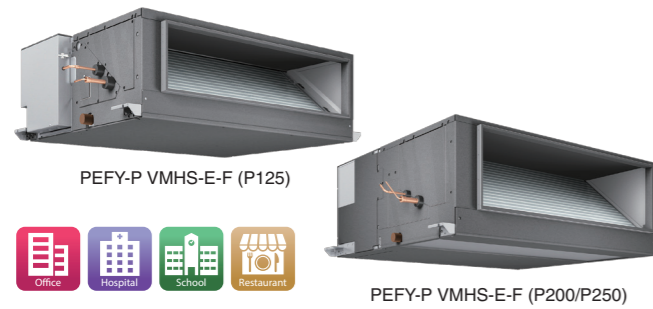


Fresh air intake type

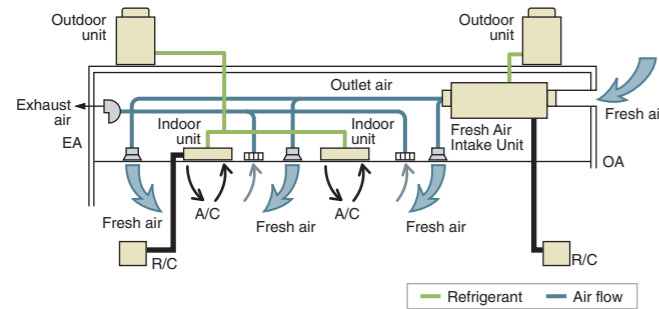
PEFY-P VMHS-E-F



Enables Intake of Outside Air

Fresh air can be taken in with temperature control. Fresh air intake is available for each air-conditioning zone.

* Fresh air intake type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.



Controllable Outlet Air Temperature

Pre-treating the intake air before being supplied to the room contributes to the stability of room temperature, ensuring optimized comfort of the occupants.

* Outlet air temperature may fluctuate, depending on the outside air temperature and the operating status of indoor and outdoor units.

Equipped with DC Fan Motor

Fan motor has been changed to higher efficiency DC motor. Power source has been changed from three-phase power supply to single-phase power supply, which allows for easier installation.

* Comparison with PEFY-P140, 200, 250VMH-E-F

Flexible Air-Flow Setting

Four levels of external static pressure levels to choose from compared to the three levels on the existing models

Model	P125	P200	P250
External static pressure (Pa)	<100> - <150> - 200 - <250>		

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

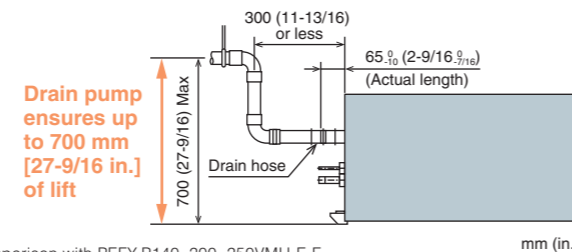
Two types of air-flow modes are available, each of which has three air-flow rates to choose from.

Mode	Normal-airflow rate	High-airflow rate
Air-flow rate	Low-Medium-High	Low-Medium-High

*Air-flow rates are accessible from the remote controller.

Drain Pump (Optional)

Greater design flexibility made possible by the increased head height (Max. 700 mm)*



* Comparison with PEFY-P140, 200, 250VMH-E-F

Specifications

Model	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	22.4	28.0	
	*1 BTU/h	76,400	95,500	
	*2 Power input kW	0.220	0.260	
*2 Current input (220 V)	A	1.43	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	
	*3 BTU/h	30,400	47,400	
	*2 Power input kW	0.230	0.270	
*2 Current input (220 V)	A	1.52	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	Type x Quantity	Sirocco fan x 1	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	
	Motor output kW	0.244	0.375	
	Driving mechanism	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>	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
		L/s	233 - 258 - 300 258 - 300 - 333	375 - 417 - 467 417 - 467 - 533
	cfm	494 - 547 - 636 547 - 636 - 706	794 - 883 - 989 883 - 989 - 1,130	
Sound pressure level (measured in anechoic room) (Low-Mid-High) *2	Normal-airflow rate mode <High-airflow rate mode>	Normal-airflow rate mode <High-airflow rate mode>	Normal-airflow rate mode <High-airflow rate mode>	
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) Brazed	9.52 (3/8) Brazed	
	Gas (R410A) mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
Field drain pipe size	mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	
Optional parts	Drain pump kit	PAC-DRP10DP-E2	PAC-KE06DM-F	
	Long life filter	PAC-KE89LAF	PAC-KE85LAF	
	Filter box	PAC-KE140TB-F	PAC-KE250TB-F	

Optional Parts

Description	Model	Applicable capacity
Drain pump kit	PAC-DRP10DP-E2	P125
	PAC-KE06DM-F	P200, 250
Long life filter	PAC-KE89LAF	P125
	PAC-KE85LAF	P200, 250
Filter box	PAC-KE140TB-F	P125
	PAC-KE250TB-F	P200, 250

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 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 PUMY series, except for PUMY-SP125/140V(Y)KM2, PUMY-CP125/140VKM2, PUMY-CP125/140/200/225YKM2, PUMY-P200/225YKM3, PUMY-(C)P250/300YBM2. Fresh air intake type indoor unit and PUMY have to be one to one connection. Fresh air intake type unit 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. 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.
- * 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.

