

# Ceiling concealed type

## 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 kW	0.220	0.260	0.350	
	*2 Current input (220 V) A	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 kW	0.230	0.270	0.360	
	*2 Current input (220 V) A	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	
		in.	15 x 47-1/16 x 35-7/16	18-9/16 x 49-1/4 x 44-1/8	
Net weight		kg (lbs)	49 (109)	78 (172)	
Heat exchanger		Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	
FAN		Sirocco fan x 1			
*4, 5	Type x Quantity	Sirocco fan x 2			
	External static press.	Pa	<100> - <150> - 200 - <250>		
		mmH <sub>2</sub> O	<10.2> - <15.3> - 20.4 - <25.5>		
	Motor Type	DC motor			
Motor output kW	0.244				
Driving mechanism		Direct-driven by motor			
*4, 5	Air flow rate (Low-Mid-High)	Normal-airflow rate mode	<High-airflow rate mode>	Normal-airflow rate mode	
		m <sup>3</sup> /min	14.0 - 15.5 - 18.0	15.5 - 18.0 - 20.0	22.5 - 25.0 - 28.0
		L/s	233 - 258 - 300	258 - 300 - 333	375 - 417 - 467
		cfm	494 - 547 - 636	547 - 636 - 706	794 - 883 - 989
Sound pressure level (measured in anechoic room) (Low-Mid-High)		Normal-airflow rate mode	<High-airflow rate mode>	Normal-airflow rate mode	
*2 dB <A>		34-37-41	36-40-42	35-38-41	
Air filter		Option: Synthetic fiber unwoven cloth filter (long life filter).			
Refrigerant piping diameter	Liquid (R410A)	9.52 (3/8) Brazed			
	Gas (R410A)	15.88 (5/8) Brazed			
Field drain pipe size		O.D.32 (1-1/4)			
Optional parts	Drain pump kit	PAC-DRP10DP-E2			
	Long life filter	PAC-KE89LAF			
	Filter box	PAC-KE140TB-F			

### 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 or WY 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 outlet air 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 or WR2 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.

# Ceiling concealed type

## Fresh air intake type PEFY-P VMH-E-F

			PEFY-P80VMH-E-F	PEFY-P140VMH-E-F	PEFY-P200VMH-E-F	PEFY-P250VMH-E-F	
Power source			1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz / 3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz				
Cooling capacity	*1	kW	9.0	16.0	22.4	28.0	
	*1	BTU/h	30,700	54,600	76,400	95,500	
Temp. range of cooling			21°CDB./15.5°CWB. ~ 43°CDB./35°CWB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 21°CDB.				
Heating capacity	*1	kW	8.5	15.1	21.2	26.5	
	*1	BTU/h	29,000	51,500	72,300	90,400	
Temp. range of heating			-10°CDB. ~ 20°CDB. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CDB.				
Power consumption	*2	Cooling	kW	0.16 / 0.21	0.29 / 0.33	0.34 / 0.42	0.39 / 0.50
	*2	Heating	kW	0.16 / 0.21	0.29 / 0.33	0.34 / 0.42	0.39 / 0.50
Current	*2	Cooling	A	0.67 / 0.91	1.24 / 1.48	0.58 / 0.74	0.68 / 0.86
	*2	Heating	A	0.67 / 0.91	1.24 / 1.48	0.58 / 0.74	0.68 / 0.86
External finish			Galvanized				
Dimension		mm (in.)	380 x 1,000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1,200 x 900 (15 x 47-1/4 x 35-7/16)	470 x 1,250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)		
Net weight		kg (lbs)	50 (111)	67 (148)	100 (221)		
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2		
	Airflow rate	m <sup>3</sup> /min	9.0	18.0	28	35	
		L/s	150	300	467	583	
		cfm	318	636	989	1,236	
	External static pressure	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>	-	-
		380V	Pa	-	-	<140> / 200	<110> / 190
		400V	Pa	-	-	<150> / 210	<120> / 200
415V		Pa	-	-	<160> / 220	<130> / 210	
Motor	Type		1-phase induction motor		3-phase induction motor		
	Output	kW	0.09 (220V, 115Pa)	0.14 (220V, 115Pa)	0.20 (415V, 220Pa)	0.23 (415V, 210Pa)	
Air filter (option)			Synthetic fiber unwoven cloth filter (long life)		Synthetic fiber unwoven cloth filter (long life type)		
Refrigerant pipe diameter	Liquid	mm (in.)	ø9.52 (ø3/8) Flare		ø9.52 (ø3/8) Brazed		
	Gas	mm (in.)	ø15.88 (ø5/8) Flare		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	
Field drain pipe diameter			mm (in.) O.D.32 (1-1/4)				
Sound pressure level (measured in anechoic room) *2 *4	208, 220V	dB<A>	38	38	-	-	
	230, 240V	dB<A>	43	43	-	-	
	380V	dB<A>	-	-	42	44	
	400V	dB<A>	-	-	43	45	
	415V	dB<A>	-	-	44	46	

**Notes:**

- \*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
Cooling : Indoor : 33°CDB/28°CWB (91°FDB/82°FWB) Outdoor : 33°CDB (91°FDB)  
Heating : Indoor : 0°CDB/-2.9°CWB (32°FDB/27°FWB) Outdoor : 0°CDB/-2.9°CWB (32°FDB/27°FWB)  
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.  
The figure of Electrical characteristic indicates at 240V 50Hz/230V 60Hz (PEFY-P80, 140VMH-E-F type), at 50Hz/60Hz (PEFY-P200, 250VMH-E-F type).
  - \*3 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.
  - \*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.
- Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the outlet air temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
  - 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.
  - Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.
  - The AUTO mode on the local remote controller is available only when fresh air intake type indoor unit is connected to the R2 or WR2 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.
  - Dry mode is not available.
  - In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan characteristics curves" in DATA BOOK for the details.
  - 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.

VRF Lineup  
 VRF Y-Series  
 VRF R2-Series  
 VRF WY-Series  
 VRF WR2-Series  
 VRF S-Series  
 VRF BC Controllers  
 VRF Indoor Units  
 HVRF Lineup  
 HVRF (W)R2-Series  
 HVRF Indoor Units  
 Technologies and Functions  
 Lossnay System  
 Remote Controller  
 Hot Water Solution

## Optional parts

Description	Model	Applicable capacity	
		VMHS-E-F	VMH-E-F
Long life filter	PAC-KE88LAF	-	P80
	PAC-KE89LAF	P125	P140
	PAC-KE85LAF	P200, P250	P200, P250
Filter box	PAC-KE80TB-F	-	P80
	PAC-KE140TB-F	P125	P140
	PAC-KE250TB-F	P200, P250	P200, P250
Drain pump	PAC-KE04DM-F	-	P80, P140, P200, P250
	PAC-DRP10DP-E2	P125	-
	PAC-KE06DM-F	P200, P250	-