

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 PaLow
noiseRear inlet
Bottom inletPiping connection
Right/LeftAir 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 PaLow
noiseHeight
200 mmDrain pump (standard)
Maximum lifting height 550 mmAir 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 of 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 PaHeight
250 mmRear inlet
Bottom inletDrain pump (standard)
Maximum lifting
height 700 mmAir 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 mmAir flow rate
3 levels**Fresh air intake type****R410A**

P.135

PEFY-P VMHS-E-F

- 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 PaFresh air
intake typeDrain pump (option)
Maximum lifting
height 700 mmAir flow rate
3 levels

*This image shows the PEFY-P125VMHS-E-F model.

Ceiling concealed type

Low static pressure type

PEFY-P VMS1(L)-E **R410A**

- Technologies and functions P.160



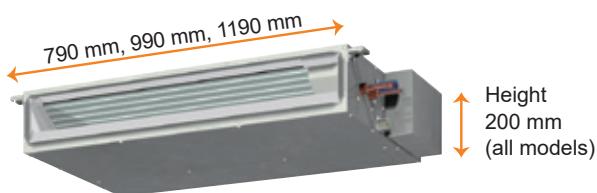
*This image shows the VMS1 type
(equipped with a drain pump as a standard feature).

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.



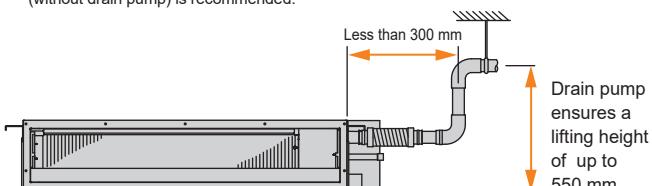
PEFY-P VMS1(L)-E		P15	P20	P25	P32	P40	P50	P63
Height	mm	200						
Width	mm	790		990		1190		

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

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.

Hot Water Solution	Remote Controller	LOSSNAY System	Ceiling suspended type	Ceiling mounted type	Floor standing type	Functions	Ceiling cassette type	BC Controllers	S-Series	ZUBADAN -Series	V-Series	R2-Series	Lineup & Functions
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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 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	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°FD.B.) 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.

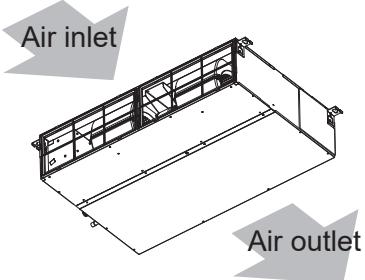
• External static pressure setting

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								

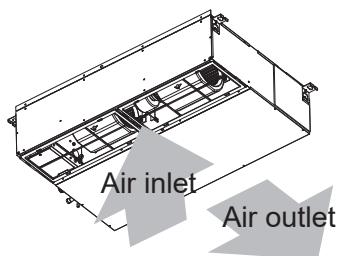
Air inlet direction can be easily changed

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

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

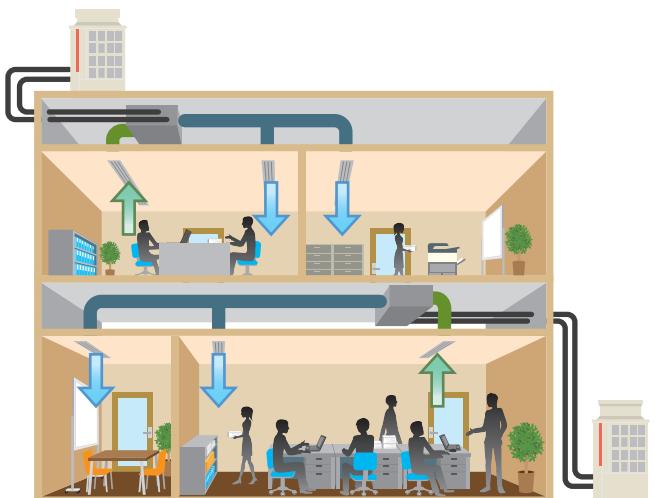
High external static pressure enables long duct and more freedom in design. It allows high interior oriented ducted air conditioning.

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 "< >".

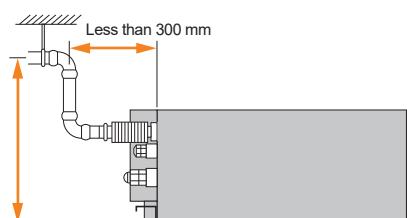
Refer to "Fan characteristics curves", according to the external static pressure, in the DATA BOOK for the usable range of the air flow rate.



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

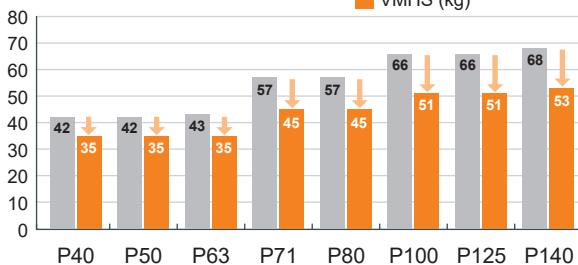
	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
PEFY-P VMH(S)	AC motor						DC motor			
PEFY-P VMHS	DC motor									

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.

