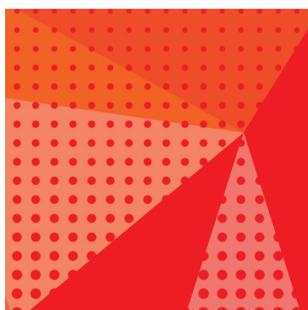




*Changes for the Better*

AIR CONDITIONING SYSTEMS

# CITY MULTI

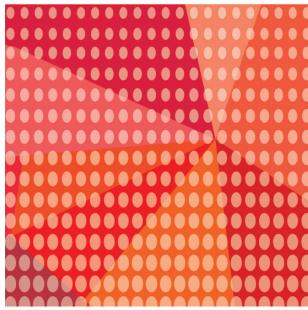


## DATA BOOK

MODEL

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**PEFY-P-NMHU-E2**  
**PEFY-P-NMHSU-E**



## PEFY-P-NMHU-E2, PEFY-P-NMHSU-E

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# 1. SPECIFICATIONS

Ceiling concealed (High static pressure type)

Model		PEFY-P15NMHU-E2	PEFY-P18NMHU-E2	PEFY-P24NMHU-E2	PEFY-P27NMHU-E2
Power source		1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz
Cooling capacity (Nominal)	*1 BTU/h	15,000	18,000	24,000	27,000
	*1 kW	4.4	5.3	7.0	7.9
	*2 Power input (208/230V) kW	0.270/0.280	0.270/0.280	0.330/0.320	0.390
	*2 Current input (208/230V) A	1.32/1.25	1.32/1.25	1.61/1.43	1.90/1.73
Heating capacity (Nominal)	*3 BTU/h	17,000	20,000	27,000	30,000
	*3 kW	5.0	5.9	7.9	8.8
	*2 Power input (208/230V) kW	0.250/0.260	0.250/0.260	0.310/0.300	0.370
	*2 Current input (208/230V) A	1.21/1.14	1.21/1.14	1.50/1.32	1.79/1.62
External finish		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension H x W x D	in.	15 x 29-3/8 x 35-7/16	15 x 29-3/8 x 35-7/16	15 x 29-3/8 x 35-7/16	15 x 40-9/16 x 35-7/16
	mm	380 x 745 x 900	380 x 745 x 900	380 x 745 x 900	380 x 1,030 x 900
Net weight	lbs (kg)	98 (44)	98 (44)	100 (45)	124 (56)
Heat exchanger		Cross fin(Aluminum fin and copper tube)	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 1	Sirocco fan x 1	Sirocco fan x 2
	*4 External static press. (208V) in.WG (230V) in.WG	<0.40> - <1.00>	<0.40> - <1.00>	<0.40> - <1.00>	<0.40> - <1.00>
		<100> - <250>	<100> - <250>	<100> - <250>	<100> - <250>
		<0.60> - 1.00	<0.60> - 1.00	<0.60> - 1.00	<0.60> - 1.00
		<150> - 250	<150> - 250	<150> - 250	<150> - 250
	Motor Type	1-phase induction motor	1-phase induction motor	1-phase induction motor	1-phase induction motor
	Motor output kW	0.17	0.17	0.25	0.26
	Driving mechanism	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate cfm m³/min L/s	(Low-High)	(Low-High)	(Low-High)	(Low-High)
		353 - 494	353 - 494	477 - 671	547 - 777
		10.0 - 14.0	10.0 - 14.0	13.5 - 19.0	15.5 - 22.0
Sound pressure level (measured in anechoic room)	(208V) dB <A>	39-45	39-45	40-46	38-44
		39-45	39-45	40-46	38-44
	(230V) dB <A>	(Low-High)	(Low-High)	(Low-High)	(Low-High)
		39-45	39-45	40-46	38-44
Insulation material		EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air filter		Option: Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.
Protection device		Fuse	Fuse	Fuse	Fuse
Refrigerant control device		LEV	LEV	LEV	LEV
Connectable outdoor unit		R410A	R410A	R410A	R410A
Diameter of refrigerant pipe	Liquid (R410A) in. (mm)	1/4 (6.35)Brazed	1/4 (6.35)Brazed	3/8 (9.52)Brazed	3/8 (9.52)Brazed
	Gas (R410A) in. (mm)	1/2 (12.7)Brazed	1/2 (12.7)Brazed	5/8 (15.88)Brazed	5/8 (15.88)Brazed
Field drain pipe size	in. (mm)	O.D.1-1/4(32)	O.D.1-1/4(32)	O.D.1-1/4(32)	O.D.1-1/4(32)
Drawing	External	KJ94C834	KJ94C834	KJ94C834	KJ94C834
	Wiring	KJ94C833	KJ94C833	KJ94C833	KJ94C833
	Refrigerant cycle	-	-	-	-
Standard attachment	Document	Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book
	Accessory	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band
Optional parts	Drain pump	-	-	-	-
	External heater adapter	PAC-YU25HT	PAC-YU25HT	PAC-YU25HT	PAC-YU25HT
	Long life filter	PAC-KE86LAF	PAC-KE86LAF	PAC-KE86LAF	PAC-KE86LAF
	Filter box	PAC-KE63TB-F	PAC-KE63TB-F	PAC-KE63TB-F	PAC-KE80TB-G
Remarks		* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specifications may be subject to change without notice.			

Notes :	Unit converter
1.Nominal cooling conditions Indoor:80°FDB/67°FWB(26.7°CDB/19.4°CWB), Outdoor:95°FDB(35°CDB) Pipe length:25ft.(7.6m), Level difference:0ft.(0m)	BTU/h =kW x 3,412 cfm =m³/min x 35.31 lbs =kg/0.4536
2.The values are measured at the rated external static pressure.	
3.Nominal heating conditions Indoor:70°FDB(21.1°CDB), Outdoor:47°FDB/43°FWB(8.3°CDB/6.1°CWB) Pipe length:25ft.(7.6m), Level difference:0ft.(0m)	
4.The rated external static pressure is shown without < >.The factory setting is the rated value.	*Above specification data is subject to rounding variation.

# 1. SPECIFICATIONS

Ceiling concealed (High static pressure type)

PEFY-P-NMHU-E2, NMHSUE

Model			PEFY-P30NMHU-E2	PEFY-P36NMHU-E2	PEFY-P48NMHU-E2	PEFY-P54NMHU-E2
Power source			1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz	1-phase 208/230 V 60 Hz
Cooling capacity (Nominal)	*1	BTU/h	30,000	36,000	48,000	54,000
	*1	kW	8.8	10.6	14.1	15.8
	*2	Power input (208/230V)	kW	0.450	0.620/0.610	0.620/0.610
	*2	Current input (208/230V)	A	2.20/2.00	3.10/2.74	3.10/2.74
Heating capacity (Nominal)	*3	BTU/h	34,000	40,000	54,000	60,000
	*3	kW	10.0	11.7	15.8	17.6
	*2	Power input (208/230V)	kW	0.430	0.600/0.590	0.600/0.590
	*2	Current input (208/230V)	A	2.09/1.89	2.99/2.63	2.99/2.63
External finish			Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension H x W x D		in.	15 x 40-9/16 x 35-7/16	15 x 47-1/16 x 35-7/16	15 x 47-1/16 x 35-7/16	15 x 47-1/16 x 35-7/16
		mm	380 x 1,030 x 900	380 x 1,195 x 900	380 x 1,195 x 900	380 x 1,195 x 900
Net weight			lbs (kg)	124 (56)	153 (69)	153 (69)
Heat exchanger			Cross fin(Aluminum fin and copper tube)	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 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	*4 External static press.	(208V)	in.WG	<0.40> - <1.00>	<0.40> - <1.00>	<0.40> - <1.00>
			Pa	<100> - <250>	<100> - <250>	<100> - <250>
		(230V)	in.WG	<0.60> - 1.00	<0.60> - 1.00	<0.60> - 1.00
			Pa	<150> - 250	<150> - 250	<150> - 250
	Motor Type		1-phase induction motor	1-phase induction motor	1-phase induction motor	1-phase induction motor
	Motor output	kW	0.31	0.49	0.49	0.55
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-High)	(Low-High)	(Low-High)	(Low-High)
		cfm	636 - 883	936 - 1,342	936 - 1,342	989 - 1,412
		m³/min	18.0 - 25.0	26.5 - 38.0	26.5 - 38.0	28.0 - 40.0
		L/s	300 - 417	442 - 633	442 - 633	467 - 667
Sound pressure level (measured in anechoic room)			(*2)	(Low-High)	(Low-High)	(Low-High)
(208V)	dB <A>		38-44	40-46	40-46	41-47
	dB <A>		38-44	40-46	40-46	41-47
Insulation material			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air filter			Option:Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option:Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option:Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.	Option:Synthetic fiber unwoven cloth filter(long life filter) and filter box are recommended.
Protection device			Fuse	Fuse	Fuse	Fuse
Refrigerant control device			LEV	LEV	LEV	LEV
Connectable outdoor unit			R410A	R410A	R410A	R410A
Diameter of refrigerant pipe	Liquid (R410A)	in. (mm)	3/8 (9.52)Brazed	3/8 (9.52)Brazed	3/8 (9.52)Brazed	3/8 (9.52)Brazed
	Gas (R410A)	in. (mm)	5/8 (15.88)Brazed	5/8 (15.88)Brazed	5/8 (15.88)Brazed	5/8 (15.88)Brazed
Field drain pipe size		in. (mm)	O.D.1-1/4(32)	O.D.1-1/4(32)	O.D.1-1/4(32)	O.D.1-1/4(32)
Drawing	External		KJ94C834	KJ94C834	KJ94C834	KJ94C834
	Wiring		KJ94C833	KJ94C833	KJ94C833	KJ94C833
	Refrigerant cycle		-	-	-	-
Standard attachment	Document		Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book
	Accessory		Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band
Optional parts	Drain pump		-	-	-	-
	External heater adapter		PAC-YU25HT	PAC-YU25HT	PAC-YU25HT	PAC-YU25HT
	Long life filter		PAC-KE88LAF	PAC-KE89LAF	PAC-KE89LAF	PAC-KE89LAF
	Filter box		PAC-KE80TB-G	PAC-KE140TB-F	PAC-KE140TB-F	PAC-KE140TB-F
Remarks		*	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			
		*	Due to continuing improvement, above specifications may be subject to change without notice.			

Notes :	Unit converter
1.Nominal cooling conditions Indoor:80°FDB/67°FWB(26.7°CDB/19.4°CWB), Outdoor:95°FDB(35°CDB) Pipe length:25ft.(7.6m), Level difference:0ft.(0m)	BTU/h =kW x 3,412
2.The values are measured at the rated external static pressure.	cfm =m³/min x 35.31
3.Nominal heating conditions Indoor:70°FDB(21.1°CDB), Outdoor:47°FDB/43°FWB(8.3°CDB/6.1°CWB) Pipe length:25ft.(7.6m), Level difference:0ft.(0m)	lbs =kg/0.4536
4.The rated external static pressure is shown without <>.The factory setting is the rated value.	*Above specification data is subject to rounding variation.

