

AIR CONDITIONING SYSTEMS

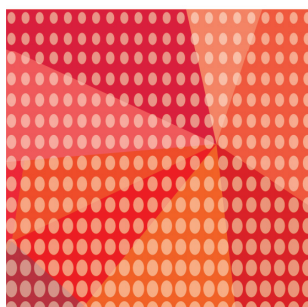
CITY MULTI



DATA BOOK

MODEL

PEFY-P-NMSU-E



PEFY-P-NMSU-E

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1. SPECIFICATIONS

Ceiling concealed (Low static pressure type)

PEFY-P-NMSU-E

Model			PEFY-P06NMSU-E	PEFY-P08NMSU-E	PEFY-P12NMSU-E	PEFY-P15NMSU-E		
Power source			1-phase 208/230V 60Hz					
Cooling capacity (Nominal)	*1	BTU / h	6,000	8,000	12,000	15,000		
	*1	kW	1.8	2.3	3.5	4.4		
	*4	Power input	kW	0.05/0.05	0.07/0.07	0.07/0.07		
	*4	Current input	A	0.42/0.41	0.51/0.49	0.56/0.53		
Heating capacity (Nominal)	*2	BTU / h	6,700	9,000	13,500	17,000		
	*2	kW	2.0	2.6	4.0	5.0		
	*4	Power input	kW	0.03/0.03	0.04/0.04	0.05/0.05		
	*4	Current input	A	0.32/0.31	0.41/0.39	0.46/0.43		
External finish			Galvanized					
External dimension H x W x D	in.		7-7/8 x 31-1/8 x 27-9/16	7-7/8 x 31-1/8 x 27-9/16	7-7/8 x 31-1/8 x 27-9/16	7-7/8 x 39 x 27-9/16		
	mm		200 x 790 x 700	200 x 790 x 700	200 x 790 x 700	200 x 990 x 700		
Net weight			42(19)	42(19)	46(20)	54(24)		
Heat exchanger			Cross fin(Aluminium fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3		
	*5	External static press (208V)	in.WG	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>		
			Pa	<5>-15-<35>-<50>	<5>-15-<35>-<50>	<5>-15-<35>-<50>		
		(230V)	in.WG	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>		
			Pa	<5>-15-<35>-<50>	<5>-15-<35>-<50>	<5>-15-<35>-<50>		
	Motor type		DC motor					
	Motor output		kW	0.096	0.096	0.096		
	Driving mechanism		Direct-driven					
	Airflow rate (Low-Mid-High)	cfm	176-212-247	194-247-317	211-282-370	282-335-388		
		m3 / min	5-6-7	5.5-7-9	6-8-10.5	8-9.5-11		
		L / s	83-100-117	91-116-150	100-133-175	133-158-183		
Sound pressure level (Low-Mid-High)								

1. SPECIFICATIONS

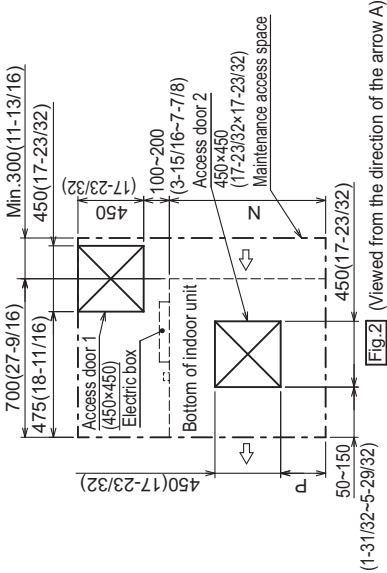
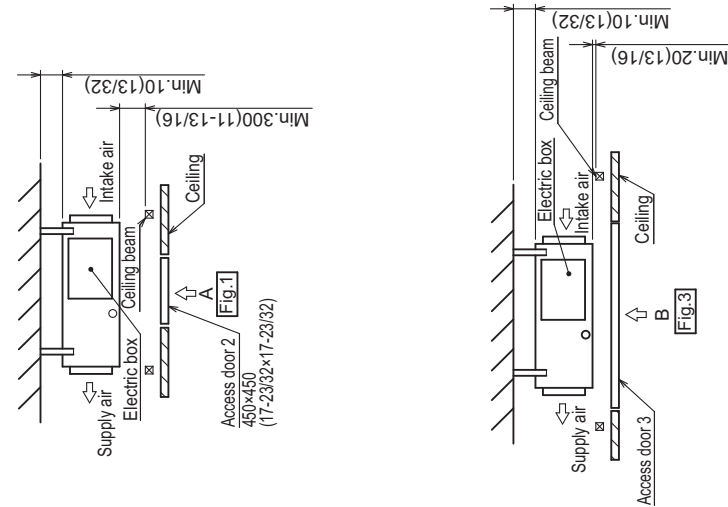
Ceiling concealed (Low static pressure type)

Model			PEFY-P18NMSU-E	PEFY-P24NMSU-E			
Power source			1-phase 208/230V 60Hz				
Cooling capacity (Nominal)	*1	BTU / h	18,000	24,000			
	*1	kW	5.3	7.0			
	*4	Power input	0.09/0.09	0.12/0.12			
	*4	Current input	0.74/0.70	0.98/0.93			
Heating capacity (Nominal)	*2	BTU / h	20,000	27,000			
	*2	kW	5.9	7.9			
	*4	Power input	0.07/0.07	0.10/0.10			
	*4	Current input	0.64/0.60	0.88/0.83			
External finish			Galvanized				
External dimension H x W x D		in.	7-7/8 x 39 x 27-9/16	7-7/8 x 46-7/8 x 27-9/16			
		mm	200 x 990 x 700	200 x 1190 x 700			
Net weight		lbs (kg)	54(24)	62(28)			
Heat exchanger			Cross fin(Aluminium fin and copper tube)				
FAN	Type x Quantity		Sirocco fan x 3	Sirocco fan x 4			
	*5 External static press	(208V) in.WG	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>			
		Pa	<5>-15-<35>-<50>	<5>-15-<35>-<50>			
		(230V) in.WG	<0.02>-0.06-<0.14>-<0.20>	<0.02>-0.06-<0.14>-<0.20>			
		Pa	<5>-15-<35>-<50>	<5>-15-<35>-<50>			
	Motor type		DC motor				
	Motor output		0.096	0.096			
	Driving mechanism		Direct-driven				
	Airflow rate (Low-Mid-High)	cfm	353-441-529	423-565-706			
		m3 / min	10-12.5-15	12-16-20			
		L / s	167-208-250	200-267-333			
Sound pressure level (Low-Mid-High) (measured in anechoic room)		dB <A>	30-34-37 (208V)	30-35-40 (208V)			
		dB <A>	30-34-37 (230V)	30-35-40 (230V)			
		*4 dB <A>	-	-			
Insulation material			Polystyrene foam, Polyethylene foam, Urethane foam				
Air filter			PP Honeycomb fabric (washable)				