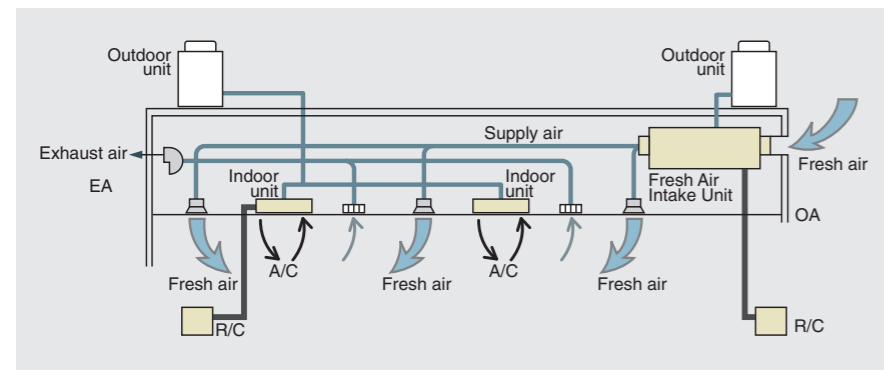
Fresh air intake type

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.



* Fresh air intake type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.
 * Discharge temperature control is not possible. PEFY-P VMH-E-F models turn the thermo ON or OFF depending on the room temperature. Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature. During thermo-off (FAN-mode), outside air blows directly into the room.

Applications across a wide range of design

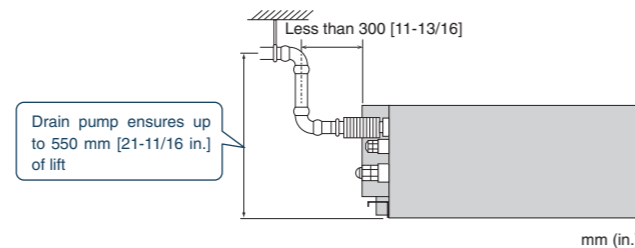
Sufficient external static pressure (up to 240 Pa) enables designs with long ducts and expands design possibilities.

PEFY-P VMH-E-F	P80	P140	P200	P250
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.



Optional Parts

Description	Model	Applicable capacity
Long life filter	PAC-KE88LAF	P80
	PAC-KE89LAF	P140
	PAC-KE85LAF	P200, P250
Filter box	PAC-KE80TB-F	P80
	PAC-KE140TB-F	P140
Drain pump	PAC-KE250TB-F	P200/P250
	PAC-KE04DM-F	P80, P140, P200, P250

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	
	*1	BTU/h	30,700	54,600	
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	
	*1	BTU/h	29,000	51,500	
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	
	*2	Heating kW	0.16 / 0.21	0.29 / 0.33	
Current	*2	Cooling A	0.67 / 0.91	1.24 / 1.48	
	*2	Heating A	0.67 / 0.91	1.24 / 1.48	
External finish	Galvanized				
Dimension H x W x D	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)	
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	Sirocco fan x 2	
	Airflow rate		m ³ /min	9.0	18.0
			L/s	150	300
			cfm	318	636
External static pressure *3	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	-	-	
	415V	Pa	-	-	
Motor	Type		1-phase induction motor		
	Output		0.09 (220V, 115Pa)	0.14 (220V, 115Pa)	
Air filter (option)		Synthetic fiber unwoven cloth filter (long life)			
Refrigerant pipe diameter	Gas	mm (in.)	ø15.88 (ø5/8) Flare		
	Liquid	mm (in.)	ø9.52 (ø3/8) Flare		
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>	-	-	
	400V	dB<A>	-	-	
	415V	dB<A>	-	-	

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	33°CDB/28°CWB (91°FDB/82°FWB)	33°CDB (91°FDB)	7.5 m (24-9/16 ft)	0m (0ft.)
Heating	0°CDB/-2.9°CWB (32°FDB/27°FWB)	0°CDB/-2.9°CWB (32°FDB/27°FWB)	7.5 m (24-9/16 ft)	0m (0ft.)

*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 temporarily 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. 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.
- 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.
- Fresh air intake type indoor units cannot be connected to PUMY series, except for PUMY-SP125/140V(Y)KM2, PUMY-CP125/140VKM2, PUMY-CP125/140/200/225YKM2, PUMY-P200/225YKM3. Fresh air intake type indoor unit and PUMY have to be one to one connection. Fresh air intake type unit cannot be connected to an outdoor unit together with PWFY series.