# 1. SPECIFICATIONS

Ceiling concealed (High static pressure type)

Model			PEFY-P72NMHSU-E	PEFY-P96NMHSU-E		
Power source			1-phase 208-230 V 50/60 Hz	1-phase 208-230 V 50/60 Hz		
Cooling capacity (Nominal)	*1	BTU / h	72,000	96,000		
	*1	kW	21.1	28.1		
	*2	Power input (208/230V)	kW	0.63	0.82	
	*2	Current input (208/230V)	A	3.67/3.32	4.89/4.43	
Heating capacity (Nominal)	*3	BTU / h	80,000	108,000		
	*3	kW	23.4	31.7		
	*2	Power input (208/230V)	kW	0.63	0.82	
	*2	Current input (208/230V)	A	3.67/3.32	4.89/4.43	
External finish			Galvanized steel plate	Galvanized steel plate		
External dimension HxWxD		in.	18-9/16 x 49-1/4 x 44-1/8	18-9/16 x 49-1/4 x 44-1/8		
		mm	470 x 1,250 x 1,120	470 x 1,250 x 1,120		
Net weight			lbs (kg)	214 (97)	221 (100)	
Heat exchanger						
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2		
	*4 External static press. (208V) (230V)	in.WG	<0.20> - <0.40> - 0.60 - <0.80> - <1.00>	<0.20> - <0.40> - 0.60 - <0.80> - <1.00>		
		Pa	<50> - <100> - 150 - <200> - <250>	<50> - <100> - 150 - <200> - <250>		
		in.WG	<0.20> - <0.40> - 0.60 - <0.80> - <1.00>	<0.20> - <0.40> - 0.60 - <0.80> - <1.00>		
		Pa	<50> - <100> - 150 - <200> - <250>	<50> - <100> - 150 - <200> - <250>		
	Motor Type		DC motor	DC motor		
	Motor output	kW	0.870	0.870		
	Driving mechanism		Inverter-control	Inverter-control		
	Air flow rate		(Low-Mid-High)	(Low-Mid-High)		
		cfm	1,766 - 2,154 - 2,542	2,048 - 2,507 - 2,966		
		m³ / min	50.0 - 61.0 - 72.0	58.0 - 71.0 - 84.0		
		L/s	833 - 1,017 - 1,200	967 - 1,183 - 1,400		
Sound pressure level (measured in anechoic room)			*2 (208V) dB <A>	(Low-Mid-High) 36-39-43	(Low-Mid-High) 39-42-46	
			(230V) dB <A>	36-39-43	39-42-46	
Insulation material						
Air filter						
Protection device						
Refrigerant control device						
Connectable outdoor unit						
Diameter of refrigerant pipe	Liquid (R410A)	in. (mm)	3/8(9.52)Brazed	3/8(9.52)Brazed		
	Gas (R410A)	in. (mm)	3/4(19.05)Brazed	7/8(22.22)Brazed		
Field drain pipe size		in. (mm)	O.D.1-1/4(32)	O.D.1-1/4(32)		
Drawing	External		KD94L345	KD94L345		
	Wiring		KD94L346	KD94L346		
	Refrigerant cycle		-	-		
Standard attachment	Document		Installation Manual, Instruction Book			
	Accessory		Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band			
Optional parts	Drain pump		PAC-KE05DM-F	PAC-KE05DM-F		
	External heater adapter		PAC-YU25HT	PAC-YU25HT		
	Long life filter		PAC-KE85LAF	PAC-KE85LAF		
	Filter box		PAC-KE250TB-F	PAC-KE250TB-F		
Remarks			* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specifications may be subject to change without notice.			

Notes :

1.Nominal cooling conditions  
Indoor:80°F D.B./67°FW.B.(26.7°C D.B./19.4°C W.B.), Outdoor:95°F D.B.(35°C D.B.)  
Pipe length:25ft.(7.6m), Level difference:0ft.(0m)

2.The values are measured at the factory setting of external static pressure.

3.Nominal heating conditions

Indoor:70°F D.B.(21.1°C D.B.), Outdoor:47°F D.B./43°FW.B.(8.3°C D.B./6.1°C W.B.)  
Pipe length:25ft.(7.6m), Level difference:0ft.(0m)

4.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.

Unit converter

BTU/h =kW x 3,412  
cfm =m³/min x 35.31

lbs =kg / 0.4536

\*Above specification data is subject to rounding variation.

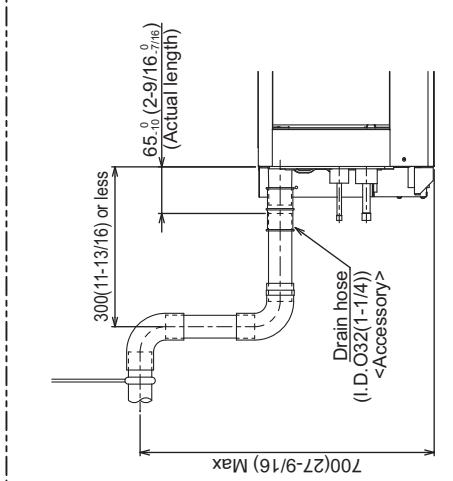
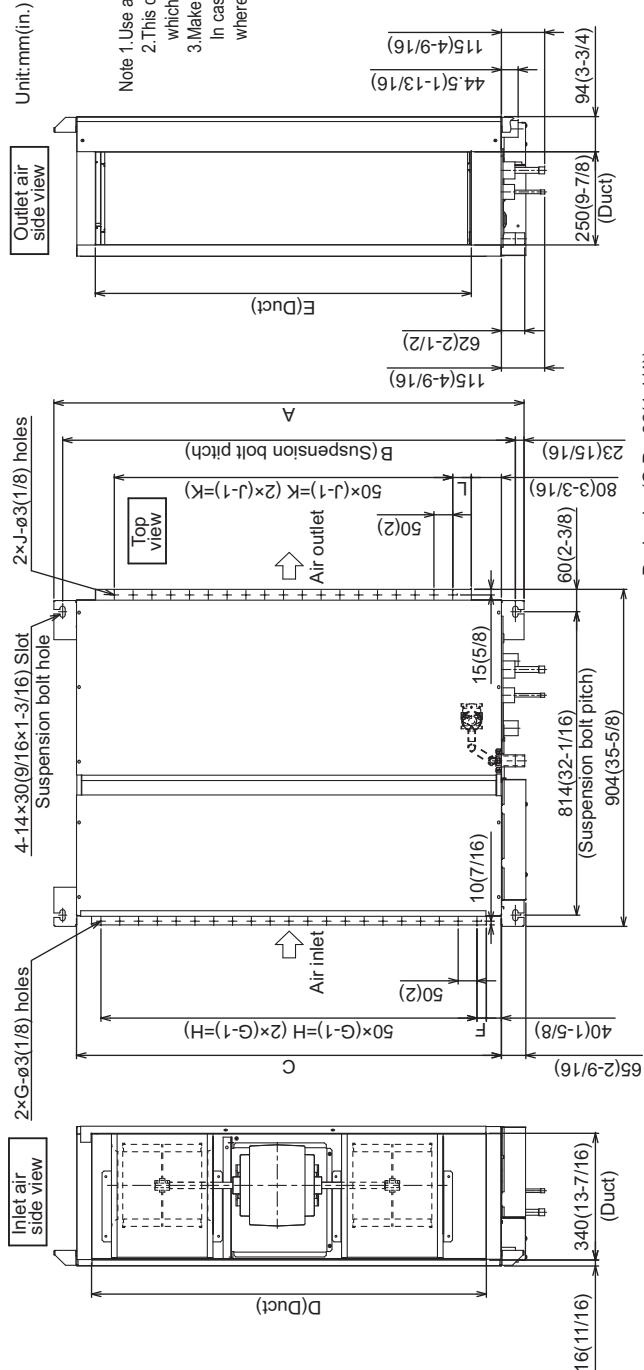
## **2. EXTERNAL DIMENSIONS**

Ceiling concealed (High static pressure type)

PEFY-P15, 18, 24, 27, 30, 36, 48, 54NMHU-E2

Unit: mm (in.)

1. Use an M10 screw for the suspension bolt (field supply).
2. This drawing is for PEFY-P27-30-38-48-54NMHU-E2 models, which have 2 fans. PEFY-P15-18-24NMHU-E2 models have 1 fan.
3. Make sure to install the air filter (field supply) on the air intake side. In case field supplied air filter is used, attach it where the filter service is easily done.



Model	(unit:mm, mm)										L	①Gas pipe φ2.7 (1/2)	②Liquid pipe φ6.35 (14)
	A	B	C	D	E	F	G	H	J	K			
PEFY-P15-18NMHU-E2	800 (31-1/2)	754 (29-11/16)	680 (26-13/16)	600 (23-5/8)	550 (21-11/16)	50 (2)	11 (19-11/16)	500 (19-11/16)	10 (17-3/4)	450 (2)	50 (2)	φ12.7 (1/2)	φ6.35 (14)
PEFY-P24NMHU-E2													
PEFY-P27-30NMHU-E2	1085 (42-3/4)	1039 (40-15/16)	965 (38)	885 (34-7/8)	835 (32-7/8)	42.5 (1-11/16)	17 (3-1/2)	800 (3-1/2)	15 (3-1/2)	700 (22-9/16)	67 (21-11/16)		
PEFY-P36-48-54NMHU-E2	1250 (49-1/4)	1204 (47-7/16)	1130 (44-1/2)	1050 (41-3/8)	1000 (39-3/8)	25 (1)	21 (39-3/8)	1000 (39-3/8)	19 (35-7/16)	700 (21-11/16)	67 (21-11/16)	φ15.88 (5/8)	φ9.52 (3/8)

## 2. EXTERNAL DIMENSIONS

Ceiling concealed (High static pressure type)

PEFY-P15, 18, 24, 27, 30, 36, 48, 54NMHU-E2

Unit: mm (in.)

**Maintenance access space**  
 Secure enough access space to allow for the maintenance, inspection, and replacement of the motor, fan, heat exchanger, drain pan, drain pump and control 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 beam or other objects.

Create access door 1(450×450mm)(17-3/4×17-3/4inch) for the maintenance from the unit side when the motor,fan,thermistor, LEV,drain pump and control box is exchanged.(Fig.2,4)

(1) When a space of 300mm(11-13/16inch) or more is available below the unit between the unit and the ceiling.  
 Create access door 2(600×600mm)(23-5/8×23-5/8inch) for the maintenance from the bottom when the heat exchanger and drain pan is cleaned(exchanged). (Fig.2)

(2) When a space of less than 300mm(11-13/16inch) is available below the unit between the unit and the ceiling.  
 (At least 20mm(13/16inch) of space should be left below the unit as shown in Fig.3)  
 Create access door 3 for the maintenance from the bottom when the heat exchanger and drain pan is cleaned(exchanged) (Fig.4)

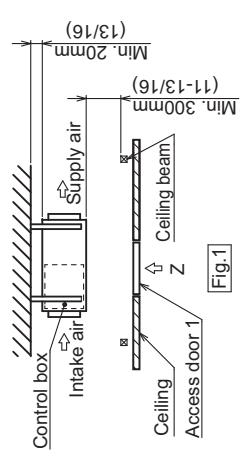


Fig.1

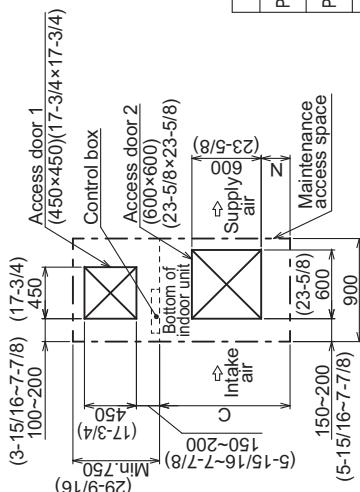


Fig.2 (Viewed from the direction of the arrow Z)

Model	C	M	N
PEFY-P15-18-24NMHU-E2	(26-13/16)	(30-3/4)	0~50 (0-2)
PEFY-P27-30NMHU-E2	965 (38)	1065 (41-15/16)	100~150 (3-15/16-5-15/16)
PEFY-P36-48-54NMHU-E2	1130 (44-1/2)	1230 (48-7/16)	200~250 (7-7/8-9-7/8)

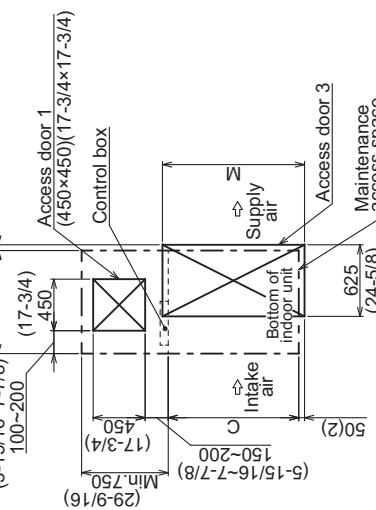


Fig.3 (Viewed from the direction of the arrow Y)

