dB <A>	78/80	80/82
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Braze	15.88 (5/8) Braze
	Gas pipe	mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze

Set Model			PUHY-P200YNW-A2(-BS)	PUHY-P200YNW-A2 (-BS)	PUHY-P200YNW-A2 (-BS)	PUHY-P250YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	*6	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
External static press.			0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.5	3.5	3.5	5.3
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight	kg (lbs)		213 (470)	213 (470)	213 (470)	213 (470)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P500YSNW-A2 (-BS)	PUHY-P550YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	56.0	61.5
		BTU / h	191,100	209,800
		Power input kW	19.85	21.65
		Current input A	33.5-31.8-30.6	36.5-34.7-33.4
		EER	2.82	2.84
Temp. range of cooling		SEER	6.69	6.59
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		Heating capacity (Max)	63.0	69.0
		BTU / h	215,000	235,400
(Nominal)	*2	Power input kW	16.98	18.80
		Current input A	28.6-27.2-26.2	31.7-30.1-29.0
		COP	3.71	3.67
		SCOP	3.99	3.90
		Indoor W.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Temp. range of heating	*3	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/1~50	P10~P250, M20~M140/2~50
		Sound pressure level (measured in anechoic room)	63.0/64.0	63.5/66.0
		Sound power level (measured in anechoic room)	81/83	82/85
Refrigerant piping diameter	*4	Liquid pipe	15.88 (5/8) Brazed	15.88 (5/8) Brazed
		Gas pipe	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-P250YNW-A2 (-BS)	PUHY-P250YNW-A2 (-BS)	PUHY-P250YNW-A2 (-BS)	PUHY-P300YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m³/min	185		185	
		L/s	3,083		3,083	
		cfm	6,532		6,532	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1		0.92 x 1	
*6	External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.3		5.3	
	Case heater	kW	—		—	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740	
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)	
Net weight	kg (lbs)		213 (470)		213 (470)	
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P600YSNW-A2 (-BS)	PUHY-P650YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	67.0	73.0	
		BTU / h	228,600	249,100	
	Power input	kW	23.34	27.96	
	Current input	A	39.4-37.4-36.0	47.2-44.8-43.2	
	EER	kW / kW	2.87	2.61	
	SEER	kW / kW	6.50	6.08	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	75.0	81.5	
		BTU / h	255,900	278,100	
	Power input	kW	20.60	22.70	
	Current input	A	34.7-33.0-31.8	38.3-36.4-35.0	
	(Nominal)	COP	kW / kW	3.64	3.59
			kW	67.0	73.0
			BTU / h	228,600	249,100
		Power input	kW	17.49	19.01
		Current input	A	29.5-28.0-27.0	32.0-30.4-29.3
		COP	kW / kW	3.83	3.84
SCOP	kW / kW	4.12	4.14		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	64.0/67.5	66.5/68.5
Sound power level (measured in anechoic room)		*4	dB <A>	83/87	83/87
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	

Set Model			PUHY-P300YNW-A2 (-BS)		PUHY-P300YNW-A2 (-BS)		PUHY-P250YNW-A2 (-BS)		PUHY-P400YNW-A2 (-BS)	
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m ³ /min	240		240		185		300	
		L/s	4,000		4,000		3,083		5,000	
		cfm	8,474		8,474		6,532		10,593	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor			
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1		0.46 x 2	
	*6	External static press.		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor				Inverter scroll hermetic compressor			
	Starting method		Inverter		Inverter		Inverter		Inverter	
	Motor output	kW	6.7		6.7		5.3		11.4	
	Case heater	kW	—		—		—		—	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 1,240 x 740	
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection				Over-heat protection, Over-current protection			
	Compressor		—				—			
	Fan motor		—				—			
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 9.8 kg (22 lbs)	
Net weight		kg (lbs)	226 (499)		226 (499)		213 (470)		277 (611)	
Heat exchanger			Salt-resistant cross fin & copper tube				Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		9.52 (3/8) Brazed		12.7 (1/2) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P700YSNW-A2 (-BS)		PUHY-P750YSNW-A2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	80.0		85.0		
		BTU / h	273,000		290,000		
	Power input	kW	28.88		32.56		
	Current input	A	48.7-46.3-44.6		54.9-52.2-50.3		
	EER	kW / kW	2.77		2.61		
SEER	kW / kW	6.15		5.90			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		
Heating capacity (Max)	*2	kW	90.0		95.0		
		BTU / h	307,100		324,100		
	Power input	kW	24.65		26.53		
	Current input	A	41.6-39.5-38.1		44.7-42.5-41.0		
	COP	kW / kW	3.65		3.58		
	(Nominal)	*3	kW	80.0		85.0	
			BTU / h	273,000		290,000	
		Power input	kW	20.40		22.25	
		Current input	A	34.4-32.7-31.5		37.5-35.6-34.3	
		COP	kW / kW	3.92		3.82	
SCOP		kW / kW	4.33		4.14		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/2~50		P10~P250, M20~M140/2~50		
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	65.0/67.5		67.0/69.0	
Sound power level (measured in anechoic room)		*4	dB <A>	83/87		84/88	
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed		34.93 (1-3/8) Brazed		

Set Model			PUHY-P350YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m³/min	270		270	
		L/s	4,500		4,500	
		cfm	9,534		9,534	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2		0.46 x 2	
*6	External static press.		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter	
	Motor output	kW	8.6		8.6	
	Case heater	kW	—		—	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740		1,858 (1,798 without legs) x 1,240 x 740	
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)		R410A x 9.8 kg (22 lbs)	
Net weight	kg (lbs)		277 (611)		277 (611)	
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model	PUHY-P800YSNW-A2 (-BS)			PUHY-P850YSNW-A2 (-BS)			PUHY-P900YSNW-A2 (-BS)				
Power source	3-phase 4-wire 380~400~415 V 50/60 Hz			3-phase 4-wire 380~400~415 V 50/60 Hz			3-phase 4-wire 380~400~415 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	90.0	kW	95.0	kW	100.0	BTU / h	341,200		
		BTU / h	307,100								
	Power input	kW	33.96	Power input	kW	37.69	Power input	kW	38.91		
	Current input	A	57.3-54.4-52.4	Current input	A	63.6-60.4-58.2	Current input	A	65.6-62.4-60.1		
	EER	kW / kW	2.65	EER	kW / kW	2.52	EER	kW / kW	2.57		
SEER	kW / kW	6.22	SEER	kW / kW	5.99	SEER	kW / kW	6.28			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	Indoor	W.B.	15.0~24.0°C (59~75°F)	Indoor	W.B.	15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		
Heating capacity (Max)	*2	kW	101.0	kW	106.0	kW	112.0	BTU / h	382,100		
		BTU / h	344,600	BTU / h	361,700	BTU / h	382,100				
		Power input	kW	28.85	Power input	kW	30.72	Power input	kW	33.03	
		Current input	A	48.7-46.2-44.5	Current input	A	51.8-49.2-47.4	Current input	A	55.7-52.9-51.0	
		COP	kW / kW	3.50	COP	kW / kW	3.45	COP	kW / kW	3.39	
	(Nominal)	*3	kW	90.0	kW	95.0	kW	100.0	BTU / h	341,200	
			BTU / h	307,100	BTU / h	324,100	BTU / h	341,200			
			Power input	kW	24.00	Power input	kW	25.81	Power input	kW	27.54
			Current input	A	40.5-38.4-37.0	Current input	A	43.5-41.3-39.8	Current input	A	46.4-44.1-42.5
			COP	kW / kW	3.75	COP	kW / kW	3.68	COP	kW / kW	3.63
SCOP	kW / kW	4.32	SCOP	kW / kW	4.16	SCOP	kW / kW	4.32			
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	Indoor	D.B.	15.0~27.0°C (59~81°F)	Indoor	D.B.	15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	Total capacity		50~130% of outdoor unit capacity	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/2~50	Model / Quantity		P10~P250, M20~M140/2~50	Model / Quantity		P10~P250, M20~M140/2~50		
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	67.5/71.0	Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	68.5/73.0	Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	68.5/74.0
Sound power level (measured in anechoic room)	*4	dB <A>	85/91	Sound power level (measured in anechoic room)	*4	dB <A>	86/91	Sound power level (measured in anechoic room)	*4	dB <A>	87/93
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	Liquid pipe	mm (in.)	19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed		

Set Model	PUHY-P350YNW-A2 (-BS)		PUHY-P450YNW-A2 (-BS)		PUHY-P400YNW-A2 (-BS)		PUHY-P450YNW-A2 (-BS)		PUHY-P450YNW-A2 (-BS)		PUHY-P450YNW-A2 (-BS)	
FAN	Type x Quantity		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m ³ /min	270		305		300		305		305	
		L/s	4,500		5,083		5,000		5,083		5,083	
		cfm	9,534		10,770		10,593		10,770		10,770	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
Compressor	*6	Motor output	kW		0.46 x 2		0.46 x 2		0.46 x 2		0.46 x 2	
		External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
		Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter		Inverter		Inverter		Inverter	
	Motor output		kW		8.6		11.7		11.4		11.7	
External finish	Case heater		kW		—		—		—		—	
	Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets	
	(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)	
	<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>	
	External dimension HxWxD		mm		mm		mm		mm		mm	
Protection devices	High pressure protection	High pressure sensor, High pressure switch	at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)	
		Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor	—		—		—		—		—	
	Fan motor	—	—		—		—		—		—	
		—	—		—		—		—		—	
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 9.8 kg (22 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)	
Net weight	kg (lbs)		277 (611)		293 (646)		277 (611)		293 (646)		293 (646)	
Heat exchanger	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed	
and distributor	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts	Outdoor Twinning kit: CMY-Y200VBK2		Joint: CMY-Y102SS/LS-G2,		Joint: CMY-Y102SS/LS-G2,		Joint: CMY-Y102SS/LS-G2,		Joint: CMY-Y102SS/LS-G2,		Joint: CMY-Y102SS/LS-G2,	
	CMY-Y202S/302S-G2		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P950YSNW-A2 (-BS)		PUHY-P1000YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	108.0		113.0	
		BTU / h	368,500		385,600	
		Power input kW	38.84		42.48	
		Current input A	65.5-62.2-60.0		71.7-68.1-65.6	
		EER	2.78		2.66	
Temp. range of cooling		SEER	6.30		6.10	
		Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	121.5		126.5	
		BTU / h	414,600		431,600	
		Power input kW	33.19		35.04	
		Current input A	56.0-53.2-51.3		59.1-56.1-54.1	
		COP	3.66		3.61	
(Nominal)	*3	kW	108.0		113.0	
		BTU / h	368,500		385,600	
		Power input kW	27.48		29.27	
		Current input A	46.3-44.0-42.4		49.4-46.9-45.2	
		COP	3.93		3.86	
Temp. range of heating		SCOP	4.34		4.21	
		Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/2~50		P10~P250, M20~M140/2~50	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	66.5/68.5		68.0/70.0	
Sound power level (measured in anechoic room)	*4	dB <A>	84/88		85/89	
Refrigerant piping diameter		Liquid pipe mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed	
		Gas pipe mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model		PUHY-P250YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P250YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m ³ /min	185	270	270	185	270
			3,083	4,500	4,500	3,083	4,500
			6,532	9,534	9,534	6,532	10,593
	Control, Driving mechanism	Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.92 x 1	0.46 x 2
Compressor	*6 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type	Inverter scroll hermetic compressor				Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.3	8.6	8.6	5.3	8.6
	Case heater	kW	—	—	—	—	—
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD	mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection	
	Compressor	—	—	—	—	—	—
	Fan motor	—	—	—	—	—	—
Refrigerant	Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight	kg (lbs)	213 (470)	277 (611)	277 (611)	213 (470)	277 (611)	277 (611)
Heat exchanger		Salt-resistant cross fin & copper tube				Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts		Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P1050YSNW-A2 (-BS)		PUHY-P1100YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	118.0		125.0	
		BTU / h	402,600		426,500	
		Power input kW	46.09		46.99	
		Current input A	77.8-73.9-71.2		79.3-75.3-72.6	
		EER	2.56		2.66	
Temp. range of cooling	*2	SEER	5.93		5.98	
		Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
		Heating capacity (Max)	131.5		140.0	
		BTU / h	448,700		477,700	
(Nominal)	*3	Power input kW	36.93		38.88	
		Current input A	62.3-59.2-57.0		65.6-62.3-60.1	
		COP	3.56		3.60	
		BTU / h	118.0		125.0	
		Power input kW	402,600		426,500	
Temp. range of heating	*4	Current input A	31.05		32.46	
		COP	3.80		3.85	
		SCOP	4.09		4.20	
		Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	69.0/70.5		68.5/70.5	
Sound power level (measured in anechoic room)	*4	dB <A>	86/90		86/90	
Refrigerant piping diameter	Liquid pipe		19.05 (3/4) Brazed		19.05 (3/4) Brazed	
	Gas pipe		41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model			PUHY-P250YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P350YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	185	300	300	270	270	300
		L/s	3,083	5,000	5,000	4,500	4,500	5,000
		cfm	6,532	10,593	10,593	9,534	9,534	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*6	External static press.		0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.3	11.4	11.4	8.6	8.6	11.4
	Case heater	kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD			mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
			in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—	—	—	—	—	—
	Fan motor		—	—	—	—	—	—
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight	kg (lbs)		213 (470)	277 (611)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

Model			PUHY-P1150YSNW-A2 (-BS)		PUHY-P1200YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	130.0		135.0	
		BTU / h	443,600		460,600	
		Power input kW	50.58		54.43	
		Current input A	85.3-81.1-78.1		91.8-87.2-84.1	
		EER	2.57		2.48	
Temp. range of cooling	*2	SEER	5.82		5.66	
		Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
		Heating capacity (Max)	145.0		150.0	
		BTU / h	494,700		511,800	
(Nominal)	*3	Power input kW	40.84		42.61	
		Current input A	68.9-65.4-63.1		71.9-68.3-65.8	
		COP	3.55		3.52	
		BTU / h	130.0		135.0	
		Power input kW	443,600		460,600	
Temp. range of heating	*4	Current input A	34.21		36.00	
		COP	57.7-54.8-52.8		60.7-57.7-55.6	
		SCOP	3.80		3.75	
		Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	69.5/71.5		70.0/72.0	
Sound power level (measured in anechoic room)	*4	dB <A>	86/90		87/91	
Refrigerant piping diameter		Liquid pipe mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed	
		Gas pipe mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model			PUHY-P350YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	270	300	300	300	300	300
		L/s	4,500	5,000	5,000	5,000	5,000	5,000
		cfm	9,534	10,593	10,593	10,593	10,593	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.6	11.4	11.4	11.4	11.4	11.4
	Case heater	kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—			—		
	Fan motor		—			—		
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight	kg (lbs)		277 (611)	277 (611)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P1250YSNW-A2 (-BS)	PUHY-P1300YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	140.0	145.0
		BTU / h	477,700	494,700
	Power input	kW	55.77	57.08
	Current input	A	94.1-89.4-86.2	96.3-91.5-88.2
	EER	kW / kW	2.51	2.54
Temp. range of cooling		kW / kW	5.89	6.09
	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
	Heating capacity (Max)	*2	kW	162.0
		BTU / h	532,300	552,700
		Power input	kW	44.95
		Current input	A	75.8-72.0-69.4
		COP	kW / kW	3.47
(Nominal)	*3	kW	140.0	145.0
		BTU / h	477,700	494,700
		Power input	kW	37.83
		Current input	A	63.8-60.6-58.4
		COP	kW / kW	3.70
Temp. range of heating		kW / kW	4.11	4.21
	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	70.0/74.0	70.0/75.0
Sound power level (measured in anechoic room)	*4	dB <A>	88/93	88/94
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P400YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P450YNW-A2 (-BS)	PUHY-P400YNW-A2 (-BS)	PUHY-P450YNW-A2 (-BS)	PUHY-P450YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	300	300	305	300	305	305
		L/s	5,000	5,000	5,083	5,000	5,083	5,083
		cfm	10,593	10,593	10,770	10,593	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
Compressor	*6	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.4	11.4	11.7	11.4	11.7	11.7
External finish	Case heater	kW	—	—	—	—	—	—
			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—	—	—	—	—	—
	Fan motor		—	—	—	—	—	—
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		277 (611)	277 (611)	293 (646)	277 (611)	293 (646)	293 (646)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
	Pipe between unit and distributor		15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Optional parts	Liquid pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

Standard

R410A

PUHY-P YSNW-A2(-BS)



Model			PUHY-P1350YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	150.0	
		BTU / h	511,800	
	Power input	kW	58.36	
		A	98.5-93.5-90.2	
		EER	2.57	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	168.0	
		BTU / h	573,200	
	Power input	kW	49.55	
		A	83.6-79.4-76.5	
		COP	3.39	
(Nominal)	*3	kW	150.0	
		BTU / h	511,800	
	Power input	kW	41.32	
		A	69.7-66.2-63.8	
		COP	3.63	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/3~50	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	70.5/76.0	
Sound power level (measured in anechoic room)	*4	dB <A>	89/95	
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	

Set Model			PUHY-P450YNW-A2 (-BS)	PUHY-P450YNW-A2 (-BS)	PUHY-P450YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	305	305	305
		L/s	5,083	5,083	5,083
		cfm	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2
	*6	External static press.	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method	Inverter		Inverter	Inverter
	Motor output	kW	11.7	11.7	11.7
	Case heater	kW	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		
	Compressor		—	—	—
	Fan motor		—	—	—
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	293 (646)	293 (646)	293 (646)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YNW-A2(-BS)



Model			PUHY-EP200YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP300YNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.51	8.21	9.68
		A	9.3-8.8-8.5	13.8-13.1-12.6	16.3-15.5-14.9
		EER	4.06	3.41	3.46
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	5.93	8.13	9.84
		A	10.0-9.5-9.1	13.7-13.0-12.5	16.6-15.7-15.2
		COP	4.21	3.87	3.81
(Nominal)	*3	kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.01	6.84	8.27
		A	8.4-8.0-7.7	11.5-10.9-10.5	13.9-13.2-12.7
		COP	4.47	4.09	4.05
Temp. range of heating	Indoor	W.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		D.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	58.0/59.0	60.0/61.0	61.0/64.5
Sound power level (measured in anechoic room)	*4	dB <A>	75/78	78/80	80/84
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze
		mm (in.)	22.2 (7/8) Braze	(12.7 (1/2) Braze, total length >= 90 m)	(12.7 (1/2) Braze, total length >= 40 m)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Compressor	*6	Motor output	0.92 x 1	0.92 x 1	0.92 x 1
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
External finish	Motor output		3.4	5.1	6.1
	Case heater		—	—	—
	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD	mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		—	—	—
	Fan motor		—	—	—
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight	kg (lbs)		228 (503)	228 (503)	231 (510)
Heat exchanger	Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

High efficiency

R410A

PUHY-EP YNW-A2(-BS)



Model			PUHY-EP350YNW-A2 (-BS)		PUHY-EP400YNW-A2 (-BS)		PUHY-EP450YNW-A2 (-BS)		PUHY-EP500YNW-A2 (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)		*1	kW	40.0		45.0		50.0		56.0		
			BTU / h	136,500		153,500		170,600		191,100		
			Power input	kW		12.42		14.65		17.73		
			Current input	A		20.9-19.9-19.1		24.7-23.4-22.6		29.9-28.4-27.4		
			EER	kW / kW		3.22		3.07		2.82		
			SEER	kW / kW		7.03		6.83		6.94		
				6.55								
Temp. range of cooling			Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
			Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)		*2	kW	45.0		50.0		56.0		63.0		
			BTU / h	153,500		170,600		191,100		215,000		
			Power input	kW		11.81		13.85		16.18		
			Current input	A		19.9-18.9-18.2		23.3-22.2-21.4		27.3-25.9-25.0		
			COP	kW / kW		3.81		3.61		3.46		
		*3	kW	40.0		45.0		50.0		56.0		
			BTU / h	136,500		153,500		170,600		191,100		
			Power input	kW		9.77		11.65		12.85		
			Current input	A		16.4-15.6-15.1		19.6-18.6-18.0		21.6-20.6-19.8		
			COP	kW / kW		4.09		3.86		3.89		
			SCOP	kW / kW		4.35		4.25		4.32		
				4.10								
Temp. range of heating			Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
			Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable			Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
			Model / Quantity		P10~P250, M20~M140/1~35		P10~P250, M20~M140/1~40		P10~P250, M20~M140/1~45		P10~P250, M20~M140/1~50	
Sound pressure level (measured in anechoic room)			*4, 5	dB <A>	62.0/64.0		65.0/65.5		65.5/70.5		63.5/66.5	
Sound power level (measured in anechoic room)			*4	dB <A>	80/83		82/85		84/90		82/85	
Refrigerant piping diameter			Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed	
			Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
FAN			Type x Quantity		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2	
			Air flow rate	m³/min	270		270		305		365	
				L/s	4,500		4,500		5,083		6,083	
				cfm	9,534		9,534		10,770		12,888	
			Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
			Motor output		kW		0.46 x 2		0.46 x 2		0.46 x 2	
Compressor			*6 External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
			Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
			Starting method		Inverter		Inverter		Inverter			
			Motor output		kW		7.7		9.8		11.1	
			Case heater		kW		—		—		—	
External finish					Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD				mm	1,858 (1,798 without legs) x 1,240 x 740		1,858 (1,798 without legs) x 1,240 x 740		1,858 (1,798 without legs) x 1,240 x 740		1,858 (1,798 without legs) x 1,750 x 740	
			in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16		73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—		—		—		—	
	Fan motor		—		—		—		—		—	
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)	
Net weight		kg (lbs)	282 (622)		303 (668)		303 (668)		303 (668)		342 (754)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP400YSNW-A2 (-BS)	PUHY-EP450YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	44.8	50.4
		BTU / h	152,900	172,000
		Power input	11.39	14.07
	EER	Current input	19.2-18.2-17.6	23.7-22.5-21.7
		kW / kW	3.93	3.58
		kW / kW	7.53	7.40
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	50.0	56.5
		BTU / h	170,600	192,800
		Power input	11.87	14.05
	COP	Current input	20.0-19.0-18.3	23.7-22.5-21.7
		kW / kW	4.21	4.02
		kW / kW	4.48	50.4
(Nominal)	*3	BTU / h	152,900	172,000
		Power input	10.02	11.85
		Current input	16.9-16.0-15.4	20.0-19.0-18.3
	COP	kW / kW	4.47	4.25
		kW / kW	4.36	4.37
		D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Temp. range of heating	Indoor	D.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	61.0/62.0	62.5/63.5
Sound power level (measured in anechoic room)	*4	dB <A>	78/81	80/82
Refrigerant piping diameter	Liquid pipe		12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe		28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-EP200YNW-A2 (-BS)		PUHY-EP200YNW-A2 (-BS)		PUHY-EP200YNW-A2 (-BS)		PUHY-EP250YNW-A2 (-BS)	
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m³/min	170		170		170		185	
		L/s	2,833		2,833		2,833		3,083	
		cfm	6,003		6,003		6,003		6,532	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1		0.92 x 1	
	*6	External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)
Compressor	Type		Inverter scroll hermetic compressor				Inverter scroll hermetic compressor			
	Starting method		Inverter		Inverter		Inverter		Inverter	
	Motor output	kW	3.4		3.4		3.4		5.1	
	Case heater	kW	—		—		—		—	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740	
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection				Over-heat protection, Over-current protection			
	Compressor		—		—		—		—	
	Fan motor		—		—		—		—	
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)	
Net weight	kg (lbs)		228 (503)		228 (503)		228 (503)		228 (503)	
Heat exchanger			Salt-resistant cross fin & aluminium tube				Salt-resistant cross fin & aluminium tube			
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP500YSNW-A2 (-BS)	PUHY-EP550YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	61.5
		BTU / h	191,100	209,800
		Power input kW	16.96	18.46
		Current input A	28.6-27.1-26.2	31.1-29.6-28.5
		EER	3.30	3.33
Temp. range of cooling		SEER	7.29	7.16
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		Heating capacity (Max)		
		*2		
Heating capacity (Max)		kW	63.0	69.0
		BTU / h	215,000	235,400
		Power input kW	16.27	18.01
		Current input A	27.4-26.0-25.1	30.4-28.8-27.8
		COP	3.87	3.83
(Nominal)	*3	kW / kW	4.09	4.06
		BTU / h	191,100	209,800
		Power input kW	13.69	15.14
		Current input A	23.1-21.9-21.1	25.5-24.2-23.4
		COP	4.09	4.06
Temp. range of heating		SCOP	4.40	4.24
		Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Indoor unit connectable		
		Model / Quantity	50~130% of outdoor unit capacity P10~P250, M20~M140/1~50	50~130% of outdoor unit capacity P10~P250, M20~M140/2~50
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	63.5/64.0	64.0/66.5
Sound power level (measured in anechoic room)	*4	dB <A>	81/83	82/85
Refrigerant piping diameter		mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze
		Gas pipe mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze

Set Model			PUHY-EP250YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP300YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Compressor	*6	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
		Type	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
		Starting method	Inverter	Inverter	Inverter	Inverter
		Motor output kW	5.1	5.1	5.1	6.1
External finish		Case heater	—	—	—	—
		Pre-coated galvanized steel sheets	Pre-coated galvanized steel sheets	Pre-coated galvanized steel sheets	Pre-coated galvanized steel sheets	Pre-coated galvanized steel sheets
		(+powder coating for -BS type)	(+powder coating for -BS type)	(+powder coating for -BS type)	(+powder coating for -BS type)	(+powder coating for -BS type)
		<MUNSELL 3Y 7.8/1.1 or similar>	<MUNSELL 3Y 7.8/1.1 or similar>	<MUNSELL 3Y 7.8/1.1 or similar>	<MUNSELL 3Y 7.8/1.1 or similar>	<MUNSELL 3Y 7.8/1.1 or similar>
		External dimension HxWxD				
Protection devices		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
		High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
		Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
		Compressor	—	—	—	—
Refrigerant		Fan motor	—	—	—	—
		Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
		Net weight	228 (503)	228 (503)	228 (503)	231 (510)
		Heat exchanger	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
		Pipe between unit and distributor				
Optional parts		Liquid pipe mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze	12.7 (1/2) Braze
		Gas pipe mm (in.)	22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze
		Outdoor Twinning kit: CMY-Y100VBK3	Outdoor Twinning kit: CMY-Y100VBK3	Outdoor Twinning kit: CMY-Y100VBK3	Outdoor Twinning kit: CMY-Y100VBK3	Outdoor Twinning kit: CMY-Y100VBK3
		Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2
		Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP600YSNW-A2 (-BS)	PUHY-EP650YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	67.0	73.0
		BTU / h	228,600	249,100
		Power input kW	20.00	23.54
		Current input A	33.7-32.0-30.9	39.7-37.7-36.3
		EER	3.35	3.10
Temp. range of cooling	*2	SEER	7.04	6.89
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		Heating capacity (Max)	75.0	81.5
		BTU / h	255,900	278,100
(Nominal)	*3	Power input kW	19.68	21.96
		Current input A	33.2-31.5-30.4	37.0-35.2-33.9
		COP	3.81	3.71
		SCOP	4.05	3.94
		Temp. range of heating	4.12	4.30
Temp. range of heating	*4	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Indoor unit connectable	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
		Sound pressure level (measured in anechoic room) *4, 5	64.0/67.5	66.5/67.0
Sound power level (measured in anechoic room) *4	*4	Refrigerant piping diameter	83/87	83/ 86
		Liquid pipe mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
		Gas pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-EP300YNW-A2 (-BS)	PUHY-EP300YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m ³ /min	240	240	185	270
		L/s	4,000	4,000	3,083	4,500
		cfm	8,474	8,474	6,532	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
Compressor	*6	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
		Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
		Starting method	Inverter	Inverter	Inverter	Inverter
		Motor output kW	6.1	6.1	5.1	9.8
External finish	Case heater	kW	—	—	—	—
External dimension HxWxD	mm		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
			1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
			73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor	—		—	
		Fan motor	—		—	
		Refrigerant Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 10.8 kg (24 lbs)
		Net weight	231 (510)	231 (510)	228 (503)	303 (668)
Heat exchanger	Salt-resistant cross fin & aluminium tube	Pipe between unit and distributor	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
		Liquid pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
		Gas pipe mm (in.)				
Optional parts	Outdoor Twinning kit: CMY-Y100VBK3	Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2	Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP700YSNW-A2 (-BS)	PUHY-EP750YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	80.0	85.0
		BTU / h	273,000	290,000
		Power input kW	25.64	27.96
		Current input A	43.2-41.1-39.6	47.2-44.8-43.2
		EER	3.12	3.04
Temp. range of cooling		SEER	6.82	6.72
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		Heating capacity (Max)	90.0	95.0
		BTU / h	307,100	324,100
(Nominal)	*2	Power input kW	23.62	25.67
		Current input A	39.8-37.8-36.5	43.3-41.1-39.6
		COP	3.81	3.70
		SCOP	4.09	3.96
		Temp. range of heating	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Indoor unit connectable	*3	Indoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Outdoor W.B.	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
		Sound pressure level (measured in anechoic room)	65.0/67.0	67.0/68.0
		Sound power level (measured in anechoic room)	83/86	84/87
Refrigerant piping diameter	*4, 5	Liquid pipe mm (in.)	19.05 (3/4) Braze	19.05 (3/4) Braze
		Gas pipe mm (in.)	34.93 (1-3/8) Braze	34.93 (1-3/8) Braze

Set Model			PUHY-EP350YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	270	270	270	270
		L/s	4,500	4,500	4,500	4,500
		cfm	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	7.7	7.7	9.8
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		282 (622)	282 (622)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model	PUHY-EP800YSNW-A2 (-BS)			PUHY-EP850YSNW-A2 (-BS)			PUHY-EP900YSNW-A2 (-BS)				
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	90.0	kW	95.0	kW	100.0	BTU / h	341,200		
		BTU / h	307,100								
	Power input	kW	31.03	Power input	kW	33.45	Power input	kW	36.63		
	Current input	A	52.3-49.7-47.9	Current input	A	56.4-53.6-51.7	Current input	A	61.8-58.7-56.6		
	EER	kW / kW	2.90	EER	kW / kW	2.84	EER	kW / kW	2.73		
SEER	kW / kW	6.77	SEER	kW / kW	6.68	SEER	kW / kW	6.73			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	Indoor	W.B.	15.0~24.0°C (59~75°F)	Indoor	W.B.	15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		
Heating capacity (Max)	*2	kW	101.0	kW	106.0	kW	112.0	BTU / h	382,100		
		BTU / h	344,600	BTU / h	361,700	BTU / h	382,100				
		Power input	kW	27.97	Power input	kW	30.02	Power input	kW	32.36	
		Current input	A	47.2-44.8-43.2	Current input	A	50.6-48.1-46.4	Current input	A	54.6-51.8-50.0	
		COP	kW / kW	3.61	COP	kW / kW	3.53	COP	kW / kW	3.46	
	(Nominal)	*3	kW	90.0	kW	95.0	kW	100.0	BTU / h	341,200	
			BTU / h	307,100	BTU / h	324,100	BTU / h	341,200			
			Power input	kW	22.67	Power input	kW	24.54	Power input	kW	25.70
			Current input	A	38.2-36.3-35.0	Current input	A	41.4-39.3-37.9	Current input	A	43.3-41.2-39.7
			COP	kW / kW	3.97	COP	kW / kW	3.87	COP	kW / kW	3.89
SCOP	kW / kW	4.33	SCOP	kW / kW	4.28	SCOP	kW / kW	4.32			
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	Indoor	D.B.	15.0~27.0°C (59~81°F)	Indoor	D.B.	15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	Total capacity		50~130% of outdoor unit capacity	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/2~50	Model / Quantity		P10~P250, M20~M140/2~50	Model / Quantity		P10~P250, M20~M140/2~50		
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	67.5/70.5	Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	68.5/72.0	Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	69.0/73.5
Sound power level (measured in anechoic room)	*4	dB <A>	85/91	Sound power level (measured in anechoic room)	*4	dB <A>	86/91	Sound power level (measured in anechoic room)	*4	dB <A>	87/93
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	Liquid pipe	mm (in.)	19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed		

Set Model	PUHY-EP350YNW-A2 (-BS)		PUHY-EP450YNW-A2 (-BS)		PUHY-EP400YNW-A2 (-BS)		PUHY-EP450YNW-A2 (-BS)		PUHY-EP450YNW-A2 (-BS)		PUHY-EP450YNW-A2 (-BS)	
FAN	Type x Quantity		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m ³ /min	270		305		270		305		305	
		L/s	4,500		5,083		4,500		5,083		5,083	
		cfm	9,534		10,770		9,534		10,770		10,770	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
Compressor	*6	Motor output	kW		0.46 x 2		0.46 x 2		0.46 x 2		0.46 x 2	
		External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
		Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter		Inverter		Inverter		Inverter	
	Motor output		kW		7.7		11.1		9.8		11.1	
External finish	Case heater		kW		—		—		—		—	
	Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets		Pre-coated galvanized steel sheets	
	(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)		(+powder coating for -BS type)	
	<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>	
	External dimension HxWxD		mm		mm		mm		mm		mm	
Protection devices	High pressure protection	High pressure sensor, High pressure switch	at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)		at 4.15 MPa (601 psi)	
		Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor	—		—		—		—		—	
	Fan motor		—		—		—		—		—	
	Refrigerant		Type x original charge		R410A x 9.8 kg (22 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)		R410A x 10.8 kg (24 lbs)	
Heat exchanger	Net weight		kg (lbs)		282 (622)		303 (668)		303 (668)		303 (668)	
	Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
	Pipe between unit		Liquid pipe		mm (in.)		12.7 (1/2) Braze		15.88 (5/8) Braze		15.88 (5/8) Braze	
	and distributor		Gas pipe		mm (in.)		28.58 (1-1/8) Braze		28.58 (1-1/8) Braze		28.58 (1-1/8) Braze	
	Optional parts		Outdoor Twinning kit: CMY-Y200VBK2		Joint: CMY-Y102SS/LS-G2,		CMY-Y202S/302S-G2		Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2	
Refrigerant	Net weight		kg (lbs)		282 (622)		303 (668)		303 (668)		303 (668)	
	Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
	Pipe between unit		Liquid pipe		mm (in.)		12.7 (1/2) Braze		15.88 (5/8) Braze		15.88 (5/8) Braze	
	and distributor		Gas pipe		mm (in.)		28.58 (1-1/8) Braze		28.58 (1-1/8) Braze		28.58 (1-1/8) Braze	
	Optional parts		Outdoor Twinning kit: CMY-Y200VBK2		Joint: CMY-Y102SS/LS-G2,		CMY-Y202S/302S-G2		Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/66°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP950YSNW-A2 (-BS)		PUHY-EP1000YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	108.0		113.0	
		BTU / h	368,500		385,600	
		Power input kW	34.06		36.33	
		Current input A	57.4-54.6-52.6		61.3-58.2-56.1	
		EER	3.17		3.11	
Temp. range of cooling		SEER	6.95		6.87	
		Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	121.5		126.5	
		BTU / h	414,600		431,600	
		Power input kW	31.80		33.82	
		Current input A	53.6-50.9-49.1		57.0-54.2-52.2	
		COP	3.82		3.74	
(Nominal)	*3	kW	108.0		113.0	
		BTU / h	368,500		385,600	
		Power input kW	26.40		28.32	
		Current input A	44.5-42.3-40.8		47.8-45.4-43.7	
		COP	4.09		3.99	
Temp. range of heating		SCOP	4.36		4.32	
		Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/2~50		P10~P250, M20~M140/2~50	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	66.5/68.0		68.0/68.5	
Sound power level (measured in anechoic room)	*4	dB <A>	84/87		85/88	
Refrigerant piping diameter		Liquid pipe	19.05 (3/4) Brazed		19.05 (3/4) Brazed	
		Gas pipe	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model			PUHY-EP250YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP400YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	185	270	270	185	270	270
		L/s	3,083	4,500	4,500	3,083	4,500	4,500
		cfm	6,532	9,534	9,534	6,532	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	*6	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.92 x 1	0.46 x 2
Compressor	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output		kW	5.1	7.7	7.7	5.1	7.7
Case heater		kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—	—	—	—	—	—
	Fan motor		—	—	—	—	—	—
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	228 (503)	282 (622)	282 (622)	228 (503)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP1050YSNW-A2 (-BS)		PUHY-EP1100YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	118.0		125.0	
		BTU / h	402,600		426,500	
		Power input	38.68		40.71	
		Current input	65.2-62.0-59.7		68.7-65.2-62.9	
		EER	3.05		3.07	
Temp. range of cooling	*2	SEER	6.79		6.75	
		Indoor	W.B.		15.0~24.0°C (59~75°F)	
		Outdoor	D.B.		15.0~24.0°C (59~75°F)	
			-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	131.5		140.0	
		BTU / h	448,700		477,700	
		Power input	35.83		37.53	
		Current input	60.4-57.4-55.3		63.3-60.1-58.0	
		COP	3.67		3.73	
(Nominal)	*3	kW	118.0		125.0	
		BTU / h	402,600		426,500	
		Power input	30.17		31.25	
		Current input	50.9-48.3-46.6		52.7-50.1-48.3	
		COP	3.91		4.00	
Temp. range of heating	*3	SCOP	4.28		4.31	
		Indoor	D.B.		15.0~27.0°C (59~81°F)	
		Outdoor	W.B.		15.0~27.0°C (59~81°F)	
			-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	68.5/69.0		68.0/69.5	
Sound power level (measured in anechoic room)	*4	dB <A>	86/89		86/89	
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed	
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model			PUHY-EP250YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP350YNNW-A2 (-BS)	PUHY-EP350YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	185	270	270	270	270	270
		L/s	3,083	4,500	4,500	4,500	4,500	4,500
		cfm	6,532	9,534	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*6	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.1	9.8	9.8	7.7	7.7	9.8
	Case heater	kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—	—	—	—	—	—
	Fan motor		—	—	—	—	—	—
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		228 (503)	303 (668)	303 (668)	282 (622)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP1150YSNW-A2 (-BS)	PUHY-EP1200YSNW-A2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	130.0	135.0
		BTU / h	443,600	460,600
		Power input	43.04	45.45
		Current input	72.6-69.0-66.5	76.7-72.8-70.2
		EER	3.02	2.97
Temp. range of cooling	*2	SEER	6.69	6.62
		Indoor	W.B.	15.0~24.0°C (59~75°F)
		Outdoor	D.B.	15.0~24.0°C (59~75°F)
			-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	145.0	150.0
		BTU / h	494,700	511,800
		Power input	39.50	41.55
		Current input	66.6-63.3-61.0	70.1-66.6-64.2
		COP	3.67	3.61
(Nominal)	*3	kW	130.0	135.0
		BTU / h	443,600	460,600
		Power input	33.07	34.97
		Current input	55.8-53.0-51.1	59.0-56.0-54.0
		COP	3.93	3.86
Temp. range of heating	*3	SCOP	4.27	4.25
		Indoor	W.B.	15.0~27.0°C (59~81°F)
		Outdoor	D.B.	15.0~27.0°C (59~81°F)
			-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/3~50	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	69.0/70.0	
Sound power level (measured in anechoic room)	*4	dB <A>	86/89	
Refrigerant piping diameter		mm (in.)	19.05 (3/4) Brazed	
		Gas pipe	41.28 (1-5/8) Brazed	

Set Model			PUHY-EP350YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	270	270	270	270	270	270
		L/s	4,500	4,500	4,500	4,500	4,500	4,500
		cfm	9,534	9,534	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	9.8	9.8	9.8	9.8	9.8
	Case heater	kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—			—		
	Fan motor		—			—		
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		282 (622)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Y-Series

High efficiency

R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP1250YSNW-A2 (-BS)		PUHY-EP1300YSNW-A2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	140.0		145.0		
		BTU / h	477,700		494,700		
	Power input	kW	48.44		51.60		
	Current input	A	81.7-77.6-74.8		87.1-82.7-79.7		
	EER	kW / kW	2.89		2.81		
SEER	kW / kW	6.66		6.70			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		
Heating capacity (Max)	*2	kW	156.0		162.0		
		BTU / h	532,300		552,700		
	Power input	kW	43.94		46.28		
	Current input	A	74.1-70.4-67.9		78.1-74.2-71.5		
	COP	kW / kW	3.55		3.50		
	(Nominal)	*3	kW	140.0		145.0	
			BTU / h	477,700		494,700	
		Power input	kW	36.17		37.37	
		Current input	A	61.0-58.0-55.9		63.0-59.9-57.7	
		COP	kW / kW	3.87		3.88	
SCOP	kW / kW	4.27		4.29			
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/3~50		P10~P250, M20~M140/3~50		
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	70.0/73.0		70.0/74.0	
Sound power level (measured in anechoic room)		*4	dB <A>	88/92		88/94	
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed		

Set Model			PUHY-EP400YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP450YNNW-A2 (-BS)	PUHY-EP400YNNW-A2 (-BS)	PUHY-EP450YNNW-A2 (-BS)	PUHY-EP450YNNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	270	270	305	270	305	305
		L/s	4,500	4,500	5,083	4,500	5,083	5,083
		cfm	9,534	9,534	10,770	9,534	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*6	External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	9.8	9.8	11.1	9.8	11.1	11.1
	Case heater	kW	—	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		—	—	—	—	—	—
	Fan motor		—	—	—	—	—	—
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		303 (668)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency R410A

PUHY-EP YSNW-A2(-BS)



Model			PUHY-EP1350YSNW-A2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	150.0	
		BTU / h	511,800	
	Power input	kW	54.94	
	Current input	A	92.7-88.1-84.9	
	EER	kW / kW	2.73	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	168.0	
		BTU / h	573,200	
	Power input	kW	48.55	
	Current input	A	81.9-77.8-75.0	
	COP	kW / kW	3.46	
(Nominal)	*3	kW	150.0	
		BTU / h	511,800	
	Power input	kW	38.56	
	Current input	A	65.0-61.8-59.6	
	COP	kW / kW	3.89	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/3~50	
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	70.5/75.5	
Sound power level (measured in anechoic room)	*4	dB <A>	89/95	
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	

Set Model			PUHY-EP450YNW-A2 (-BS)	PUHY-EP450YNW-A2 (-BS)	PUHY-EP450YNW-A2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	305	305	305
		L/s	5,083	5,083	5,083
		cfm	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Compressor	*6	Motor output	0.46 x 2	0.46 x 2	0.46 x 2
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	11.1	11.1	11.1
External finish	Case heater	kW	—	—	—
			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
	in.		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		—	—	—
	Fan motor		—	—	—
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Optional parts R32 R410A

• For Y-Series

Description	Model	Remarks
Panel heater kit *1	PAC-PH01EHY-E	For S module
	PAC-PH02EHY-E	For L module
	PAC-PH03EHY-E	For XL module
Twinning kit	CMY-Y100VBK3	For PUHY-(E)P400-(E)P650YSNW-A2
	CMY-Y200VBK2	For PUHY-(E)P700-(E)P900YSNW-A2
	CMY-Y300VBK3	For PUHY-(E)P950-(E)P1350YSNW-A2
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below(Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400(Total capacity of indoor unit)
	CMY-Y202S-G2	401-650(Total capacity of indoor unit)
	CMY-Y302S-G2	651-above(Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Fin Guard	PAC-FG01S-E	For side surfaces of S and L modules (a set of two pieces)
	PAC-FG02S-E	For side surfaces of XL modules (a set of two pieces)
	PAC-FG01B-E	For rear surface of S module
	PAC-FG02B-E	For rear surface of L module (a set of two pieces)
	PAC-FG03B-E	For rear surface of XL module (a set of two pieces)

* R32 is only applied to S module.

*1. If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a panel heater is recommended.
For details, refer to the installation manual for the panel heater.

R2-Series

Standard

R32

PURY-M YNW-A1(-BS)



Model			PURY-M200YNW-A1 (-BS)		PURY-M250YNW-A1 (-BS)		PURY-M300YNW-A1 (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1	kW	22.4		28.0		33.5			
		BTU/h	76,400		95,500		114,300			
	Power input	kW	6.68		10.25		11.75			
	Current input	A	8.1-7.7-7.4		11.9-11.3-10.9		14.6-13.9-13.4			
	EER	kW/kW	3.35		2.73		2.85			
		SEER	kW/kW	7.27		6.85		6.34		
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)			
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)			
Heating capacity (Max)	*2	kW	25.0		31.5		37.5			
		BTU/h	85,300		107,500		128,000			
	Power input	kW	5.27		7.32		9.35			
	Current input	A	8.8-8.4-8.1		12.3-11.7-11.3		15.7-14.9-14.4			
	COP	kW/kW	3.68		3.29		3.48			
	(Nominal)	*3	kW	22.4		28.0		33.5		
			BTU/h	76,400		95,500		114,300		
		Power input	kW	5.38		7.36		9.62		
		Current input	A	7.4-7.0-6.8		10.3-9.8-9.4		13.3-12.6-12.1		
		COP	kW/kW	4.16		3.80		3.48		
		SCOP	kW/kW	4.01		4.01		4.01		
Temp. range of heating	Indoor	D.B.	15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)			
	Outdoor	W.B.	-20.0~15.5 °C (-4~60 °F)		-20.0~15.5 °C (-4~60 °F)		-20.0~15.5 °C (-4~60 °F)			
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity			
	Model / Quantity		M20~M140/1~9 *8		M20~M140/1~11 *9		M20~M140/2~14 *10			
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>		59.0/59.0		60.5/61.0		61.0/67.0	
Sound power level (measured in anechoic room)		*4	dB <A>		76.0/78.0		78.5/80.0		80.0/86.5	
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed			
	Low pressure	mm (in.)	19.05 (3/4) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed			
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1			
	Air flow rate	m³/min	170		185		240			
		L/s	2,833		3,083		4,000			
		cfm	6,003		6,532		8,474			
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1			
	*6	External static press.	0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)			
		Type	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			
Compressor	Starting method		Inverter		Inverter		Inverter			
	Motor output	kW	3.6		5.4		7.2			
	Case heater	kW	- (- V)		- (- V)		- (- V)			
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740			
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16			
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection			
	Compressor		-		-		-			
	Fan motor		-		-		-			
Refrigerant	Type x original charge		R32 x 5.2 kg (12 lbs)		R32 x 5.2 kg (12 lbs)		R32 x 5.2 kg (12 lbs)			
	Control		Indoor LEV and BC controller		Indoor LEV and BC controller		Indoor LEV and BC controller			
Net weight		kg (lbs)	227 (501)		227 (501)		227 (501)			
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1			

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).
Consult your dealer about the specification when setting External static pressure option.

*7 R32 is flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
For detail, refer to the section in the Databook on installation restrictions.

*8 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 8.

*9 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 10.

*10 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 12.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series High efficiency R32

PURY-EM YNW-A1(-BS)



Model			PURY-EM200YNW-A1 (-BS)	PURY-EM250YNW-A1 (-BS)	PURY-EM300YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		BTU/h	76,400	95,500	114,300
	Power input	kW	6.38	9.75	11.20
		A	7.4-7.1-6.8	11.2-10.7-10.3	13.2-12.5-12.0
		EER	3.51	2.87	2.99
		SEER	7.45	7.05	6.48
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)
Heating capacity (Max)	*2	kW	25.0	31.5	37.5
		BTU/h	85,300	107,500	128,000
		Power input	kW	5.23	7.30
		Current input	A	8.8-8.3-8.0	12.3-11.7-11.2
	(Nominal)	COP	kW/kW	3.72	3.31
		*3	kW	22.4	33.5
		BTU/h	76,400	95,500	114,300
		Power input	kW	5.37	7.31
		Current input	A	7.3-7.0-6.7	10.3-9.7-9.4
		COP	kW/kW	4.17	3.83
		SCOP	kW/kW	3.51	3.54
		Temp. range of heating	Indoor D.B. 15.0~27.0 °C (59~81 °F) Outdoor W.B. -20.0~15.5 °C (-4~60 °F)	Indoor D.B. 15.0~27.0 °C (59~81 °F) Outdoor W.B. -20.0~15.5 °C (-4~60 °F)	Indoor D.B. 15.0~27.0 °C (59~81 °F) Outdoor W.B. -20.0~15.5 °C (-4~60 °F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		M20~M140/1~9 *8	M20~M140/1~11 *9	M20~M140/2~14 *10
Sound pressure level (measured in anechoic room)	*4, 5	dB <A>	59.0/59.0	60.5/61.0	61.0/67.0
Sound power level (measured in anechoic room)	*4	dB <A>	76.0/78.0	78.5/80.0	80.0/86.5
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze
	Low pressure	mm (in.)	19.05 (3/4) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
Compressor	*6 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.6	5.4	7.2
	Case heater		- (- V)	- (- V)	- (- V)
	External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) (MUNSELL 5Y 8/1 or similar)	Pre-coated galvanized steel sheets (+powder coating for -BS type) (MUNSELL 5Y 8/1 or similar)	Pre-coated galvanized steel sheets (+powder coating for -BS type) (MUNSELL 5Y 8/1 or similar)
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
	in.		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		-	-	-
	Fan motor		-	-	-
Refrigerant	Type x original charge		R32 x 5.2 kg (12 lbs)	R32 x 5.2 kg (12 lbs)	R32 x 5.2 kg (12 lbs)
	Control		Indoor LEV and BC controller	Indoor LEV and BC controller	Indoor LEV and BC controller
Net weight	kg (lbs)		231 (510)	231 (510)	231 (510)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts	Joint: CMY-Y102SS-G2 CMY-Y102LS-G2 CMY-R160-J1		Joint: CMY-Y102SS-G2 CMY-Y102LS-G2 CMY-R160-J1	Joint: CMY-Y102SS-G2 CMY-Y102LS-G2 CMY-R160-J1	Joint: CMY-Y102SS-G2 CMY-Y102LS-G2 CMY-R160-J1
	BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1		BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1	BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1	BC controller: CMB-M104, 106, 108, 1012, 1016V-J1 Main BC controller: CMB-M108, 1012, 1016V-JA1 Sub BC controller: CMB-M104, 108V-KB1

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).
Consult your dealer about the specification when setting External static pressure option.

*7 R32 is flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
For detail, refer to the section in the Databook on installation restrictions.

*8 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 8.

*9 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 10.

*10 When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is 12.

R2-Series

Standard

R410A

PURY-P YNW-A2/TR2/RU2 (-BS)



Model			PURY-P200YNW-A2/TR2/RU2 (-BS)		PURY-P250YNW-A2/TR2/RU2 (-BS)		PURY-P300YNW-A2/TR2/RU2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	22.4		28.0		33.5		
		BTU / h	76,400		95,500		114,300		
	Power input	kW	6.68		10.25		11.75		
	Current input	A	11.2-10.7-10.3		17.3-16.4-15.8		19.8-18.8-18.1		
	EER	kW / kW	3.35		2.73		2.85		
SEER	kW / kW	7.27		6.85		6.34			
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	25.0		31.5		33.5		
		BTU / h	85,300		107,500		114,300		
	Power input	kW	6.79		9.57		9.62		
	Current input	A	11.4-10.8-10.4		16.1-15.3-14.7		16.2-15.4-14.8		
	COP	kW / kW	3.68		3.29		3.48		
	(Nominal)	*3	kW	22.4		28.0		33.5	
			BTU / h	76,400		95,500		114,300	
		Power input	kW	5.38		7.36		9.62	
		Current input	A	9.0-8.6-8.3		12.4-11.8-11.3		16.2-15.4-14.8	
		COP	kW / kW	4.16		3.80		3.80	
SCOP		kW / kW	4.01		4.01		4.01		
Temp. range of heating	*4	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/1~20		P10~P250, M20~M140/1~25		P10~P250, M20~M140/1~30		
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	59.0/59.0		60.5/64.0		61.0/67.0		
Sound power level (measured in anechoic room)	*5	dB <A>	76/76		78/83		80/86		
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed		19.05 (3/4) Brazed		19.05 (3/4) Brazed		
	Low pressure	mm (in.)	19.05 (3/4) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		
Compressor	*7	Air flow rate	m³/min	170		220		240	
			L/s	2,833		3,667		4,000	
		cfm	6,003		7,768		8,474		
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1		
	External static press.	0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Starting method	Inverter		Inverter		Inverter		Inverter	
Motor output	kW	5.0		8.0		9.2			
Case heater	kW	—		—		—			
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		1,858 (1,798 without legs) x 920 x 740		
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor		—		—		—		
	Fan motor		—		—		—		
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)		R410A x 5.2 kg (12 lbs)		R410A x 5.2 kg (12 lbs)		
Net weight	kg (lbs)		214 (472)		223 (492)		225 (497)		
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

Standard

R410A

PURY-P YNW-A2/TR2/RU2 (-BS)



Model			PURY-P350YNW-A2/TR2/RU2 (-BS)	PURY-P400YNW-A2/TR2/RU2 (-BS)	PURY-P450YNW-A2/TR2/RU2 (-BS)	PURY-P500YNW-A2/TR2/RU2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0	56.0		
		BTU / h	136,500	153,500	170,600	191,100		
		Power input kW	14.92	19.65	22.22	22.22		
		Current input A	25.1-23.9-23.0	33.1-31.5-30.3	33.4-31.8-30.6	37.5-35.6-34.3		
		EER	2.68	2.29	2.52	2.52		
Temp. range of cooling	*4	SEER	5.98	5.82	6.38	6.24		
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)		
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)		
		Heating capacity (Max)	*2	kW	45.0	50.0	56.0	63.0
				BTU / h	153,500	170,600	191,100	215,000
Power input kW	13.88			16.66	18.79	21.14		
Current input A	23.4-22.2-21.4			28.1-26.7-25.7	31.7-30.1-29.0	35.6-33.9-32.6		
COP	3.24			3.00	2.98	2.98		
(Nominal)	*3	kW	40.0	45.0	50.0	56.0		
		BTU / h	136,500	153,500	170,600	191,100		
		Power input kW	10.89	13.39	15.33	16.76		
		Current input A	18.3-17.4-16.8	22.6-21.4-20.6	25.8-24.5-23.6	28.2-26.8-25.9		
		COP	3.67	3.36	3.26	3.34		
Temp. range of heating	*4	SCOP	3.53	3.51	3.51	3.51		
		Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)		
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)		
		Indoor unit connectable		Total capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
		Model / Quantity		P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	
Sound pressure level (measured in anechoic room)		*5, 6	dB <A>	62.5/64.0	65.0/69.0	65.5/70.0	63.5/64.5	
Sound power level (measured in anechoic room)		*5	dB <A>	81/83	83/88	83/89	82/84	
Refrigerant piping diameter	High pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed		
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed		
FAN	Type x Quantity	Propeller fan x 2		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2		
	Air flow rate	m ³ /min	250	315	315	295		
		L/s	4,167	5,250	5,250	4,917		
		cfm	8,828	11,123	11,123	10,416		
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2		
	External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter	Inverter	Inverter		
	Motor output	kW	12.0	16.1	16.2	17.4		
	Case heater	kW	—	—	—	—		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740		
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection		
	Compressor		—		—	—		
	Fan motor		—		—	—		
Refrigerant	Type x original charge	R410A x 8.0 kg (18 lbs)		R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)		
Net weight	kg (lbs)	269 (594)		269 (594)	289 (638)	335 (739)		
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube		
Optional parts		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

Standard

R410A

PURY-P YNW-A2/TR2/RU2 (-BS)



Model			PURY-P550YNW-A2/TR2/RU2 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	60.0	
		BTU / h	204,700	
	Power input	kW	25.86	
	Current input	A	43.6-41.4-39.9	
	EER	kW / kW	2.32	
SEER	kW / kW	6.25		
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	69.0	
		BTU / h	235,400	
	Power input	kW	24.55	
	Current input	A	41.4-39.3-37.9	
	COP	kW / kW	2.81	
	(Nominal)	*3	kW	63.0
			BTU / h	215,000
		Power input	kW	20.00
		Current input	A	33.7-32.0-30.9
		COP	kW / kW	3.15
SCOP		kW / kW	3.51	
Temp. range of heating	*4	Indoor	D.B.	15.0~27.0°C (59~81°F)
		Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/2~50	
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	70.0/70.0	
Sound power level (measured in anechoic room)	*5	dB <A>	89/89	
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (28.58 (1-1/8) Brazed for the part that exceeds 65 m)	
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	
FAN	Type x Quantity		Propeller fan x 2	
	Air flow rate	m³/min	410	
		L/s	6,833	
		cfm	14,477	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 2	
	*7	External static press.		0 Pa (0 mmH₂O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	
	Starting method		Inverter	
	Motor output	kW	20.5	
	Case heater		kW	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	
	Compressor		—	
	Fan motor		—	
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	
Net weight	kg (lbs)		335 (739)	
Heat exchanger			Salt-resistant cross fin & copper tube	
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa/3.1 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P400YSNW-A2/TR2/RU2 (-BS)	PURY-P450YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	44.8	50.4
		BTU / h	152,900	172,000
	Power input	kW	13.78	17.08
		Current input	A	23.2-22.0-21.3
		EER	kW / kW	3.25
		SEER	kW / kW	7.05
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	50.0	56.5
		BTU / h	170,600	192,800
	Power input	kW	14.00	16.71
		Current input	A	23.6-22.4-21.6
		COP	kW / kW	3.57
		SCOP	kW / kW	4.01
(Nominal)	*3	kW	44.8	50.4
		BTU / h	152,900	172,000
Temp. range of heating	Indoor	kW	11.08	13.05
		Current input	A	22.0-20.9-20.1
		COP	kW / kW	3.86
		SCOP	kW / kW	4.01
	Outdoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	62.0/62.0	63.0/65.5
Sound power level (measured in anechoic room)	*5	dB <A>	79/79	81/84
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P200YNW-A2/TR2/RU2 (-BS)	PURY-P200YNW-A2/TR2/RU2 (-BS)	PURY-P200YNW-A2/TR2/RU2 (-BS)	PURY-P250YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m³/min	170	170	170	220
		L/s	2,833	2,833	2,833	3,667
		cfm	6,003	6,003	6,003	7,768
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*7	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.0	5.0	5.0	8.0
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	214 (472)	214 (472)	214 (472)	223 (492)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P500YSNW-A2/TR2/RU2 (-BS)	PURY-P550YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	61.5
		BTU / h	191,100	209,800
	Power input	kW	21.13	22.69
	Current input	A	35.6-33.8-32.6	38.3-36.3-35.0
	EER	kW / kW	2.65	2.71
Temp. range of cooling		kW / kW	6.64	6.40
	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
	Heating capacity (Max)	*2	kW	65.0
		BTU / h	215,000	221,800
(Nominal)	Power input	kW	19.74	19.81
	Current input	A	33.3-31.6-30.5	33.4-31.7-30.6
	COP	kW / kW	3.19	3.28
	*3	kW	56.0	61.5
		BTU / h	191,100	209,800
Temp. range of heating	Power input	kW	15.17	17.42
	Current input	A	25.6-24.3-23.4	29.4-27.9-26.9
	COP	kW / kW	3.69	3.53
	SCOP	kW / kW	4.01	4.01
	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Indoor unit connectable	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	63.5/67.0	64.0/69.0
Sound power level (measured in anechoic room)	*5	dB <A>	81/86	83/88
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P250YNW-A2/TR2/RU2 (-BS)	PURY-P250YNW-A2/TR2/RU2 (-BS)	PURY-P250YNW-A2/TR2/RU2 (-BS)	PURY-P300YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	220	220	220	240
		L/s	3,667	3,667	3,667	4,000
		cfm	7,768	7,768	7,768	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.0	8.0	8.0	9.2
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	223 (492)	223 (492)	223 (492)	225 (497)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN -Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P600YSNW-A2/TR2/RU2 (-BS)	PURY-P650YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	67.0	73.5
		BTU / h	228,600	250,800
	Power input	kW	24.27	27.42
	Current input	A	40.9-38.9-37.5	46.2-43.9-42.3
	EER	kW / kW	2.76	2.68
	SEER	kW / kW	6.15	5.98
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	67.0	78.5
		BTU / h	228,600	267,800
	Power input	kW	19.81	24.07
	Current input	A	33.4-31.7-30.6	40.6-38.6-37.2
	COP	kW / kW	3.38	3.26
	(Nominal)	*3	kW	73.5
			BTU / h	250,800
	Power input	kW	19.82	21.18
	Current input	A	33.4-31.7-30.6	35.7-33.9-32.7
	COP	kW / kW	3.38	3.47
	SCOP	kW / kW	4.01	3.53
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	64.0/70.0	65.0/69.0
Sound power level (measured in anechoic room)	*5	dB <A>	83/89	84/88
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P300YNW-A2/TR2/RU2 (-BS)	PURY-P300YNW-A2/TR2/RU2 (-BS)	PURY-P300YNW-A2/TR2/RU2 (-BS)	PURY-P350YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m ³ /min	240	240	240	250
		L/s	4,000	4,000	4,000	4,167
		cfm	8,474	8,474	8,474	8,828
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	9.2	9.2	9.2	12.0
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	225 (497)	225 (497)	225 (497)	269 (594)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P700YSNW-A2/TR2/RU2 (-BS)	PURY-P750YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	80.0	85.0
		BTU / h	273,000	290,000
	Power input	kW	30.76	35.26
	Current input	A	51.9-49.3-47.5	59.5-56.5-54.5
	EER	kW / kW	2.60	2.41
Temp. range of cooling		kW / kW	5.80	5.72
	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
	Heating capacity (Max)	*2	kW	95.0
		BTU / h	307,100	324,100
(Nominal)	Power input	kW	28.66	31.35
	Current input	A	48.3-45.9-44.3	52.9-50.2-48.4
	COP	kW / kW	3.14	3.03
	*3	kW	80.0	85.0
		BTU / h	273,000	290,000
Temp. range of heating	Power input	kW	22.47	24.92
	Current input	A	37.9-36.0-34.7	42.0-39.9-38.5
	COP	kW / kW	3.56	3.41
	SCOP	kW / kW	3.53	3.51
	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Indoor unit connectable	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	65.5/67.0	67.0/70.5
Sound power level (measured in anechoic room)	*5	dB <A>	84/86	86/90
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PURY-P350YNW-A2/TR2/RU2 (-BS)	PURY-P350YNW-A2/TR2/RU2 (-BS)	PURY-P350YNW-A2/TR2/RU2 (-BS)	PURY-P400YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	250	250	250	315
		L/s	4,167	4,167	4,167	5,250
		cfm	8,828	8,828	8,828	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.0	12.0	12.0	16.1
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight	kg (lbs)		269 (594)	269 (594)	269 (594)	269 (594)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P800YSNW-A2/TR2/RU2 (-BS)	PURY-P850YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	90.0	95.0
		BTU / h	307,100	324,100
	Power input	kW	40.54	40.77
	Current input	A	68.4-65.0-62.6	68.8-65.3-63.0
	EER	kW / kW	2.22	2.33
	SEER	kW / kW	5.65	5.92
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	100.0	106.0
		BTU / h	341,200	361,700
	Power input	kW	34.36	36.55
	Current input	A	58.0-55.1-53.1	61.7-58.6-56.4
	COP	kW / kW	2.91	2.90
(Nominal)	*3	kW	90.0	95.0
		BTU / h	307,100	324,100
	Power input	kW	27.60	29.59
	Current input	A	46.5-44.2-42.6	49.9-47.4-45.7
	COP	kW / kW	3.26	3.21
	SCOP	kW / kW	3.51	3.51
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	68.0/72.0	68.5/72.5
Sound power level (measured in anechoic room)	*5	dB <A>	86/91	86/92
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-P400YNW-A2/TR2/RU2 (-BS)	PURY-P400YNW-A2/TR2/RU2 (-BS)	PURY-P400YNW-A2/TR2/RU2 (-BS)	PURY-P450YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	315	315	315	315
		L/s	5,250	5,250	5,250	5,250
		cfm	11,123	11,123	11,123	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	16.1	16.1	16.1	16.2
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		269 (594)	269 (594)	269 (594)	289 (638)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model			PURY-P900YSNW-A2/TR2/RU2 (-BS)	PURY-P950YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	100.0	106.0
		BTU / h	341,200	361,700
	Power input	kW	40.98	43.44
	Current input	A	69.1-65.7-63.3	73.3-69.6-67.1
	EER	kW / kW	2.44	2.44
	SEER	kW / kW	6.19	6.12
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	112.0	119.0
		BTU / h	382,100	406,000
	Power input	kW	38.75	41.17
	Current input	A	65.4-62.1-59.8	69.5-66.0-63.6
	COP	kW / kW	2.89	2.89
	(Nominal)	*3	kW	100.0
			BTU / h	341,200
	Power input	kW	31.64	33.12
	Current input	A	53.4-50.7-48.9	55.9-53.1-51.1
	COP	kW / kW	3.16	3.20
	SCOP	kW / kW	3.51	3.51
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable			50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	68.5/73.0	68.0/71.5
Sound power level (measured in anechoic room)	*5	dB <A>	86/92	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-P450YNW-A2/TR2/RU2 (-BS)	PURY-P450YNW-A2/TR2/RU2 (-BS)	PURY-P450YNW-A2/TR2/RU2 (-BS)	PURY-P500YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	315	315	315	295
		L/s	5,250	5,250	5,250	4,917
		cfm	11,123	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	16.2	16.2	16.2	17.4
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		289 (638)	289 (638)	289 (638)	335 (739)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN -Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

R2-Series

Standard

R410A

PURY-P YSNW-A2/TR2/RU2 (-BS)



Model	PURY-P1000YSNW-A2/TR2/RU2 (-BS)		PURY-P1050YSNW-A2/TR2/RU2 (-BS)		PURY-P1100YSNW-A2/TR2/RU2 (-BS)	
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	112.0		116.0	
		BTU / h	382,100		395,800	
	Power input	kW	45.90		49.36	
		A	77.4-73.6-70.9		83.3-79.1-76.2	
		EER	2.44		2.35	
Temp. range of cooling	*4	SEER	6.05		6.06	
		kW / kW	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
		W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	126.0		132.0	
		BTU / h	429,900		450,400	
	Power input	kW	43.59		46.97	
		A	73.5-69.9-67.3		79.2-75.3-72.6	
		COP	2.89		2.81	
(Nominal)	*3	kW	112.0		119.0	
		BTU / h	382,100		406,000	
	Power input	kW	34.56		37.77	
		A	58.3-55.4-53.4		63.7-60.5-58.3	
		COP	3.24		3.15	
Temp. range of heating	*4	SCOP	3.51		3.51	
		kW / kW	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
	Outdoor	D.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
		W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
		D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity	
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	66.5/67.5		71.0/71.5	
Sound power level (measured in anechoic room)	*5	dB <A>	85/87		90/91	
Refrigerant piping diameter	High pressure		28.58 (1-1/8) Brazed		34.93 (1-3/8) Brazed	
	Low pressure		41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Set Model			PURY-P500YNW-A2/ TR2/RU2 (-BS)	PURY-P500YNW-A2/ TR2/RU2 (-BS)	PURY-P500YNW-A2/ TR2/RU2 (-BS)	PURY-P550YNW-A2/ TR2/RU2 (-BS)	PURY-P550YNW-A2/ TR2/RU2 (-BS)	PURY-P550YNW-A2/ TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	295	295	295	410	410	410
		L/s	4,917	4,917	4,917	6,833	6,833	6,833
		cfm	10,416	10,416	10,416	14,477	14,477	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
	*7	External static press.		0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	17.4	17.4	17.4	20.5	20.5	20.5
	Case heater		kW	—	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD			mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
			in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—		—	
	Fan motor		—		—		—	
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		335 (739)	335 (739)	335 (739)	335 (739)	335 (739)	335 (739)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available.

