

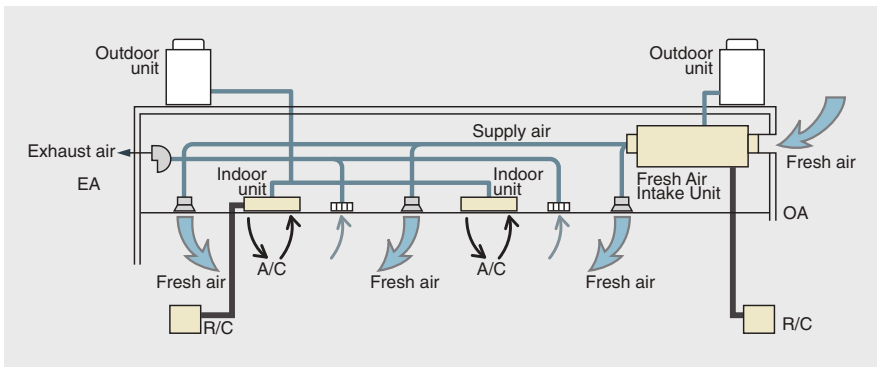
Fresh air intake type

PEFY-P VMH-E-F



Example design for an outside air treatment unit system

The Fresh Air intake indoor unit can take fresh outdoor air into any building.



[Recommended application]
Office, Lobby, Workshop,
Restroom, Nursing home,
Smoking corner,
Kitchen in a restaurant

Applications across a wide range of design

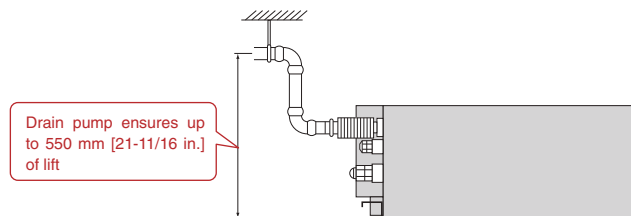
Sufficient external static pressure (up to 240 Pa) enables designs with long ducts and expands design possibilities.

PEFY-P VMH-E-F		P80	P140	P200	P250
External static pressure (Pa)	208 V	<35> - 85 - <170>	<35> - 85 - <170>	<140> - 200	<110> - 190
	220 V	<40> - 115 - <190>	<50> - 115 - <190>	<150> - 210	<120> - 200
	230 V	<50> - 130 - <210>	<60> - 130 - <220>	<160> - 220	<130> - 210
	240 V	<80> - 170 - <220>	<100> - 170 - <240>	-	-

*The factory setting for external static pressure is shown without "< >". 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

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm [21-11/16 in.], allowing more freedom in piping layout design and reducing horizontal piping requirements.



Specifications

Model			PEFY-P80VMH-E-F	PEFY-P140VMH-E-F	
Power source			1-phase 220-240V 50Hz/1-phase 208-230V 60Hz		
Cooling capacity	*1	kW	9.0	16.0	
		BTU/h	30,700	54,600	
Heating capacity	*1	kW	8.5	15.1	
		BTU/h	29,000	51,500	
Power consumption	Cooling	kW	0.16/0.21	0.29/0.33	
	Heating	kW	0.16/0.21	0.29/0.33	
Current	Cooling	A	0.67/0.91	1.24/1.48	
	Heating	A	0.67/0.91	1.24/1.48	
External finish			Galvanized		
Dimension H x W x D		mm (in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)	
Net weight		kg (lbs.)	50 (111)	67 (148)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)		
Fan	Type x Quantity		Sirocco fan x 1		
	Airflow rate	m ³ /min	9.0	18.0	
		L/s	150	300	
		cfm	318	636	
	External static pressure (Lo-Mid-Hi)	208V	Pa	35-85-170	35-85-170
		220V	Pa	40-115-190	50-115-190
230V		Pa	50-130-210	60-130-220	
240V		Pa	80-170-220	100-170-240	
Motor	Type	1-phase induction motor			
	Output	kW	0.09 (at 220V)	0.14 (at 220V)	
Air filter (option)			Synthetic fiber unwoven cloth filter (long life)		
Refrigerant pipe diameter	Gas (Flare)	mm (in.)	ø15.88 (ø5/8)		
	Liquid (Flare)	mm (in.)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm (in.)	O.D.32 (1-1/4)		
Sound pressure level (Lo-Mid-Hi)	*2 208, 220V	dB (A)	27-38-43	28-38-43	
	*2 230, 240V	dB (A)	33-43-45	34-43-45	

Model			PEFY-P200VMH-E-F	PEFY-P250VMH-E-F	
Power source			3-phase 380-415V 50Hz/3N~ 380-415V 60Hz		
Cooling capacity		kW	22.4	28.0	
		BTU/h	76,400	95,500	
Heating capacity		kW	21.2	26.5	
		BTU/h	72,300	90,400	
Power consumption	Cooling	kW	0.34/0.42	0.39/0.50	
	Heating	kW	0.34/0.42	0.39/0.50	
Current	Cooling	A	0.58/0.74	0.68/0.86	
	Heating	A	0.58/0.74	0.68/0.86	
External finish			Galvanized		
Dimension H x W x D		mm (in.)	470 x 1250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)		
Net weight		kg (lbs.)	100 (221)		
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)		
Fan	Type x Quantity		Sirocco fan x 2		
	Airflow rate	m ³ /min	28	35	
		L/s	467	583	
		cfm	989	1236	
	External static pressure	380V	Pa	140/200	110/190
		400V	Pa	150/210	120/200
415V		Pa	160/220	130/210	
Motor	Type	3-phase induction motor			
	Output	kW	0.20	0.23	
Air filter (option)			Synthetic fiber unwoven cloth filter (long life type)		
Refrigerant pipe diameter	Gas (Flare)	mm (in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)	
	Liquid (Flare)	mm (in.)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm (in.)	O.D.32 (1-1/4)		
Sound pressure level	*2 380V	dB (A)	39/42	40/44	
	*2 400V	dB (A)	40/43	40/45	
	*2 415V	dB (A)	40/44	41/46	

Notes:

- *1 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 7.5m.
*2 The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information.
*3 The operating noise is the data that was obtained by measuring it 1.5m from the bottom of the unit in an anechoic room. (Noise meter A-scale value)
*4 The figure of Electrical characteristic indicates at 240V 50Hz/230V60Hz (PEFY-P80, 140VMH-E-F type), at 220Pa setting at 415V (PEFY-P200, 250VMH-E-F type).
*5 When the 100% fresh air indoor units are connected, the maximum connectable indoor units to 1 outdoor unit are as follows

Heat pump models	Cooling only
110% (100% in case of heating below-5°C (23°F))	110%

- *6 Operational temp range is (Cooling : from 21°C(70°F)DB/15.5°C(60°F)WB to 43°C(109°F)DB/35°C(95°F)WB)
(Heating : from -10°C(14°F)DB to 20°C(68°F)DB)

* Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(70°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.

- *7 As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
*8 Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
*9 In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
*10 When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
*11 Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation.
Please be careful when positioning indoor unit air outlet grilles, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
*12 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 fild supply filters.
*13 Long life cannot be used with HI-efficiency filter together (PEFY-P80 - 140VMH-E-F type).