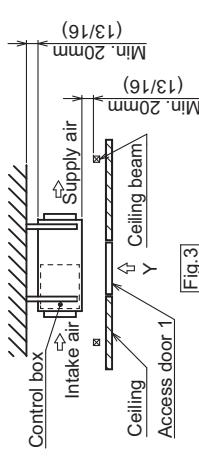


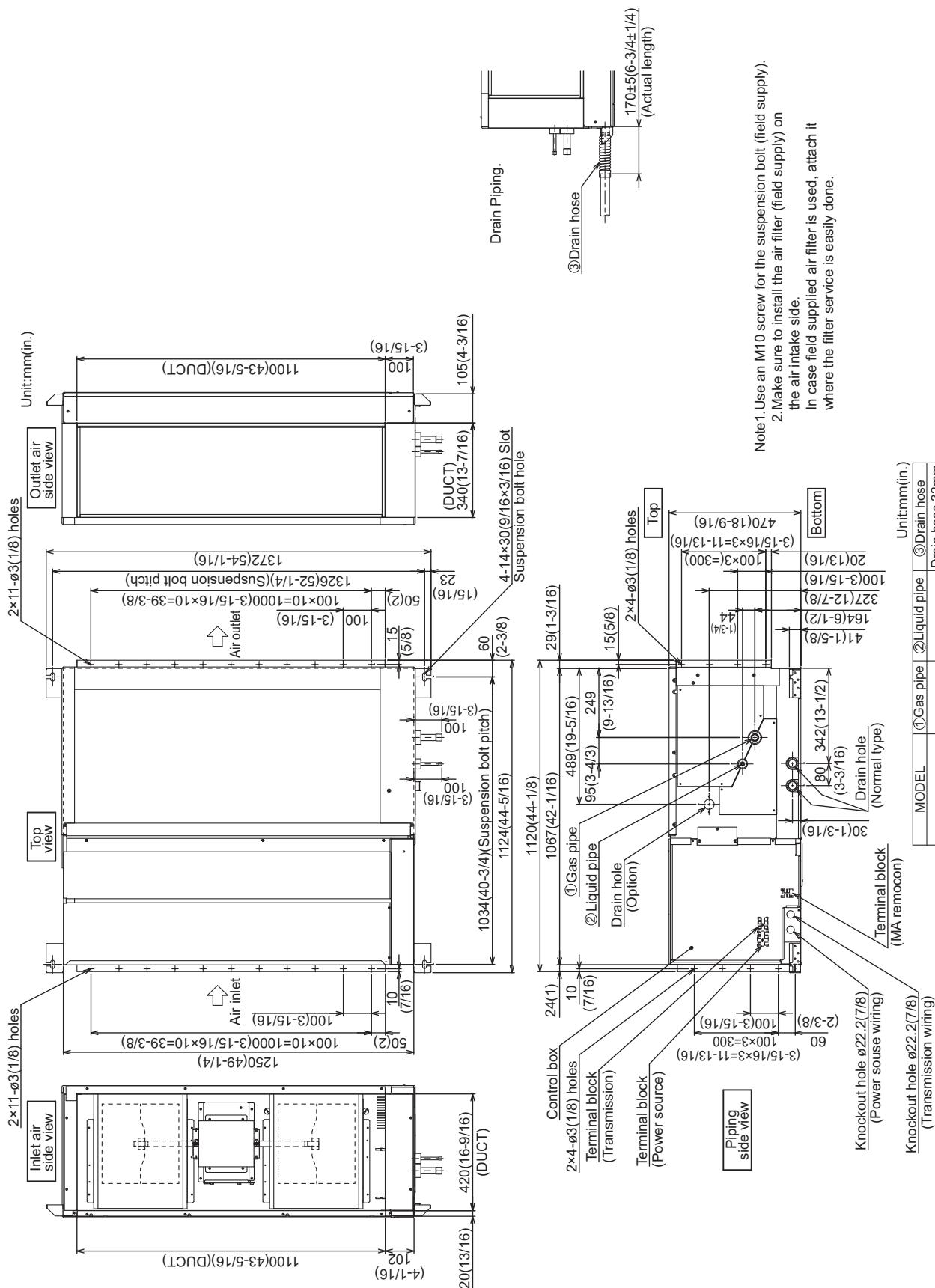
Fig.4 (Viewed from the direction of the arrow Y)

## 2. EXTERNAL DIMENSIONS

Ceiling concealed (High static pressure type)

PEFY-P72, 96NMHSU-E

Unit: mm (in.)



## 2. EXTERNAL DIMENSIONS

Ceiling concealed (High static pressure type)

PEFY-P72, 96NMHSU-E

Unit: mm (in.)

[Maintenance access space]  
Secure enough access space to allow for the maintenance, inspection, and replacement of the motor fan, heat exchanger, drain pan and control 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 beam or other objects.

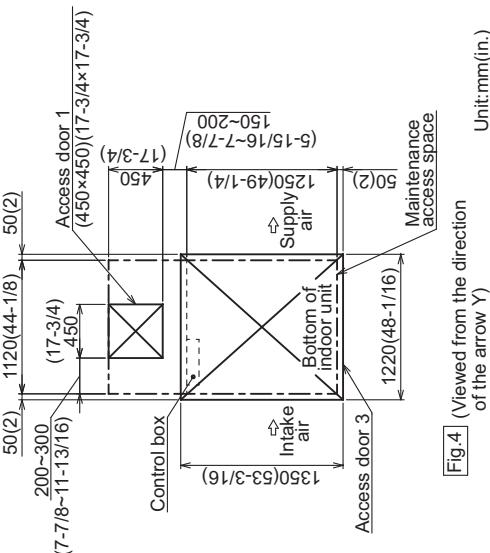
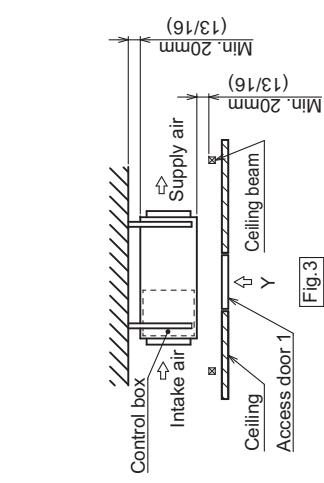
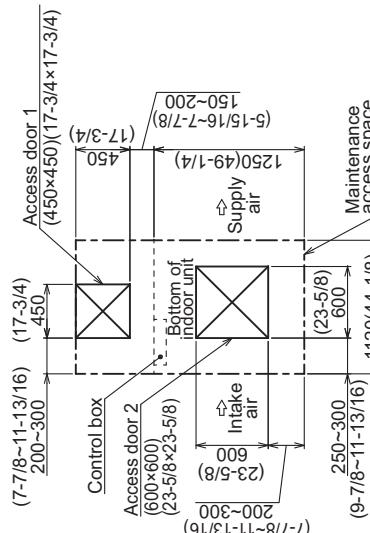
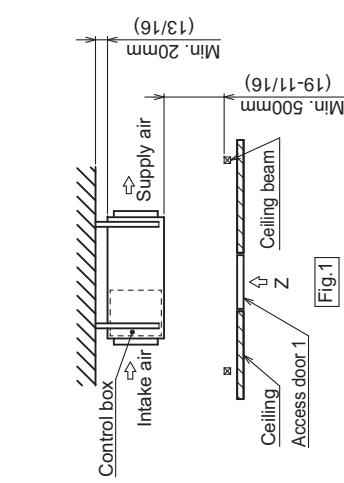
Create access door 1(450x450mm)(17-3/4x17-3/4inch) for the maintenance from the unit side when the thermistor,LEV and control box is exchanged.(Fig.2,4)

(1) When a space of 500mm(19-11/16inch) or more is available below the unit between the unit and the ceiling.  
Create access door 2(600x600mm)(23-5/8x23-5/8inch) for the maintenance from the bottom when the motor,fan,heat exchanger and drain pan is cleaned(exchanged).(Fig.2)

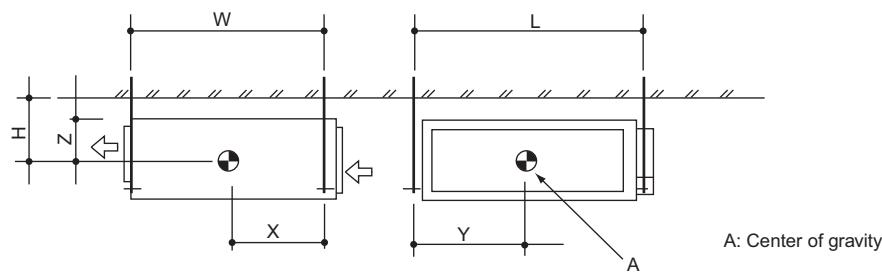
(2) When a space of less than 500mm(19-11/16inch) is available below the unit between the unit and the ceiling.

(At least 20mm(13/16inch) of space should be left below the unit as shown in Fig.3.)

Create access door 3 for the maintenance from the bottom when the motor,fan,heat exchanger and drain pan is cleaned(exchanged).(Fig.4)

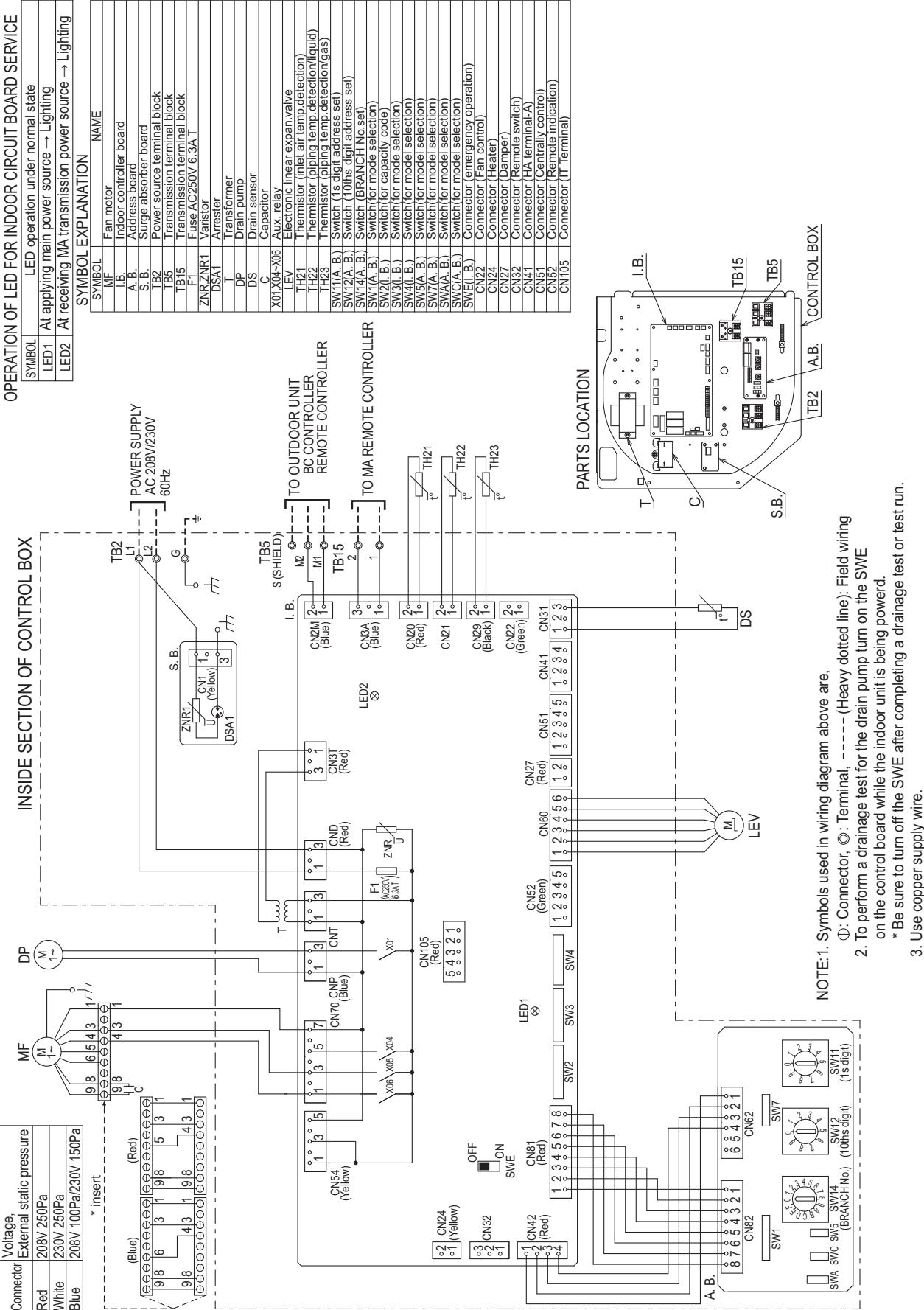


PEFY-P15, 18, 24, 27, 30, 36, 48, 54NMHU-E2  
 PEFY-P72, 96NMHSU-E



Model name	W	L	H	X	Y	Z
PEFY-P15NMHU-E2	814 [32-1/16]	754 [29-11/16]	210 [8-5/16]	374 [14-3/4]	440 [17-3/8]	190 [7-1/2]
PEFY-P18NMHU-E2	814 [32-1/16]	754 [29-11/16]	210 [8-5/16]	374 [14-3/4]	440 [17-3/8]	190 [7-1/2]
PEFY-P24NMHU-E2	814 [32-1/16]	754 [29-11/16]	210 [8-5/16]	374 [14-3/4]	440 [17-3/8]	190 [7-1/2]
PEFY-P27NMHU-E2	814 [32-1/16]	1039 [40-15/16]	210 [8-5/16]	364 [14-3/8]	548 [21-5/8]	190 [7-1/2]
PEFY-P30NMHU-E2	814 [32-1/16]	1039 [40-15/16]	210 [8-5/16]	364 [14-3/8]	548 [21-5/8]	190 [7-1/2]
PEFY-P36NMHU-E2	814 [32-1/16]	1204 [47-7/16]	210 [8-5/16]	364 [14-3/8]	649 [25-9/16]	190 [7-1/2]
PEFY-P48NMHU-E2	814 [32-1/16]	1204 [47-7/16]	210 [8-5/16]	364 [14-3/8]	649 [25-9/16]	190 [7-1/2]
PEFY-P54NMHU-E2	814 [32-1/16]	1204 [47-7/16]	210 [8-5/16]	364 [14-3/8]	649 [25-9/16]	190 [7-1/2]
PEFY-P72NMHSU-E	1034 [40-3/4]	1326 [52-1/4]	255 [10-1/16]	462 [18-1/4]	660 [26]	235 [9-5/16]
PEFY-P96NMHSU-E	1034 [40-3/4]	1326 [52-1/4]	255 [10-1/16]	462 [18-1/4]	660 [26]	235 [9-5/16]