For PURY-P1000YSNW-A2: 30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂OFor PURY-P1050/1100YSNW-A2: 30 Pa/3.1 mmH₂O

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YNW-A2/TR2/RU2 (-BS)



Model			PURY-EP200YNW-A2/TR2/RU2 (-BS)	PURY-EP250YNW-A2/TR2/RU2 (-BS)	PURY-EP300YNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	6.38	9.75	11.20
		A	10.7-10.2-9.8	16.4-15.6-15.0	18.9-17.9-17.3
		EER	3.51	2.87	2.99
Temp. range of cooling	*4	SEER	7.45	7.05	6.48
		kW / kW			
	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	6.72	9.51	10.90
		A	11.3-10.7-10.3	16.0-15.2-14.7	18.4-17.4-16.8
		COP	3.72	3.31	3.44
(Nominal)	*3	kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.37	7.31	9.59
		A	9.0-8.6-8.3	12.3-11.7-11.2	16.1-15.3-14.8
		COP	4.17	3.83	3.49
Temp. range of heating	*4	SCOP	3.51	3.51	3.54
		kW / kW			
	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	59.0/59.0	60.5/61.0	61.0/67.0
Sound power level (measured in anechoic room)	*5	dB <A>	76/76	78/80	80/86
Refrigerant piping diameter	mm (in.)	High pressure	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
		Low pressure	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Compressor	*7	Motor output	0.92 x 1	0.92 x 1	0.92 x 1
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.9	7.5	8.8
External finish	Case heater		—	—	—
			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		—	—	—
	Fan motor		—	—	—
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight	kg (lbs)		219 (483)	228 (503)	230 (508)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

High efficiency

R410A

PURY-EP YNW-A2/TR2/RU2 (-BS)



Model			PURY-EP350YNW-A2/TR2/RU2 (-BS)	PURY-EP400YNW-A2/TR2/RU2 (-BS)	PURY-EP450YNW-A2/TR2/RU2 (-BS)	PURY-EP500YNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
		Power input kW	14.23	18.75	18.93	21.78
		Current input A	24.0-22.8-21.9	31.6-30.0-28.9	31.9-30.3-29.2	36.7-34.9-33.6
		EER	2.81	2.40	2.64	2.57
Temp. range of cooling	*4	SEER	6.03	6.10	6.58	6.38
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		Heating capacity (Max)	45.0	50.0	56.0	63.0
		BTU / h	153,500	170,600	191,100	215,000
(Nominal)	*2	Power input kW	13.39	16.33	18.36	21.00
		Current input A	22.6-21.4-20.6	27.5-26.1-25.2	30.9-29.4-28.3	35.4-33.6-32.4
		COP	3.36	3.06	3.05	3.00
	*3	kW / kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
Temp. range of heating	*4	Power input kW	10.63	13.15	14.61	16.66
		Current input A	17.9-17.0-16.4	22.1-21.0-20.3	24.6-23.4-22.5	28.1-26.7-25.7
		COP	3.76	3.42	3.42	3.36
		SCOP	3.56	3.57	3.56	3.54
		Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Indoor unit connectable	*4	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Total capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50
		Sound pressure level (measured in anechoic room)	*5, 6 dB <A>	62.5/64.0	65.0/69.0	65.5/70.0
		Sound power level (measured in anechoic room)	*5 dB <A>	81/83	83/88	83/89
Refrigerant piping diameter	*5	High pressure mm (in.)	19.05 (3/4) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze
		Low pressure mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
		FAN	Type x Quantity	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
		Air flow rate	m ³ /min	250	315	295
		L/s	4,167	5,250	5,250	4,917
Compressor	*7	cfm	8,828	11,123	11,123	10,416
		Control, Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
		Motor output kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
		External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
		Type x Quantity	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
External finish	*7	Starting method	Inverter	Inverter	Inverter	Inverter
		Motor output kW	11.4	15.3	15.5	17.0
		Case heater	—	—	—	—
		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
		External dimension HxWxD	mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
Protection devices	*7	in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
		High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
		Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
		Compressor	—	—	—	—
		Fan motor	—	—	—	—
Refrigerant	*7	Type x original charge	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
		Net weight kg (lbs)	275 (607)	276 (609)	301 (664)	346 (763)
		Heat exchanger	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
		Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YNW-A2/TR2/RU2 (-BS)



Model			PURY-EP550YNW-A2/TR2/RU2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	60.0		
		BTU / h	204,700		
	Power input	kW	25.70		
	Current input	A	43.3-41.2-39.7		
	EER	kW / kW	2.33		
	SEER	kW / kW	6.40		
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)	
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	69.0		
		BTU / h	235,400		
	Power input	kW	23.87		
	Current input	A	40.2-38.2-36.8		
	COP	kW / kW	2.89		
	(Nominal)	*3	kW	63.0	
			BTU / h	215,000	
		Power input	kW	19.81	
		Current input	A	33.4-31.7-30.6	
		COP	kW / kW	3.18	
		SCOP	kW / kW	3.51	
Temp. range of heating		*4	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor		W.B.	-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/2~50		
Sound pressure level (measured in anechoic room)		*5, 6	dB <A>		
			70.0/70.0		
Sound power level (measured in anechoic room)		*5	dB <A>		
			89/89		
Refrigerant piping diameter	High pressure		mm (in.) 22.2 (7/8) Brazed (28.58 (1-1/8) Brazed for the part that exceeds 65 m)		
	Low pressure		mm (in.) 28.58 (1-1/8) Brazed		
FAN	Type x Quantity		Propeller fan x 2		
	Air flow rate	m ³ /min	410		
		L/s	6,833		
		cfm	14,477		
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2		
	*7	External static press.		0 Pa (0 mmH ₂ O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		
	Starting method		Inverter		
	Motor output	kW	20.4		
	Case heater	kW	-		
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740		
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		
	Compressor		-		
	Fan motor		-		
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)		
Net weight	kg (lbs)		346 (763)		
Heat exchanger			Salt-resistant cross fin & aluminium tube		
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa/3.1 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP400YSNW-A2/TR2/RU2 (-BS)		PURY-EP450YSNW-A2/TR2/RU2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	44.8		50.4		
		BTU / h	152,900		172,000		
		Power input	kW		13.17		
		Current input	A		22.2-21.1-20.3		
		EER	kW / kW		3.40		
		SEER	kW / kW		7.23		
Temp. range of cooling	*4	Indoor	W.B.		15.0~24.0°C (59~75°F)		
		Outdoor	D.B.		-5.0~52.0°C (23~126°F)		
Heating capacity (Max)	*2	kW	50.0		56.5		
		BTU / h	170,600		192,800		
		Power input	kW		13.85		
		Current input	A		23.3-22.2-21.4		
		COP	kW / kW		3.61		
	(Nominal)	*3	kW	44.8		50.4	
			BTU / h	152,900		172,000	
			Power input	kW		11.08	
			Current input	A		18.7-17.7-17.1	
			COP	kW / kW		4.04	
		SCOP	kW / kW		3.51		
Temp. range of heating	*4	Indoor	D.B.		15.0~27.0°C (59~81°F)		
		Outdoor	W.B.		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/1~40		P10~P250, M20~M140/1~45		
Sound pressure level (measured in anechoic room)		*5, 6	dB <A>	62.0/62.0		63.0/63.5	
Sound power level (measured in anechoic room)		*5	dB <A>	79/79		81/82	
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		

Set Model			PURY-EP200YNNW-A2/TR2/RU2 (-BS)	PURY-EP200YNNW-A2/TR2/RU2 (-BS)	PURY-EP200YNNW-A2/TR2/RU2 (-BS)	PURY-EP250YNNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m ³ /min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*7 External static press.		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Starting method		Inverter		Inverter	
	Motor output	kW	4.9	4.9	4.9	7.5
	Case heater		kW		—	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant		Type x original charge	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	219 (483)	219 (483)	219 (483)	228 (503)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP500YSNW-A2/TR2/RU2 (-BS)	PURY-EP550YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	61.5
		BTU / h	191,100	209,800
	Power input	kW	20.14	21.65
	Current input	A	33.9-32.2-31.1	36.5-34.7-33.4
	EER	kW / kW	2.78	2.84
Temp. range of cooling		kW / kW	6.84	6.56
	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
	*2	kW	63.0	69.0
		BTU / h	215,000	235,400
Heating capacity (Max)	Power input	kW	19.62	21.10
	Current input	A	33.1-31.4-30.3	35.6-33.8-32.6
	COP	kW / kW	3.21	3.27
	(Nominal)	*3	kW	61.5
		BTU / h	191,100	209,800
Temp. range of heating	Power input	kW	15.05	17.32
	Current input	A	25.4-24.1-23.2	29.2-27.7-26.7
	COP	kW / kW	3.72	3.55
	SCOP	kW / kW	3.51	3.51
	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Indoor unit connectable	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	63.5/64.0	64.0/68.0
Sound power level (measured in anechoic room)	*5	dB <A>	81/83	83/87
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-EP250YNW-A2/TR2/RU2 (-BS)	PURY-EP250YNW-A2/TR2/RU2 (-BS)	PURY-EP250YNW-A2/TR2/RU2 (-BS)	PURY-EP300YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m ³ /min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.5	7.5	7.5	8.8
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight	kg (lbs)		228 (503)	228 (503)	228 (503)	230 (508)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP600YSNW-A2/TR2/RU2 (-BS)	PURY-EP650YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	67.0	73.5
		BTU / h	228,600	250,800
		Power input kW	23.10	26.15
		Current input A	38.9-37.0-35.7	44.1-41.9-40.4
		EER	2.90	2.81
Temp. range of cooling	*4	SEER	6.29	6.07
		Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
		Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
		*2	kW	82.5
			BTU / h	281,500
Heating capacity (Max)		Power input kW	22.45	25.00
		Current input A	37.8-36.0-34.7	42.2-40.0-38.6
		COP	3.34	3.30
		(Nominal)	*3	
		kW	67.0	73.5
Temp. range of heating	*4	BTU / h	228,600	250,800
		Power input kW	19.76	20.88
		Current input A	33.3-31.6-30.5	35.2-33.4-32.2
		COP	3.39	3.52
		SCOP	3.54	3.54
Indoor unit connectable	Model / Quantity	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>		64.0/70.0
Sound power level (measured in anechoic room)	*5	dB <A>		83/89
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-EP300YNW-A2/TR2/RU2 (-BS)	PURY-EP300YNW-A2/TR2/RU2 (-BS)	PURY-EP300YNW-A2/TR2/RU2 (-BS)	PURY-EP350YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m ³ /min	240	240	240	250
		L/s	4,000	4,000	4,000	4,167
		cfm	8,474	8,474	8,474	8,828
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.8	8.8	8.8	11.4
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 8.0 kg (18 lbs)
Net weight	kg (lbs)		230 (508)	230 (508)	230 (508)	275 (607)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP700YSNW-A2/TR2/RU2 (-BS)	PURY-EP750YSNW-A2/TR2/RU2 (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	80.0	85.0		
		BTU / h	273,000	290,000		
	Power input	kW	29.30	33.59		
	Current input	A	49.4-46.9-45.2	56.7-53.8-51.9		
	EER	kW / kW	2.73	2.53		
	SEER	kW / kW	5.85	5.88		
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	
Heating capacity (Max)	*2	kW	90.0	95.0		
		BTU / h	307,100	324,100		
	Power input	kW	27.60	30.54		
	Current input	A	46.5-44.2-42.6	51.5-48.9-47.2		
	(Nominal)	*3	COP	kW / kW	3.26	3.11
			kW	80.0	85.0	
		BTU / h	273,000	290,000		
		Power input	kW	21.91	24.42	
		Current input	A	36.9-35.1-33.8	41.2-39.1-37.7	
		COP	kW / kW	3.65	3.48	
		SCOP	kW / kW	3.56	3.56	
		Temp. range of heating	*4	Indoor	D.B.	15.0~27.0°C (59~81°F)
Outdoor				W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable		Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50		
Sound pressure level (measured in anechoic room)		*5, 6	dB <A>	65.5/67.0	67.0/70.5	
Sound power level (measured in anechoic room)		*5	dB <A>	84/86	86/90	
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed		
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed		

Set Model			PURY-EP350YNW-A2/TR2/RU2 (-BS)	PURY-EP350YNW-A2/TR2/RU2 (-BS)	PURY-EP350YNW-A2/TR2/RU2 (-BS)	PURY-EP400YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	250	250	250	315
		L/s	4,167	4,167	4,167	5,250
		cfm	8,828	8,828	8,828	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*7 External static press.		0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.4	11.4	11.4	15.3
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight	kg (lbs)		275 (607)	275 (607)	275 (607)	276 (609)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/66°F WB/45°F DB/43°F WB	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP800YSNW-A2/TR2/RU2 (-BS)	PURY-EP850YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	90.0	95.0
		BTU / h	307,100	324,100
	Power input	kW	38.62	38.93
	Current input	A	65.1-61.9-59.6	65.7-62.4-60.1
	EER	kW / kW	2.33	2.44
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)
	Heating capacity (Max)	*2	kW	106.0
			BTU / h	361,700
		Power input	kW	35.81
(Nominal)	*3	Current input	A	60.4-57.4-55.3
		COP	kW / kW	2.96
			kW	95.0
			BTU / h	324,100
		Power input	kW	28.61
Temp. range of heating	*4	Indoor	W.B.	15.0~27.0°C (59~81°F)
		Outdoor	D.B.	-20.0~15.5°C (-4~60°F)
	Total capacity	*2	kW	106.0
			BTU / h	361,700
		Power input	kW	35.81
Indoor unit connectable	Model / Quantity	Current input	A	60.4-57.4-55.3
		COP	kW / kW	2.96
		SCOP	kW / kW	3.56
		Indoor	W.B.	15.0~27.0°C (59~81°F)
		Outdoor	D.B.	-20.0~15.5°C (-4~60°F)
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	68.0/72.0	68.5/72.5
Sound power level (measured in anechoic room)	*5	dB <A>	86/91	86/92
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-EP400YNW-A2/TR2/RU2 (-BS)	PURY-EP400YNW-A2/TR2/RU2 (-BS)	PURY-EP400YNW-A2/TR2/RU2 (-BS)	PURY-EP450YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	315	315	315	315
		L/s	5,250	5,250	5,250	5,250
		cfm	11,123	11,123	11,123	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	15.3	15.3	15.3	15.5
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
	Fan motor		—	—	—	—
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		276 (609)	276 (609)	276 (609)	301 (664)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP900YSNW-A2/TR2/RU2 (-BS)	PURY-EP950YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	100.0	106.0
		BTU / h	341,200	361,700
	Power input	kW	39.06	41.89
	Current input	A	65.9-62.6-60.3	70.7-67.1-64.7
	EER	kW / kW	2.56	2.53
	SEER	kW / kW	6.38	6.29
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Max)	*2	kW	112.0	119.0
		BTU / h	382,100	406,000
	Power input	kW	37.83	40.61
	Current input	A	63.8-60.6-58.4	68.5-65.1-62.7
	COP	kW / kW	2.96	2.93
(Nominal)	*3	kW	100.0	106.0
		BTU / h	341,200	361,700
	Power input	kW	30.12	32.21
	Current input	A	50.8-48.3-46.5	54.3-51.6-49.7
	COP	kW / kW	3.32	3.29
	SCOP	kW / kW	3.56	3.54
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	68.5/73.0	68.0/71.5
Sound power level (measured in anechoic room)	*5	dB <A>	86/92	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-EP450YNW-A2/TR2/RU2 (-BS)	PURY-EP450YNW-A2/TR2/RU2 (-BS)	PURY-EP450YNW-A2/TR2/RU2 (-BS)	PURY-EP500YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	315	315	315	295
		L/s	5,250	5,250	5,250	4,917
		cfm	11,123	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	15.5	15.5	15.5	17.0
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—	—	—	—
Refrigerant	Fan motor		—	—	—	—
	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	301 (664)	301 (664)	301 (664)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN -Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP1000YSNW-A2/TR2/RU2 (-BS)	PURY-EP1050YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	112.0	116.0
		BTU / h	382,100	395,800
	Power input	kW	44.97	48.73
	Current input	A	75.9-72.1-69.5	82.2-78.1-75.3
	EER	kW / kW	2.49	2.38
Temp. range of cooling	*4	Indoor	W.B.	15.0~24.0°C (59~75°F)
		Outdoor	D.B.	-5.0~52.0°C (23~126°F)
	Heating capacity (Max)	*2	kW	126.0
			BTU / h	429,900
		Power input	kW	43.29
(Nominal)	*3	Current input	A	73.0-69.4-66.9
		COP	kW / kW	2.91
			kW	112.0
			BTU / h	382,100
		Power input	kW	34.35
Temp. range of heating	*4	Indoor	W.B.	15.0~27.0°C (59~81°F)
		Outdoor	D.B.	-20.0~15.5°C (-4~60°F)
	Total capacity	50~150% of outdoor unit capacity		50~150% of outdoor unit capacity
		Model / Quantity	P10~P250, M20~M140/2~50	P10~P250, M20~M140/3~50
		Sound pressure level (measured in anechoic room) *5, 6	dB <A>	66.5/67.5
Sound power level (measured in anechoic room) *5	dB <A>	85/87		90/91
		Refrigerant piping diameter	mm (in.)	28.58 (1-1/8) Braze
		Low pressure	mm (in.)	41.28 (1-5/8) Braze
				34.93 (1-3/8) Braze
				41.28 (1-5/8) Braze

Set Model			PURY-EP500YNSW-A2/TR2/RU2 (-BS)	PURY-EP500YNSW-A2/TR2/RU2 (-BS)	PURY-EP500YNSW-A2/TR2/RU2 (-BS)	PURY-EP500YNSW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m ³ /min	295	295	295	410
		L/s	4,917	4,917	4,917	6,833
		cfm	10,416	10,416	10,416	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
	*7 External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	17.0	17.0	17.0	20.4
	Case heater	kW	—	—	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		—		—	
	Fan motor		—		—	
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		346 (763)	346 (763)	346 (763)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze
	Low pressure	mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/66°F WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available.

For PURY-EP1000YSNW-A2: 30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O

For PURY-EP1050YSNW-A2: 30 Pa/3.1 mmH₂O

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series

High efficiency

R410A

PURY-EP YSNW-A2/TR2/RU2 (-BS)



Model			PURY-EP1100YSNW-A2/TR2/RU2 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	120.0
		BTU / h	409,400
	Power input	kW	53.08
	Current input	A	89.6-85.1-82.0
	EER	kW / kW	2.26
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
		D.B.	-5.0~52.0°C (23~126°F)
	Outdoor		
Heating capacity (Max)	*2	kW	138.0
		BTU / h	470,900
	Power input	kW	49.28
	Current input	A	83.1-79.0-76.1
	COP	kW / kW	2.80
(Nominal)	*3	kW	126.0
		BTU / h	429,900
	Power input	kW	40.90
	Current input	A	69.0-65.5-63.2
	COP	kW / kW	3.08
Temp. range of heating	Indoor	W.B.	15.0~27.0°C (59~81°F)
		D.B.	-20.0~15.5°C (-4~60°F)
	Outdoor	W.B.	
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity
	Model / Quantity		P10~P250, M20~M140/3~50
Sound pressure level (measured in anechoic room)	*5, 6	dB <A>	73.0/73.0
Sound power level (measured in anechoic room)	*5	dB <A>	92/92
Refrigerant piping diameter	High pressure	mm (in.)	34.93 (1-3/8) Braze
	Low pressure	mm (in.)	41.28 (1-5/8) Braze

Set Model			PURY-EP550YNW-A2/TR2/RU2 (-BS)	PURY-EP550YNW-A2/TR2/RU2 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	410	410
		L/s	6,833	6,833
		cfm	14,477	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2	0.92 x 2
*7	External static press.		0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter
	Motor output	kW	20.4	20.4
	Case heater	kW	—	—
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		—	—
	Fan motor		—	—
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight	kg (lbs)		346 (763)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.), 15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa/3.1 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Optional parts R32 R410A

• For R2-Series

Description		Model	Remarks
Panel heater kit *1		PAC-PH01EHY-E	For S module
		PAC-PH02EHY-E	For L module
		PAC-PH03EHY-E	For XL module
Twinning kit		CMY-R100VBK4	For PURY-(E)P400-(E)P650YSNW-A2
		CMY-R200VBK4	For PURY-(E)P700-(E)P1100YSNW-A2
For BC controller	2-Branch Joint Pipe	CMY-Y102SS-G2	200 or below(Total capacity of indoor unit)
		CMY-Y102LS-G2	201-250(Total capacity of indoor unit)
	Joint and Reducer	CMY-R201S-G	350 or below(Total capacity of indoor unit)
		CMY-R202S-G	351-600(Total capacity of indoor unit)
		CMY-R203S-G	601-650(Total capacity of indoor unit)
		CMY-R204S-G	651-1000(Total capacity of indoor unit)
		CMY-R205S-G	1001 or above(Total capacity of indoor unit)
	Reducer	CMY-R301S-G	For CMB-M104,106,108,1012,1016V-J1 (When the outdoor unit capacity is M200 to M300/P200 to P350)
		CMY-R302S-G1	For CMB-M108,1012,1016V-JA1 (When the outdoor unit capacity is M200 to M300/P200 to P900)
		CMY-R303S-G1	For CMB-M108,1012,1016V-JA1 and for use with sub BC controller
		CMY-R304S-G1	For CMB-P1016V-KA1(When the outdoor unit capacity is P200 to P1100)
		CMY-R305S-G1	For CMB-P1016V-KA1 and for use with sub BC controller
		CMY-R306S-G	For CMB-M104,108V-KB1
	Branch pipe (Header)	CMY-R160-J1	Joint for connecting to two nozzles
Fin Guard		PAC-FG01S-E	For side surfaces of S and L modules (a set of two pieces)
		PAC-FG02S-E	For side surfaces of XL modules (a set of two pieces)
		PAC-FG01B-E	For rear surface of S module
		PAC-FG02B-E	For rear surface of L module (a set of two pieces)
		PAC-FG03B-E	For rear surface of XL module (a set of two pieces)

* R32 is only applied to S module.

*1. If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a panel heater is recommended.
For details, refer to the installation manual for the panel heater.

ZUBADAN-Series R410A

Cooling or Heating Heat pump

- Features P.74 - P.77
- Specifications R410A PUHY-HP Y(S)NW-A P.78 - P.79
- Optional parts P.80
- Technologies and functions P.153

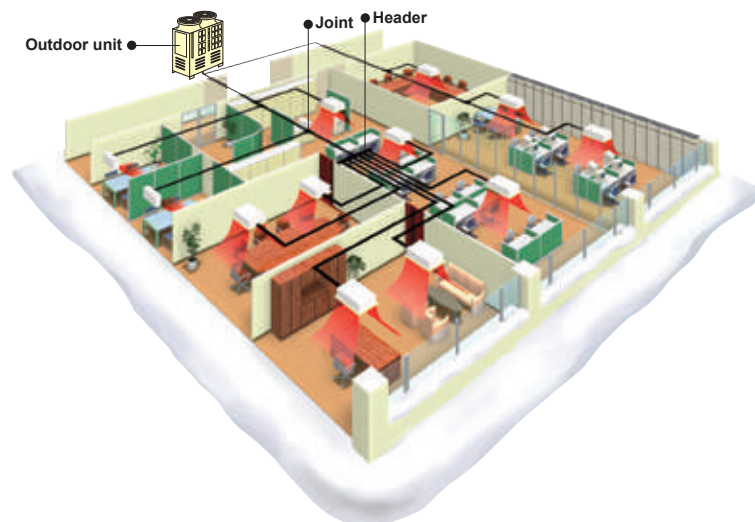


Bringing a year round comfort solutions to extreme climates

CITY MULTI ZUBADAN-Series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -30°C.

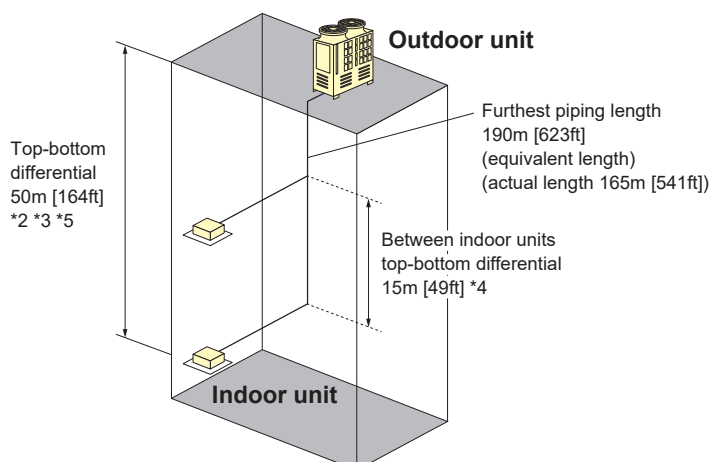
The new ZUBADAN-Series that has new, larger-capacity compressors with an injection function in the suction chamber is capable of running at the rated heating capacity down to -20°C. In addition, the guaranteed outside temperature range of heating operation is expanded down to -30°C.

- Installation image (ZUBADAN-Series)



- System Pipe Lengths [HP200-HP500]

Refrigerant Piping Lengths	Maximum meters [Feet]	Vertical differentials between units	Maximum meters [Feet]
Total length	1,000 [3,280]	Indoor/outdoor (outdoor higher)	50 [164]*2
Maximum allowable length	165 (190 equivalent) [541(623)]	Indoor/outdoor (outdoor lower)	40 [131]*3
Farthest indoor from first branch	40 [131]*1	Indoor/indoor	15 [49]*4



- *1 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.
- *2 90m [295ft] is available depending on installation conditions. For more detailed information, contact your local distributor.
- *3 60m [196ft] is available depending on installation conditions. For more detailed information, contact your local distributor.
- *4 30m [98ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one size larger pipes for indoor unit liquid pipes.
- *5 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

ZUBADAN YNW-Series R410A



PUHY-HP YNW-A

Powerful heating performance at low outside temperatures

Key features of ZUBADAN YNW-Series

The new ZUBADAN YNW-Series features units and core components designed with the latest technology to improve operating performance at low outside temperatures.

Reliable Heating

The improved operating performance in low outside temperatures contributes to comfortable heating in cold weather.

Energy Saving

Various key components have been equipped, improving energy-saving performance and meeting customers' requirements.

Design

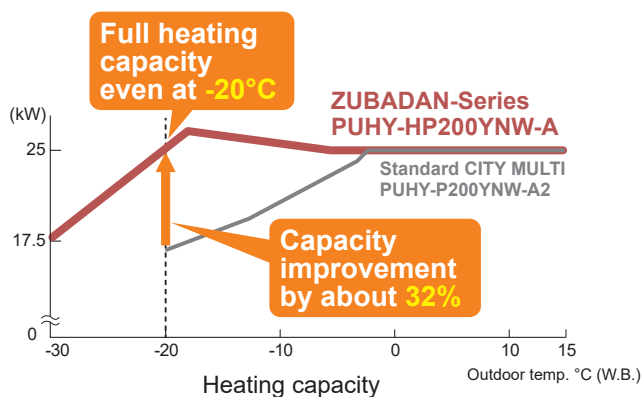
The modern design blends in well with most building architectures.

Flexible Installation

The static pressure options of up to 80 Pa and a height difference of up to 90 m between OU and IU are available.

Reliable heating performance

Stable Heating Performance even at -20°C

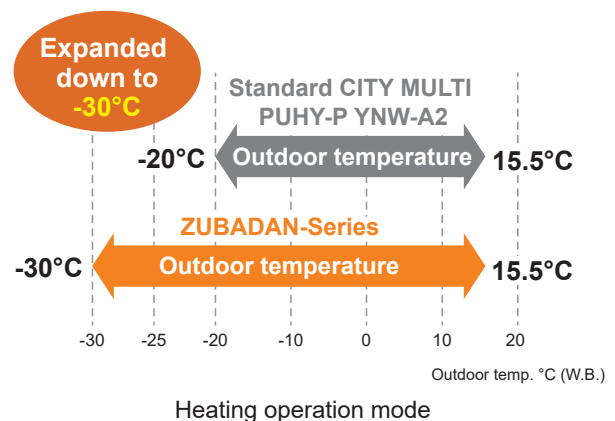


*Performance without considering frosting.

The new ZUBADAN-Series are able to provide full heating capacity in outside temperatures as low as -20°C.

Furthermore, from the previous lowest operating outside temperature of -20°C, the new YNW-Series pushes the boundaries of technology to give heating in outside temperatures as low as -30°C.

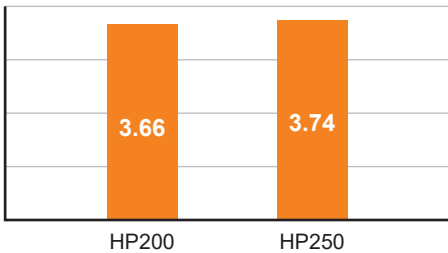
Expanded Heating Operation down to -30°C



Energy saving

The ZUBADAN-Series delivers high energy-saving performance throughout the year. The improved compressor with the latest technologies realizes both reliable performance and highly efficient operation. The highest SCOP 3.74 is achieved by the HP250 model.

• SCOP



*SCOP values are calculated based on EN14825 used for ErP Lot 21/6.

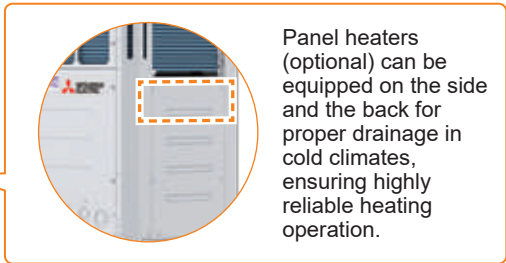
New design

The structure and design have been revised. The appearance is more sophisticated which can enhance the design of building.

Previous model (YHM)

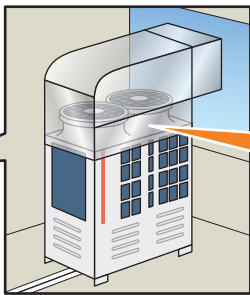
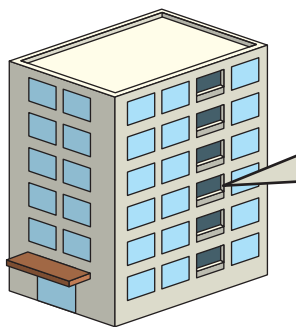


New model (YNW)



Expanded options for external static pressure settings

The new models (YNW) offer the static pressure options of 0, 30, 60, and 80 Pa, while previous models (YHM) had maximum external static pressure of 60 Pa. This facilitates installation of the unit on each floor of a high-rise building or on balconies.

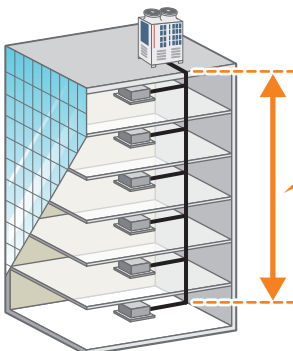


Long exhaust hoods can be connected. This facilitates installation of the unit on each floor of a high-rise building or on balconies.

Maximum external static pressure
80 Pa (local setting)

Usable in an application with a large vertical separation of up to 90 meters

A height difference of up to 90 m from the outdoor unit to the indoor unit can be supported with no extra-cost options. This increases design flexibility and facilitates installation of these units even in high-rise buildings.



Height difference from outdoor unit to indoor unit:
The system can be configured with a height difference of up to **90 m with no extra-cost options.**

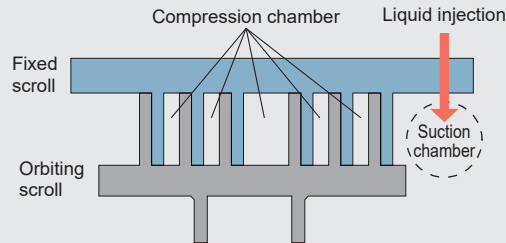
* The maximum height difference is 60 m when the outdoor unit is located lower than the indoor unit.
* Requires switch settings.

Key Components of ZUBADAN YNW-Series

Suction chamber injection mechanism

The reliable heating operation of ZUBADAN-Series is supported by a suction chamber injection mechanism. This mechanism injects liquid refrigerant into the suction chamber and suppresses the temperature rise of the discharge gas. Owing to this technology, the ZUBADAN-Series can perform heating operation even at an outside temperature as low as -30°C . Furthermore, heating performance at low outside temperatures is improved, because the rated capacity is maintained even at outside temperatures down to -20°C .

• A mechanism for injecting



Multi-port mechanism

Efficient partial load operation is realized by avoiding overcompression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The new compressor is equipped two sub-ports in addition to the conventional discharge port to reduce this over-compression loss during low loads. In operation conditions having a low compression rate, the distance in the compression process is kept short by that successfully avoiding unnecessary compression, and contributing to efficient partial load operation.

Conventional structure

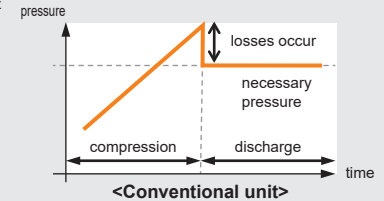
There was only one discharge port in the center and regardless of the air conditioning loads, the refrigerant was compressed up to the center part of scroll, then discharged with constant pressure. This means that the refrigerant tends to be compressed to higher than necessary pressure during low loads.

There is only one discharge port and refrigerant is discharged with constant pressure regardless of loads.



Refrigerant pressure
High
Low

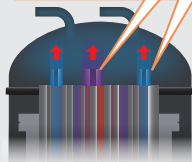
Image of refrigerant pressure (medium loads)



New structure

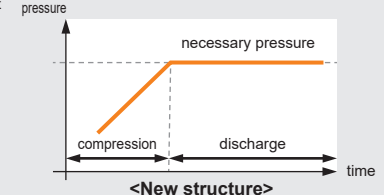
The new compressor is equipped two sub-ports in addition to the discharge port at the center, and it realizes discharge according to air conditioning loads. The suppression of over-compression contributes to improve the operation efficiency of partial load.

Some discharge ports are equipped and refrigerant is discharged by the pressure according to loads without useless.



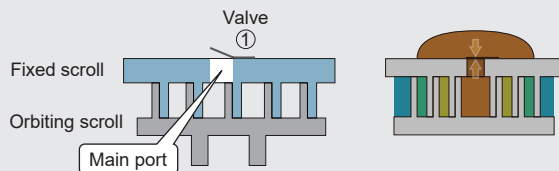
Refrigerant pressure
High
Low

Image of refrigerant pressure



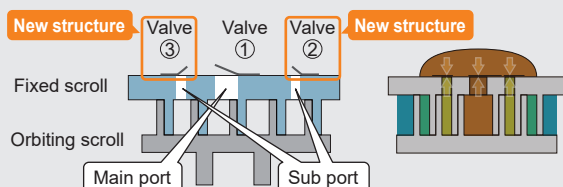
The new structure, multi-port compressor which newly equipped two sub-ports which open and close according to loads, discharges refrigerant from sub-port during the partial load operation.

Conventional structure

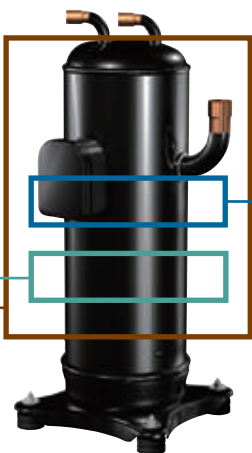


Operation pattern			
Main port	Valve ①	Partial load	Rating, high pressure difference
		open	open

New structure • Multi-port



Operation pattern			
Main port	Valve ①	Partial load	Rating, high pressure difference
		open	open
		open	close
Sub port	Valve ②	open	close
	Valve ③	open	close

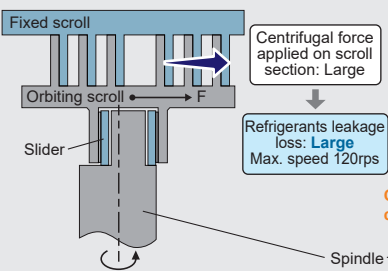


Centrifugal force canceling mechanism (8HP)

The latest structure has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps. This mechanism also speeds up the start of operation, and enables operations such as preheat defrost and the smooth auto-shift startup mode.

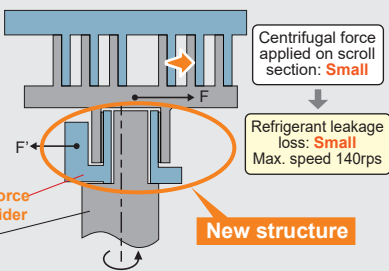
Conventional mechanism

Large loss Vortex pressing load (F) is high.



Centrifugal force canceling mechanism

Small loss Vortex pressing load (F-F') is low.

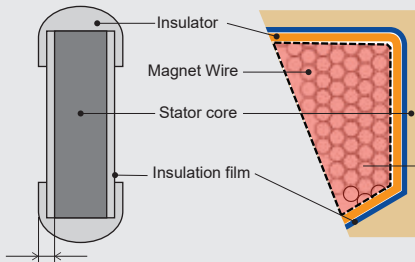


F: Centrifugal force applied on scroll section F': Centrifugal force applied on cancelling slider

Improved high-efficiency motor

The insulator section that traditionally created a dead space is eliminated by insulating the motor's stator film. Since winding can be set in that section, the winding area can be increased by approx. 9%. The wire diameter has also been increased by two ranks, so the resistance between terminals is reduced, and the insulation distance is shorter. This improves the motor's operation performance and contributes to high-efficiency operation of the compressor.

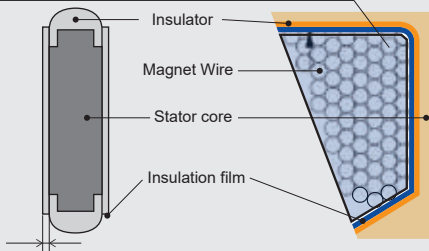
Previous model (YHM)



The insulator section is large, and the area where the copper wire can be wound is small.

Increase in area available for winding

New model (YNW)



The motor can be wound in the section where the insulator was, and a larger wire diameter can be used.

Change refrigerant oil of compressor

The new ZUBADAN-Series uses MEL46EH refrigerant oil instead of the conventional MEL32, for greater resistance to low temperatures and steady circulation even in cold environments.

ZUBADAN-Series **R410A**

PUHY-HP YNW-A



Model			PUHY-HP200YNW-A	PUHY-HP250YNW-A		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	22.4	28.0		
		BTU / h	76,400	95,500		
		Power input kW	6.45	7.69		
		Current input A	10.8-10.3-9.9	12.9-12.3-11.8		
		EER	3.47	3.64		
		SEER	6.52	6.49		
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)		
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)		
Heating capacity (Max)	*2	kW	25.0	31.5		
		BTU / h	85,300	107,500		
		Power input kW	6.11	8.09		
		Current input A	10.3-9.7-9.4	13.6-12.9-12.5		
		COP	4.09	3.89		
		(Nominal) *3	kW	22.4	28.0	
	BTU / h		76,400	95,500		
	Power input kW		5.12	6.73		
	Current input A		8.6-8.2-7.9	11.3-10.7-10.4		
	COP		4.37	4.16		
	SCOP		3.66	3.74		
	Temp. range of heating	Indoor	D.B.	15.0~27.0 °C (59~81 °F)	15.0~27.0 °C (59~81 °F)	
Outdoor		W.B.	-30.0~15.5 °C (-22~60 °F)	-30.0~15.5 °C (-22~60 °F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25		
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	53.5 / 54.0	56.0 / 57.5	
Sound power level (measured in anechoic room)		*4	dB <A>	73 / 73	75 / 77	
Refrigerant piping diameter	Liquid pipe		mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	
	Gas pipe		mm (in.)	22.2 (7/8) Brazed	(12.7 (1/2) Brazed, total length >= 90 m) 22.2 (7/8) Brazed	
FAN	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m ³ /min	190		210	
		L/s	3,167		3,500	
		cfm	6,709		7,415	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output		kW		0.46 x 2	0.46 x 2
	*6 External static press.		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter	
	Motor output	kW	3.8		4.5	
	Case heater	kW	-		-	
External finish			Pre-coated galvanized steel sheets <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740		1,858 (1,798 without legs) x 1,240 x 740	
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16		73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		-		-	
	Fan motor		-		-	
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)		R410A x 10.8 kg (24 lbs)	
Net weight		kg (lbs)	274 (605)		294 (649)	
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104-G, CMY-Y108-G, CMY-Y1010-G		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104-G, CMY-Y108-G, CMY-Y1010-G	

Notes:

*1, *2, *3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

ZUBADAN-Series R410A

PUHY-HP YSNW-A



Model			PUHY-HP400YSNW-A		PUHY-HP500YSNW-A		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	44.8		56.0		
		BTU / h	153,500		191,100		
	Power input	kW	13.33		15.86		
	Current input	A	22.5-21.3-20.6		26.7-25.4-24.5		
	EER	kW / kW	3.36		3.53		
	SEER	kW / kW	6.33		6.30		
Temp. range of cooling	Indoor	W.B.	15.0~24.0 °C (59~75 °F)		15.0~24.0 °C (59~75 °F)		
	Outdoor	D.B.	-5.0~52.0 °C (23~126 °F)		-5.0~52.0 °C (23~126 °F)		
Heating capacity (Max)	*2	kW	50.0		63.0		
		BTU / h	170,600		215,000		
	Power input	kW	12.62		16.71		
	Current input	A	21.3-20.2-19.5		28.2-26.7-25.8		
	(Nominal)	*3	COP	kW / kW	3.96		
			kW	44.8			
				BTU / h	153,500		
				Power input	kW	10.59	
		Current input	A	17.8-16.9-16.3			
		COP	kW / kW	4.23			
SCOP		kW / kW	3.55				
Temp. range of heating		Indoor	D.B.	15.0~27.0 °C (59~81 °F)		15.0~27.0 °C (59~81 °F)	
	Outdoor	W.B.	-30.0~15.5 °C (-22~60 °F)		-30.0~15.5 °C (-22~60 °F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P10~P250, M20~M140/1~40		P10~P250, M20~M140/1~50		
Sound pressure level (measured in anechoic room)		*4, 5	dB <A>	57.0 / 57.5		59.5 / 61.0	
Sound power level (measured in anechoic room)		*4	dB <A>	77 / 77		79 / 81	
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed		
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		

Set Model			PUHY-HP200YNW-A	PUHY-HP200YNW-A	PUHY-HP250YNW-A	PUHY-HP250YNW-A
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	190	190	210	210
		L/s	3,167	3,167	3,500	3,500
		cfm	6,709	6,709	7,415	7,415
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.8	3.8	4.5	4.5
	Case heater	kW	-	-	-	-
External finish			Pre-coated galvanized steel sheets <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		-	-	-	-
	Fan motor		-	-	-	-
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	274 (605)	274 (605)	294 (649)	294 (649)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104-G, CMY-Y108-G, CMY-Y1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104-G, CMY-Y108-G, CMY-Y1010-G	

Notes:

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Optional Parts **R410A**

• For ZUBADAN-Series

Description	Model	Remarks
Panel heater *1	PAC-PH02EHY-E	For PUHY-HP200/250/400/500Y(S)NW-A
Twinning kit	CMY-Y100VBK3	For PUHY-HP400/500YSNW-A
Branch pipe (Joint)	CMY-Y102SS-G2	For PUHY-HP200/250/400/500Y(S)NW-A
	CMY-Y102LS-G2	For PUHY-HP200/250/400/500Y(S)NW-A
	CMY-Y202S-G2	For PUHY-HP400/500YSNW-A
	CMY-Y302S-G2	For PUHY-HP400/500YSNW-A
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Fin guard	PAC-FG01S-E	For side surface (a set of two pieces)
	PAC-FG02B-E	For rear surface (a set of two pieces)

*1. If there is a risk that drain water will freeze inside the outdoor unit, the installation of a panel heater is recommended.
For details, refer to the installation manual for the panel heater.

S-Series **R410A**

Cooling or Heating **Heat pump**

- Features P.83 - P.85
- Optional parts P.86
- Specifications
 - R410A** 1-fan type **PUMY-SP VKM2/YKM2(-BS)** P.87 - P.88
 - 2-fan type **PUMY-P VKM6/YKM5/YKM3/YBM2(-BS)** P.89 - P.92



Cooling/heating changeover system with horizontal airflow for small offices and stores

The CITY MULTI S-Series (for small applications) makes use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an inverter-driven compressor for effective energy use.

With a wide lineup of indoor units connected to a flexible piping system, the CITY MULTI Series can be configured to suit diverse applications. Thanks to the individual operation of up to 30 units* and a group change function, the CITY MULTI S-Series can flexibly accommodate layout changes in stores and offices.

*For P250/300 model

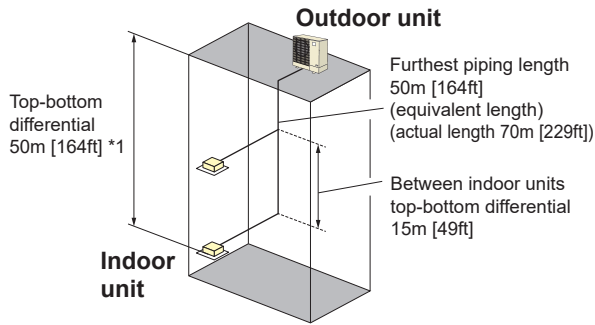
- Installation image (R410A S-Series)

<Small offices>



* For details of the installation restrictions, refer to the DATABOOK.

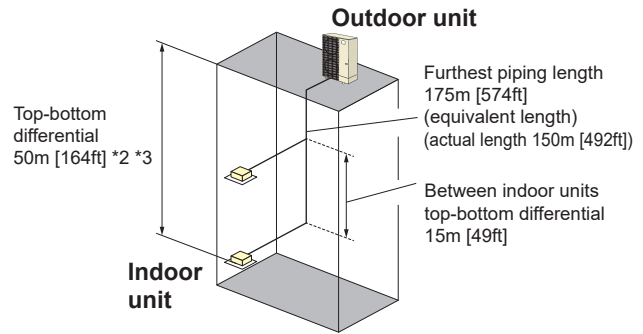
• System Pipe Lengths



[SP112~140(VKM2/YKM2)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	120 [393]
Maximum allowable length	70 (90 equivalent) [229 (295)]
Farthest indoor from first branch	50 [164]

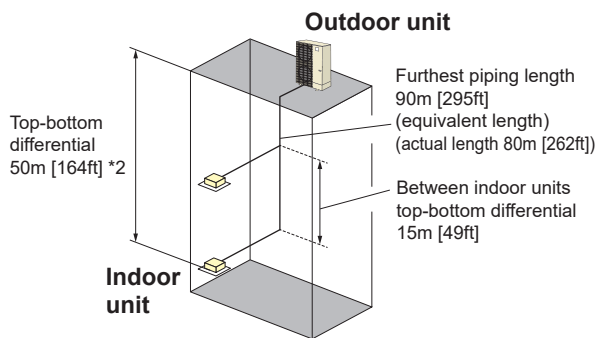
Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	30 [98]
Indoor/indoor	15 [49]



[P112~140(VKM6/YKM5)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300 [984]
Maximum allowable length	150 (175 equivalent) [492(574)]
Farthest indoor from first branch	30 [98]

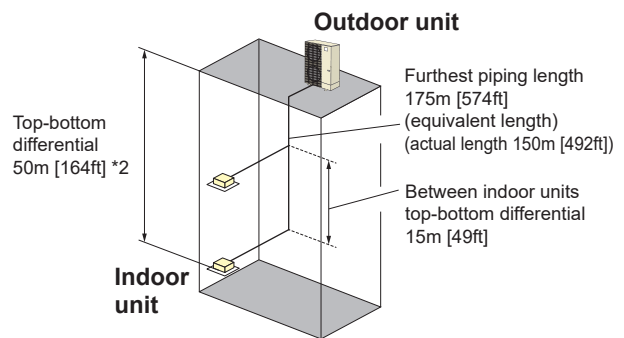
Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131] *3
Indoor/indoor	15 [49]



[P200YKM3]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	150 [492]
Maximum allowable length	80 (90 equivalent) [262(295)]
Farthest indoor from first branch	30 [98]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]



[P250-300YBM2]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	310 [1,017]
Maximum allowable length	150 (175 equivalent) [492(574)]
Farthest indoor from first branch	30 [98]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]

*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 30m [98ft].

*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

*3 30m [98ft] or less if PKFY-P10/15/20/25/32/VLM, PFFY-P*VKM, PFFY-P*VCM, PFFY-P*VL* type of indoor units are included.

Lineup of the VKM/YKM/YBM-Series

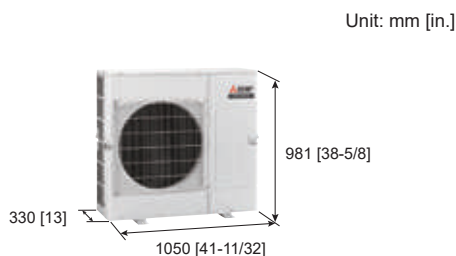
The YBM-Series is added to the lineup, which has the selection from 4.5 HP up to 12 HP.

1-fan type

PUMY-SP112, 125, 140VKM2/YKM2 (-BS)

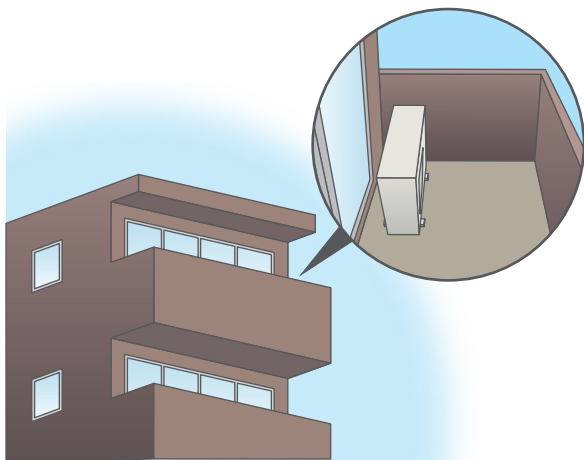
*VKM model...Single-phase type

YKM model...Three-phase type



The 1-fan type is 981 mm [38-5/8] high and stays hidden behind balcony walls. A compact single-fan unit is available to better suit individual installation conditions.

• Installation image*



*Refer to the installation manual for installation restrictions and requirements.

2-fan type

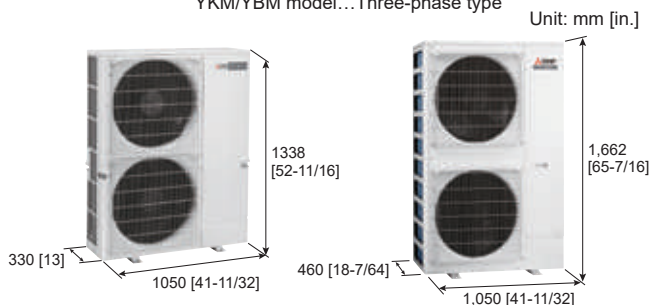
PUMY-P112, 125, 140VKM6/YKM5 (-BS)

PUMY-P200YKM3 (-BS)

PUMY-P250, 300YBM2 (-BS)

*VKM model...Single-phase type

YKM/YBM model...Three-phase type

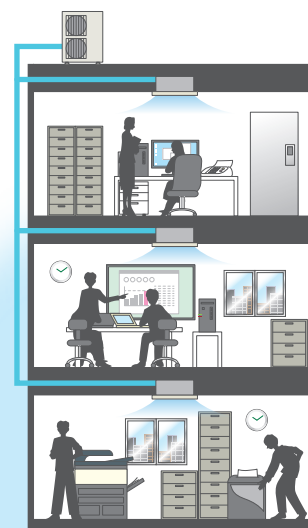


The 2-fan type accommodates a maximum total piping length of 310 m* and can be installed in a remote location such as on the roof.

*150 m for the PUMY-P200YKM3 model

300 m for the PUMY-P112, 125, 140VKM6/YKM5 models

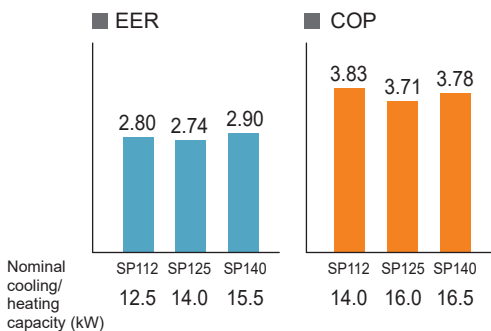
• Installation image



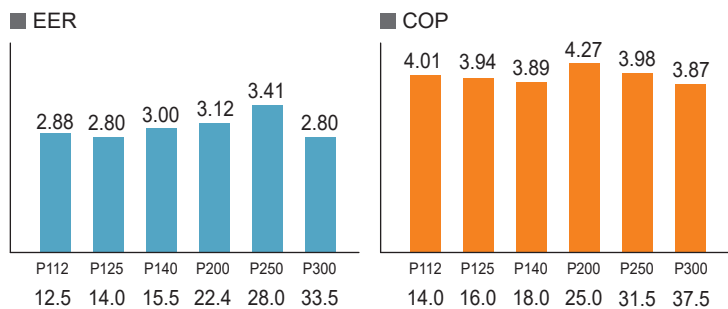
Highly energy efficient

Even with its compact size and light weight, the PUMY-Series has high EER and COP. Costs are reduced with energy saving abilities.

1-fan type



2-fan type



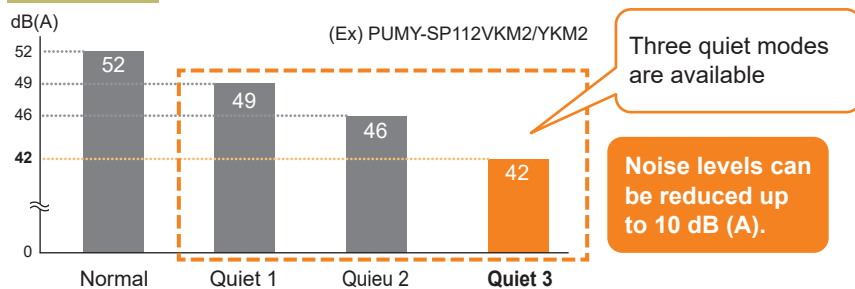
Flexible noise setting

The 2-fan models have a quiet mode, and the 1-fan models have three quiet modes in addition to the normal mode, so a suitable noise mode can be selected. The pattern can be selected according to customer needs for low-noise operation.

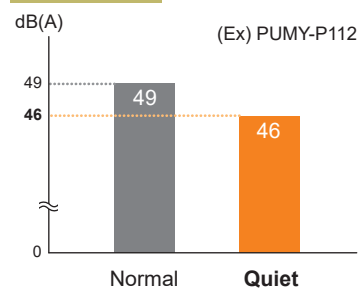
* Capacity reduction differs according to the mode setting.

* PAC-SC36NA-E is required to activate quiet modes.

1-fan type



2-fan type



Wide operation range

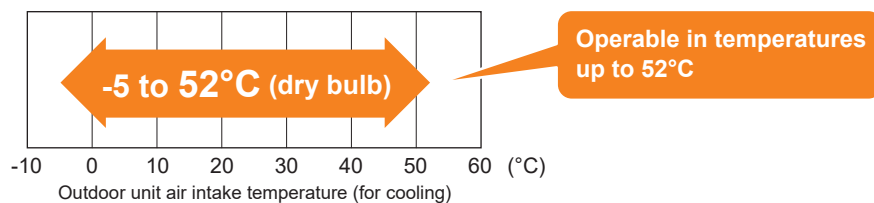
1-fan type

2-fan type

The PUMY-Series has an expanded guaranteed cooling operation range of up to **52°C**, so it can be used reliably even if the outdoor air temperature rises abnormally during the hot summer daytime.

- Inverter technology allows units to operate at outdoor air temperatures as high as 52°C.
- Performs well even in narrow spaces and in multiple installations where heated air may stagnate.

• Cooling operation temperature range



* Depending on the types of indoor units used, the operable temperature range may be between 10°C and 52°C. Refer to the DATA BOOK for details.

* Using of the Air Protect Guide [PAC-SH95AG-E] (optional part) increases the operable temperature range to between -15°C and +52°C. Refer to the DATA BOOK for details.

External static pressure of 30 Pa

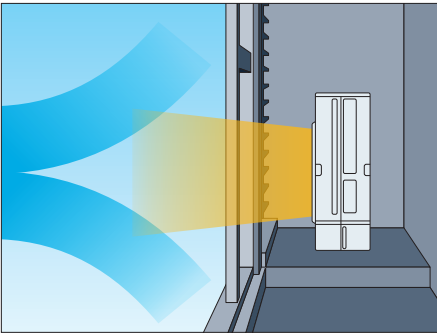
1-fan type

2-fan type

(VKM6/YKM5/YBM2)

An external static pressure of 30 Pa allows flexible installation.
The outdoor unit can be installed in locations that were not possible before.

It can be installed on balconies in high-rise buildings or spaces near louvers.
*Noise level will increase when using this function.



* To change the external static pressure of PUMY-P112-140VKM6/YKM5, a fan motor [PAC-SJ71FM-E] (optional part) is required.

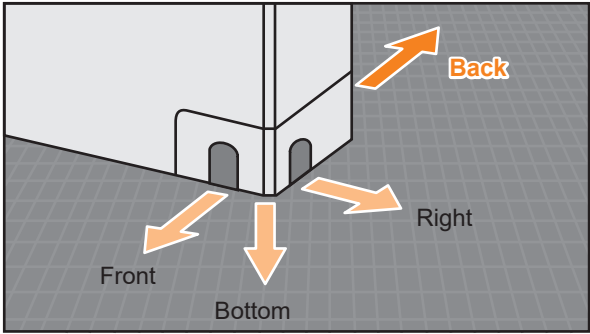
Rear piping is possible

1-fan type

2-fan type

- Flexible with layout owing to piping pullout locations in four directions

The indoor unit allows piping from any of four directions: front, back, bottom, or right. This enables easier horizontal connection for collective layouts.
The outdoor unit also allows expanded piping layout flexibility to greatly improve piping workability.



Lineup & Functions
Y-Series
R2-Series
ZUBADAN-Series
S-Series
BC Controllers
Ceiling cassette type
Ceiling concealed type
Ceiling suspended type
Wall-mounted type
Floor standing type
Functions
LOSSNAY System
Remote Controller
Hot Water Solution

Optional parts **R410A**

• For the PUMY-Series

Description	Model	Remarks
Branch (2 branches)	CMY-Y62-G-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3/YBM2
Header	CMY-Y64-G-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3/YBM2
	CMY-Y68-G-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3/YBM2
Fan motor	PAC-SJ71FM-E	For PUMY-P VKM6/YKM5
Air protect guide *1	PAC-SH95AG-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3
	PAC-SK21AG-E	For PUMY-P YBM2
Drain socket	PAC-SG61DS-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3
	PAC-SK27DS-E	For PUMY-P YBM2
Air outlet guide *1	PAC-SH96SG-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3
	PAC-SK22G-E	For PUMY-P YBM2
Drain pan	PAC-SH97DP-E	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3
	PAC-SJ83DP-E	For PUMY-P YBM2
Base heater	PAC-SJ10BH-E	For PUMY-SP VKM2/YKM2
	PAC-SJ20BH-E	For PUMY-P VKM6/YKM5/YKM3
Connection kit	PAC-LV11M-J	For PUMY-SP VKM2/YKM2, PUMY-P VKM6/YKM5/YKM3/YBM2

*1. Two are needed for PUMY-P VKM6/YKM5/YKM3/YBM2.

S-Series

1-fan type

R410A

PUMY-SP VKM2(-BS)



Model	PUMY-SP112VKM2 (-BS)		PUMY-SP125VKM2 (-BS)		PUMY-SP140VKM2 (-BS)	
Power source	1-phase 220-230-240V 50Hz, 220V 60Hz		1-phase 220-230-240V 50Hz, 220V 60Hz		1-phase 220-230-240V 50Hz, 220V 60Hz	
Cooling capacity (Nominal)	*1	kW	12.5		14.0	
	*1	BTU / h	42,650		47,768	
	Power input	kW	4.46		5.11	
	Current input	A	20.69 - 19.79 - 18.97, 20.69		23.71 - 22.68 - 21.73, 23.71	
Temp. range of cooling	EER	kW / kW	2.80		2.74	
	Indoor temp.	W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Outdoor temp.*3,*4	D.B.	-5.0~52.0°C(23~126°F)		-5.0~52.0°C(23~126°F)	
	Heating capacity (Nominal)	*2	14.0		16.0	
Temp. range of heating	*2	BTU / h	47,768		54,592	
	Power input	kW	3.66		4.31	
	Current input	A	16.98 - 16.24 - 15.57, 16.98		20.00 - 19.13 - 18.33, 20.00	
	COP	kW / kW	3.83		3.71	
Indoor unit connectable	Indoor temp.	D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Outdoor temp.	W.B.	-20.0~15.0°C(-4~59°F)		-20.0~15.0°C(-4~59°F)	
	Total capacity		50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity	
	Model / Quantity		P10-P140, M20-M140/9		P10-P140, M20-M140/10	
Sound pressure level (measured in anechoic room)	*5	dB <A>	52/54		53/56	
Sound power level (measured in anechoic room)	*5	dB <A>	72/74		73/76	
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8)		9.52(3/8)	
	Gas pipe	mm (in.)	15.88(5/8)		15.88(5/8)	
FAN	Type x Quantity		Propeller Fan x 1		Propeller Fan x 1	
	Air flow rate	m³/min	77		83	
		L/s	1,283		1,383	
		cfm	2,719		2,931	
	Motor output	kW	0.20 x 1		0.20 x 1	
	*6 External static press.		0		0	
Compressor	Type x Quantity		Twin rotary hermetic compressor x 1		Twin rotary hermetic compressor x 1	
	Starting method		Inverter		Inverter	
	Motor output	kW	3.1		3.5	
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	
External dimension HxWxD	mm		981 x 1,050 x 330 (+40)		981 x 1,050 x 330 (+40)	
		in.	38-5/8 x 41-3/8 x 13 (+1-37/64)		38-5/8 x 41-3/8 x 13 (+1-37/64)	
Protection devices	High pressure protection		High pressure Switch		High pressure Switch	
	Inverter circuit (COMP/FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)		Overcurrent detection, Overheat detection (Heat sink thermistor)	
	Compressor		Compressor thermistor, Overcurrent detection		Compressor thermistor, Overcurrent detection	
	Fan motor		Overheating, Voltage protection		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A 3.5kg		R410A 3.5kg	
Net weight	kg (lbs)		93(205) *7		93(205) *7	
Heat exchanger	Cross Fin and Copper tube		Cross Fin and Copper tube		Cross Fin and Copper tube	
HIC circuit (HIC: Heat Inter-Changer)	HIC circuit		HIC circuit		HIC circuit	
Defrosting method	Reversed refrigerant circuit		Reversed refrigerant circuit		Reversed refrigerant circuit	
Optional parts	Joint: CMY-Y62-G-E		Joint: CMY-Y62-G-E		Joint: CMY-Y62-G-E	
	Header: CMY-Y64/68-G-E		Header: CMY-Y64/68-G-E		Header: CMY-Y64/68-G-E	
	Air protect guide: PAC-SH95AG-E		Air protect guide: PAC-SH95AG-E		Air protect guide: PAC-SH95AG-E	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB (68°F DB)	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52., when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLE(R)M, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, and M-Series, S-Series, and P-Series type indoor unit with branch box, M-Series type indoor unit with connection kit.

*4 -15 to 52., when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in *3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH₂O).

*7 94 (207), for PUMY-SP112/125/140VKM2-BS.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

S-Series

1-fan type

R410A

PUMY-SP YKM2(-BS)



Model	PUMY-SP112YKM2 (-BS)		PUMY-SP125YKM2 (-BS)		PUMY-SP140YKM2 (-BS)	
Power source	3-phase 380-400-415V 50Hz, 380V 60Hz		3-phase 380-400-415V 50Hz, 380V 60Hz		3-phase 380-400-415V 50Hz, 380V 60Hz	
Cooling capacity (Nominal)	*1	kW	12.5		14.0	
	*1	BTU / h	42,650		47,768	
	Power input	kW	4.46		5.11	
	Current input	A	7.14 - 6.78 - 6.54, 7.14		8.18 - 7.77 - 7.49, 8.18	
Temp. range of cooling	EER	kW / kW	2.80		2.74	
	Indoor temp.	W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Outdoor temp.*3,*4	D.B.	-5.0~52.0°C(23~126°F)		-5.0~52.0°C(23~126°F)	
	Heating capacity (Nominal)	*2	14.0		16.0	
Temp. range of heating	*2	BTU / h	47,768		54,592	
	Power input	kW	3.66		4.31	
	Current input	A	5.86 - 5.57 - 5.36, 5.86		6.90 - 6.55 - 6.32, 6.90	
	COP	kW / kW	3.83		3.71	
Indoor unit connectable	Indoor temp.	D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Outdoor temp.	W.B.	-20.0~15.0°C(-4~59°F)		-20.0~15.0°C(-4~59°F)	
	Total capacity		50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity	
	Model / Quantity		P10-P140, M20-M140/9		P10-P140, M20-M140/10	
Sound pressure level (measured in anechoic room)	*5	dB <A>	52/54		53/56	
Sound power level (measured in anechoic room)	*5	dB <A>	72/74		73/76	
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8)		9.52(3/8)	
	Gas pipe	mm (in.)	15.88(5/8)		15.88(5/8)	
FAN	Type x Quantity		Propeller Fan x 1		Propeller Fan x 1	
	Air flow rate	m³/min	77		83	
		L/s	1,283		1,383	
		cfm	2,719		2,931	
	Motor output	kW	0.20 x 1		0.20 x 1	
	*6 External static press.		0		0	
Compressor	Type x Quantity		Twin rotary hermetic compressor x 1		Twin rotary hermetic compressor x 1	
	Starting method		Inverter		Inverter	
	Motor output	kW	3.1		3.5	
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	
External dimension HxWxD	mm		981 x 1,050 x 330 (+40)		981 x 1,050 x 330 (+40)	
		in.	38-5/8 x 41-3/8 x 13 (+1-37/64)		38-5/8 x 41-3/8 x 13 (+1-37/64)	
Protection devices	High pressure protection		High pressure Switch		High pressure Switch	
	Inverter circuit (COMP/FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)		Overcurrent detection, Overheat detection (Heat sink thermistor)	
	Compressor		Compressor thermistor, Overcurrent detection		Compressor thermistor, Overcurrent detection	
	Fan motor		Overheating, Voltage protection		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A 3.5kg		R410A 3.5kg	
Net weight	kg (lbs)		94(207) *7		94(207) *7	
Heat exchanger			Cross Fin and Copper tube		Cross Fin and Copper tube	
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit		HIC circuit	
Defrosting method			Reversed refrigerant circuit		Reversed refrigerant circuit	
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Air protect guide: PAC-SH95AG-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Air protect guide: PAC-SH95AG-E	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52., when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLE(R)M, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, and M-Series, S-Series, and P-Series type indoor unit with branch box, M-Series type indoor unit with connection kit.

*4 -15 to 52., when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH₂O).

*7 95 (209), for PUMY-SP112/125/140YKM2-BS.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

S-Series

2-fan type

R410A

PUMY-P VKM6(-BS)



Model	PUMY-P112VKM6 (-BS)				PUMY-P125VKM6 (-BS)				PUMY-P140VKM6 (-BS)				
Power source		1-phase 220-230-240V 50Hz, 220-230V 60Hz				1-phase 220-230-240V 50Hz, 220-230V 60Hz				1-phase 220-230-240V 50Hz, 220-230V 60Hz			
Cooling capacity (Nominal)	*1	kW	12.5				14.0				15.5		
		BTU / h	42,650				47,768				52,886		
	Power input	kW	4.34				5.00				5.17		
		Current input	A	20.03 - 19.16 - 18.36, 20.03 - 19.16				23.08 - 22.08 - 21.16, 23.08 - 22.08				23.86 - 22.83 - 21.87, 23.86 - 22.83	
Temp. range of cooling	EER	kW / kW	2.88				2.80				3.00		
		Indoor temp.	W.B.	15.0~24.0°C(59~75°F)				15.0~24.0°C(59~75°F)				15.0~24.0°C(59~75°F)	
	Outdoor temp.	*3,*4	D.B.	-5.0~52.0°C(23~126°F)				-5.0~52.0°C(23~126°F)				-5.0~52.0°C(23~126°F)	
Heating capacity (Nominal)	*2	kW	14.0				16.0				18.0		
		BTU / h	47,768				54,592				61,416		
	Power input	kW	3.04				3.74				4.47		
		Current input	A	16.11 - 15.41 - 14.77, 16.11 - 15.41				18.74 - 17.93 - 17.18, 18.74 - 17.93				21.37 - 20.44 - 19.59, 21.37 - 20.44	
Temp. range of heating	COP	kW / kW	4.01				3.94				3.89		
		Indoor temp.	D.B.	15.0~27.0°C(59~81°F)				15.0~27.0°C(59~81°F)				15.0~27.0°C(59~81°F)	
	Outdoor temp.	W.B.	-20.0~15.0°C(-4~59°F)				-20.0~15.0°C(-4~59°F)				-20.0~15.0°C(-4~59°F)		
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity				50~130 % of outdoor unit capacity				50~130 % of outdoor unit capacity		
	Model / Quantity		P10-P140, M20-M140/9				P10-P140, M20-M140/10				P10-P140, M20-M140/12		
Sound pressure level (measured in anechoic room)	*5		dB <A>	49/51				50/52				51/53	
Sound power level (measured in anechoic room)	*5		dB <A>	69/71				70/72				71/73	
Refrigerant piping diameter	Liquid pipe		mm (in.)	9.52(3/8)				9.52(3/8)				9.52(3/8)	
	Gas pipe		mm (in.)	15.88(5/8)				15.88(5/8)				15.88(5/8)	
FAN	Type x Quantity		Propeller Fan x 2				Propeller Fan x 2				Propeller Fan x 2		
	Air flow rate	m³/min	110				110				110		
			1,833				1,833				1,833		
			3,884				3,884				3,884		
	Motor output		kW	0.074 + 0.074				0.074 + 0.074				0.074 + 0.074	
	*6 External static press.		0				0				0		
	Compressor	Type x Quantity		Scroll hermetic compressor x 1				Scroll hermetic compressor x 1				Scroll hermetic compressor x 1	
Starting method		Inverter				Inverter				Inverter			
Motor output		kW	2.9				3.5				3.9		
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1				Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1				Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension HxWxD			mm	1,338 x 1,050 x 330 (+40)				1,338 x 1,050 x 330 (+40)				1,338 x 1,050 x 330 (+40)	
			in.	52-11/16 x 41-11/32 x 13 (+1-9/16)				52-11/16 x 41-11/32 x 13 (+1-9/16)				52-11/16 x 41-11/32 x 13 (+1-9/16)	
Protection devices	High pressure protection		High pressure Switch				High pressure Switch				High pressure Switch		
	Inverter circuit (COMP/FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)				Overcurrent detection, Overheat detection (Heat sink thermistor)				Overcurrent detection, Overheat detection (Heat sink thermistor)		
	Compressor		Compressor thermistor, Overcurrent detection				Compressor thermistor, Overcurrent detection				Compressor thermistor, Overcurrent detection		
	Fan motor		Overheating, Voltage protection, Overcurrent detection				Overheating, Voltage protection, Overcurrent detection				Overheating, Voltage protection, Overcurrent detection		
Refrigerant	Type x original charge		R410A 4.8kg				R410A 4.8kg				R410A 4.8kg		
Net weight	kg (lbs)		123(271)				123(271)				123(271)		
Heat exchanger			Cross Fin and Copper tube				Cross Fin and Copper tube				Cross Fin and Copper tube		
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit				HIC circuit				HIC circuit		
Defrosting method			Reversed refrigerant circuit				Reversed refrigerant circuit				Reversed refrigerant circuit		
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E				Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E				Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E		

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C D.B. [50 to 126°F D.B.], when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PFFY-P25/32/40VMA3; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52°C D.B. [50 to 126°F D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH₂O). To use this option, PAC-SJ71FM-E is needed.

*Nominal condition *1, *2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

S-Series

2-fan type

R410A

PUMY-P YKM5(-BS)



Model			PUMY-P112YKM5 (-BS)	PUMY-P125YKM5 (-BS)	PUMY-P140YKM5 (-BS)
Power source			3-phase 380-400-415V 50Hz, 380V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz
Cooling capacity (Nominal)	*1	kW	12.5	14.0	15.5
		BTU / h	42,650	47,768	52,886
	Power input	kW	4.34	5.00	5.17
		A	7.76 - 7.37 - 7.11, 7.76	8.45 - 8.02 - 7.73, 8.45	8.27 - 7.86 - 7.58, 8.27
Temp. range of cooling	EER	kW / kW	2.88	2.80	3.00
		W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor temp.*3,*4	D.B.	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)
		W.B.	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)
Heating capacity (Nominal)	*2	kW	14.0	16.0	18.0
		BTU / h	47,768	54,592	61,416
	Power input	kW	3.49	4.06	4.63
		A	6.24 - 5.93 - 5.72, 6.24	6.86 - 6.52 - 6.28, 6.86	7.41 - 7.04 - 6.79, 7.41
Temp. range of heating	COP	kW / kW	4.01	3.94	3.89
		D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor temp.	D.B.	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)
		W.B.	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity		P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/12
Sound pressure level (measured in anechoic room)		*5 dB <A>	49/51	50/52	51/53
Sound power level (measured in anechoic room)		*5 dB <A>	69/71	70/72	71/73
Refrigerant piping diameter	Liquid pipe		9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas pipe		15.88(5/8)	15.88(5/8)	15.88(5/8)
FAN	Type x Quantity		Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m³/min	110	110	110
		L/s	1,833	1,833	1,833
		cfm	3,884	3,884	3,884
	Motor output	kW	0.074 + 0.074	0.074 + 0.074	0.074 + 0.074
		*6 External static press.		0	0
Compressor	Type x Quantity		Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter
	Motor output		kW	2.9	3.5
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD		mm	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)
		in.	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)
Protection devices	High pressure protection		High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)
	Compressor		Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection
	Fan motor		Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection
Refrigerant	Type x original charge		R410A 4.8kg	R410A 4.8kg	R410A 4.8kg
Net weight	kg (lbs)		125 (276)	125 (276)	125 (276)
Heat exchanger			Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit	HIC circuit	HIC circuit
Defrosting method			Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C D.B. [50 to 126°F D.B.], when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VCM, PFFY-P20/25/32VCM, PEFY-P25/32/40VMA3; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52°C D.B. [50 to 126°F D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH₂O). To use this option, PAC-SJ71FM-E is needed.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

S-Series

2-fan type

R410A

PUMY-P YKM3(-BS)



Model			PUMY-P200YKM3 (-BS)
Power source			3-phase 380-400-415V 50Hz
Cooling capacity (Nominal)	*1	kW	22.4
	*1	BTU / h	76,400
	Power input	kW	7.18
	Current input	A	11.73 - 11.15 - 10.75
EER			3.12
Temp. range of cooling	Indoor temp.	W.B.	15.0~24.0°C(59~75°F)
	Outdoor temp.*3,*4	D.B.	-5.0~52.0°C(23~126°F)
Heating capacity (Nominal)	*2	kW	25.0
	*2	BTU / h	85,300
	Power input	kW	5.85
	Current input	A	9.56 - 9.08 - 8.76
COP			4.27
Temp. range of heating	Indoor temp.	D.B.	15.0~27.0°C(59~81°F)
	Outdoor temp.	W.B.	-20.0~15.0°C(-4~59°F)
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity
	Model / Quantity		P10-P200, M20-M140/12
Sound pressure level (measured in anechoic room)	*5	dB <A>	57/61
Sound power level (measured in anechoic room)	*5	dB <A>	76/80
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8) *6
	Gas pipe	mm (in.)	19.05(4/3)
FAN	Type x Quantity		Propeller Fan x 2
	Air flow rate	m³/min	141
		L/s	2,350
		cfm	4,978
	Motor output	kW	0.20 + 0.20
	External static press.		0
Compressor	Type x Quantity		Scroll hermetic compressor x 1
	Starting method		Inverter
	Motor output	kW	5.3
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+40)	
	in.	52-11/16 x 41-11/32 x 13 (+1-9/16)	
Protection devices	High pressure protection		High pressure Switch
	Inverter circuit (COMP/FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)
	Compressor		Compressor thermistor, Over current detection
	Fan motor		Overheating, Voltage protection
Refrigerant	Type x original charge		R410A 7.3kg
Net weight	kg (lbs)		141 (311)
Heat exchanger			Cross Fin and Copper tube
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit
Defrosting method			Reversed refrigerant circuit
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Air protect guide: PAC-SH95AG-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C, when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PFFY-P40/63/VMA3-E; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52°C, when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 Liquid pipe diameter: 12.7 mm, in case of further piping length is longer than 60 m.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

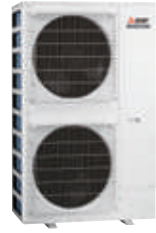
LOSSNAY
SystemRemote
ControllerHot Water
Solution

S-Series

2-fan type

R410A

PUMY-P YBM2(-BS)



Model			PUMY-P250YBM2 (-BS)	PUMY-P300YBM2 (-BS)
Power source			3-phase 380-400-415V 50Hz	3-phase 380-400-415V 50Hz
Cooling capacity (Nominal)	*1	kW	28.0	33.5
	*1	BTU / h	95,500	114,300
	Power input	kW	8.21	11.96
	Current input	A	13.41 - 12.74 - 12.28	19.54 - 18.56 - 17.89
	EER	kW / kW	3.41	2.80
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)	15.0 to 24.0°C (59 to 75°F)
	Outdoor temp.*3,*4	D.B.	-5.0 to 52.0°C (23 to 126°F)	-5.0 to 52.0°C (23 to 126°F)
Heating capacity (Nominal)	*2	kW	31.5	37.5
	*2	BTU / h	107,500	128,000
	Power input	kW	7.91	9.69
	Current input	A	12.92 - 12.28 - 11.83	15.83 - 15.04 - 14.50
	COP	kW / kW	3.98	3.87
Temp. range of heating	Indoor temp.	D.B.	15.0 to 27.0°C (59 to 81°F)	15.0 to 27.0°C (59 to 81°F)
	Outdoor temp.	W.B.	-20.0 to 15.0°C (-4 to 59°F)	-20.0 to 15.0°C (-4 to 59°F)
Indoor unit connectable	Total capacity		50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity
	Model / Quantity		P10 - P250/ 30	P10 - P250/ 30
Sound pressure level (measured in anechoic room)	*5	dB <A>	55/61	57/62
Sound power level (measured in anechoic room)	*5	dB <A>	73/79	75/79
Refrigerant piping diameter	Liquid pipe	mm (in.)	ø9.52 (3/8) *5	ø12.7 (1/2)
	Gas pipe	mm (in.)	ø22.4 (7/8)	ø22.4 (7/8)
FAN	Type x Quantity		Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m³/min	165/183	165/183
		L/s	2,750/3,050	2,750/3,050
		cfm	5,826/6,462	5,826/6,462
	Motor output	kW	0.375 × 2	0.375 × 2
	*6 External static press.		0Pa / 30Pa *6	0Pa / 30Pa *6
Compressor	Type x Quantity		Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method		Inverter	Inverter
	Motor output	kW	6.65	7.35
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD	mm		1,662 × 1,050 × 460 (+45)	1,662 × 1,050 × 460 (+45)
		in.	65-7/16 × 41-11/32 × 187/64 (+ 1-49/64)	65-7/16 × 41-11/32 × 187/64 (+ 1-49/64)
Protection devices	High pressure protection		High pressure Switch	High pressure Switch
	Inverter circuit (COMP/FAN)		Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)
	Compressor		Compressor thermistor, Over current detection, Compressor protector	Compressor thermistor, Over current detection, Compressor protector
	Fan motor		Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type x original charge		R410A 9.3 kg	R410A 9.3 kg
Net weight	kg (lbs)		192 (423) [194 (428)]	192 (423) [194 (428)]
Heat exchanger			Cross Fin and Copper tube	Cross Fin and Copper tube
HIC circuit (HIC: Heat Inter-Changer)			Double pipe heat exchanger	Double pipe heat exchanger
Defrosting method			Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C, when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PFFY-P20/25/32VEM, PEFY-P63/71/80VMA3-E; and M series type indoor unit.

*4 -15 to 52°C, when using an optional air protect guide [PAC-SK21AG-E]. However, this condition does not apply to the indoor unit listed in *3.

*5 Liquid pipe diameter: 12.7mm, when further piping length is longer than 90m, and when PEFY-P200 or P250 is connected.

*6 It is possible to set the External static pressure to 30 Pa by Dip Switch.

*Nominal conditions *1, *2 are subject to ISO15042.

*Due to continuing improvement, above specification may be subject to change without notice.