PEFY-P06, 08, 12, 15, 18, 24NMSU-E

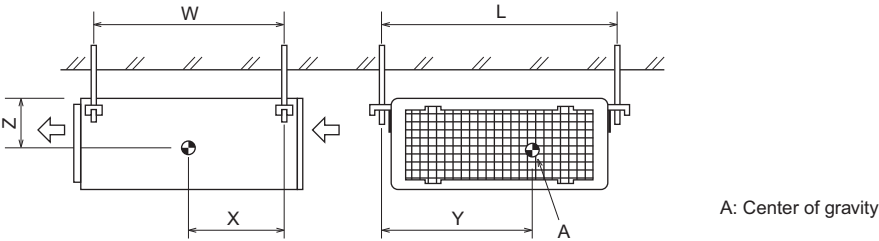
Unit: mm (in.)

- [Maintenance access space]
Secure enough access space to allow for the maintenance, inspection, and replacement of the motor, fan, drain pump, heat exchanger, and electric box in one of the following ways.
Select an installation site for the indoor unit so that its maintenance access space will not be obstructed by beams or other objects.
- (1) When a space of 300mm(11-13/16) or more is available below the unit between the unit and the ceiling. (Fig. 1)
• Create access door 1 and 2 (450x450mm(17-23/32) each) as shown in Fig. 2.
(Access door 2 is not required if enough space is available below the unit for a maintenance worker to work in.)
- (2) When a space of less than 300mm(11-13/16) is available below the unit between the unit and the ceiling.
(At least 20mm(13/16) of space should be left below the unit as shown in Fig. 3.)
• Create access door 1 diagonally below the electric box and access door 3 below the unit as shown in Fig. 4.
or
• Create access door 4 below the electric box and the unit as shown in Fig. 5.



PEFY-P-NMSU-E

PEFY-P06,08,12,15,18,24NMSU-E



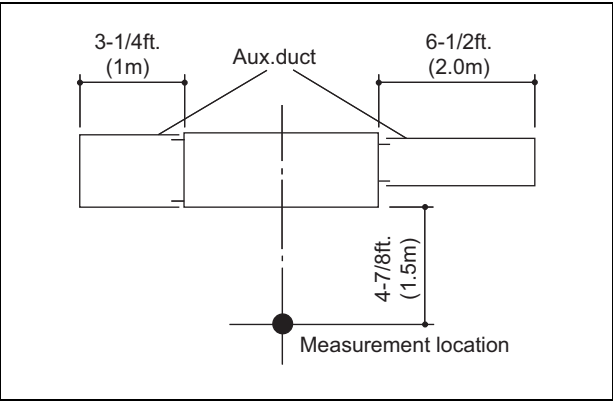
(mm)[in]

Model name	W	L	X	Y	Z
PEFY-P06NMSU-E	625 [24-5/8]	752 [29-5/8]	263 [10-3/8]	338 [13-5/16]	105 [4-5/32]
PEFY-P08NMSU-E	625 [24-5/8]	752 [29-5/8]	263 [10-3/8]	338 [13-5/16]	105 [4-5/32]
PEFY-P12NMSU-E	625 [24-5/8]	752 [29-5/8]	275 [10-27/32]	340 [13-13/32]	104 [4-1/8]
PEFY-P15NMSU-E	625 [24-5/8]	952 [37-1/2]	280 [11-1/32]	422 [16-5/8]	104 [4-1/8]
PEFY-P18NMSU-E	625 [24-5/8]	952 [37-1/2]	280 [11-1/32]	422 [16-5/8]	104 [4-1/8]
PEFY-P24NMSU-E	625 [24-5/8]	1152 [45-3/8]	285 [11-1/4]	511 [20-1/8]	104 [4-1/8]