## PEFY-P15, 18, 24, 27, 30, 36, 48, 54NMHU-E2

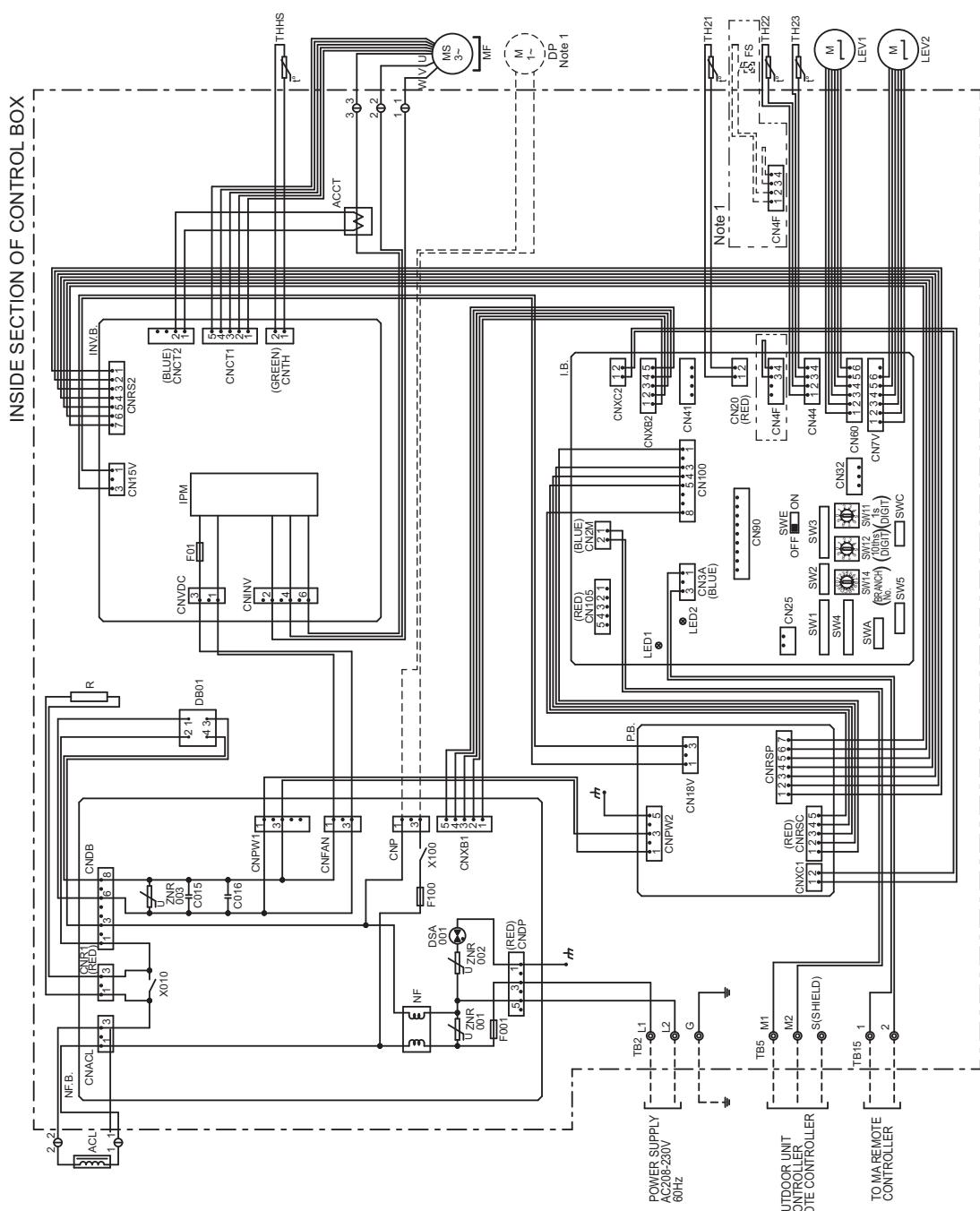


## **4. ELECTRICAL WIRING DIAGRAMS**

Ceiling concealed (High static pressure type)

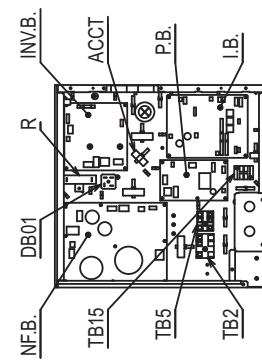
PEFY-P72,96NMHSU-E

SYMBOL		NAME	EXPLANATION
I.B.	CN125 CN342 CN41 CN50 CN105 SW1 SW2 SW3 SW4 SW5 SW11 SW12 SW14 SW15 SWC SWE	Indoor controller board Connector Connector (Remote switch) Connector (IT terminal A) Connector (IT terminal) Switch (for mode selection) Switch (for capacity code) Switch (for mode selection) Switch (for mode selection) Switch (for mode selection) Switch (for digital address set) Switch (for digital address set) Switch (BRANCH No.) Switch (for static pressure selection) Switch (for static pressure selection) Connector (emergency operation) Noise filter board	
N.F.B.	DSA001 ZNR01~ ZNR03 X101X100 F001 F100 NF	Antenna Varistor Aux. relay Fuse(A2250V 10A) Fuse(3.15A) Noise filter	
P.B.	TPM F01 TB2 TB5 TB15 TH21 TH22 TH23 THHS MF	Inverter board Intelligent power module Fuse(A2250V 15A) Power source terminal block Transmission terminal block Transmission terminal block Thermistor (left air flow detection) Thermistor (left air flow detection/liquid) Thermistor (right temp. detection/gas) Thermistor (heat sink) Fan motor	
INV.B.	LEV1/LEV2 ACL R DB01 ACCT LED1 LED2 <D> <E>	Electronic linear expant. valve AC reactor (Power factor improvement) Resistor Diode bridge Current Sensor (AC) LED (Power supply) LED (Remote controller supply) Drain pump Float switch	Inside < is the optional parts



CN105 is on products manufactured in April 2012 and later.

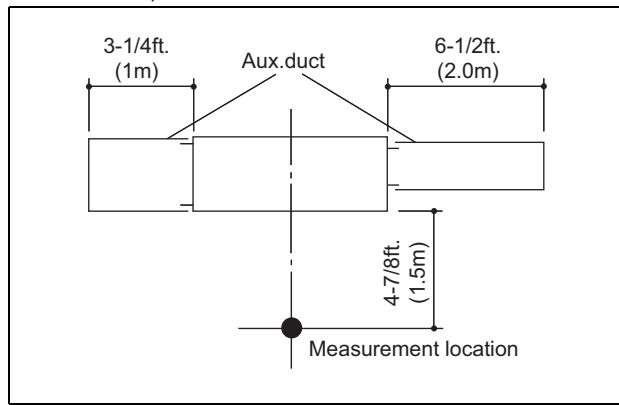
**NOTE:**1.The part of thin dotted line indicates the circuit for optional parts.  
2.To perform a drainage test for the drain pump turn on the SWE on the control board while the indoor unit is being powered.  
Be sure to turn off the SWE after completing a drainage test or test run.  
3.The wirings to TB2,TB5,TB15 shown in dotted line are field work.  
4.Mark @ indicates terminal block,Φ connector.  
5.Use copper supply wire.



PARTS LOCATION

## 5-1. Sound levels

PEFY-P-NMHU-E2, NMHSU-E



\* Measured in anechoic room

### Operating sound levels ( Low - High )

Model	Sound pressure level (A weighted)		Unit : dB (A)
PEFY-P15,P18NMHU-E2	208V	39 - 45	
	230V	39 - 45	
PEFY-P24NMHU-E2	208V	40 - 46	
	230V	40 - 46	
PEFY-P27,P30NMHU-E2	208V	38 - 44	
	230V	38 - 44	
PEFY-P36,P48NMHU-E2	208V	40 - 46	
	230V	40 - 46	
PEFY-P54NMHU-E2	208V	41 - 47	
	230V	41 - 47	

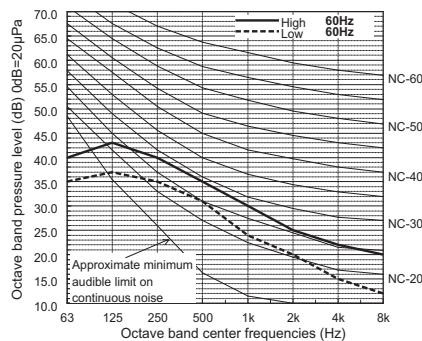
### ( Low - Middle - High )

Model	Sound pressure level (A weighted)		Unit : dB (A)
PEFY-P72NMHSU-E	208V	36 - 39 - 43	
	230V	36 - 39 - 43	
PEFY-P96NMHSU-E	208V	39 - 42 - 46	
	230V	39 - 42 - 46	