BC Controllers

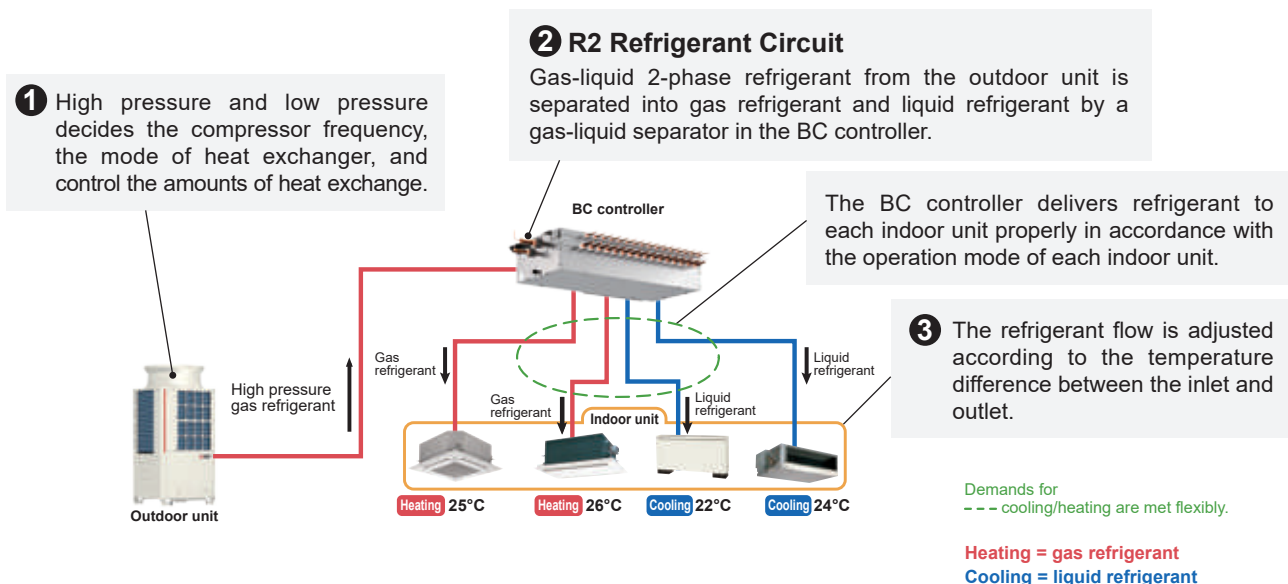
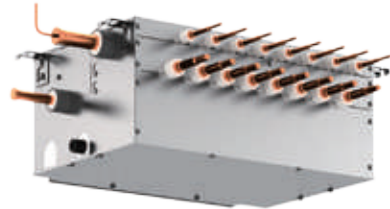
Hot Water Solution	Remote Controller	LOSSNAY System	Functions	Floor standing type	Wall-mounted type	Ceiling suspended type	Ceiling concealed type	Ceiling cassette type	BC Controllers	S-Series	ZUBADAN -Series	R2-Series	Y-Series	Lineup & Functions
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For R2-Series

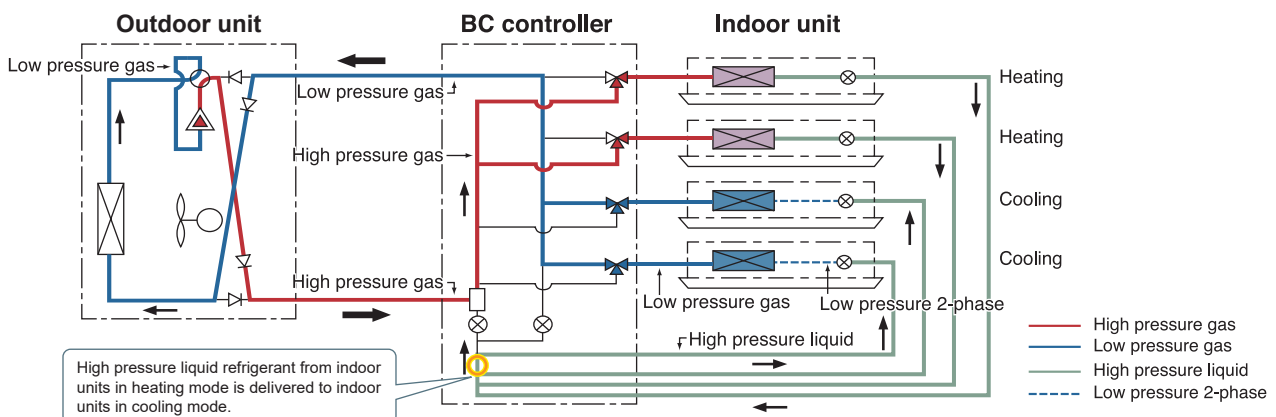
The secret of CITY MULTI heat recovery systems lies in the

BC Controller

The BC controller houses a liquid/gas separator, allowing the outdoor unit to deliver a mixture (2-phase) of hot gas for heating and liquid for cooling, all through the same pipe. The three pipe system allocates a pipe to each of these phases. When this mixture arrives at the BC controller, it is separated, and the correct phase is delivered to each indoor unit according to the individual requirement for either heating or cooling.



• Total heat recovery operation



The latest BC controller models are compatible with both the R32 and the R410A outdoor unit series.

Lineup

Conventional model

Type	Model name
J	CMB-P**V-J
JA	CMB-P**V-JA
KA	CMB-P**V-KA
KB	CMB-P**V-KB

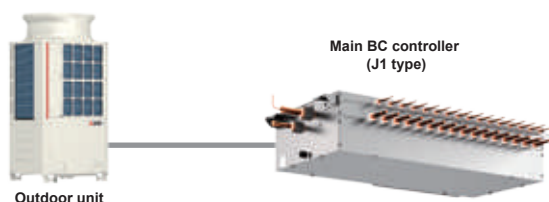
Latest model

Type	Model name	Usage
J1	CMB-M**V-J1	Main BC controller
JA1	CMB-M**V-JA1	Main BC controller with sub BC controller
KA1	CMB-P**V-KA1 *	Main BC controller with sub BC controller
KB1	CMB-M**V-KB1	Sub BC controller

*KA1 type can only be connected to R410A outdoor units.

*When mixing the use of a conventional (J/JA/KA/KB type) and latest (J1/JA1/KA1/KB1 type) BC controller, please refer to the DATABOOK for details.

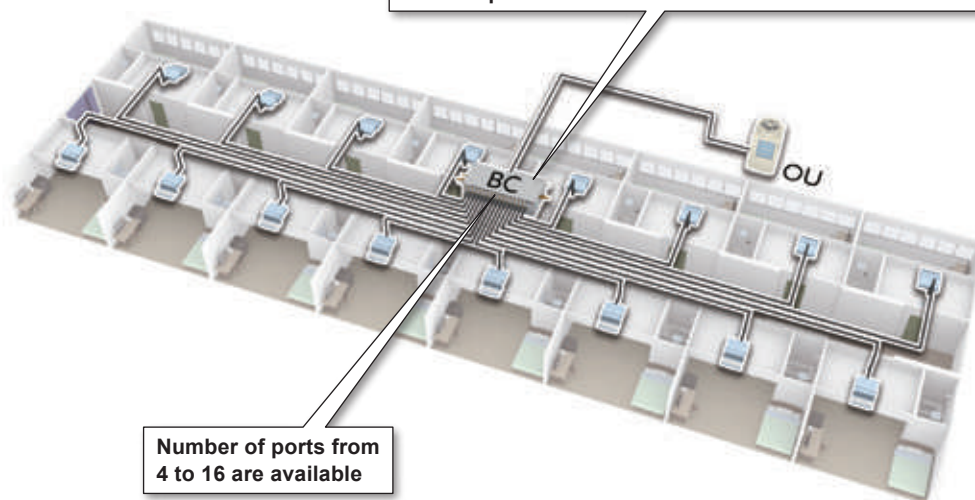
• System with a main BC controller



Main BC controller (J1 type)

Model	CMB-M104V-J1	CMB-M106V-J1	CMB-M108V-J1	CMB-M1012V-J1	CMB-M1016V-J1
Number of branches	4	6	8	12	16
Connectable outdoor unit capacity	R32 (E)M200 to (E)M300/ R410A (E)P200 to (E)P350				

Up to 44 HP can be connected to one main BC controller. Construction is easier as the number of piping connections and suspension work can be reduced.



• System with multiple BC controllers



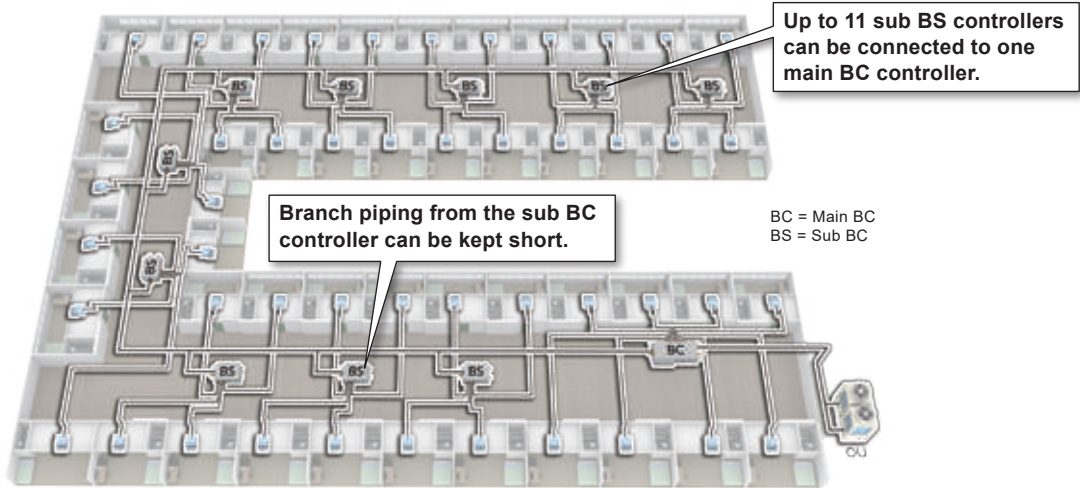
Main BC controller used with sub BC controller (JA1 and KA1 types)

Model	CMB-M108V-JA1	CMB-M1012V-JA1	CMB-M1016V-JA1	CMB-P1016V-KA1
Number of branches	8	12	16	16
Connectable outdoor unit capacity	R32 (E)M200 to (E)M300/ R410A (E)P200 to (E)P900			R410A (E)P200 to (E)P1100

*KA1 type can only be connected to R410A outdoor units.

Sub BC controller (KB1 type)

Model	CMB-M104V-KB1	CMB-M108V-KB1
Number of branches	4	8
Connectable main BC controller	CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1	

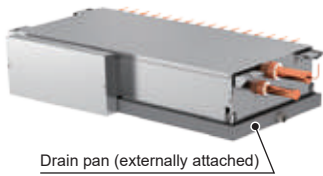


*When installing a sub BC controller, refer to the DATA BOOK for full details.
*The main BC controller has two ports for sub BC controllers. A low pressure pipe needs to be branched from the outdoor unit.

Features

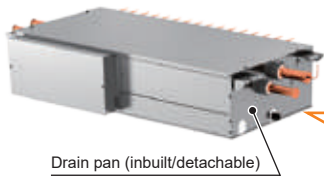
• Drain pan design

Conventional model *CMB-P V-J/V-JA/V-KA/V-KB



The drain pan is externally attached to the BC controller.

Latest model *CMB-M V-J1/V-JA1/V-KB1, CMB-P V-KA1

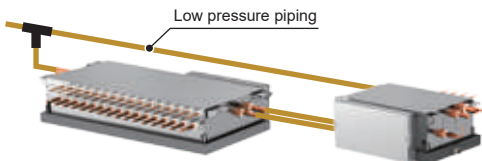


The drain pan on the latest BC controller is inbuilt and can be detached from the bottom for easier maintenance.

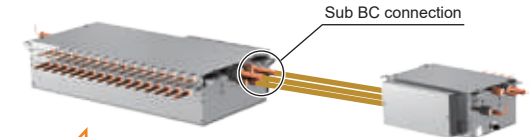
Easier maintenance with inbuilt detachable drain pan.

• Piping

Conventional model *CMB-P V-JA/V-KA/V-KB



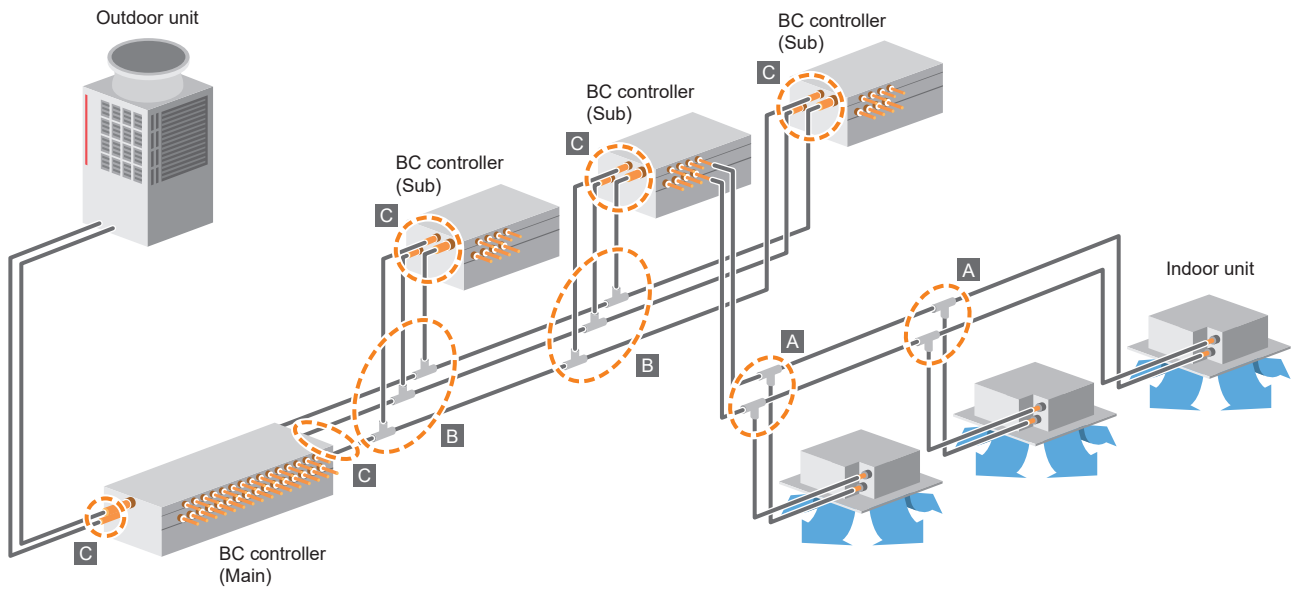
Latest model *CMB-M V-JA1/V-KB1, CMB-P V-KA1



Easier installation with a low pressure piping connected to a sub BC.

Optional parts

- For BC controllers



A	Branch joint	Between BC and indoor units	CMY-Y102SS-G2	Total down-stream indoor unit capacity: -P/M200
			CMY-Y102LS-G2	Total down-stream indoor unit capacity: P/M201-P/M250
B	Branch joint	Between Main BC and Sub BC	CMY-R201S-G	Total down-stream indoor unit capacity: -P/M350
			CMY-R202S-G	Total down-stream indoor unit capacity: P/M351-P/M600
			CMY-R203S-G	Total down-stream indoor unit capacity: P/M601-P/M650
			CMY-R204S-G	Total down-stream indoor unit capacity: P/M651-P/M1000
			CMY-R205S-G	Total down-stream indoor unit capacity: P/M1001-
C	Reducer	Between outdoor units and BC	CMY-R301S-G	For J1 type (Outdoor unit capacity: P200-P350/M200-M300)
			CMY-R302S-G1	For JA1 type (Outdoor unit capacity: P200-P900/M200-M300)
			CMY-R304S-G1	For KA1 type (Outdoor unit capacity: P200-P1100)
		Between Main BC and Sub BC	CMY-R303S-G1	For JA1 type (When using the Sub BC controller)
			CMY-R305S-G1	For KA1 type (When using the Sub BC controller)
			CMY-R306S-G	For KB1 type
Branch pipe (Header)			CMY-R160-J1	Joint for connecting to two nozzles

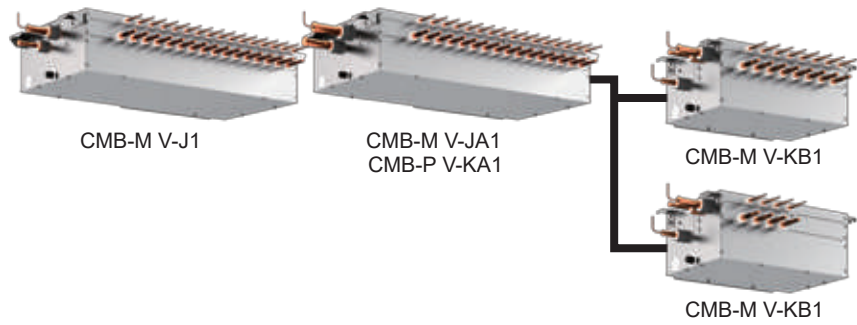
*Items "B" is not necessary when J1-type BC controller is used.

CMB-M V-J1

CMB-M V-JA1

CMB-P V-KA1

CMB-M V-KB1



J1 type R32 R410A

CMB-M V-J1

Model			CMB-M104V-J1(-TR)		CMB-M106V-J1(-TR)		CMB-M108V-J1(-TR)		CMB-M1012V-J1(-TR)		CMB-M1016V-J1(-TR)	
Number of branch			4		6		8		12		16	
Power source			1-phase 220-230-240 V									
			50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Power input (220/230/240)	Cooling	kW	0.067/0.076/0.085	0.054/0.061/0.067	0.097/0.110/0.123	0.078/0.088/0.097	0.127/0.144/0.161	0.102/0.115/0.127	0.186/0.211/0.236	0.150/0.168/0.186	0.246/0.279/0.312	0.198/0.222/0.246
	Heating	kW	0.030/0.034/0.038	0.024/0.027/0.030	0.045/0.051/0.057	0.036/0.041/0.045	0.060/0.068/0.076	0.048/0.054/0.060	0.090/0.102/0.114	0.072/0.081/0.090	0.119/0.135/0.151	0.096/0.108/0.119
Current input (220/230/240)	Cooling	A	0.31/0.34/0.36	0.25/0.27/0.28	0.45/0.48/0.52	0.36/0.39/0.41	0.58/0.63/0.68	0.47/0.50/0.53	0.85/0.92/0.99	0.69/0.74/0.78	1.12/1.22/1.30	0.90/0.97/1.03
	Heating	A	0.14/0.15/0.16	0.11/0.12/0.13	0.21/0.23/0.24	0.17/0.18/0.19	0.28/0.30/0.32	0.22/0.24/0.25	0.42/0.44/0.48	0.33/0.36/0.38	0.55/0.59/0.63	0.44/0.47/0.50
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)									
Connectable outdoor unit capacity			P200 to P350/M200 to M300									
Indoor unit capacity connectable to 1 branch *14			Model P/M80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P/M81.)									
External dimension HxWxD		mm	250 x 596 x 476		250 x 596 x 476		250 x 596 x 476		252 x 911 x 622		252 x 1,135 x 622	
		in.	9-7/8 x 23-1/2 x 18-3/4		9-7/8 x 23-1/2 x 18-3/4		9-7/8 x 23-1/2 x 18-3/4		9-15/16 x 35-7/8 x 24-1/2		9-15/16 x 44-11/16 x 24-1/2	
Refrigerant piping diameter	To outdoor unit		High press. pipe	Low press. pipe	High press. pipe	Low press. pipe	High press. pipe	Low press. pipe	High press. pipe	Low press. pipe	High press. pipe	Low press. pipe
	Connectable unit capacity											
	P200/M200	mm(in.) O.D.	15.88 (5/8) Braze	19.05 (3/4) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze
	P250/P300	mm(in.) O.D.	19.05 (3/4) Braze	22.2 (7/8) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze
	P350 *15	mm(in.) O.D.	19.05 (3/4) Braze or 22.2 (7/8) Braze	28.58 (1-1/8) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	28.58 (1-1/8) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	28.58 (1-1/8) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	28.58 (1-1/8) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	28.58 (1-1/8) Braze
	M250/M300	mm(in.) O.D.	15.88 (5/8) Braze	22.2 (7/8) Braze	15.88 (5/8) Braze	22.2 (7/8) Braze	15.88 (5/8) Braze	22.2 (7/8) Braze	15.88 (5/8) Braze	22.2 (7/8) Braze	15.88 (5/8) Braze	22.2 (7/8) Braze
	To indoor unit		Liquid pipe	Gas pipe	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze	Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze	Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze	Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/2) Braze bigger than 50 9.52 (3/8) Braze	Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze	Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size			mm (in.) O.D. 32 (1-1/4)		O.D. 32 (1-1/4)		O.D. 32 (1-1/4)		O.D. 32 (1-1/4)		O.D. 32 (1-1/4)	
Net weight			kg (lbs) 26 (58)		29 (64)		33 (73)		49 (109)		59 (131)	
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		59		59		59		59	
	Defrost	dB <A>	71		71		71		71		71	
Sound pressure level (measured in anechoic room) *16	Rated operation	dB <A>	40		40		40		40		40	
	Defrost	dB <A>	53		53		53		53		53	
Accessories			Drain Connection pipe, Washer, Tie band									

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A or R32 refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor unit capacity or operation condition.
The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P/M100, P/M125, P/M140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. R32 is flammable, and certain restrictions apply to the installation of units.
When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
For detail, refer to the section in the DATA BOOK on installation restrictions.
14. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
15. For the refrigerant pipe size, refer to Installation Manual of outdoor units.
16. The sound pressure level measured by the conventional method in JIS for reference purpose.

JA1 type R32 R410A

CMB-M V-JA1

Model			CMB-M108V-JA1(-TR)		CMB-M1012V-JA1(-TR)		CMB-M1016V-JA1(-TR)						
Number of branch			8		12		16						
Power source			1-phase 220-230-240 V										
			50 Hz		60 Hz		50 Hz		60 Hz				
Power input	Cooling	kW	0.127/0.144/0.161	0.102/0.115/0.127	0.186/0.211/0.236	0.150/0.168/0.186	0.246/0.279/0.312	0.198/0.222/0.246					
(220/230/240)	Heating	kW	0.060/0.068/0.076	0.048/0.054/0.060	0.090/0.102/0.114	0.072/0.081/0.090	0.119/0.135/0.151	0.096/0.108/0.119					
Current input	Cooling	A	0.58/0.63/0.68	0.47/0.50/0.53	0.85/0.92/0.99	0.69/0.74/0.78	1.12/1.22/1.30	0.90/0.97/1.03					
(220/230/240)	Heating	A	0.28/0.30/0.32	0.22/0.24/0.25	0.42/0.44/0.48	0.33/0.36/0.38	0.55/0.59/0.63	0.44/0.47/0.50					
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)										
Connectable outdoor unit capacity			P200 to P900/M200 to M300										
Indoor unit capacity connectable to 1 branch *14			Model P/M80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P/M81.)										
External dimension HxWxD		mm	252 x 911 x 622			252 x 1,135 x 622		252 x 1,135 x 622					
		in.	9-15/16 x 35-7/8 x 24-1/2			9-15/16 x 44-11/16 x 24-1/2		9-15/16 x 44-11/16 x 24-1/2					
Refrigerant piping diameter	To outdoor unit		High press. pipe		Low press. pipe		High press. pipe		Low press. pipe				
	Connectable unit capacity												
	P200/M200	mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed			
	P250/P300	mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed			
	P350	*15 mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed			
	P400 to P500	mm(in.) O.D.	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed			
	P550	*15 mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed			
	P600	*15 mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed			
	P650	mm(in.) O.D.	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed			
	P700 to P800	mm(in.) O.D.	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed			
	P850 to P900	mm(in.) O.D.	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed			
	M250/M300	mm(in.) O.D.	15.88 (5/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	22.2 (7/8) Brazed			
	To indoor unit		Liquid pipe		Gas pipe		Liquid pipe		Gas pipe				
			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)				
			mm(in.) O.D.										
	To other BC controller												
	Total down-stream Indoor unit capacity		High press. pipe		Liquid pipe		Low press. pipe		High press. pipe		Liquid pipe		Low press. pipe
	to P200/M200		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	P201 to P300		mm(in.) O.D.	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
P301 to P350		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P351 to P400		mm(in.) O.D.	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P401 to P600		mm(in.) O.D.	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P601 to P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P651 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	41.28(1-5/8) Brazed	
P801 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	48.93(1-7/8) Brazed	
P1001 or above		mm(in.) O.D.	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	48.93(1-7/8) Brazed	
M201 to M300		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
M301 to M350		mm(in.) O.D.	15.88 (5/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
M351 to M400		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
M401 to M450		mm(in.) O.D.	19.05 (3/4) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			O.D. 32 (1-1/4)			O.D. 32 (1-1/4)				
Net weight		kg (lbs)	48 (106)			60 (133)			68 (150)				
Sound power level (measured in anechoic room)	Rated operation	dB <A>	68			68			68				
	Defrost	dB <A>	74			74			74				
Sound pressure level (measured in anechoic room) *16	Rated operation	dB <A>	50			50			50				
	Defrost	dB <A>	56			56			56				
Accessories			Drain Connection pipe, Washer, Tie band										

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A or R32 refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor unit capacity or operation condition.
The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P/M100, P/M125, P/M140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. R32 is flammable, and certain restrictions apply to the installation of units.
When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
For detail, refer to the section in the DATA BOOK on installation restrictions.
14. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
15. For the refrigerant pipe size, refer to Installation Manual of outdoor units.
16. The sound pressure level measured by the conventional method in JIS for reference purpose.

KA1 type **R410A**

CMB-P V-KA1

Model				CMB-P1016V-KA1(-TR)		
Number of branch				16		
Power source				1-phase 220-230-240 V		
				50Hz		
Power input (220/230/240)	Cooling	kW		0.246/0.279/0.312		0.198/0.222/0.246
	Heating	kW		0.119/0.135/0.151		0.096/0.108/0.119
Current input (220/230/240)	Cooling	A		1.12/1.22/1.30		0.90/0.97/1.03
	Heating	A		0.55/0.59/0.63		0.44/0.47/0.50
External finish				Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor unit capacity				P200 to P1100		
Indoor unit capacity connectable to 1 branch *13				Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)		
External dimension HxWxD			mm	250 x 1,135 x 622		
			in.	9-7/8 x 44-11/16 x 24-1/2		
Refrigerant piping diameter	To outdoor unit			High press. pipe		
	Connectable unit capacity			Low press. pipe		
	P200	mm(in.) O.D.		15.88 (5/8) Brazed		19.05 (3/4) Brazed
	P250/P300	mm(in.) O.D.		19.05 (3/4) Brazed		22.2 (7/8) Brazed
	P350 *14	mm(in.) O.D.		19.05 (3/4) Brazed or 22.2 (7/8) Brazed		28.58 (1-1/8) Brazed
	P400 to P500	mm(in.) O.D.		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed
	P550 *14	mm(in.) O.D.		22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed
	P600 *14	mm(in.) O.D.		22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed
	P650	mm(in.) O.D.		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed
	P700 to P800	mm(in.) O.D.		28.58 (1-1/8) Brazed		34.93 (1-3/8) Brazed
	P850 to P1000	mm(in.) O.D.		28.58 (1-1/8) Brazed		41.28 (1-5/8) Brazed
	P1050 to P1100	mm(in.) O.D.		34.93 (1-3/8) Brazed		41.28 (1-5/8) Brazed
	To indoor unit			Liquid pipe		
				Gas pipe		
		mm(in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
	To other BC controller			High press. pipe		
	Total down-stream Indoor unit capacity			Liquid pipe		
	to P200			Low press. pipe		
	P201 to P300	mm(in.) O.D.		15.88 (5/8) Brazed		19.05 (3/4) Brazed
	P301 to P350	mm(in.) O.D.		19.05 (3/4) Brazed		22.2 (7/8) Brazed
	P351 to P400	mm(in.) O.D.		19.05 (3/4) Brazed		28.58 (1-1/8) Brazed
	P401 to P600	mm(in.) O.D.		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed
	P601 to P650	mm(in.) O.D.		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed
	P651 to P800	mm(in.) O.D.		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed
	P801 to P1000	mm(in.) O.D.		28.58 (1-1/8) Brazed		34.93 (1-3/8) Brazed
	P1001 or above	mm(in.) O.D.		28.58 (1-1/8) Brazed		41.28 (1-5/8) Brazed
Field drain pipe size			mm (in.)	O.D. 32 (1-1/4)		
Net weight			kg (lbs)	69 (153)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>		66		
	Defrost	dB <A>		73		
Sound pressure level (measured in anechoic room) *15	Rated operation	dB <A>		48		
	Defrost	dB <A>		55		
Accessories				Drain Connection pipe, Washer, Tie band		

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 2.The equipment is for R410A refrigerant.
- 3.Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.The ambient relative humidity of the BC controller needs to be kept below 80%.
- 13.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 14.For the refrigerant pipe size, refer to Installation Manual of outdoor units.
- 15.The sound pressure level measured by the conventional method in JIS for reference purpose.

KB1 type R32 R410A

CMB-M V-KB1






Model			CMB-M104V-KB1(-TR)			CMB-M108V-KB1(-TR)								
Number of branch			4			8								
Power source			1-phase 220-230-240 V											
			50 Hz		60 Hz		50 Hz		60 Hz					
Power input	Cooling	kW	0.060/0.068/0.076		0.048/0.054/0.060		0.119/0.135/0.151		0.096/0.108/0.119					
(220/230/240)	Heating	kW	0.030/0.034/0.038		0.024/0.027/0.030		0.060/0.068/0.076		0.048/0.054/0.060					
Current input	Cooling	A	0.28/0.30/0.32		0.22/0.24/0.25		0.55/0.59/0.63		0.44/0.47/0.50					
(220/230/240)	Heating	A	0.14/0.15/0.16		0.11/0.12/0.13		0.28/0.30/0.32		0.22/0.24/0.25					
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)											
Connectable Main BC controller			CMB-M108/1012/1016V-JA1(-TR), CMB-P1016V-KA1(-TR)											
The maximum number of connectable Sub BC controllers			11											
The maximum connectable capacity of indoor units			P/M350 for each											
External dimension HxWxD		mm	250 x 596 x 476				250 x 596 x 476							
		in.	9-7/8 x 23-1/2 x 18-3/4				9-7/8 x 23-1/2 x 18-3/4							
Refrigerant piping diameter	To outdoor unit		High press. pipe		Low press. pipe		High press. pipe		Low press. pipe					
	Connectable unit capacity													
	-	mm(in.) O.D.	-		-		-		-					
	To indoor unit		Liquid pipe		Gas pipe		Liquid pipe		Gas pipe					
	mm(in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)					
			To other BC controller		High press. pipe		Liquid pipe		Low press. pipe		High press. pipe		Liquid pipe	
	Total down-stream Indoor unit capacity		15.88 (5/8) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed		15.88 (5/8) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed	
	to P200/M200 mm(in.) O.D.		19.05 (3/4) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed		19.05 (3/4) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed	
	P201 to P300 mm(in.) O.D.		28.58 (1-1/8) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed	
	P301 to P350 mm(in.) O.D.		22.2 (7/8) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		22.2 (7/8) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed	
	P351 to P400 mm(in.) O.D.		22.2 (7/8) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		22.2 (7/8) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed	
	P401 to P600 mm(in.) O.D.		28.58 (1-1/8) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed	
	P601 to P650 mm(in.) O.D.		19.05 (3/4) Brazed		34.93 (1-3/8) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		34.93 (1-3/8) Brazed		28.58 (1-1/8) Brazed	
	P651 to P800 mm(in.) O.D.		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		41.28(1-5/8) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		41.28(1-5/8) Brazed	
P801 to P1000 mm(in.) O.D.		34.93 (1-3/8) Brazed		19.05 (3/4) Brazed		41.28(1-5/8) Brazed		34.93 (1-3/8) Brazed		19.05 (3/4) Brazed		41.28(1-5/8) Brazed		
P1001 or above mm(in.) O.D.		15.88 (5/8) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed		15.88 (5/8) Brazed		9.52 (3/8) Brazed		22.2 (7/8) Brazed		
M201 to M300 mm(in.) O.D.		15.88 (5/8) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		15.88 (5/8) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		
M301 to M350 mm(in.) O.D.		19.05 (3/4) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		12.7 (1/2) Brazed		28.58 (1-1/8) Brazed		
M351 to M400 mm(in.) O.D.		19.05 (3/4) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		
M401 to M450 mm(in.) O.D.		19.05 (3/4) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		19.05 (3/4) Brazed		15.88 (5/8) Brazed		28.58 (1-1/8) Brazed		
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)						O.D. 32 (1-1/4)					
Net weight		kg (lbs)	23 (51)						31 (69)					
Sound power level (measured in anechoic room)	Rated operation		dB <A>						59					
	Defrost		dB <A>						71					
Sound pressure level (measured in anechoic room) *15	Rated operation		dB <A>						40					
	Defrost		dB <A>						53					
Accessories			Drain Connection pipe, Washer, Tie band											

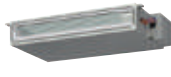




Notes:






1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A or R32 refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor unit capacity or operation condition.
The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P/M100, P/M125, P/M140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. Can't use singleness. (MAIN BC CONTROLLER is necessary)
13. The ambient relative humidity of the BC controller needs to be kept below 80%.
14. R32 is flammable, and certain restrictions apply to the installation of units.
When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
For detail, refer to the section in the DATA BOOK on installation restrictions.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.



Selection of Indoor Units

Type	Ceiling cassette type				Ceiling concealed type
	4-way airflow type	4-way airflow type	2-way airflow type	1-way airflow type	Low noise type
Model	R32 R410A PLFY-M VEM-E PLFY-M VEM6-E 	R410A PLFY-P VFM-E1 	R410A PLFY-P VLMD-E 	R410A PMFY-P VBM-E 	R410A PEFY-P VMR-E-L/R 
Refrigerant	R32 R410A	R410A	R410A	R410A	R410A
Line Up	P15				
	M/P20				
	M/P25				
	M/P32				
	M/P40				
	M/P50				
	M/P63				
	M/P71				
	M/P80				
	M/P100				
	M/P125				
Reference page	P.105	P.111	P.114	P.117	P.121

Type	Ceiling concealed type				Ceiling suspended type
	Low static pressure type	Medium static pressure type	High static pressure type	Fresh air intake type	
Model	R410A PEFY-P VMS1(L)-E 	R32 R410A PEFY-M VMA(L)-A PEFY-M VMA(L)-A1 	R410A PEFY-P VMHS-E 	R410A PEFY-P VMHS-E-F 	R410A PCFY-P VKM-E 
Refrigerant	R410A	R32 R410A	R410A	R410A	R410A
Line Up	P15				
	M/P20				
	M/P25				
	M/P32				
	M/P40				
	M/P50				
	M/P63				
	M/P71				
	M/P80				
	M/P100				
	M/P125				
	M/P140				
	P200				
	P250				
Reference page	P.123	P.125	P.131	P.135	P.138

Type	Wall-mounted type		Floor standing type		
Model	R410A PKFY-P VLM-E 	R410A PKFY-P VKM-E 	R410A PFFY-P VKM-E2 	R410A PFFY-P VEM-E 	R410A PFFY-P VCM-E 
Refrigerant	R410A	R410A	R410A	R410A	R410A
Line Up	P10				
	P15				
	P20				
	P25				
	P32				
	P40				
	P50				
	P63				
	P100				
	P125				
Reference page	P.141	P.141	P.145	P.147	P.150

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

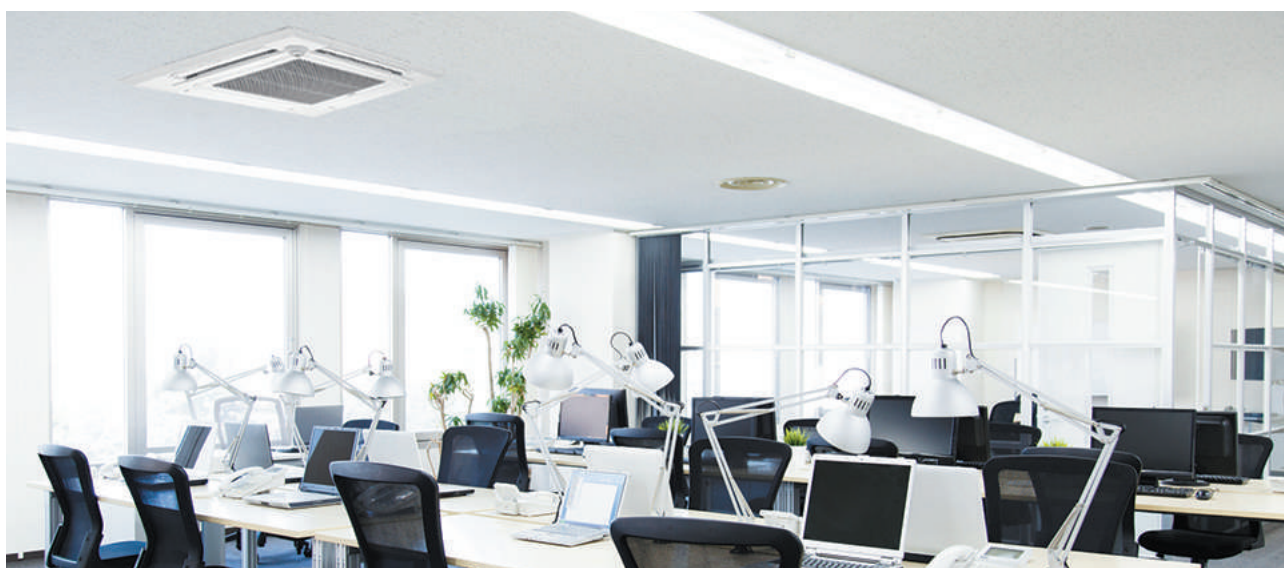
LOSSNAY
System

Remote
Controller

Hot Water
Solution



Ceiling cassette type 4-way airflow type



Ceiling cassette type

4-way airflow type

PLFY-M VEM-E **R32** **R410A**

PLFY-M VEM6-E **R32** **R410A**

• Technologies and functions P.160



3D i-see Sensor and versatile airflow variation provide comfort to all corners of the room.

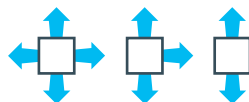
Optimum airflow

2-, 3-, 4-way airflow pattern selection

Three outlet options are available--bidirectional, three-way, and four-way--to suit different types of installation. Select, for example, the four-way pattern for installation in the center of the room and three-way pattern for installation in the corner.

2-, 3-, 4-way airflow pattern selection

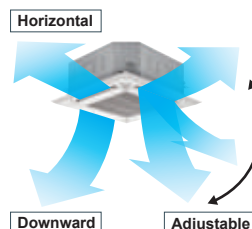
* Optional shuffle placement is required for 2- and 3-way patterns.



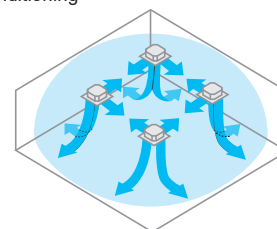
Individual vane angle settings

Vane direction can be changed or fixed from the remote controller to direct the supply air at or away from objects or occupants in the room.

The airflow direction of each vane can be set using the wired remote controller or wireless remote controller (PAR-SL101A-E).



Multi-directional air conditioning



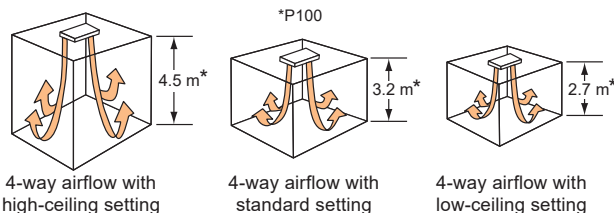
2-, 3-, 4-way airflow pattern selection

individual vane angle settings

Combinations with individual vane settings enable an optimal outlet setting for each room layout to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

Equipped with high- and low-ceiling modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match the height of the room. Being able to choose the optimum airflow volume helps optimize the breezy sensation felt throughout the room.

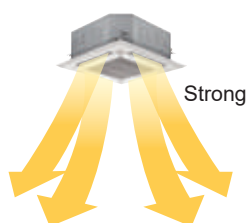


Airflow range

Airflow pattern	M20-M80			M100/M125		
	High-ceiling setting	Standard setting	Low-ceiling setting	High-ceiling setting	Standard setting	Low-ceiling setting
4-way	3.5 m	2.7 m	2.5 m	4.5 m	3.2 m	2.7 m
3-way	3.5 m	3.0 m	2.7 m	4.5 m	3.6 m	3.0 m
2-way	3.5 m	3.3 m	3.0 m	4.5 m	4.0 m	3.3 m

Automatic air-speed adjustment

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment.



At the start of the heating/cooling operation, airflow is set to high speed to quickly heat/cool the room.



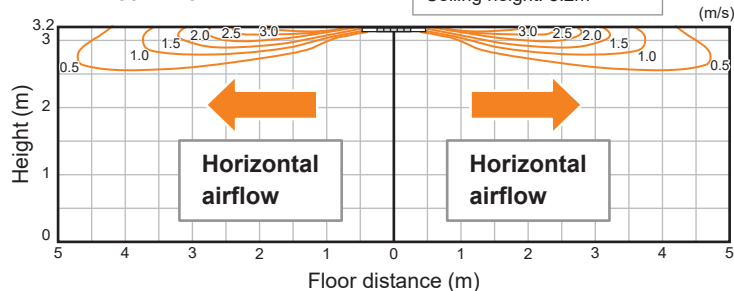
When the room temperature reaches the desired setting, the airflow speed is automatically decreased for stable and comfortable heating/cooling operation.

Horizontal airflow

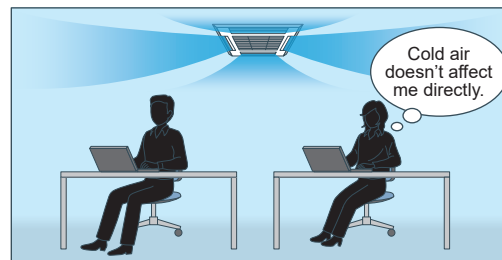
Supply air is horizontally fed into the room to reduce the cold draft feeling. This airflow is ideal for offices and restaurants.

• Airflow distribution

PLFY-M100VEM6-E



• Horizontal airflow

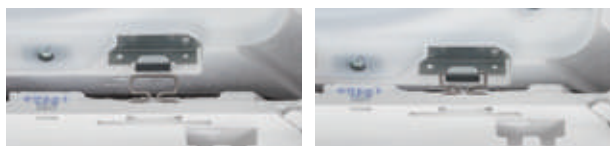


Easy installation

Temporary hanging hook

The structure of the panel has been redesigned and is now equipped with a temporary hanging hook.

This improves work efficiency during panel installation.



Electrical box wiring

After reviewing the power supply terminal position in the electrical box, the structure has been redesigned to improve connectivity. This makes complex wiring work easier.

• Conventional model



• Latest model



No need to remove screws

Installation is possible without removing the screws for the corner panel and the control box; they simply need to be loosened. This lowers the risk of losing screws.

• Corner panel



• Control box cover



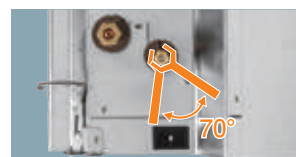
Increased space for plumbing work

The top and bottom positions of the liquid and gas pipes have been reversed to allow the gas pipe work, which requires more effort, to be completed first. Further, through structural innovations related to the space around the pipes, the area for the spanner has been increased, thus improving liquid piping work and enabling it to be completed smoothly.

• Conventional model

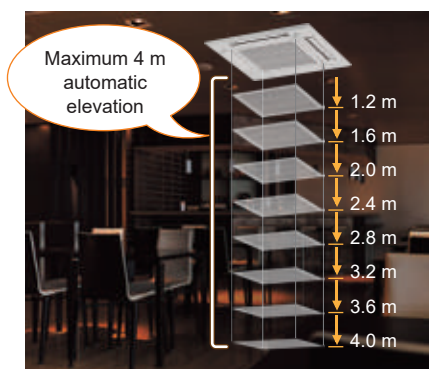


• Latest model



Easy cleaning

The automatic elevation panel makes cleaning the filter easy, even with high ceilings.



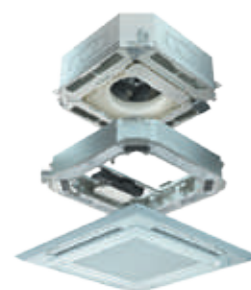
IT terminal

An IT terminal is available. Contact your local distributor for details.

Connectable to Plasma Quad Connect*

The optional Plasma Quad Connect PAC-SK51FT-E can be installed on the indoor units (PLFY-M VEM6-E only).

* Plasma Quad Connect (PAC-SK51FT-E) cannot be used with Auto elevation panel (PLP-6EAJ, PLP-6EAJE), Multi functional casement (PAC-SJ41TM-E) and High-efficiency filter element (PAC-SH59KF-E).



Ceiling cassette type **R32** **R410A**

4-way airflow type **PLFY-M VEM-E**

			PLFY-M20VEM-E	PLFY-M25VEM-E	PLFY-M32VEM-E	PLFY-M40VEM-E	PLFY-M50VEM-E	PLFY-M63VEM-E
Power source			1-phase 220~240V 50Hz, 1-phase 220V 60Hz					
Cooling capacity (Nominal)	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity (Nominal)	*2	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*2	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
External finish								
External dimension HxWxD		mm	258 x 840 x 840					
		in.	10-3/16 x 33-3/32 x 33-3/32					
Net weight		kg (lbs)	19 (42)	19 (42)	19 (42)	19 (42)	19 (42)	21 (46)
Grille	model		PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
	External finish		MUNSELL (1.0Y 9.2/0.2)					
	Dimension H x W x D	mm in.	40 x 950 x 950 1-9/16 x 37-13/32 x 37-13/32					
Heat exchanger		kg (lbs)	5 (11)					
FAN	Type x Quantity		Cross fin (Aluminum fin and copper tube)					
	External static press.	Pa mmH ₂ O	0					
	Motor Type		DC motor					
Driving mechanism	Motor output	kW	0.050	0.050	0.050	0.050	0.050	0.050
	Air flow rate (Low-Mid2-Mid1-High)	m ³ /min L/s cfm	12 - 13 - 14 - 15 200 - 217 - 233 - 250 424 - 459 - 494 - 530	12 - 13 - 14 - 15 200 - 217 - 233 - 250 424 - 459 - 494 - 530	13 - 14 - 15 - 16 217 - 233 - 250 - 267 459 - 494 - 530 - 565	13 - 14 - 15 - 17 217 - 233 - 250 - 283 459 - 494 - 530 - 600	13 - 14 - 16 - 18 217 - 233 - 267 - 300 459 - 494 - 565 - 636	14 - 15 - 16 - 18 233 - 250 - 267 - 300 494 - 530 - 565 - 636
	Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)	dB<A>	24 - 26 - 27 - 29	24 - 26 - 27 - 29	26 - 27 - 29 - 31	26 - 27 - 29 - 31	26 - 27 - 29 - 31	28 - 29 - 30 - 32
Air filter			PP honeycomb					
	Refrigerant piping diameter	Liquid Gas	mm (in.) mm (in.)	mm (in.) mm (in.)	mm (in.) mm (in.)	mm (in.) mm (in.)	mm (in.) mm (in.)	mm (in.) mm (in.)
	Field drain pipe size		O.D. ø32 (1-1/4) (VP-25)					

			PLFY-M80VEM-E	PLFY-M100VEM-E	PLFY-M125VEM-E
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz		
Cooling capacity (Nominal)	*1	kW	9.0	11.2	14.0
	*1	BTU/h	30,700	38,200	47,800
Heating capacity (Nominal)	*2	kW	10.0	12.5	16.0
	*2	BTU/h	34,100	42,700	54,600
External finish					
External dimension HxWxD		mm	258 x 840 x 840	298 x 840 x 840	
		in.	10-3/16 x 33-3/32 x 33-3/32	11-3/4 x 33-3/32 x 33-3/32	
Net weight		kg (lbs)	21 (46)	24 (53)	24 (53)
Grille	model		PLP-6EA	PLP-6EA	PLP-6EA
	External finish		MUNSELL (1.0Y 9.2/0.2)		
	Dimension H x W x D	mm in.	40 x 950 x 950 1-9/16 x 37-13/32 x 37-13/32		
Heat exchanger		kg (lbs)	5 (11)		
FAN	Type x Quantity		Cross fin (Aluminum fin and copper tube)		
	External static press.	Pa mmH ₂ O	0		
	Motor Type		DC motor		
Driving mechanism	Motor output	kW	0.050	0.120	0.120
	Air flow rate (Low-Mid2-Mid1-High)	m ³ /min L/s cfm	14 - 17 - 20 - 23 233 - 283 - 333 - 383 494 - 600 - 706 - 812	20 - 23 - 26 - 29 333 - 383 - 433 - 483 706 - 812 - 918 - 1024	22 - 26 - 30 - 35 367 - 433 - 500 - 583 777 - 918 - 1060 - 1236
	Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)	dB<A>	28 - 31 - 34 - 37	34 - 37 - 39 - 41	35 - 39 - 42 - 45
Air filter			PP honeycomb		
	Refrigerant piping diameter	Liquid Gas	mm (in.) mm (in.)	mm (in.) mm (in.)	mm (in.) mm (in.)
	Field drain pipe size		O.D. ø32 (1-1/4) (VP-25)		

Notes:

- *1 Nominal cooling conditions
Indoor:27°CDB/19°CWB (81°FDB/66°F WB), Outdoor:35°CDB (95°FDB)
Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)
- *2 Nominal heating conditions
Indoor:20°CDB (68°FDB), Outdoor:7°CDB/6°CWB (45°FDB/43°F WB)
Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)
- *3 Nominal conditions *1 and *2 are subject to JIS B8615-1.

- * R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- * When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

		Outdoor unit	(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25		1-20	1-25	1-30
	Including M20 or M25		1-8	1-10	1-12

Lineup & Functions

Y-Series

R2-Series

ZUBADAN -Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

Ceiling cassette type **R32** **R410A**

4-way airflow type **PLFY-M VEM6-E**

		PLFY-M20VEM6-E	PLFY-M25VEM6-E	PLFY-M32VEM6-E	PLFY-M40VEM6-E	PLFY-M50VEM6-E
Power source		1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Cooling capacity (Nominal)	*1 kW	2.2	2.8	3.6	4.5	5.6
	*1 BTU/h	7,500	9,600	12,300	15,400	19,100
	Power input kW	0.03	0.03	0.03	0.03	0.06
Heating capacity (Nominal)	*2 kW	2.5	3.2	4.0	5.0	6.3
	*2 BTU/h	8,500	10,900	13,600	17,100	21,500
	Power input kW	0.03	0.03	0.03	0.03	0.07
External finish	Current input A	0.24	0.24	0.25	0.25	0.60
	External finish	Galvanized steel sheet				
External dimension	mm	258 x 840 x 840				
	HxWxD in.	10-3/16 x 33-3/32 x 33-3/32				
Net weight	kg (lbs)	19 (42)	19 (42)	19 (42)	19 (42)	24 (53)
Grille	model	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
	External finish	MUNSELL (1.0Y 9.2/0.2)				
	Dimension mm	40 x 950 x 950				
	H x W x D in.	1-9/16 x 37-13/32 x 37-13/32				
	Net weight kg (lbs)	5 (11)				
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1
	External static press. Pa	0	0	0	0	0
	mmH ₂ O	0	0	0	0	0
	Motor Type	DC motor				
	Motor output kW	0.050	0.050	0.050	0.050	0.120
	Driving mechanism	Direct-drive				
	Air flow rate (Low-Mid2-Mid1-High)	m ³ /min	12 - 13 - 14 - 15	12 - 13 - 14 - 15	13 - 14 - 15 - 16	13 - 14 - 15 - 17
		L/s	200 - 217 - 233 - 250	200 - 217 - 233 - 250	217 - 233 - 250 - 267	217 - 233 - 250 - 283
		cfm	424 - 459 - 494 - 530	424 - 459 - 494 - 530	459 - 494 - 530 - 565	459 - 494 - 530 - 600
	Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)	dB<A>	24 - 26 - 27 - 29	24 - 26 - 27 - 29	26 - 27 - 29 - 31	26 - 27 - 29 - 31
Air filter		PP honeycomb				
Refrigerant piping diameter	Liquid mm (in.)	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare
	Gas mm (in.)	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare
Field drain pipe size		O.D. ø32 (1-1/4) (VP-25)				

		PLFY-M63VEM6-E	PLFY-M71VEM6-E	PLFY-M80VEM6-E	PLFY-M100VEM6-E	PLFY-M125VEM6-E
Power source		1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Cooling capacity (Nominal)	*1 kW	7.1	8.0	9.0	11.2	14.0
	*1 BTU/h	24,200	27,300	30,700	38,200	47,800
	Power input kW	0.09	0.12	0.12	0.12	0.12
Heating capacity (Nominal)	*2 kW	8.0	9.0	10.0	12.5	16.0
	*2 BTU/h	27,300	30,700	34,100	42,700	54,600
	Power input kW	0.12	0.12	0.12	0.12	0.12
External finish	Current input A	0.90	0.94	0.94	0.94	0.94
	External finish	Galvanized steel sheet				
External dimension	mm	298 x 840 x 840				
	HxWxD in.	11-3/4 x 33-3/32 x 33-3/32				
Net weight	kg (lbs)	24 (53)	27 (60)	27 (60)	27 (60)	27 (60)
Grille	model	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
	External finish	MUNSELL (1.0Y 9.2/0.2)				
	Dimension mm	40 x 950 x 950				
	H x W x D in.	1-9/16 x 37-13/32 x 37-13/32				
	Net weight kg (lbs)	5 (11)				
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1
	External static press. Pa	0	0	0	0	0
	mmH ₂ O	0	0	0	0	0
	Motor Type	DC motor				
	Motor output kW	0.120	0.120	0.120	0.120	0.120
	Driving mechanism	Direct-drive				
	Air flow rate (Low-Mid2-Mid1-High)	m ³ /min	16 - 18 - 20 - 32 (Cooling) 16 - 18 - 20 - 35 (Heating)	16 - 18 - 20 - 35	16 - 20 - 23 - 35	17 - 22 - 28 - 35
		L/s	267 - 300 - 333 - 533 (Cooling) 267 - 300 - 333 - 583 (Heating)	267 - 300 - 333 - 583	267 - 333 - 383 - 583	283 - 367 - 467 - 583
		cfm	565 - 636 - 706 - 1130 (Cooling) 565 - 636 - 706 - 1236 (Heating)	565 - 636 - 706 - 1236	565 - 706 - 812 - 1236	600 - 777 - 989 - 1236
	Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)	dB<A>	27 - 30 - 32 - 43(Cooling) 27 - 30 - 32 - 46(Heating)	28 - 31 - 35 - 46	28 - 33 - 37 - 46	29 - 35 - 41 - 46
Air filter		PP honeycomb				
Refrigerant piping diameter	Liquid mm (in.)	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas mm (in.)	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare
Field drain pipe size		O.D. ø32 (1-1/4) (VP-25)				

Notes:

- *1 Nominal cooling conditions
Indoor: 27°C DB/19°C WB (81°F DB/66°F WB), Outdoor: 35°C DB (95°F DB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- *2 Nominal heating conditions
Indoor: 20°C DB (68°F DB), Outdoor: 7°C DB/6°C WB (45°F DB/43°F WB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- *3 Nominal conditions *1 and *2 are subject to JIS B8615-1.

- * R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- * When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

Outdoor unit		(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25	1-20	1-25	1-30
	Including M20 or M25	1-8	1-10	1-12

Ceiling cassette type **R32** **R410A**

4-way airflow type

Optional parts

- For PLFY-M VEM-E **R32** **R410A**

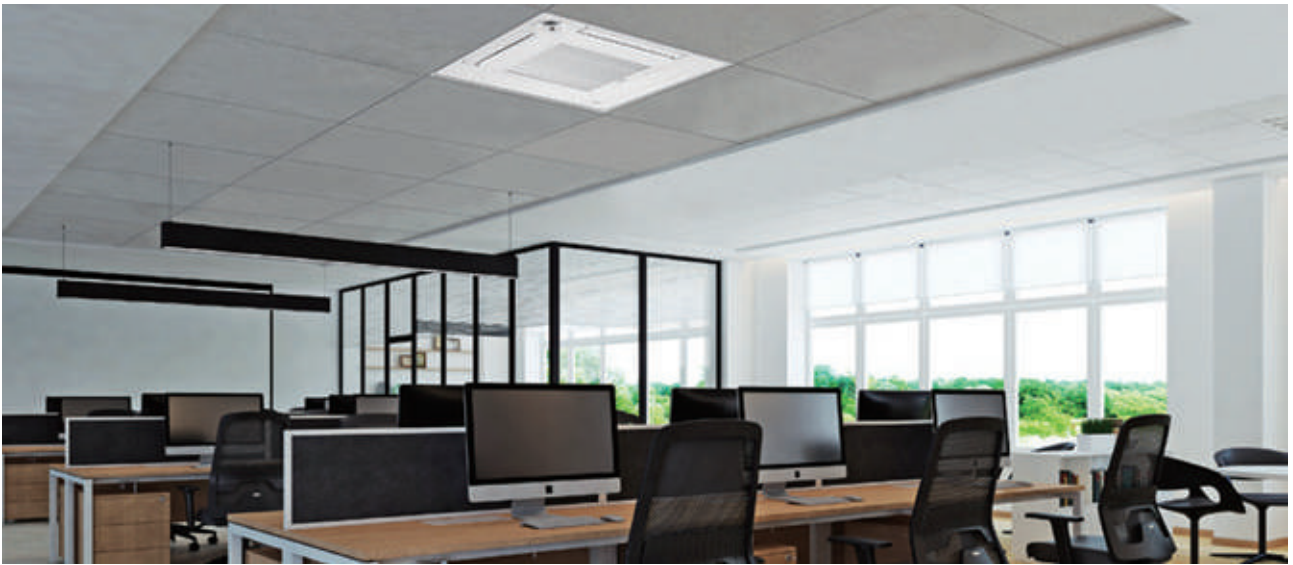
Description	Model	Applicable capacity
Air outlet shutter plate	PAC-SJ37SP-E	M20, 25, 32, 40, 50, 63, 80, 100, 125
Multi-function casement	PAC-SJ41TM-E	
High efficiency filter element	PAC-SH59KF-E	
Space panel	PAC-SJ65AS-E	
Duct flange for fresh air intake	PAC-SH65OF-E	

- For PLFY-M VEM6-E **R32** **R410A**

Description	Model	Applicable capacity
Air outlet shutter plate	PAC-SJ37SP-E	M20, 25, 32, 40, 50, 63, 71, 80, 100, 125
Multi-function casement	PAC-SJ41TM-E	
High efficiency filter element	PAC-SH59KF-E	
Space panel	PAC-SJ65AS-E	
Duct flange for fresh air intake	PAC-SH65OF-E	
Plasma quad connect	PAC-SK51FT-E	

Panel & Corner panel

		With signal Receiver	With 3D i-see Sensor	With New Wireless Remote Controller	With Auto Elevation
Panel	PLP-6EA				
	PLP-6EAL	●			
	PLP-6EAE		●		
	PLP-6EAL E	●	●		
	PLP-6EAJ	●			●
	PLP-6EAJE	●	●		●
	PLP-6EALM2	●		●	
	PLP-6EALME2	●	●	●	
Corner panel	PAR-SE9FA-E	●			
	PAC-SE1ME-E		●		



Ceiling cassette type
4-way airflow type



Ceiling cassette type

4-way airflow type

PLFY-P VFM-E1 **R410A**

• Technologies and functions P.160

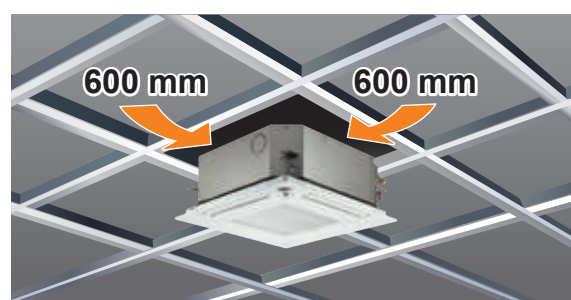


The compact size offers an ideal fit to grid system ceilings (600 mm × 600 mm) and provides 4-way airflows despite its size.

Beautiful square design

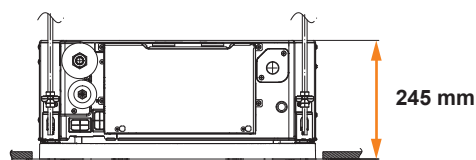
The square design matches 2 × 2 (600 mm × 600 mm) ceiling construction specifications.

Direct line-based square design enables designs of system ceiling to match the design of direct line type illuminations, thereby creating a beautiful space.



Above-ceiling height of 245 mm

The above-ceiling height of 245 mm is top class in the industry* and fits into narrow ceiling spaces.



* As of Aug 2015, among compact 4-way cassettes for system ceilings. (In-company survey)

Compact & light-weight design

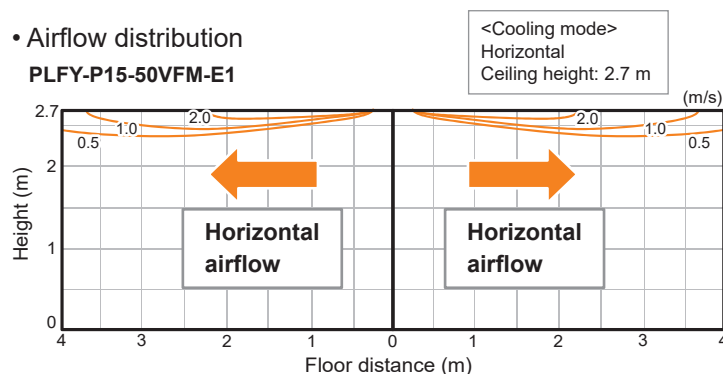
The panel weighs 3 kg, and the main unit weighs 14 kg (P15, P20 and P25 models) or 15 kg (P32, P40 and P50 models). The total weights are more than 7 kg lighter than the corresponding PLFY-M VEM6 model, allowing easy suspension.

Horizontal airflow

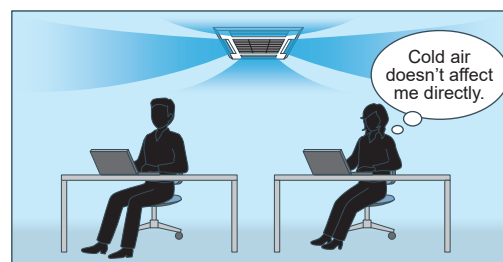
Supply air is horizontally fed into the room to reduce the cold draft feeling. This airflow is ideal for offices and restaurants.

• Airflow distribution

PLFY-P15-50VFM-E1



• Horizontal airflow



IT terminal

An IT terminal is available. Contact your local distributor for details.

Ceiling cassette type **R410A**

4-way airflow type **PLFY-P VFM-E1**

			PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Power source			1-phase 220-240V 50Hz / 220V 60Hz					
Cooling capacity		*1 kW	1.7	2.2	2.8	3.6	4.5	5.6
		*1 BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity		*1 kW	1.9	2.5	3.2	4.0	5.0	6.3
		*1 BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating	kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling	A	0.19	0.21	0.22	0.23	0.28	0.40
	Heating	A	0.14	0.16	0.17	0.18	0.23	0.35
External finish	Unit		Galvanized steel sheet					
(Munsell No.)	Panel		MUNSELL (1.0Y 9.2/0.2)					
Dimension	Unit	mm(in.)	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)					
H x W x D	Panel	mm(in.)	10 x 625 x 625 (3/8 x 24-5/8 x 24-5/8)					
Net weight	Unit	kg(lbs.)	14 (31)			15 (33)		
	Panel	kg(lbs.)	3 (7)					
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity		Turbo fan x 1					
	Airflow rate (Lo-Mid-Hi)	m³/min	6.5-7.5-8.0	6.5-7.5-8.5	6.5-8.0-9.0	7.0-8.0-9.5	7.5-9.0-11.0	9.0-11.0-13.0
		L/s	108-125-133	108-125-142	108-133-150	117-133-158	125-150-183	150-183-217
		cfm	230-265-282	230-265-300	230-282-318	247-282-335	265-318-388	318-388-459
	External static press.	Pa	0					
Motor	Type		DC motor					
	Output	kW	0.05					
Air filter			PP Honeycomb fabric (long life type)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4) (PVC pipe VP-25 connectable)					
Sound pressure level (Lo-Mid-Hi)		*2 dB<A>	26-28-30	26-29-31	26-30-33	26-30-34	28-33-39	33-39-43

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 It is measured in anechoic room at power source 230V.

Optional parts

Description	Model	Applicable models
i-see Sensor corner panel	PAC-SF1ME-E	P15, 20, 25, 32, 40, 50
Wireless signal receiver	PAR-SF9FA-E	
Anti-allergy enzyme filter	PAC-SK46KF-E	

Panel & Corner panel

		With signal Receiver	With 3D i-see Sensor	With New Wireless Remote Controller
Panel	SLP-2FA			
	SLP-2FAL	●		
	SLP-2FAE		●	
	SLP-2FALE	●	●	
	SLP-2FALM2	●		●
	SLP-2FALME2	●	●	●
Corner panel	PAR-SF9FA-E	●		
	PAC-SF1ME-E		●	



Ceiling cassette type 2-way airflow type



Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Ceiling cassette type

2-way airflow type

PLFY-P VLMD-E **R410A**

• Technologies and functions..... P.160



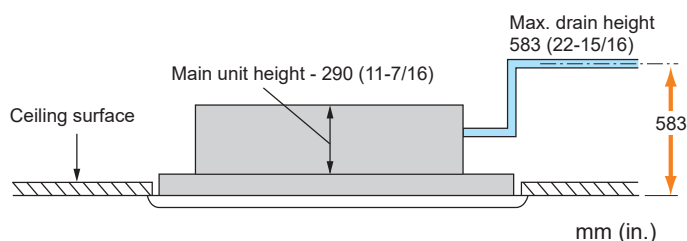
Slim body (depth 634 mm) for up to P100.
Recommended for corridors or long and narrow rooms.

Simple panel design

The in-take port is not a grille but made in a stylish design. It can be installed visually attractively in harmony with the ceiling and lightings.

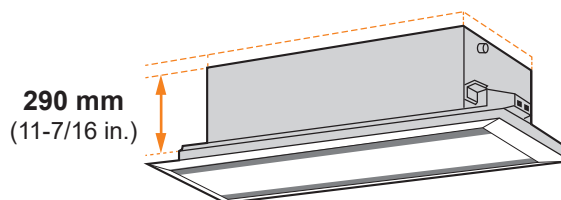
Drain pump as a standard feature

The drain can be positioned anywhere up to 583 mm (22-15/16 in.) from the ceiling surface, providing greater flexibility with long cross-piping and allowing more versatility with piping layouts.



Slim body - only 290 mm (11-7/16 in.) high

The slimline body is highly suited for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The height of the main unit is only 290 mm (11-7/16 in.).



Vane control

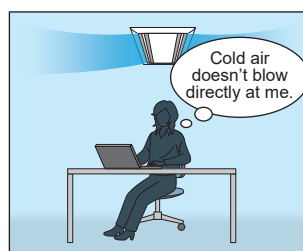
Vane angle can be selected from 7 types, including "Horizontal fix" and "Swing," to set the air blow according to preference.

*Airflow direction cannot be changed individually.

Air blow Swing



Windbreak Horizontal airflow



Ceiling cassette type **R410A**

2-way airflow type **PLFY-P VLMD-E**

			PLFY-P20VLMD-E		PLFY-P25VLMD-E		PLFY-P32VLMD-E		PLFY-P40VLMD-E		
Power source			1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz								
Cooling capacity		*1	kW	2.2		2.8		3.6		4.5	
		*1	BTU/h	7,500		9,600		12,300		15,400	
Heating capacity		*1	kW	2.5		3.2		4.0		5.0	
		*1	BTU/h	8,500		10,900		13,600		17,100	
Power consumption	Cooling	kW	0.072 / 0.075		0.072 / 0.075		0.072 / 0.075		0.081 / 0.085		
	Heating	kW	0.065 / 0.069		0.065 / 0.069		0.065 / 0.069		0.074 / 0.079		
Current	Cooling	A	0.36 / 0.37		0.36 / 0.37		0.36 / 0.37		0.40 / 0.42		
	Heating	A	0.30 / 0.32		0.30 / 0.32		0.30 / 0.32		0.34 / 0.37		
External finish (Munsell No.)	Unit		Galvanized steel plate								
	Panel		Pure white (6.4Y 8.9/0.4)								
Dimension	Unit	mm(in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)								
H x W x D	Panel	mm(in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)								
Net weight	Unit	kg(lbs.)	23 (51)				24 (53)				
	Panel	kg(lbs.)					6.5 (15)				
Heat exchanger			Cross fin								
FAN	Type x Quantity		Turbo fan x 1								
	Airflow rate (Lo-Mid-Hi)	*2	m³/min	6.5-8.0-9.5					7.0-8.5-10.5		
			L/s	108-133-158					117-142-175		
			cfm	230-283-335					247-300-371		
External static press.		Pa	0								
Motor	Type		1-phase induction motor								
	Output		kW		0.015 (at 240V)						
Air filter			PP honeycomb fabric (long life type)								
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)								
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)								
Field drain pipe diameter	mm(in.)		O.D.32 (1-1/4)								
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V	dB<A>	27-30-33					29-33-36			
	230V	dB<A>	28-31-34					30-34-37			

			PLFY-P50VLMD-E		PLFY-P63VLMD-E		PLFY-P80VLMD-E		PLFY-P100VLMD-E		PLFY-P125VLMD-E			
Power source			1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz											
Cooling capacity		*1	kW	5.6		7.1		9.0		11.2		14.0		
		*1	BTU/h	19,100		24,200		30,700		38,200		47,800		
Heating capacity		*1	kW	6.3		8.0		10.0		12.5		16.0		
		*1	BTU/h	21,500		27,300		34,100		42,700		54,600		
Power consumption	Cooling	kW	0.082 / 0.086		0.101 / 0.105		0.147 / 0.156		0.157 / 0.186		0.28 / 0.28			
	Heating	kW	0.075 / 0.080		0.094 / 0.099		0.140 / 0.150		0.150 / 0.180		0.27 / 0.27			
Current	Cooling	A	0.41 / 0.43		0.49 / 0.51		0.72 / 0.74		0.75 / 0.88		1.35 / 1.35			
	Heating	A	0.35 / 0.38		0.43 / 0.46		0.66 / 0.69		0.69 / 0.83		1.33 / 1.33			
External finish (Munsell No.)	Unit		Galvanized steel plate											
	Panel		Pure white (6.4Y 8.9/0.4)											
Dimension	Unit	mm(in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)				290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)				290 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)			
H x W x D	Panel	mm(in.)	20 x 1250 x 710 (13/16 x 49-1/4 x 28)				20 x 1750 x 710 (13/16 x 68-15/16 x 28)				20 x 2010 x 710 (13/16 x 79-3/16 x 28)			
Net weight	Unit	kg(lbs.)	27 (60)		28 (62)		44 (98)		47 (104)		56 (124)			
	Panel	kg(lbs.)	7.5 (17)				12.5 (28)				13.0 (29)			
Heat exchanger			Cross fin											
FAN	Type x Quantity		Turbo fan x 1				Turbo fan x 2				Sirocco fan x 4			
	Airflow rate (P50-P100:Lo-Mid-Hi) (P125:Lo-Mid2-Mid1-Hi)	*2	m³/min	9.0-11.0-12.5		11.0-13.0-15.5		15.5-18.5-22.0		17.5-21.0-25.0		24.0-27.0-30.0-33.0		
			L/s	150-183-208		167-217-258		258-308-367		292-350-417		400-450-500-550		
			cfm	318-388-441		353-459-547		547-653-777		618-742-883		848-953-1,059-1,165		
External static press.		Pa	0											
Motor	Type		1-phase induction motor											
	Output	kW	0.020 (at 240V)				0.020 x 2 (at 240V)		0.030 x 2 (at 240V)		0.078 x 2 (at 240V)			
Air filter			PP honeycomb fabric (long life type)										Synthetic fiber unwoven cloth filter (long life)	
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)				ø15.88 (ø5/8)							
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)				ø9.52 (ø3/8)							
Field drain pipe diameter	mm(in.)		O.D.32 (1-1/4)											
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V	dB<A>	31-34-37		32-37-39		33-36-39		36-39-42		40-42-44-46 (Lo-Mid2-Mid1-Hi)			
	230V	dB<A>	32-35-38		33-38-40		34-37-40		37-41-43					

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).
*3 It is measured in anechoic room.

Optional parts

Description	Model	Applicable capacity
Decoration panel	CMP-40VLW-C	P20, P25, P32, P40
	CMP-63VLW-C	P50, P63
	CMP-100VLW-C	P80, P100
	CMP-125VLW-C	P125
OA duct flange	PAC-KH11OF	P20, P25, P32, P40, P50, P63, P80, P100



Ceiling cassette type 1-way airflow type

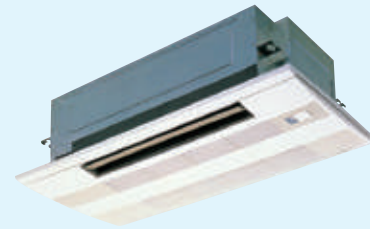


Ceiling cassette type

1-way airflow type

PMFY-P VBM-E **R410A**

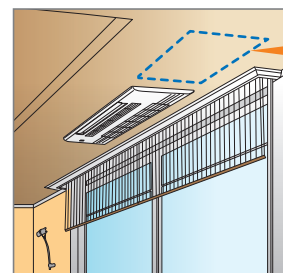
• Technologies and functions..... P.160



Recommended for installation at the edges of a room.
A lightweight body ensures excellent workability.

Ceiling mounted installation

Installing a 1-way airflow type unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the center of the room and fixtures such as book shelves are mounted on wall surfaces.