PEFY-P-NMSU-E

5-1. Sound levels

PEFY-P-NMSU



* Measured in anechoic room

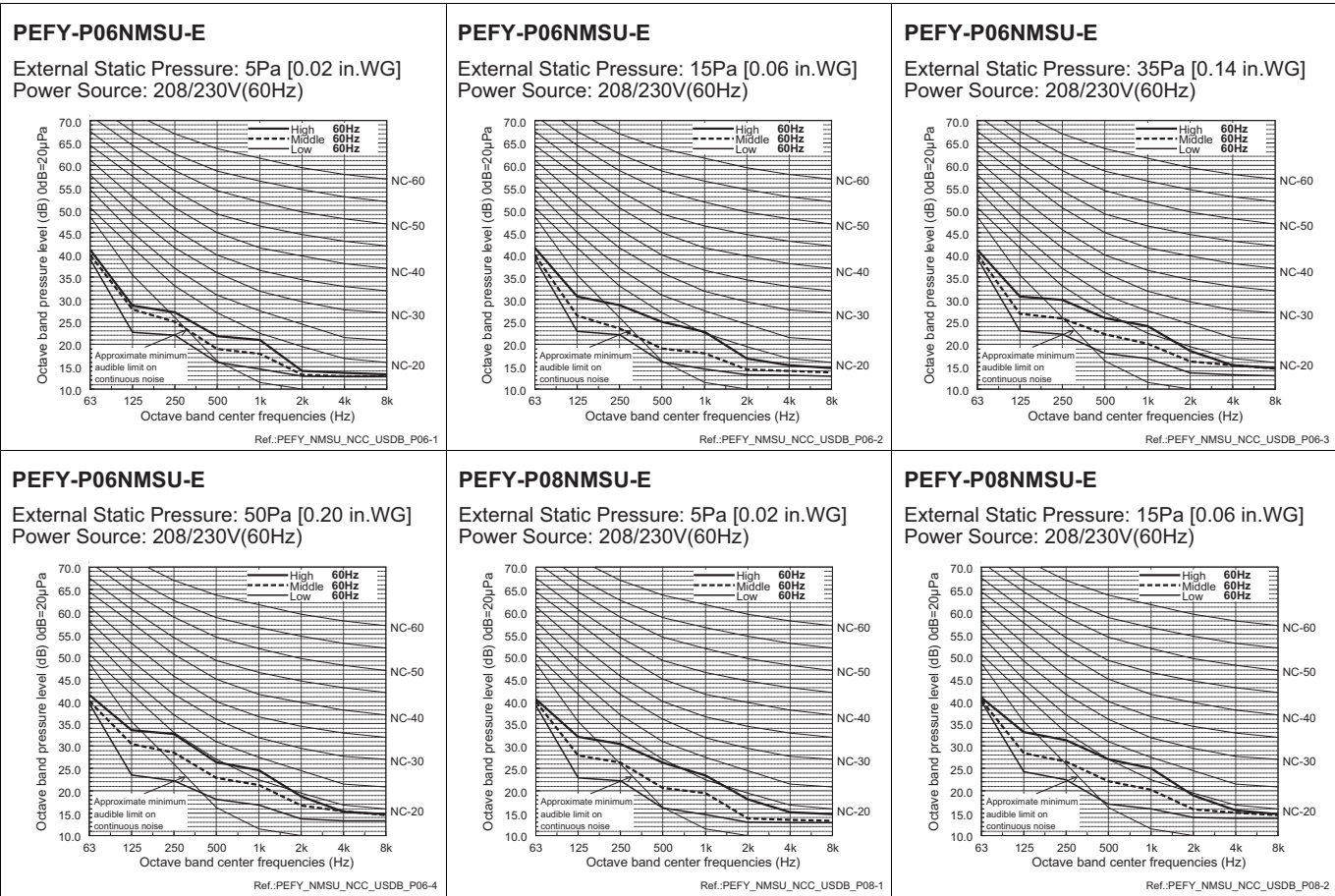
Operating sound levels

(Low - Middle - High)

Unit : dB (A)

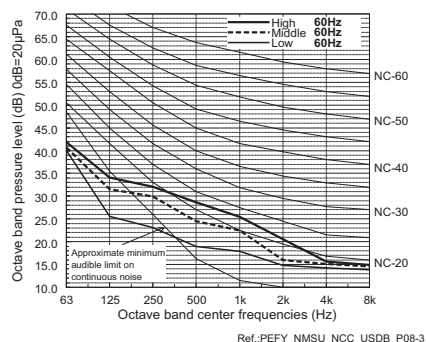
Model		Sound pressure level (A weighted)
PEFY-P06NMSU-E	208V	22 - 24 - 28
	230V	22 - 24 - 28
PEFY-P08NMSU-E	208V	23 - 26 - 30
	230V	23 - 26 - 30
PEFY-P12NMSU-E	208V	23 - 28 - 35
	230V	23 - 28 - 35
PEFY-P15NMSU-E	208V	28 - 30 - 33
	230V	28 - 30 - 33
PEFY-P18NMSU-E	208V	30 - 34 - 37
	230V	30 - 34 - 37
PEFY-P24NMSU-E	208V	30 - 35 - 40
	230V	30 - 35 - 40

5-2. NC curves

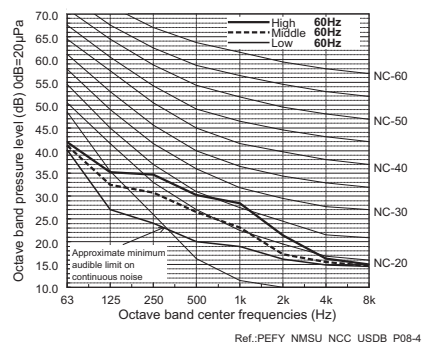


PEFY-P08NMSU-E

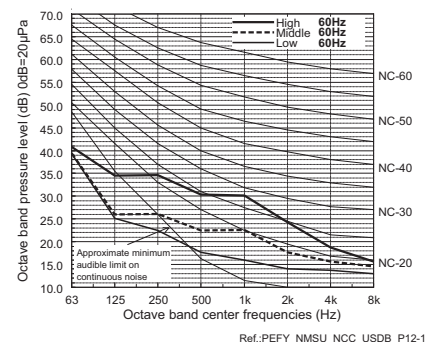
External Static Pressure: 35Pa [0.14 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P08NMSU-E**

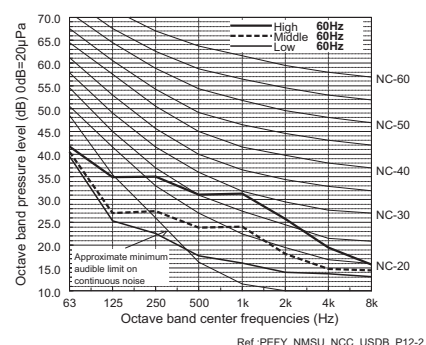
External Static Pressure: 50Pa [0.20 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P12NMSU-E**

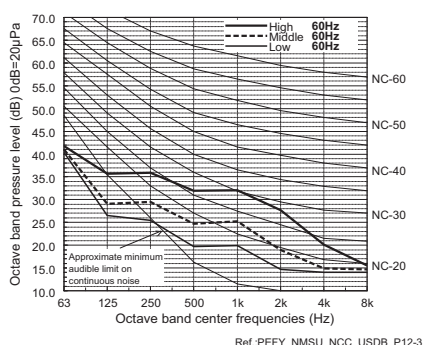
External Static Pressure: 5Pa [0.02 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P12NMSU-E**

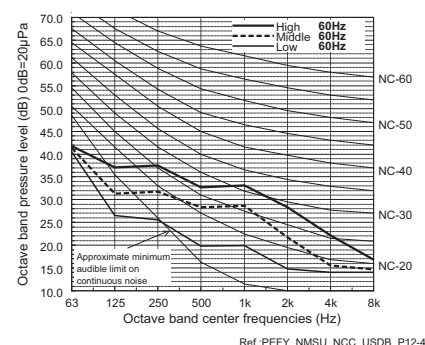
External Static Pressure: 15Pa [0.06 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P12NMSU-E**

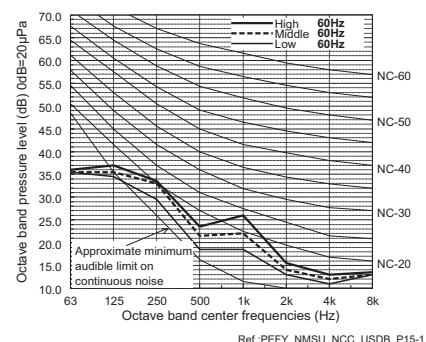
External Static Pressure: 35Pa [0.14 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P12NMSU-E**