## 5-2. NC curves

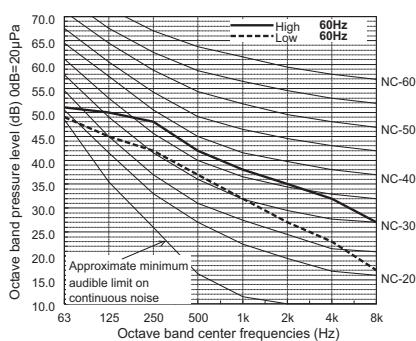
PEFY-P15NMHU-E2

External Static Pressure: 100Pa [0.40 in.WG]  
Power Source: 208V/60Hz



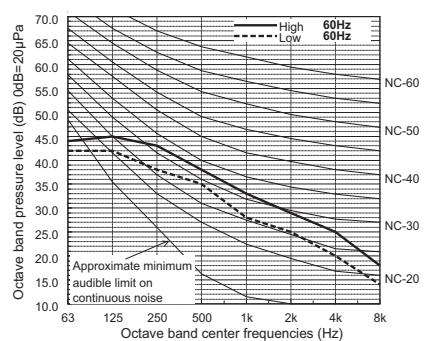
PEFY-P15NMHU-E2

External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 208V/60Hz



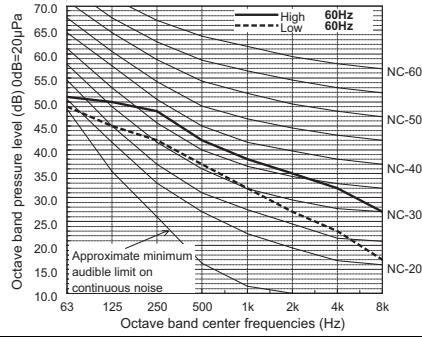
PEFY-P15NMHU-E2

External Static Pressure: 150Pa [0.60 in.WG]  
Power Source: 230V/60Hz



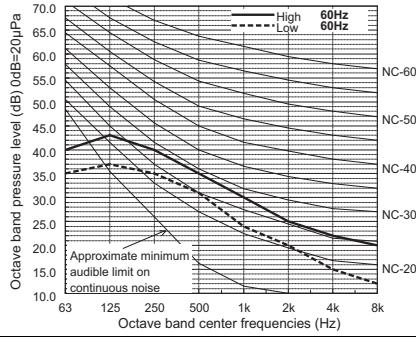
PEFY-P15NMHU-E2

External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 230V/60Hz



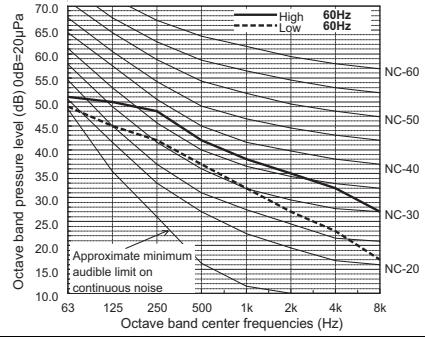
PEFY-P18NMHU-E2

External Static Pressure: 100Pa [0.40 in.WG]  
Power Source: 208V/60Hz

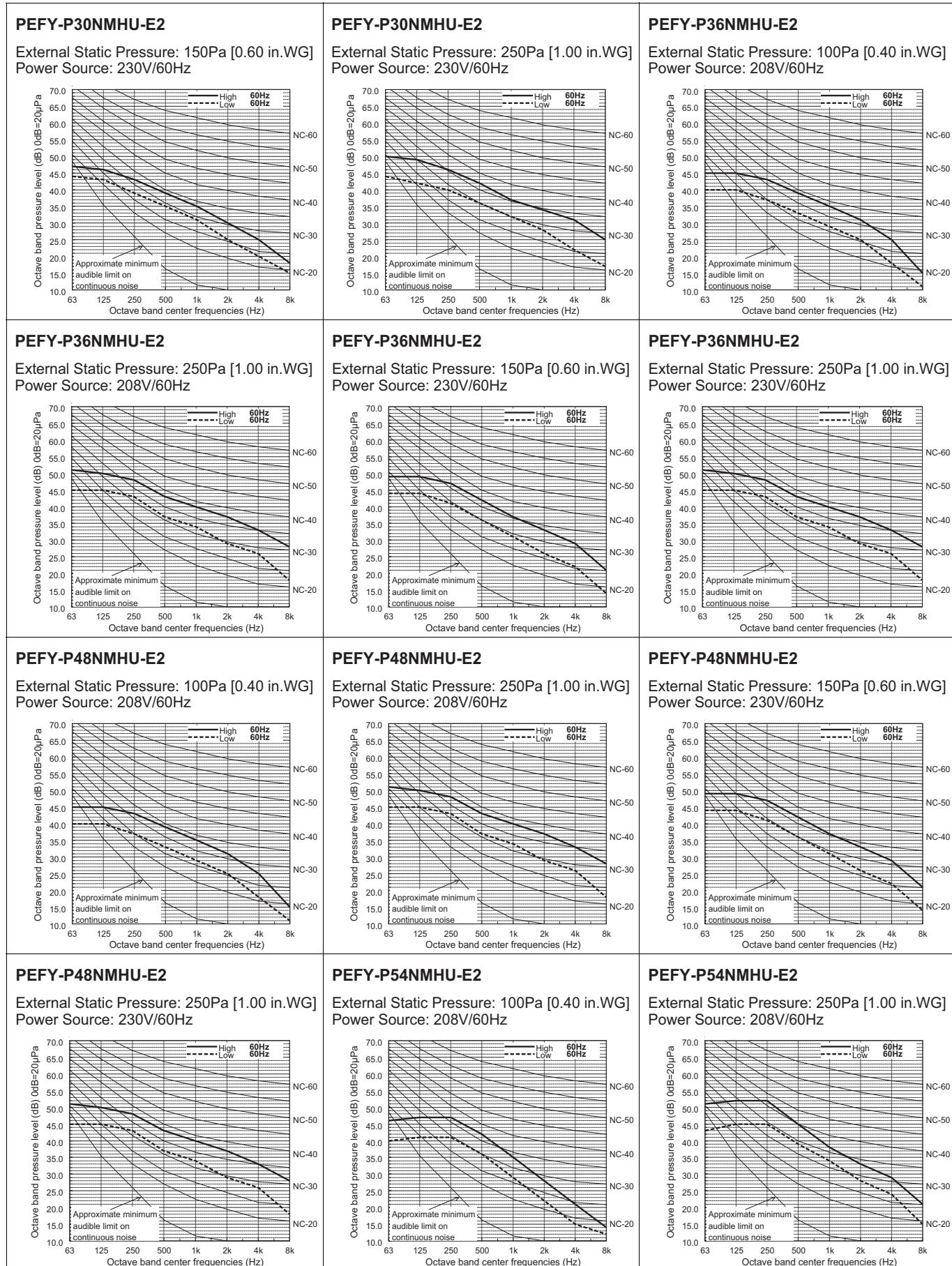


PEFY-P18NMHU-E2

External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 208V/60Hz

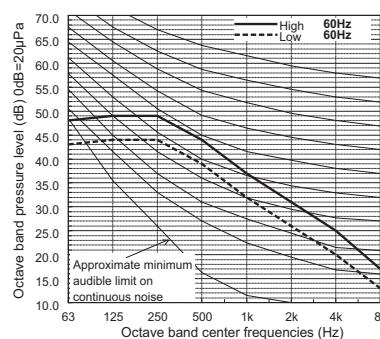


<b>PEFY-P18NMHU-E2</b>	<b>PEFY-P18NMHU-E2</b>	<b>PEFY-P24NMHU-E2</b>
External Static Pressure: 150Pa [0.60 in.WG] Power Source: 230V/60Hz	External Static Pressure: 250Pa [1.00 in.WG] Power Source: 230V/60Hz	External Static Pressure: 100Pa [0.40 in.WG] Power Source: 208V/60Hz
<b>PEFY-P24NMHU-E2</b>	<b>PEFY-P24NMHU-E2</b>	<b>PEFY-P24NMHU-E2</b>
External Static Pressure: 250Pa [1.00 in.WG] Power Source: 208V/60Hz	External Static Pressure: 150Pa [0.60 in.WG] Power Source: 230V/60Hz	External Static Pressure: 250Pa [1.00 in.WG] Power Source: 230V/60Hz
<b>PEFY-P27NMHU-E2</b>	<b>PEFY-P27NMHU-E2</b>	<b>PEFY-P27NMHU-E2</b>
External Static Pressure: 100Pa [0.40 in.WG] Power Source: 208V/60Hz	External Static Pressure: 250Pa [1.00 in.WG] Power Source: 208V/60Hz	External Static Pressure: 150Pa [0.60 in.WG] Power Source: 230V/60Hz
<b>PEFY-P27NMHU-E2</b>	<b>PEFY-P30NMHU-E2</b>	<b>PEFY-P30NMHU-E2</b>
External Static Pressure: 250Pa [1.00 in.WG] Power Source: 230V/60Hz	External Static Pressure: 100Pa [0.40 in.WG] Power Source: 208V/60Hz	External Static Pressure: 250Pa [1.00 in.WG] Power Source: 208V/60Hz

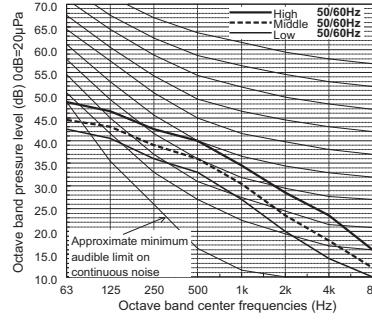


**PEFY-P54NMHU-E2**

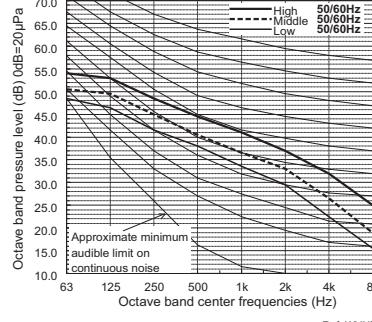
External Static Pressure: 150Pa [0.60 in.WG]  
Power Source: 230V/60Hz

**PEFY-P72NMHSU-E**

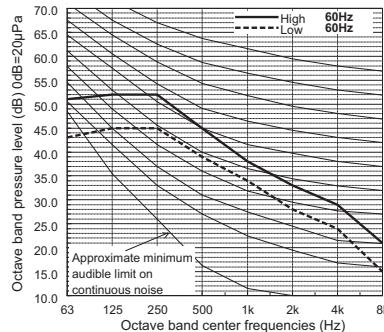
External Static Pressure: 100Pa [0.40 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P72NMHSU-E**

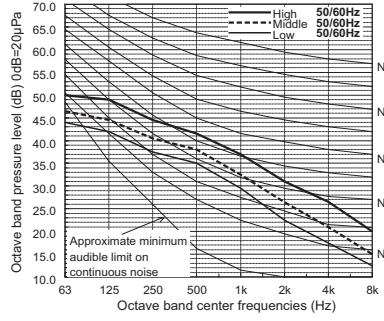
External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P54NMHU-E2**

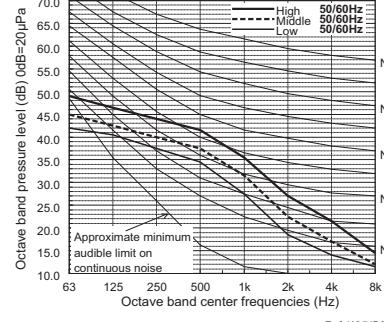
External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 230V/60Hz

**PEFY-P72NMHSU-E**

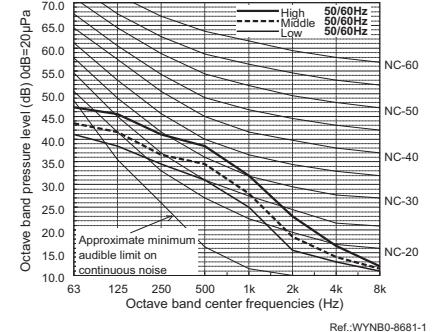
External Static Pressure: 150Pa [0.60 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P96NMHSU-E**

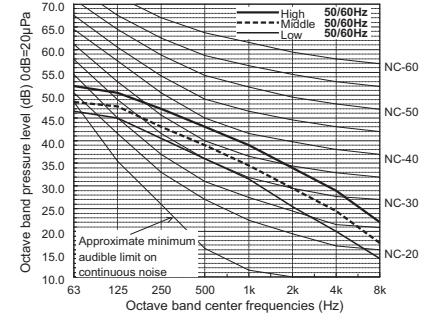
External Static Pressure: 50Pa [0.20 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P72NMHSU-E**

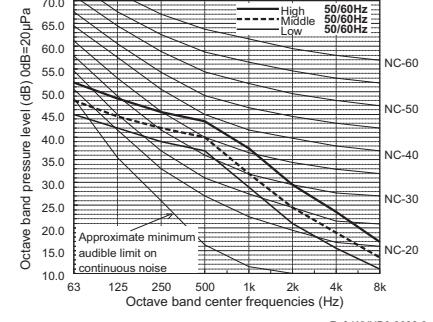
External Static Pressure: 50Pa [0.20 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P72NMHSU-E**

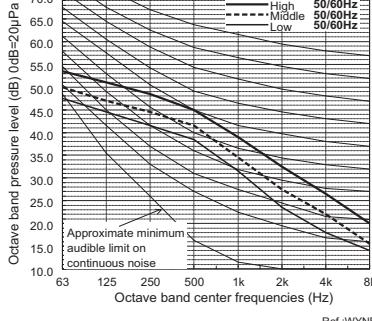
External Static Pressure: 200Pa [0.80 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P96NMHSU-E**

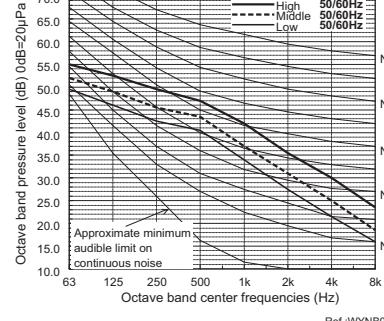
External Static Pressure: 100Pa [0.40 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P96NMHSU-E**

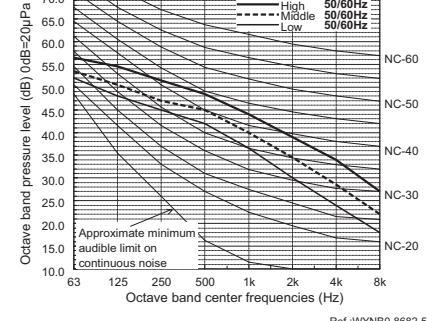
External Static Pressure: 150Pa [0.60 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P96NMHSU-E**

External Static Pressure: 200Pa [0.80 in.WG]  
Power Source: 208,230V(50/60Hz)