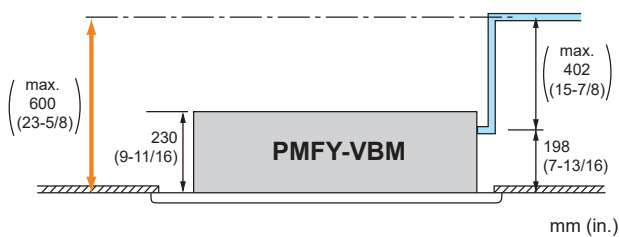
No access door is required

Compact size for smooth installation and maintenance

The body size of the unit has been standardized for all models at 812 mm for easy installation. Body weight is only 14 kg for the main unit and 3 kg for the panel, making this unit one of the lightest in the industry.

Drain pump

The drain can be positioned anywhere up to 600 mm (23-5/8 in.) from the ceiling surface.



IT terminal

An IT terminal is available. Contact your local distributor for details.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Ceiling cassette type **R410A**

1-way airflow type **PMFY-P VBM-E**

			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5
		BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1	kW	2.5	3.2	4.0	5.0
		BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.042	0.044		0.054
	Heating	kW	0.042	0.044		0.054
Current	Cooling	A	0.20	0.21		0.26
	Heating	A	0.20	0.21		0.26
External finish (Munsell No.)			White (0.98Y 8.99/0.63)			
Dimension	Unit	mm(in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
	Panel	mm(in.)	30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit	kg(lbs.)	14 (31)			
	Panel	kg(lbs.)	3 (7)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
FAN	Type		Line flow fan x 1			
	Airflow rate	*2 m ³ /min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3	7.7-8.7-9.7-10.7	
	(Lo-Mid2-Mid1-Hi)	L/s	108-120-133-145	122-133-143-155	128-145-162-178	
		cfm	230-254-283-307	258-283-304-328	272-307-343-378	
Motor	External static press.	Pa	0			
	Type		1-phase induction motor			
Air filter	Output	kW	0.028			
			PP Honeycomb fabric			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3 dB<A>	27-30-33-35	32-34-36-37	33-35-37-39	

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

*3 It is measured in anechoic room.

Optional parts

Description	Model	Applicable capacity
Decoration panel	PMP-40BMW	P20, P25, P32, P40



Ceiling concealed type



Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

Low noise type

R410A

P.121

PEFY-P VMR-E-L/R



- Realizes low noise operation. Most suitable for places such as hotels where low noise operation is required.
- The position of the inlet can be selected to be at the bottom or rear.
- The location of the piping connection can be selected according to the layout of a room.

Static pressure
5 Pa

Low
noise

Rear inlet
Bottom inlet

Piping connection
Right/Left

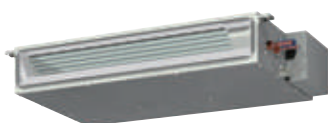
Air flow rate
3 levels

Low static pressure type

R410A

P.123

PEFY-P VMS1(L)-E



- Thin design with a body height of 200 mm (all HP models) enables installation in a ceiling with small cavity space.
- Realizes low noise operation.
- Demonstrates a maximum external static pressure of 50 Pa despite its compact design.
- The drain pump can be installed or not.

Static pressure
Maximum 50 Pa

Low
noise

Height
200 mm

Drain pump (standard)
Maximum lifting height 550 mm

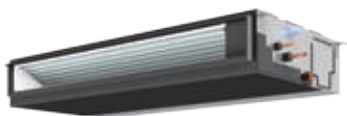
Air flow rate
3 levels

Medium static pressure type

R32 R410A

P.125

PEFY-M VMA(L)-A PEFY-M VMA(L)-A1



- Thin design with a body height of 250 mm (all HP models) enables installation in a ceiling with small cavity space.
- The position of the inlet can be selected to be at the bottom or rear.
- Demonstrates a maximum external static pressure of 150 Pa despite its compact design.
- The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.

Static pressure
Maximum 150 Pa

Height
250 mm

Rear inlet
Bottom inlet

Drain pump (standard)
Maximum lifting height 700 mm

Air flow rate
4 levels

High static pressure type

R410A

P.131

PEFY-P VMHS-E



- Maximum external static pressure of 250 Pa* allows for more flexibility in duct design.
*P200, P250VMHS-E models
- Compatible with drain pumps (option) 550 mm–700 mm

Static pressure
Maximum 250 Pa

*Maximum pressure differs depending on model.
Drain pump (option)
Maximum lifting height 700 mm

Air flow rate
3 levels

Fresh air intake type

R410A

P.135

PEFY-P VMHS-E-F


*This image shows the PEFY-P125VMHS-E-F model.

- Fresh air intake type indoor unit
- Outlet air temperature can be controlled.
- Maximum external static pressure of 250 Pa allows for more flexibility in duct design.

Static pressure
Maximum 250 Pa

Fresh air
intake type

Drain pump (option)
Maximum lifting height 700 mm

Air flow rate
3 levels

Ceiling concealed type

Low noise type

PEFY-P VMR-E-L/R **R410A**

• Technologies and functions P.160



*This image shows the -L type. On the -R type, the control box comes to the right side when looked at from the front.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Realizes low noise operation as well as reduced construction work and maintenance, to create a comfortable room environment. Most suitable for installation in places such as hotels.

Low noise operation for a quiet indoor environment

Low noise design: Minimum of 20 dB when airflow rate is low and maximum of 35 dB when airflow rate is high.

*Noise values measured on a rear-inlet model in an anechoic room. (The noise value is higher when the bottom inlet is used.)

Flexible application in symmetrically arranged rooms

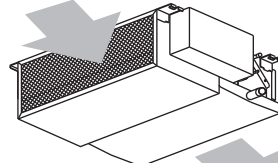
Models are available with the refrigerant/drain piping and control box on either the right or left side, to flexibly fit rooms that are symmetrically arranged next to each other, as is frequently seen in hotels.

Easy change of air inlet direction

The air inlet can be selected to be at the rear or bottom in accordance with the layout of a room.

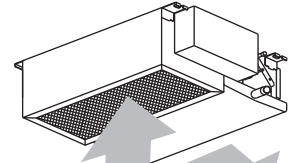
• Rear inlet

Air inlet



Air outlet

• Bottom inlet



Air inlet

Air outlet

By exchanging the closing board and air filter, the position of the inlet can be changed. (At factory shipment: Rear inlet)

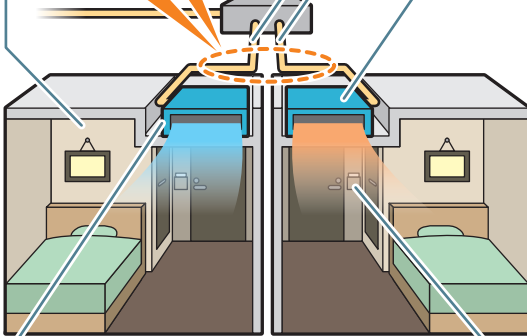
*Units with a bottom inlet make more noise than those with a rear inlet.

The rear inlet is recommended for rooms that need to be quiet, such as bedrooms.

One unit can serve adjacent rooms

Refrigerant piping

Drain piping



Fan structure allowing easy maintenance

The fan case can be removed without unscrewing it, allowing easy maintenance. Moreover, the air filter can be pulled out from two directions, from the side or rear of the main unit.

Interlocking using a card key

The air conditioner can be switched ON/OFF by inserting or removing a card key to prevent forgetting to turn off the air conditioner and save wasteful operation. (Optional accessory is needed.)

IT terminal

An IT terminal is available. Contact your local distributor for details.

Ceiling concealed type **R410A**

Low noise type **PEFY-P VMR-E-L/R**

			PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L
Power source			1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity	*1	kW	2.2	2.8	3.6
	*1	BTU/h	7,500	9,600	12,300
Heating capacity	*1	kW	2.5	3.2	4.0
	*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish			Galvanized		
Dimension	Rear inlet	mm(in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet	mm(in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight		kg(lbs.)	18 (40)		
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
FAN	Type x Quantity		Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)	m ³ /min	4.8-5.8-7.9		
		L/s	80-97-132		
		cfm	170-205-279		
	External static pressure *2	Pa	5		
Motor	Type		1-phase induction motor		
	Output	kW	0.018		0.023
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas	mm(in.)	ø12.7 (ø1/2) Brazed		
	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter		mm(in.)	O.D. 26 (1)		
Sound pressure level (Lo-Mid-Hi)	220V	dB<A>	20-25-30		20-25-33
	230V		21-26-32		21-26-35
	*3 240V		22-27-30		22-27-33

			PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R
Power source			1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity	*1	kW	2.2	2.8	3.6
	*1	BTU/h	7,500	9,600	12,300
Heating capacity	*1	kW	2.5	3.2	4.0
	*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating	kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating	A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish			Galvanized		
Dimension	Rear inlet	mm(in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet	mm(in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight		kg(lbs.)	18 (40)		
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
FAN	Type x Quantity		Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)	m ³ /min	4.8-5.8-7.9		
		L/s	80-97-132		
		cfm	170-205-279		
	External static pressure *2	Pa	5		
Motor	Type		1-phase induction motor		
	Output	kW	0.018		0.023
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas	mm(in.)	ø12.7 (ø1/2) Brazed		
	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter		mm(in.)	O.D. 26(1)		
Sound pressure level (Lo-Mid-Hi)	220V	dB<A>	20-25-30		20-25-33
	230V		21-26-32		21-26-35
	*3 240V		22-27-30		22-27-33

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

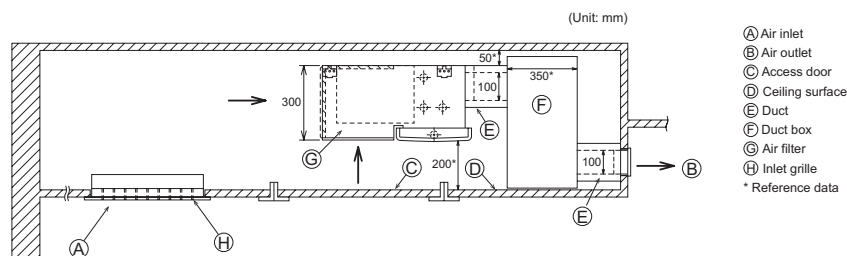
Cooling : Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB

Heating : Indoor 20°C (68°F) DB, Outdoor 7°C (45°F) DB/6°C (43°F) WB

*2 The external static pressure is set to 5Pa (at 220V, 230V, 240V).

*3 Measured in anechoic room. Sound pressure levels of the unit with a rear air inlet. (Sound pressure levels are higher than the unit with a bottom air inlet.)

• If quietness is required, installation of an L-shaped duct is recommended. Please refer to the installation pattern below for the duct system design.



Ceiling concealed type

Low static pressure type

PEFY-P VMS1(L)-E **R410A**

• Technologies and functions P.160



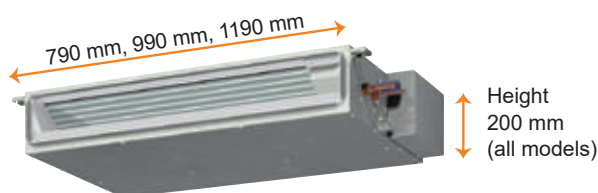
*This image shows the VMS1 type (equipped with a drain pump as a standard feature).

A thin body 200 mm in height and a maximum external static pressure rating of 50 Pa provide significant flexibility of design and allow installation in narrow ceiling spaces.

The lineup consists of models up to P63 with the same height.

Compact design with a height of no more than 200 mm (all models) and widths of 790 mm (P15-P32).

The thin body with a height of no more than 200 mm (all models) allows installation in a ceiling with small cavity space.



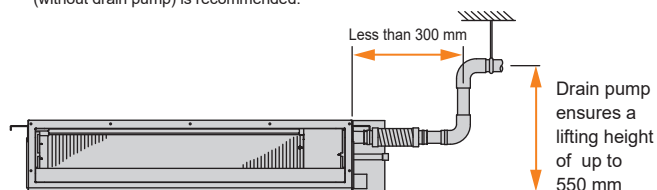
PEFY-P VMS1(L)-E	P15	P20	P25	P32	P40	P50	P63
Height	mm	200					
Width	mm	790		990		1190	

Optional drain pump

For PEFY-P VMS1, the drain pump is equipped as a standard feature and eliminates the need for a drain trap. It has a maximum lifting height of 550 mm.

For PEFY-P VMS1L-E, the drain pump is sold separately.

*For places where low noise operation is especially required (i.e., hotels), VMS1L (without drain pump) is recommended.



Low noise design

Owing to a centrifugal fan and coil, low noise operation is realized. It is best suited to places where quietness is required.

- Sound pressure level (standard static pressure) at 15 Pa

		dB(A)							
Sound pressure level	Capacity	P15	P20	P25	P32	P40	P50	P63	
	Fan Speed	High	28	29	30	32	33	35	36
	Mid	24	25	26	27	30	32	33	
	Low	22	23	24	24	28	30	30	

Demonstrates a maximum external static pressure of 50 Pa despite its compact design

External static pressure can be selected from 5, 15, 35 and 50 Pa (set to 15 Pa at the time of factory shipment).

IT terminal

An IT terminal is available. Contact your local distributor for details.

Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment is required.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

Ceiling concealed type **R410A**

Low static pressure type **PEFY-P VMS1(L)-E**

			PEFY-P15VMS1(L)-E	PEFY-P20VMS1(L)-E	PEFY-P25VMS1(L)-E	PEFY-P32VMS1(L)-E	PEFY-P40VMS1(L)-E	PEFY-P50VMS1(L)-E	PEFY-P63VMS1(L)-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz						
Cooling capacity	*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	*3	Cooling	kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]
		Heating	kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]
Current	*3	Cooling	A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]
		Heating	A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]
External finish			Galvanized						
Dimension		mm	200 x 790 x 700				200 x 990 x 700		200 x 1,190 x 700
H x W x D		in.	7-7/8 x 31-1/8 x 27-9/16				7-7/8 x 39 x 27-9/16		7-7/8 x 46-7/8 x 27-9/16
Net weight	*3	kg(lbs.)	19(42) [18(40)]			20(45) [19(42)]		24(53) [23(51)]	
Heat exchanger			Cross fin (Aluminium fin and copper tube)						
FAN	Type x Quantity		Sirocco fan x 2				Sirocco fan x 3		Sirocco fan x 4
	Airflow rate (Lo-Mid-Hi)	m³/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
		L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
		cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static press.	Pa	5-15-35-50						
Motor	Type		DC motor						
	Output		0.096						
Air filter			PP Honeycomb fabric (washable)						
Refrigerant	Gas	mm(in.)	ø12.7 (ø1/2) Brazed						ø15.88 (ø5/8) Brazed
pipe diameter	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed						ø9.52 (ø3/8) Brazed
Field drain pipe diameter			O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (measured in anechoic room)			dB<A>	22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35
									30-33-36

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°C D.B. / 19°C W.B. (81°F D.B. / 66°F W.B.) Outdoor : 35°C D.B. (95°F D.B.)
Heating : Indoor : 20°C D.B. (68°F D.B.) Outdoor : 7°C D.B. / 6°C W.B. (45°F D.B. / 43°F W.B.)
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)
- *2 The external static pressure is set to 15 Pa at factory shipment.
- *3 [] is in case of PEFY-P15-63VMS1L-E

Optional parts

Description	Model	Applicable capacity
Drain pump	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63 *For PEFY-VMS1L only
Control box replace kit	PAC-KE70HS-E	P15, 20, 25, 32, 40, 50, 63
Plasma quad connect*	MAC-100FT-E	P15, 20, 25, 32, 40, 50, 63
PQ attachment*	PAC-HA11PAR	P15, 20, 25, 32, 40, 50, 63

* Plasma Quad Connect (MAC-100FT-E) should be used together with PQ attachment.

Ceiling concealed type

Medium static pressure type

PEFY-M VMA(L)-A **R32** **R410A**

PEFY-M VMA(L)-A1 **R32** **R410A**

• Technologies and functions P.160



A wide range of external static pressure and the slim 250-mm-height body provide design flexibility for narrow ceiling spaces. The lineup consists of up to M140 with the same height.

Five levels of external static pressure settings

Five-stage external static pressure settings provide flexibility for duct extension, branching, and air outlet configuration and are adjustable to meet different application conditions. Settings range to a maximum of 150Pa.

• External static pressure setting

Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-M VMA(L)-A				35/50/70/100/150 Pa			40/50/70/100/150 Pa				
PEFY-M VMA(L)-A1				35/50/70/100/150 Pa			40/50/70/100/150 Pa				

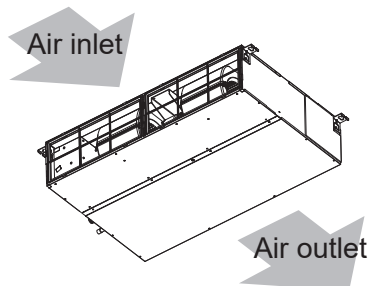
Four fan speeds to choose from

The conventional models had three levels of fan speed, but the new models offer four levels (Low/Mid2/Mid1/High). Combined with a wider selection of external static pressure levels, the new models offer optimal operation settings to suit the air-conditioning load of the installation space.

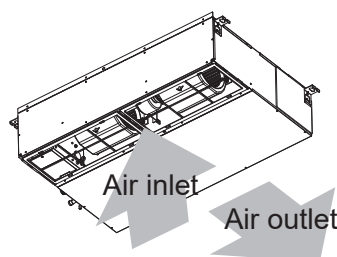
Air inlet direction can be easily changed

By simply switching the closing board and air filter, the inlet layout can be changed from the rear inlet to the bottom inlet. (At factory shipment: Rear inlet)

• Rear inlet



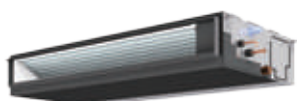
• Bottom inlet



* Units with a bottom inlet make more noise than those with a rear inlet. The rear inlet is recommended for rooms that need to be quiet, such as bedrooms.

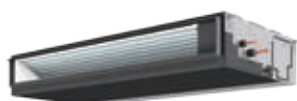
Optional drain pump

The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.



Built-in drain pump

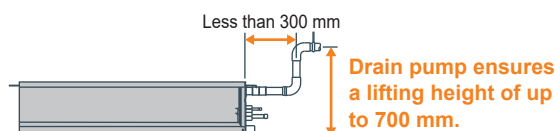
PEFY-M VMA-A
PEFY-M VMA-A1



No drain pump

PEFY-M VMAL-A
PEFY-M VMAL-A1

*Units with an "L" at the end of the model name are not equipped with a drain pump.



Drain pump ensures a lifting height of up to 700 mm.

Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side (PEFY-M VMAL-A1 only). For installation, PQ attachment or PQ box is required.

Ceiling concealed type **R32** **R410A**

Medium static pressure type **PEFY-M VMA-A** (built-in drain pump)

		PEFY-M20VMA-A	PEFY-M25VMA-A	PEFY-M32VMA-A	PEFY-M40VMA-A	PEFY-M50VMA-A	PEFY-M63VMA-A
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	5.6	7.1
(Nominal)	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
	*2 Power input kW	0.032	0.032	0.044	0.047	0.066	0.087
	*2 Current input A	0.26-0.25-0.24	0.26-0.25-0.24	0.36-0.34-0.33	0.39-0.37-0.36	0.53-0.51-0.49	0.69-0.66-0.63
Heating capacity	*3 kW	2.5	3.2	4.0	5.0	6.3	8.0
(Nominal)	*3 BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
	*2 Power input kW	0.030	0.030	0.042	0.045	0.064	0.085
	*2 Current input A	0.26-0.25-0.24	0.26-0.25-0.24	0.36-0.34-0.33	0.39-0.37-0.36	0.53-0.51-0.49	0.69-0.66-0.63
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732	250 x 900 x 732
H x W x D	in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8
Net weight	kg (lbs)	21 (47)	21 (47)	21 (47)	25 (56)	25 (56)	27 (60)
Heat exchanger		Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
*4 External static press.	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>
	mmH ₂ O	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output kW	0.085	0.085	0.085	0.121	0.121	0.121
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate	(Low-Mid-High)					
	m ³ /min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0	13.5 - 16.0 - 19.0
	L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283	225 - 267 - 317
	cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600	477 - 565 - 671
Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7	dB<A>	21.0-25.0-27.0	21.0-25.0-27.0	23.0-27.0-30.0	23.0-28.0-31.0	24.0-31.0-34.0	27.0-31.0-35.0
		18.0-22.0-24.0	18.0-22.0-24.0	20.0-24.0-27.0	20.0-25.0-28.0	21.0-28.0-31.0	24.0-28.0-32.0
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI
Refrigerant	Liquid	mm (in.)	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	9.52 (3/8) Braze
piping diameter	Gas	mm (in.)	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	15.88 (5/8) Braze
Field drain pipe size	mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE92TB-E	PAC-KE92TB-E	PAC-KE92TB-E

		PEFY-M71VMA-A	PEFY-M80VMA-A	PEFY-M100VMA-A	PEFY-M125VMA-A	PEFY-M140VMA-A
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1 kW	8.0	9.0	11.2	14.0	16.0
(Nominal)	*1 BTU/h	27,300	30,700	38,200	47,800	54,600
	*2 Power input kW	0.080	0.080	0.142	0.199	0.208
	*2 Current input A	0.60-0.57-0.55	0.60-0.57-0.55	1.01-0.97-0.93	1.29-1.23-1.18	1.40-1.34-1.28
Heating capacity	*3 kW	9.0	10.0	12.5	16.0	18.0
(Nominal)	*3 BTU/h	30,700	34,100	42,700	54,600	61,400
	*2 Power input kW	0.078	0.078	0.140	0.197	0.206
	*2 Current input A	0.60-0.57-0.55	0.60-0.57-0.55	1.01-0.97-0.93	1.29-1.23-1.18	1.40-1.34-1.28
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension	mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
H x W x D	in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight	kg (lbs)	30 (67)	30 (67)	37 (82)	38 (84)	42 (93)
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
*4 External static press.	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>
	mmH ₂ O	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output kW	0.121	0.121	0.300	0.300	0.300
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate	(Low-Mid-High)				
	m ³ /min	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 32.0	28.0 - 34.0 - 37.0	29.5 - 35.5 - 40.0
	L/s	242 - 300 - 350	242 - 300 - 350	383 - 467 - 533	467 - 567 - 617	492 - 592 - 667
	cfm	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,130	989 - 1,201 - 1,306	1,042 - 1,254 - 1,412
Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7	dB<A>	25.0-31.0-34.0	25.0-31.0-34.0	30.0-35.0-38.0	34.0-38.0-40.0	33.0-37.0-40.0
		22.0-28.0-31.0	22.0-28.0-31.0	27.0-32.0-35.0	31.0-35.0-37.0	30.0-34.0-37.0
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI
Refrigerant	Liquid	mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze
piping diameter	Gas	mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze
Field drain pipe size	mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE93TB-E	PAC-KE93TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE95TB-E

Notes:

- *1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- *2 The values are measured at the factory setting of external static pressure.
- *3 Nominal heating conditions
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
- *4 The factory setting of airflow mode and external static pressure mode is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
- *5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.
- *6 Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

- *7 The sound pressure level measured by the conventional method in JIS.
- * R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.
- * When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

	Outdoor unit	(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25	1-20	1-25	1-30
	Including M20 or M25	1-8	1-10	1-12

Ceiling concealed type **R32** **R410A**

Medium static pressure type **PEFY-M VMAL-A** (Without drain pump)

			PEFY-M20VMAL-A	PEFY-M25VMAL-A	PEFY-M32VMAL-A	PEFY-M40VMAL-A	PEFY-M50VMAL-A	PEFY-M63VMAL-A						
Power source			1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz						
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1						
(Nominal)	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200						
	*2	Power input	kW	0.030	0.042	0.045	0.064	0.085						
	*2	Current input	A	0.26-0.25-0.24	0.26-0.25-0.24	0.39-0.37-0.36	0.53-0.51-0.49	0.69-0.66-0.63						
Heating capacity	*3	kW	2.5	3.2	4.0	5.0	6.3	8.0						
(Nominal)	*3	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300						
	*2	Power input	kW	0.030	0.042	0.045	0.064	0.085						
	*2	Current input	A	0.26-0.25-0.24	0.26-0.25-0.24	0.39-0.37-0.36	0.53-0.51-0.49	0.69-0.66-0.63						
External finish			Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate						
External dimension H x W x D		mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732	250 x 900 x 732						
		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8						
Net weight		kg (lbs)	20 (45)	20 (45)	20 (45)	24 (53)	24 (53)	26 (58)						
Heat exchanger			Cross fin (Aluminum fin and copper tube)											
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2						
	*4 External static press.	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>						
		mmH ₂ O	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>						
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor							
	Motor output	kW	0.085	0.085	0.085	0.121	0.121	0.121						
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor							
	Air flow rate	(Low-Mid-High)												
		m ³ /min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0	13.5 - 16.0 - 19.0						
	L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283	225 - 267 - 317							
	cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600	477 - 565 - 671							
Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7			(Low-Mid-High)											
			21.0-25.0-27.0		21.0-25.0-27.0		23.0-27.0-30.0		23.0-28.0-31.0		24.0-31.0-34.0		27.0-31.0-35.0	
			18.0-22.0-24.0		18.0-22.0-24.0		20.0-24.0-27.0		20.0-25.0-28.0		21.0-28.0-31.0		24.0-28.0-32.0	
Air filter			PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.						
Connectable outdoor unit			R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI						
Refrigerant	Liquid	mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	9.52 (3/8) Brazed						
piping diameter	Gas	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed						
Field drain pipe size		mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")						
Optional parts	Filter box		PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE92TB-E	PAC-KE92TB-E	PAC-KE92TB-E						

			PEFY-M71VMAL-A	PEFY-M80VMAL-A	PEFY-M100VMAL-A	PEFY-M125VMAL-A	PEFY-M140VMAL-A
Power source			1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1	kW	8.0	9.0	11.2	14.0	16.0
(Nominal)	*1	BTU/h	27,300	30,700	38,200	47,800	54,600
	*2	Power input	kW	0.078	0.140	0.197	0.206
	*2	Current input	A	0.60-0.57-0.55	0.60-0.57-0.55	1.01-0.97-0.93	1.29-1.23-1.18
					1.01-0.97-0.93	1.29-1.23-1.18	1.40-1.34-1.28
Heating capacity	*3	kW	9.0	10.0	12.5	16.0	18.0
(Nominal)	*3	BTU/h	30,700	34,100	42,700	54,600	61,400
	*2	Power input	kW	0.078	0.140	0.197	0.206
	*2	Current input	A	0.60-0.57-0.55	0.60-0.57-0.55	1.01-0.97-0.93	1.29-1.23-1.18
					1.01-0.97-0.93	1.29-1.23-1.18	1.40-1.34-1.28
External finish			Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension		mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
H x W x D		in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight		kg (lbs)	29 (64)	29 (64)	36 (80)	37 (82)	41 (91)
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
*4	External static press.	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>
		mmH ₂ O	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	<4.1> - 5.1 - <7.1> - <10.2> - <15.3>	<4.1> - 5.1 - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor	
	Motor output	kW	0.121	0.121	0.300	0.300	0.300
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid-High)				
	m ³ /min	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 32.0	28.0 - 34.0 - 37.0	29.5 - 35.5 - 40.0	
	L/s	242 - 300 - 350	242 - 300 - 350	383 - 467 - 533	467 - 567 - 617	492 - 592 - 667	
	cfm	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,130	989 - 1,201 - 1,306	1,042 - 1,254 - 1,412	
Sound pressure level (measured in *2 *5 *7 anechoic room) *2 *6 *7			(Low-Mid-High)				
	dB<A>	25.0-31.0-34.0	25.0-31.0-34.0	30.0-35.0-38.0	34.0-38.0-40.0	33.0-37.0-40.0	
		22.0-28.0-31.0	22.0-28.0-31.0	27.0-32.0-35.0	31.0-35.0-37.0	30.0-34.0-37.0	
Air filter			PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit			R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI	R32, R410A CITY MULTI
Refrigerant	Liquid	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
piping diameter	Gas	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain	pipe size	mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box		PAC-KE93TB-E	PAC-KE93TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE95TB-E

Notes:

- *1 Nominal cooling conditions
Indoor:27°CDB/19°CWB(81°FDB/66°FWB), Outdoor:35°CDB(95°FDB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- *2 The values are measured at the factory setting of external static pressure.
- *3 Nominal heating conditions
Indoor:20°CDB(68°FDB), Outdoor:7°CDB/6°CWB(45°FDB/43°FWB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- *4 The factory setting of airflow mode and external static pressure mode is shown without < > .
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
- *5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

- *6 Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.
- *7 The sound pressure level measured by the conventional method in JIS.
- * R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.
- * When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

	Outdoor unit	(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25	1-20	1-25	1-30
	Including M20 or M25	1-8	1-10	1-12

Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution

Ceiling concealed type **R32** **R410A**

Medium static pressure type **PEFY-M VMA-A1** (built-in drain pump)

		PEFY-M20VMA-A1	PEFY-M25VMA-A1	PEFY-M32VMA-A1	PEFY-M40VMA-A1	PEFY-M50VMA-A1	PEFY-M63VMA-A1
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6
(Nominal)	*1	BTU/h	7,500	9,600	12,300	15,400	19,100
	*2	Power input	kW	0.039	0.060	0.087	0.131
	*2	Current input	A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64
Heating capacity	*3	kW	2.5	3.2	4.0	5.0	6.3
(Nominal)	*3	BTU/h	8,500	10,900	13,600	17,100	21,500
	*2	Power input	kW	0.037	0.058	0.085	0.129
	*2	Current input	A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension		mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 1,100 x 732
H x W x D		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8
Net weight		kg (lbs)	21.0 (46.5)	21.0 (46.5)	21.0 (46.5)	25.0 (55.0)	30.0 (66.0)
Heat exchanger		Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
*4	External static press.	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>
		mmH ₂ O	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>	3.6 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output	kW	0.085	0.085	0.085	0.121	0.121
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
*2	Air flow rate	(Low-Mid2-Mid1-High)					
	Cooling	m ³ /min	6.0 - 7.5 - 8.5 - 10	6.0 - 7.5 - 8.5 - 10	7.4 - 9.0 - 10.5 - 12.5	10.0 - 11.5 - 13.5 - 19.0	12.0 - 14.5 - 16.5 - 25.6
		L/s	100 - 125 - 142 - 166	100 - 125 - 142 - 166	123 - 150 - 175 - 208	166 - 191 - 225 - 316	208 - 241 - 275 - 426
		cfm	212 - 265 - 300 - 353	212 - 265 - 300 - 353	261 - 317 - 370 - 441	353 - 406 - 476 - 670	441 - 511 - 582 - 903
	Heating	m ³ /min	6.0 - 7.5 - 8.5 - 10	6.0 - 7.5 - 8.5 - 10	7.4 - 9.0 - 10.5 - 12.5	10.0 - 11.5 - 13.5 - 19.0	12.0 - 14.5 - 16.5 - 25.6
		L/s	100 - 125 - 142 - 166	100 - 125 - 142 - 166	123 - 150 - 175 - 208	166 - 191 - 225 - 316	208 - 241 - 275 - 426
		cfm	212 - 265 - 300 - 353	212 - 265 - 300 - 353	261 - 317 - 370 - 441	353 - 406 - 476 - 670	441 - 511 - 582 - 903
Sound pressure level (measured in anechoic room)		(Low-Mid2-Mid1-High)					
*5	Cooling	dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	24.0 - 28.0 - 31.5 - 35.5	23.5-25.5-28.5-37.0	22.0-24.0-26.5-37.0
	Heating	dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	24.0 - 28.0 - 31.5 - 35.5	23.5-25.5-28.5-37.0	22.0-24.0-26.5-37.0
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI
Refrigerant piping diameter	Liquid	mm (in.)	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze
	Gas	mm (in.)	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	15.88 (5/8) Braze
Field drain pipe size		mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE92TB-E	PAC-KE93TB-E	PAC-KE93TB-E

		PEFY-M71VMA-A1	PEFY-M80VMA-A1	PEFY-M100VMA-A1	PEFY-M125VMA-A1	PEFY-M140VMA-A1
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1	kW	8.0	9.0	11.2	14.0
(Nominal)	*1	BTU/h	27,300	30,700	38,200	47,800
	*2	Power input	kW	0.165	0.211	0.218
	*2	Current input	A	1.16-1.11-1.06	1.16-1.11-1.06	1.44-1.38-1.32
Heating capacity	*3	kW	9.0	10.0	12.5	16.0
(Nominal)	*3	BTU/h	30,700	34,100	42,700	54,600
	*2	Power input	kW	0.216	0.209	0.216
	*2	Current input	A	1.47-1.41-1.35	1.47-1.41-1.35	1.44-1.38-1.32
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension		mm	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
H x W x D		in.	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight		kg (lbs)	37 (82)	37 (82)	37 (82)	42 (93)
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
*4	External static press.	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>
		mmH ₂ O	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output	kW	0.300	0.300	0.300	0.300
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
*2	Air flow rate	(Low-Mid2-Mid1-High)				
	Cooling	m ³ /min	14.5 - 18.0 - 21.0 - 33.1	14.5 - 18.0 - 21.0 - 33.1	23.0 - 28.0 - 32.0 - 37.0	25.5 - 31.0 - 34.0 - 37.0
		L/s	241 - 300 - 350 - 518	241 - 300 - 350 - 518	383 - 466 - 533 - 616	425 - 516 - 566 - 616
		cfm	511 - 635 - 741 - 1098	511 - 635 - 741 - 1098	812 - 988 - 1129 - 1306	900 - 1094 - 1200 - 1306
	Heating	m ³ /min	14.5 - 18.0 - 21.0 - 36.6	14.5 - 18.0 - 21.0 - 36.6	23.0 - 28.0 - 32.0 - 37.0	25.5 - 31.0 - 34.0 - 37.0
		L/s	241 - 300 - 350 - 610	241 - 300 - 350 - 610	383 - 466 - 533 - 616	425 - 516 - 566 - 616
		cfm	511 - 635 - 741 - 1292	511 - 635 - 741 - 1292	812 - 988 - 1129 - 1306	900 - 1094 - 1200 - 1306
Sound pressure level (measured in anechoic room)		(Low-Mid2-Mid1-High)				
*5	Cooling	dB(A)	22.0-25.0-27.5-38.5	22.0-25.0-27.5-38.5	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5
	Heating	dB(A)	22.0-25.0-27.5-40.5	22.0-25.0-27.5-40.5	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI
Refrigerant piping diameter	Liquid	mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze
	Gas	mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze
Field drain pipe size		mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE95TB-E

Notes:

- Nominal cooling conditions
Indoor:27°CDB/19°CWB(81°FDB/66°FWB), Outdoor:35°CDB(95°FDB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- The values are measured at the factory setting of external static pressure.
The Air flow rate is measured by the conventional method in JIS.
- Nominal heating conditions
Indoor:20°CDB(68°FDB), Outdoor:7°CDB/6°CWB(45°FDB/43°FWB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- The factory setting of airflow mode and external static pressure mode is shown without < > . Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
- Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit, under the conditions shown in *2.

- The sound pressure level measured by the conventional method in JIS.
- R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.
- When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

	Outdoor unit	(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25	1-20	1-25	1-30
	Including M20 or M25	1-8	1-10	1-12

Ceiling concealed type R32 R410A

Medium static pressure type PEFY-M VMAL-A1 (Without drain pump)

		PEFY-M20VMAL-A1	PEFY-M25VMAL-A1	PEFY-M32VMAL-A1	PEFY-M40VMAL-A1	PEFY-M50VMAL-A1	PEFY-M63VMAL-A1
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	5.6	7.1
(Nominal)	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
	*2 Power input kW	0.037	0.037	0.058	0.085	0.129	0.137
	*2 Current input A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64	0.94-0.90-0.86	0.99-0.95-0.91
Heating capacity	*3 kW	2.5	3.2	4.0	5.0	6.3	8.0
(Nominal)	*3 BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
	*2 Power input kW	0.037	0.037	0.058	0.085	0.129	0.231
	*2 Current input A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64	0.94-0.90-0.86	1.55-1.48-1.42
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 1,100 x 732	250 x 1,100 x 732
H x W x D	in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8
Net weight	kg (lbs)	20.0 (44.0)	20.0 (44.0)	20.5 (45.0)	24.5 (54.0)	29.0 (64.0)	29.0 (64.0)
Heat exchanger		Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
*4	External static press.	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 35 - <50> - <70> - <100> - <150> mmH ₂ O 3.6 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output kW	0.085	0.085	0.085	0.121	0.121	0.121
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
*2	Air flow rate	(Low-Mid2-Mid1-High)					
	Cooling	m ³ /min 6.0 - 7.5 - 8.5 - 10 L/s 100 - 125 - 142 - 166 cfm 212 - 265 - 300 - 353	m ³ /min 6.0 - 7.5 - 8.5 - 10 L/s 100 - 125 - 142 - 166 cfm 212 - 265 - 300 - 353	m ³ /min 7.4 - 9.0 - 10.5 - 12.5 L/s 123 - 150 - 175 - 208 cfm 261 - 317 - 370 - 441	m ³ /min 10.0 - 11.5 - 13.5 - 19.0 L/s 166 - 191 - 225 - 316 cfm 353 - 406 - 476 - 670	m ³ /min 12.0 - 14.5 - 16.5 - 25.6 L/s 208 - 241 - 275 - 426 cfm 441 - 511 - 582 - 903	m ³ /min 13.5 - 16.0 - 19.2 - 26.2 L/s 225 - 266 - 320 - 436 cfm 476 - 564 - 677 - 925
	Heating	m ³ /min 6.0 - 7.5 - 8.5 - 10 L/s 100 - 125 - 142 - 166 cfm 212 - 265 - 300 - 353	m ³ /min 6.0 - 7.5 - 8.5 - 10 L/s 100 - 125 - 142 - 166 cfm 212 - 265 - 300 - 353	m ³ /min 7.4 - 9.0 - 10.5 - 12.5 L/s 123 - 150 - 175 - 208 cfm 261 - 317 - 370 - 441	m ³ /min 10.0 - 11.5 - 13.5 - 19.0 L/s 166 - 191 - 225 - 316 cfm 353 - 406 - 476 - 670	m ³ /min 12.0 - 14.5 - 16.5 - 25.6 L/s 208 - 241 - 275 - 426 cfm 441 - 511 - 582 - 903	m ³ /min 13.5 - 16.0 - 19.2 - 31.0 L/s 225 - 266 - 320 - 516 cfm 476 - 564 - 677 - 1094
	Sound pressure level (measured in anechoic room)	(Low-Mid2-Mid1-High)					
*5	Cooling	dB<A> 21.5 - 23.0 - 26.5 - 30.0	dB<A> 21.5 - 23.0 - 26.5 - 30.0	dB<A> 24.0 - 28.0 - 31.5 - 35.5	dB<A> 23.5-25.5-28.5-37.0	dB<A> 22.0-24.0-26.5-37.0	dB<A> 23.0-26.0-30.0-37.5
	Heating	dB<A> 21.5 - 23.0 - 26.5 - 30.0	dB<A> 21.5 - 23.0 - 26.5 - 30.0	dB<A> 24.0 - 28.0 - 31.5 - 35.5	dB<A> 23.5-25.5-28.5-37.0	dB<A> 22.0-24.0-26.5-37.0	dB<A> 23.0-26.0-30.0-41.5
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI
Refrigerant piping diameter	Liquid mm (in.)	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	6.35 (1/4) Braze	9.52 (3/8) Braze
	Gas mm (in.)	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	15.88 (5/8) Braze
Field drain pipe size	mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE91TB-E	PAC-KE92TB-E	PAC-KE93TB-E	PAC-KE93TB-E

		PEFY-M71VMAL-A1	PEFY-M80VMAL-A1	PEFY-M100VMAL-A1	PEFY-M125VMAL-A1	PEFY-M140VMAL-A1
Power source		1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz
Cooling capacity	*1 kW	8.0	9.0	11.2	14.0	16.0
(Nominal)	*1 BTU/h	27,300	30,700	38,200	47,800	54,600
	*2 Power input kW	0.163	0.163	0.209	0.216	0.280
	*2 Current input A	1.16-1.11-1.06	1.16-1.11-1.06	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
Heating capacity	*3 kW	9.0	10.0	12.5	16.0	18.0
(Nominal)	*3 BTU/h	30,700	34,100	42,700	54,600	61,400
	*2 Power input kW	0.216	0.216	0.209	0.216	0.280
	*2 Current input A	1.47-1.41-1.35	1.47-1.41-1.35	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension	mm	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
H x W x D	in.	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight	kg (lbs)	36 (80)	36 (80)	36 (80)	37 (82)	41 (91)
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
*4	External static press.	Pa 40 - <50> - <70> - <100> - <150> mmH ₂ O 4.1 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 40 - <50> - <70> - <100> - <150> mmH ₂ O 4.1 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 40 - <50> - <70> - <100> - <150> mmH ₂ O 4.1 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 40 - <50> - <70> - <100> - <150> mmH ₂ O 4.1 - <5.1> - <7.1> - <10.2> - <15.3>	Pa 40 - <50> - <70> - <100> - <150> mmH ₂ O 4.1 - <5.1> - <7.1> - <10.2> - <15.3>
	Motor Type	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output kW	0.300	0.300	0.300	0.300	0.300
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
*2	Air flow rate	(Low-Mid2-Mid1-High)				
	Cooling	m ³ /min 14.5 - 18.0 - 21.0 - 33.1 L/s 241 - 300 - 350 - 518 cfm 511 - 635 - 741 - 1098	m ³ /min 14.5 - 18.0 - 21.0 - 33.1 L/s 241 - 300 - 350 - 518 cfm 511 - 635 - 741 - 1098	m ³ /min 23.0 - 28.0 - 32.0 - 37.0 L/s 383 - 466 - 533 - 616 cfm 812 - 988 - 1129 - 1306	m ³ /min 25.5 - 31.0 - 34.0 - 37.0 L/s 425 - 516 - 566 - 616 cfm 900 - 1094 - 1200 - 1306	m ³ /min 29.5 - 35.5 - 40.0 - 44.0 L/s 491 - 591 - 666 - 733 cfm 1041 - 1253 - 1412 - 1553
	Heating	m ³ /min 14.5 - 18.0 - 21.0 - 36.6 L/s 241 - 300 - 350 - 610 cfm 511 - 635 - 741 - 1292	m ³ /min 14.5 - 18.0 - 21.0 - 36.6 L/s 241 - 300 - 350 - 610 cfm 511 - 635 - 741 - 1292	m ³ /min 23.0 - 28.0 - 32.0 - 37.0 L/s 383 - 466 - 533 - 616 cfm 812 - 988 - 1129 - 1306	m ³ /min 25.5 - 31.0 - 34.0 - 37.0 L/s 425 - 516 - 566 - 616 cfm 900 - 1094 - 1200 - 1306	m ³ /min 29.5 - 35.5 - 40.0 - 44.0 L/s 491 - 591 - 666 - 733 cfm 1041 - 1253 - 1412 - 1553
	Sound pressure level (measured in anechoic room)	(Low-Mid2-Mid1-High)				
*5	Cooling	dB<A> 22.0-25.0-27.5-38.5	dB<A> 22.0-25.0-27.5-38.5	dB<A> 29.5 - 34.0 - 37.5 - 40.0	dB<A> 31.5 - 36.5 - 38.5 - 40.5	dB<A> 34.0 - 38.0 - 40.5 - 43.0
	Heating	dB<A> 22.0-25.0-27.5-40.5	dB<A> 22.0-25.0-27.5-40.5	dB<A> 29.5 - 34.0 - 37.5 - 40.0	dB<A> 31.5 - 36.5 - 38.5 - 40.5	dB<A> 34.0 - 38.0 - 40.5 - 43.0
Air filter		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Connectable outdoor unit		R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI	R32,R410A CITY MULTI
Refrigerant piping diameter	Liquid mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze
	Gas mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze
Field drain pipe size	mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")
Optional parts	Filter box	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE94TB-E	PAC-KE95TB-E

Notes:

- Nominal cooling conditions
Indoor:27°CDB/19°CWB(81°FDB/66°FWB), Outdoor:35°CDB(95°FDB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- The values are measured at the factory setting of external static pressure.
The Air flow rate is measured by the conventional method in JIS.
- Nominal heating conditions
Indoor:20°CDB(68°FDB), Outdoor:7°CDB/6°CWB(45°FDB/43°FWB)
Pipe length:7.5m(24-9/16ft.), Level difference:0m(0ft.)
- The factory setting of airflow mode and external static pressure mode is shown without <>. Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
- Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit, under the conditions shown in *2.

- The sound pressure level measured by the conventional method in JIS.
- R32 is flammable, and certain restrictions apply to the installation of units.
For detail, refer to the section in the Databook on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.
- When connecting the indoor units of M20 or M25, the maximum connectable number of indoor units is limited. Please refer to the table for details.

	Outdoor unit	(E)M200	(E)M250	(E)M300
Connectable indoor units	Not including M20 or M25	1-20	1-25	1-30
	Including M20 or M25	1-8	1-10	1-12

Ceiling concealed type R32 R410A

Medium static pressure type

Optional parts

- For PEFY-M VMA(L)-A R32 R410A

Description	Model	Applicable capacity
Filter box	PAC-KE91TB-E	M20, 25, 32
	PAC-KE92TB-E	M40, 50, 63
	PAC-KE93TB-E	M71, 80
	PAC-KE94TB-E	M100, 125
	PAC-KE95TB-E	M140

- For PEFY-M VMA(L)-A1 R32 R410A

Description	Model	Applicable capacity
Filter box	PAC-KE91TB-E	M20, 25, 32
	PAC-KE92TB-E	M40
	PAC-KE93TB-E	M50, 63
	PAC-KE94TB-E	M71, 80, 100, 125
	PAC-KE95TB-E	M140
Plasma quad connect*	MAC-100FT-E	M20, 25, 32, 40, 50, 63, 71, 80, 100, 125, 140
PQ attachment (rear inlet)*	PAC-HA31PAR	M20, 25, 32, 40, 50, 63, 71, 80, 100, 125, 140
PQ attachment (bottom inlet)*	PAC-HA31PAU	M20, 25, 32, 40, 50, 63, 71, 80, 100, 125, 140
PQ box*	PAC-KE91PTB-E	M20, 25, 32
	PAC-KE92PTB-E	M40
	PAC-KE93PTB-E	M50, 63
	PAC-KE94PTB-E	M71, 80, 100, 125
	PAC-KE95PTB-E	M140

* Plasma Quad Connect (MAC-100FT-E) should be used together with PQ attachment or PQ box.

Ceiling concealed type

High static pressure type

PEFY-P VMHS-E **R410A**

• Technologies and functions P.160



PEFY-P VMHS-E
(P40-P140)



PEFY-P VMHS-E (P200/P250)

A wide range of external static pressure allows authentic duct air-conditioning with an elegant interior layout.

Maximum 250 Pa of external static pressure allows easy duct design

High external static pressure enables long duct and more freedom in design. It allows high interior oriented ducted air conditioning.

PEFY-P VMHS-E	P40	P50	P63	P71	P80	P100	P125	P140
External static pressure (Pa)	50 - <100> - <150> - <200>							

PEFY-P VMHS-E	P200	P250
External static pressure (Pa)	<50> - <100> - 150 - <200> - <250>	

The factory setting of external static pressure is shown without chevrons "<" ">".

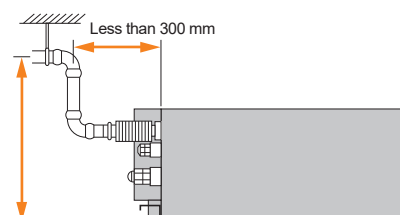
Refer to "Fan characteristics curves", according to the external static pressure, in the DATA BOOK for the usable range of the air flow rate.



Drain pump (option) ensures up to 550 mm (21-11/16 in.) of lift for P40-P140 VMHS models / 700 mm (27-9/16 in.) for P200/P250VMHS models

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm (21-11/16 in.) for P40-P140VMHS models/700 mm (27-9/16 in.) for P200/P250VMHS models, allowing more freedom in piping layout design and reducing horizontal piping requirements.

Drain pump ensures up to 550 mm of lift (P40-P140VMHS models), 700 mm of lift (P200/P250 VMHS models)



IT terminal

IT terminal is available. For details, contact your local distributor.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution



P140 (6 HP) and smaller models with a DC motor

The use of a DC motor

In the past, the only models featuring a DC motor were the P200 (8 HP) and P250 (10 HP). Now, the P140 (6 HP) and smaller models feature a DC motor that consumes less power compared to AC motors. In the P80 models, power consumption is reduced by 59%*.

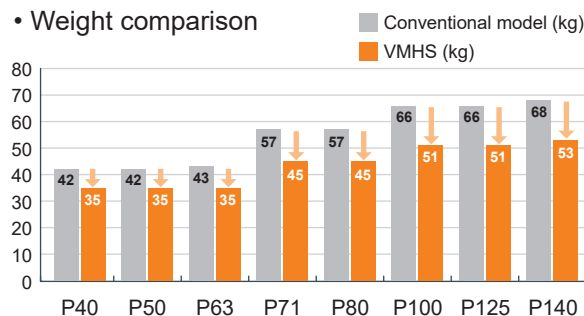
*Comparison made at 50 Hz, 220 V, 100 Pa low fan speed

	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
PEFY-P VMH(S)	AC motor								DC motor	
PEFY-P VMHS	DC motor									

Reduced weight

By downsizing the motor, the unit weight has been reduced, offering easier installation.

• Weight comparison



Drain pumps (sold separately) with a DC motor are now also available.

The use of a high-efficiency DC motor for the drain pump motor in the latest models reduces power consumption by 90%, in comparison to conventional models. The pump head height of 550 mm provides for greater piping design flexibility.

Four levels of external static pressure settings

While the conventional models only had three levels of external static pressure, the latest models offer four levels of external static pressure. The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

		P40	P50	P63	P71	P80	P100	P125	P140
PEFY-P VMH	External static pressure (Pa)	<50>-100-<200>							
	220 V								
PEFY-P VMHS	External static pressure (Pa)	<100>-150-<200>							
	230, 240 V								
	220-240 V	50-<100>-<150>-<200>							

Four levels of external pressure settings

The factory setting of external static pressure is shown without brackets (< >).

Refer to "Fan characteristics curves" according to the external static pressure, in the DATA BOOK for the usable range of airflow rate.

Three fan speeds (Low/Mid/High) to choose from

The conventional models had two levels of fan speed, but the latest models offer three levels (Low/Mid/High). Combined with a wider selection of external static pressure levels, the latest models offer optimal operation settings to suit the air-conditioning load of the installation space.

Ceiling concealed type **R410A**

High static pressure **PEFY-P VMHS-E**

		PEFY-P40VMHS-E		PEFY-P50VMHS-E		PEFY-P63VMHS-E		PEFY-P71VMHS-E		PEFY-P80VMHS-E		PEFY-P100VMHS-E		PEFY-P125VMHS-E		PEFY-P140VMHS-E		
Power source		1-phase 220-230-240 V 50/60 Hz																
Cooling capacity (Nominal)	*1	kW	4.5		5.6		7.1		8.0		9.0		11.2		14.0		16.0	
	*1	BTU/h	15,400		19,100		24,200		27,300		30,700		38,200		47,800		54,600	
	*2	Power input	kW		0.055		0.055		0.090		0.075		0.090		0.160		0.160	
	*2	Current input (220-230-240 V)	A		0.41 - 0.39 - 0.38		0.41 - 0.39 - 0.38		0.64 - 0.62 - 0.59		0.54 - 0.52 - 0.50		0.63 - 0.61 - 0.58		1.05 - 1.01 - 0.96		1.05 - 1.01 - 0.96	
Heating capacity (Nominal)	*3	kW	5.0		6.3		8.0		9.0		10.0		12.5		16.0		18.0	
	*3	BTU/h	17,100		21,500		27,300		30,700		34,100		42,700		54,600		61,400	
	*2	Power input	kW		0.055		0.055		0.090		0.075		0.090		0.160		0.160	
	*2	Current input (220-230-240 V)	A		0.41 - 0.39 - 0.38		0.41 - 0.39 - 0.38		0.64 - 0.62 - 0.59		0.54 - 0.52 - 0.50		0.63 - 0.61 - 0.58		1.05 - 1.01 - 0.96		1.05 - 1.01 - 0.96	
External finish		Galvanized steel plate																
External dimension H x W x D	mm	380 x 745 x 900		380 x 745 x 900		380 x 745 x 900		380 x 1,030 x 900		380 x 1,030 x 900		380 x 1,195 x 900		380 x 1,195 x 900		380 x 1,195 x 900		
	in.	15 x 29-3/8 x 35-7/16		15 x 29-3/8 x 35-7/16		15 x 29-3/8 x 35-7/16		15 x 40-9/16 x 35-7/16		15 x 40-9/16 x 35-7/16		15 x 47-1/16 x 35-7/16		15 x 47-1/16 x 35-7/16		15 x 47-1/16 x 35-7/16		
Net weight	kg (lbs)	35 (78)		35 (78)		35 (78)		45 (100)		45 (100)		51 (113)		51 (113)		53 (117)		
Heat exchanger		Cross fin (Aluminum fin and copper tube)																
FAN	Type x Quantity	Sirocco fan x 1		Sirocco fan x 1		Sirocco fan x 1		Sirocco fan x 2		Sirocco fan x 2		Sirocco fan x 2		Sirocco fan x 2		Sirocco fan x 2		
	*4 External static press.	Pa	50 - <100> - <150> - <200>		50 - <100> - <150> - <200>		50 - <100> - <150> - <200>		50 - <100> - <150> - <200>		50 - <100> - <150> - <200>		50 - <100> - <150> - <200>		50 - <100> - <150> - <200>			
		mmH ₂ O	5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>		5.1 - <10.2> - <15.3> - <20.4>			
	Motor Type	DC motor																
	Motor output	kW	0.121		0.121		0.121		0.244		0.244		0.375		0.375		0.375	
	Driving mechanism	Direct-driven by motor																
	Airflow rate (Lo-Mid-Hi)	m ³ /min	10.0 - 12.0 - 14.0		10.0 - 12.0 - 14.0		13.5 - 16.0 - 19.0		15.5 - 18.0 - 22.0		18.0 - 21.5 - 25.0		26.5 - 32.0 - 38.0		26.5 - 32.0 - 38.0		28.0 - 34.0 - 40.0	
		L/s	167 - 200 - 233		167 - 200 - 233		225 - 267 - 317		258 - 300 - 367		300 - 358 - 417		442 - 533 - 633		442 - 533 - 633		467 - 567 - 667	
		cfm	353 - 424 - 494		353 - 424 - 494		477 - 565 - 671		547 - 636 - 777		636 - 759 - 883		936 - 1,130 - 1,342		936 - 1,130 - 1,342		989 - 1,201 - 1,412	
	Sound pressure level (measured in anechoic room)	*2 dB <A>	20-23-27		20-23-27		24-27-32		24-26-30		25-27-30		27-31-34		27-31-34		27-32-36	
Air filter		Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.																
Refrigerant piping diameter	Liquid	mm (in.)	6.35 (1/4) Brazed		6.35 (1/4) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed	
	Gas	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed	
Field drain pipe size	mm (in.)	O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)		

		PEFY-P200VMHS-E		PEFY-P250VMHS-E		
Power source		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz				
Cooling capacity	*1	kW	22.4		28.0	
	*1	BTU/h	76,400		95,500	
Heating capacity	*3	kW	25.0		31.5	
	*3	BTU/h	85,300		107,500	
Power consumption	*2 Cooling	kW	0.63		0.82	
	Heating	kW	0.63		0.82	
Current	Cooling 220-230-240V	A	3.47-3.32-3.18		4.72-4.43-4.14	
	*2 Heating 220-230-240V	A	3.47-3.32-3.18		4.72-4.43-4.14	
External finish		Galvanized steel plate				
Dimension H x W x D	mm	470 x 1,250 x 1,120				
	in.	18-9/16 x 49-1/4 x 44-1/8				
Net weight	kg (lbs)	97 (214)		100 (221)		
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)				
FAN	Type x Quantity	Sirocco fan x 2				
	*4 Airflow rate (Lo-Mid-Hi)	m ³ /min	50.0-61.0-72.0		58.0-71.0-84.0	
		L/s	833-1017-1200		967-1183-1400	
		cfm	1766-2154-2542		2048-2507-2966	
	External static press.	Pa	<50>-<100>-150-<200>-<250>			
		mmH ₂ O	<5.1>-<10.2>-15.3-<20.4>-<25.5>			
Motor	Type	DC motor				
	Output	kW	0.87		0.87	
Air filter(option)		Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.				
Refrigerant pipe diameter	Gas (Braze)	mm (in.)	ø19.05 (ø3/4)		ø22.2 (ø7/8)	
	Liquid (Braze)	mm (in.)	ø9.52 (ø3/8)			
Field drain pipe diameter	mm (in.)	O.D. 32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi)*2	dB<A>	36-39-43		39-42-46		

Ceiling concealed type

R410A

High static pressure type

Optional parts

Description	Model	Applicable capacity	Remarks
Drain pump	PAC-KE05DM-F	P200, P250	
	PAC-DRP10DP-E2	P40-P140	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P200, P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Required when long life filter is used
	PAC-KE99TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	

Ceiling concealed type

Fresh air intake type

PEFY-P VMHS-E-F **R410A**

• Technologies and functions P.160



Lineup & Functions

Y-Series

R2-Series

ZUBADAN -Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

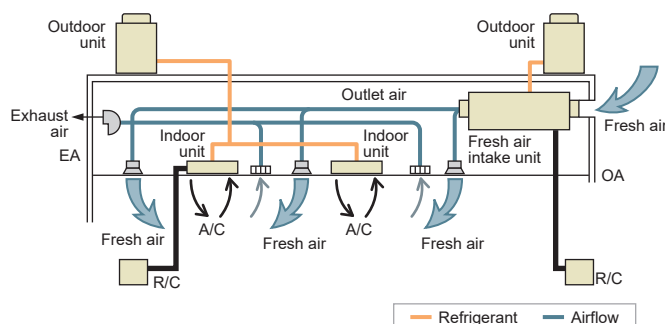
Hot Water Solution

Function to control outlet air temperature contributes to enhance the quality of fresh air intake

Enables intake of outside air

Fresh air can be taken in with temperature control. This fresh air intake feature is available for each air-conditioning zone.

*Fresh air intake type indoor units are designed to supply pretreated outside air to the room. It is not or controlling internal thermal load.



Flexible settings

• External static pressure

Four levels of external static pressure are available, compared to the three levels in conventional models

Model	P125	P200	P250
External static pressure (Pa)	<100>-<150>-200-<250>		

*The factory setting of external static pressure is shown without brackets (< >).

• Airflow mode/rate

Two types of airflow modes are available, each of which has three airflow rates to choose from.

Mode	Normal airflow rate	High airflow rate
Airflow rate	Low-Medium-High	Low-Medium-High

*Airflow rates are accessible from the remote controller.

Outlet air temperature control

Pre-treating the intake air before it is supplied to the room contributes to the stability of room temperature, ensuring optimized room comfort.

*Outlet air temperature may fluctuate depending on the outside air temperature and the operating status of the indoor and outdoor units.

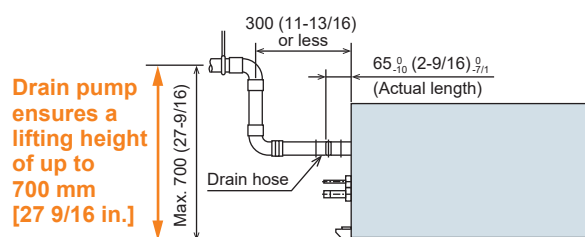
Fan motor

The fan motor has been changed to a higher efficiency DC motor. The power source has been changed from a three-phase power supply to single-phase power supply, which allows for easier installation.

*Comparison with PEFY-P140, 200, 250VMH-E-F

Drain pump (optional)

Greater design flexibility is made possible by the increased head height (max. 700 mm)*.



*Comparison with drain pump PAC-KE04DM-F

mm (in.)

Ceiling concealed type **R410A**

Fresh air intake type **PEFY-P VMHS-E-F**

			PEFY-P125VMHS-E-F	PEFY-P200VMHS-E-F	PEFY-P250VMHS-E-F *6						
Power source			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz						
Cooling capacity (Nominal)	*1	kW	14.0	22.4	28.0						
	*1	BTU/h	47,800	76,400	95,500						
	*2	Power input	0.220	0.260	0.350						
	*2	Current input (220 V)	1.43	1.66	2.16						
Temp. range of cooling			17°CDB./15.5°CWB. ~ 43°CDB./35°CWB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CDB.	17°CDB./15.5°CWB. ~ 43°CDB./35°CWB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CDB.	17°CDB./15.5°CWB. ~ 43°CDB./35°CWB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CDB.						
Heating capacity (Nominal)	*3	kW	8.9	13.9	17.4						
	*3	BTU/h	30,400	47,400	59,400						
	*2	Power input	0.230	0.270	0.360						
	*2	Current input (220 V)	1.52	1.85	2.38						
Temp. range of heating			-10°CDB. ~ 20°CDB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CDB.	-10°CDB. ~ 20°CDB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CDB.	-10°CDB. ~ 20°CDB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CDB.						
External finish			Galvanized	Galvanized	Galvanized						
External dimension HxWxD		mm	380 x 1,195 x 900	470 x 1,250 x 1,120	470 x 1,250 x 1,120						
		in.	15 x 47-1/16 x 35-7/16	18-9/16 x 49-1/4 x 44-1/8	18-9/16 x 49-1/4 x 44-1/8						
Net weight		kg (lbs)	49 (109)	78 (172)	81 (179)						
Heat exchanger			Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2						
	*4, 5	External static press.	Pa	<100> - <150> - 200 - <250>	<100> - <150> - 200 - <250>						
			mmH ₂ O	<10.2> - <15.3> - 20.4 - <25.5>	<10.2> - <15.3> - 20.4 - <25.5>						
	Motor Type		DC motor	DC motor	DC motor						
	Motor output		0.244	0.375	0.375						
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor						
	*4, 5	Air flow rate (Low-Mid-High)	Normal-airflow rate mode	<High-airflow rate mode>	Normal-airflow rate mode	<High-airflow rate mode>					
			m ³ /min	14.0 - 15.5 - 18.0	15.5 - 18.0 - 20.0	22.5 - 25.0 - 28.0	25.0 - 28.0 - 32.0	28.0 - 31.0 - 35.0	31.0 - 35.0 - 40.0		
			L/s	233 - 258 - 300	258 - 300 - 333	375 - 417 - 467	417 - 467 - 533	467 - 517 - 583	517 - 583 - 667		
			cfm	494 - 547 - 636	547 - 636 - 706	794 - 883 - 989	883 - 989 - 1,130	989 - 1,095 - 1,236	1,095 - 1,236 - 1,412		
	Sound pressure level (measured in anechoic room) (Low-Mid-High)			*2	dB <A>	34-37-41	36-40-42	35-38-41	36-39-42	38-40-44	38-41-45
	Air filter			Option: Synthetic fiber unwoven cloth filter (long life filter).		Option: Synthetic fiber unwoven cloth filter (long life filter).		Option: Synthetic fiber unwoven cloth filter (long life filter).			
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze	9.52 (3/8) Braze						
	Gas (R410A)	mm (in.)	15.88 (5/8) Braze	19.05 (3/4) Braze	22.22 (7/8) Braze						
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)						

Notes:

- *1 Cooling capacity indicates the maximum value at operation under the following condition. Cooling: Indoor 33°CDB/28°CWB, Outdoor 33°CDB. The set temperature of the remote controller is 18°C.
- *2 The value are measured at the factory setting of airflow mode and external static pressure.
- *3 Heating capacity indicates the maximum value at operation under the following condition. Heating: Indoor 0°CDB/-2.9°CWB, Outdoor 0°CDB/-2.9°CWB. The set temperature of the remote controller is 25°C.
- *4 The factory setting of airflow mode and external static pressure mode is shown without < >. Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
- *5 If the airflow rate is over the usable range, dew drop can be caused from the air outlet and the air flow rate is changed automatically because of the output down by the fan motor control. If the air flow rate is less than the usable range, condensation from the unit surface can be caused.
- *6 Regarding P250VMHS-E-F, the middle notch air flow rate is different from the spec value when the external static pressure setting is set to 100Pa. See "Fan characteristics curves" in DATA BOOK for the details.
- The combination of fresh air intake type indoor units with other types of indoor units to handle internal thermal load which may cause the conflict of operation mode. It is not recommended when fresh air intake type indoor unit is connected to the Y series.
- Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the desired preset temperature may not always be achieved and the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- Fresh air intake type indoor units cannot be connected to an outdoor unit together with PWFY series.
- The maximum connectable indoor units to 1 outdoor unit are 110% (100% in case of heating below -5°C).
- When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity.
- The AUTO mode on the local remote controller is available only when fresh air intake type indoor unit is connected to the R2 series of outdoor unit.
- The system changeover function is available only when all the connected indoor units are fresh air intake type indoor units.
- The fan temporary stops during defrost.
- The cooling and heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5 m and a level difference of 0 m.
- The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information in DATA BOOK for the details.
- Thermo off (Fan) operation automatically starts either when temperature is lower than 17°CDB in cooling mode or when the temperature exceeds 20°CDB in heating mode.
- Dry mode is not available.
- When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
- Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation, which may occur dew condensation on the grills and ducts. Please insulate the grills, ducts, and rooms to prevent dew condensation properly.
- Air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible in case of usage of field supply filters.

Optional parts

Description	Model	Applicable capacity
Long life filter	PAC-KE89LAF	P125
	PAC-KE85LAF	P200, P250
Filter box	PAC-KE140TB-F	P125
	PAC-KE250TB-F	P200, P250
Drain pump	PAC-DRP10DP-E2	P125
	PAC-KE06DM-F	P200, P250



Ceiling suspended type



Lineup & Functions	Y-Series	R2-Series	ZUBADAN-Series	S-Series	BC Controllers	Ceiling cassette type	Ceiling concealed type	Ceiling suspended type	Wall-mounted type	Floor standing type	Functions	LOSSNAY System	Remote Controller	Hot Water Solution
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Ceiling suspended type

PCFY-P VKM-E **R410A**

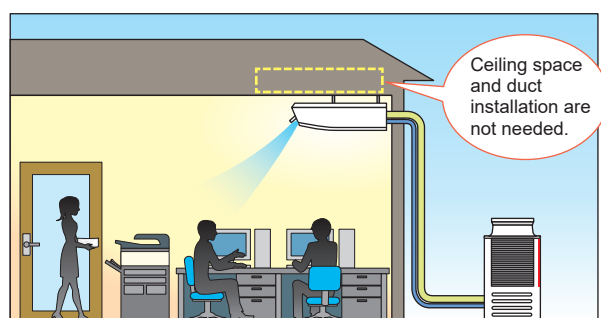
• Technologies and functions P.160



A stylish indoor unit design and optional drain pump expand installation possibilities.

Easy installation

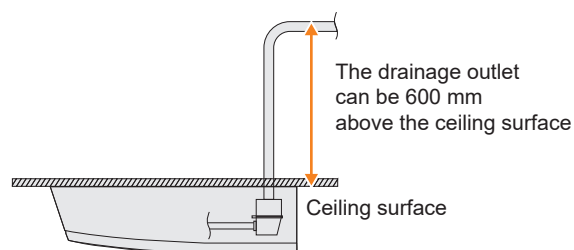
The ceiling suspended cassette can easily be installed without requiring ductwork, even if the ceiling does not have sufficient space.



Drain pumps can be supported throughout the horsepower range. (Optional)

The optional drain pump allows the drain connection to be raised as high as 600 mm, expanding flexibility in choosing an installation location.

• Drain pump installation



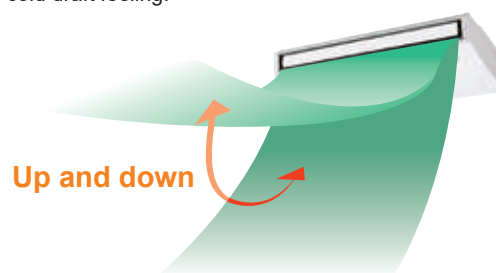
A height of 230 mm for harmony with the interior design

Sleek and slim with stylishly curved lines, the PCFY-Series blends right into any interior.



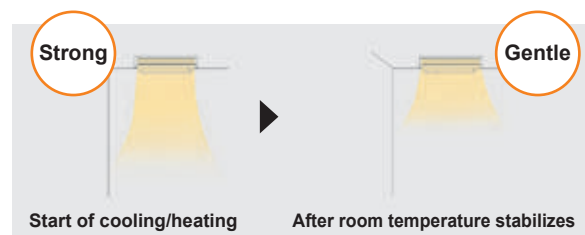
Auto vane control

Outlet vanes can be moved up and down using the remote controller. This improved airflow control feature helps eliminate the cold draft feeling.



Automatic air-speed adjustment

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.



IT terminal

An IT terminal is available. Contact your local distributor for details.

Ceiling suspended type **R410A** PCFY-P VKM-E

			PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1	kW	4.5	7.1	11.2	14.0
	*1	BTU/h	15,400	24,200	38,200	47,800
Heating capacity	*1	kW	5.0	8.0	12.5	16.0
	*1	BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling	kW	0.04	0.05	0.09	0.11
	Heating	kW	0.04	0.05	0.09	0.11
Current	Cooling	A	0.28	0.33	0.65	0.76
	Heating	A	0.28	0.33	0.65	0.76
External finish(Munsell No.)			6.4Y 8.9/0.4			
Dimension H x W x D	mm		230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680	
	in.		9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4	
Net weight	kg(lbs.)		24(53)	32 (71)	36 (79)	38 (84)
Heat exchanger			Cross fin (Aluminum fin and copper tube)			
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4	
	Airflow rate *2 (Lo-Mid2-Mid1-Hi)	m³/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
		L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
		cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
	External static pressure		Pa			
Motor	Type		DC motor			
	Output		kW	0.090	0.095	0.160
Air filter			PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB<A>	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB

*2 Airflow rate/Sound pressure level are shown in (low-middle 2-middle 1-high).

*3 It is measured in anechoic room.

Optional parts

Description	Model	Applicable capacity
Drain pump kit	PAC-SJ92DM-E	P40
	PAC-SJ93DM-E	P63, 100, 125
High efficiency filter	PAC-SH88KF-E	P40
	PAC-SH89KF-E	P63
	PAC-SH90KF-E	P100, 125
Wireless remote controller kit	PAR-SL94B-E	P40, 63, 100, 125
Anti-allergy enzyme filter	PAC-SK48KF-E	P40
	PAC-SK49KF-E	P63
	PAC-SK50KF-E	P100, 125

Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution



Wall-mounted type

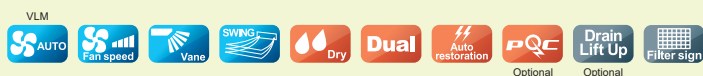


Wall-mounted type

PKFY-P VLM-E **R410A**

PKFY-P VKM-E **R410A**

• Technologies and functions P.160



PKFY-P10-32VLM



PKFY-P40-50VLM



PKFY-P VKM

Its sophisticated design matches any room interior without disturbing the atmosphere of the room.

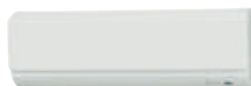
A design that matches any room interior (VLM model)

A sharp and simple form combines beauty and function. The simple square design harmonizes beautifully with the straight lines of the walls, floor and ceiling. The white body color has been adopted to enhance the beauty and comfort of a room without disturbing its atmosphere.

Conventional model



PKFY-P VBM <P15-P25>



PKFY-P VHM <P32-P50>

Latest model



PKFY-P VLM <P10-P32>



PKFY-P VLM <P40-P50>

Lineup

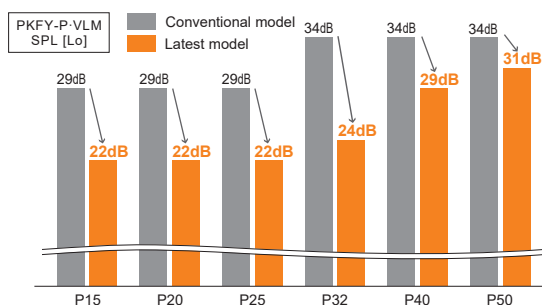
The broad lineup from P10 to P50 offers flexible proposals tailored to diverse customer needs and applications.

		P10	P15	P20	P25	P32	P40	P50
Conventional	VBM		●	●	●			
Conventional	VHM					●	●	●
Latest	VLM	●	●	●	●	●	●	●

*For details on connectivity with the P10 model, refer to the specifications of the outdoor units.

Reduced noise level

The noise level has been reduced compared to the conventional model (PKFY-P VBM/VHM) by improving the unit structure, including the line flow fan.

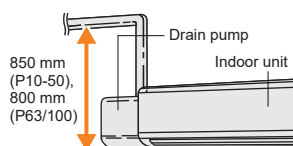


*Measurement condition (Fan speed: Low)

*Measured in an anechoic room

Optional drain pump

The optional drain pump allows the drain connection to be raised as high as 850 mm (P10-50) or 800 mm (P63/100), allowing more flexibility in piping layout design.



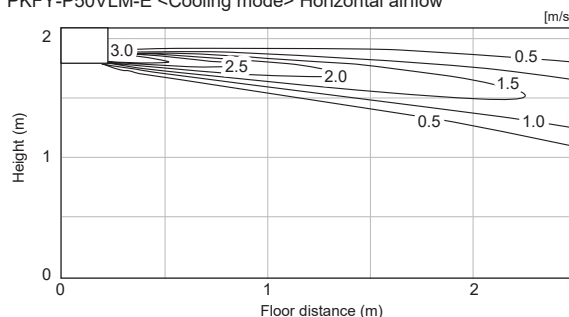
Improved airflow control

Horizontal airflow

Airflow control has been improved to achieve horizontal airflow. This reduces the cold draft feeling even with a wall mounted model, while ensuring optimal air conditioning.

• Airflow distribution

PKFY-P50VLM-E <Cooling mode> Horizontal airflow



Fan speed & vane control

The VLM model provides 4 fan speeds and an auto mode. Additionally, the vane angle can be set to five steps. This enables air conditioning as desired.