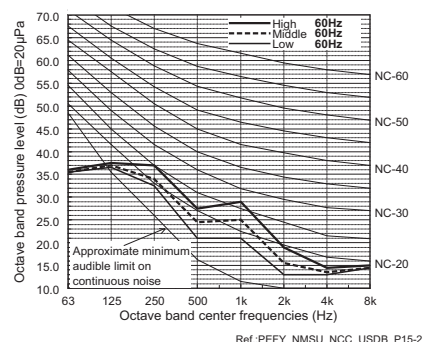
External Static Pressure: 50Pa [0.20 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P15NMSU-E**

External Static Pressure: 5Pa [0.02 in.WG]
Power Source: 208/230V(60Hz)

**PEFY-P15NMSU-E**

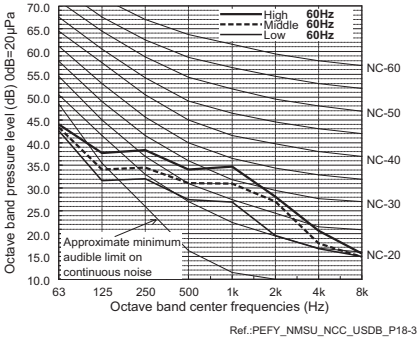
External Static Pressure: 15Pa [0.06 in.WG]
Power Source: 208/230V(60Hz)



PEFY-P-NMSU-E

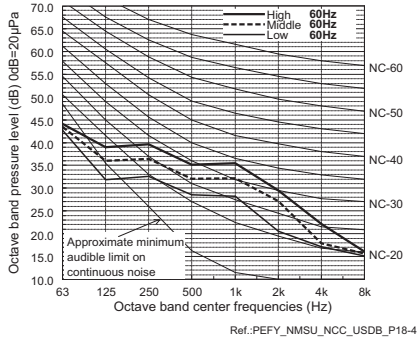
PEFY-P18NMSU-E

External Static Pressure: 35Pa [0.14 in.WG]
Power Source: 208/230V(60Hz)



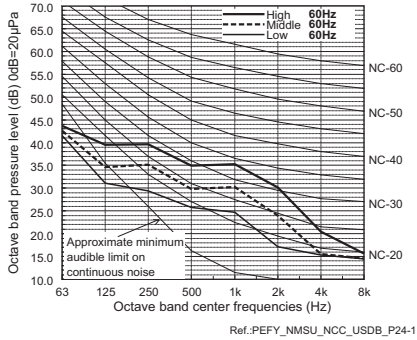
PEFY-P18NMSU-E

External Static Pressure: 50Pa [0.20 in.WG]
Power Source: 208/230V(60Hz)



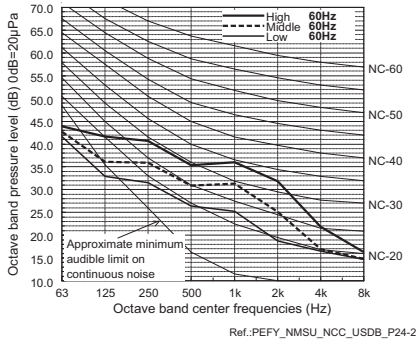
PEFY-P24NMSU-E

External Static Pressure: 5Pa [0.02 in.WG]
Power Source: 208/230V(60Hz)



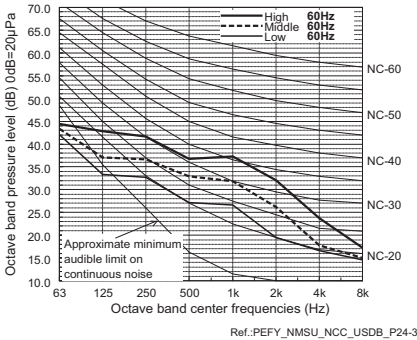
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External Static Pressure: 15Pa [0.06 in.WG]
Power Source: 208/230V(60Hz)



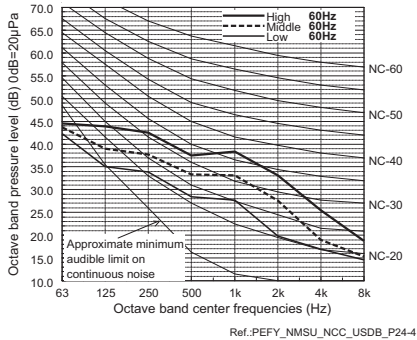
PEFY-P24NMSU-E

External Static Pressure: 35Pa [0.14 in.WG]
Power Source: 208/230V(60Hz)



PEFY-P24NMSU-E

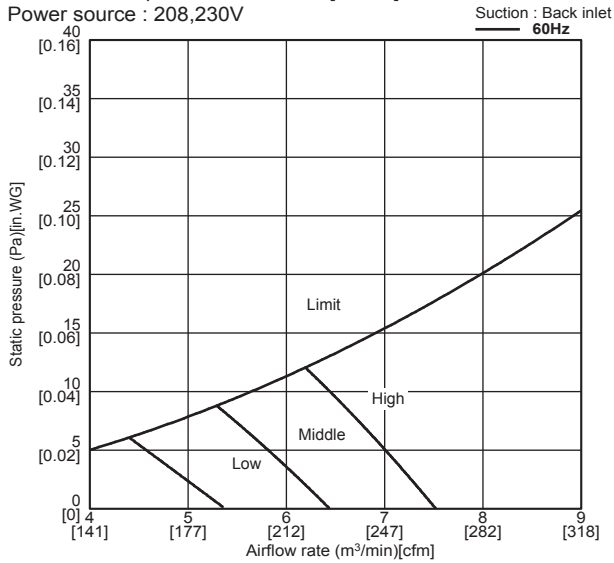
External Static Pressure: 50Pa [0.20 in.WG]
Power Source: 208/230V(60Hz)