**PEFY-P96NMHSU-E**

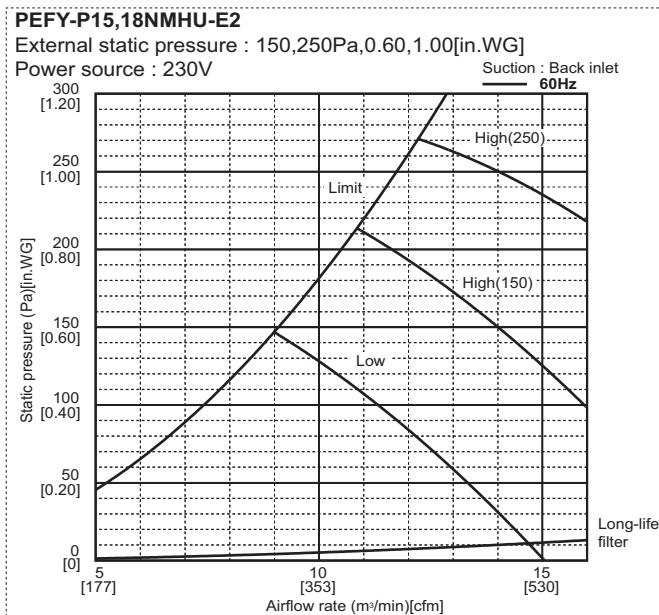
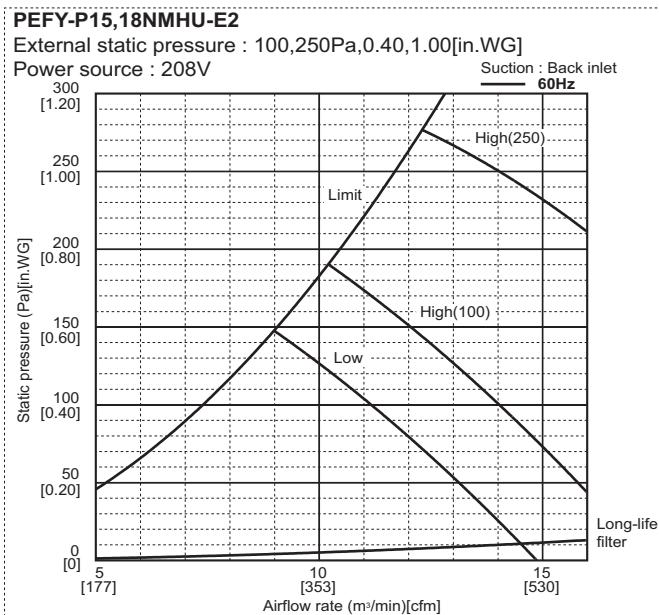
External Static Pressure: 250Pa [1.00 in.WG]  
Power Source: 208,230V(50/60Hz)



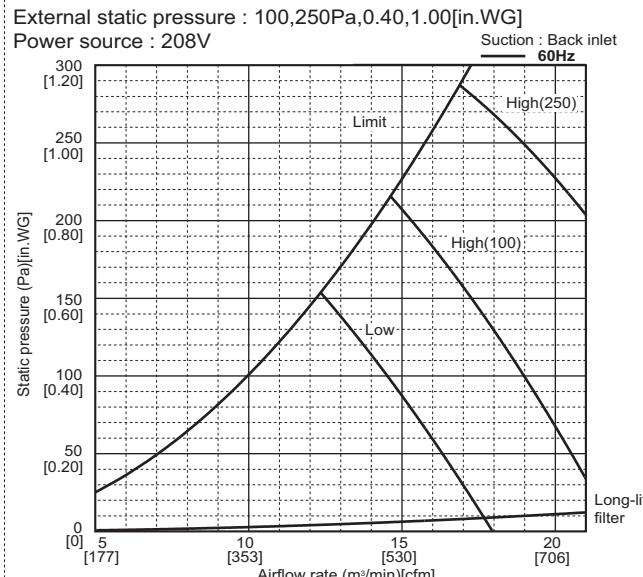
## 6. FAN CHARACTERISTICS CURVES

Ceiling concealed (High static pressure type)

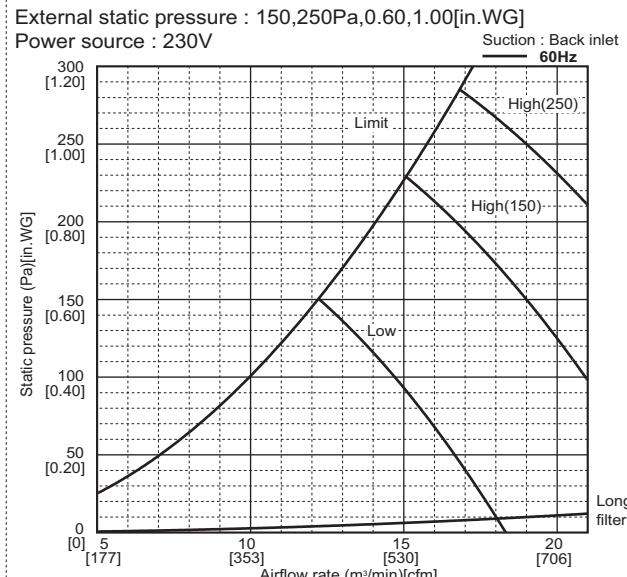
**PEFY-P-NMHU-E2, NMHU-E2**



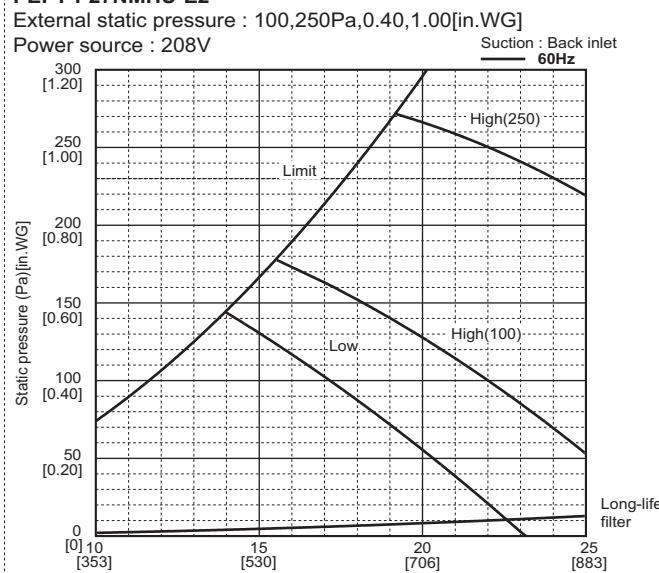
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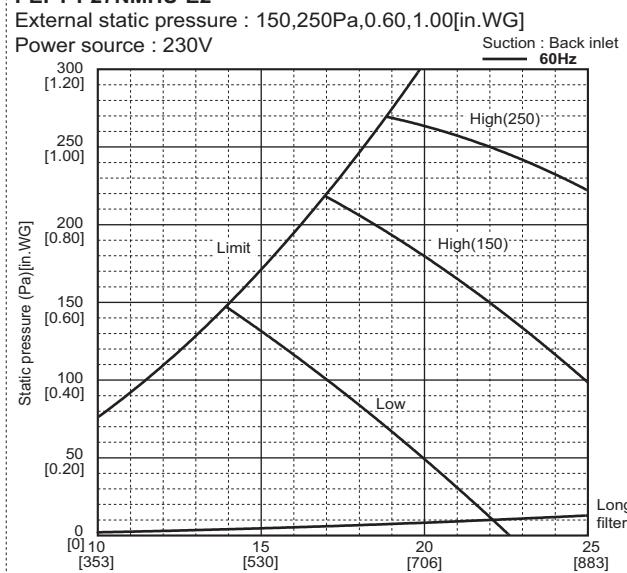
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**PEFY-P27NMHU-E2**



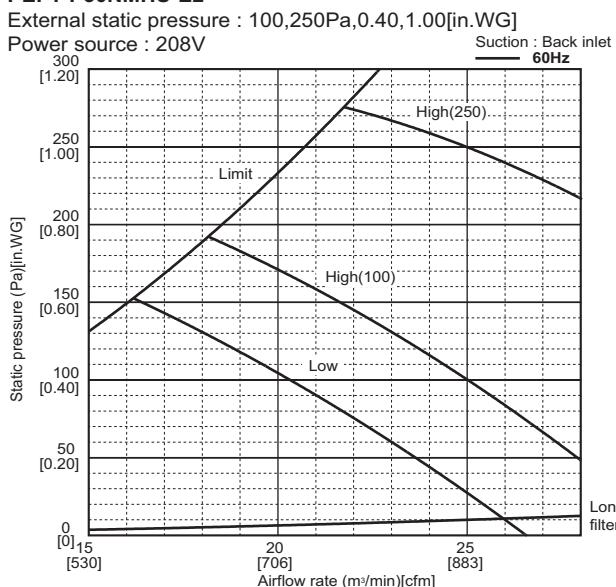
**PEFY-P27NMHU-E2**



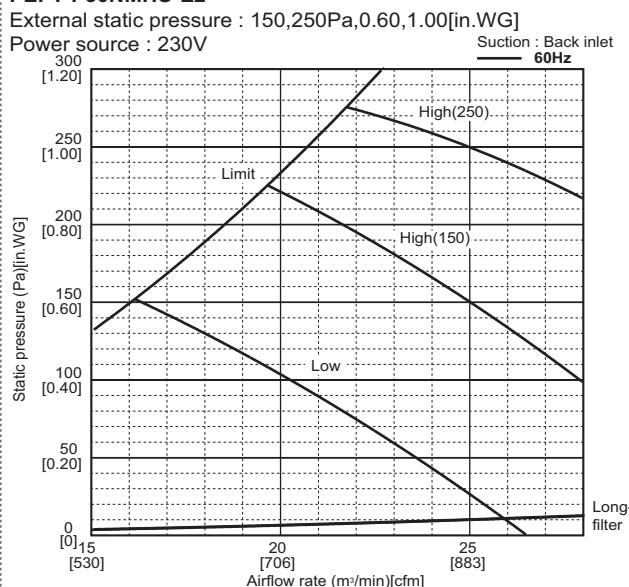
## 6. FAN CHARACTERISTICS CURVES

Ceiling concealed (High static pressure type)