		Fan Speed 	Vane Control	
			Vane Angle 	Swing mode
Conventional	PKFY-P** VBM	4 speeds	4 steps	---
	PKFY-P** VHM	3 speeds + AUTO	5 steps	✓

Latest	PKFY-P** VLM-E	4 speeds + AUTO	5 steps	✓
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Wall-mounted type **R410A** PKFY-P VLM-E

			PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz						
Cooling capacity	*1	kW	1.2	1.7	2.2	2.8	3.6	4.5	5.6
	*1	BTU/h	4,100	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity	*1	kW	1.4	1.9	2.5	3.2	4.0	5.0	6.3
	*1	BTU/h	4,800	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.02			0.03	0.04		0.05
	Heating	kW	0.01			0.02	0.03		0.04
Current	Cooling	A	0.20			0.25	0.35		0.45
	Heating	A	0.15			0.20	0.30		0.40
External finish(Munsell No.)			Plastic, MUNSELL (0.7PB 9.2/0.4)						
Dimension H x W x D			mm(in.) 299 x 773 x 237 (11-25/32 x 30-7/16 x 9-11/32)					299 x 898 x 237 (11-25/32 x 35-3/8 x 9-11/32)	
Net weight			kg(lbs.) 11 (25)					13 (29)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Line flow fan x 1						
	Airflow rate *2 (Lo-Mid2-Mid1-Hi)	m³/min	3.3-3.5-3.8-4.2	4.0-4.2-4.4-4.7	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4
		L/s	55-58-63-70	67-70-73-78	67-73-82-90	67-77-90-112	72-90-115-140	105-123-143-167	113-138-170-207
		cfm	117-124-134-148	141-148-155-166	141-155-173-191	141-162-191-237	152-191-244-297	222-261-304-353	240-293-360-438
	External static pressure		Pa 0						
Motor	Type		DC motor						
	Output		kW 0.030						
Air filter			PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2) Flare						
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4) Flare						
Field drain pipe diameter			mm(in.) I.D.16 (5/8)						
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3			dB<A> 22-24-26-28		22-26-29-31	22-27-31-35	24-31-37-41	29-34-37-40	31-36-41-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

*3 It is measured in anechoic room.

Wall-mounted type **R410A** PKFY-P VKM-E

			PKFY-P63VKM-E	PKFY-P100VKM-E
Power source			1-phase 220-230-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity	*1	kW	7.1	11.2
	*1	BTU/h	24,200	38,200
Heating capacity	*1	kW	8.0	12.5
	*1	BTU/h	27,300	42,600
Power consumption	Cooling*4	kW	0.05	0.08
	Heating	kW	0.04	0.07
Current	Cooling*4	A	0.37	0.58
	Heating	A	0.30	0.51
External finish(Munsell No.)			Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D			mm(in.) 365 x 1,170 x 295 (14-3/8 x 46-1/16 x 11-5/8)	
Net weight			kg(lbs.) 21 (46)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		Line flow fan x 1	
	Airflow rate (Lo-Hi)	*2 m³/min	16-20	20-26
		L/s	267-333	333-433
		cfm	565-706	706-918
	External static pressure		Pa 0	
Motor	Type		DC motor	
	Output		kW 0.056	
Air filter			PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter		mm(in.)	I.D. 16(5/8)	
Sound pressure level (Lo-Hi) *2 *3		dB<A>	39-45	41-49

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-high).

*3 It is measured in anechoic room.

*4 Electrical characteristic of cooling are included optional drain-pump.

Wall-mounted type **R410A**

Optional parts

Description	Model	Applicable capacity
External LEV Box	PAC-SK17LE-E	P10
	PAC-SG95LE-E	P15, 20, 25, 32, 40, 50, 63
Drain pump kit	PAC-SK01DM-E	P10, 15, 20, 25, 32, 40, 50
	PAC-SH94DM-E	P63, 100
Wi-Fi interface	MAC-557IF-E	P10, 15, 20, 25, 32, 40, 50
Plasma quad connect	MAC-100FT-E	P10, 15, 20, 25, 32, 40, 50, 63, 100

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution



Floor standing type



Floor standing type

Exposed type

PFFY-P VKM-E2 **R410A**

• Technologies and functions P.160



Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

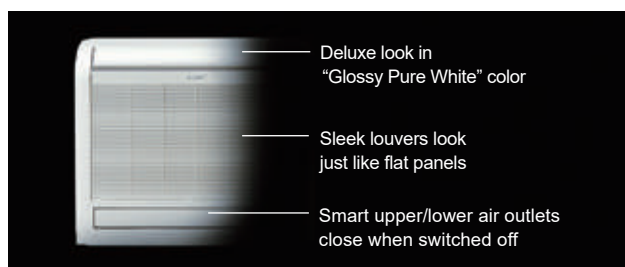
Remote
Controller

Hot Water
Solution

For living rooms, bed rooms, or offices where a sophisticated design is required.

The latest Mitsubishi innovation is a floor-standing air-conditioner that is sophisticated in design and rich in function.

Sophisticated design



This innovative, new floor standing air-conditioner exhibits a pleasing mix of streamlined form and diverse functions. It is engineered to keep room walls empty, and to provide comfortable cooling in the summer and toasty heating in the winter.

The "Glossy Pure White" color ensures a high-end look, a perfect match for any room. Both upper and lower air outlets remain closed when switched off, showing off a smart and striking image. It is sure to provide a handsome fit to distinctive room interiors.

IT terminal

An IT terminal is available. Contact your local distributor for details.

Slim, yet mighty

The unit's body is slim and trim, highlighting its compact essence. It is an ideal size for living rooms, bedrooms, and more.

The removable and washable front panel makes for easy cleaning.

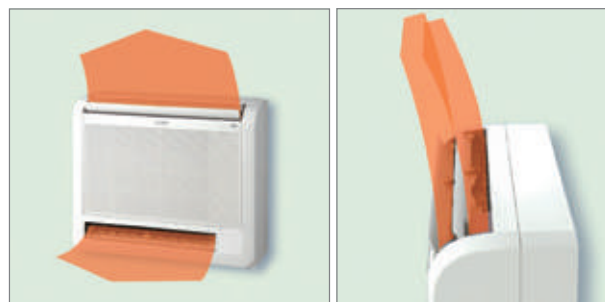
Easy, regular cleaning helps the air conditioner stay beautiful while maintaining energy-efficient operation.

Optimum air distribution

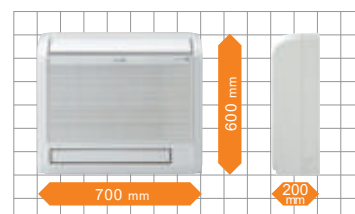
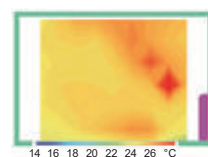
Comfortable room temperatures are accomplished through optimum, powerful, and efficient air distribution through upper and lower air outlets.

The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode).

By setting the vane angle almost vertical, bothersome direct wind can be avoided for increased comfort.



The air from both the upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Say goodbye to chilly feet!



Quiet operation (lowest noise level among most floor standing types)

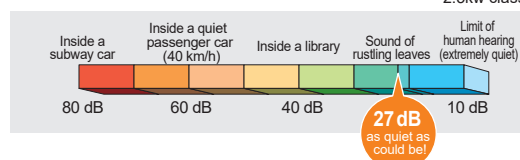
Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. The new floor standing models are no exception. They create a quiet and comfortable space with virtually no conspicuous noise.

ONLY
27 dB*

*PFFY-P20VKM-E2
at low fan speed

• Noise level

*2.5kw class



Floor standing type **R410A**

Exposed type **PFFY-P VKM-E2**

			PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source			1-phase 220-240V 50Hz			
Cooling capacity		*1 kW	2.2	2.8	3.6	4.5
			7,500	9,600	12,300	15,400
Heating capacity		*1 kW	2.5	3.2	4.0	5.0
		*1 BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.025	0.025	0.025	0.028
	Heating	kW	0.025	0.025	0.025	0.028
Current	Cooling	A	0.20	0.20	0.20	0.24
	Heating	A	0.20	0.20	0.20	0.24
External finish			Plastic (Pure white)			
Dimension		mm	600 x 700 x 200			
H x W x D		in.	23-5/8 x 27-9/16 x 7-7/8			
Net weight		kg(lbs.)	15 (34)			
Heat exchanger			Cross fin (Aluminium plate fin and copper tube)			
FAN	Type x Quantity		Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi)	m³/min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	External static pressure	Pa	0			
Motor	Type		DC motor			
	Output	kW	0.03 x 2			
Air filter			PP honeycomb fabric (Catechin Filter)			
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi)		*2 dB<A>	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

*2 Airflow rate/Sound pressure level are in (low-middle-high-shigh).

*3 It is measured in anechoic room.

Floor standing type

Exposed type

PFFY-P VEM-E **R410A**

• Technologies and functions P.160



A new floorstanding unit has been launched featuring a sophisticated design.

The design, coupled with improved power consumption and noise, contributes to creating a stylish and comfortable room environment.

Flexible airflow rate setting

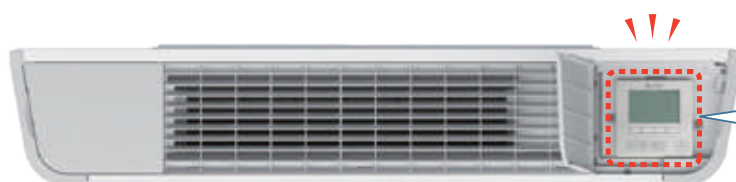
Airflow rate can be set to three levels to suit various installation conditions and maintain a comfortable room temperature.

Airflow rate setting

	Model	Airflow rate
New	PFFY-P VEM	Low- Mid -High
Conventional	PFFY-P VLEM	Low-High

Airflow rate setting has been increased from two to three levels.

Remote controller storage in the main unit



MA remote controller can be stored on the right side of the main unit.

Easy maintenance

The air filter can be easily removed from the front bottom of the unit for regular cleaning.

*Refer to the Instruction Book for details.



New design

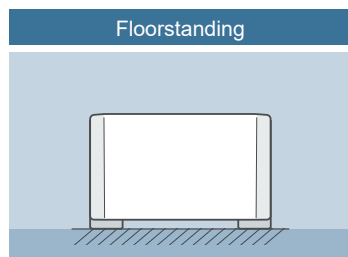
The new sophisticated design in clear white and pearl grey blends in with any interior.

With a depth of 217 mm [8-9/16 in.], the compact unit is ideal for installation in the perimeter zone of a room.

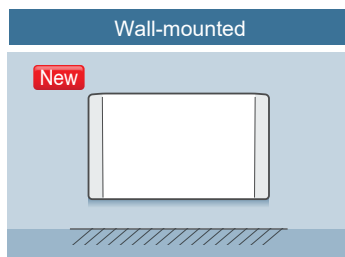
Three installation options are available to suit a wide range of applications.



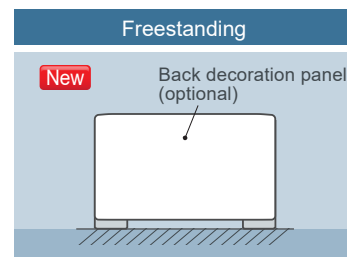
Three installation options



Conventional floorstanding installation is possible.



Wall-mounted installation allows for a stylish interior design.



With the optional back decoration panel, the unit can be installed away from the wall for more design flexibility.

*The legs are not attached to the unit at the time of shipment from the factory. They need to be attached when installing the unit on the floor.

Reduced power consumption and noise

PFFY-P VEM-E features new components and an optimized structure for more efficient and comfortable operation.



A high-efficiency DC fan motor is equipped.



The inner pipes of the heat exchanger have been downsized from $\varnothing 9.52$ to $\varnothing 7.0$ to fit in more pipings.



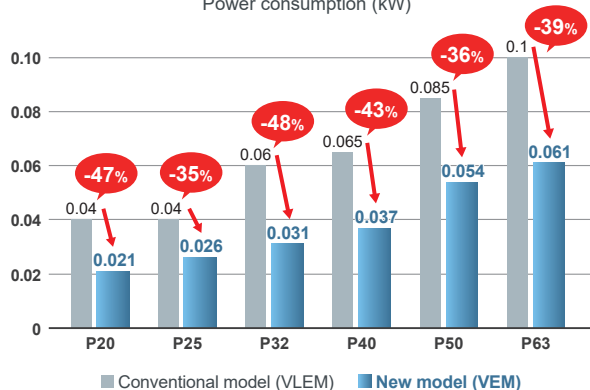
The new structure realizes smooth airflow and reduces pressure loss in the air pathway.



Reduced power consumption



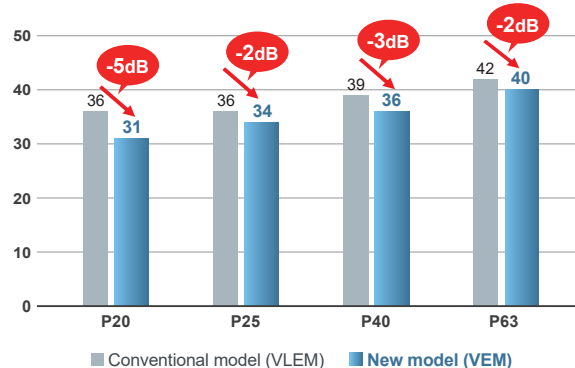
Power consumption (kW)



Reduced noise



Sound pressure level (dB<A>)



*Measurement conditions (Power source: AC220-240V/50Hz, Fan speed: High)
The unit consumes the same amount of power in both cooling and heating modes.

*Measurement conditions (Measured point: 1.5m×1.5m, Power source: AC230V/50Hz)
The sound pressure level is measured in an anechoic room.

Floor standing type **R410A**

Exposed type **PFFY-P VEM-E**

			PFFY-P20VEM-E	PFFY-P25VEM-E	PFFY-P32VEM-E	PFFY-P40VEM-E	PFFY-P50VEM-E	PFFY-P63VEM-E
Power source			1-phase 220-230-240 V 50/60 Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.021	0.026	0.031	0.037	0.054	0.061
	Heating	kW	0.021	0.026	0.031	0.037	0.054	0.061
Current	Cooling	A	0.26 / 0.25 / 0.24	0.31 / 0.30 / 0.29	0.37 / 0.35 / 0.34	0.39 / 0.38 / 0.36	0.58 / 0.56 / 0.55	0.52 / 0.50 / 0.48
	Heating	A	0.26 / 0.25 / 0.24	0.31 / 0.30 / 0.29	0.37 / 0.35 / 0.34	0.39 / 0.38 / 0.36	0.58 / 0.56 / 0.55	0.52 / 0.50 / 0.48
External finish(Munsell No.)			Galvanized steel plate, MUNSELL (1.0Y 9.2/0.2)/ABS, MUNSELL (5.32GY 8.75/0.37)					
Dimension H x W x D	*2	mm	669 (726) x 1,142 x 217			669 (726) x 1,342 x 217		669 (726) x 1,542 x 217
		in.	26-3/8 (28-5/8) x 45 x 8-9/16			26-3/8 (28-5/8) x 52-7/8 x 8-9/16		26-3/8 (28-5/8) x 60-3/4 x 8-9/16
Net weight		kg(lbs.)	29.5 (67)		30 (67)	35 (78)	35 (78)	39.5 (89)
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 2			Sirocco fan x 3		Sirocco fan x 4
	Airflow rate *3 (Lo-Mid-Hi)	m³/min	5.0 - 6.0 - 7.0	5.5 - 6.5 - 8.0	5.5 - 7.0 - 8.5	8.0 - 9.5 - 11.0	10.0 - 11.5 - 13.5	12.0 - 14.0 - 16.5
		L/s	83 - 100 - 117	92 - 108 - 133	92 - 117 - 142	133 - 158 - 183	167 - 192 - 225	200 - 233 - 275
		cfm	177 - 212 - 247	194 - 230 - 282	194 - 247 - 300	282 - 335 - 388	353 - 406 - 477	424 - 494 - 583
External static pressure		Pa	0					
Motor	Type		DC motor					
	Output	kW	0.096					
Air filter			PP Honeycomb fabric					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)					
Sound pressure level (L0-Mid-Hi)		*3 *4 dB<A>	23.0-27.0-31.0	25.0-29.0-34.0	25.0-31.0-36.0	29.0-33.0-36.0	34.0-37.0-41.0	32.0-36.0-40.0

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 The values in () show the height of unit with leg.

*3 Air flow rate/Sound pressure level are in (Low-Mid-High)

*4 It is measured in anechoic room.

Optional parts

Description	Model	Applicable capacity
Back decoration panel*	PAC-BP32VEM-E	P20, 25, 32
	PAC-BP50VEM-E	P40, 50
	PAC-BP63VEM-E	P63

*The back decoration panel is required for freestanding installation. When it is attached to the main unit, the pipes must run under the floor. Refer to the Installation Manual for details.

Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Floor standing type

Concealed type

PFFY-P VCM-E **R410A**

• Technologies and functions P.160



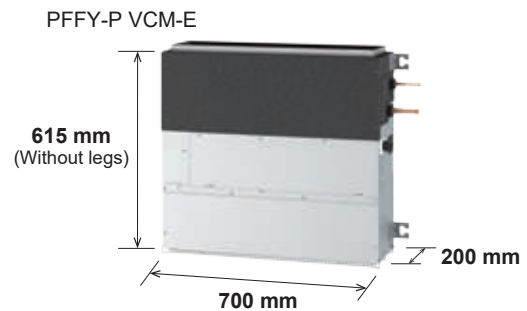
An improved air pathway structure helps reduce power consumption and noise.

External static pressure, airflow rate, and return-air intake direction can be changed according to customer needs.

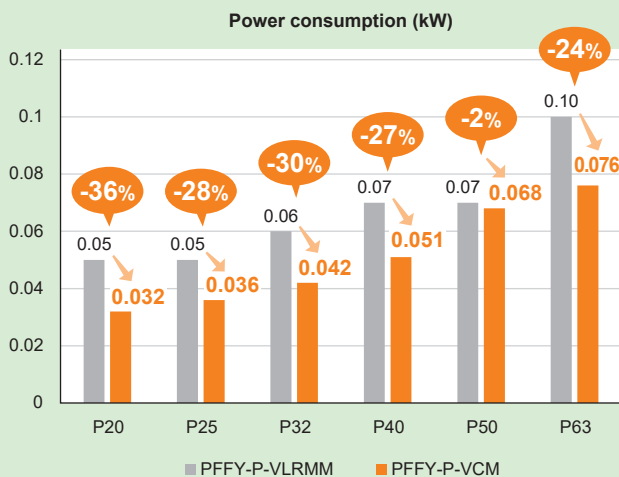
Reduced power consumption and noise

The structure realizes smooth airflow to reduce pressure loss in the air pathway. Additionally, the inner pipes of its heat exchanger have been downsized from $\varnothing 9.52$ to $\varnothing 7.0$ to contain a larger number of pipings.

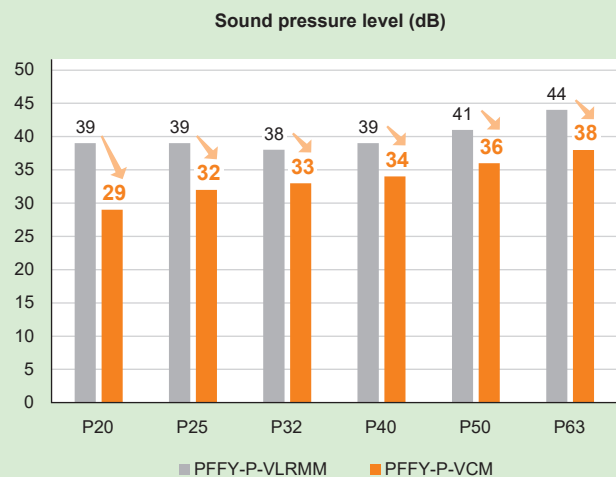
The combination of the structure and components contributes to reducing power consumption and operation noise.



Reduced power consumption



Reduced noise level



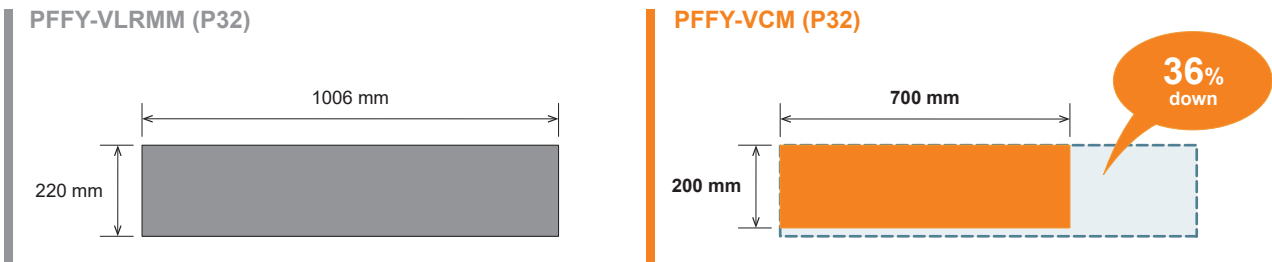
*The sound pressure level during operation is measured at a distance 1.5 m from the front side and bottom side of the unit in an anechoic room.

*Measurement conditions (External static pressure: 40Pa; Fan speed: High)

*The unit consumes the same power in both cooling and heating modes.

Small footprint

The latest model (P32) has a 36% smaller footprint compared to the PFFY-VLRMM, owing to a redesigning of the positions of the inner components.



Flexible airflow and external static pressure setting

Airflow rate and external static pressure can be selected to suit various installation conditions.

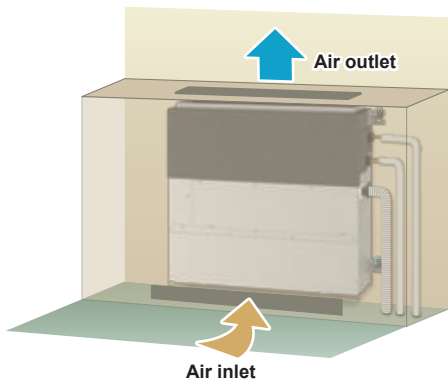
Airflow rate	PFFY-P VLRM	Low-High	External static pressure (Pa)	PFFY-P VLRM	0
	PFFY-P VLRMM	Low/Mid/High		PFFY-P VLRMM	20-40-60
	PFFY-P VCM	Low/Mid/High		PFFY-P VCM	0-10-40-60
Airflow rate can be selected from 3 patterns.			External static pressure can be selected from 4 patterns.		

Flexible installation

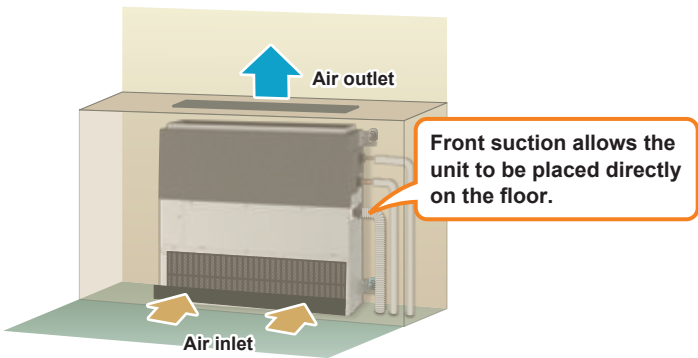
Selectable air inlet pattern

Air inlet can be selected from two patterns, bottom suction or front suction, by changing the panel, fan guard and filter.

Bottom suction *1



Front suction *2

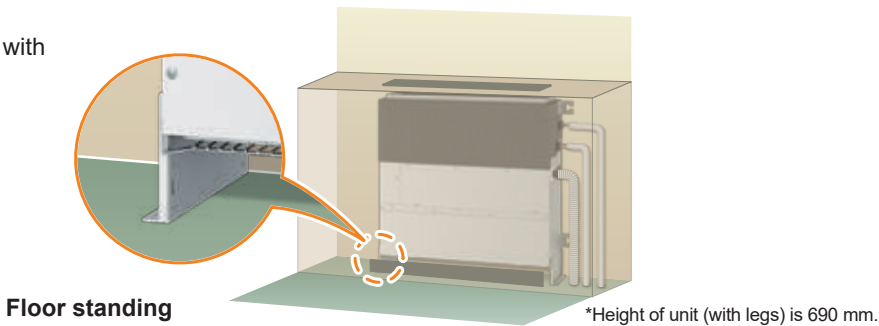


*1 Select a site where the flow of supply air is not blocked. The unit cannot be placed directly on the floor in the case of bottom suction.

*2 Front suction makes more noise than bottom suction. Bottom suction is recommended when installing the unit in rooms that need to be quiet, such as bedrooms.

Floor standing with legs

The unit can be placed on the floor with the supplied legs attached.



Floor standing type **R410A**

Concealed type **PFFY-P VCM-E**

			PFFY-P20VCM-E	PFFY-P25VCM-E	PFFY-P32VCM-E	PFFY-P40VCM-E	PFFY-P50VCM-E	PFFY-P63VCM-E
Power source			1-phase 220-230-240 V 50/60 Hz					
Cooling capacity (Nominal)	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
	*2	Power input kW	0.022	0.026	0.031	0.038	0.052	0.058
	*2	Current input A	0.25	0.30	0.34	0.38	0.50	0.49
Heating capacity (Nominal)	*3	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*3	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
	*2	Power input kW	0.022	0.026	0.031	0.038	0.052	0.058
	*2	Current input A	0.25	0.30	0.34	0.38	0.50	0.49
External finish			Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension H x W x D	*4	mm	615 (690) x 700 x 200	615 (690) x 700 x 200	615 (690) x 700 x 200	615 (690) x 900 x 200	615 (690) x 900 x 200	615 (690) x 1,100 x 200
		in.	24-1/4 (27-3/16) x 27-9/16 x 7-7/8	24-1/4 (27-3/16) x 27-9/16 x 7-7/8	24-1/4 (27-3/16) x 27-9/16 x 7-7/8	24-1/4 (27-3/16) x 35-7/16 x 7-7/8	24-1/4 (27-3/16) x 35-7/16 x 7-7/8	24-1/4 (27-3/16) x 43-5/16 x 7-7/8
Net weight			kg (lbs)	18 (40)	18 (40)	18.5 (42)	22.5 (51)	22.5 (51)
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 4
	*5 External static press.	Pa	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>
		mmH ₂ O	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>
	Motor Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output		kW	0.096	0.096	0.096	0.096	0.096
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid-High)					
		m ³ /min	5.0 - 6.0 - 7.0	5.5 - 6.5 - 8.0	5.5 - 7.0 - 8.5	8.0 - 9.5 - 11.0	10.0 - 11.5 - 13.5	12.0 - 14.0 - 16.5
Sound pressure level (measured in anechoic room)			(Low-Mid-High)					
*2 dB<A>			21-23-26	22-25-29	23-26-30	25-27-30	28-31-34	28-32-35
Air filter			PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Refrigerant piping diameter	Liquid (410A)	mm (in.)	6.35 (1/4)Braze	6.35 (1/4)Braze	6.35 (1/4)Braze	6.35 (1/4)Braze	6.35 (1/4)Braze	9.52 (3/8)Braze
	Gas (410A)	mm (in.)	12.7 (1/2)Braze	12.7 (1/2)Braze	12.7 (1/2)Braze	12.7 (1/2)Braze	12.7 (1/2)Braze	15.88 (5/8)Braze
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B. (95°F D.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*2 The values are measured at the factory setting of external static pressure.

*3 Nominal heating conditions
Indoor: 20°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*4 The values in () show the height of unit with leg.

*5 The factory setting of external static pressure is shown without < > .

Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

*Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.



Inverter-driven compressor technology

Y-Series EM, EP R2-Series EM, EP ZUBADAN
Y-Series M, P R2-Series M, P

All CITY MULTI compressors are inverter-driven to precisely match the cooling and heating demands of each building.

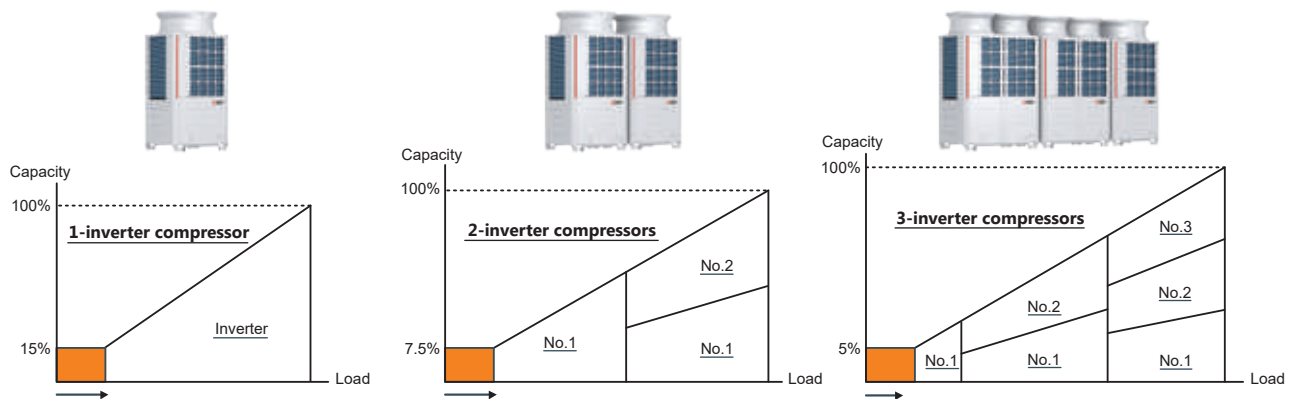
The compressor varies its speed to match the indoor cooling or heating demand and therefore consumes only the energy that is required.

When an inverter-driven system operates at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non-inverter system.

The fixed speed system can only operate at 100%, but partial load conditions prevail for the majority of the time. Therefore, it cannot match the annual efficiency of an inverter-driven system.

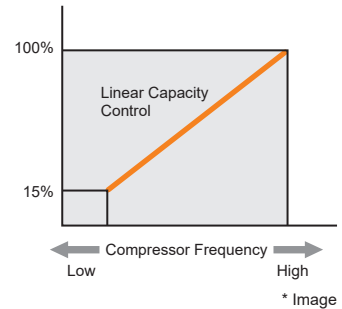
With its proven single inverter-driven compressor technology, the CITY MULTI series is favored by the industry for its low starting currents (a mere 8 amps for a 20HP outdoor unit) and smooth transition across the range of compressor frequencies.

• Stable and Smooth Operation



Compressor

• Heating/Cooling Capacity



*Values vary depending on actual conditions, such as ambient temperature.

IPM Intelligent Power Module (IPM) manufactured by Mitsubishi Electric

Y-Series EP^{*1} R2-Series EP^{*2} ZUBADAN
Y-Series P^{*1} R2-Series P^{*2}

Power modules manufactured by Mitsubishi Electric are installed in the inverter circuit boards that drive compressors and fans. SiC (silicon carbide) is used in the power module that is equipped with a voltage-boosting circuit to raise the output voltage of the inverter and expand the operating range. This greatly reduces the power loss of the voltage boosting circuit and helps improve the energy efficiency of the unit (EER and SEER improvement).

* The 20 horsepower YNW is equipped with a voltage boosting circuit that uses SiC.



*1. IPM (compressor) is installed in the 14HP to 20HP (P350 to P500) single modules and the 26HP to 54HP (P650 to P1350) combination modules. SiC elements are used in the 20HP (P500) single module IPM.

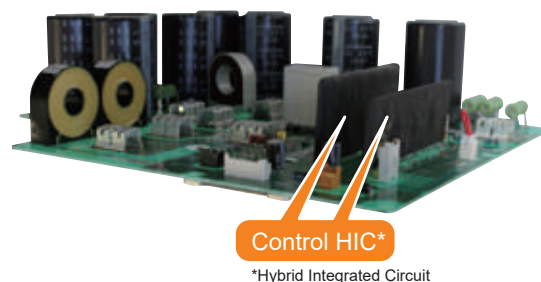
*2. IPM (compressor) is installed in the 14HP to 22HP (P350 to P550) single modules and the 26HP to 44HP (P650 to P1100) combination modules. SiC elements are used in the 20HP and 22HP (P500 and P550) single module IPM.

PWM PWM control

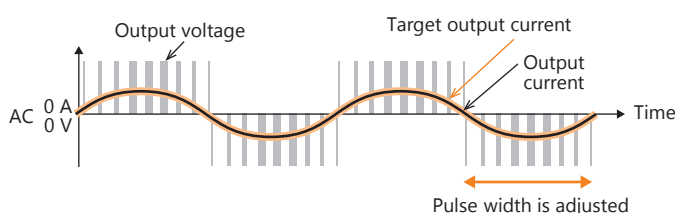
Y-Series EM, EP R2-Series EM, EP ZUBADAN
Y-Series M, P R2-Series M, P

PWM control is used to control the number of motor revolutions according to operational load. It varies the inverter pulse width (electric signal wave occurring over a short period) to control the output.

Optimal control of electrical current is required according to operation.

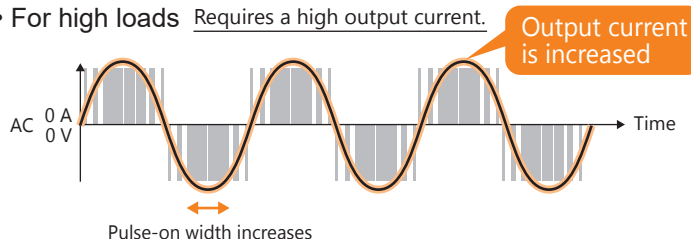


- For low loads Does not require a high target output current.



To achieve the target output current, the intervals at which the “pulse” signal is turned on are controlled to adjust the output current. At low load time, the pulse-on width is minimized to save energy.

- For high loads Requires a high output current.



The increased pulse-on width increases both the duration that the voltage is applied and the amount of electrical current compared to the low load time, and accelerates the rotation speed of the compressor from 60 rps to 140 rps.*

*The number of compressor rotations differs depending on the usage condition.

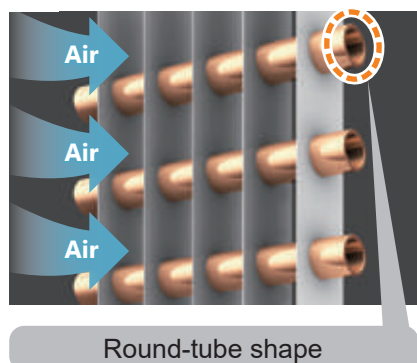
The ability to adjust the pulse range and output current to suit a given load increases the operating range of the unit.

Flat-tube heat exchanger

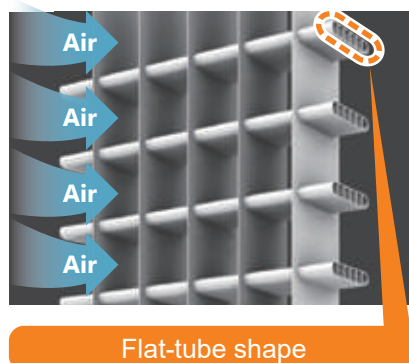
Y-Series EM, EP R2-Series EM, EP

The flat-tube heat exchanger delivers high heat exchange efficiency. The use of flat tubes increases the number of piping stages while maintaining the same size of heat exchanger. The inside of the tube is divided into thin compartments to increase the area of contact between the refrigerant and air, and thereby increase heat exchange effectiveness and significantly improve energy-saving performance. The flat-tube heat exchanger improves heat exchange effectiveness by approximately 30% compared to round-tube heat exchangers.

- Round-tube heat exchanger



- Flat-tube heat exchanger



Approximately 30% increase in heat-exchange efficiency (compared to the round-tube)

220% increase in surface area (compared to the round-tube)

(Illustration)

Heat Inter-Changer (HIC) circuit

Y-Series EM, EP R2-Series EM, EP

ZUBADAN

Y-Series M, P R2-Series M, P

The HIC circuit increases cooling efficiency. This technology raises the degree of supercooling, increasing both cooling capacity and cooling efficiency.

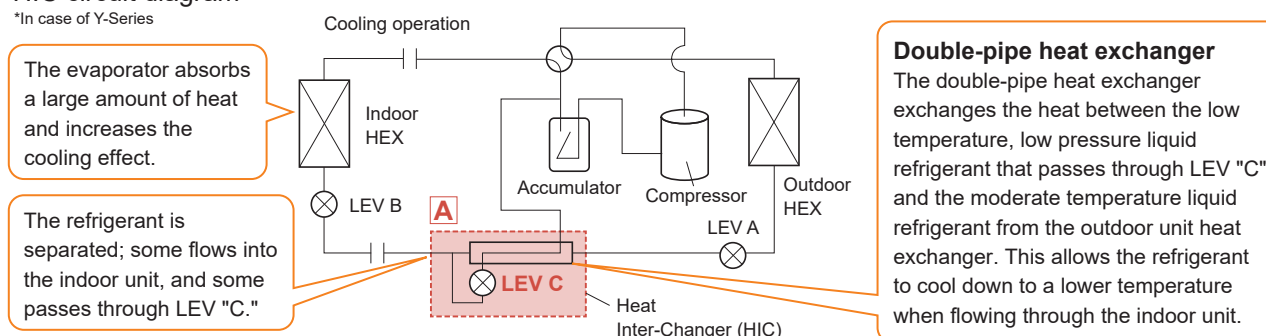
The HIC circuit is installed before the point at which the high pressure liquid refrigerant, which passes through the heat exchanger of the outdoor/heat source unit, flows into the indoor unit. The temperature of the liquid refrigerant, to which heat is discharged from the outdoor/heat source unit heat exchanger, is further lowered before the refrigerant enters the expansion valve, to allow the evaporator to absorb a large amount of heat and increase cooling efficiency.

HIC mechanism

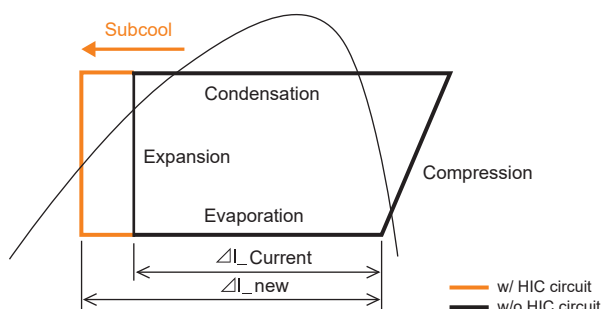
Some of the high pressure liquid refrigerant that passes through the outdoor/heat source unit heat exchanger flows directly into the indoor unit, and the rest passes through linear expansion valve (LEV) "C" to lower both the temperature and pressure. The heat is exchanged between the low temperature, low pressure liquid refrigerant that passes through LEV "C" and the moderate temperature liquid refrigerant from the outdoor/heat source unit heat exchanger. This further lowers the temperature of the liquid refrigerant before it enters LEV "B." This heat exchange system uses a "double-pipe" heat exchanger.

HIC circuit diagram

*In case of Y-Series



HIC circuit effect (Image using a Mollier diagram)

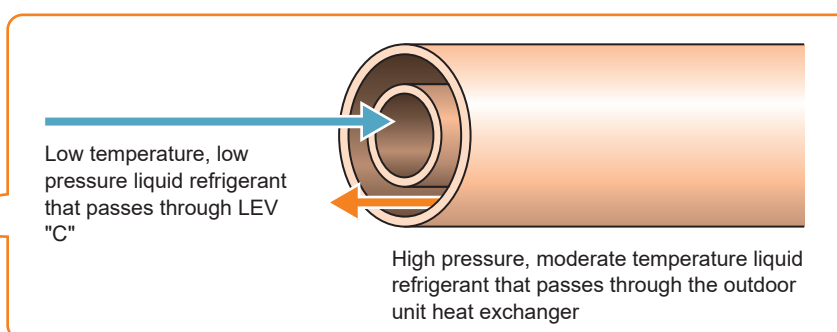


HIC circuit (Double-pipe heat exchanger)



Heat Inter-Changer (HIC) circuit
*In case of Y-Series

Double-pipe heat exchanger cross section (High-performance grooved pipe)





IH warmer

Y-Series EM, EP

R2-Series EM, EP

ZUBADAN

Y-Series M, P

R2-Series M, P

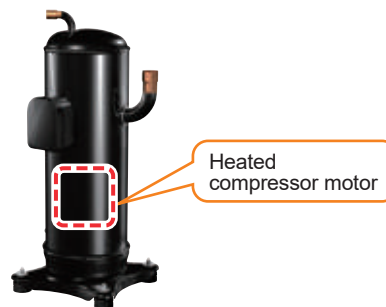
Induction heating (IH) is used to heat the refrigerant that flows back into the compressor*. This method differs from the conventional crankcase heater method (in which a belt heater is wrapped around the outside of the compressor) in that heat is not applied from the outside; the refrigerant is heated from the inside, thus eliminating wasted heat.

* Normally, the compressor is heated while the outdoor unit is stopped to prevent liquid refrigerant from remaining in the compressor and to evaporate the liquid refrigerant in the compressor.

- Crankcase heater power supply method



- IH power supply method (without crankcase heater)



Metal compressor enclosure

Y-Series EM, EP

R2-Series EM, EP

ZUBADAN

Y-Series M, P

R2-Series M, P

The compressor is enclosed in a metal casing to reduce noise.

In some models, a sound absorbing material is applied to the metal casing to further reduce noise.



The compressor is enclosed in a metal casing to reduce noise.

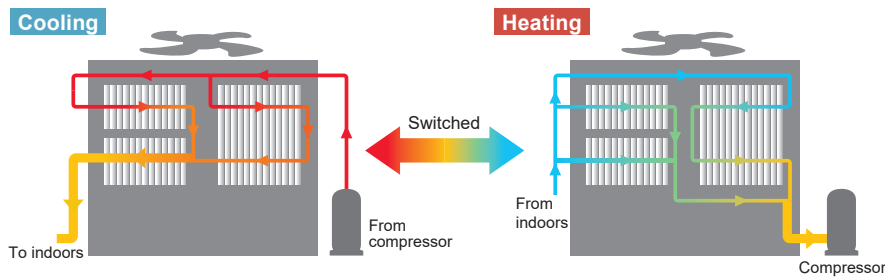
Adaptive
flow

Adaptive flow control

Y-Series EM, EP (~18HP)

Changed to a refrigerant circuit flow for both heating and cooling.

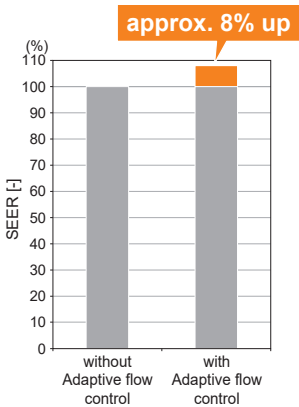
Adaptive flow control



- During cooling, a serial flow path (flow through two of the heat exchangers split into three, and then through the last heat exchanger) is used. With fewer paths, the refrigerant flow rate is increased and the heat conductivity performance is improved. In addition, the drop in heat exchanger capacity for per path prevents the refrigerant stagnation and improves the condensing performance of the heat exchanger during cooling.
- During heating, a parallel flow path (flow refrigerant simultaneously through all heat exchangers split into three) is used. By flowing the refrigerant to all paths at the heat exchanger inlets (by increasing the number of paths compared to cooling), pressure loss in the heat exchanger is reduced, and the evaporator performance is improved.

* Increase in evaporator performance is compared to using the original number of cooling paths.



Comparison of EP300 (Y-Series) SEER (cooling) with and without variable path



Lineup & Functions
Y-Series
R2-Series
ZUBADAN -Series
S-Series
BC Controllers
Ceiling cassette type
Ceiling concealed type
Ceiling suspended type
Wall-mounted type
Floor standing type
Functions
LOSSNAY System
Remote Controller
Hot Water Solution

OUTDOOR UNIT FUNCTION TABLE

Mitsubishi Electric's outdoor units and heat source units utilize the latest technology and offer a wide variety of functions. See the pages titled "TECHNOLOGY INTRODUCTION" and "OUTDOOR UNIT FUNCTIONS" for details of each technology and function.

Refrigerant	R32	
System	Air cooled	
Type	Heat pump	Heat recovery
Series	Y-Series Y-Series EM, M	R2-Series R2-Series EM, M
Model	PUHY-(E)M YNW-A1(-BS)	PURY-(E)M YNW-A1(-BS)
	 *This image shows Standard type.	 *This image shows Standard type.

► Operation mode

COP priority mode	●	●
Low noise mode	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%
Smooth auto-shift startup mode	●	●
Preheat defrost operation	●	●
System changeover (for heat pump)	●	—
Auto mode	—	●
Dual set point ^{*1}	●	●

► Energy efficiency control




Evaporating temperature control (Fixed temperature control)	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C
Evaporating temperature control (Automatic control shifting)	4 patterns	4 patterns
High sensible heat operation (during cooling)	●	●
Demand control ^{*2}	12 steps	8 steps
Continuous heating operation during defrost	●	●
Selectable external static pressure of outdoor unit	0,30,60,80 Pa	0,30,60,80 Pa
Operation at high outside temperatures	52°C	52°C

► Maintenance functions

Rotation control	—	—
Emergency operation mode	—	—
Pump down function	●	●
Individual LEV control	●	●
Snow sensor setting	●	●
Maintenance data retrieval via USB	●	●

*1 Should be supported by indoor unit and remote controller.

*2 Maximum number of steps. Available steps depends on the outdoor unit combination.

Refrigerant	R410A		
System	Air cooled		
Type	Heat pump	Heat recovery	Heat pump
Series	Y-Series Y-Series EP, P	R2-Series R2-Series EP, P	ZUBADAN-Series ZUBADAN
Model	PUHY-(E)P Y(S)NW-A2	PURY-(E)P Y(S)NW-A2	PUHY-HP Y(S)NW-A(-BS)
	 *This image shows Standard type.	 *This image shows Standard type.	

► Operation mode

COP priority mode	●	●	●
Low noise mode	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%
Smooth auto-shift startup mode	●	●	●
Preheat defrost operation	●	●	●
System changeover (for heat pump)	●	—	●
Auto mode	—	●	—
Dual set point ^{*1}	●	●	●

► Energy efficiency control

Evaporating temperature control (Fixed temperature control)	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C
Evaporating temperature control (Automatic control shifting)	4 patterns	4 patterns	4 patterns
High sensible heat operation (during cooling)	●	●	●
Demand control ^{*2}	12 steps	8 steps	12 steps
Continuous heating operation during defrost	●	●	—
Selectable external static pressure of outdoor unit	0,30,60,80 Pa	0,30,60,80 Pa ^{*3}	0,30,60,80 Pa
Operation at high outside temperatures	52°C	52°C	52°C

► Maintenance functions

Rotation control	●	●	●
Emergency operation mode	●	●	●
Pump down function	●	●	●
Individual LEV control	●	●	●
Snow sensor setting	●	●	●
Maintenance data retrieval via USB	●	●	●






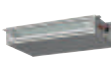

*1 Should be supported by indoor unit and remote controller.

*2 Maximum number of steps. Available steps depends on the outdoor unit combination.


*3 0, 30 Pa for PURY-(E)P550YNW-A2, and PURY-(E)P1050/1100YNW-A2.

INDOOR UNIT FUNCTION TABLE





●: Standard ▲: Optional -: Not available

Type	Ceiling cassette type				Ceiling concealed type		
	4-way airflow type		2-way airflow type	1-way airflow type	Low noise type	Low static pressure type	Medium static pressure type
Model	PLFY-M VEM-E PLFY-M VEM6-E PLFY EM	PLFY-P VFM-E1 PLFY FM	PLFY-P VLMD-E PLFY LMD	PMFY-P VBM-E PMFY BM	PEFY-P VMR-E-L/R PEFY MR	PEFY-P VMS1(L)-E PEFY MS	PEFY-M VMA(L)-A PEFY-M VMA(L)-A1 PEFY MA
							







► i-see Sensor

 3D i-see Sensor	▲ ^{*1}	▲ ^{*1}	-	-	-	-	-
--	-----------------	-----------------	---	---	---	---	---




► Air distribution

 Automatic air-speed adjustment ^{*2}	●	●	-	-	-	●	●
 Fan speed setting	4 levels	3 levels	P20-P100: 3 levels P125: 4 levels	4 levels	3 levels	3 levels	4 levels
 Vane setting ^{*4}	5 levels +Auto	5 levels +Auto	4 levels (Auto: N/A)	4 levels +Auto	-	-	-
 Swing	●	●	●	●	-	-	-

► Convenience

 Dry operation	●	●	●	●	●	●	●
 Dual set point ^{*5}	●	●	●	●	●	●	●
 External static pressure setting	-	-	-	-	1 level	4 levels	5 levels
 Automatic restoration after power failure	●	●	●	●	●	●	●
 High efficiency filter	▲	-	-	-	-	-	-
 Plasma Quad Connect	▲	-	-	-	-	▲	▲

► Installability and serviceability

 Drain pump	●	●	●	●	-	VMS1: ● VMS1L: ▲	VMA: ● VMAL: -
 Pump head (mm) ^{*6}	850	850	P20-P100: 583 P125: 600	600	-	550	700
 Filter cleaning sign ^{*8}	●	●	●	●	●	●	●

^{*1} Requires a panel with the 3D i-see Sensor (sold separately). An MA remote controller (PAR-41MAA) is required to set the 3D i-see Sensor. Some settings can be made using the PAR-SL101A-E.

^{*2} To set the fan speed to Auto using the wireless remote controller, certain controller settings need to be made beforehand. Refer to the installation manual of the wireless remote controller for details on how to make the settings.

^{*3} The airflow rate mode can be set to either Normal or High. Three fan speeds are available in each mode. Select the mode with the DipSW on the indoor unit. Contact your local distributor for details.









^{*4} The available vane angle positions will depend on the remote controller to be used. Refer to the instruction manual of the relevant remote controller for details.

^{*5} Should be supported by indoor unit and remote controller.

^{*6} Pump head from the bottom of the unit

^{*7} Pump head from the top of the unit

^{*8} Factory setting: OFF

Ceiling concealed type		Ceiling suspended type	Wall mounted type		Floor standing type		
High static pressure type	Fresh air intake type				Exposed type		Concealed type
PEFY-P VMHS-E PEFY MHS	PEFY-P VMHS-E-F PEFY MHS-F	PCFY-P VKM-E PCFY KM	PKFY-P VLM-E PKFY LM	PKFY-P VKM-E PKFY KM	PFFY-P VKM-E2 PFFY KM	PFFY-P VEM-E PFFY EM	PFFY-P VCM-E PFFY CM
							
-	-	-	-	-	-	-	-
●	-	●	●	-	-	-	●
3 levels	3 levels *3	4 levels	4 levels	2 levels	4 levels	3 levels	3 levels
-	-	5 levels +Auto	5 levels +Auto	4 levels +Auto	4 levels +Auto	-	-
-	-	●	●	●	●	-	-
●	-	●	●	●	●	●	●
●	-	●	●	●	●	●	●
P20-P140: 4 levels P200, P250: 5 levels	4 levels	-	-	-	-	-	4 levels
●	●	●	●	●	●	●	●
-	-	▲	-	-	-	-	-
-	-	-	▲	▲	-	-	-
▲	▲	▲	▲	▲	-	-	-
P40-P140: 550 P200, P250: 700	P125: 550 P200, P250: 700	600 *7	850	800	-	-	-
●	●	●	●	●	●	●	●

Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Operation mode

COP priority

COP priority mode

Y-Series EM, EP

Y-Series M, P

R2-Series EM, EP

R2-Series M, P

ZUBADAN

The operation pattern under low ambient temperature conditions can be selected and the priority mode setting ("Capacity priority mode" and "COP priority mode") can be switched with the function settings.

Each mode is activated when the ambient temperature is below the specified temperature. For factory settings, refer to the Data Book.

Low noise

Low noise mode

Y-Series EM, EP

Y-Series M, P

R2-Series EM, EP

R2-Series M, P

ZUBADAN

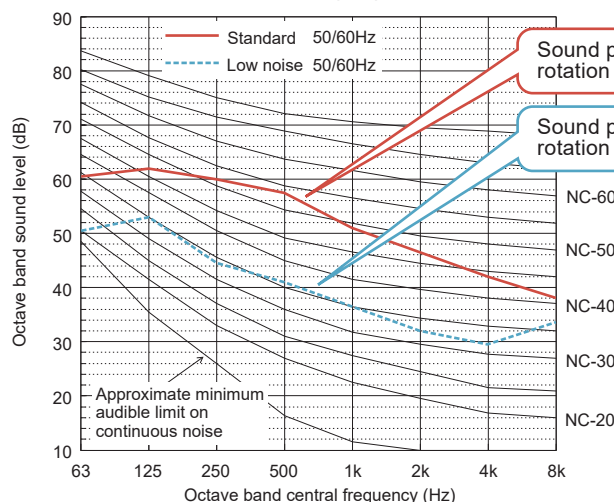
This mode reduces noise by limiting the compressor frequency and the number of rotations of the outdoor fan (for the air-cooled outdoor unit).

The user can select a preferred level.

*Cooling/heating capacity drops during low-noise mode operation.

- Examples of sound pressure level in low noise mode (PUHY-P200YNW-A2 <cooling>)

Sound level of PUHY-P200YNW-A2(-BS)



		Octave band central frequency (Hz)							dB(A)
		63	125	250	500	1k	2k	4k	
Standard mode (dB)	50/60Hz	60.5	62.0	60.0	57.5	51.0	46.5	42.0	58.0
Low noise mode (dB)	50/60Hz	50.5	53.0	44.5	41.0	36.5	32.0	29.5	44.0

When Low noise mode is set, "Performance-priority mode" and "Quiet-priority mode" can be selected. When "Performance-priority mode" is selected, the system automatically returns to normal operation in cases of heavy operating conditions.

Auto-shift startup

Smooth auto-shift startup mode

Y-Series EM, EP

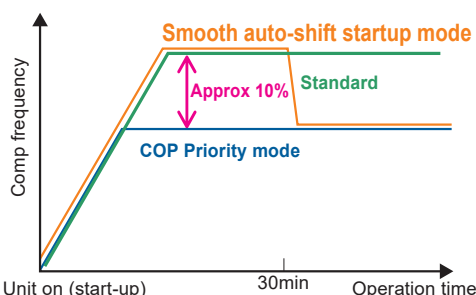
R2-Series EM, EP

ZUBADAN

Y-Series M, P

R2-Series M, P

Smooth auto-shift startup mode, an operation mode on the outdoor unit, can now be selected in addition to the conventional COP Priority and Capacity Priority modes. In order to heat the room faster, Capacity Priority mode runs for 30 minutes when heating operation starts. The unit then switches to COP Priority mode to increase energy-saving efficiency. This enables both improved comfort and energy savings.



* Time for preparation for heating is required.

* Each mode is activated when the ambient temperature is below the specified temperature. For details on the settings, refer to the Data Book.

Preheat

Preheat defrost operation

Y-Series EM, EP

R2-Series EM, EP

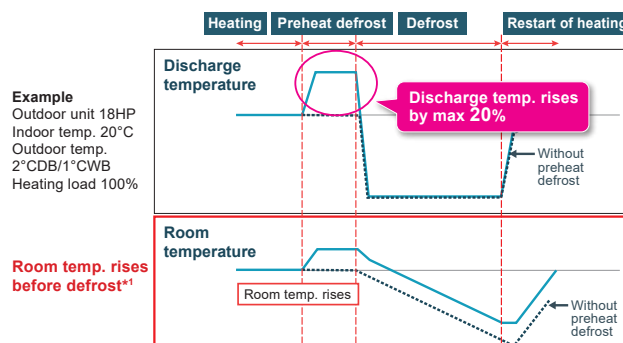
ZUBADAN

Y-Series M, P

R2-Series M, P

The outdoor unit is equipped with a preheat defrost operation that raises the discharge temperature of the air before beginning defrost operation. This contributes to raising the room temperature before the start of defrost operation and prevents room occupants experiencing a chilling sensation.

Preheat defrost ON/OFF



*1 depending on heating load



System changeover (for heat pumps)

Y-Series EM, EP Y-Series M, P ZUBADAN

Normal switching between cooling and heating

With CITY MULTI's switchable cooling/heating models, in order to switch from cooling to heating, the operation mode of all indoor units performing cooling operation needs to be switched manually.

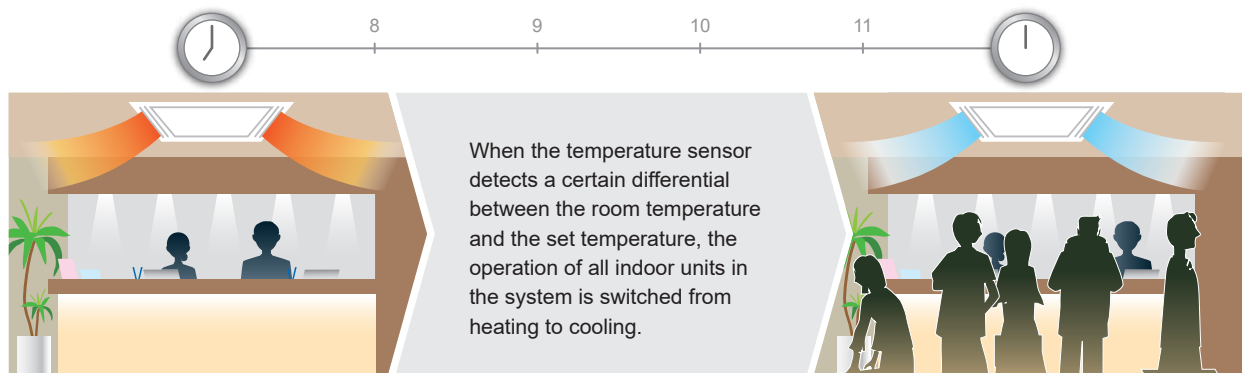
Using system changeover to switch between cooling and heating

Depending on the dip switch settings, the operation mode of all indoor units can be automatically switched according to the operation mode of a specific indoor unit (the unit with the smallest M-NET address). Operation can be automatically switched between cooling and heating according to the temperature difference between the preset temperature on the specific indoor unit and the room temperature.

*Please avoid grouping the indoor unit with the smallest number address with other indoor units.

• Suitable situations

When both cooling and heating operations are required in a single day due to a large difference between the hottest and coldest times of the day.



When using the AE-C400E

It is possible to automatically switch between cooling and heating without setting the dip switches on outdoor units. Users can select from the two types of switching patterns shown below.

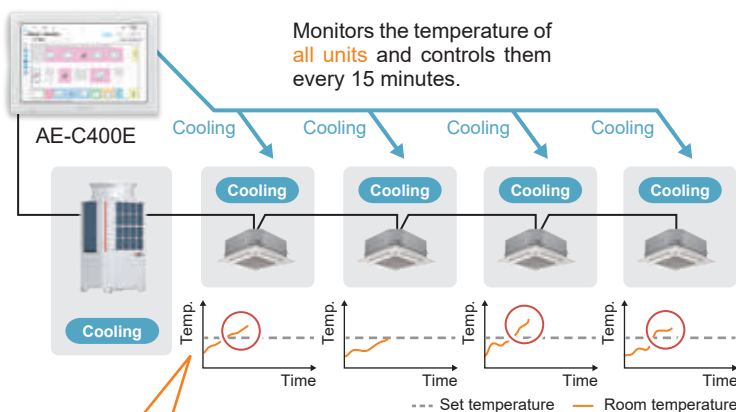
(1) Averaging

Operation mode (cooling or heating) is determined and switched every 15 minutes based on the demands of the majority of all groups connected to the outdoor unit, taking into consideration the capacity of each indoor unit and the temperature differences between the set temperatures and room temperatures.

(2) Representative Group

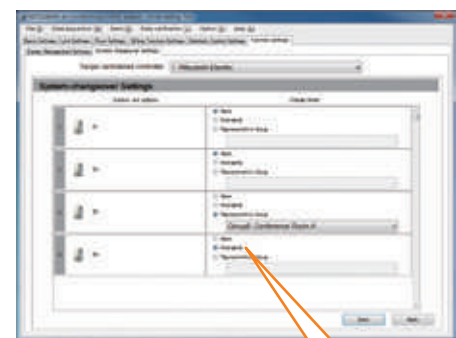
Operation mode (cooling or heating) is switched based on the temperature difference between the set temperature and the room temperature of the representative group.

• Image of the averaging method



If the room temperature is higher on average than the set temperature, AE-C400E changes the system mode to cooling. Cooling mode or heating mode is decided by the average weighted return air temperature, the set temperature and capacity.

• Settings for the AE-C400E



Select from "None," "Averaging," and "Representative Group."

*To use system changeover, the Initial Setting Tool ver. 1.61 or later is required.

Dual Dual set point

Y-Series **EM, EP** Y-Series **M, P** R2-Series **EM, EP** R2-Series **M, P** **ZUBADAN**

Normally, the desired room temperature is set to the same value for cooling and heating. However, the dual set point function allows different temperatures to be set for cooling and heating. When operation switches from cooling to heating or vice versa, the preset temperature changes accordingly.

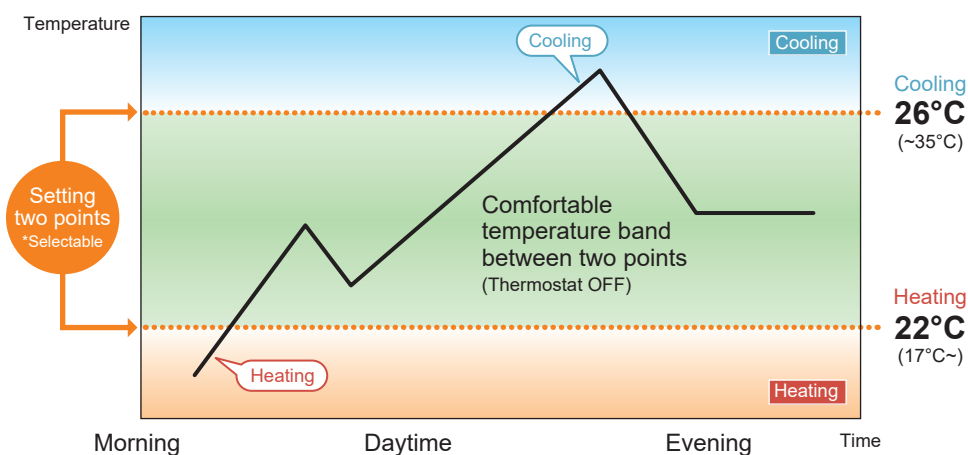
Setting dual set points in Auto mode on R2 models improves energy efficiency, compared to setting a single set point.

When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the cooling or heating mode and keep the room temperature within the preset range.

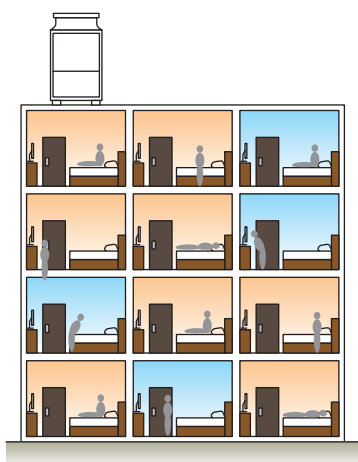
The outdoor unit does not operate in the comfortable temperature band defined by two temperature points where the thermostat is off. This cuts down on unnecessary operation of the air conditioning system.

*This function is supported only when all the indoor units, remote controllers, and system controllers that are connected to a given group are compatible with the function.

• Operation pattern in Auto (dual set point) mode

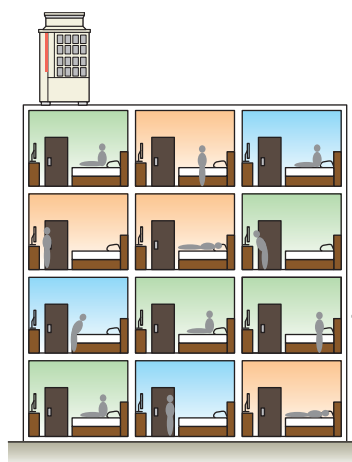


Auto mode with single set point



Auto mode with dual set point

Thermo OFF status is energy saving as the refrigerant stops circulating.



Room temperature stays within the comfortable temperature band.

Energy saving by preventing unnecessary operation

Heating operation Cooling operation Thermo OFF

*For details of the installation restrictions, refer to the DATABOOK.

Energy efficiency control

ET control

Evaporating temperature control (during cooling)

Y-Series (EM, EP) Y-Series (M, P) R2-Series (EM, EP) R2-Series (M, P) ZUBADAN

During cooling, the temperature of the refrigerant is controlled according to the air conditioning load. This helps to ensure energy-efficient operation.

Normal mode

The evaporating temperature is kept constant regardless of the load. Even at low loads, the normal evaporating temperature does not change, and energy loss is generated during partial load operation.

Smart evaporating temperature control mode

The evaporating temperature is increased and the compressor input is decreased according to the load, resulting in increased operating efficiency. There are two patterns for controlling the evaporating temperature, as follows.

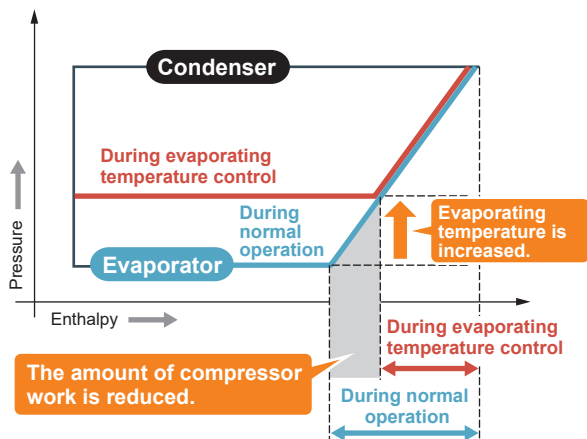
- 1 The evaporating temperature is controlled to be constant regardless of the ΔT . It is set to a value that is higher than the normal evaporating temperature.
- 2 The evaporating temperature is controlled in accordance with the ΔT . It can be selected from 4 control patterns.

* The availability of 1 and 2 varies depending on the model. Refer to the function table.

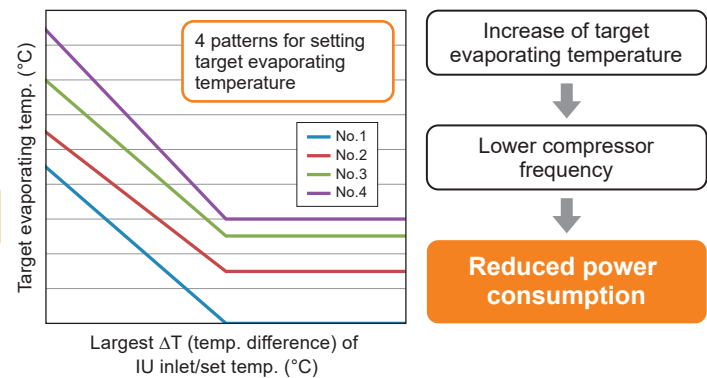
* Changing the evaporating temperature reduces latent heat capacity. Select an appropriate pattern according to the installation conditions.

* The fixed temperature control function and the automatic control shifting function cannot be used simultaneously.

1 Image of evaporating temperature control (Fixed temperature control)



2 Image of evaporating temperature control (Automatic control in 4 patterns)

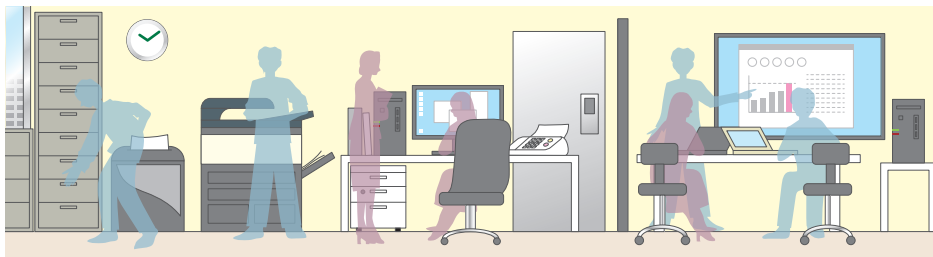


*1 To change the evaporating temperature setting, the setting of the dip switch on the outdoor unit needs to be changed.

*2 When the difference between the indoor unit air-intake temperature and the actual temperature exceeds 1°C, the evaporating temperature based on this difference is constant.

Suitable situations

- Spaces with constant high temperatures from heat sources such as OA equipment
- During low load times when air conditioners are used for cooling (such as during the morning)

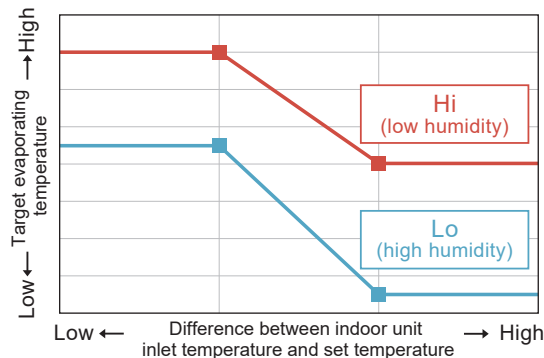


High SHF **High sensible heat operation (during cooling)**

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

Evaporating temperature is controlled according to room temperature and humidity.

- Image of evaporating temperature control during high sensible heat operation in full cooling mode

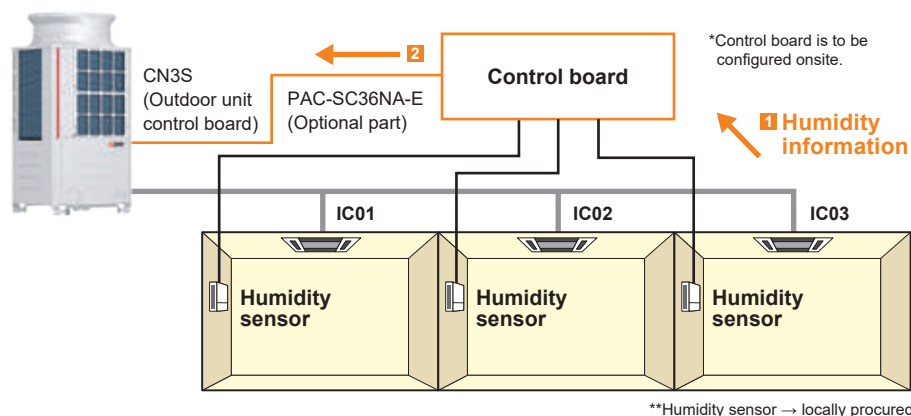


In high sensible heat operation mode, air conditioners consume less energy, thereby realizing cost savings.

With the installation of a locally-procured humidity sensor, the evaporating temperature of the outdoor unit can be controlled optimally as shown below according to the difference between the indoor unit inlet temperature and set temperature.

A wide range of temperature settings is available, from a low evaporating temperature close to normal operation temperature to a high evaporating temperature to realize energy savings.

- Image of installation of locally-procured humidity sensors



- Humidity information is sent to the control board.
- The control board judges the humidity information and sends a HIGH/LOW signal to the outdoor unit through CN3S. The outdoor unit shifts the evaporating temperature depending on the information from the control board.

- Temperature and humidity conditions

	Comfort level in room	Zone	Status of outdoor unit	Evaporating temperature control
Comfortable temperature and humidity High sensible heat operation	Comfortable	Humidity Temperature Comfortable zone	Comfortable and energy-saving operation even at low compressor rotating speed	Target evaporating temperature Low → High Difference between indoor unit inlet temperature and set temperature Hi Lo Temperature of indoor unit refrigerant is kept high.
High humidity	A little humid	Humidity Temperature Comfortable zone	Compressor rotates at medium speed to reduce humidity	Target evaporating temperature Low → High Difference between indoor unit inlet temperature and set temperature Hi Lo Temperature of indoor unit refrigerant is slightly reduced.
High temperature and humidity	Uncomfortable	Humidity Temperature Comfortable zone	Compressor rotates at high speed to reduce temperature and humidity	Target evaporating temperature Low → High Difference between indoor unit inlet temperature and set temperature Hi Lo Temperature of indoor unit refrigerant is greatly reduced.

Demand control

Demand control

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

This function reduces the capacity of the outdoor/heat source unit by way of the external input to the outdoor unit.

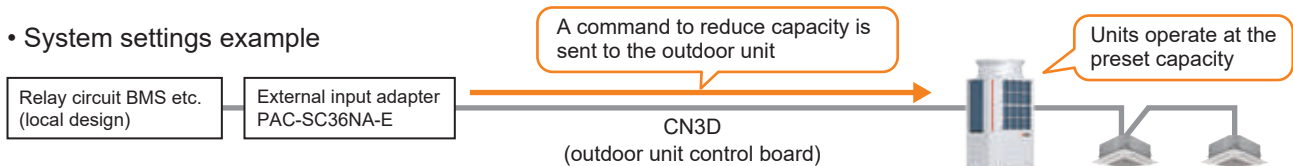
The capacity of the outdoor unit can be reduced in steps, with patterns ranging from 2 to 12 control steps depending on the system. The number of steps that can be set and the corresponding capacity are shown below.

- 2 steps (0-100%) • 4 steps (0-50-75-100%) • 8 steps (0-25-38-50-63-75-88-100%)
- 12 steps (0-17-25-34-42-50-59-67-75-84-92-100%)

Possible usage

When power consumption is centrally-controlled within a building, the system can be made to operate in capacity-save mode by receiving external signals.

• System settings example



Cont. heating

Continuous heating operation

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P

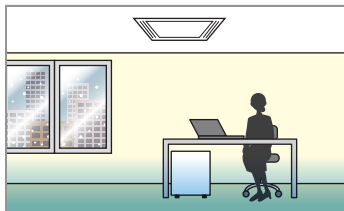
Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting without stopping the heating operation.

Reducing the stoppage time of the heating operation suppresses drop in room temperature.

Use the dip switch on the outdoor unit to switch between the continuous heating operation method and conventional defrosting method.

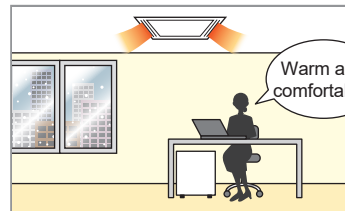
* Heating capacity drops during continuous heating operation.

Conventional defrosting operation



Heating is stopped during the defrosting operation, so room temperature drops.