PEFY-P06NMSU-E

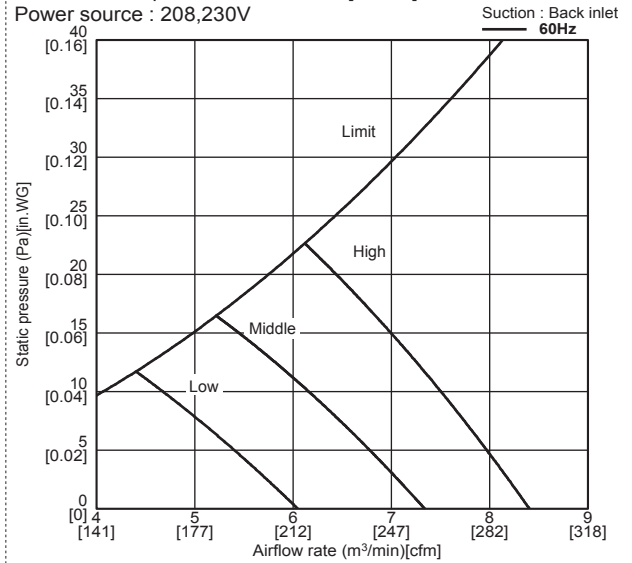
External static pressure : 5Pa,0.02[in.WG]

Power source : 208,230V

**PEFY-P06NMSU-E**

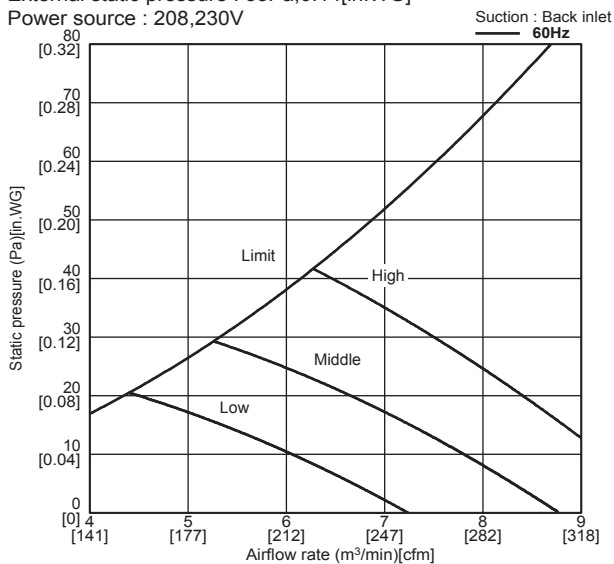
External static pressure : 15Pa,0.06[in.WG]

Power source : 208,230V

**PEFY-P06NMSU-E**

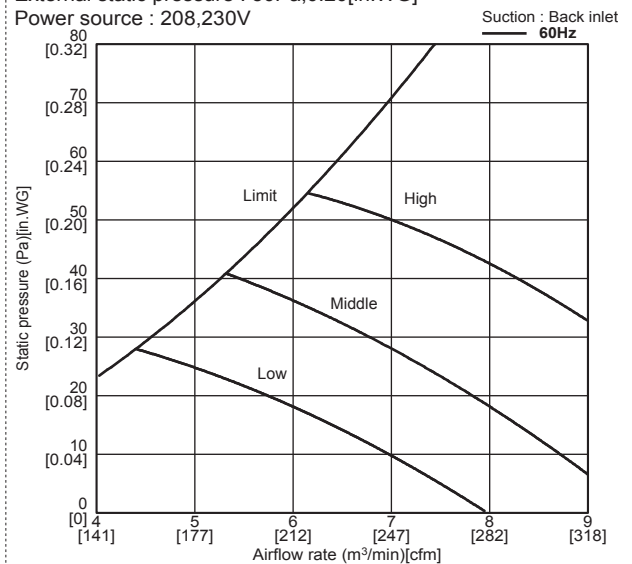
External static pressure : 35Pa,0.14[in.WG]

Power source : 208,230V

**PEFY-P06NMSU-E**

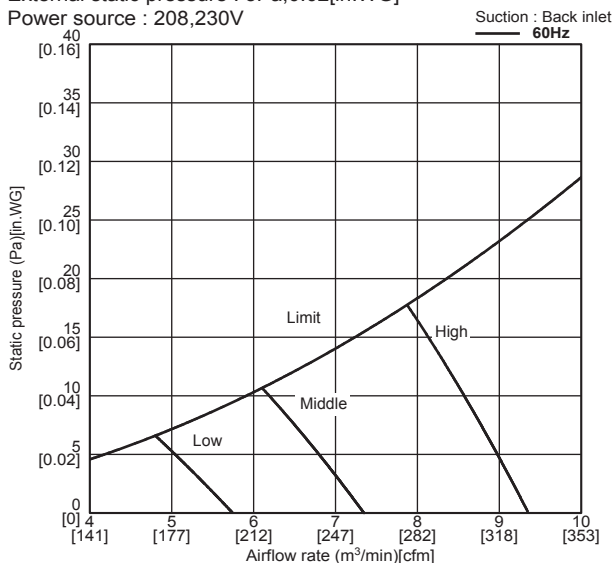
External static pressure : 50Pa,0.20[in.WG]

Power source : 208,230V

**PEFY-P08NMSU-E**

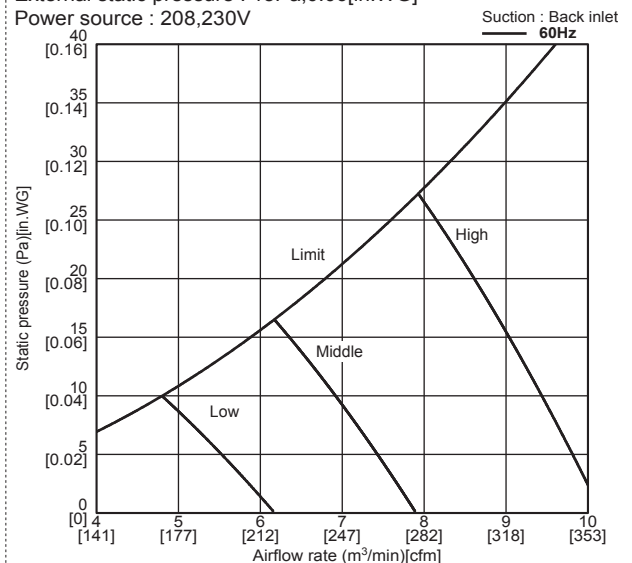
External static pressure : 5Pa,0.02[in.WG]

Power source : 208,230V

**PEFY-P08NMSU-E**

External static pressure : 15Pa,0.06[in.WG]

