

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).

Lineup & Functions

V-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

Hot Water Solution

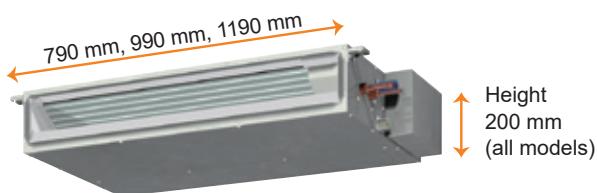
Remote Controller

LOSSNAY System

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.



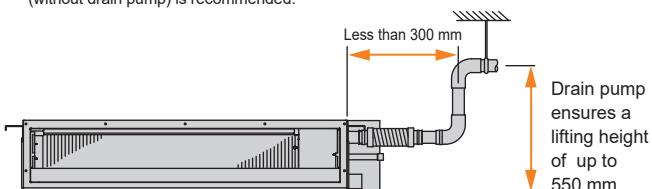
PEFY-P VMS1(L)-E		P15	P20	P25	P32	P40	P50	P63
Height	mm	200						
Width	mm	790		990		1190		

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

Sound pressure level	Fan Speed	Capacity	P15	P20	P25	P32	P40	P50	P63	dB(A)
		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.

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	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]	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]	0.07 [0.07]						
Current	Cooling *3 A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]							
	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]	0.61 [0.61]						
External finish		Galvanized												
Dimension		mm			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							
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														
Motor	Type	DC motor												
	Output	kW	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														
mm(in.)														
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°CDB./19°CWB. (81°FDB. / 66°FWB.) Outdoor : 35°CDB. (95°FD.B.)
Heating : Indoor : 20°CDB. (68°FDB.) Outdoor : 7°CDB. / 6°CWB. (45°FD.B. / 43°FWB.)

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



Lineup & Functions

V-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

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.

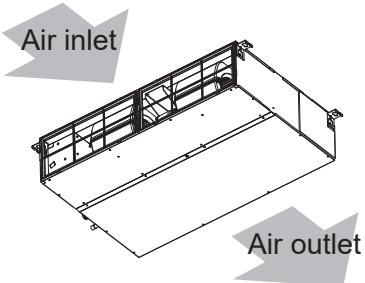
• External static pressure setting

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								

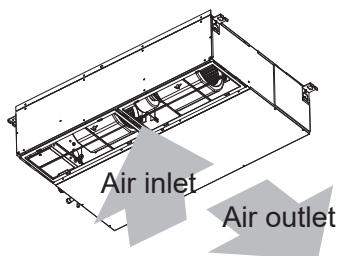
Air inlet direction can be easily changed

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 (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	0.032	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 (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	0.030	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 anechoic room)		(Low-Mid-High)					
*2 *5 *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
*2 *6 *7 dB<A>		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 piping diameter	Liquid	mm (in.)	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
	Gas	mm (in.)	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-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 (Nominal)	*1 kW	8.0	9.0	11.2	14.0	16.0	
	*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 (Nominal)	*3 kW	9.0	10.0	12.5	16.0	18.0	
	*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 anechoic room)		(Low-Mid-High)					
*2 *5 *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	
*2 *6 *7 dB<A>		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 piping diameter	Liquid	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	
	Gas	mm (in.)	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.
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.)
- *3 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.
- *4 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.
- *5 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.
- *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
	Including M20 or M25	1-8	1-10

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 (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	0.030	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
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	0.030	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 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 anechoic room)	*2 *5 *7 dB<A>	(Low-Mid-High)					
	*2 *6 *7	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	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	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")	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			
Cooling capacity (Nominal)	*1 kW	8.0	9.0	11.2	14.0	16.0
	*1 BTU/h	27,300	30,700	38,200	47,800	54,600
*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
Heating capacity (Nominal)	*3 kW	9.0	10.0	12.5	16.0	18.0
	*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 H x W x D	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
	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 anechoic room)	(Low-Mid-High)					
*2 *5 *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
*2 *6 *7 dB(A)		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.	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.)	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	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-KF93TR-F	PAC-KF93TR-F	PAC-KF94TR-F	PAC-KF94TR-F	PAC-KF95TR-F

Notes:

*1 Nominal cooling conditions
Indoor:27°CDB/19°CWB(81°FDB/66°FWB), Outdoor:35°CDB(95°FDB)
Duct length:7.5m(24.646ft), Level difference:0cm(0ft)

*2 The values are measured at the factory setting of external static pressure.