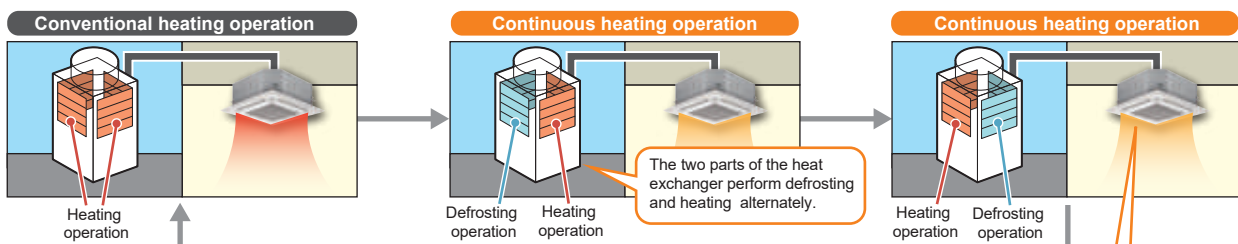
Continuous heating operation



You can enjoy a comfortable environment that is continuously heated.

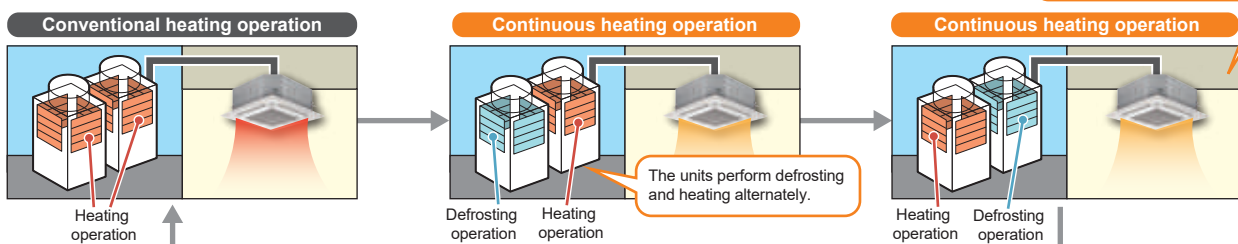
• Image of continuous heating operation (single unit)

The heat exchanger of the outdoor unit is divided into two parts. Even when defrosting is necessary, one part of the heat exchanger continues the heating operation.



• Image of continuous heating operation (combination)

With the combination model, units perform defrosting and heating alternately. While one unit is performing defrosting, the other continues heating.



Lineup & Functions

Y-Series

R2-Series

ZUBADAN-Series

S-Series

BC Controllers

Ceiling cassette type

Ceiling concealed type

Ceiling suspended type

Wall-mounted type

Floor standing type

Functions

LOSSNAY System

Remote Controller

Hot Water Solution



Selectable external static pressure of the outdoor unit

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

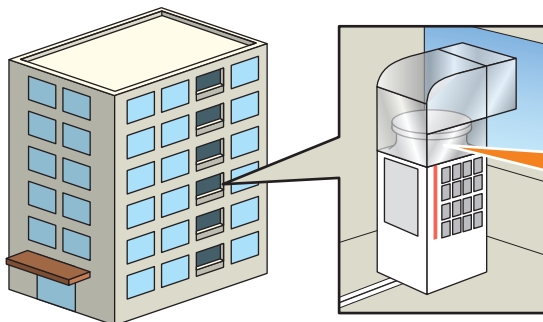
The static pressure specification for the outdoor unit can be selected (0, 30, 60, or 80 Pa).

This facilitates installation of the unit on each floor of a high-rise building or on balconies.

* The static pressure that can be set varies depending on the model.

* Noise level and power consumption vary depending on the static pressure setting.

* For details of the installation restrictions, refer to the DATABOOK.



Long exhaust hoods can be connected.
This facilitates installation of the unit on each floor of a high-rise building or on balconies.

**Maximum external static pressure
80 Pa (local setting)**

* PUHY-M/P-Y(S)NW-A2,
PURY-M/P-Y(S)NW-A2,
PUHY-EP-Y(S)NW-A1,
PURY-EP-Y(S)NW-A1



Operation at high outside temperatures

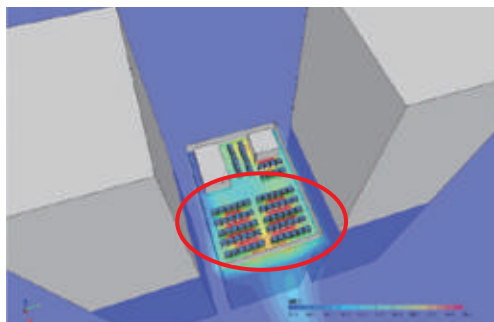
Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

In built-up areas where the passage of air is blocked, the warm air that is discharged from the outdoor units may cause high temperatures around the units. YNW has an expanded guaranteed operation range of up to 52°C [125°F], so it can be used reliably even if the outdoor air temperature rises abnormally during the hot summer daytime.

Example of flow analysis

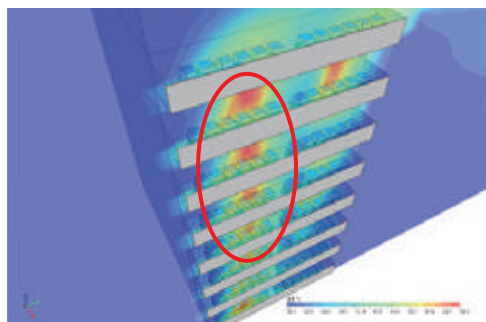
Conditions: Outdoor air temperature = 35°C (DB), Room temperature = 27°C (DB)

Built-up area with buildings and outdoor units



If the passage of air is blocked in a built-up area, the high temperature air discharged from the outdoor units may linger around the units.

Installation on each floor a high-rise building



When the outdoor units are installed on the balconies, the high temperature air discharged from the units may be trapped in the balcony.

Maintenance functions



Rotation control

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

With the combination model, the outdoor/heat source units operate alternately. This reduces operating load and leads to a longer service life.



Emergency operation mode

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

With combination model, if one outdoor unit is experiencing a problem, the other outdoor units temporary performs emergency operation. This mode can be easily set via remote controller.

*Not available for single outdoor unit system.



Rest assured in case of unit failure



Emergency operation is possible

Emergency operation can be performed easily with a local remote controller.



Pump down function

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

This function collects the refrigerant that remains in the indoor unit and the outdoor/heat source unit piping when the refrigerant piping needs to be removed, such as when the air conditioner is relocated.

This function can also be used to stop the operation of the indoor unit and return the refrigerant to the outdoor/heat source unit in the event that a refrigerant leak is detected.

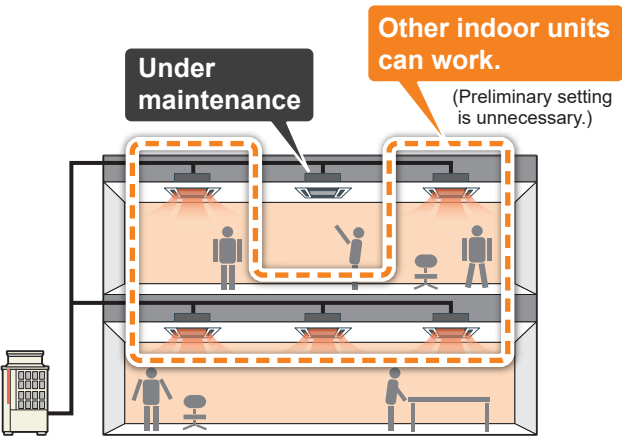
* To detect a refrigerant leak, a circuit that includes a refrigerant leak detection sensor must be designed and prepared on site.



Individual LEV control

Y-Series EM, EP R2-Series EM, EP ZUBADAN
Y-Series M, P R2-Series M, P

Even if one of the indoor units stops for repair, the LEV of the indoor unit can be closed so that the other indoor units can continue to operate. (No preliminary setting is necessary.)

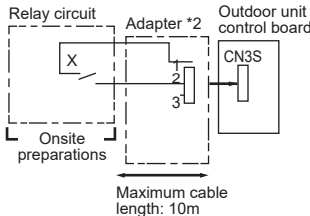


Snow sensor setting

Y-Series EM, EP R2-Series EM, EP ZUBADAN
Y-Series M, P R2-Series M, P

When a snow buildup signal is received from the snow sensor (procured locally), or when ambient temperature drops below 5°C (detected with TH7), the outdoor unit is automatically switched to ventilation operation. This activates the outdoor unit fan to prevent snow from building up on the unit.

- Snow sensor setting example
Snow sensor (CN3S)



X: Relay Contact rating voltage $\geq 15\text{VDC}$
 Contact rating current $\geq 0.1\text{A}$
 Minimum applicable load $\geq 1\text{mA at DC}$

*2. Optional part: PAC-SC36NA-E or locally procured product
Snow sensor: The outdoor fan runs when X is closed in stop mode.



Maintenance data retrieval via USB

Y-Series EM, EP Y-Series M, P R2-Series EM, EP R2-Series M, P ZUBADAN

Operation data was retrieved from conventional models using the maintenance tool. On the latest model, the data can be retrieved quickly via USB*1. It is unnecessary to carry the personal computer in which the maintenance tool has been installed, reducing field operation time and improving convenience. Software can be rewritten via USB*2.

*1 In the case of OC-IC maximum configuration

*2 USB memory devices conforming to USB2.0 can be used.

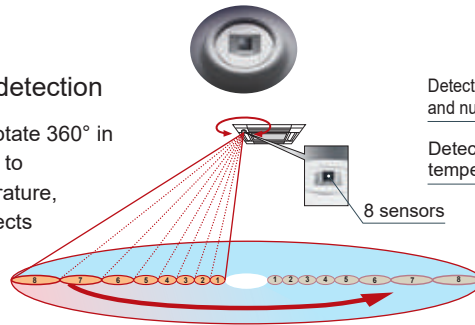
i-see Sensor

i-see Sensor 3D i-see Sensor

PLFY EM PLFY FM
Optional Optional

• Highly accurate people detection

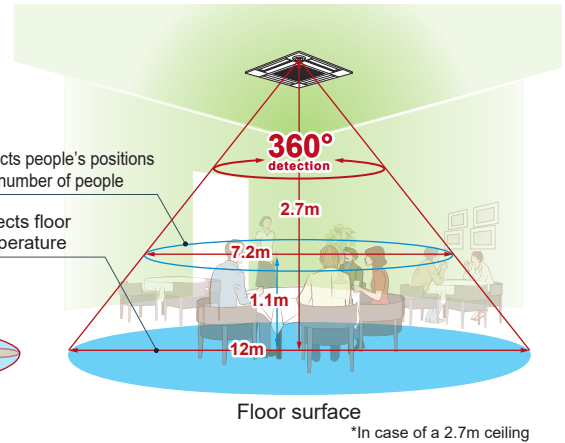
A total of eight sensors fully rotate 360° in 3-minute intervals. In addition to detecting human body temperature, an original algorithm also detects people's positions and the number of people.



Detects people's positions and number of people

Detects floor temperature

8 sensors



Floor surface

*In case of a 2.7m ceiling

• Detects number of people

Room occupancy energy saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time to save air-conditioning power. Air-conditioning power equivalent to 1°C is saved during both cooling and heating operations at an occupancy rate of approximately 30%. The temperature is controlled according to the number of people.

Room occupancy energy saving mode



1°C power savings

No occupancy energy saving mode

When 3D i-see Sensor detects no one in the room, the system is switched to a preset power-saving mode. If the room remains unoccupied for more than 60 minutes, air-conditioning power equivalent to 2°C is saved during both cooling and heating operations. This contributes to preventing waste in terms of heating and cooling.

No occupancy energy saving mode

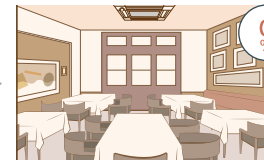


2°C power savings

No occupancy Auto-OFF mode

When the room remains unoccupied for a preset length of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10 minutes, from 60 to 180 minutes.

No occupancy Auto-OFF mode



Auto-OFF

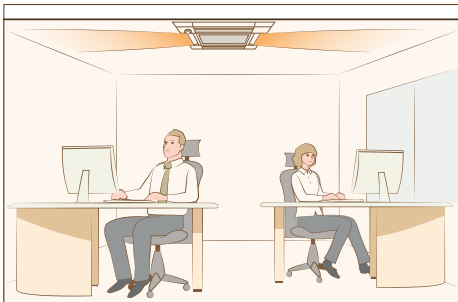
*No occupancy Auto-OFF mode is not available when multiple indoor units are operated by a single MA remote controller.

*PAR-41MAA is required for each setting.

• Detects people's positions

Direct/indirect settings*

Some people do not like the feeling of wind, while others want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, each vane can be set to block or not block the wind.



*PAR-41MAA or PAR-SL101A-E is required for each setting.

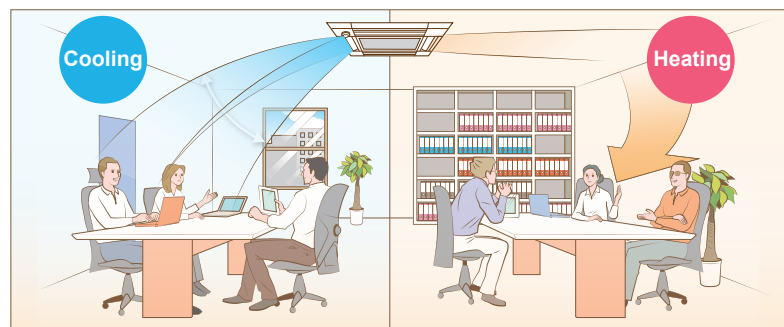
Seasonal airflow*

<When cooling>

Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When the pre-set temperature is reached, the air conditioner switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

<When heating>

The air conditioner automatically switches between circulation and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When the pre-set temperature is reached, the air conditioner switches from heating to circulation and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



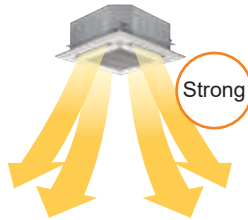
*PAR-41MAA is required for each setting.

Air distribution

Automatic air-speed adjustment

PLFY EM PLFY FM PEFY MS PEFY MA PEFY MHS PCFY KM PKFY LM PFFY CM

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment.



At the start of the heating/cooling operation, airflow is set to high speed to quickly heat/cool the room.



When the room temperature reaches the desired setting, the airflow speed is automatically decreased for stable and comfortable heating/cooling operation.



















The unit operates at high speed at startup to rapidly heat or cool the space, then automatically slows down once the target temperature has been reached. It is more economical than starting up the unit at low speed and keeping it operating at low speed.

Air speed is automatically reduced when the target temperature has been reached, saving on energy costs. There is no more need to remember to turn down the setting.

Fan speed setting

PLFY EM PLFY FM PLFY LMD PMFY BM PEFY MR PEFY MS PEFY MA PEFY MHS PEFY MHS-F
PCFY KM PKFY LM PKFY KM PFFY KM PFFY LEM PFFY CM

A maximum of four fan speeds are available (Low-Middle 2-Middle 1-High). In addition to the four fan speeds, the Auto mode is available on some models. Various combinations of fan speed and vane angle setting are available to create the optimum airflow for any given space.

Fan speed	Remote controller display				
	Auto	Low	Middle 2	Middle 1	High
4 levels	Auto  /  *1				
3 levels	Auto  /  *1			 (Middle)	
2 levels	Auto  /  *1				

*1 On PAR-FL32MA

*The actual fan speed will differ from the fan speed displayed on the LCD when one of the following conditions is met.

- While "Standby" or "Defrost" is displayed
- Immediately after heating operation (during standby for switching the operation mode)
- When the room temperature is higher than the set temperature during the heating mode
- During the Dry mode

Vane setting

PLFY EM PLFY FM PLFY LMD PMFY BM PCFY KM PKFY LM PKFY KM PFFY KM

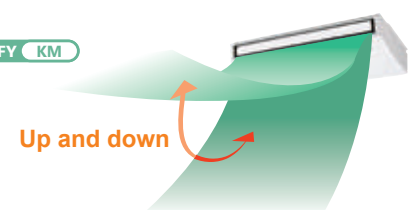
Vertical airflow setting is selectable from a maximum of seven settings (a maximum of five fixed angles, swing, and Auto). Using different combinations of vertical airflow setting and fan speed, airflow direction and distance can be fine-tuned to deliver optimum airflow to all corners of the room.

When set to Auto, the vane is directed horizontally in the Cooling, Dry, and Fan modes, and directed downward in the Heating mode. The available vane angle positions will depend on the remote controller to be used. Refer to the instruction manual of the relevant remote controller for details.

Swing

PLFY EM PLFY FM PLFY LMD PMFY BM PCFY KM PKFY LM PKFY KM PFFY KM

The air outlet vane swings up and down so that the airflow is spread evenly throughout the room.



*The actual air direction will differ from the air direction displayed on the LCD when one of the following conditions is met.

- While "Standby" or "Defrost" is displayed
- When the room temperature is higher than the set temperature during the heating mode
- Immediately after heating operation (during standby for switching the operation mode)

Convenience



Dry operation



The Dry mode is a dehumidifying mode in which the unit intermittently operates in a mild cooling mode.

During seasons when operating the unit in the Cooling mode tends to overcool the room, such as during the rainy season, the Dry mode helps keep the room at a comfortable temperature by reducing the room temperature by a few degrees centigrade.

*The unit cannot be operated in the Dry mode when the room temperature is below 18°C.

*The fan operates at low speed in the Dry mode. (When the user tries to change the fan speed, the fan speed display on the remote controller will change, but the selection will not actually be reflected.)



Dual set point



Normally, the desired room temperature is set to the same value for cooling and heating. However, the dual set point function allows different temperatures to be set for cooling and heating. When operation switches from cooling to heating or vice versa, the preset temperature changes accordingly.



External static pressure setting



External static pressure settings are selectable in fine steps according to the inlet/outlet directions and duct length.

*External static pressure setting is set with the DipSW on the indoor unit. Contact your local distributor for details.



Automatic restoration after power failure



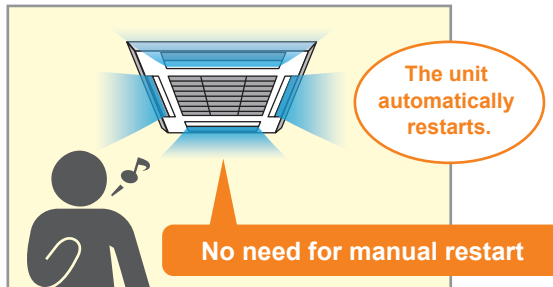
Upon restoration of power, the unit will automatically resume operation in the mode it was in before the power failure (in approximately 5 minutes after restoration of power).

*External static pressure setting is set with the DipSW on the indoor unit. Contact your local distributor for details.

Power failure



Power restoration



High efficiency filter



The high efficiency filter has a much finer mesh compared to standard filters, and is capable of capturing minute particulates floating in the air that were not previously caught.

PLFY EM

PEFY MS

PEFY MA

PKFY LM

PKFY KM

Optional

Optional

Optional

Optional

Optional

The optional Plasma Quad Connect can be installed on the indoor unit's air inlet side. It applies a high voltage to the electrode to generate plasma which effectively removes airborne particles.

Installability and serviceability

Drain pump

PLFY EM

PLFY FM

PLFY LMD

PMFY BM

PEFY MS

PEFY MA

Optional

Optional

Optional

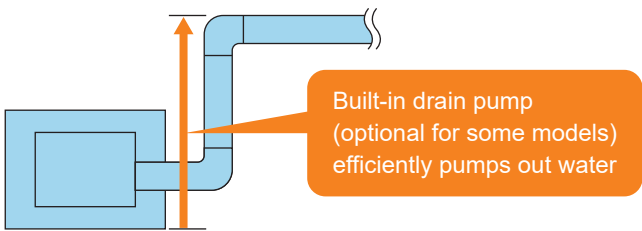
Optional

Optional

Optional

*1. Optional for PEFY-P-VMS1L-E
*2. VMA only

A built-in drain pump (optional for some models) allows the drain piping to be raised.



Filter cleaning sign

PLFY EM

PLFY FM

PLFY LMD

PMFY BM

PEFY MR

PEFY MS

PEFY MA

PEFY MHS

PEFY MHS-F

Optional

Optional

Optional

Optional

Optional

Optional

Optional

Optional

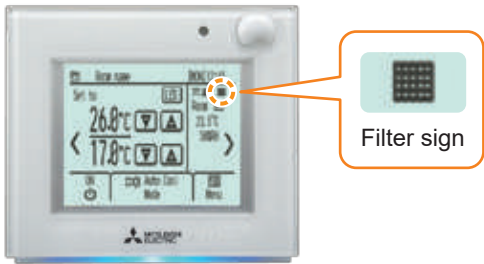
Optional

Air conditioner operating time is monitored, and the user is notified when filter maintenance is necessary. The filter icon is scheduled to appear on the remote controller after a certain number of operation hours.

Factory setting: OFF

*External static pressure setting is set with the DipSW on the indoor unit. Contact your local distributor for details.

- Filter sign on the controller display








Lineup & Functions
Y-Series
R2-Series
ZUBADAN-Series
S-Series
BC Controllers
Ceiling cassette type
Ceiling concealed type
Ceiling suspended type
Wall-mounted type
Floor standing type
Functions
LOSSNAY System
Remote Controller
Hot Water Solution

LOSSNAY System



• LOSSNAY lineup

Type	Core	Model	Airflow	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1600 CMH	2000 CMH	2500 CMH
LOSSNAY	ERV	LGH-RVX3 Series	Single decker 	●	●	●	●	●	●	●			
			Double decker 								●	●	
	ERV	LGH-RVXT3 Series									●	●	●
	HRV	LGH-RVS Series					●		●	●			
Fresh Master	ERV	GUF Series					●			●			

*ERV = Energy recovery ventilator *HRV = Heat recovery ventilator

LGH-RVX3 Series

A commercially oriented system that can be used to deliver high performance and functions virtually anywhere.

LGH-RVXT3 Series

Thin, large airflow models of the LGH Series that deliver high performance and functions.

LGH-RVS Series

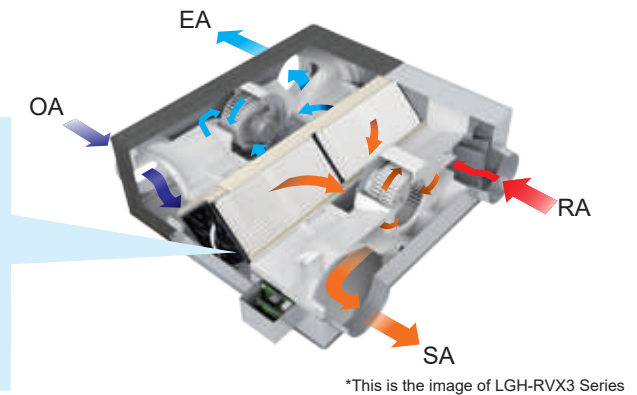
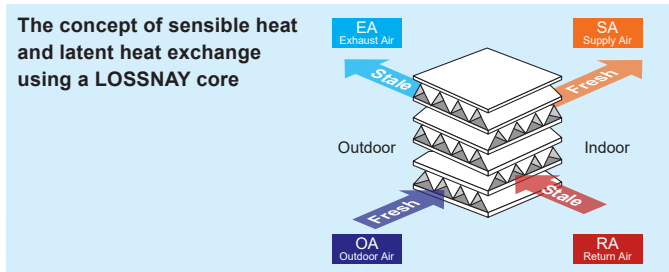
Sensible heat models of the LGH Series that can be installed for sanitary area.

GUF Series

Heat recovery units with a heating and cooling system that uses the CITY MULTI outdoor unit as a heat source.

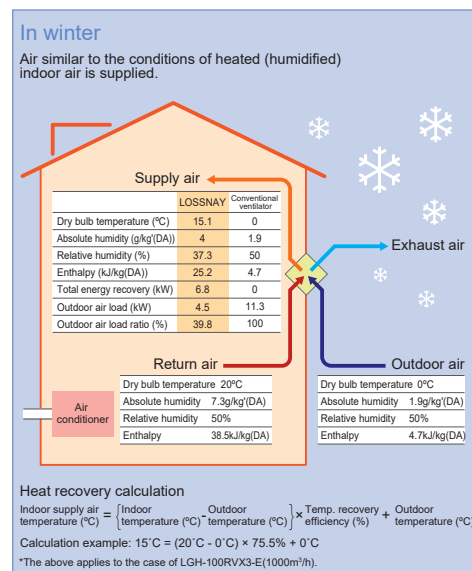
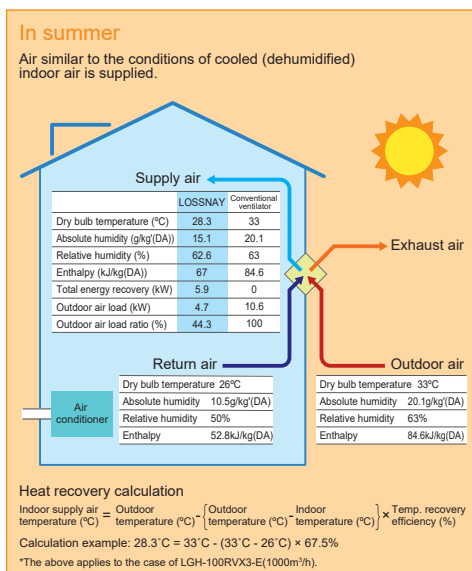
What is LOSSNAY

LOSSNAY is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.



Energy saving effects of LOSSNAY

• Ventilation with maximized comfort

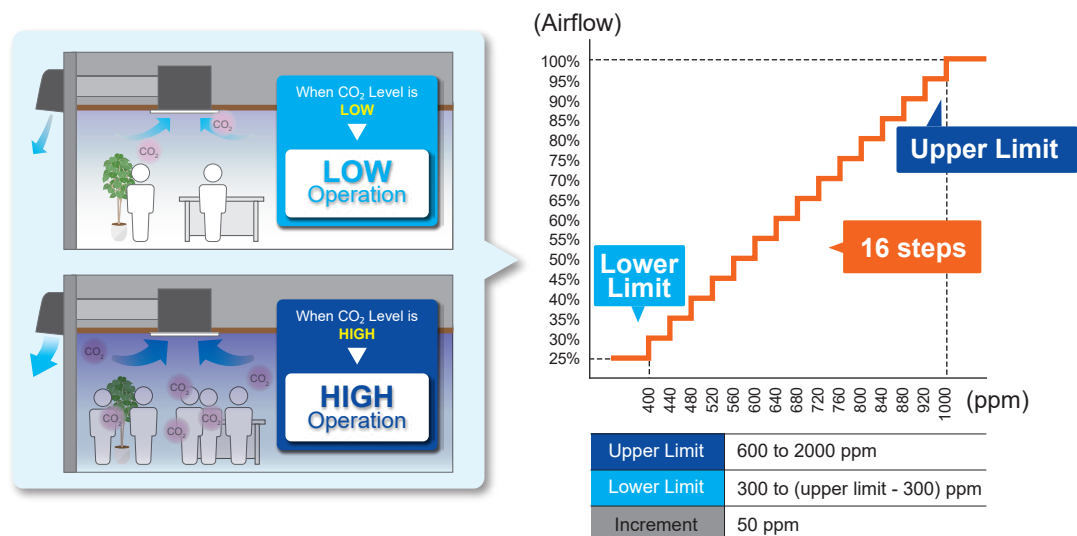


New features of RVX3, RVXT3 and RVS Series

Airflow control by CO₂ sensor

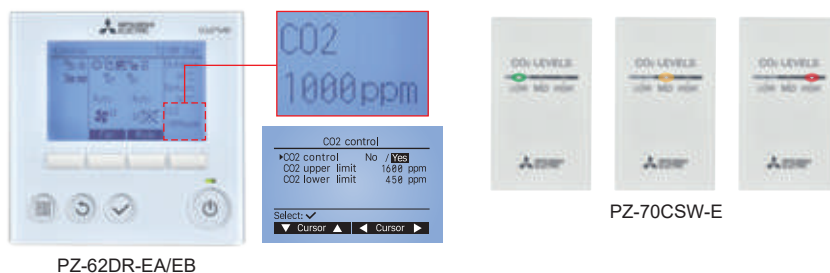
- 16 Steps of Automatic Airflow Control by CO₂ Level

The CO₂ sensor controls airflow by 16 steps depending on the CO₂ level in the room. This saves energy by over-ventilation while maintaining high indoor air quality.



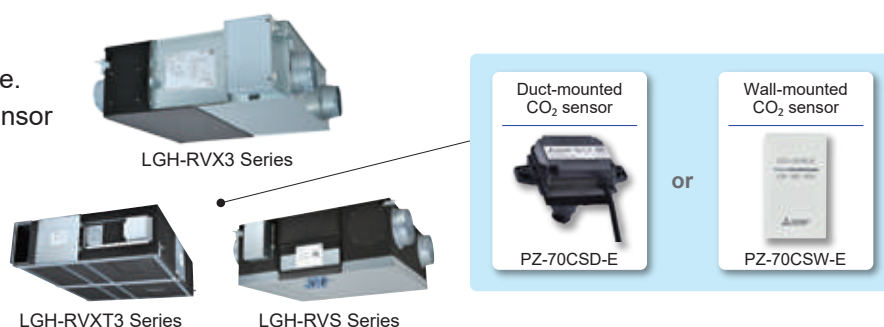
- 2 Ways to Monitor CO₂ Level

CO₂ Level can be monitored by LOSSNAY Remote Controller or Wall-mounted CO₂ Sensor.



- 2 Types of CO₂ Sensors

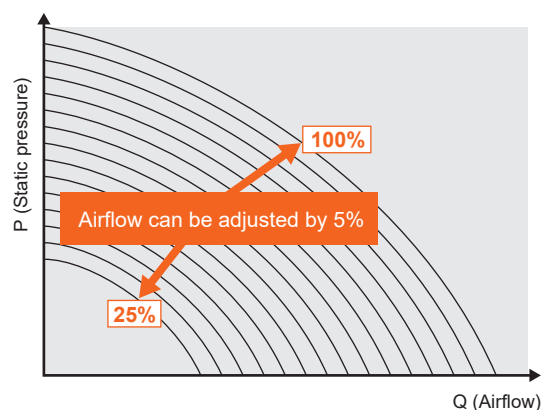
2 types of CO₂ Sensor is available. Power is supplied to both CO₂ sensor from LOSSNAY circuit board.



Flexible Airflow Setting

With the flexible air volume setting, energy will be saved by preventing over-ventilation.

The fan speed of both supply and exhaust air can be flexibly adjusted within the range between 25% to 100% offering sufficient air volume. Airflow can be adjusted by 5% increments.



Vertical and Horizontal Installation (RVX3 Series)

The RVX3 Series can be installed vertically for greater flexibility of installing locations. By using optional parts, it can be installed in places such as the machine room where only vertical installation is possible.

Horizontal Installation

Vertical Installation **NEW!**

Vertical Installation Plates

	EA side plate	RA side plate
Model name	LOSSNAY	
PZ-1VS-E	LGH-15RVX3-E	
	LGH-25RVX3-E	
	LGH-35RVX3-E	
	LGH-50RVX3-E	
PZ-2VS-E	LGH-65RVX3-E	
	LGH-80RVX3-E	
	LGH-100RVX3-E	

*Not applicable to LGH-160RVX3-E and LGH-200RVX3-E.
*Please follow the installation manual when installing the RVX3 Series vertically.

Large airflow as one unit: Leader-follower function (RVXT3 Series)

PZ-62DR-EA/EB

- Multiple LOSSNAY units can be operated in synchronization as a single large airflow unit.
- A maximum of four units can be connected. In the case of four LGH-250RVXT3-E units, total air volume is approx. 10,000 m³/h.*

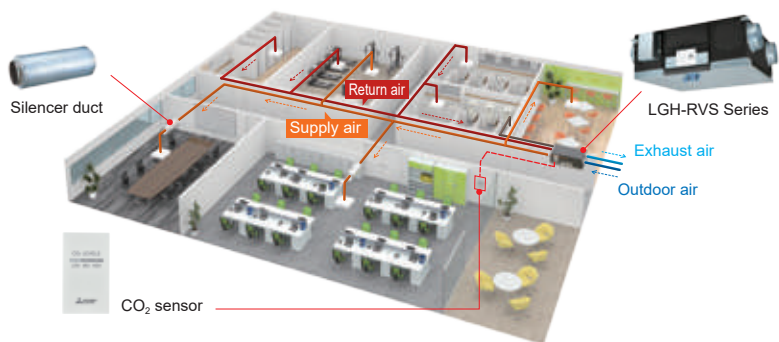
* Actual airflow depends on system design and site condition.
• Only same model can be in one group.
• PZ-62DR-EA/EB connection is required for this control.
• The maximum number of LOSSNAY units that can be connected in one group is four (one leader unit and three follower units).

Features of RVS and GUF Series

Sensible Heat model (RVS Series)

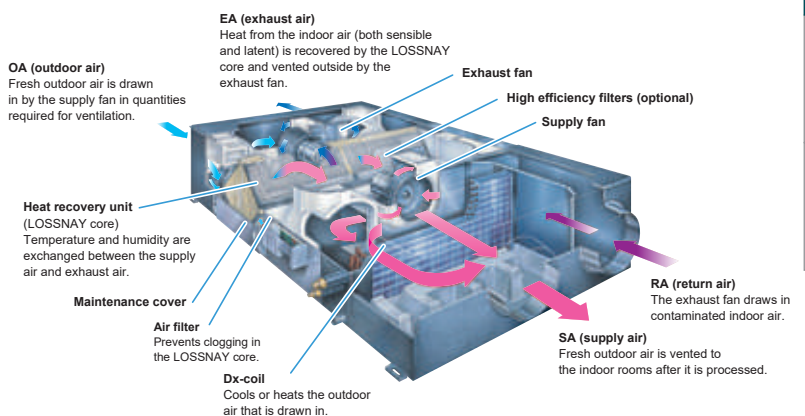
Offering the system solution for all area ventilation. Sensible heat exchanger allows ventilation including the sanitary area.

- Plug and play CO₂ sensor control including power
- Digital commissioning of fan speed increments
- Built-in condensate drainage traps



LOSSNAY with Dx-coil unit (GUF Series)

The GUF Series consists of a heat recovery unit (LOSSNAY core) and a DX coil. Along with LOSSNAY ventilation, it can be used as a main air conditioner when the load is light, and as a supplemental air conditioner in high load.



Lineup & Functions
Y-Series
R2-Series
ZUBADAN-Series
S-Series
BC Controllers
Ceiling cassette type
Ceiling concealed type
Ceiling suspended type
Wall-mounted type
Floor standing type
Functions
LOSSNAY System
Remote Controller
Hot Water Solution

RVX3 Series

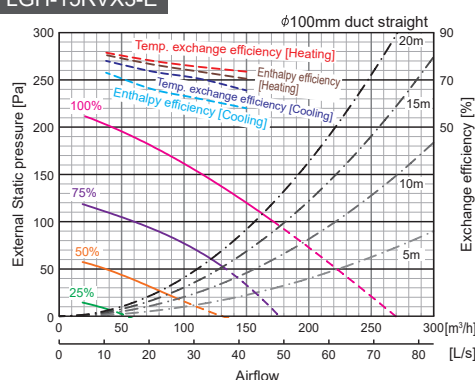
Model		LGH-15RVX3-E				LGH-25RVX3-E				LGH-35RVX3-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Fan speed		4	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ^{*1}		55	30	15	10	75	42	21	11	120	61	29	15
Airflow ^{*1}	(m³/h)	150	113	75	38	250	188	125	63	350	263	175	88
	(L/s)	42	31	21	10	69	52	35	17	97	73	49	24
Specific fan power [W/(L/s)] ^{*1}		1.32	0.96	0.72	0.96	1.08	0.81	0.60	0.63	1.23	0.84	0.60	0.62
External static pressure (Pa) ^{*1}		120	68	30	8	120	68	30	8	160	90	40	10
Temperature exchange efficiency (%) ^{*1}	Heating	73.5	75.5	78.0	81.5	75.5	78.5	81.0	88.0	75.0	77.0	79.0	82.0
	Cooling	65.5	70.5	73.5	78.0	70.5	76.5	79.0	85.0	66.5	71.0	74.0	79.0
Enthalpy exchange efficiency (%) ^{*1}	Heating	70.5	73.5	76.5	80.5	69.0	72.0	75.5	84.0	72.0	74.5	77.5	80.0
	Cooling	58.0	62.0	66.0	73.0	59.0	63.5	68.0	75.0	60.0	64.5	68.5	74.5
Noise (dB) ^{*2}		27.0	22.0	18.0	17.0	30.5	25.0	19.5	17.0	30.5	24.5	19.0	17.0
Exhaust air transfer ratio (%) ^{*3}		5				5				5			
Weight (kg)		20				22				30			
Maximum input power (W)		74				119				196			

*1: Input power, efficiency, and noise are based on rated air volume, 230V/50Hz and horizontal installation. *1: Measured according to ISO 16494-1: 2022

*2: A-weighted sound pressure level measured at 1.5m under the center of the unit in an anechoic chamber. *3: Measured according to EN308: 2022 / FS3

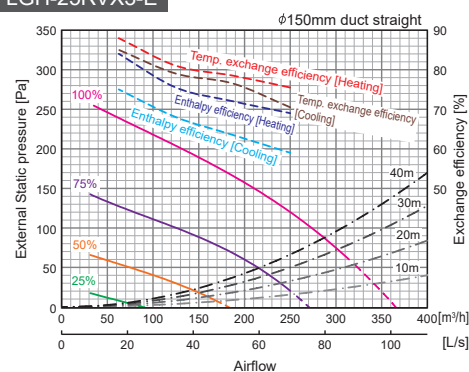
Characteristic curve

LGH-15RVX3-E



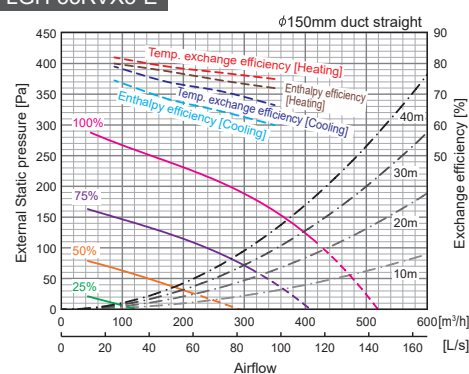
*The dotted lines of the fan curves are reference values.

LGH-25RVX3-E



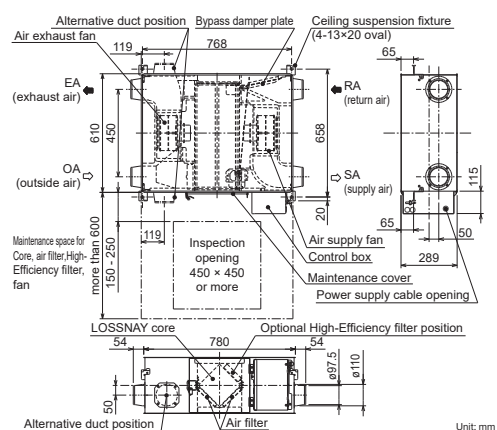
*The dotted lines of the fan curves are reference values.

LGH-35RVX3-E

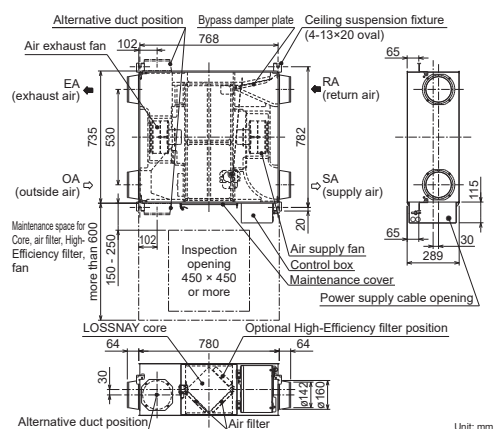


*The dotted lines of the fan curves are reference values.

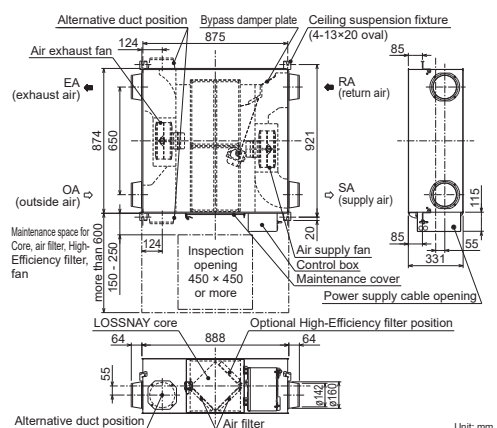
Outline drawings



Unit: mm



Unit: mm



Unit: mm

*Specifications may be subject to change without notice.

Model	LGH-50RVX3-E				LGH-65RVX3-E				LGH-80RVX3-E			
Electrical power supply	220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Fan speed	4	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting	100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ^{*1}	185	81	34	15	245	120	51	20	343	160	64	23
Airflow ^{*1}	(m ³ /h)	500	375	250	125	650	488	325	163	800	600	400
	(L/s)	139	104	69	35	181	135	90	45	222	167	111
Specific fan power [W/(L/s)] ^{*1}		1.33	0.78	0.49	0.43	1.36	0.89	0.56	0.44	1.54	0.96	0.58
External static pressure (Pa) ^{*1}		150	85	38	10	150	85	38	10	170	96	43
Temperature exchange efficiency (%) ^{*2}	Heating	70.5	71.5	73.5	75.0	72.5	75.0	78.5	82.0	75.0	76.5	78.0
	Cooling	63.5	67.0	71.0	73.0	65.0	70.0	74.5	80.0	65.0	70.0	75.5
Enthalpy exchange efficiency (%) ^{*2}	Heating	68.5	69.5	72.0	73.0	69.5	72.0	76.5	80.0	62.0	65.0	70.5
	Cooling	53.5	58.0	63.0	68.0	55.5	60.0	66.5	74.0	54.5	58.5	65.0
Noise (dB) ^{*3}		35.0	27.0	21.0	17.0	37.5	31.5	24.0	17.5	39.0	33.5	25.0
Exhaust air transfer ratio (%) ^{*4}		5				5				5		
Weight (kg)		33				41				47		
Maximum input power (W)		227				360				503		

*Input power, efficiency, and noise are based on rated air volume, 230V/50Hz and horizontal installation.

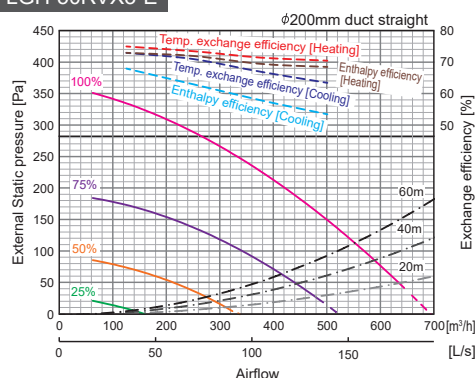
*1 : Measured according to (LGH-50RVX3-E) ISO 16494-1: 2022, (LGH-65/80RVX3-E) EN13053: 2019

*2 : Measured according to (LGH-50RVX3-E) ISO 16494-1: 2022, (LGH-65/80RVX3-E) EN308: 2022

*3 : A-weighted sound pressure level measured at 1.5m under the center of the unit in an anechoic chamber. *4 : Measured according to EN308: 2022 / FS3

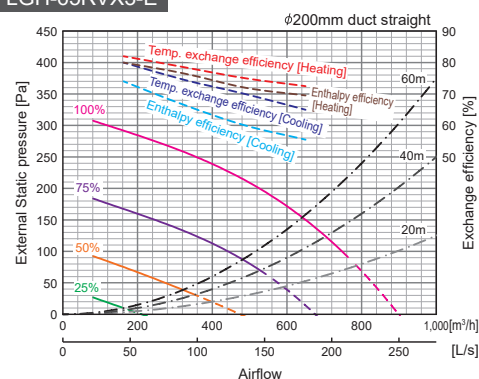
Characteristic curve

LGH-50RVX3-E



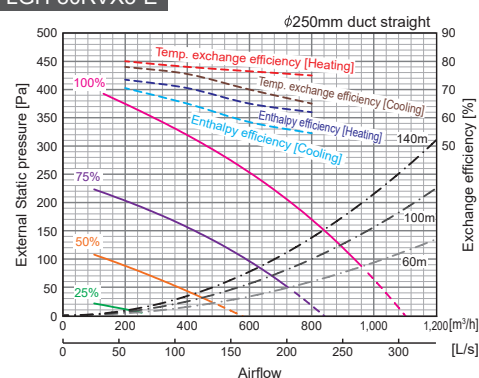
*The dotted lines of the fan curves are reference values.

LGH-65RVX3-E



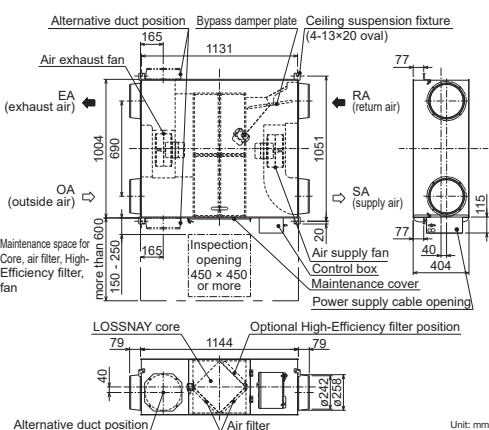
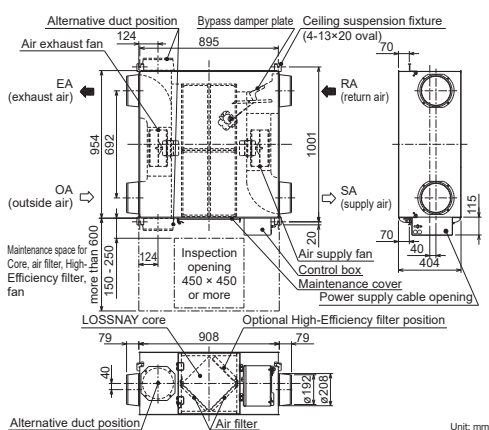
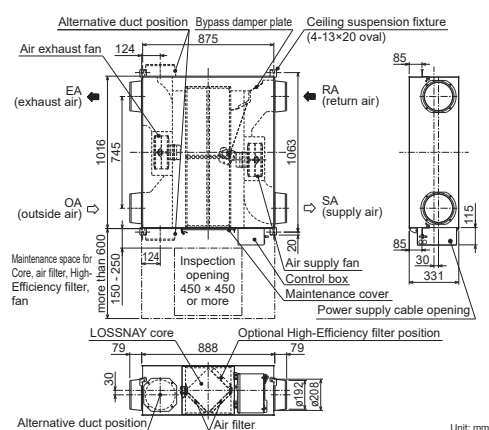
*The dotted lines of the fan curves are reference values.

LGH-80RVX3-E



*The dotted lines of the fan curves are reference values.

Outline drawings



*Specifications may be subject to change without notice.

Model		LGH-100RVX3-E				LGH-160RVX3-E				LGH-200RVX3-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Fan speed		4	3	2	1	4	3	2	1	4	3	2	1
Default Airflow setting		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ^{*1}		438	210	83	27	687	324	128	45	855	416	163	57
Airflow ^{*1}	(m³/h)	1000	750	500	250	1600	1200	800	400	2000	1500	1000	500
	(L/s)	278	208	139	69	444	333	222	111	556	417	278	139
Specific fan power [W/(L/s)] ^{*1}		1.58	1.01	0.60	0.39	1.55	0.97	0.58	0.41	1.54	1.00	0.59	0.41
External static pressure (Pa) ^{*1}		190	107	48	12	170	96	43	11	170	96	43	11
Temperature exchange efficiency (%) ^{*2}	Heating	75.5	77.0	79.5	83.5	75.0	76.5	78.0	80.0	76.5	77.5	79.5	83.5
	Cooling	67.5	72.0	77.0	82.5	65.0	70.0	75.5	78.0	66.5	71.5	76.0	82.5
Enthalpy exchange efficiency (%) ^{*2}	Heating	60.5	63.0	68.5	75.5	62.0	65.0	70.5	73.5	60.5	64.0	67.5	76.0
	Cooling	55.5	61.0	66.0	73.5	54.5	58.5	65.0	70.5	57.0	60.0	65.0	71.0
Noise (dB) ^{*3}		40.0	35.0	27.0	18.5	41.0	35.0	26.0	18.0	41.5	36.0	27.5	18.0
Exhaust air transfer ratio (%) ^{*4}		5				5				5			
Weight (kg)		53				96				108			
Maximum input power (W)		646				798				915			

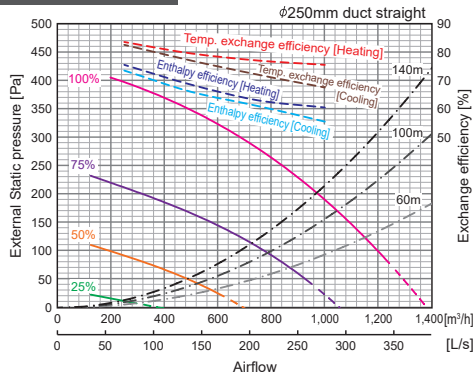
*Input power, efficiency, and noise are based on rated air volume, 230V/50Hz and horizontal installation.

*1 : Measured according to EN13053: 2019 *2 : Measured according to EN308: 2022

*3 : A-weighted sound pressure level measured at 1.5m under the center of the unit in an anechoic chamber. *4 : Measured according to EN308: 2022 / FS3

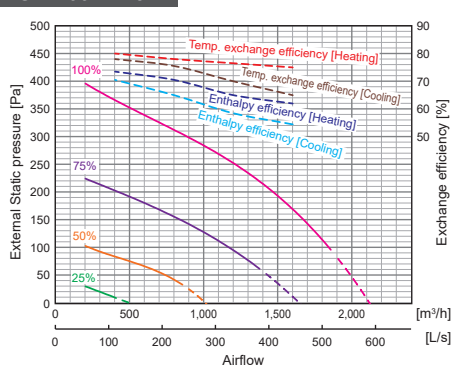
Characteristic curve

LGH-100RVX3-E



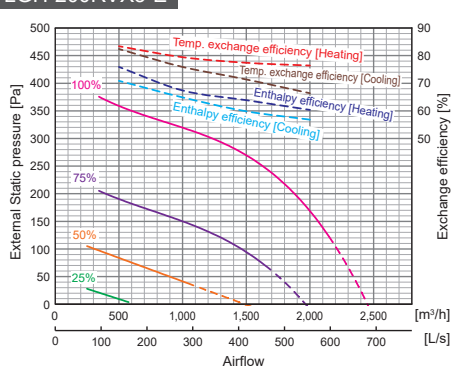
*The dotted lines of the fan curves are reference values.

LGH-160RVX3-E



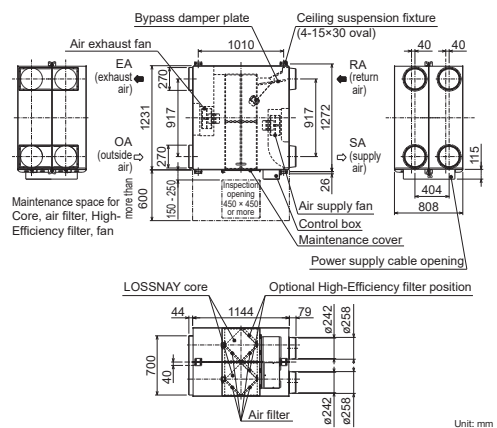
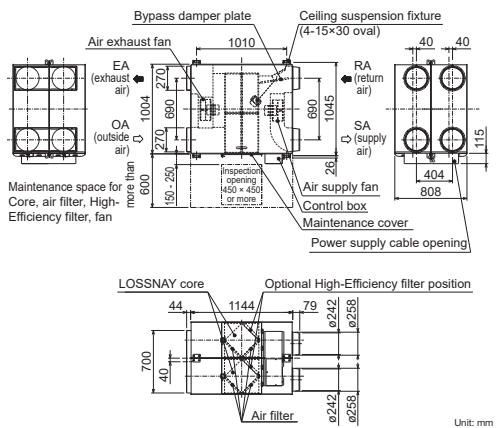
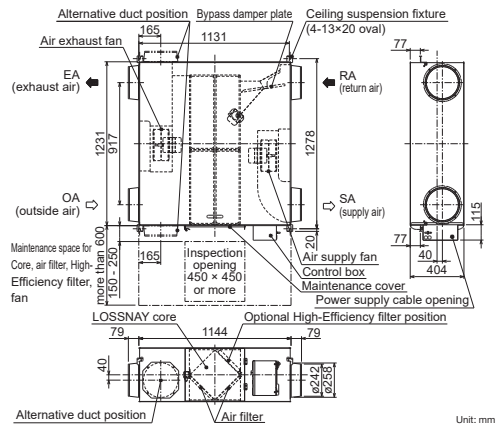
*The dotted lines of the fan curves are reference values.

LGH-200RVX3-E



*The dotted lines of the fan curves are reference values.

Outline drawings



*Specifications may be subject to change without notice.

RVXT3 Series

Model		LGH-160RVXT3-E				LGH-200RVXT3-E				LGH-250RVXT3-E			
Electrical power supply		380-415V/3N~ 50Hz, 380V/3N~ 60Hz				380-415V/3N~ 50Hz, 380V/3N~ 60Hz				380-415V/3N~ 50Hz, 380V/3N~ 60Hz			
Fan speed		4	3	2	1	4	3	2	1	4	3	2	1
Default airflow setting		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Input power (W) ^{*1}	L1-N	0	0	0	0	0	0	0	0	0	0	0	0
	L2-N	354	184	72	23	522	249	96	28	724	348	142	43
	L3-N	354	184	72	23	522	249	96	28	724	348	142	43
	Total	708	368	144	46	1044	498	192	56	1448	696	284	86
Airflow ^{*1}	(m ³ /h)	1600	1200	800	400	2000	1500	1000	500	2500	1875	1250	625
	(L/s)	444	333	222	111	556	417	278	139	694	521	347	174
Specific fan power (W/(L/s)) ^{*1}		1.59	1.10	0.65	0.41	1.88	1.20	0.69	0.40	2.09	1.34	0.82	0.50
External static pressure (Pa) ^{*1}		190	107	48	12	190	107	48	12	190	107	48	12
Temperature exchange efficiency (%) ^{*2}	Heating	82.0	83.0	85.5	88.0	80.0	81.0	83.0	86.0	77.0	78.0	80.0	84.0
	Cooling	70.0	75.0	79.0	83.0	67.5	73.0	78.0	82.0	65.0	70.5	76.5	81.0
Enthalpy exchange efficiency (%) ^{*2}	Heating	80.0	81.0	83.0	85.5	78.5	79.5	81.5	84.5	75.0	76.0	78.0	81.5
	Cooling	61.5	65.5	73.0	78.0	56.5	61.0	67.5	75.0	54.0	59.0	66.0	73.0
Noise (dB) ^{*3}		38.0	33.0	26.0	19.5	40.0	35.0	28.0	21.0	44.0	38.0	31.5	23.0
Exhaust air transfer ratio (%) ^{*4}		5.0				5.0				5.0			
Weight (kg)		172				172				172			
Maximum input power (W) (380-415V 3N~ 50Hz/380V 3N~ 60Hz)	Total	740-720/740				1060-1040/1060				1480-1460/1500			

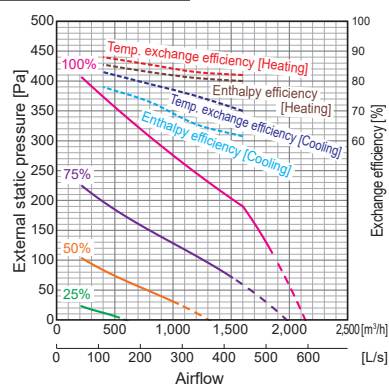
* Input power, efficiency, and noise are based on rated airflow, 400V/50Hz. ** In bypass mode, the maximum airflow is 70% of heat recovery mode. The same applies to the Night-purge function.

*1 : Measured according to EN13053: 2019 *2 : Measured according to EN308: 2022

*3 : A-weighted sound pressure level measured at 1.5m under the center of the unit in an anechoic chamber. *4 : Measured according to EN308: 2022 / 75% fan speed

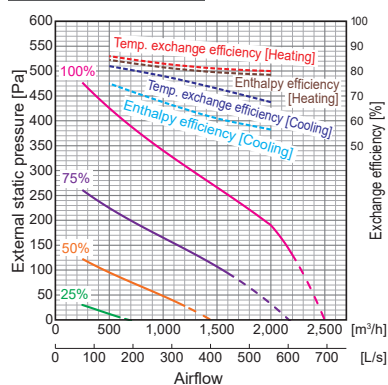
Characteristic curve

LGH-160RVXT3-E



*The dotted lines of the fan curves are reference values.

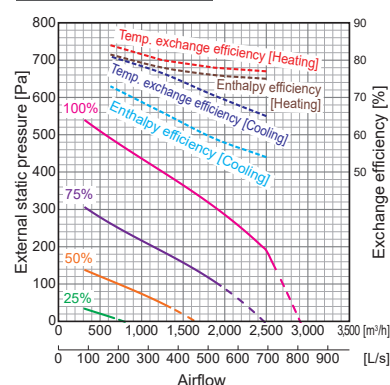
LGH-200RVXT3-E



*The dotted lines of the fan curves are reference values.

*Leader-follower function is not available when external static pressure is more than 460Pa.

LGH-250RVXT3-E



*The dotted lines of the fan curves are reference values.

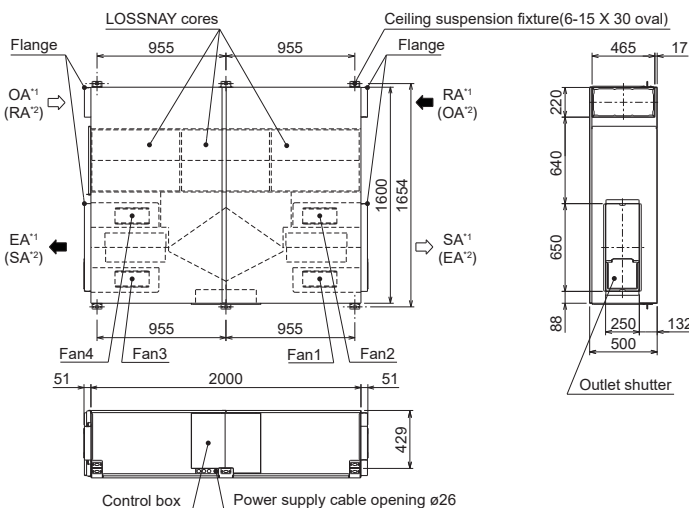
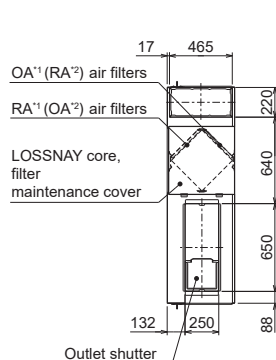
*Leader-follower function is not available when external static pressure is more than 460Pa.

Outline drawings

LGH-160RVXT3-E

LGH-200RVXT3-E

LGH-250RVXT3-E



SA [supply air]
EA [exhaust air outlet]
RA [return air]
OA [outside air intake]
*1 : LR switching is OFF (Factory setting)
*2 : LR switching is ON

Unit (mm)

*Specifications may be subject to change without notice.

Model		LGH-50RVS-E				LGH-80RVS-E				LGH-100RVS-E				
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				
Fan speed		100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%	
Input power (W)		190	110	60	25	325	175	85	32	445	225	100	35	
Airflow		(m³/h)	500	375	250	125	800	600	400	200	1000	750	500	250
		(L/s)	139	104	69	35	222	167	111	56	278	208	139	69
Specific fan power (W/(L/s))		1.37	1.06	0.86	0.72	1.46	1.05	0.77	0.58	1.60	1.08	0.72	0.50	
External static pressure (Pa)		150	84	38	9	170	96	43	11	190	107	48	12	
Temp. exchange efficiency (%)		87.0	89.0	91.0	93.0	82.0	84.0	86.0	90.0	82.0	84.0	86.0	90.0	
Noise (dB)		33.0	27.0	22.0	18.0	36.0	30.0	25.0	18.0	37.0	32.0	24.0	18.0	
Exhaust air transfer ratio (%)		5				5				5				
Weight		55kg (67kg with maximum drain water)				63kg (77kg with maximum drain water)				73kg (89kg with maximum drain water)				
Maximum input power (W) (220-240V 50Hz/220V 60Hz)		Total	361-360/359				622-621/619				691-782/679			

Examples of the absolute humidity 0.0139kg/kg(DA) are 20.7°C 90%RH, 25°C 70%, 30°C 50% etc.

Outline drawings

*The dotted lines of the fan curves are reference values.

*The dotted lines of the fan curves are reference values.

*The dotted lines of the fan curves are reference values.



*Specifications may be subject to change without notice.

GUF Series

Model		GUF-50RD4				GUF-100RD4			
Electrical power supply		220-240V/50Hz				220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low	High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70	2.20	1.73	2.25	1.77
Input power (W)		235-265	150-165	235-265	150-165	480-505	370-395	490-515	385-410
Airflow	(m³/h)	500	400	500	400	1000	800	1000	800
	(L/s)	139	111	139	111	278	222	278	222
External static pressure (Pa)		140	90	140	90	140	90	140	90
Temperature exchange efficiency (%)		77.5	80	—	—	79.5	81.5	—	—
Enthalpy exchange efficiency (%)	Heating	68	71	—	—	71	74	—	—
	Cooling	65	67	—	—	69	71	—	—
Cooling capacity (kW)		5.57 (1.94)				11.44 (4.12)			
Heating capacity (kW)		6.21 (2.04)				12.56 (4.26)			
Capacity equivalent to the indoor unit		P32				P63			
Humidifier	Humidifying	—				—			
	Humidifying capacity (kg/h)	—				—			
	Water supply pressure	—				—			
Noise (dB) (Measured at 1.5m under the center of the unit)		33.5-34.5	29.5-30.5	35-36	29.5-30.5	38-39	34-35	38-39	35-36
Weight (kg)		48				82			

*Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling: Indoor: 27°C DB/19°C WB Outdoor: 35°C DB/24°C WB

Heating: Indoor: 20°C DB/13.8°C WB Outdoor: 7°C DB/6°C WB

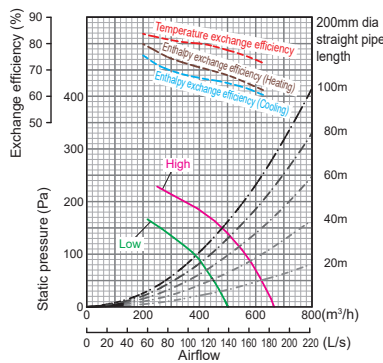
*The figures in () indicates heat recovering capacity of heat exchange core.

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

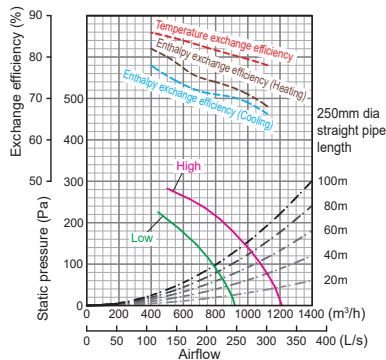
*When the total capacity of indoor units connected to 1 outdoor unit (PUH or PUY) exceeds the capacity of the outdoor unit, the total capacity of GUF needs to be 30% and less of the connected outdoor unit capacity.

Characteristic curve

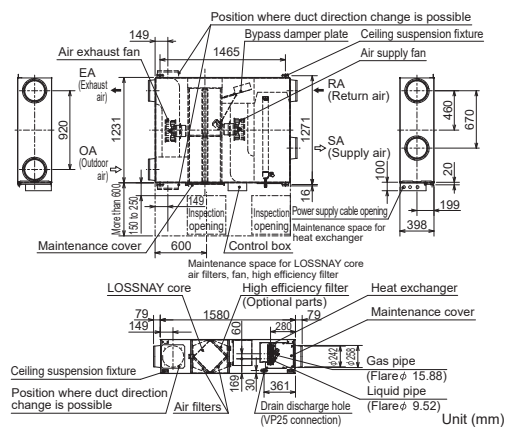
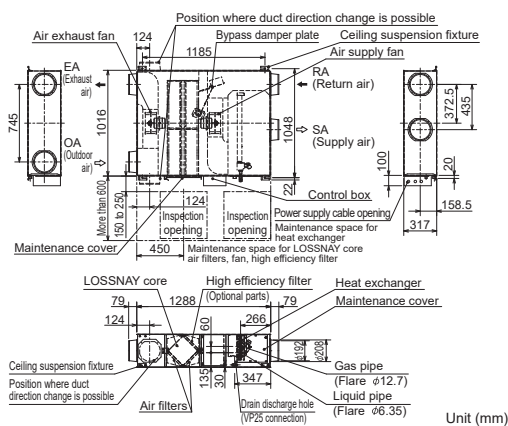
GUF-50RD4



GUF-100RD4



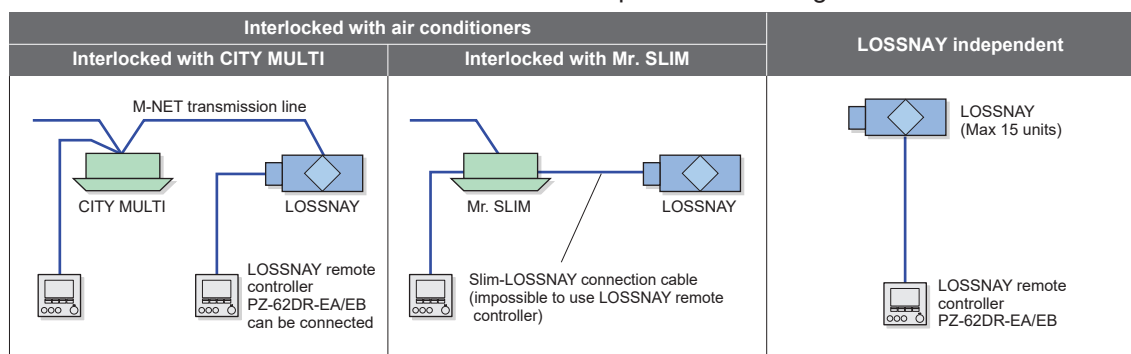
Outline drawings



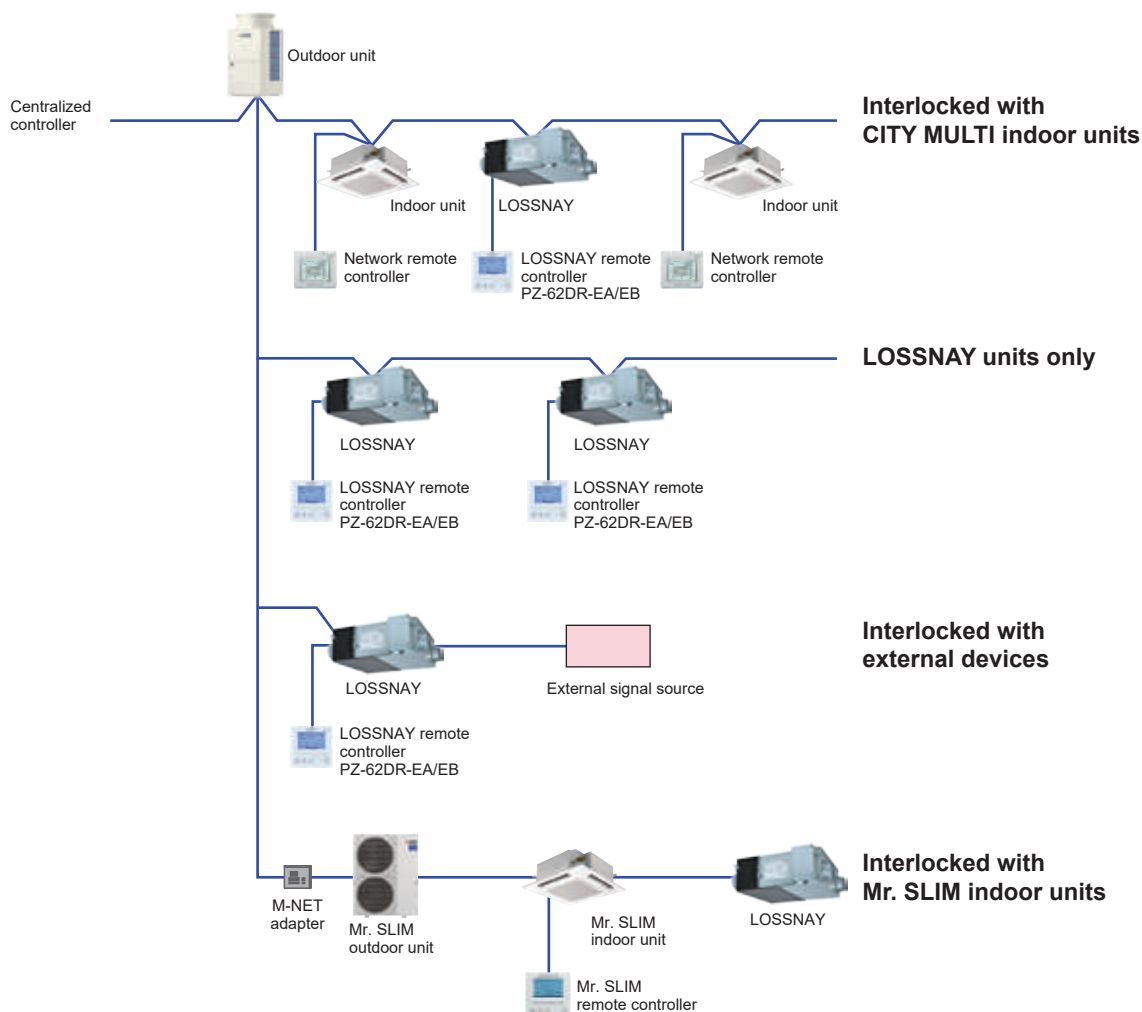
*Specifications may be subject to change without notice.

Control setting

The remote controller PZ-62DR-EA/EB enables simple control setting



Centralized controller system



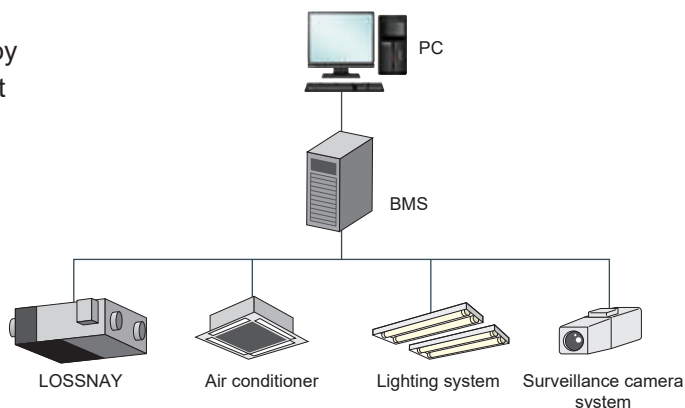
Control with a BMS

The airflow of the LOSSNAY unit can be changed by using a 0-10V signal from the building management system.



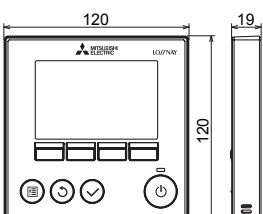
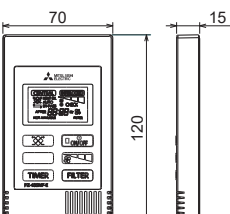
Connection example: BMS (Building Management System)

Input voltage [VDC]	Fan speed	Fan speed change from remote controller
0 - 1.0	-	Available
1.5 - 2.5	1	Not available
3.5 - 4.5	2	Not available
5.5 - 7.0	3	Not available
8.5 - 10.0	4	Not available

*This function is only available in LGH-RVX3, RVXT3, and RVS Series.



• Compatibility Table

Model	PZ-62DR-EA/EB	PZ-43SMF-E
Image		
Dimension	 Unit (mm)	 Unit (mm)
Remote Controller Compatibility Table		
Model name	PZ-62DR-EA/EB	PZ-43SMF-E
Compatible series	LGH-RVX3/RVXT3/RVS	LGH-RVX3/RVXT3/RVS
Fan speed selection	4 fan speeds and Auto (Auto is available when using a CO ₂ sensor)	2 of 4 fan speeds
Control with a CO ₂ sensor (Mitsubishi Electric and field supply)	Yes (Fan speed automatically changes from 25% to 100% depending on the CO ₂ concentration*)	No
Ventilation mode selection	Energy recovery/Bypass/Auto	Energy recovery/Bypass/Auto
Night purge	Yes	No
Function setting from remote controller	Yes	No
Bypass temp. free setting	Yes	No
Flexible airflow setting	Yes (Both supply and exhaust fan speeds can be set separately from 25% to 100% in 5% pitches)	No
ON/OFF timer	Yes	Yes
Auto-off timer	Yes	No
Weekly timer	Yes	No
Fan speed timer	Yes	No
Operation restrictions (ON/OFF, ventilation mode, fan speed)	Yes	No
Operation restrictions (fan speed skip setting)	Yes	No
Screen contrast adjustment	Yes	No
Language selection	Yes (17 languages)	No (English only)
CO ₂ concentration indication (Mitsubishi Electric and field supply)	Yes	No
Filter cleaning sign	Yes (Maintenance interval can be changed)	Yes
LOSSNAY core cleaning sign	Yes (RVX3,RVXT3 Series)/No (RVS Series)	No
Error indication	Yes (Displays model name, serial number, contact information)	Yes
Error history	Yes	No
OA/RA/SA temp. display	Yes	No

*When using a CO₂ sensor. Upper and lower limits may differ.