Power source : 208,230V



6. FAN CHARACTERISTICS CURVES

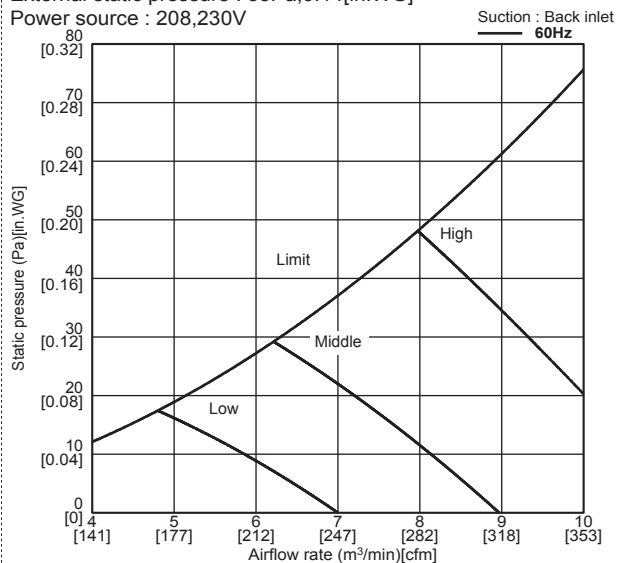
Ceiling concealed (Low static pressure type)

PEFY-P-NMSU-E

PEFY-P08NMSU-E

External static pressure : 35Pa,0.14[in.WG]

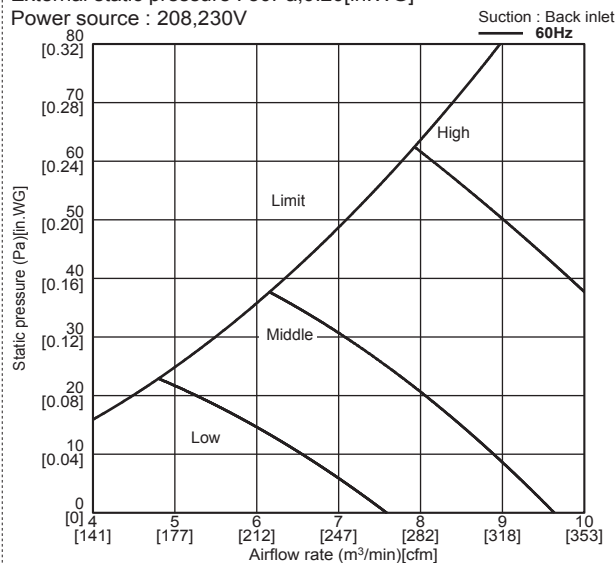
Power source : 208,230V



PEFY-P08NMSU-E

External static pressure : 50Pa,0.20[in.WG]

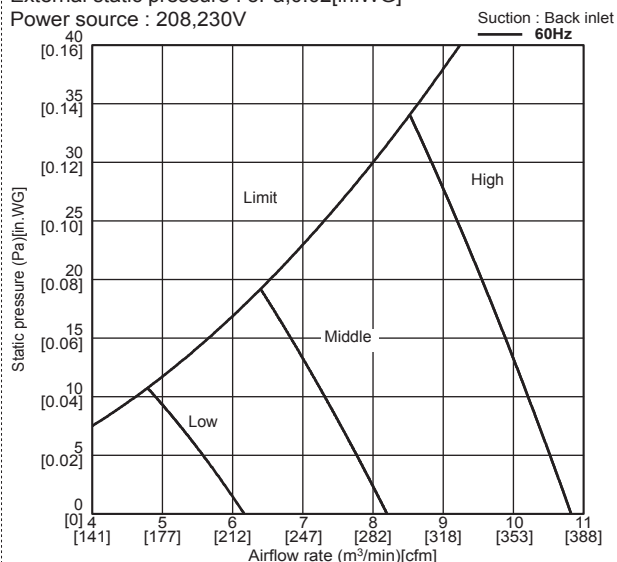
Power source : 208,230V



PEFY-P12NMSU-E

External static pressure : 5Pa,0.02[in.WG]

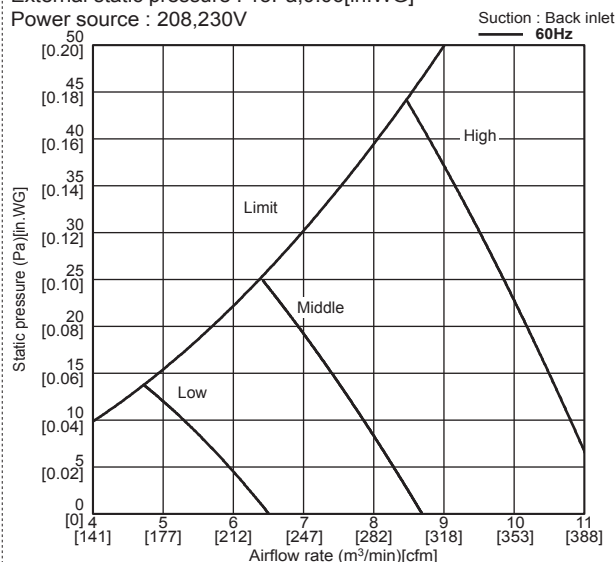
Power source : 208,230V



PEFY-P12NMSU-E

External static pressure : 15Pa,0.06[in.WG]