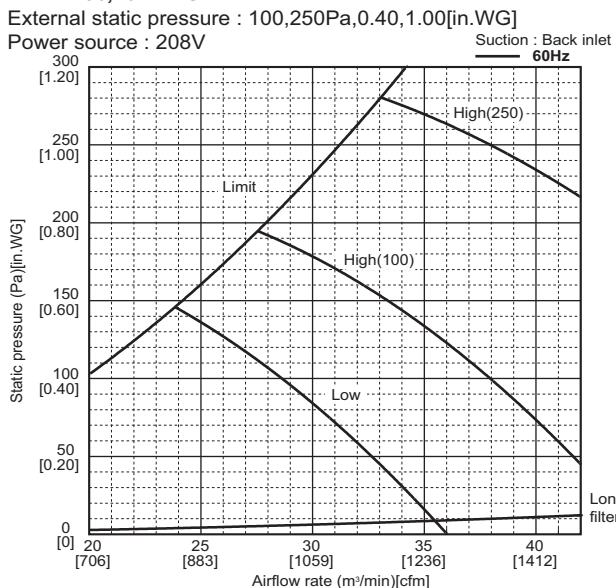
**PEFY-P30NMHU-E2**



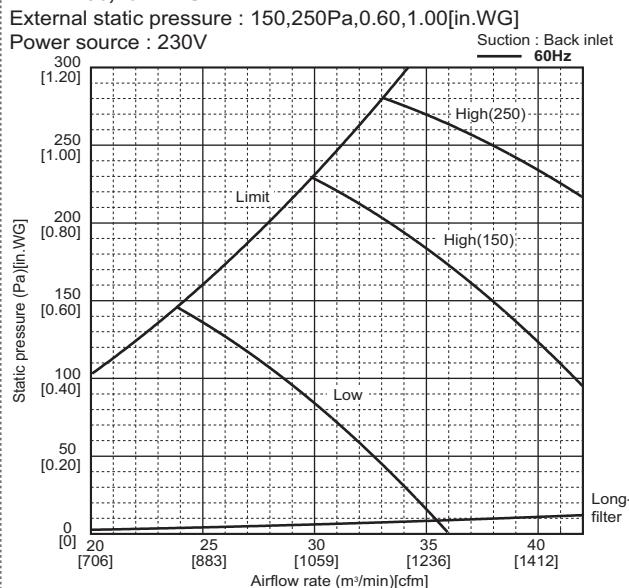
**PEFY-P30NMHU-E2**



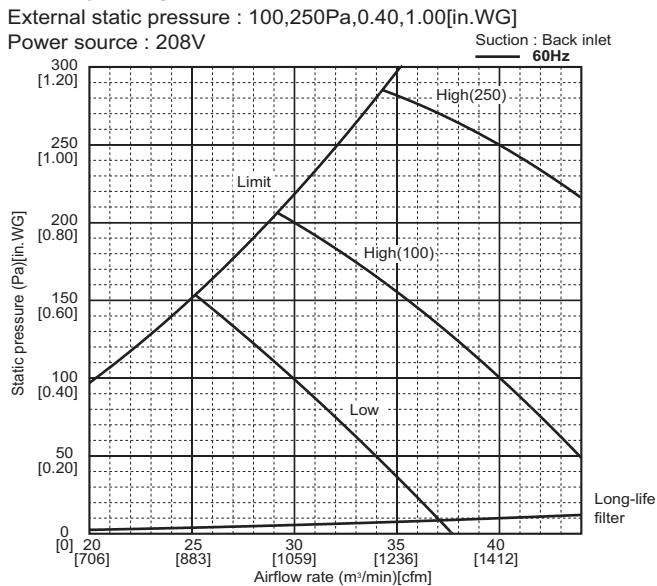
**PEFY-P36,48NMHU-E2**



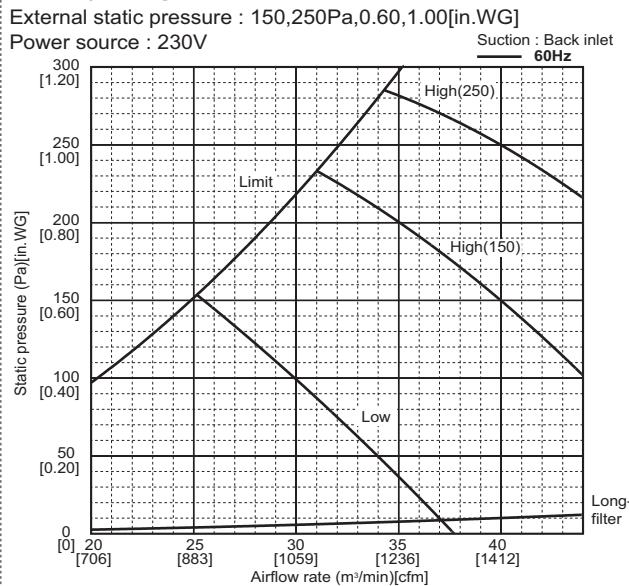
**PEFY-P36,48NMHU-E2**



**PEFY-P54NMHU-E2**



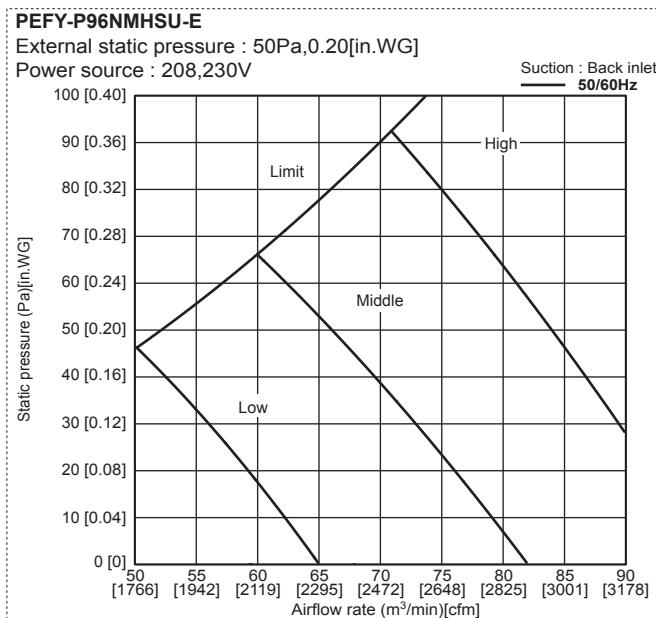
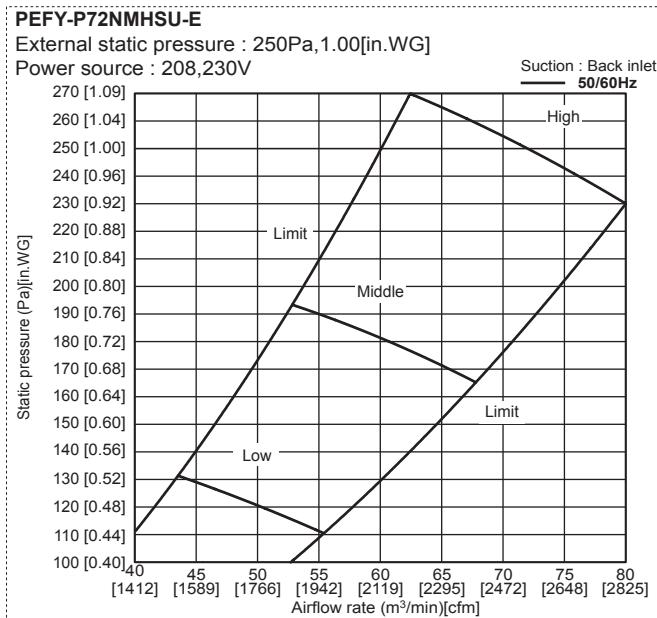
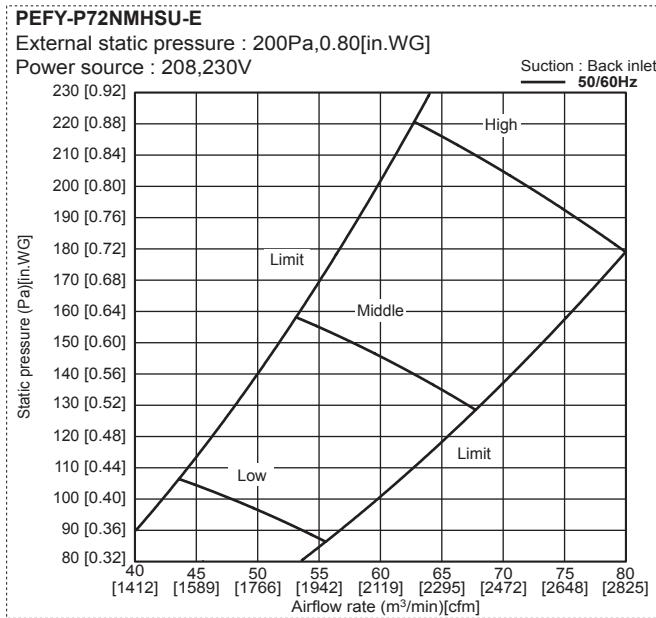
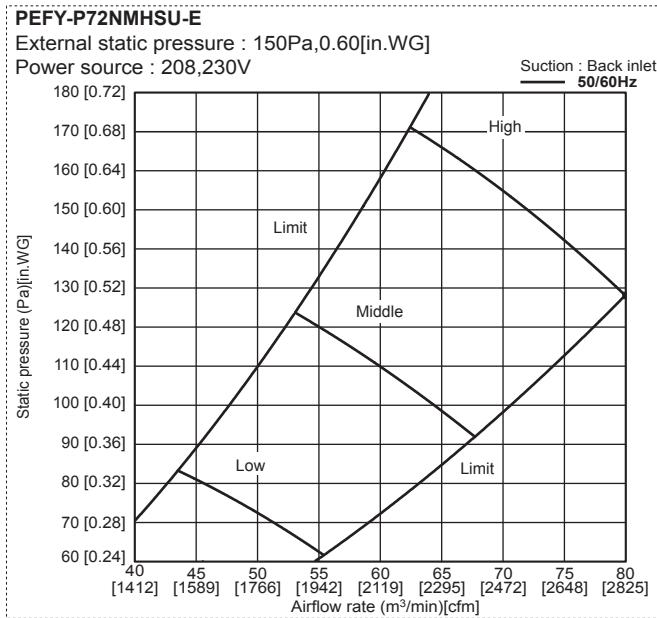
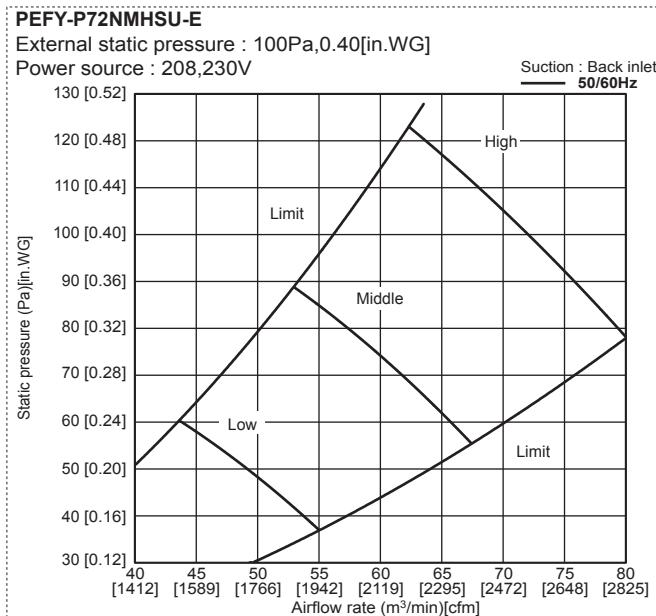
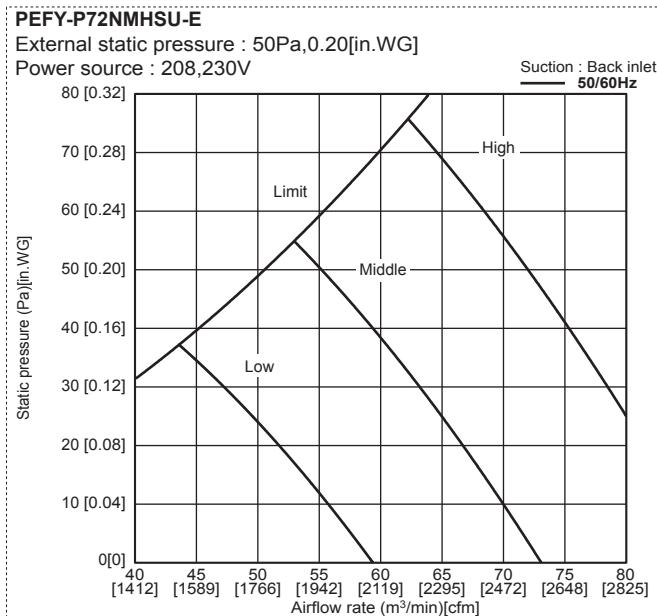
**PEFY-P54NMHU-E2**



## 6. FAN CHARACTERISTICS CURVES

Ceiling concealed (High static pressure type)

PEFY-P-NMHU-E2, NMHSU-E



## 6. FAN CHARACTERISTICS CURVES

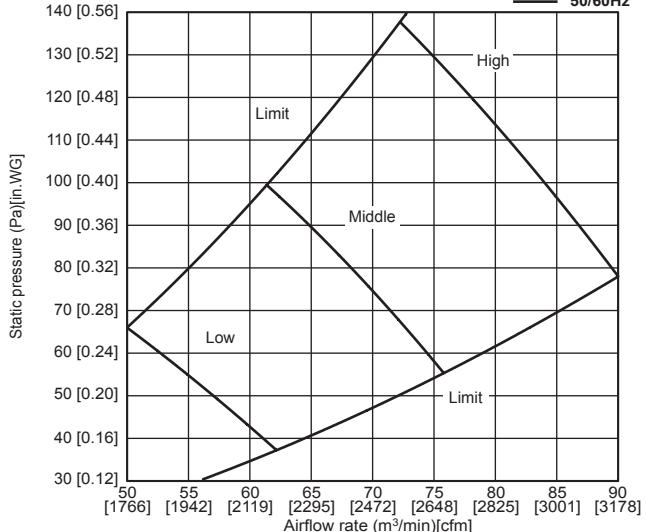
Ceiling concealed (High static pressure type)

**PEFY-P96NMHSU-E**

External static pressure : 100Pa,0.40[in.WG]

Power source : 208,230V

Suction : Back inlet  
50/60Hz

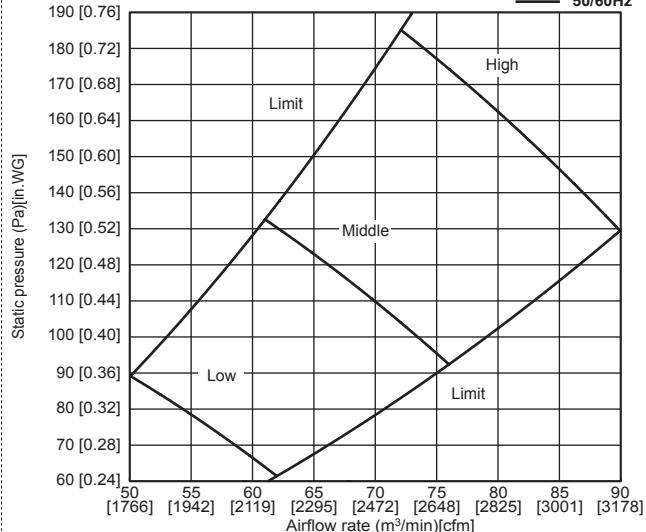


**PEFY-P96NMHSU-E**

External static pressure : 150Pa,0.60[in.WG]