• Remote Control Language Table

Language	English	German	Spanish	French	Italian	Russian	Portuguese	Swedish	Dutch	Turkish	Polish	Greek	Czech	Hungarian	Slovenian	Bulgarian	Danish
-EA	●	●	●	●		●			●	●	●		●	●		●	
-EB	●	●	●	●	●		●	●				●			●		●

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers





Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution





Filters

• Lineup and Classification

LOSSNAY			Filter				
Model	Filter		Name	Model	Material	Classification	
	Standard Setting	Optional Setting				ISO 16890: 2016	EN779: 2012
	●		Replacement filter (Coarse 60% filter)	PZ-**RF3-E	Non-woven fabric	Coarse 60%	–
		●	Advanced high-efficiency filter (ePM1 75% filter)	PZ-**RFP3-E	Synthetic fiber	ePM1 75%, ePM2.5 80%, ePM10 95%	–
		●*1	High-efficiency filter (M6 filter)	PZ-**RFM3-E	Synthetic fiber	–	M6
		●*1	Advanced high-efficiency filter (F8 filter)	PZ-**RFH3-E	Synthetic fiber	–	F8
	●		Replacement filter (Coarse 60% filter)	PZ-250TRF-E	Non-woven fabric	Coarse 60%	–
		●	Advanced high-efficiency filter (ePM1 75%)	PZ-250TPF-E	Synthetic fiber	ePM1 75%, ePM2.5 80%, ePM10 95%	–
		●*1	High-efficiency filter (M6 filter)	PZ-250TMFR-E	Synthetic fiber	–	M6
		●*1	Advanced high-efficiency filter (F8 filter)	PZ-250THFR-E	Synthetic fiber	–	F8
	●		Replacement filter (Coarse 50% filter)	PZ-S**RF-E	Non-woven fabric	Coarse 50%	G3
		●	High-efficiency filter (ePM10 80% filter)	PZ-S**RFM-E	Synthetic fiber	ePM10 80%	M6
		●	Advanced high-efficiency filter (ePM1 65% filter)	PZ-S**RFH-E	Synthetic fiber	ePM1 65%, ePM2.5 75%, ePM10 90%	F8
	●		Replacement filter (Coarse 35% filter)	PZ-**RF8-E	Non-woven fabric	Coarse 35%	G3
		●	High-efficiency filter (ePM10 75%)	PZ-**RFM-E	Noncombustible fiber	ePM10 75%	–
		●	Advanced high-efficiency filter (ePM1 75%)	PZ-**RFP2-E	Synthetic fiber	ePM1 75%, ePM2.5 80%, ePM10 95%	–


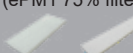

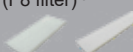
*1: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installations of Buildings)

• For LGH-RVX3 Series

Filter							Package number for replacement	Installation location			
Image	Model	Applicable model	Dimension (mm)			Pieces per package		Numbers of filters			
			L	W	H			OA	RA	SA	
	PZ-15RF3-E	LGH-15RVX3-E	549	125	20	2	1	2	1	1	—
	PZ-25RF3-E	LGH-25RVX3-E	654	151	15	2	1	2	1	1	—
	PZ-35RF3-E	LGH-35RVX3-E	784	178	15	2	1	2	1	1	—
	PZ-50RF3-E	LGH-50RVX3-E	926	178	15	2	1	2	1	1	—
	PZ-65RF3-E	LGH-65RVX3-E	852	213	15	2	1	2	1	1	—
	PZ-80RF3-E	LGH-80RVX3-E	890	238	15	2	1	2	1	1	—
		LGH-160RVX3-E					2	4	2	2	—
	PZ-100RF3-E	LGH-100RVX3-E	1117	238	15	2	1	2	1	1	—
		LGH-200RVX3-E					2	4	2	2	—
	PZ-15RFP3-E	LGH-15RVX3-E	542	104.5	25	1	1	1	—	—	1
	PZ-25RFP3-E	LGH-25RVX3-E	322	128.5	25	2	1	2	—	—	2
	PZ-35RFP3-E	LGH-35RVX3-E	390	158.5	25	2	1	2	—	—	2
	PZ-50RFP3-E	LGH-50RVX3-E	461	158.5	25	2	1	2	—	—	2
	PZ-65RFP3-E	LGH-65RVX3-E	423	197.5	25	2	1	2	—	—	2
	PZ-80RFP3-E	LGH-80RVX3-E	442	215.5	25	2	1	2	—	—	2
		LGH-160RVX3-E					2	4	—	—	4
	PZ-100RFP3-E	LGH-100RVX3-E	554	215.5	25	2	1	2	—	—	2
		LGH-200RVX3-E					2	4	—	—	4
	PZ-15RFM3-E	LGH-15RVX3-E	542	125	13	1	1	1	1	—	—
	PZ-25RFM3-E	LGH-25RVX3-E	322	151	13	2	1	2	2	—	—
	PZ-35RFM3-E	LGH-35RVX3-E	390	178	13	2	1	2	2	—	—
	PZ-50RFM3-E	LGH-50RVX3-E	461	178	13	2	1	2	2	—	—
	PZ-65RFM3-E	LGH-65RVX3-E	423	213	13	2	1	2	2	—	—
	PZ-80RFM3-E	LGH-80RVX3-E	442	238	13	2	1	2	2	—	—
		LGH-160RVX3-E					2	4	4	—	—
	PZ-100RFM3-E	LGH-100RVX3-E	554	238	13	2	1	2	2	—	—
		LGH-200RVX3-E					2	4	4	—	—
	PZ-15RFH3-E	LGH-15RVX3-E	542	104.5	25	1	1	1	—	—	1
	PZ-25RFH3-E	LGH-25RVX3-E	322	128.5	25	2	1	2	—	—	2
	PZ-35RFH3-E	LGH-35RVX3-E	390	158.5	25	2	1	2	—	—	2
	PZ-50RFH3-E	LGH-50RVX3-E	461	158.5	25	2	1	2	—	—	2
	PZ-65RFH3-E	LGH-65RVX3-E	423	197.5	25	2	1	2	—	—	2
	PZ-80RFH3-E	LGH-80RVX3-E	442	215.5	25	2	1	2	—	—	2
		LGH-160RVX3-E					2	4	—	—	4
	PZ-100RFH3-E	LGH-100RVX3-E	554	215.5	25	2	1	2	—	—	2
		LGH-200RVX3-E					2	4	—	—	4




*2: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installations of Buildings)

• For LGH-RVXT3 Series




Filter										Package number for replacement	Installation location				
Image	Model	Applicable model	Dimension (mm)						Pieces per package		Numbers of filters				
			Short			Long					OA	RA	SA		
			L	W	H	L	W	H			Long	Long	Short	Long	
<div>Replacement filter (Coarse 60% filter)</div> 	PZ-250TRF-E	LGH-160RVXT3-E LGH-200RVXT3-E LGH-250RVXT3-E	-	-	-	995	285	15	Long : 4	1	4	2	2	-	-
<div>Advanced high-efficiency filter (ePM1 75% filter)</div> 	PZ-250TPF-E		663	286	25	1327	286	25	Short : 1 Long : 1	1	2	-	-	1	1
<div>High-efficiency filter (M6 filter)^{3*}</div> 	PZ-250TMFR-E		-	-	-	1003	283	13	Long : 2	1	2	2	-	-	-
<div>Advanced high-efficiency filter (F8 filter)^{3*}</div> 	PZ-250THFR-E		663	286	25	1327	286	25	Short : 1 Long : 1	1	2	-	-	1	1

*3: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installations of Buildings)

• For LGH-RVS Series

Filter							Package number for replacement	Installation location			
Image	Model	Applicable model	Dimension (mm)			Pieces per package		Numbers of filters			
			L	W	H			OA	RA	SA	
Replacement filter (Coarse 50% filter) 	PZ-S50RF-E	LGH-50RVS-E	845	195	15	2	1	2	1	1	—
	PZ-S80RF-E	LGH-80RVS-E	885	195	15	2	1	2	1	1	—
	PZ-S100RF-E	LGH-100RVS-E	1112	195	15	2	1	2	1	1	—
High-efficiency filter (ePM10 80% filter) 	PZ-S50RFM-E	LGH-50RVS-E	422	195	15	2	1	2	2	—	—
	PZ-S80RFM-E	LGH-80RVS-E	442	195	15	2	1	2	2	—	—
	PZ-S100RFM-E	LGH-100RVS-E	556	195	15	2	1	2	2	—	—
Advanced high-efficiency filter (ePM1 65% filter) 	PZ-S50RFH-E	LGH-50RVS-E	412	203	25	2	1	2	2	—	—
	PZ-S80RFH-E	LGH-80RVS-E	432	203	25	2	1	2	2	—	—
	PZ-S100RFH-E	LGH-100RVS-E	546	203	25	2	1	2	2	—	—

• For GUF Series

Filter							Package number for replacement	Installation location			
Image	Model	Applicable model	Dimension (mm)			Pieces per package		Numbers of filters			
			L	W	H			OA	RA	SA	
Replacement filter (Coarse 35% filter) 	PZ-50RF8-E	GUF-50RD4	470	183	15	4	1	4	2	2	-
	PZ-100RF8-E	GUF-100RD4	565	243	15	4	1	4	2	2	-
High-efficiency filter (ePM10 75% filter) 	PZ-50RFM-E	GUF-50RD4	464	175	25	2	1	2	-	-	2
	PZ-100RFM-E	GUF-100RD4	559	236	25	2	1	2	-	-	2
Advanced high-efficiency filter (ePM1 75% filter) 	PZ-50RFP2-E	GUF-50RD4	464	175	25	2	1	2	-	-	2
	PZ-100RFP2-E	GUF-100RD4	559	236	25	2	1	2	-	-	2

*Specifications may be subject to change without notice.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

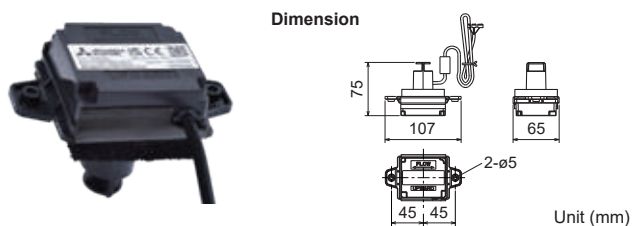
Hot Water
Solution

CO₂ Sensors

A CO₂ sensor connected directly to the LOSSNAY unit optimizes the fan speed according to the level of CO₂ detected.

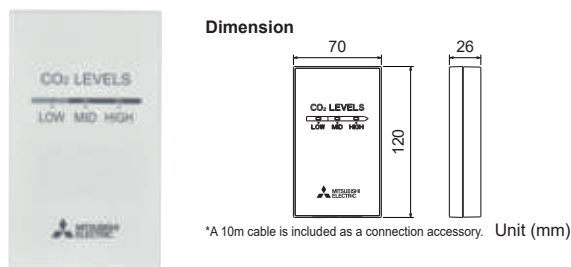
PZ-70CSD-E (Duct-mounted type)

Mounted in the duct with all the wiring hidden in the ceiling.



PZ-70CSW-E (Wall-mounted type)

Mounted on the wall. CO₂ is monitored in 3 levels.



Vertical Installation Plates

PZ-1VS-E, PZ-2VS-E



Parts used to install RVX3 vertically.

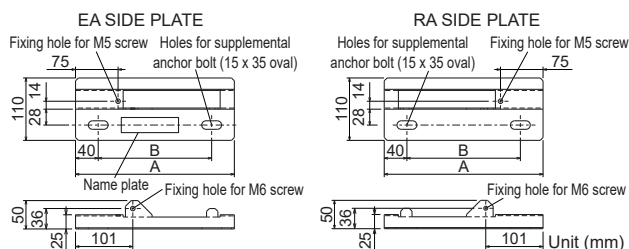
EA side plate RA side plate

Change dimension table (Unit: mm)

Model	A	B	Weight (kg)	Applicable model
PZ-1VS-E	280	200	1.2	LGH-15 to 50RVX3-E
PZ-2VS-E	380	300	1.6	LGH-65 to 100RVX3-E

*Not applicable to LGH-160/200RVX3-E

Dimension



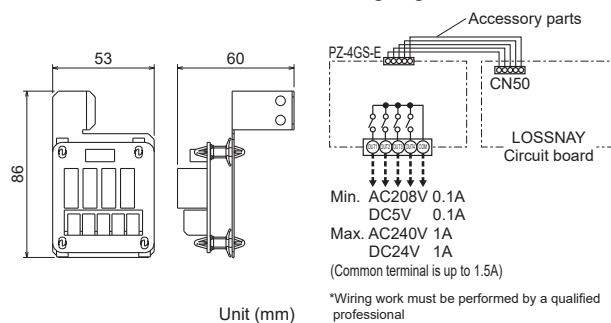
Signal Output Terminal

PZ-4GS-E



The PCBs of RVX3, RVXT3, RVS have only one output terminal. By using PZ-4GS-E, four more output terminals can be added to the units.

Dimension



Duct Silencer



The duct silencer connects to the LOSSNAY unit to reduce airflow noise.

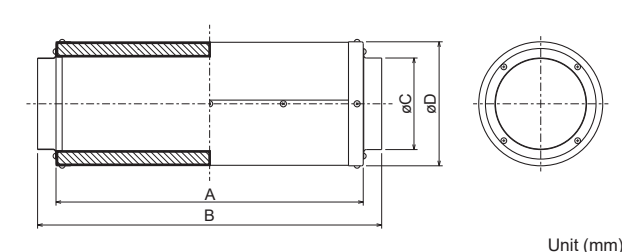
Specifications

Model	Airflow (m ³ /h)	Attenuation of sound power level [dB] for center frequency (discharge)							
		62.5Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
PZ-100SS-E	50	0	3	5	7	6	6	6	8
	150	0	3	6	7	7	7	7	9
PZ-150SS-E	250	0	1	5	8	15	21	20	14
	350	0	1	4	8	14	21	21	16
PZ-200SS-E	500	0	1	4	7	13	18	16	9
	650	0	1	3	8	12	17	14	6
PZ-250SS-E	800	0	2	4	12	22	21	14	13
	1000	0	1	4	12	22	20	14	13

- Figures in the chart above are based on a comparison with a general steel duct of the same length.
- The silencer is placed just before the outlet during the measurement.
- When the airflow rate differs, the attenuation will also differ from the chart above.
- Figures in the chart above are flat (not-weighted) values.

*Certain ratings and specifications may change due to product improvements or modifications.

Dimension



Change dimension table (Unit: mm)

Model	A	B	C	D	Connectable Duct	Weight (kg)
PZ-100SS-E	400	450	99	152	ø100	1.9
PZ-150SS-E	500	560	149	202	ø150	3.5
PZ-200SS-E	600	660	199	252	ø200	5.3
PZ-250SS-E	600	660	249	332	ø250	8.9

• Optional parts list

Optional parts			Model		LGH-15RVX3-E	LGH-25RVX3-E	LGH-35RVX3-E	LGH-50RVX3-E	LGH-65RVX3-E	LGH-80RVX3-E	LGH-100RVX3-E	LGH-160RVX3-E	LGH-200RVX3-E	LGH-160RVXT3-E	LGH-200RVXT3-E	LGH-250RVXT3-E	LGH-50RVS-E	LGH-80RVS-E	LGH-100RVS-E	GUF-50RD4	GUF-100RD4			
LOSSNAY remote controller			PZ-62DR-EA/EB		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
			PZ-43SMF-E		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
Filter	Replacement filter	PZ-**RF3-E (Coarse 60% filter)	PZ-15RF3-E	●																				
			PZ-25RF3-E		●																			
			PZ-35RF3-E			●																		
			PZ-50RF3-E				●																	
			PZ-65RF3-E					●																
			PZ-80RF3-E						●			●		●										
			PZ-100RF3-E							●			●											
		PZ-250TRF-E (Coarse 60% filter)	PZ-250TRF-E										●	●	●									
		PZ-S**RF-E (Coarse 50% filter)	PZ-S50RF-E															●						
			PZ-S80RF-E																●					
			PZ-S100RF-E																	●				
		PZ-**RF8-E (Coarse 35% filter)	PZ-50RF8-E																	●				
			PZ-100RF8-E																		●			
	High-efficiency filter	PZ-**RFM3-E ¹ (M6 filter)	PZ-15RFM3-E	●																				
			PZ-25RFM3-E		●																			
			PZ-35RFM3-E			●																		
			PZ-50RFM3-E				●																	
			PZ-65RFM3-E					●																
			PZ-80RFM3-E						●		●		●											
			PZ-100RFM3-E							●			●											
		PZ-250TMFR-E (M6 filter)	PZ-250TMFR-E										●	●	●									
		PZ-S**RFM-E (ePM10 80% filter)	PZ-S50RFM-E															●						
			PZ-S80RFM-E																●					
			PZ-S100RFM-E																	●				
		PZ-**RFM-E (ePM10 75% filter)	PZ-50RFM-E																	●				
			PZ-100RFM-E																		●			
	Advanced high-efficiency filter	PZ-**RFP3-E (ePM1 75% filter)	PZ-15RFP3-E	●																				
			PZ-25RFP3-E		●																			
			PZ-35RFP3-E			●																		
			PZ-50RFP3-E				●																	
			PZ-65RFP3-E					●																
			PZ-80RFP3-E						●		●		●											
			PZ-100RFP3-E							●			●											
		PZ-**RFH3-E ¹ (F8 filter)	PZ-15RFH3-E	●																				
			PZ-25RFH3-E		●																			
			PZ-35RFH3-E			●																		
			PZ-50RFH3-E				●																	
			PZ-65RFH3-E					●			●		●											
			PZ-80RFH3-E						●			●		●										
			PZ-100RFH3-E							●			●											
		PZ-250TPF-E (ePM1 75% filter)	PZ-250TPF-E										●	●	●									
		PZ-250THFR-E ¹ (F8 filter)	PZ-250THFR-E										●	●	●									
		PZ-S**RFH-E (ePM1 65% filter)	PZ-S50RFH-E															●						
			PZ-S80RFH-E																●					
			PZ-S100RFH-E																	●				
	PZ-**RFP2-E (ePM1 75% filter)	PZ-50RFP2-E																	●					
		PZ-100RFP2-E																		●				
	CO ₂ sensor			PZ-70CSD-E		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
				PZ-70CSW-E		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Vertical installation plates			PZ-1VS-E		●	●	●	●															
				PZ-2VS-E					●	●	●													
	Signal output terminal			PZ-4GS-E		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Duct silencer			PZ-100SS-E		●																		
				PZ-150SS-E			●	●																
				PZ-200SS-E					●	●									●			●		
				PZ-250SS-E							●	●	●	●						●	●			

*1: Designed for the Spanish market to comply with RITE (Regulation of Thermal Installations of Buildings)

Note: Please refer to each product page for required number of pieces/sets.



Remote Controller



The Importance of Control

The need for control is paramount in order to optimize the performance of any air-conditioning system and minimize its running costs. Mitsubishi Electric offers a wide range of control options designed to meet such needs.

Operating an air-conditioning system without the right control can prove costly. It is therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric has a wide range of controls available 'off-the-shelf' and individual control systems that can be specifically designed to match.

Good controls will benefit any application, large or small. Air-conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air-conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

• A Degree of Difference

When an air-conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, while giving the optimum amount of control.

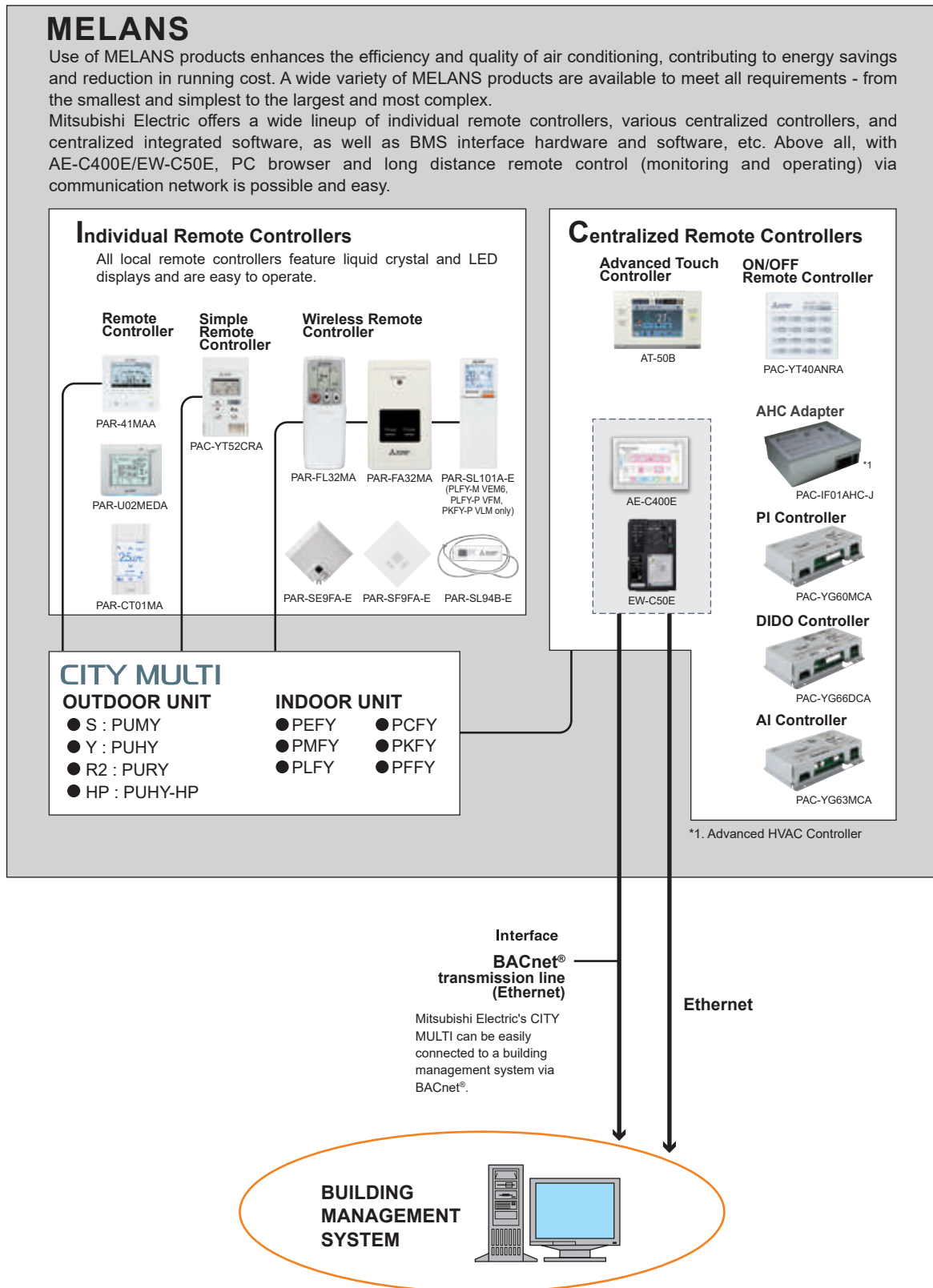
• The Simpler, The Better

With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air-conditioning systems. From a simple hand-held controller to an AE-C400E system, you are in control.



System Controller

Mitsubishi Electric's Air-conditioner Network System (MELANS) leads air-conditioner management in a PC browser and network era.



*Some controllers cannot be used in combination with certain models of devices.

Integrated Communications Control with Mitsubishi Electric's Unique Transmission Network (M-NET)

Model	Local remote controller *5						System controller *5					
	PAR-CT01MA	PAR-41MAAM	PAR-U02MEDA	PAC-YT52CRA	PAR-FL32MA	PAR-SL101A-E	PAC-YT40ANRA	AT-50B	AE-C400E		EW-C50E	
	1/16	1/16	1/16	1/16	1/16	1/1	16/50	50/50	50/50*9	50/50*9		
Controllable Groups/Indoors (Group/Indoor) *4									AE-C400E	Browser	Browser	
■Operation												
ON/OFF	○	○	○	○	○	○	◎	◎	◎■	◎■	◎■	
Mode (cool/heat/dry/fan)	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	
Temperature setting	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	
Dual set point *6	○	○	○	○	N	○*7	○*8	◎	◎■	◎■	◎■	
Local Permit/Prohibit	N	N	N	N	N	N	N	◎	◎■	◎■	◎■	
Fan speed	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	
Air flow direction	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	
■Status monitoring												
ON/OFF	○	○	○	○	○	○	◎	◎	◎	○	○	
Mode (cool/heat/dry/fan)	○	○	○	○	○	○	N	○	○	○	○	
Temperature setting	○	○	○	○	○	○	N	○	○	○	○	
Local Permit/Prohibit	○	○	○	○	N	N	○	○	○	○	○	
Fan speed	○	○	○	○	○	○	N	○	○	○	○	
Air flow direction	○	○	○	○	○	○	N	○	○	○	○	
Indoor temperature	○	○	○	○	N	N	N	○	○	○	○	
Filter sign	○	○	○	N	N	N	N	◎	○	○	○	
Error flashing	○	○	○	○	N	N	○	◎	○	○	○	
Error code	○	○	○	○	N	N	○	○	○	○	○	
Operation hour	N	N	N	N	N	N	N	N	N	N	N	
■Scheduling												
One day	○	○	○	N	N	N	N	○	◎■	◎■	◎■	
ON/OFF times per day	1	1	1	N	1	1	N	16	24	24	24	
Weekly	○	○	○	N	N	N	N	○	◎■	◎■	◎■	
ON/OFF times per week	8 x 7	8 x 7	8 x 7	N	N	N	N	16 x 7	24 x 7	24 x 7	24 x 7	
Annual	N	N	N	N	N	N	N	N	◎■	◎■	◎■	
Optimized start-up	N	N	N	N	N	N	N	N	○	○	○	
Auto-OFF timer	○	○	○	N	N	N	N	N	N	N	N	
Min. timer setting unit (minute)	5	5	5	N	10	10	N	5	1	1	1	
■Recording												
Error log	○	○	N	N	N	N	N	○	○	○	○	
Daily/monthly report	N	N	N	N	N	N	N	N	N	N	N	
Charge function	N	N	N	N	N	N	N	N	○	N	○	
Energy management data	N	N	N	N	N	N	N	N	○	○	○	
■Other												
Temp-set limitation by Local R/C	○	○	○	○	N	N	N	N	N	N	N	
Temp-set limitation by System controller	○*2	○*2	○	○*2	N	N	N	○*2	○	○	○	
Operation lock	○	○	○	○	N	N	N	◎	N	N	N	
Night setback	○	○	○	N	N	N	N	◎	○	○	○	
Sliding temperature control	N	N	N	N	N	N	N	N	○	○	○	
BACnet® connection	N	N	N	N	N	N	N	N	●	●	●	
■Operating on LOSSNAY (Group/Interlocked)												
ON/OFF	N / ○	N / ○	N / ○	N / ○	N / ○*3	N / ○*3	◎/◎*1	◎/◎	◎/◎	◎/◎	◎/◎	
Fan speed	N / ○	N / ○	N / ○	N	N	N	N	◎/◎	◎/◎	◎/◎	◎/◎	
Ventilation mode	N / N	N / N	N	N	N	N	N	◎/N	◎/N	◎/N	◎/N	
■Status monitoring on LOSSNAY (Group/Interlocked)												
ON/OFF	N / ○	N / ○	N / ○	N / ○	N	N	N	○/○	◎/◎	◎/◎	◎/◎	
Fan speed	N / ○	N / ○	N / ○	N	N	N	N	○/○	○/○	○/○	○/○	
Ventilation mode	N	N	N	N	N	N	N	○/N	○/N	○/N	○/N	
CO ₂ indication	N	N	N	N	N	N	N	N	○/N	○/N	○/N	

◎: Each group/Batched ○: Each group ●: AE-C400E/EW-C50E license registration possible. N: Not Available (Not Used.) ■: Block

*1. Interlock is set at Local remote controller.

*2. This function can only be set on the ME remote controller.


This function cannot be used with the MA/Simple MA remote controller.

(However, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and it is possible to use this function with them.)

*3. Interlock is set from system controllers (Except PAC-YT40ANRA) or local remote controllers.

*4. The maximum number of controllable units decreases depending on the indoor unit model.

*5. For indoor use only.

*6. Icon Indication:  When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

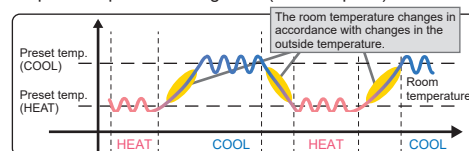
This function is supported only when all of the indoor units, remote controllers, and system controllers that are connected to a given group features said function.

*7. Function setting of this remote controller is necessary.

*8. Please contact your local distributor regarding the availability of this function.

*9. The maximum number of connectable units depends on the model. Refer to the Technical Manual.

• Operation pattern during Auto (dual set point) mode



MA Touch Remote Controller



Dual
Set
Point



PAR-CT01MAA-SB
PAR-CT01MAR-SB

Dimensions: 65(W) x 120(H) x 14.1(D) mm
: 2-9/16(W) x 4-3/4(H) x 9/16(D) in.



Dual
Set
Point



PAR-CT01MAA-PB
PAR-CT01MAR-PB

Dimensions: 68(W) x 120(H) x 14.1(D) mm
: 2-11/16(W) x 4-3/4(H) x 9/16(D) in.



Dual
Set
Point

PAR-CT01MAA-S

Dimensions: 65(W) x 120(H) x 14.1(D) mm
: 2-9/16(W) x 4-3/4(H) x 9/16(D) in.

Flexibility

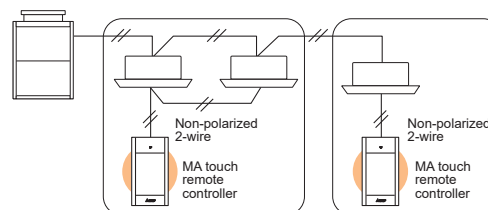
• Multiple color patterns

180 color patterns can be selected for the control parameters and background of the display.



3.5 inch/HVGA full color LCD

• System configuration example



*When a PAR-CT01MA is connected to a group, no other MA remote controller may be connected to the same group.

• Logo image customization

A logo image can be displayed on the initial screen.

* PAR-CT01MAA/MAR-SB and
PAR-CT01MAA/MAR-PB models only



• Full color touch panel & backlit display



Touch panel

• Control parameter customization

The screen can be customized to display only the selected parameters.

Hotel setting

A simple operation screen is frequently preferred, especially in hotels. It can be set to display only ON/OFF, temperature setting, and fan speed.

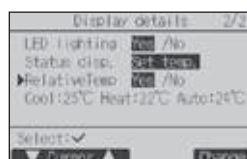


• Relative temperature display



By setting the reference temperature for each operation mode, the target temperature can be displayed on the temperature setting change window as the difference between the reference temperature and the target temperature (between +3 and +5°C or -3 and -5°C).

<Setting method>



1. Select "RelativeTemp" from the display details setting screen.



2. Set the reference value for "Reference-Cool", "Reference-Heat", Reference-Auto." Settable temperature range also has to be selected with "Set temp. range."*

*The temperature can only be set to a value within the operation temperature range of the indoor unit.

• Language selection

The screen display language can be selected from 14 languages.

English, French, Spanish, Italian, Portuguese, Greek, Turkish, Swedish, German, Dutch, Russian, Czech, Hungarian, Polish

• Bluetooth® low energy technology

* PAR-CT01MAA/MAR-SB and PAR-CT01MAA/MAR-PB models only

The remote controller can communicate with a smartphone or tablet device via Bluetooth Low Energy.

User and setting apps are available.

* Bluetooth® is a trademark of Bluetooth SIG, Inc. in the U.S.

* Contact a Bluetooth sales company for information on the Bluetooth function.



<User App>

For iPhone
Available on the App Store
* For iOS (11.0 or later)

For Android
GET IT ON Google Play
* For Android (7.0 or later) **

<Setting App>

For iPhone
Available on the App Store
* For iOS (11.0 or later)

For Android
GET IT ON Google Play
* For Android (7.0 or later) **

To download the app, scan the QR code. *QR code is a registered trademark of DENSO WAVE INCORPORATED.

*1 The app may not function properly on some mobile devices.

• Functions

○: Available X: Not available

Item	Description	Setting	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool/Dry/Fan/Auto/Heat.	○	○
Temperature setting	Changes the set temperature. * The settable temperature range varies depending on the indoor unit model.	○	○
Relative temperature display	Changes the target temperature by selecting the temperature difference (between +3 and +5°C or -3 and -5°C) between the preset reference temperature and the target temperature in the cool, dry, heat, or auto (single set point) mode. *The temperature can only be set to a value within the operation temperature range of the indoor unit. *When the relative temperature display is selected, certain restrictions apply to the system controller functions. *The reference temperature needs to be set to each operation mode.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI LOSSNAY units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	—	○
Timer	ON/OFF timer • Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer • Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	X	○
Operation lock	The following operations can be prohibited: "Location," "On/Off," "Mode," "Set temp.," "Menu," "Fan," "Louver," or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	X
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the settings.	○	X
Weekly timer	Weekly ON/OFF times and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Bluetooth connection, Bluetooth, Screen update	The Bluetooth connection information can be acquired. Using an Application, a logo image as well as settings data can be sent to the remote controller. * For PAR-CT01MAA/MAR-SB and PAR-CT01MAA/MAR-PB models only	○	○

Wired MA Remote Controller

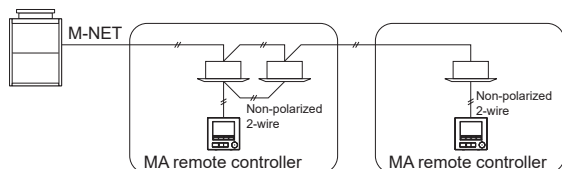


Dual
Set
Point

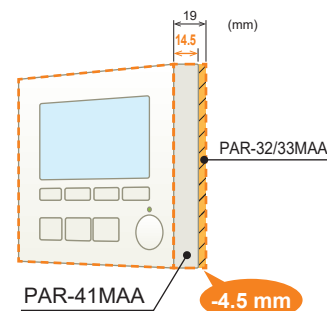
PAR-41MAA

Dimensions: 120(W) x 120(H) x 14.5(D) mm
: 4-23/32(W) x 4-23/32(H) x 37/64(D) in.

• Example of system configuration



*When a PAR-41MAA is connected to a group, no other MA remote controllers can be connected to the same group.



• Slim design

Compared to the previous remote controller (PAR-32/33MAA), the latest controller is slimmer by 4.5 mm (depth), allowing for more flexible installation.

• Backlit LCD (Liquid Crystal Display)

Large, easy-to-see display.
Full-dot LCD display with large characters for easy viewing.
Contrast can also be adjusted.

• Night setback

When the room temperature goes outside a certain range during a prespecified time period, heating or cooling operation is automatically activated to prevent dew condensation or an excessive temperature increase in the room.

• Language selection

The screen display language can be selected from 14 languages:
English, French, Spanish, Italian, Portuguese, Greek, Turkish, Swedish, German, Dutch, Russian, Czech, Hungarian, and Polish.

• 3D i-see Sensor*

Settings can be made for the 3D i-see Sensor.

• Draft reduction*

"Close" has been added to the manual vane angle selection. The air outlet can be closed to reduce drafts from the air conditioner.

• Auto descending panel*

Panels can be lowered/raised using the remote controller. Panel position can also be selected from a number of patterns.

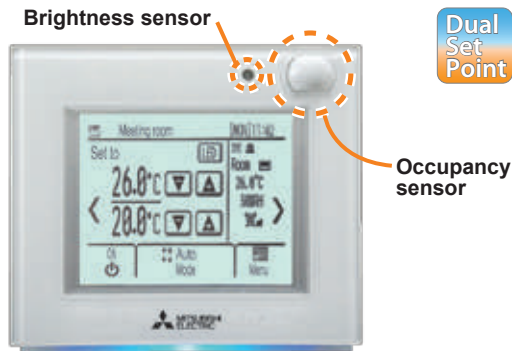
*Availability of the function depends on the indoor unit model. Contact your local distributor for details.

• Functions

○ : Available ✕ : Not available

Item	Description	Setting	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool/Dry/Fan/Auto/Heat.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI LOSSNAY units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. The air-conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The above information needs to be entered in advance.) * An error code may not appear depending on the error.	—	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode, set temperature, filter sign reset, air direction, fan speed and timer. * While an operation is prohibited, the operation icon lights up (only on the Main display in the "Full" mode).	✕	○
Operation lock	The following operations can be prohibited: "Location," "On/Off," "Mode," "Set temp.," "Menu," "Fan," "Louver," or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	✕
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the setting contents.	○	○

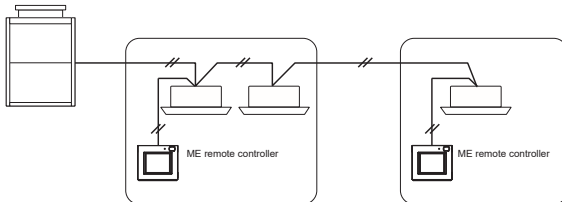
ME Remote Controller



PAR-U02MEDA

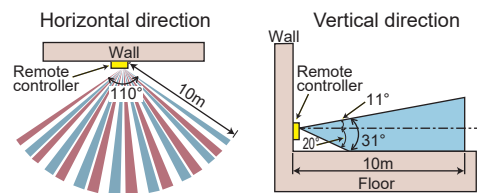
Dimensions : 140(W) x 120(H) x 25(D) mm
: 5-9/16(W) x 4-3/4(H) x 1(D) in.

• System configuration example



- **Occupancy sensor**
Detects vacancy for energy-save control.
- **Touch panel & backlit LCD**
Shows the operation settings screen.
When the backlight is off, touching the panel turns on the backlight, and it will stay lit for a prespecified period of time.
- **LED indicator**
Shows the operation status in different colors.
It lights up during normal operation, turns off when units are stopped, and blinks when an error occurs.
- **Brightness sensor**
Detects the brightness of the room for energy-save control.
- **Temperature & humidity sensor**
Detects room temperature and relative humidity.
- **Device control via AHC (Advanced HVAC Controller)**
Allows control of other manufacturer's products connected via AHC.
- **Auto (dual set point) modes**
Two temperatures (one each for cooling and heating) can be set.

Occupancy sensor detection zone



• Functions

○: Available ×: Not available

Item	Description	Setting	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model. Auto mode is for CITY MULTI R2 Series only.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up.	×	○
Error information	When an error occurs, an error code and the unit address appear. A contact number can be set to appear when an error occurs. (The above information needs to be entered in the Service menu.)	—	○
Schedule (Weekly timer)	Weekly ON/OFF times, operation mode, and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 in 10-minute increments.	○	○
Energy-save control during vacancy	When vacancy is detected by the occupancy sensor, the energy-save control assist function is activated. Four control types are available for selection: ON/OFF/Set temperature/Fan speed/Thermo-off. The brightness sensor can be used in conjunction with the occupancy sensor to detect the occupancy/vacancy status more accurately.	○	○

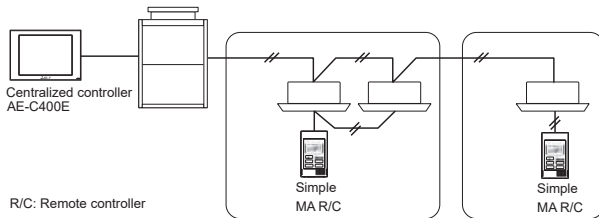
Simple Remote Controller



PAC-YT52CRA (MA)

Dimensions: 70(W) x 120(H) x 14.5(D) mm
: 2-3/4(W) x 4-3/4(H) x 19/32(D) in.

• System configuration example



• Dual set point

When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

*Contact your Mitsubishi Electric sales office for details.

• Backlit LCD

Backlight for operation in dark places


• Flat back

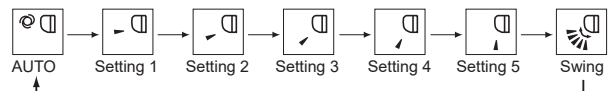
The remote controller can be installed without making a hole in the wall.

Thickness is less than 14.5 mm (19/32 in).

• Vane button (standard)


The Vane button has been added to allow users to change airflow direction (ceiling cassette and wall mounted types).

Pressing the  button changes the vane direction.



*The vane directions that can be set varies depending on the indoor unit model.

* If the unit has no vane function, vane direction cannot be set.

In this case, the vane icon blinks when the  button is pressed.

• Only cross-over wiring is required, based on two-wire signal lines.

• Room temperature sensors are built in.

• Compatible with all types of indoor units

*As this controller has limited functions, it should always be used in conjunction with a standard controller or centralized controller.

• LCD temperature setting and display in 1°C/1°F increments

• Functions

□: Each unit ○: Each group ×: Not available

Item	Description	Setting	Display
ON/OFF	Changes between ON and OFF.	○	○
Operation mode switching	Select from COOL, DRY, FAN, AUTO, and HEAT. * AUTO mode is settable only when those functions are available on the indoor unit.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes the fan speed. * The settable fan speed varies depending on the indoor unit model to be connected.	○	○
Permit / Prohibit local operation	By setting a centralized controller, the following local operations can be prohibited: ON/OFF, operation mode, preset temperature; * The CENTRAL icon appears while local operations are prohibited.	×	○
Error	Displays the current error status with the address. * The address may not be displayed depending on the error status.	×	□
Ventilation equipment	When the CITY MULTI indoor unit is connected, interlocked setting of the CITY MULTI LOSSNAY unit is possible. When the Mr. SLIM indoor unit (A-control) is connected, interlocked operation of the LGH-R(V)X Type LOSSNAY unit is possible.	○	○
Set temperature range limit	The preset temperature range can be restricted for each operation mode (COOL/HEAT/AUTO).	○	○

Wireless Remote Controller



PAR-FL32MA

Dimensions: 58(W) x 159(H) x 19(D) mm
: 2-5/16(W) x 6-5/16(H) x 3/4(D) in.



PAR-SL101A-E

(PLFY-EP/M VEM6, PLFY-P VFM, PKFY-P VLM only)
Dimensions: 66(W) x 188(H) x 22(D) mm
: 2-5/8(W) x 7-13/32(H) x 7/8(D) in.



PAR-FA32MA

Dimensions: 70(W) x 120(H) x 22.5(D) mm
: 2-3/4(W) x 4-3/4(H) x 7/8(D) in.



PAR-SE9FA-E

(4-way cassette signal receiver)
Dimensions: 273(H) x 29(D) mm



PAR-SF9FA-E

(2 x 2 cassette signal receiver)
Dimensions: 214(H) x 25.5(D) mm

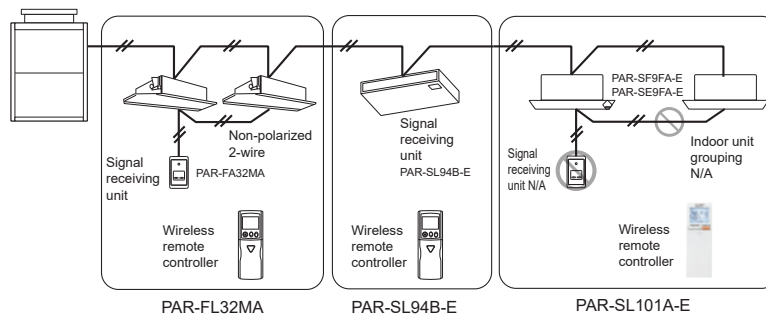


PAR-SL94B-E

(Wireless remote controller kit for ceiling suspended type)
Dimensions: 182(W) x 57(H) x 31(D) mm

- No need to configure addresses for group operation.
- The LED remains lit to show operation status. It also provides error information via the number of blinks.
- Can be used with the MA remote controller.
 - *When used in group configurations, wiring is required between indoor units.
 - *ME remote controller and/or LOSSNAY remote controller cannot be combined in the same group.
- Multiple indoor units cannot be controlled with the PAR-SL101A-E. Only one indoor unit can be used in each group.
- LCD temperature setting and display in 1°C/1°F increments.

System configuration example



Compatibility table

Indoor unit model	Receiver	Transmitter
PLFY-P VLMD-E PEFY-P VMR-E-L/R PEFY-P VMS1(L)-E PEFY-M VMA(L)-A1 PEFY-P VMHS-E(-F) PFFY-P VKM-E2 PFFY-P VEM-E PFFY-P VCM-E	PAR-FA32MA	PAR-FL32MA

Indoor unit model	Receiver	Transmitter
PLFY-M VEM6-E	PAR-SE9FA-E	PAR-SL101A-E
PLFY-P VFM-E1	PAR-SE9FA-E	(PAR-FL32MA)*1*2
PCFY-P VKM-E	PAR-SL94B-E (PAR-SL94B-E includes a receiver and a transmitter.)	
PMFY-P VBM-E	Built-in	PAR-FL32MA
PKFY-P VKM-E	Built-in	PAR-SL101A-E (PAR-FL32MA)*1*2

*1 Use either PAR-SL101A-E or PAR-FL32MA to control each indoor unit, not both.

*2 Multiple indoor units cannot be controlled with the PAR-SL101A-E. Only one indoor unit can be used in each group.

Functions

○: Available ✕: Not available

Item	Description	Setting	Display
ON/OFF	ON and OFF operation for a single group	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	*	*
Timer operation	One ON/OFF setting can be set per day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *1 If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will sound and an LED will flash.	✕	○*1

*Some models will have a different display for the air flow direction and fan speed. Set the air flow direction and fan speed when performing initial settings.

Advanced Touch Controller

Advanced Touch Controller AT-50B ensures easy and simple operation on the touch panel to offer an optimal air environment by each unit.



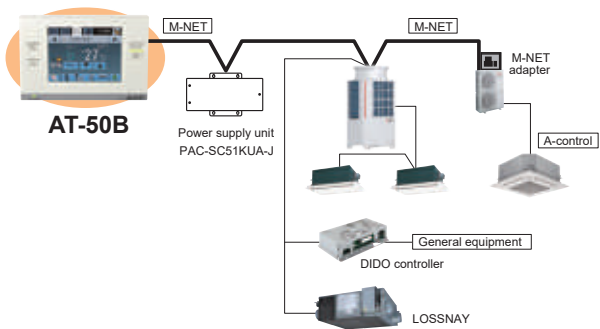
AT-50B

Dimensions: 180(W) x 120(H) x 30(D) mm
: 7-2/16(W) x 4-3/4(H) x 1-3/16(D) in.

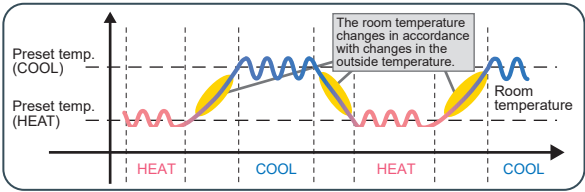


- **The color touch panel is easy to see and operate.**
The operation screen can be selected according to the intended use.
- **Dual set point**
When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
*Contact your Mitsubishi Electric sales office for details.

• System structure



• Operation pattern during Auto (dual set point) mode



Backlit LCD touch panel

A 5-inch color LCD (Liquid Crystal Display) touch panel enables easy and simple operation.
When the backlight is off, touching the panel turns it back on.
The touch panel displays the operation status of the units in GRID, LIST or GROUP form.



GRID (zoom out) screen
Displays the operation status of all groups.



GRID (zoom in) screen
Displays the operation status details of each group.



LIST screen
Displays the operation status details of each group by group name.



GROUP screen
Displays the operation status details of each group. Sets group operations.

Controls 50 indoor units in all

One screen shows the operation conditions of 50 connected indoor units.

Weekly and daily schedules

5 daily schedule patterns and 12 weekly schedule patterns (max. 16 settings per pattern).

Two types of weekly schedules can be set.

System changeover

Operation mode can be switched depending on the indoor temperature setting and target temperature of each group or a representative indoor unit.

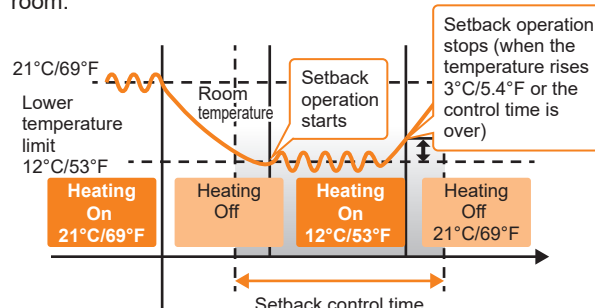
Functions

[Basic Functions]

- ON/OFF ▪ Operation mode switching
- Temperature setting ▪ Fan speed setting
- Airflow direction setting ▪ Louver setting

Night setback

When the room temperature goes outside a certain range during a prespecified time period, this heating or cooling operation is automatically activated to prevent dew condensation or an excessive temperature increase in the room.



When the temperature drops below the lower temperature limit (heating control)

Main system controller/Sub system controller

The AT-50B can be used as the main or sub system controller. When it is connected to a system controller such as the AE-C400E, it is used as a sub controller. When multiple units of the AT-50B are connected, the main and sub controllers can be specified.

Simple button arrangement

The F1 (Function 1) and F2 (Function 2) buttons can be set as a run button for the following collective operations. (Setback/Schedule/Operation mode/Temperature correction/Disable remote controller operation)

• Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

Item	Description	Setting	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group. *The settable items vary depending on the models.	○	○
Operation lock	The operation lock can be set to the input operation of the AT-50B. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	◎	◎
Error display	When an error is occurring on an air conditioner unit, the affected unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen shows an abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□○
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	◎	◎
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of the indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	◎	◎
Temperature set limitation	Batch-setting to temperature range limit in cooling, heating, and auto modes. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	◎	◎
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited: When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	◎	◎
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	○	◎
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
Checking the Gas Amount	Use this function to check for a refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded.) Series only.	□	□
Schedule operation	Weekly schedule setting of up to 12 patterns is available. In one pattern, up to 16 settings of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction", and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedules (Summer/Winter) can be set. Today's schedule allows setting of up to 5 patterns.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.

Centralized Controller



AE-C400E

Dimensions: 306 (W)× 211(H) × 71.8(D) mm
:12-1/16 (W)× 8-5/16 (H)× 2-27/32(D) in.

- Promotes energy savings through the comprehensive display of the air-conditioning equipment's energy consumption.
- The energy consumption of the air-conditioning equipment can be displayed by individual area in graph form for easy viewing.
- Operating status can be easily confirmed by comparing power consumption with the previous year and with the electrical power target.
- Floor layout is displayed on the 12.1-inch LCD touch panel for easy management of air-conditioning equipment.
- An optimal system can be easily and flexibly established according to the size of the facility.
- Up to 400 units can be controlled by connecting additional AE-C400E or EW-C50E.
- Air conditioners can be operated and monitored using the air conditioner icons on the floor plan image displayed on the AE-C400E or the Web browser. On the floor plan image, each floor is divided into six sections, and up to 20 floors can be registered.
- Features for operating and monitoring the hot water heat pump are also available on PWFY, CAHV, QAHV, and EAHV/EACV.
- Centralized batch control on PWFY, CAHV, QAHV, and EAHV/EACV is possible in addition to that on each air-conditioning unit.

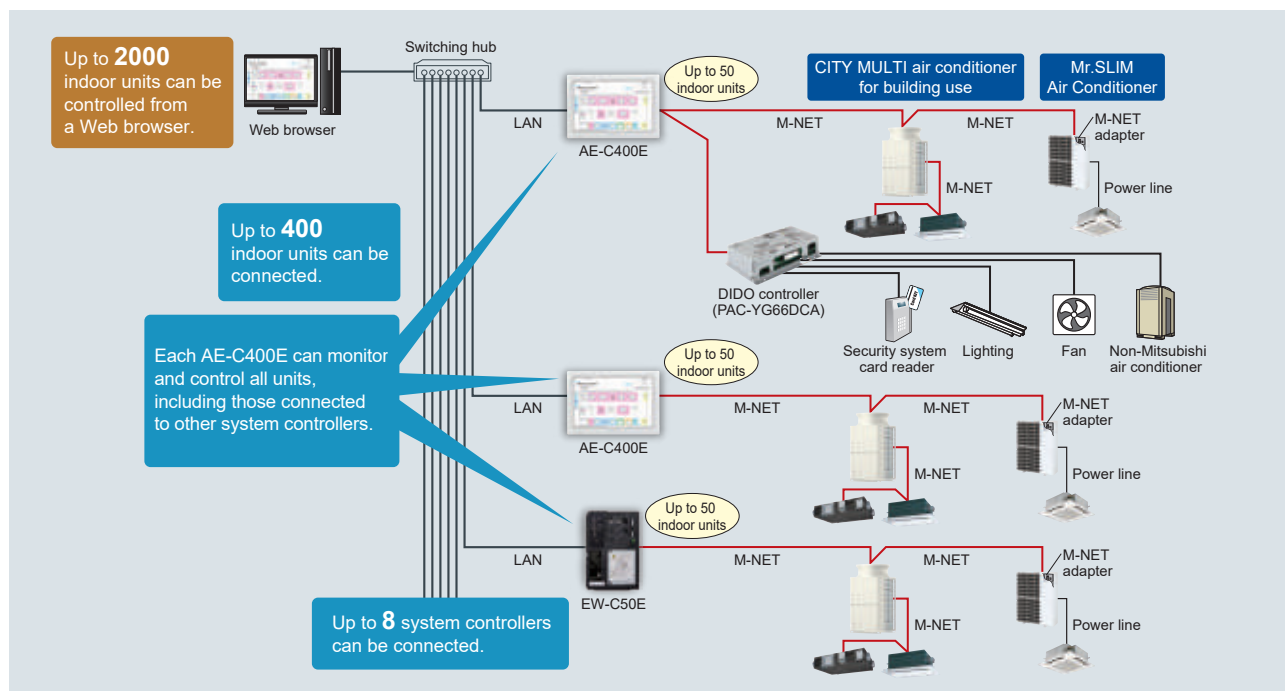
Control screen for power consumption

AE-C400E is provided with an energy management function as standard. With this function, you can understand the current status of usage of air conditioners and verify the effect of energy saving measures.

- The data of an area in different terms can be compared.
- The data of two areas in the same term can be compared.
- The effect of energy saving measures can be verified.
- The energy management data for the past 24 months (daily or monthly data) or the past 5 years (annual data) from the present can be retained.
- The energy management data (for the past 5 years) can be output to a USB flash drive or a personal computer.

A screenshot of the "Display item setting" screen. It allows users to configure the data displayed on the main screen. There are two columns: "Display target" and "Comparison target". Each column has fields for "Date range" (Day, Week, Month, Year) and "Target" (e.g., "Elevator hall(EP)", "Meeting Room 2A"). Below these, there are dropdown menus for "Bar graph", "Line graph", and "Set Temp (Cool)". At the bottom, there are "Cancel" and "OK" buttons. A circular callout with the text "Display setting screen" points to the "Display target" column.

• System configuration image



• Functions * The functions and specifications are subject to change.

□: Each unit ○: Each group ●: Each block △: Each floor ◎: Collective ×: Not available

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ◎ △ ●	○ ◎
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto(*)/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○ ◎ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] Auto : 19°C (67°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] The range of temperature depends on the air conditioning unit. [] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMHS-E-F is excluded.	○ ◎ △ ●	○
Fan speed setting	Models with 4 air fl ow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air fl ow speed settings : Hi/Mid/Low Models with 2 air fl ow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ◎ △ ●	○
Air flow direction setting	Air fl ow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○ ◎ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ◎ △ ●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ◎ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioning unit, the affiliated unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioning units in test run mode.	○ ◎ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ◎ △ ●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	◎	◎
Energy Management	Bar Graph : Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□ ○ ●

Centralized Controller



Dual
Set
Point

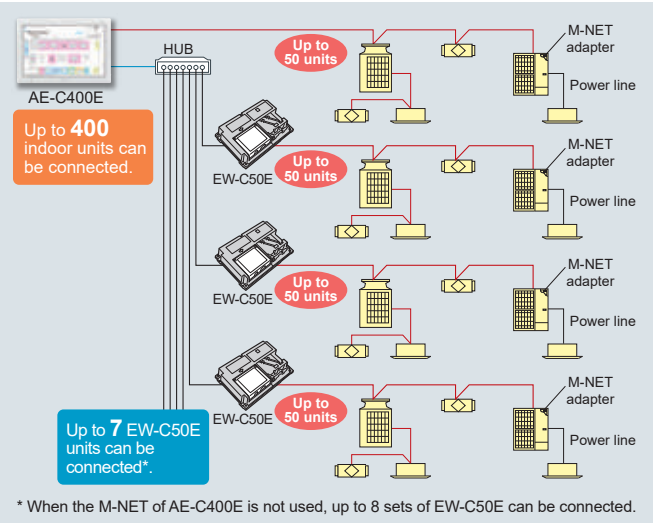
EW-C50E

Dimensions: 185(W) x 278(H) x 60.3(D) mm
: 7-5/16(W) x 10-31/32(H) x 2-3/8(D) in.
(185 x 278 x 81.5 mm (7-5/16 x 10-31/32 x 3-7/32 in.)
when installed on the installation frame)

Major features

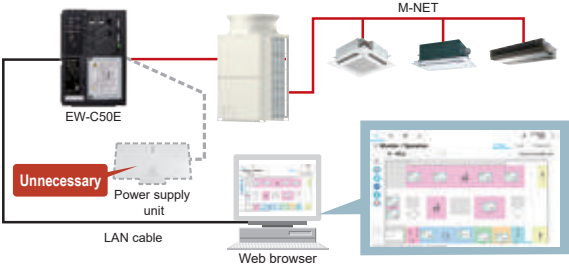
Usable as expansion controller for AE-C400E

When 7 sets of EW-C50E are connected to AE-C400E, up to 400 indoor units can be operated and monitored by AE-C400E.



- Air conditioners can be operated and monitored only with EW-C50E by using a personal computer, tablet or smartphone.

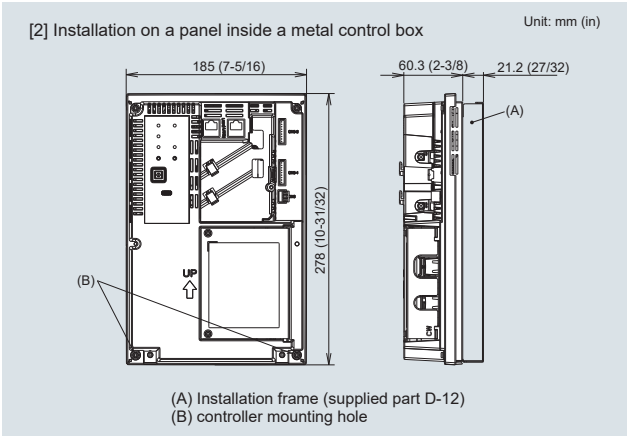
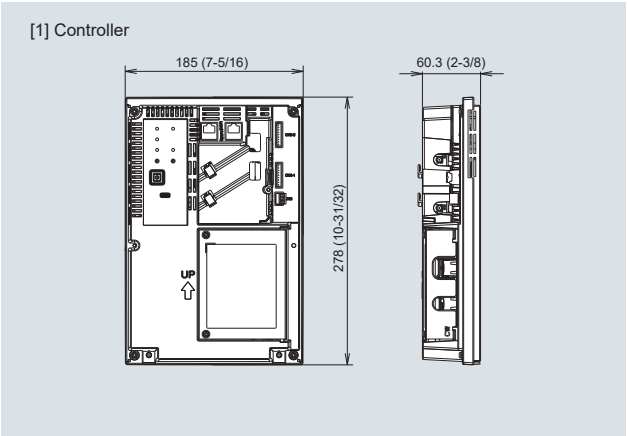
Without AE-C400E, air conditioners can be monitored and operated only with this controller by using the browser software*¹ of a personal computer. They can be monitored and operated remotely by using the Internet, and the air conditioners in some buildings can be operated simultaneously.*²



*1. In the case of Windows, Microsoft® Edge or Google Chrome is required.
In the case of Macintosh, Safari 7 is required.
Windows and Microsoft® Edge are registered trademarks of Microsoft Corporation in the United States and other countries.
iPad and Safari are registered trademarks of Apple Inc. in the United States and other countries.
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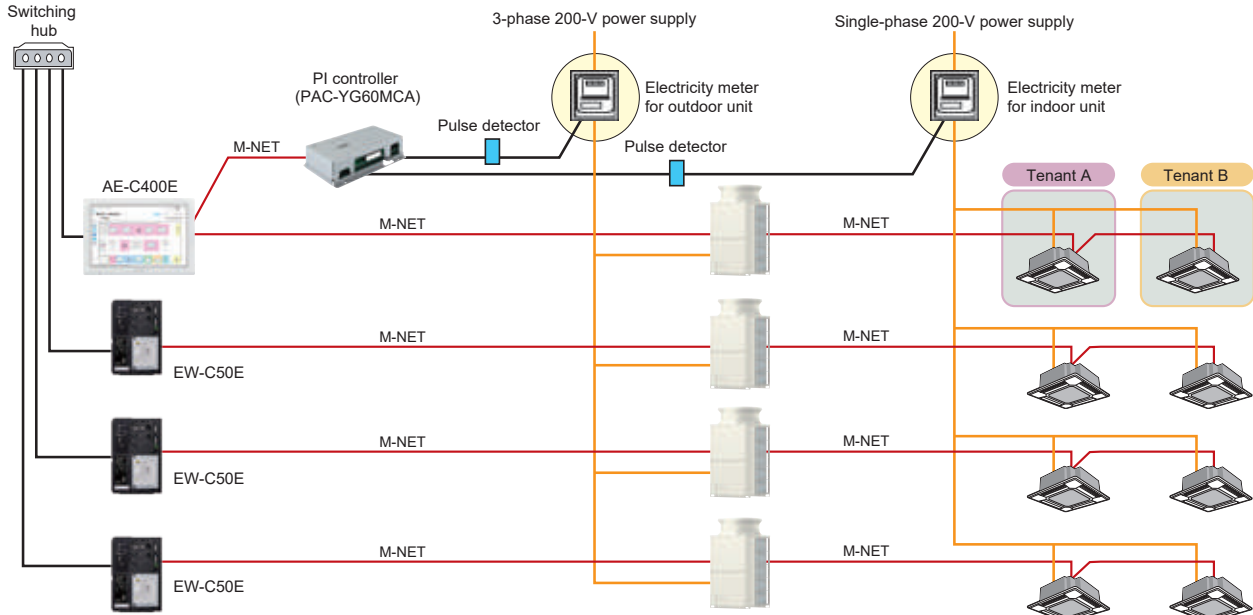
*2. The company names and product names in the text may be trademarks or registered trademarks of their respective companies.
When connecting EW-C50E via the Internet, avoid connecting it directly to the Internet. Connect it through a router or the like provided with the VPN function to ensure the security.

Outline drawing

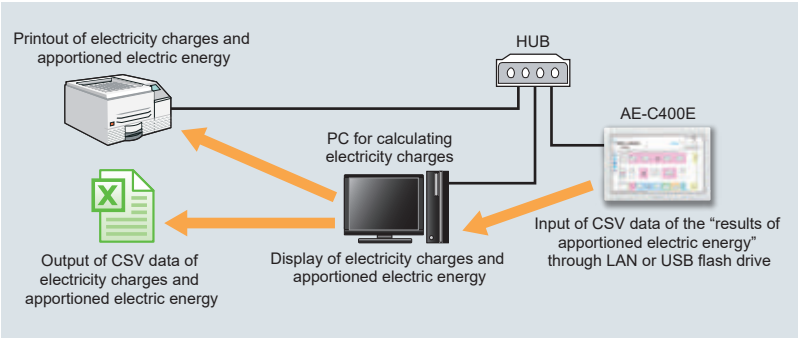


Charge function (The charge liscence is required.)

• Example of system configuration for apportionment by AE-C400E



* EW-C50E can be replaced with AE-C400E



A PC is used to calculate electricity charges. (It does not need to be constantly connected to the AE-C400E. The charge calculation tool must be installed, but other software can also be used on the computer.)

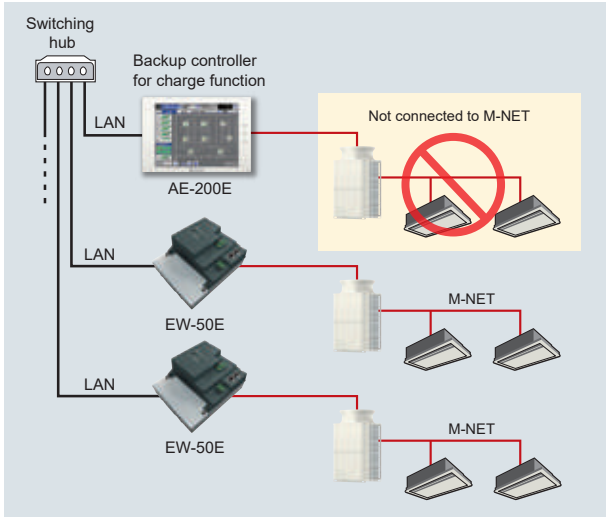
Notes on configuration

- When using charge function, input must be made by pulse input through the PI controller (PAC-YG60MCA). The charge function cannot be used with Modbus watt-hour meters.
- Electric energy pulses for apportionment must be input to each system of AE-C400E and EW-C50E.

The charge function requires no backup controller

When using the charge function, the conventional AE-200E system requires a dedicated backup controller that is not connected to M-Net, but the AE-C400E system does not require a backup controller. Reducing the number of required system controllers leads to lower system costs.

• Conventional AE-200E system



• AE-C400E system

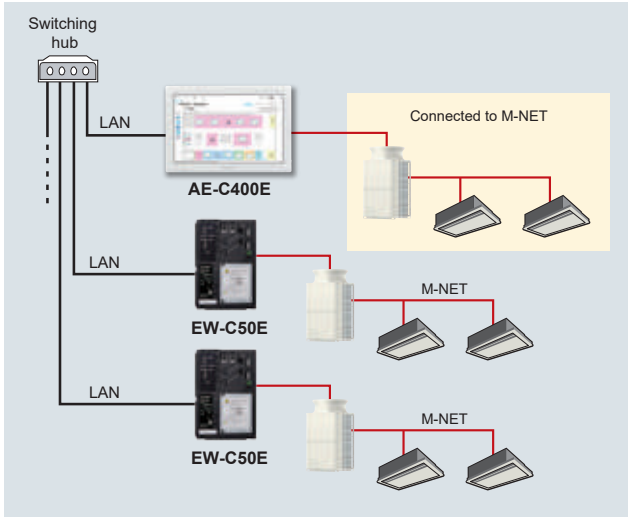
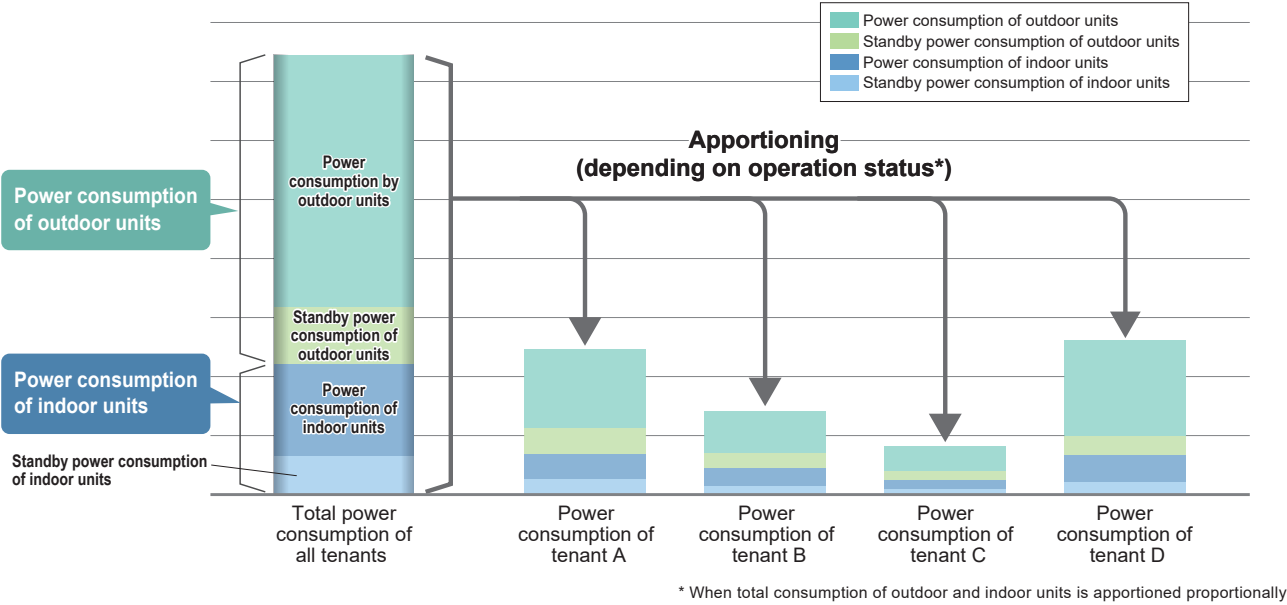


Image of electricity apportioning

Based on the operating status of each tenant's air conditioner, the total power consumption of all tenants (including the amount of power used by outdoor units and their standby power and the amount of power used by indoor units and their standby power) is apportioned to each tenant's power consumption.



Support for charging for air conditioning

Information on operation of indoor units in minutes can be obtained by registering the charge license (option) in AE-C400E. Electric energy can be apportioned according to the results of operation of indoor units to support charging for air conditioning.

* The calculation system for the support for charging for air conditioning cannot be used for trading or explanation defined by the Measurement Act (based on measurement). The billing support function for air conditioning is designed to support the apportionment by our unique method. Use the function after understanding its features.

Number	Data	Description	Tenant A	Tenant B
1	Reference data for apportionment	One of the following three modes is selected as the apportionment method, and the reference data (time) for apportionment is calculated based on the information on the operation of indoor units. ① Capacity save amount: Approximate value of amount of refrigerant used by indoor unit obtained by counting the capacity save amount (100 to 0%) every minute and dividing the integrated value by 100. [Example] 8:1: 100%, 8:2: 0%, ... 8:30: 100% (100 + 0 + ... 100)/100 = capacity save amount for 30 min ② Thermo ON time: Thermo ON time is integrated. ③ Fan operation time: The time during which the fan is operating is integrated.	① An example of calculation in the case of capacity save amount is shown. 15 min (20 min) (25 min)	18 min (23 min) (30 min)
2	Cooling capacity	The cooling capacity of each indoor unit has been determined for each model name.	4.5 kW	5.6 kW
3	Electric energy for outdoor unit	Power consumption by outdoor unit measured by electricity meter.	1.2 kWh (30 min)	
4	Electricity charge	Unit price of 1 kWh of electricity. * Five kinds of unit price can be set for each time slot. In this example, one kind of unit price is used for time slot 1.	30 yen/kWh	

Below is shown the method for apportioning the electric energy consumed by outdoor units for 30 minutes when the capacity save amount is selected as the apportionment mode.

* Although the standby electricity consumed by outdoor units and electric energy consumed by indoor units can be apportioned, these values are omitted in this explanation.

Concept of billing by apportionment to outdoor units

The charge is apportioned to each tenant based on **1. reference data for apportionment** (① capacity save amount), **2. cooling capacity** and **3. electric energy consumed by outdoor unit**.

	Capacity save amount for 30 min	Cooling capacity of indoor unit	Apportionment coefficient	Electric energy consumed by outdoor unit for 30 min	Electricity charge
Tenant A	15	× 4.5kW	67.5	⇒ 1.2kWh × 67.5 / 168.3	× 30 yen/kWh = 14.4 yen
Tenant B	18	× 5.6kW	100.8	⇒ 1.2kWh × 100.8 / 168.3	× 30 yen/kWh = 21.6 yen
Sum total of apportionment coefficients				168.3	

ON/OFF Remote Controller

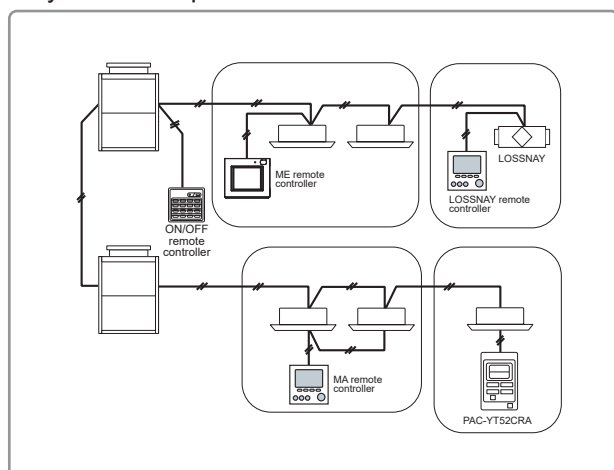
Just press a switch to start. All units can be switched ON/OFF by pressing the main switch, and each unit in the group can be switched ON/OFF with individual switches. The PAC-YT40ANRA also has a hardwired connection available (ON/OFF input, fire alarm input, run output, fault output).



PAC-YT40ANRA

Dimensions: 130(W) x 120(H) x 19(D) mm
: 5-1/8(W) x 4-3/4(H) x 3/4(D) in.

• System example



• Control of up to 16 groups/50 indoor units

- Up to 16 groups/50 units can be operated with a single ON/OFF remote controller.
- A general-purpose interface is also available for turning ON/OFF general devices.

• Just press a switch to start

- All units can be started and stopped by pressing the main switch, and each unit in the group can be started and stopped with individual switches.

• LED flashing during failure

- Any error in an air conditioner can be easily confirmed by the flashing of the LED. The LED also indicates whether each group is running or stopped.

• Interlock operation with an external system

- On/off operation can be flexibly interlocked with a card reader, fire alarm system, or building management system, etc. using the external input/output function.

• Flexible group setting

- Groups can be easily configured, allowing group patterns to be set freely according to the layout.
- The ON/OFF remote controller can be connected to the indoor/outdoor transmission line without a power supply unit.

NOTE

The dual set point function is available depending on the controller version.

Contact your local distributor regarding the availability of this function.

• Function

○: Each group □: Batch only ×: Not available

Item	Description	PAC-YT40ANRA	
		Setting	Display
UNITS	Max No.Units	50 units/16 groups	
ON/OFF	ON and OFF operation	○	○
Error indication	LED flashes during failure. (The error code can be confirmed by removing the cover.)	×	○
Ventilation operation (Independent)	Group operation is only possible with LOSSNAY units. *Only ON/OFF of group.	○	○
Ventilation operation (Interlocked)	The LOSSNAY will run in interlock with the operation of the indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	○	○
External input	ON and OFF operation / Fire Alarm*	□	×
External output	ON and OFF operation / Faults*	×	□

* Applicable to collective only
Not applicable to groups

AHC adapter



PAC-IF01AHC-J

Dimensions: 116(W) x 90(H) x 40(D) mm
: 4-9/16(W) x 3-1/2(H) x 1-9/16(D) in.

The Advanced HVAC Controller (AHC) comprises Mitsubishi Electric's AHC adapter (PAC-IF01AHC-J) and α2 simple application controller* (ALPHA2).

*The α2 simple application controller is a programming logic controller manufactured by Mitsubishi Electric Corporation.