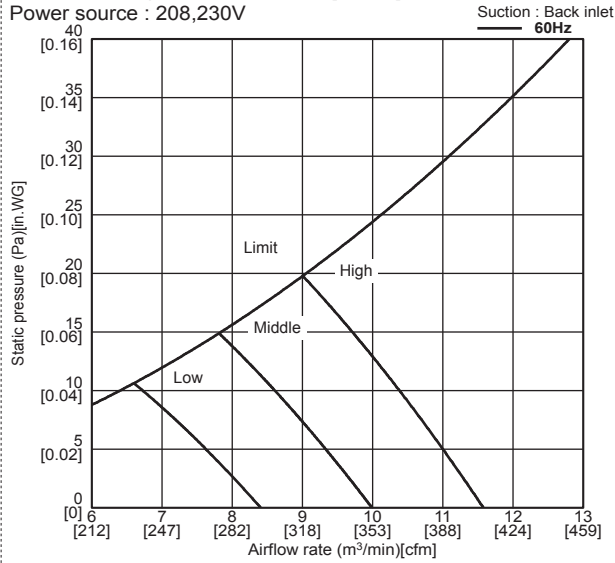
Power source : 208,230V



PEFY-P15NMSU-E

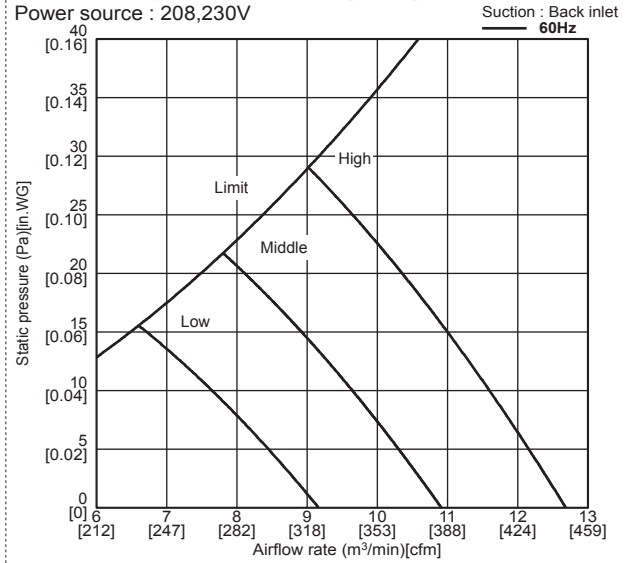
External static pressure : 5Pa,0.02[in.WG]

Power source : 208,230V

**PEFY-P15NMSU-E**

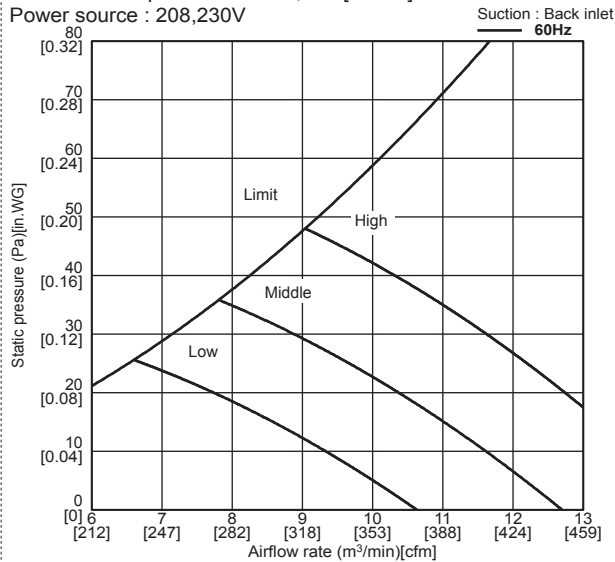
External static pressure : 15Pa,0.06[in.WG]

Power source : 208,230V

**PEFY-P15NMSU-E**

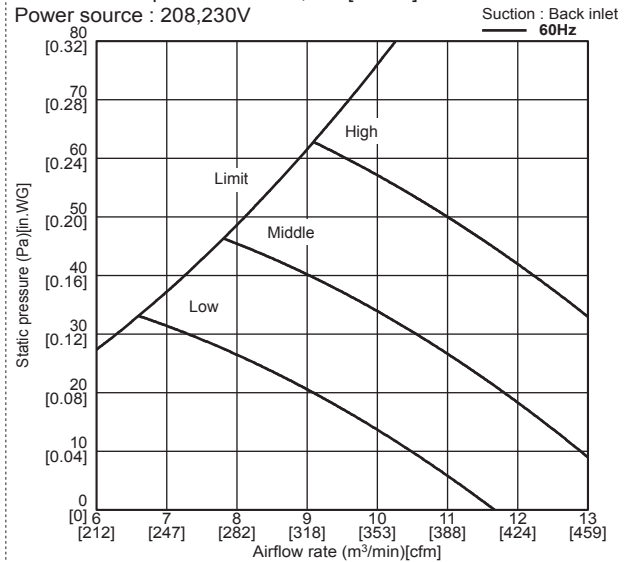
External static pressure : 35Pa,0.14[in.WG]

Power source : 208,230V

**PEFY-P15NMSU-E**

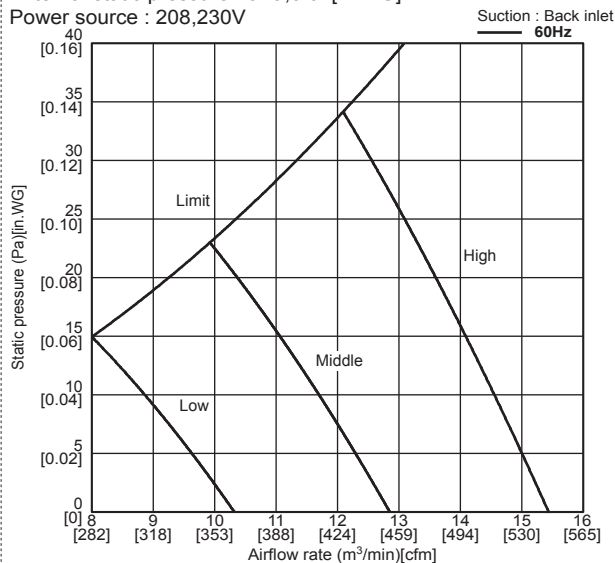
External static pressure : 50Pa,0.20[in.WG]

Power source : 208,230V

**PEFY-P18NMSU-E**

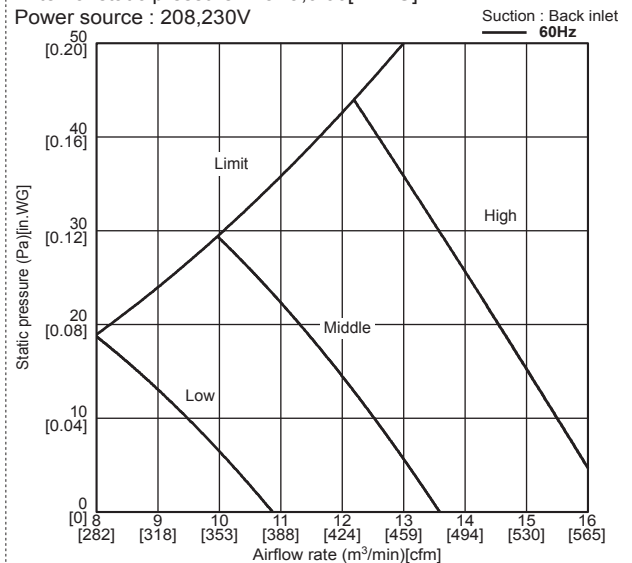
External static pressure : 5Pa,0.02[in.WG]