*2 The values are measured at
*3 Nominal heating conditions

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 <>.

*5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct

³ 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 details, refer to the section in the Rulebook on installation restrictions.

* 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

High static pressure type

PEFY-P VMHS-E **R410A**

- Technologies and functions P.160



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

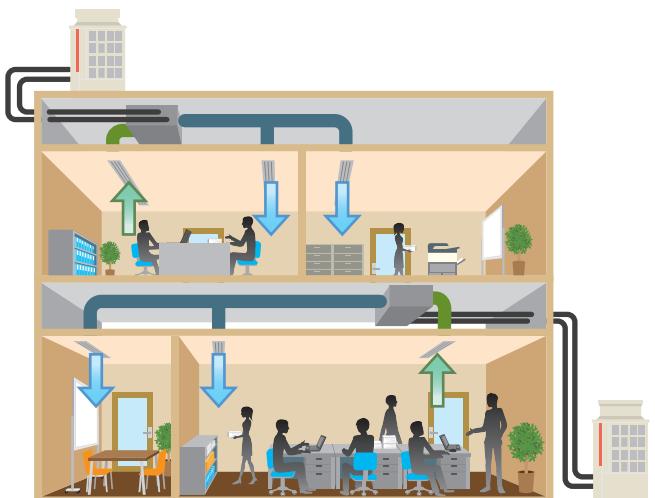
High external static pressure enables long duct and more freedom in design. It allows high interior oriented ducted air conditioning.

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 "< >".

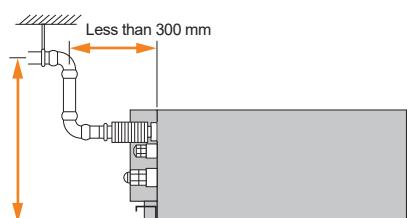
Refer to "Fan characteristics curves", according to the external static pressure, in the DATA BOOK for the usable range of the air flow rate.



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.



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

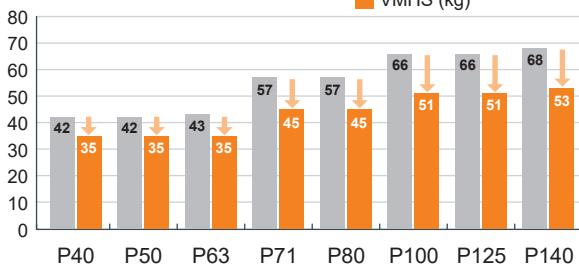
	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
PEFY-P VMH(S)	AC motor						DC motor			
PEFY-P VMHS	DC motor									

Reduced weight

By downsizing the motor, the unit weight has been reduced, offering easier installation.

- Weight comparison

■ Conventional model (kg)
■ VMHS (kg)



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.

		220 V	P40	P50	P63	P71	P80	P100	P125	P140
PEFY-P VMH	External static pressure (Pa)	<50>-100-<200>								
PEFY-P VMHS	230, 240 V	<100>-150-<200>								
PEFY-P VMHS	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 type 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	0.190		
Heating capacity (Nominal)	*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	1.24 - 1.19 - 1.14		
	*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		
External finish	*2 Power input kW	0.055	0.055	0.090	0.075	0.090	0.160	0.160	0.190		
	*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	1.24 - 1.19 - 1.14		
	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											
FAN	Type x Quantity	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	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											
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)											
(Low-Mid-High)											
*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						
	Gas	mm (in.)	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)	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							
	*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							
	Heating 220-230-240V A	3.47-3.32-3.18		4.72-4.43-4.14							
External finish											
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											
FAN	Type x Quantity		Cross fin (Aluminum plate fin and copper tube)								
	*4 Airflow rate (Lo-Mid-Hi)	Pa	Sirocco fan x 2								
		m ³ /min	50.0-61.0-72.0		58.0-71.0-84.0						
		L/s	833-1017-1200		967-1183-1400						
	External static press.	cfm	1766-2154-2542		2048-2507-2966						
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 (Brazed)	mm (in.)	ø19.05 (ø3/4)		ø22.2 (ø7/8)						
	Liquid (Brazed)	mm (in.)	ø9.52 (ø3/8)								
Field drain pipe diameter		mm (in.)	O.D. 32 (1-1/4)								
Sound pressure level (L-Mid-Hi)*2		dB<A>	36-39-43		39-42-46						

Notes:

*1 Nominal cooling conditions

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 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.

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

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	Required when long life filter is used
	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	