AHC allows Mitsubishi Electric's air-conditioning network system (M-NET) to be connected to other systems, which was not possible with the use of ALPHA2 alone. AHC provides the following functions:

- ① Controls external devices using the sensor data of air-conditioning units connected to M-NET.
- ② Interlocks the operation of air-conditioning units and external devices that are connected to ALPHA2.
- ③ Controls air-conditioning units that are connected to M-NET.
- ④ Allows for the combined use of items ①-③ above.
- ⑤ Monitors the input/output status of ALPHA2 via a remote controller or centralized controller.

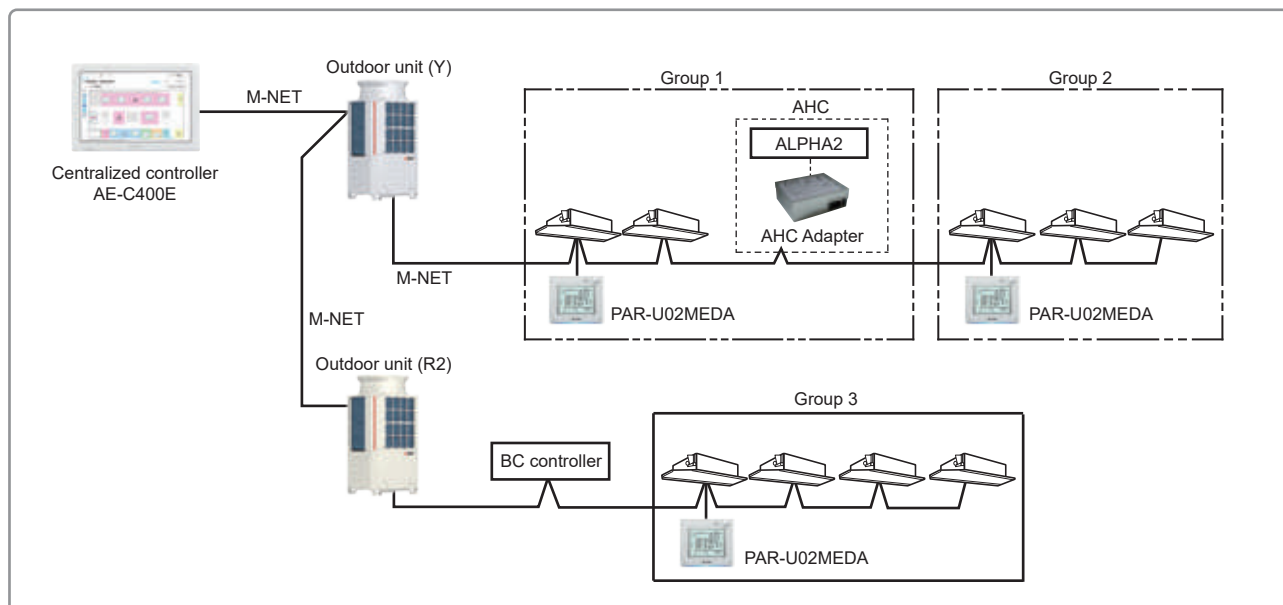
Compatible controllers

- Remote controller: PAR-U02MEDA
- Centralized controller: AE-C400E, EW-C50E

* Refer to the ALPHA2 manual for detailed information about ALPHA2.

* Use of the AHC adapter requires either a remote controller or centralized controller.

• System structure



PI Controller



PAC-YG60MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

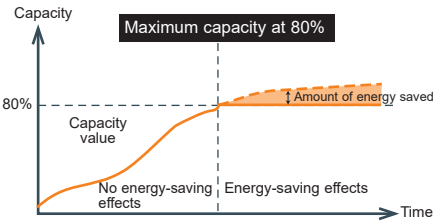
The PI controller counts pulses from a power meter, gas meter, water meter, and calorimeter. By combining the AE-C400E/EW-C50E, the charges for each unit can be calculated and peak cut (e.g., demand control) operations can be performed. The meters can be monitored on the AE-C400E LCD.

Energy Saving Control (Peak Cut)

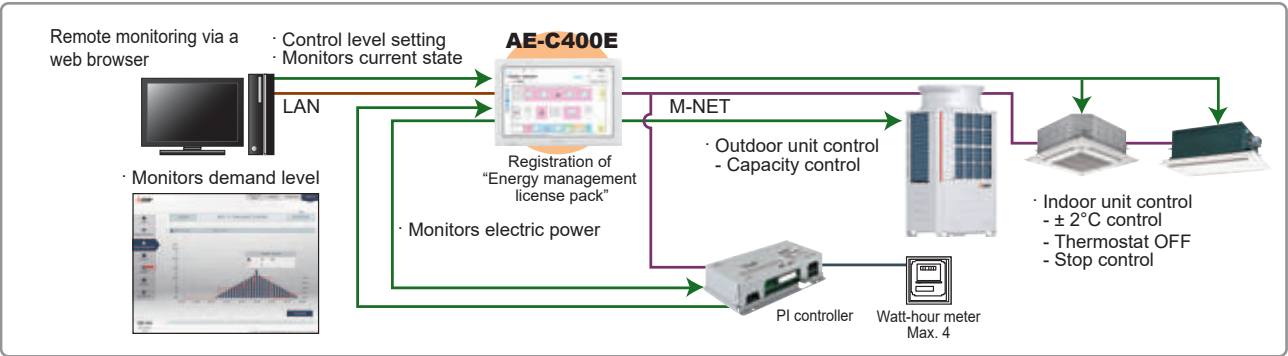
The PI controller enables energy saving control.
(Registration of the “Energy management license pack” is required.)

Energy saving is achieved by controlling the capacity of the outdoor unit.

*Note that when using energy saving control, there are no warranties for failures such as usages exceeding the contracted electricity amount.



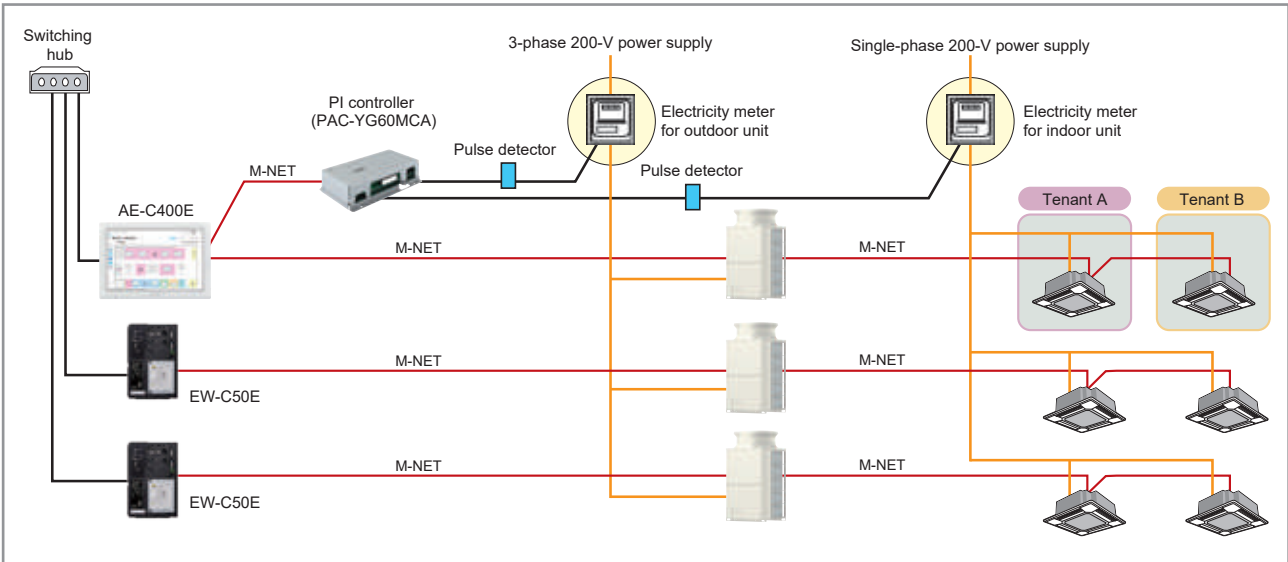
• System structure



Charge Calculation

• System structure

The charges for each tenant are calculated and output as a CSV file.



DIDO Controller



PAC-YG66DCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The DIDO controller is used in combination with an AE-C400E/EW-C50E to operate general-purpose equipment, as well as to monitor operating and error status. It is equipped with two sets of standard terminals (Channels 1 and 2), and four sets of expansion connectors for the input/output terminals.

The expansion cable is optional.

Operation can be monitored or performed from the AE-C400E LCD.

In addition, this device includes a function that interlocks M-NET devices such as indoor units, general equipment, etc.

Control of general-purpose equipment

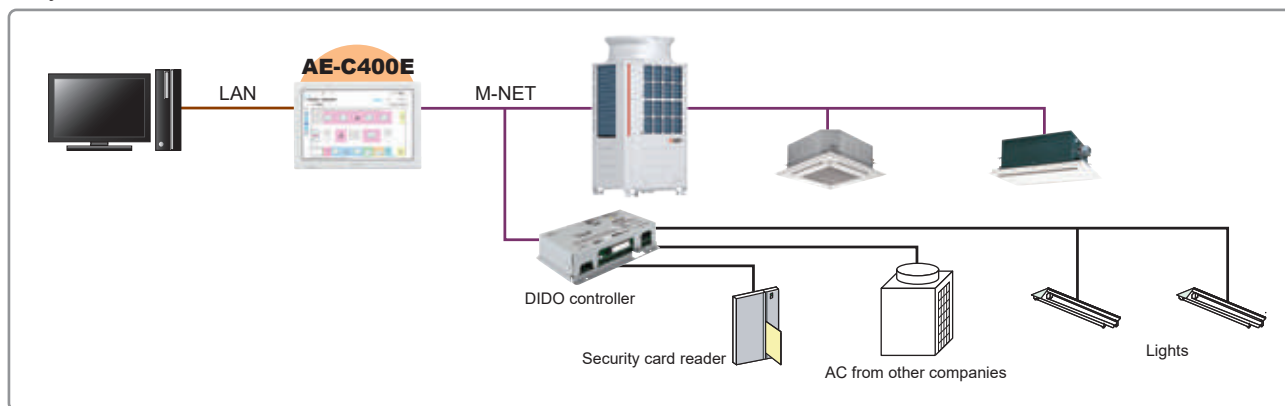
Equipment other than air conditioners (air conditioners from other companies, lights, ventilators, etc.) can be controlled and monitored.

- In addition to above, air conditioners can be interlocked with general-purpose equipment.
E.g.: Interlock between indoor units and a security system
- Indoor units can be turned ON/OFF when the security system is activated/deactivated.

Icon display (lights)



• System structure



AI Controller



PAC-YG63MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The AI controller measures temperature and humidity; it also has an alarm capability if the measurement data exceeds defined setpoints. Measurement data history can be displayed only via the AE-C400E/EW-C50E web browser. Temperature and humidity can be displayed on the AE-C400E LCD. Furthermore, an alarm can be output if measurement data exceeds a preset upper or lower limit. The AI controller also features a function that interlocks M-NET devices for indoor units, etc.

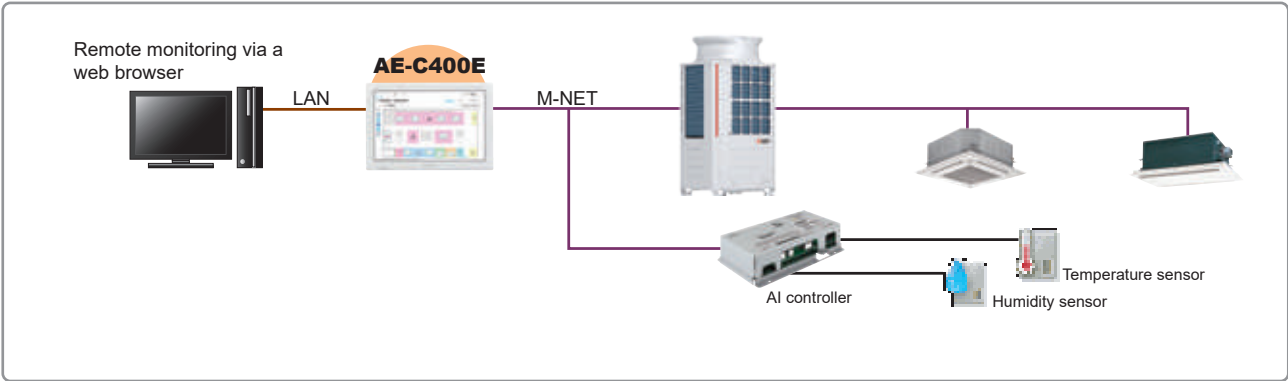
Temperature/humidity monitoring

Monitors the values measured by the temperature/humidity sensor connected to the AI controller

Temperature: Pt100, 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC
Humidity: 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC

- Measurement data trends can be displayed on a web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

• System structure



Lineup & Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Optional parts

• For CONTROL

Model	Description	Model	Description
PAC-SE42TS-E	Remote Sensor	PAC-YK92TB-J	Mounting attachment for AE-C400E wall-mount installations
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit	PAC-YK94UTB-J	Electrical box for AE-C400E wall-embed installations
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit	PAC-YK96TK-J	Mounting kit for AE-C400E wall-mount installations
PAC-SC37SA-E	Output signal connector for Outdoor Unit	PAC-YK91RF-J	Replace attachment from AE-200E
PAC-SC36NA-E	Input signal connector		
PAC-SF46EPA-G	Transmission booster		
PAC-YT51HAA-J	External input/output adapter for AT-50B		
PAC-YG10HA-E	External input/output adapter for AE-C400E		

Hot Water Solution/ Air to Water Series

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Air to Water Series is a system that can create cold and hot water and be used with a VRF system as with the indoor units.

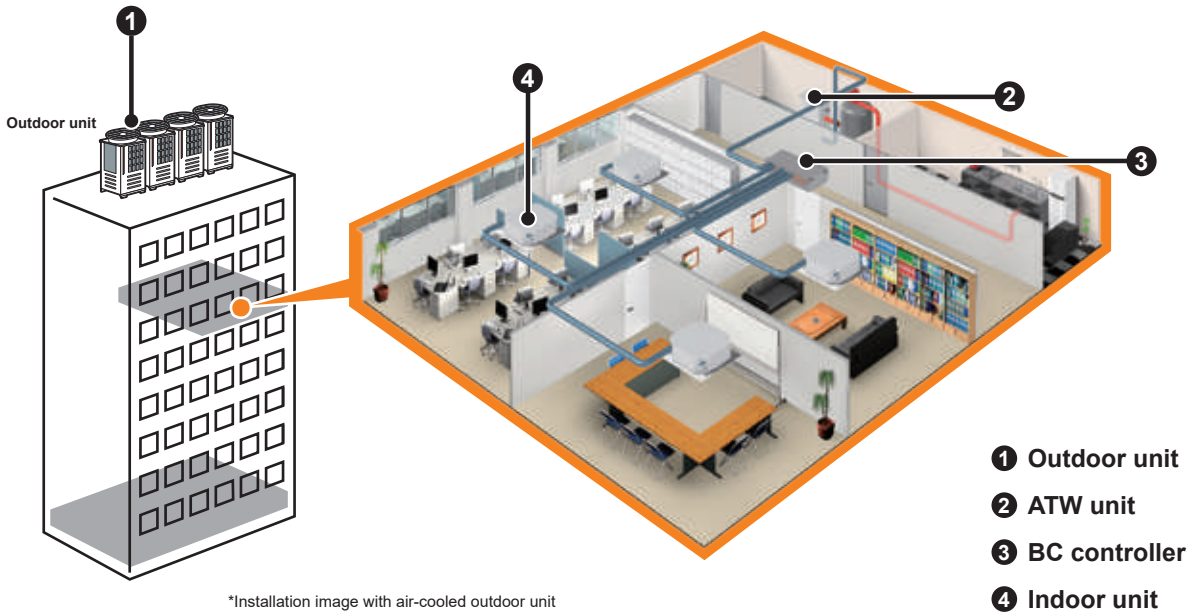
It can supply hot water of up to 70°C, and can be used in any situation, such as for showers or floor heating in homes and hotels, as well as for supplying hot water in offices and restaurants.

Using the Air to Water Series in combination with the heat recovery series (R2-Series) allows exhaust heat from the cooling operation to be used effectively to create hot water, ensuring efficient heat recovery operation.


System structure

The booster unit offers hot water to a maximum of 70°C. Applying heat recovery technology to provide hot water, the units are suitable for residences, office buildings, restaurants and hotels, providing an optimal environment with the benefits of reduced running costs and less impact on environment.

The ATW system consists of an outdoor unit, a BC controller when connected with the R2-Series, an ATW unit, indoor unit and controller.



Lineup

Type	Booster unit	
Model name	PWFY-P100VM-E1-BU	
Applications	Sanitary water, shower, etc.	
Operation	Up to 70°C	
Connectable to	Outdoor unit	CITY MULTI R2/WR2 Series
	BC controller	CMB-M104-1016V-J1 CMB-M108-1016V-JA1 CMB-P1016V-KA1 CMB-M104, 108V-KB1

ATW Unit - Booster Unit

PWFY-P100VM-E1-BU



Benefiting from the heat recovery operation of the CITY MULTI R2 system, the booster unit converts energy from the air to higher temperatures suitable for supplying hot water with virtually no wasted energy.

Connectable to

CITY MULTI
R2 Series

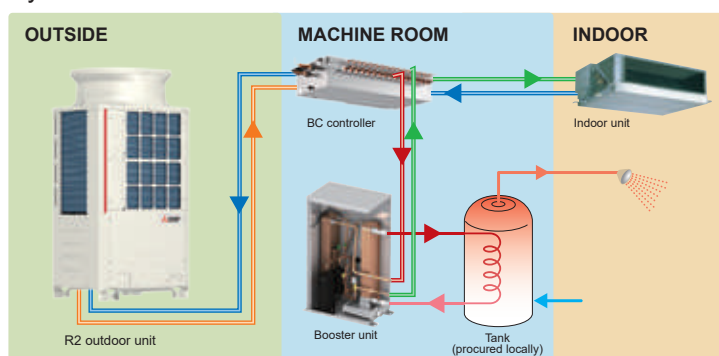
Applications

Sanitary water,
shower, etc.

Operation

Up to 70°C

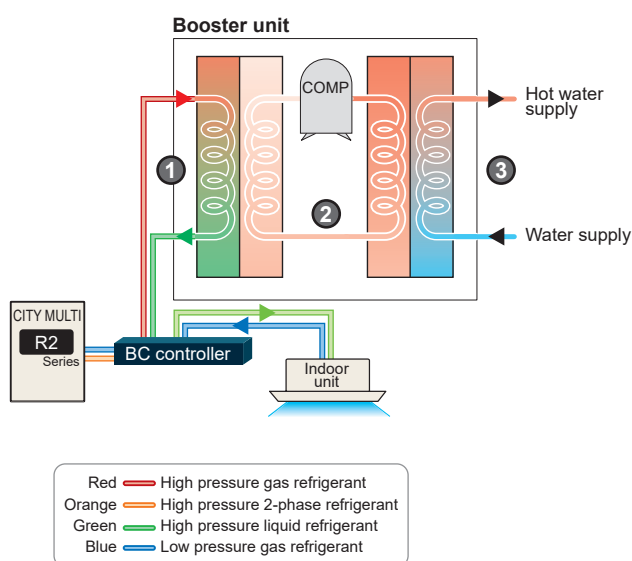
• System outline



The booster unit is connected to a BC controller with refrigerant pipes and to the water tank with water pipes. The waste heat from cooling operation is utilized in the heating operation for providing hot water.

Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

What makes the booster unit unique?



Refrigerant flow

- From the BC controller, high pressure R410A gas refrigerant is delivered to the Booster unit to exchange heat with the low pressure R134a liquid refrigerant circulating through ② and returns to the BC controller as a high pressure liquid refrigerant.
- Refrigerant R134a circulates inside the two plate heat exchangers inside the unit. Temperature rises as low pressure R134a gas refrigerant is compressed by the compressor and becomes a high pressure gas refrigerant.

Water supply

- Water entering the Booster unit exchanges heat with high pressure R134a gas refrigerant. The hot water circulates to heat the water inside the tank, to be used for showers, sanitary water, etc.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System


Remote
Controller

Hot Water
Solution

BC Controller

- CMB-M104-M1016V-J1
- CMB-M108-M1016V-JA1
- CMB-P1016V-KA1
- CMB-M104, 108V-KB1

To connect the R2 Series outdoor units and ATW indoor units a BC controller is required.

		BC controller
Model		CMB-M104-M1016V-J1 CMB-M108-M1016V-JA1 CMB-P1016V-KA1 CMB-M104, 108V-KB1
Connectable ATW system		Booster
Outdoor unit	Connectable series	R410A R2
	Connectable capacity	P200-P1100
ATW/ Indoor unit	Connectable quantity	1-50
	Connection method	With a BC port
	Operation mode	Cooling AND heating
Product image		

CASE STUDY

Application: Restaurant
Country: Italy



Unit information

Outdoor unit: Air-cooled R2-Series ×5, BC controller ×5
ATW unit: Booster unit ×3 Indoor unit: Floor mounted concealed type ×18
Control: AG-150A ×1, ATW controller ×3, ME remote controller ×27, Power supply unit ×1
Other: OA processing unit ×9

●Background

The restaurant required air conditioning, fresh air, and sanitary water. As a perfect solution that can provide all three, the consultant proposed the Air to Water system+CITY MULTI+OA processing unit. With the combination of Mitsubishi Electric's product lineup, the system can provide hot water without a boiler and air conditioning with a high COP. What's more, with the OA processing unit in the system, suitable ventilation with top quality air and energy saving environment is created.

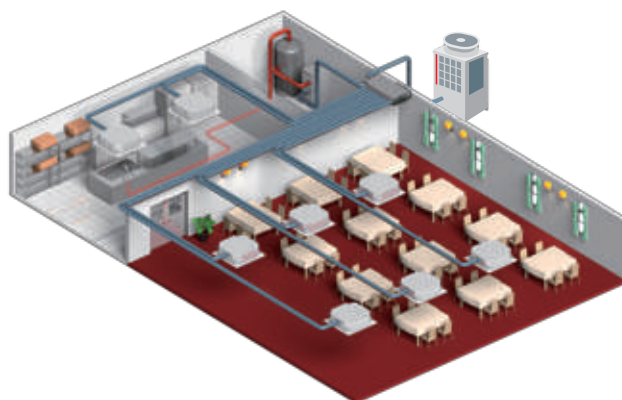
APPLICATION EXAMPLE

The application examples here indicate why ATW systems are chosen and how the great potential offered by using ATW systems can be best utilized.

RESTAURANTS

Reason for ATW

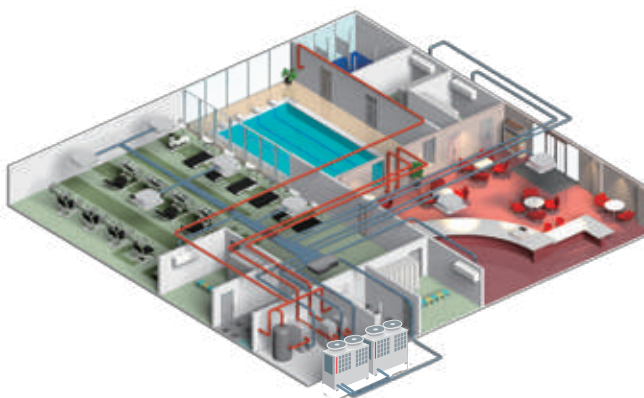
- >Hot water is almost always required in the kitchen.
- >Waste heat from the kitchen can be used to cool the dining hall in the summer and increase efficiency of the system.



HEALTH CLUBS

Reason for ATW

- >Gym space requires year-round cooling.
- >Swimming pools and shower rooms require hot water.



OFFICES

Reason for ATW

- >Different requirements for different tenants/rooms mean cooling/heating/hot water is expected throughout the year.
- >In the winter, waste heat from the cooling operation in rooms with large numbers of computers can be used for hot water in small kitchens.
- >In the summer, cooling operation can be performed in all rooms while hot water is available in small kitchens.



RESIDENCES

Reason for ATW

- >Hot water is required throughout the year for the shower and kitchen.
- >Can be used for under floor heating in winter and cooling in summer.

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette typeCeiling
concealed typeCeiling
suspended typeWall-mounted
typeFloor standing
type

Functions

LOSSNAY
SystemRemote
ControllerHot Water
Solution

Booster unit

PWFY-P100VM-E1-BU



Model			PWFY-P100VM-E1-BU
Power source			1 - phase 220 - 230 - 240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5
	*1	BTU / h	42,700
	Power input	kW	2.48
Temp. range of heating	Current input	A	11.63 - 11.12 - 10.66
	Outdoor unit condition	W.B.	-20 ~ 32°C (-4~90°F) R2-Series
	Booster unit inlet water temp.	-	10 ~ 70°C (50 ~ 158°F)
Connectable outdoor unit	Total capacity	-	50 ~ 100% of outdoor unit/heat source unit capacity
	Model / Quantity		PURY-(E)P•Y(S)NW-A2(-BS) PQRY-P•Y(S)LM-A1/A2
Sound pressure level (measured in anechoic room) dB <A>			44
Diameter of refrigerant pipe	Liquid	mm (in.)	ø9.52 (ø3/8") Brazed
	Gas	mm (in.)	ø15.88 (ø5/8") Brazed
Diameter of water pipe	Inlet	mm (in.)	R3/4
	Outlet	mm (in.)	Rc3/4
Field drain pipe size		mm (in.)	ø32 (1-1/4")
External finish			NO
External dimension H × W × D		mm	848 (833 without legs) × 450 × 300
		in.	33-7/16" (32-13/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg (lbs)	63 (138)
Compressor	Type		Inverter rotary hermetic compressor
	Starting method		Inverter
	Motor output	kW	1.0
	Lubricant		NEO22
Circulating water	Operation volume Range	m³ / h	0.6 ~ 2.15
Protection on internal circuit (R134a)	High pressure protection		High pressure sensor, High pressure switch at 3.60 MPa (601 psi)
	Inverter circuit (COMP)		Over-heat protection, Over-current protection
	Compressor		Discharge thermo protection, Over-current protection
Refrigerant	Type × original charge	*2	R134a × 1.1kg (0.50lb)
	GWP	*3	1,430
	CO ₂ equivalent	*3 t	1.6
	Control		LEV
Design pressure	R410A	MPa	4.15
	R134a	MPa	3.60
	Water	MPa	1.00
Drawing	External		WKB94C7Q4
	Wiring		WKE94L369
Standard attachment	Document		Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, Wire x 1 set
Optional parts			NONE
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Note: *1Nominal heating conditions
<R2-Series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp. 65°C (149°F) Water flow rate 2.15m³/h

*2Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
*3These values are based on Regulation (EU) No.517/2014.

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the Outdoor unit (R2-Series) in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

Unit converter

BTU / h =kW × 3.412
cfm =m³ / min × 35.31
lbs =kg / 0.4536

* The specification data is subject to rounding variation.

Remote Controller

PAR-W21MAA



○ : Each group × : Not available

Item	Description	Operations	Display
ON / OFF	ON and OFF the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Heating 30°C ~ 50°C (87°F ~ 122°F) Heating ECO 30°C ~ 45°C (87°F ~ 113°F) Hot Water 30°C ~ 70°C (87°F ~ 158°F) Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Cooling 10°C ~ 30°C (50°F ~ 87°F) • The settable range varies depending on the unit to be connected.	○	○
Preset temperature range limit	Preset temperature range setting can be limited via a remote controller.	○	○
Water temperature display	10°C ~ 90°C (50°F ~ 194°F) (in increments of 1°C or 1°F) • The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function : ON / OFF, Operation modes, water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	×	○
Schedule operation	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	×	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
Circulating water replacement warning	Displays the circulating water replacement warning via the unit message. Clears the display by pressing the CIR.WATER button twice. * Circulating water replacement warning is not available depending on the unit to be connected.	○	○
Operation locking function	Remote controller operation can be locked or unlocked. • All-switch locking • Locking except ON / OFF switch	○	○

Centralized Controller

AE-C400E



□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG6DCA is required.)	○ ◎ △ ●	○ ◎
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto(*)/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○ ◎ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] Auto : 19°C (67°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] The range of temperature depends on the air conditioning unit. [] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○ ◎ △ ●	○
Fan speed setting	Models with 4 air flow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings : Hi/Mid/Low Models with 2 air flow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ◎ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○ ◎ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ◎ △ ●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ◎ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioning unit, the afflicted unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioning units in test run mode.	○ ◎ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ◎ △ ●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	◎	◎
Energy Management	Bar Graph : Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□ ○ ●

Lineup &
Functions

Y-Series

R2-Series

ZUBADAN
-Series

S-Series

BC Controllers

Ceiling
cassette type

Ceiling
concealed type

Ceiling
suspended type

Wall-mounted
type

Floor standing
type

Functions

LOSSNAY
System

Remote
Controller

Hot Water
Solution

Centralized Controller

EW-C50E



◎: By group or multiple groups ○: By group □: Batch only

Item	Description	Setting Display	Display
ON/OFF	Switches to ON or OFF air conditioners and general equipment.	◎	◎
Operation mode switching	Switches to cool, dry, auto, fan, or heat operation. * Depending on the unit, some modes are not available.	◎	○
Room temperature setting	The temperature can be set in the following range. The values inside the parenthesis are for indoor units for medium temperature. * Depending on the model, the setting temperature range differs. · Cooling/dry : 19°C to 35°C (4.5°C to 30°C) · Heating : 17°C to 28°C (17°C to 28°C) · Auto (single set point): 19°C - 28°C · Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. · Setback (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode.	◎	○
Prohibition of local remote controller operation	It is possible to disable the ability to use to local remote controller to run or stop, the operation mode, set temperature, filter sign reset, wind speed, wind direction and timer operation. * In the Lossnay group, only ON/OFF and filter reset can be disabled. * Disabling of the fan speed, air direction, and timer operation can be set for the AT-50B, PAR-41MAA, PAR-U02MEDA, and PAC-YT52CRA models.	◎	○
Room temperature display	Displays the suction temperature of the indoor unit.	-	○
Error display	Displays the current error content together with the address.	-	◎
Schedule operation	Today/weekly/weekly by season/yearly Setting content: ON/OFF, operation mode, set temperature, disable local remote controller, air direction/fan	◎	○
Energy management	Displays the power consumption* or operating hours. * Requires an optional part.	-	◎
External input (timer connection, emergency stop input, etc.)	Using a level signal or pulse signal, it is possible to input the following. Level signal: Emergency Stop Input, Batch ON/OFF, and Demand Input. Pulse signal: Batch ON/OFF or Operation Disable/Enable * Requires an external power supply and separately sold external I/O adapter (PAC-YG10HA-E). Of the above inputs, only one input can be selected.	□	-
External output (error output, operation output)	Using the level signal, ON/OFF and Error/Normal are output. * Requires an external power supply and separately sold external I/O adapter (PAC-YG10HA-E).	-	□
Web browser	Monitor/operation, failure, filter sign monitoring, schedule setting, interlocked control setting (option), energy saving control setting (option), energy saving peak cut setting (option), set temperature range restrictions, other	◎*1	◎*1

* The functions and specifications differ depending on the connected equipment and model.
* Electric energy can be proportionally divided using the EW-C50E alone.
But the apportioned electricity charge function requires an AE-C400E

■Connectable equipment: Free plan direct expansion system air conditioner
Inverter air conditioner for facility
Package air conditioner for facility (the AW control model can be connected using an M control compatible indoor unit)
A Control Mr. Slim (Can be connected using an M-NET adapter or special outdoor unit)
Kirigamine room air conditioner (Requires a system control interface or M-NET control interface)
Free plan Lossnay/Lossnay with heating and humidification
Independent humidification unit *2
Environmental measuring controller, metering measurement controller, general interface

Notes

*1. Some items do not support the multi group setting and display.

*2. Use only items for which the unit has the function.

Advanced touch controller

AT-50B



□: Each unit ○: Each group ●: Each block △: Each floor ◎: Collective ×: Not available

Item	Description	Operations	Display
Controllable unit	Up to 50 units / 50 groups of units		
ON / OFF	ON and OFF operation of a group of units. Even when only a single ATW unit or indoor unit is operated in the system, the advanced touch controller will operate and collective ON/OFF lamp will light up.	○ ◎	○ ◎
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected.	○ ◎	○ ×
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) [Booster unit] Heating 30°C ~ 50°C (87°F ~ 122°F) Heating ECO* 30°C ~ 45°C (87°F ~ 113°F) Hot Water 30°C ~ 70°C (87°F ~ 158°F) Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Cooling Invali * The settable range varies depending on the unit to be connected. * The temperature is controlled automatically in the Heating ECO mode. The user cannot change the temperature settings.	○ ◎	○ ×
Water temperature display	10°C ~ 90°C (50°F ~ 194°F) (in increments of 1°C or 1°F)	×	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start / Stop, Change operation mode, Set temperature, Circulating water replacement warming reset).	○ ◎	○ ×
Schedule operation	Weekly schedule setting up to 12 patterns is available. In one pattern, up to 16 settings of "ON / OFF", "Operation mode", "Temperature Setting", and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule patterns (summer and winter) are available. Today's schedule setting up to 5 patterns is available. * Time setting unit: 5 minutes / unit	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON / OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□ ◎

Installation Information

* Refer to the enclosed Installation Manual for details on installation. Arrange to have an expert install the system correctly.

I. General precautions

1-1. Usage

- ◆ The air-conditioning system described in this catalogue is designed for human comfort.
- ◆ This product is not designed to assist in the preservation of food, provide conditions to maintain plants or animals, or stabilize environments for the preservation of precision equipment or art objects. To prevent loss of quality, do not use the product for purposes other than those it is designed for.
- ◆ To reduce the risk of water leakage and electric shock, do not use the product for air-conditioning vehicles or vessels.

1-2. Installation environment

- ◆ Do not install any unit other than the dedicated unit in an area where the voltage changes significantly, large amounts of mineral oil (e.g., cutting oil) are present, cooking oil may splash, or a large quantity of steam can be generated, such as a kitchen.
- ◆ Do not install the unit in acidic or alkaline environments.
- ◆ Installation should not be performed in locations exposed to chlorine or other corrosive gases. Avoid installation near sewers.
- ◆ To reduce the risk of fire, do not install the unit in an area where flammable gas may leak or flammable material is present.
- ◆ This air-conditioning unit has a built-in microcomputer. The effects of noise should be taken into consideration when deciding on the installation position. It is recommended that the air-conditioning unit be installed in a position away from antennas or electronic devices.
- ◆ Install the unit on a solid foundation in accordance with local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, or falling.

1-3. Backup system

- ◆ In regions in which the malfunctioning of the air conditioner may have a critical effect, it is recommended to have two or more systems made up of single outdoor/heat source units and multiple indoor units.

1-4. Unit characteristics

- ◆ The heat pump efficiency of the outdoor unit depends on the outdoor temperature. In heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air will continue to be trapped near the ceiling and the floor level will remain cold. In such cases, heat pumps require a supplemental heating system or air circulator. Before purchasing, consult your local distributor for assistance in selecting the unit and system.
- ◆ When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor/heat source unit side tends to collect frost, which reduces its heating performance. The Auto-defrost function will be activated in order to remove the frost, and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of the defrost process.
- ◆ An air conditioner with a heat pump requires time to warm up the whole room after the heating operation begins, because the system circulates warm air in order to warm up the whole room.
- ◆ Sound levels were obtained in an anechoic room. Sound levels during actual operation are usually higher than the simulated values due to ambient noise and echoes. Refer to the section on "SOUND LEVELS" in the DATA BOOK for the measurement location.

- ◆ Depending on the operating conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Try to avoid positioning the air conditioner in locations where quietness is required.

With regard to the BC/HBC controller, it is recommended that the unit be installed in areas such as corridor ceilings, restrooms and plant rooms.

- ◆ The total capacity of the connected indoor units can be greater than the capacity of the outdoor/heat source unit.
However, when the connected indoor units operate simultaneously, each unit's capacity may become smaller than the rated capacity.
- ◆ When the unit is started up for the first time within 12 hours after the power comes on, i.e. after a power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires a maximum of 90 minutes to complete, depending on the operating load.
- ◆ When the unit is operating out of the operation temperature range, the unit may stop to prevent malfunction.

1-5. Related equipment

- ◆ Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 second or less.
- ◆ Consult your local distributor or a qualified technician when installing an earth leakage breaker.
- ◆ If the unit is an inverter type, select an earth leakage breaker able to respond to high harmonic waves and surges.
- ◆ Leakage current is generated not only through the air-conditioning unit but also through the power wires. The leakage current of the main power supply is therefore greater than the total leakage current of each unit. Take the capacity of the earth leakage breaker or leakage alarm into consideration when installing one at the main power supply. To measure the leakage current simply on site, use a measurement tool equipped with a filter, and clamp all the four power wires together. The leakage current measured on the ground wire may not be accurate because the leakage current from other systems may be included in the measurement value.
- ◆ Do not install a phase-advancing capacitor on a unit connected to the same power system as an inverter-type unit and its related equipment.
- ◆ If a large current flows due to the malfunctioning of the product or faulty wiring, both the earth leakage breaker on the product side and the upstream overcurrent breaker may trip almost at the same time. Separate the power system or coordinate all the breakers depending on the system's priority level.

1-6. Unit installation

- ◆ Your local distributor or a qualified technician must read the Installation Manual that is provided with each unit carefully before performing installation work.
- ◆ Consult your local distributor or a qualified technician when installing the unit. Improper installation by an unqualified person may result in water leakage, electric shock, or fire.
- ◆ Ensure that there is enough space around each unit.

1-7. Optional accessories

- ◆ Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician when installing them. Improper installation by an unqualified person may result in water leakage, power leakage, system breakdown, or fire.
- ◆ Some optional accessories may not be compatible for use with the air-conditioning unit or may not be suitable for the installation conditions. Check the compatibility when considering any accessories.
- ◆ Note that some optional accessories may affect the air conditioner's external form, appearance, weight, operating sound, and other characteristics.

1-8. Operation/Maintenance

- ◆ Read the Instruction Book that is provided with each unit carefully prior to use.
- ◆ Maintenance or cleaning of each unit may be risky and require expertise. Read the Instruction Book to ensure safety. Consult your local distributor or a qualified technician when special expertise is required, such as when the indoor unit needs to be cleaned.

2. Precautions for Indoor unit and BC controller

2-1. Operating environment

- ◆The refrigerant (R410A) used in the air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant leaks.
- ◆If the units operate in cooling mode at a humidity above 80%, condensation may collect and drip from the indoor units.
- ◆Regular checking and cleaning of the drain drainage paths, such as the drain pan or the drain pump, is recommended to prevent clogging. The neglect of a clogged drain pump may trigger the water-leakage protection function which stops operation of the entire system.

2-2. Unit characteristics

- ◆Depending on the operating conditions, the unit generates noise caused by refrigerant flow even when operating normally. Try to avoid positioning the air conditioner in locations where quietness is required.
- ◆The return air temperature display on the remote controller may differ from the displays on the other thermometers.
- ◆The clock on the remote controller may be displayed with a time lag of approximately one minute every month.
- ◆The temperature measured by the built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- ◆Use the built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.
- ◆The room temperature may rise drastically due to Thermo OFF in areas where the air-conditioning load is large, such as computer rooms.
- ◆Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and operating noise may increase.
- ◆The room temperature may increase above the preset temperature in environments in which the heating or air-conditioning load is small.

2-3. Unit installation

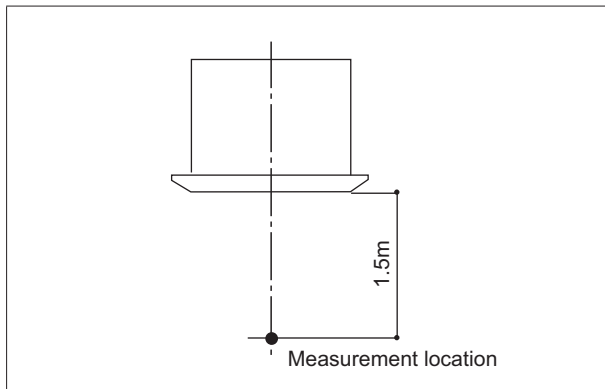
- ◆The insulation for the low-pressure pipe between the BC controller and the outdoor/heat source unit must be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.
- ◆Do not have any branching points on the downstream of the refrigerant pipe header.
- ◆When a field-supplied external thermistor is installed or when a device for demand control is used, the unit may stop abnormally or damage may occur to the electromagnetic contactor. Consult your local distributor for details.
- ◆When indoor units employ fresh air intake, install a filter in the duct (locally procured) to remove dust from the air.
- ◆The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" in the DATA BOOK for the available range for fresh air intake volume.
- ◆Employing fresh air intake for the indoor unit may increase the sound pressure level.
- ◆Do not install the unit above the cooking or food processing area.

2-4. Noise level (Sound pressure level)

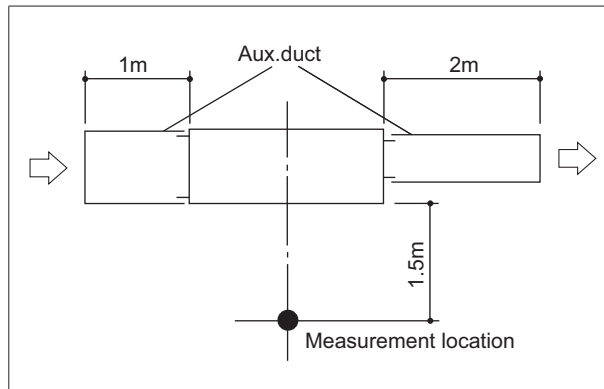
◆The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the value indicated in this catalogue due to the influence of ambient noise and echoes.

<Measurement location>

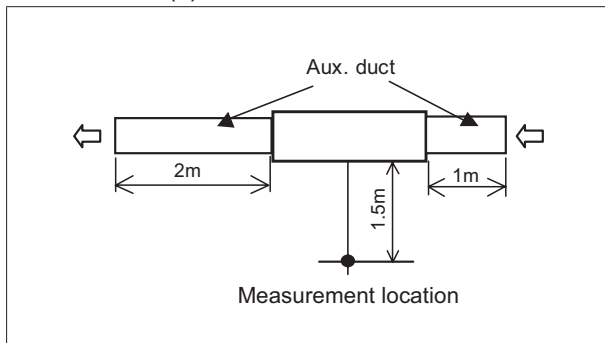
■PLFY-M-VEM6-E, PLFY-P-VFM-E1,
PLFY-P-VLMD-E, PMFY-P-VBM-E



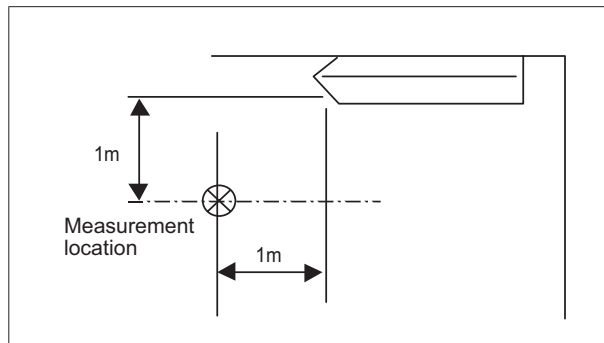
■PEFY-P-VMR-E-L/R, PEFY-P-VMS1(L)-E,
PEFY-P-VMHS-E, PEFY-P-VMHS-E-F



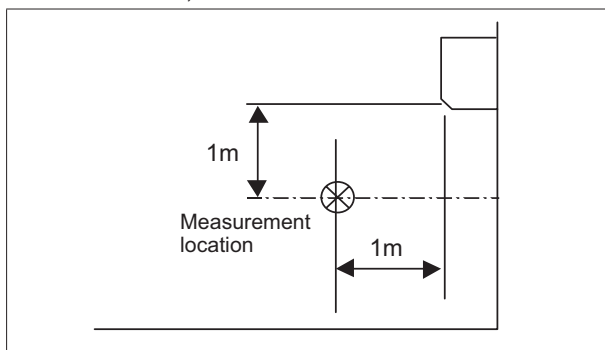
■PEFY-M-VMA(L)-A1



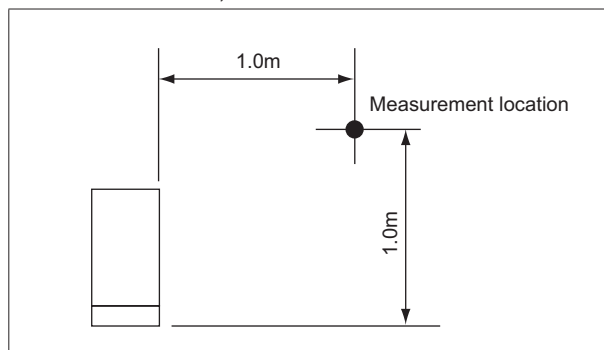
■PCFY-P-VKM-E



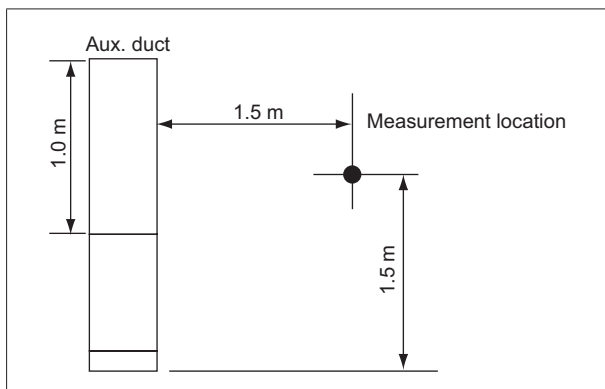
■PKFY-P-VLM-E, PKFY-P-VKM-E



■PFFY-P-VKM-E2, PFFY-P-VEM-E



■PFFY-P-VCM-E



3. Precautions for fresh air intake-type indoor unit

3-1. Usage

- ◆The fresh air intake-type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.

3-2. Unit characteristics

- ◆Depending on the operating conditions, the unit generates noise caused by refrigerant flow even when operating normally. Try to avoid positioning the air conditioner in locations where quietness is required.
- ◆This unit cannot perform drying operation. The unit will continue fan operation and blow fresh air (air that is not air-conditioned) when the Heating Thermo OFF or Cooling Thermo OFF mode is selected.
- ◆The fan may stop temporarily when the unit is connected to a simultaneous cooling/heating operation-type outdoor/heat source unit (R2-Series) or during the defrost cycle.
- ◆If only this unit is used as an indoor unit, condensation may form at the supply air grille while the unit is operated in cooling mode. This unit cannot perform dehumidifying operation.
- ◆The maximum connectable indoor units for 1 outdoor unit is 110% (100% in case of heating below -5°C).
- ◆When fresh air intake-type indoor units are connected to an outdoor unit together with other types of indoor unit, the total capacity of the fresh air intake-type indoor units must be no more than 30% of the capacity of the connected outdoor unit.
- ◆The AUTO mode on the local remote controller is available only when the fresh air intake-type indoor unit is connected to the R2-Series outdoor units.
- ◆The system changeover function is available only when all the connected indoor units are fresh air intake-type indoor units.
- ◆Untreated outside air such as humid air or cold air will be blown into the indoor environment during Thermo OFF operation, which may cause dew condensation on the grilles and ducts. Ensure that the grilles, ducts, and rooms are properly insulated to prevent dew condensation.
- ◆An air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible if using locally procured filters.
- ◆The outside air temperature ranges for operation are as follows:
Cooling: 17°C D.B./15.5°C W.B. ~ 43°C D.B./35°C W.B.
Heating: -10°C D.B. ~ +20°C D.B.
The unit is forced to operate in Thermo OFF (fan operation) mode when the outside air temperature is as follows:
Cooling: 17°C D.B. or below
Heating: 20°C D.B. or above
- ◆Outside air is directly supplied into the room during Thermo OFF. Be careful with regard to cold supply air due to low outside air temperatures and of condensation in the room due to high humidity of the outside air.
- ◆If the airflow rate is higher than the usable range, condensation may drip from the air outlet, and the air flow rate will be automatically reduced by the fan motor control. If the air flow rate is lower than the usable range, condensation may form on the surface of the unit.
- ◆Combining fresh air intake-type indoor units with other types of indoor units to respond to the internal thermal load may cause conflict in operating modes. It is not recommended when a fresh air intake-type indoor unit is connected to a Y-Series unit.
- ◆Depending on the air-conditioning load, outside temperature, and the activation of protection functions, the desired preset temperature may not always be achieved and the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- ◆Fresh air intake-type indoor units cannot be connected to an outdoor unit together with PWFY-Series units.

4. Precautions for outdoor unit

4-1. Installation environment

- ◆The outdoor unit with the salt-resistant specification is recommended for use in an area in which it will be exposed to salt air.
- ◆Even when the unit with the salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in the Instruction Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to in the guidelines published by JRAIA (JRA9002).
- ◆Install the unit in an area where the flow of discharge air is not obstructed. If the flow of discharge air is obstructed, short-cycling of discharge air may occur.
- ◆Provide proper drainage around the base of the units; condensation may collect and drip from outdoor units. Provide water-proofing protection to the floor when installing the unit on the rooftop.
- ◆In regions where snowfall can be expected, install the unit so that the outlet faces away from the direction of the wind, and install a snow guard to protect the unit from snow. Install the unit on a base approximately 50 cm higher than the expected snowfall. Close the openings for pipes and wiring, because the ingress of water and small animals may cause equipment damage. If a SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and be careful with the installation to avoid the risk of corrosion.
- ◆When the unit is expected to operate continuously for a long period of time at outside air temperatures of below 0°C, take appropriate measures, such as the use of a unit base heater, to prevent ice forming on the unit base. (Not applicable to the PUMY-Series)
- ◆Install the snow guard so that the outlet/inlet faces away from the direction of the wind.
- ◆When approximately 50 cm or more of snow accumulates on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand loads caused by snow in areas where snow accumulates.
- ◆Provide proper protection around the outdoor units in places such as schools to avoid the risk of injury.
- ◆A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere.
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air to ensure that the oxygen dissolved in the water is 1 mg/L or less.
- ◆Install a strainer (50 mesh or more recommended) on the water pipe inlet on the heat source unit.
- ◆Interlock the heat source unit and water circuit pump.
- ◆Note the following to prevent the freezing and bursting of pipes when the heat source unit is installed in an area where the ambient temperature can be 0°C or below.
 - ◆Keep the water circulating to prevent it from freezing when the ambient temperature is 0°C or below.
 - ◆Before a long period of non-use, be sure to purge the water from the unit.
- ◆The salt-resistant unit is resistant to salt corrosion, but not salt-proof.
Please note the following when installing and maintaining outdoor units in a marine environment.
 1. Install the salt-resistant unit in an area in which it is not directly exposed to sea breezes, and minimize exposure to salt water mist.
 2. Avoid installing a sun shade over the outdoor unit, so that rain will wash away salt deposits off the unit.
 3. Install the unit horizontally to ensure proper water drainage from the base of the unit. Accumulation of water in the base of the outdoor unit will significantly accelerate corrosion.
 4. Periodically wash salt deposits off the unit, especially when the unit is installed in a coastal area.
 5. Repair all noticeable scratches after installation and during maintenance.
 6. Periodically check the unit, and apply an anti-rust agent and replace corroded parts as necessary.

4-2. Circulating water

- ◆Regularly check the quality of the water in the heat source unit, following the guidelines published by JRAIA (JRA-GL02-1994).
- ◆A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere.
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air to ensure that the oxygen dissolved in the water is 1 mg/L or less.

4-3. Unit characteristics

- ◆When the Thermo ON and OFF is frequently repeated on the indoor unit, the operating status of outdoor/heat source units may become unstable.

4-4. Related equipment

- ◆Provide grounding in accordance with the local regulations.

4-5. Noise level (Sound pressure level)

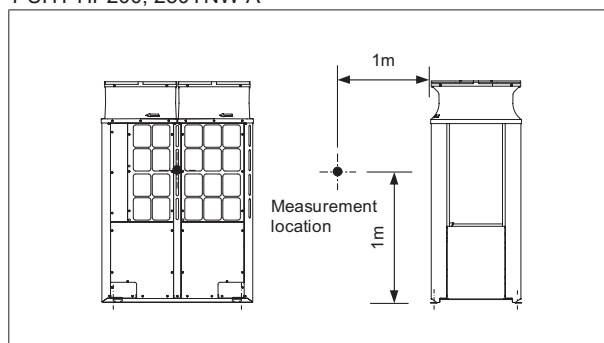
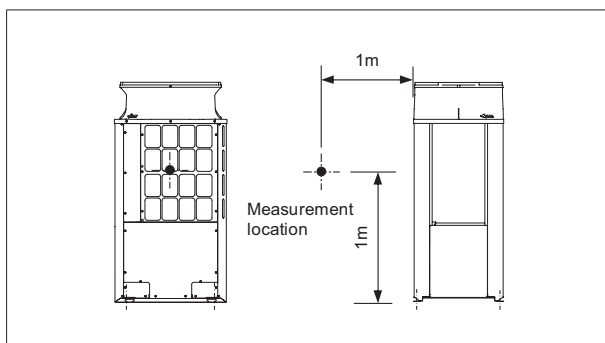
- ◆The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the indicated value in this catalogue due to the influence of ambient noise and echoes.
Valve operation noise and refrigerant flow noise may occur from inside the outdoor unit/heat-source unit.

<Measurement location>

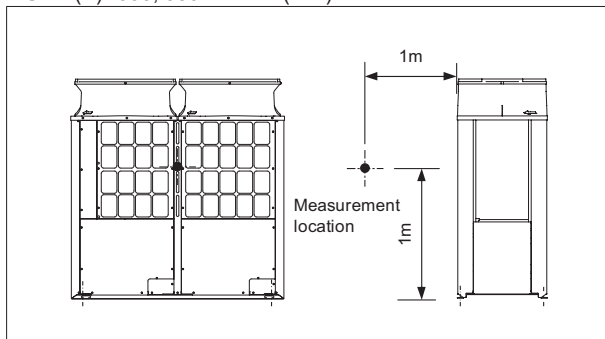
■PUHY-(E)P-Y(S)NW-A2(-BS), PURY-(E)P-Y(S)NW-A2(-BS), PUHY-HP-Y(S)NW-A

PUHY-(E)P200, 250, 300YNW-A2(-BS)
PURY-(E)P200, 250, 300YNW-A2(-BS)

PUHY-(E)P350, 400, 450YNW-A2(-BS)
PURY-(E)P350, 400, 450YNW-A2(-BS)
PUHY-HP200, 250YNW-A



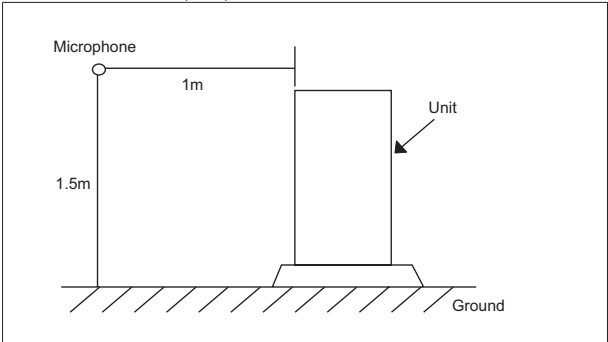
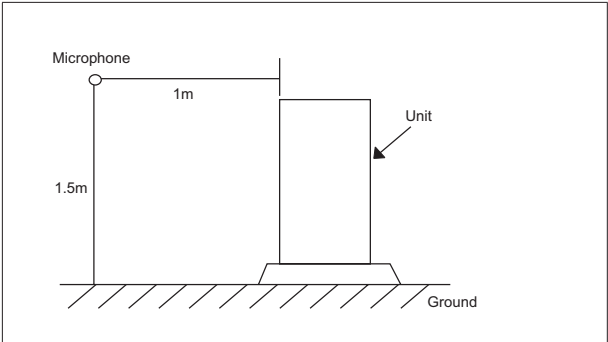
PUHY-(E)P500YNW-A2(-BS)
PURY-(E)P500, 550YNW-A2(-BS)



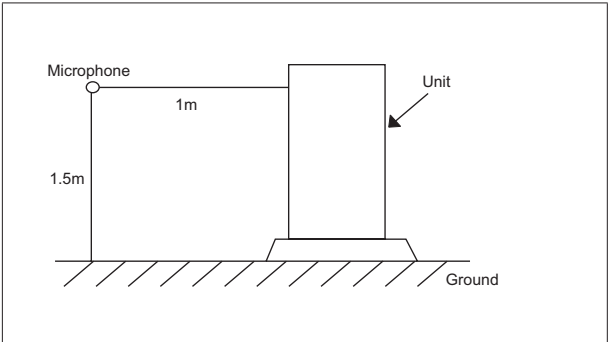
*See the DATA BOOK for information on the combination models.

- PUMY-SP-VKM2(-BS), PUMY-SP-YKM2(-BS)
- PUMY-P-VKM6(-BS), PUMY-P-YKM5(-BS), PUMY-P-YKM3(-BS), PUMY-P-YBM2(-BS)
- PUMY-SP112, 125, 140VKM2(-BS)
- PUMY-SP112, 125, 140YKM2(-BS)

- PUMY-P112, 125, 140VKM6(-BS)
- PUMY-P112, 125, 140YKM5(-BS)
- PUMY-P200YKM3(-BS)



PUMY-P250, 300YBM2(-BS)



5. Precautions for control-related items

5-1. Product specification

- ◆To introduce the MELANS system, a consultation with us is required in advance. Especially to introduce the electricity charge-apportioning function or energy save function, further detailed consultation is required. Consult your local distributor for details.
- ◆Billing calculation for AE-C400E/EW-C50E, or the billing calculation unit is unique and based on our original method. (Backup operation is included.) It is not based on the metering method, and do not use it for official business purposes. It is not the method that the amount of electric power consumption (input) by air conditioner is calculated. Note that the electric power consumption by air conditioner is apportioned by using the ratio corresponding to the operation status (output) for each air conditioner (indoor unit) in this method.
- ◆In the apportioned billing function for AE-C400E and EW-C50E, separate watt-hour meters should be used for A-control units, K-control units, and CITY MULTI packaged air conditioners. It is recommended that an individual watt-hour meter should be used for large-capacity indoor units (with two or more addresses).
- ◆When using the peak cut function on the AE-C400E or EW-C50E, note that the control is performed once every minute and it takes time to obtain the effect of the control. Take appropriate measures such as lowering the criterion value. Power consumption may exceed the limits if the AE-C400E or EW-C50E malfunctions or stops. Provide a back-up remedy as necessary.
- ◆The controllers cannot operate while the indoor unit is OFF. (No error)
Turn ON the power to the indoor unit when operating the controllers.
- ◆When using the interlocked control function on the AE-C400E/EW-C50E/PAC-YG66DCA or PAC-YG63MCA, do not use the control for fire prevention or security. (This function should never be used in a way that would put people's lives at risk.) Employ any methods or circuits that allow ON/OFF operation using an external switch in case of failure.

5-2. Installation environment

- ◆Surge protection may be required for the transmission line in areas where lightning strikes occur frequently.
- ◆The receiver for a wireless remote controller may not work properly due to the effect of general lighting. Leave a space of at least 1 m between the general lighting and the receiver.
- ◆When the auto-elevating panel is used and the system is operated using a wired remote controller, install the wired remote controller in a place where all the air conditioners being controlled (at least the bottom part of them) can be seen from the wired remote controller. If not, the descending panel may cause damage or injury; be sure to use a wireless remote controller designed for use with the elevating panel (sold separately).
- ◆Install the wired remote controller (switch box) in a place where the following conditions are met.
 - ◆Where the installation surface is flat
 - ◆Where the remote controller can detect an accurate room temperature
The temperature sensors that detect the room temperature are installed both in the remote controller and in the indoor unit.
When the room temperature is detected using the sensor in the remote controller, the main remote controller is used to detect the room temperature. In this case, follow the instructions below.
 - ◆Install the controller in a place where it is not affected by a heat source.
(If the remote controller faces direct sunlight or the direction of the supply air flow, the remote controller cannot detect the accurate room temperature.)
 - ◆Install the controller in a place where the average room temperature can be detected.
 - ◆Install the controller in a place where no other wires are present around the temperature sensor.
(If other wires are present, the remote controller cannot detect an accurate room temperature.)
- ◆To prevent unauthorized access, always use a security device such as a VPN router when connecting the AE-C400E or EW-C50E to the Internet.

6. R32 precautions

◆R32 is flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.

For details, refer to the section in the DATA BOOK on installation restrictions.

Maintenance Equipment

Maintenance cycle

[Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPs (The number of START/STOPs is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

When the equipment is used under the following conditions, the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where temperature and humidity are high or change dramatically
- When equipment is used in an environment where power supply fluctuations (the distortion of voltage, frequency, and waveform) are large (Only within the allowable range)
- When equipment is used in an environment where the unit may receive vibration or mechanical shock
- When equipment is used in an environment where dust, salt, toxic gases such as sulfur dioxide and hydrogen sulfide, and oil mist are present
- When equipment starts/stops frequently and operates for long periods (24-hour air-conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearings		15,000 hours	Sensor (thermistors, pressure sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note 1 This table shows major components. Refer to the maintenance contract for details.

Note 2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) The Checking/ Maintenance cycle may be shorter than the one shown on this table depending on the contents of the maintenance check contract.

- Sudden unpredictable accidents may occur even if check-ups are performed.

Replacement cycle for consumable components

[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note 1 This table shows major components. Refer to the maintenance contract for details.

Note 2 This replacement cycle shows a period in which products are expected to require no replacement. Use this cycle for planning maintenance (budgeting expenses for replacing equipment, etc.)

Fluorinated Greenhouse Gases Information

R32 Y-Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUHY-M200YNW-A1 (-BS)	R32	675	6.5	4.39	18.0	12.15	24.5	16.54
PUHY-M250YNW-A1 (-BS)			6.5	4.39	18.5	12.49	25.0	16.88
PUHY-M300YNW-A1 (-BS)			6.5	4.39	19.5	13.16	26.0	17.55

R32 Y-Series (High efficiency)

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUHY-EM200YNW-A1 (-BS)	R32	675	6.5	4.39	18.0	12.15	24.5	16.54
PUHY-EM250YNW-A1 (-BS)			6.5	4.39	18.5	12.49	25.0	16.88
PUHY-EM300YNW-A1 (-BS)			6.5	4.39	19.5	13.16	26.0	17.55

R410A Y-Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUHY-P200YNW-A2 (-BS)	R410A	2088	6.5	13.57	15.9	33.20	22.4	46.77
PUHY-P250YNW-A2 (-BS)			6.5	13.57	22.9	47.82	29.4	61.39
PUHY-P300YNW-A2 (-BS)			6.5	13.57	23.4	48.86	29.9	62.43
PUHY-P350YNW-A2 (-BS)			9.8	20.46	24.0	50.11	33.8	70.57
PUHY-P400YNW-A2 (-BS)			9.8	20.46	24.4	50.95	34.2	71.41
PUHY-P450YNW-A2 (-BS)			10.8	22.55	32.2	67.23	43.0	89.78
PUHY-P500YNW-A2 (-BS)			10.8	22.55	33.1	69.11	43.9	91.66
PUHY-P400YSNW-A2 (-BS)			13.0	27.14	32.0	66.82	45.0	93.96
PUHY-P450YSNW-A2 (-BS)			13.0	27.14	32.0	66.82	45.0	93.96
PUHY-P500YSNW-A2 (-BS)			13.0	27.14	32.9	68.70	45.9	95.84
PUHY-P550YSNW-A2 (-BS)			13.0	27.14	34.7	72.45	47.7	99.60
PUHY-P600YSNW-A2 (-BS)			13.0	27.14	34.7	72.45	47.7	99.60
PUHY-P650YSNW-A2 (-BS)			16.3	34.03	35.2	73.50	51.5	107.53
PUHY-P700YSNW-A2 (-BS)			19.6	40.92	44.8	93.54	64.4	134.47
PUHY-P750YSNW-A2 (-BS)			19.6	40.92	44.8	93.54	64.4	134.47
PUHY-P800YSNW-A2 (-BS)			20.6	43.01	44.7	93.33	65.3	136.35
PUHY-P850YSNW-A2 (-BS)			20.6	43.01	46.5	97.09	67.1	140.10
PUHY-P900YSNW-A2 (-BS)			21.6	45.10	46.4	96.88	68.0	141.98
PUHY-P950YSNW-A2 (-BS)			26.1	54.50	45.9	95.84	72.0	150.34
PUHY-P1000YSNW-A2 (-BS)			26.1	54.50	45.9	95.84	72.0	150.34
PUHY-P1050YSNW-A2 (-BS)			26.1	54.50	45.9	95.84	72.0	150.34
PUHY-P1100YSNW-A2 (-BS)			29.4	61.39	45.6	95.21	75.0	156.60
PUHY-P1150YSNW-A2 (-BS)			29.4	61.39	45.6	95.21	75.0	156.60
PUHY-P1200YSNW-A2 (-BS)			29.4	61.39	45.6	95.21	75.0	156.60
PUHY-P1250YSNW-A2 (-BS)			30.4	63.48	47.3	98.76	77.7	162.24
PUHY-P1300YSNW-A2 (-BS)			31.4	65.56	47.2	98.55	78.6	164.12
PUHY-P1350YSNW-A2 (-BS)			32.4	67.65	47.1	98.34	79.5	166.00

*This table is based on Regulation (EU) No 517/2014.

R410A Y-Series (High efficiency)

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUHY-EP200YNW-A2 (-BS)	R410A	2088	6.5	13.57	15.9	33.20	22.4	46.77
PUHY-EP250YNW-A2 (-BS)			6.5	13.57	22.9	47.82	29.4	61.39
PUHY-EP300YNW-A2 (-BS)			6.5	13.57	23.4	48.86	29.9	62.43
PUHY-EP350YNW-A2 (-BS)			9.8	20.46	24.0	50.11	33.8	70.57
PUHY-EP400YNW-A2 (-BS)			10.8	22.55	24.3	50.74	35.1	73.29
PUHY-EP450YNW-A2 (-BS)			10.8	22.55	32.2	67.23	43.0	89.78
PUHY-EP500YNW-A2 (-BS)			10.8	22.55	33.1	69.11	43.9	91.66
PUHY-EP400YSNW-A2 (-BS)			13.0	27.14	32.0	66.82	45.0	93.96
PUHY-EP450YSNW-A2 (-BS)			13.0	27.14	32.0	66.82	45.0	93.96
PUHY-EP500YSNW-A2 (-BS)			13.0	27.14	32.9	68.70	45.9	95.84
PUHY-EP550YSNW-A2 (-BS)			13.0	27.14	34.7	72.45	47.7	99.60
PUHY-EP600YSNW-A2 (-BS)			13.0	27.14	34.7	72.45	47.7	99.60
PUHY-EP650YSNW-A2 (-BS)			17.3	36.12	35.1	73.29	52.4	109.41
PUHY-EP700YSNW-A2 (-BS)			19.6	40.92	44.8	93.54	64.4	134.47
PUHY-EP750YSNW-A2 (-BS)			20.6	43.01	44.7	93.33	65.3	136.35
PUHY-EP800YSNW-A2 (-BS)			20.6	43.01	44.7	93.33	65.3	136.35
PUHY-EP850YSNW-A2 (-BS)			21.6	45.10	46.4	96.88	68.0	141.98
PUHY-EP900YSNW-A2 (-BS)			21.6	45.10	46.4	96.88	68.0	141.98
PUHY-EP950YSNW-A2 (-BS)			26.1	54.50	45.9	95.84	72.0	150.34
PUHY-EP1000YSNW-A2 (-BS)			27.1	56.58	45.8	95.63	72.9	152.22
PUHY-EP1050YSNW-A2 (-BS)			28.1	58.67	45.7	95.42	73.8	154.09
PUHY-EP1100YSNW-A2 (-BS)			30.4	63.48	45.5	95.00	75.9	158.48
PUHY-EP1150YSNW-A2 (-BS)			31.4	65.56	45.4	94.80	76.8	160.36
PUHY-EP1200YSNW-A2 (-BS)			32.4	67.65	45.3	94.59	77.7	162.24
PUHY-EP1250YSNW-A2 (-BS)			32.4	67.65	47.1	98.34	79.5	166.00
PUHY-EP1300YSNW-A2 (-BS)			32.4	67.65	47.1	98.34	79.5	166.00
PUHY-EP1350YSNW-A2 (-BS)			32.4	67.65	47.1	98.34	79.5	166.00

*This table is based on Regulation (EU) No 517/2014.

R32

R2-Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PURY-M200YNW-A1 (-BS)	R32	675	5.2	3.51	21.3	14.38	26.5	17.89
PURY-M250YNW-A1 (-BS)			5.2	3.51	22.3	15.05	27.5	18.56
PURY-M300YNW-A1 (-BS)			5.2	3.51	22.8	15.39	28.0	18.90

R32

R2-Series (High efficiency)

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PURY-EM200YNW-A1 (-BS)	R32	675	5.2	3.51	21.3	14.38	26.5	17.89
PURY-EM250YNW-A1 (-BS)			5.2	3.51	22.3	15.05	27.5	18.56
PURY-EM300YNW-A1 (-BS)			5.2	3.51	22.8	15.39	28.0	18.90

R410A

R2-Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PURY-P200YNW-A2 (-BS)	R410A	2088	5.2	10.86	31.8	66.40	37.0	77.26
PURY-P250YNW-A2 (-BS)			5.2	10.86	37.8	78.93	43.0	89.78
PURY-P300YNW-A2 (-BS)			5.2	10.86	37.8	78.93	43.0	89.78
PURY-P350YNW-A2 (-BS)			8.0	16.70	41.3	86.23	49.3	102.94
PURY-P400YNW-A2 (-BS)			8.0	16.70	47.3	98.76	55.3	115.47
PURY-P450YNW-A2 (-BS)			10.8	22.55	44.5	92.92	55.3	115.47
PURY-P500YNW-A2 (-BS)			10.8	22.55	45.2	94.38	56.0	116.93
PURY-P550YNW-A2 (-BS)			10.8	22.55	45.2	94.38	56.0	116.93
PURY-P400YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-P450YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-P500YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-P550YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-P600YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-P650YSNW-A2 (-BS)			13.2	27.56	45.8	95.63	59.0	123.19
PURY-P700YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-P750YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-P800YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-P850YSNW-A2 (-BS)			18.8	39.25	67.2	140.31	86.0	179.57
PURY-P900YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-P950YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-P1000YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-P1050YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-P1100YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57

R410A

R2-Series (High efficiency)

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PURY-EP200YNW-A2 (-BS)	R410A	2088	5.2	10.86	28.3	59.09	33.5	69.95
PURY-EP250YNW-A2 (-BS)			5.2	10.86	34.3	71.62	39.5	82.48
PURY-EP300YNW-A2 (-BS)			5.2	10.86	34.3	71.62	39.5	82.48
PURY-EP350YNW-A2 (-BS)			8.0	16.70	39.0	81.43	47.0	98.14
PURY-EP400YNW-A2 (-BS)			8.0	16.70	39.0	81.43	47.0	98.14
PURY-EP450YNW-A2 (-BS)			10.8	22.55	44.7	93.33	55.5	115.88
PURY-EP500YNW-A2 (-BS)			10.8	22.55	45.2	94.38	56.0	116.93
PURY-EP550YNW-A2 (-BS)			10.8	22.55	45.2	94.38	56.0	116.93
PURY-EP400YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-EP450YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-EP500YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-EP550YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-EP600YSNW-A2 (-BS)			10.4	21.72	48.6	101.48	59.0	123.19
PURY-EP650YSNW-A2 (-BS)			13.2	27.56	45.8	95.63	59.0	123.19
PURY-EP700YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-EP750YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-EP800YSNW-A2 (-BS)			16.0	33.41	70.0	146.16	86.0	179.57
PURY-EP850YSNW-A2 (-BS)			18.8	39.25	67.2	140.31	86.0	179.57
PURY-EP900YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-EP950YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-EP1000YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-EP1050YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57
PURY-EP1100YSNW-A2 (-BS)			21.6	45.10	64.4	134.47	86.0	179.57

*This table is based on Regulation (EU) No 517/2014.

R410A ZUBADAN Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUHY-HP200YNW-A	R410A	2088	9.8	20.47	21.9	45.73	31.7	66.19
PUHY-HP250YNW-A			10.8	22.56	22.5	46.98	33.3	69.54
PUHY-HP400YSNW-A			19.6	40.93	31.3	65.36	50.9	106.28
PUHY-HP500YSNW-A			21.6	45.11	32.0	66.82	53.6	111.92

R410A S-Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PUMY-SP112VKM2 (-BS)	R410A	2088	3.5	7.31	9.0	18.79	12.5	26.1
PUMY-SP125VKM2 (-BS)			3.5	7.31	9.0	18.79	12.5	26.1
PUMY-SP140VKM2 (-BS)			3.5	7.31	9.0	18.79	12.5	26.1
PUMY-SP112YKM2 (-BS)			3.5	7.31	9.0	18.79	12.5	26.1
PUMY-SP125YKM2 (-BS)			3.5	7.31	9.0	18.79	12.5	26.1
PUMY-SP140YKM2 (-BS)			3.5	7.31	9.0	18.79	12.5	26.1
PUMY-P112VKM6 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P125VKM6 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P140VKM6 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P112YKM5 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P125YKM5 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P140YKM5 (-BS)			4.8	10.02	13.8	28.81	18.6	38.84
PUMY-P200YKM3 (-BS)			7.3	15.25	10.7	22.35	18.0	37.60
PUMY-P250YBM2 (-BS)			9.3	19.5	22.8	47.7	32.1	67.1
PUMY-P300YBM2 (-BS)			9.3	19.5	22.8	47.7	32.1	67.1

R410A Air to Water Series

Model Name	Refrigerant		Factory charged		Maximum additional charge		Total charge	
	Type	GWP	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *	Weight [kg]	CO ₂ equivalent [t] *
PWFY-P100VM-E1-BU	R134a	1430	1.1	1.6	—	—	1.1	1.6

*This table is based on Regulation (EU) No 517/2014.

⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
 - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
 - It may also be in violation of applicable laws.
 - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R134a (GWP:1430) or R410A (GWP:2088), or R32 (GWP:675) depending on the product. These GWP values are based on Regulation (EU) No. 517/2014 from IPCC 4th edition. In case of Regulation (EU) No. 626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R134a (GWP:1300), R32 (GWP:550)

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