Power source : 208,230V

**PEFY-P18NMSU-E**

External static pressure : 15Pa,0.06[in.WG]

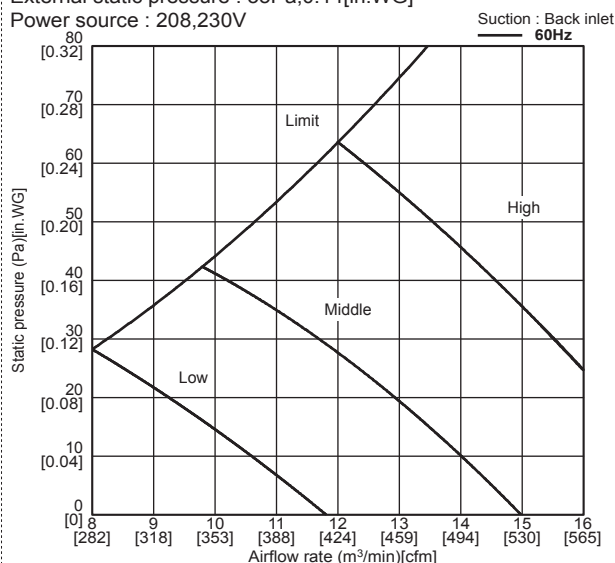
Power source : 208,230V



PEFY-P18NMSU-E

External static pressure : 35Pa,0.14[in.WG]

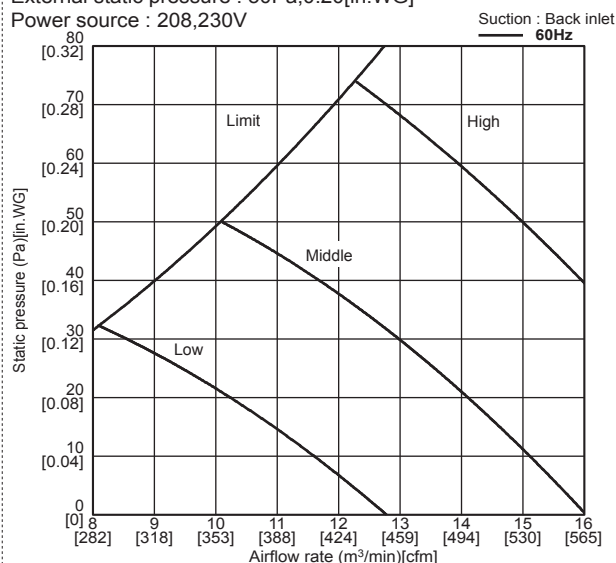
Power source : 208,230V



PEFY-P18NMSU-E

External static pressure : 50Pa,0.20[in.WG]

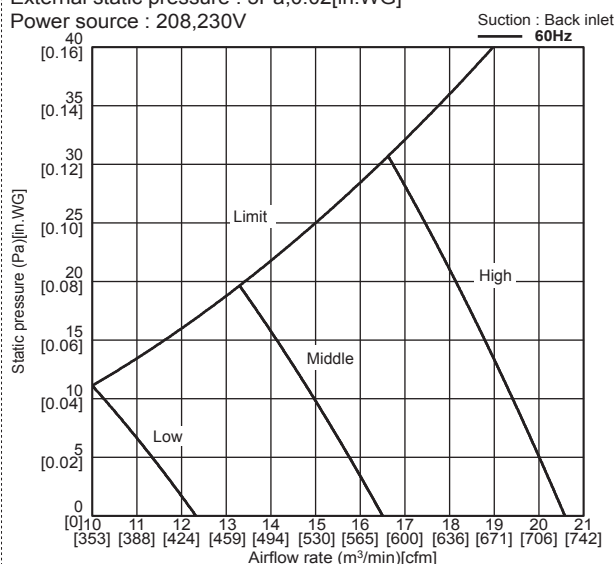
Power source : 208,230V



PEFY-P24NMSU-E

External static pressure : 5Pa,0.02[in.WG]

Power source : 208,230V



Symbols: MCA: Minimum Circuit Ampacity (=1.25xFLA) FLA: Full Load Amps
IFM: Indoor Fan Motor Output: Fan motor rated output

Model	Indoor Unit				IFM	
	Hz	Volts	Voltage range	MCA(A)	Output(kW)	FLA(A)
PEFY-P06NMSU-E	60Hz	208 / 230V	188 to 253V	0.47 / 0.50	0.023 / 0.023	0.32 / 0.31
PEFY-P08NMSU-E				0.47 / 0.50	0.023 / 0.023	0.41 / 0.39
PEFY-P12NMSU-E				0.68 / 0.74	0.032 / 0.032	0.46 / 0.43
PEFY-P15NMSU-E				1.20 / 1.33	0.130 / 0.130	0.47 / 0.45
PEFY-P18NMSU-E				1.20 / 1.33	0.130 / 0.130	0.64 / 0.60
PEFY-P24NMSU-E				1.57 / 1.73	0.180 / 0.180	0.88 / 0.83

PEFY-P-NMSU-E

PEFY-P-NMSU-E

8-1. Optional parts line up for the Indoor unit

	Long-life filter	Filter box	Drain pump	External heater adapter
PEFY-P06,08,12,15,18,24NMSU-E	-	-	-	PAC-YU25HT

8-2. External heater adapter

External heater adapter PAC-YU25HT is a set of special wiring parts for controlling the electric heater* with the air conditioner system.
*The electric heater should be designed and prepared at the site.

A basic connection method is shown as follows:(For details, refer to its Installation Manual.)

(1) Basic wiring

For relay X use the specifications given below Operation coil
Rated voltage : 12VDC
Power consumption : 1W or less
* Use the diode that is recommended by the relay manufacturer at both ends of the relay coil.
The length of the electrical wiring for the PAC-YU25HT is 2 meters (6-1/2 ft).
To extend this length, use sheathed 2-core cable.
Control cable type : CVV, CVS, CPEV or equivalent.
Cable size : 0.5 mm² ~ 1.25 mm² (16 to 22 AWG)
Don't extend the cable more than 10 meters (32ft).

(2) Recommended circuit

Each outdoor unit has function code of heating backup. Please refer to each service manual (DIP S/W Functions).

Item	① External output cable	② Connector (for use with the panel heater)	
Quantity	2	3	
Shape			

Wiring details and Installation details should be referred to its Installation Manual.

⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
 - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
 - It may also be in violation of applicable laws.
 - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A.

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