Power source : 208,230V

Suction : Back inlet  
50/60Hz

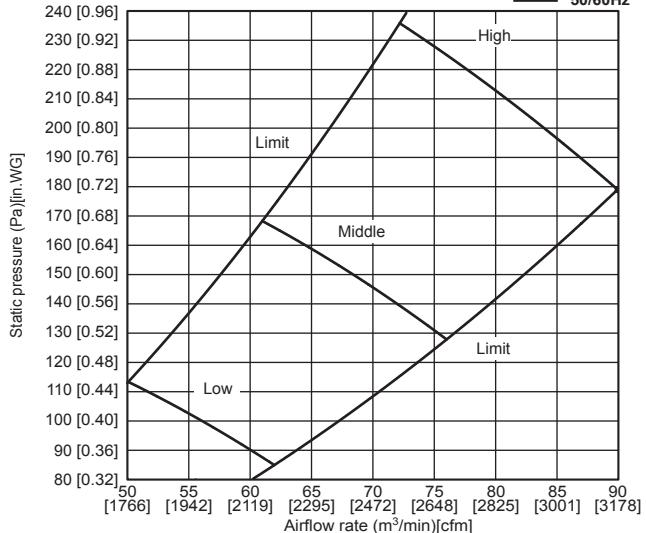


**PEFY-P96NMHSU-E**

External static pressure : 200Pa,0.80[in.WG]

Power source : 208,230V

Suction : Back inlet  
50/60Hz

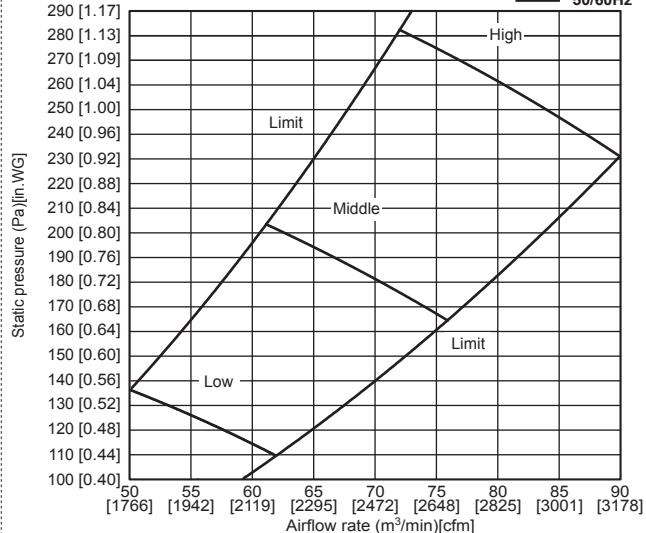


**PEFY-P96NMHSU-E**

External static pressure : 250Pa,1.00[in.WG]

Power source : 208,230V

Suction : Back inlet  
50/60Hz



## 7. ELECTRICAL CHARACTERISTICS

Ceiling concealed (High static pressure type)

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-P15NMHU-E2	60Hz	208 / 230V	188 to 253V	1.63 / 1.50	0.17	1.30 / 1.20
PEFY-P18NMHU-E2				1.63 / 1.50	0.17	1.30 / 1.20
PEFY-P24NMHU-E2				2.11 / 1.83	0.25	1.69 / 1.46
PEFY-P27NMHU-E2				2.35 / 2.13	0.26	1.88 / 1.70
PEFY-P30NMHU-E2				2.70 / 2.45	0.31	2.16 / 1.96
PEFY-P36NMHU-E2				4.16 / 3.67	0.49	3.32 / 2.94
PEFY-P48NMHU-E2				4.16 / 3.67	0.49	3.32 / 2.94
PEFY-P54NMHU-E2				4.18 / 3.69	0.55	3.34 / 2.95
PEFY-P72NMHSU-E				7.7	0.87	6.2
PEFY-P96NMHSU-E			187 to 253V	8.2	0.87	6.6

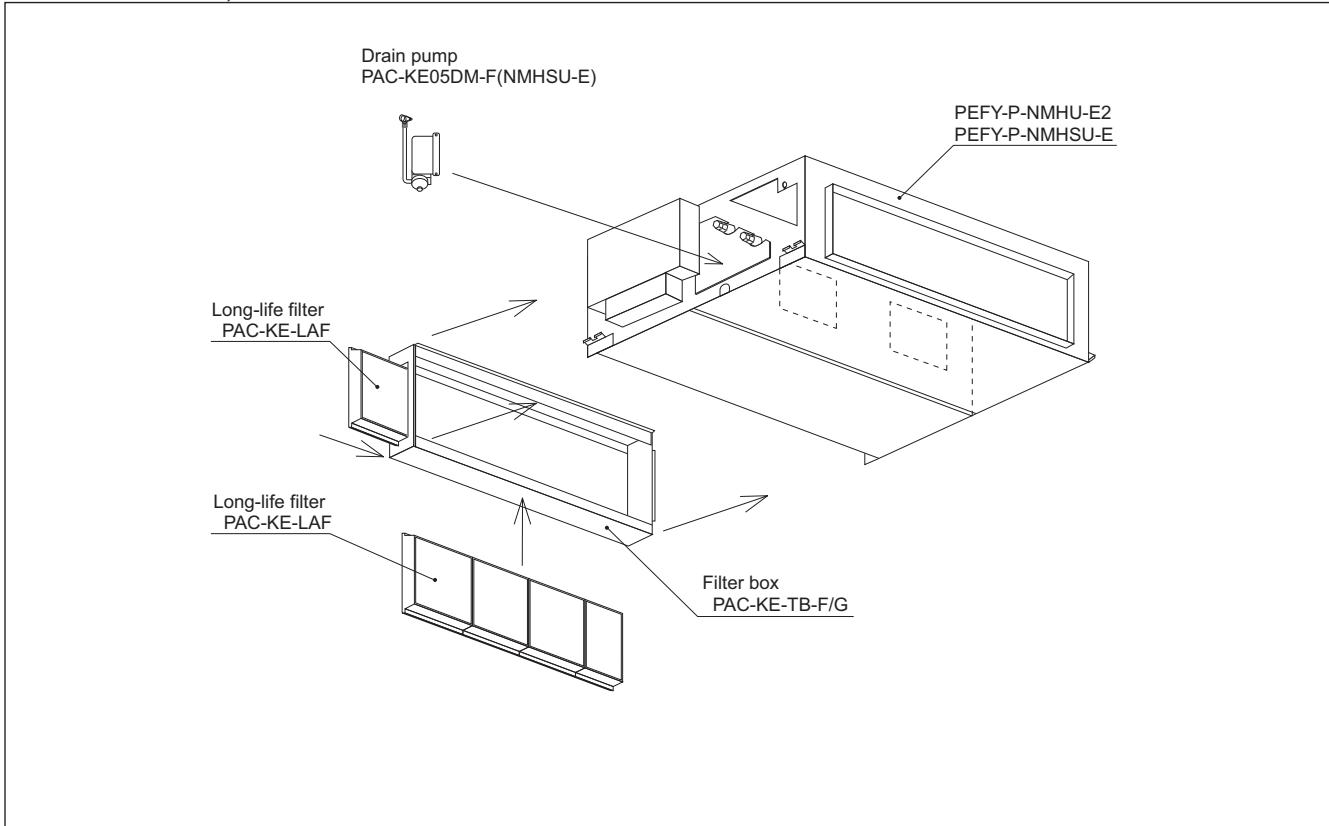
## 8. OPTIONAL PARTS

Ceiling concealed (High static pressure type)

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

	Long-life filter	Filter box	Drain pump	External heater adapter
PEFY-P15,18,24NMHU-E2	PAC-KE86LAF	PAC-KE63TB-F	-	PAC-YU25HT
PEFY-P27,30NMHU-E2	PAC-KE88LAF	PAC-KE80TB-G	-	PAC-YU25HT
PEFY-P36,48,54NMHU-E2	PAC-KE89LAF	PAC-KE140TB-F	-	PAC-YU25HT
PEFY-P72,96NMHSU-E	PAC-KE85LAF	PAC-KE250TB-F	PAC-KE05DM-F	PAC-YU25HT

PEFY-P-NMHU-E2, NMHSU-E



### 8-2. Long-life filter

Life span: 2,500 hr  
\*. The actual dust situation affects the filter life span, which should be considered at the applying site.

Material: Synthetic fiber unwoven cloth filter

Static pressure loss is referred to "Fan characteristics curves".

Long-life filter should be used together with filter box PAC-KE-TB-F.

PAC-KE-LAF

Item	PAC-KE86LAF	PAC-KE88LAF	PAC-KE89LAF	PAC-KE85LAF
Quantity	2	3	3	2
Shape	(298X300)	(298X300)	(298X300)	(411X600)

Detailed installation information should be referred to its Installation Manual.

PAC-KE-TB-F/G

Item	① Screw	② Filter box	③ Installation manual	
Quantity	10/12*	1	1	
Shape				*PAC-KE250TB has 12 pieces of screw.

Detailed installation information should be referred to its Installation Manual.

### 8-3. Drain pump

If drain water can not flow out the Indoor unit by gravity and gradient, a Drain-pump for draining is needed.  
Drain pump PAC-KE05DM-F can pump water up to 700mm [27-9/16 in.] high from the drain pan.

PAC-KE05DM-F

Item	① Drain pump ass'y	② Rubber plug	③ Rubber bushing	④ Band	⑤ PTT screw 4X10
Quantity	1	2	1	2	6+1 (spare)
Shape					
Item	⑥ Installation manual				
Quantity	1				
Shape					

Detailed installation information should be referred to its Installation Manual.

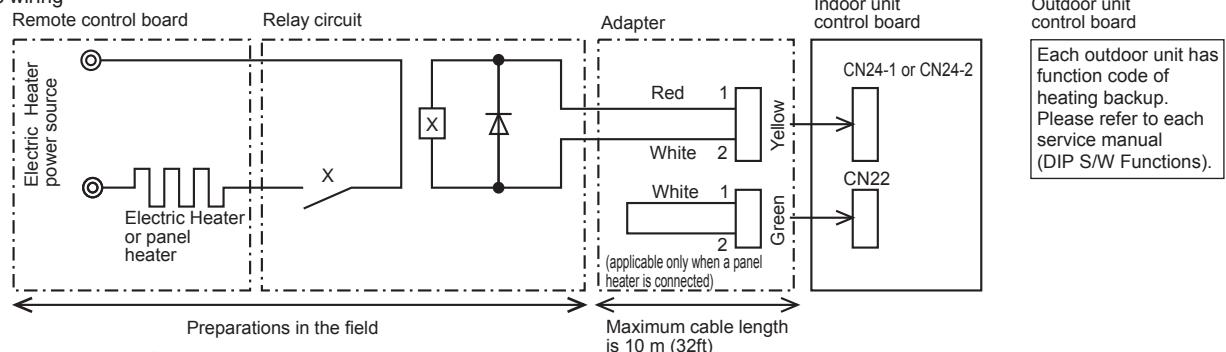
### 8-4. External heater adapter

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).

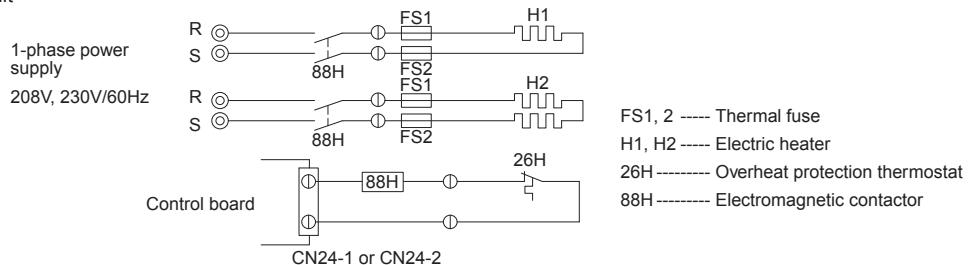
To extend this length, use sheathed 2-core cable.

Control cable type : CVV, CVS, CPEV or equivalent.

Cable size : 0.5 mm<sup>2</sup> ~ 1.25 mm<sup>2</sup> (16 to 22 AWG)

Don't extend the cable more than 10 meters (32ft).

#### (2) Recommended circuit



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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