

**PEFY-P-VMS1-E**  
**PEFY-P-VMH-E**

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# 1. SPECIFICATIONS

R410A Data G6

PEFY

Model		PEFY-P15VMS1-E	PEFY-P20VMS1-E	PEFY-P25VMS1-E	PEFY-P32VMS1-E	
Power source		220-240V (50/60Hz)				
Cooling capacity (Nominal)	*1 kW	1.7	2.2	2.8	3.6	
	*1 kcal / h	1,450	1,900	2,400	3,100	
	*1 Btu / h	5,800	7,500	9,600	12,300	
	*2 kcal / h	1,500	2,000	2,500	3,150	
	*4 Power input kW	0.05<0.03>	0.05<0.03>	0.06<0.04>	0.07<0.05>	
*4 Current input A	0.42<0.31>	0.47<0.36>	0.50<0.39>	0.50<0.39>		
Heating capacity (Nominal)	*3 kW	1.9	2.5	3.2	4.0	
	*3 kcal / h	1,600	2,200	2,800	3,400	
	*3 Btu / h	6,500	8,500	10,900	13,600	
	*4 Power input kW	0.03<0.03>	0.03<0.03>	0.04<0.04>	0.05<0.05>	
	*4 Current input A	0.31<0.31>	0.36<0.36>	0.39<0.39>	0.39<0.39>	
External finish		Galvanized				
External dimension H x W x D		mm 200 x 790 x 700	200 x 790 x 700	200 x 790 x 700	200 x 790 x 700	
		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 31-1/8 x 27-9/16	
Net weight		kg (lb) 19(42)<18(40)>	19(42)<18(40)>	19(42)<18(40)>	20(44)<19(42)>	
Heat exchanger		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
	External (220V) static press. (230, 240V)	Pa	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>
		mmH <sub>2</sub> O	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>
		Pa	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>
	*5	mmH <sub>2</sub> O	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>
	Motor type		DC brushless motor			
	Motor output kW		0.096	0.096	0.096	0.096
	Driving mechanism		Direct-driven			
	Airflow rate (Low-Mid-High)	m <sup>3</sup> / min	5 - 6 - 7	5.5 - 6.5 - 8	5.5 - 7 - 9	6 - 8 - 10
		L / s	83 - 100 - 117	91 - 108 - 133	91 - 117 - 150	100 - 133 - 167
cfm		176 - 212 - 247	194 - 229 - 282	194 - 247 - 317	212 - 282 - 353	
Sound pressure level (Low-Mid-High) (measured in anechoic room) *4		dB <A> 22 - 24 - 28(15Pa,220-240V)	23 - 25 - 29(15Pa,220-240V)	24 - 26 - 30(15Pa,220-240V)	24 - 27 - 32(15Pa,220-240V)	
Insulation material		Polystyrene foam, Polyethylene foam, Urethane foam				
Air filter		PP Honeycomb fabric (washable)				
Protection device		Fuse				
Refrigerant control device		LEV				
Connectable outdoor unit		R410A, R407C, R22 CITY MULTI				
Diameter of refrigerant pipe	Liquid (R410A) (R22, R407C)	mm (in.)	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed
		mm (in.)	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed
	Gas (R410A) (R22, R407C)	mm (in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed
		mm (in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed
Field drain pipe size		mm (in.) O.D. 32mm (1-1/4)				
Drawing	External	IU-KB94-G728<IU-KB94-G731>	IU-KB94-G728<IU-KB94-G731>	IU-KB94-G728<IU-KB94-G731>	IU-KB94-G728<IU-KB94-G731>	
	Wiring	IU-KB94-G668	IU-KB94-G668	IU-KB94-G668	IU-KB94-G668	
	Refrigerant cycle	-	-	-	-	
Standard attachment	Document	Installation Manual, Instruction Book				
	Accessory	Drain hose (flexible joint)				
Remark	Optional parts					
	Control Box Replace kit		<PAC-KE70HS-E>	<PAC-KE70HS-E>	<PAC-KE70HS-E>	<PAC-KE70HS-E>
	Installation		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			
<b>Note :</b>		*1 Nominal cooling conditions	*2 Nominal cooling conditions	*3 Nominal heating conditions	Unit converter	
Indoor :		27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860	
Outdoor :		35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412	
Pipe length :		7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m <sup>3</sup> /min x 35.31	
Level difference :		0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536	
* Nominal conditions *1, *3 are subject to JIS B615-1.		* Due to continuing improvement, above specification may be subject to change without notice.		* The external static pressure is set to 15 Pa at factory shipment.	* Above specification data is subject to rounding variation.	
*4 The values are measured at the rated external static pressure.		*5 The figure in <> indicates the value when external static pressure is changed.				

Ref.: Spec\_PEFY-P-VMS-E\_1

# 1. SPECIFICATIONS

Model		PEFY-P40VMS1-E	PEFY-P50VMS1-E	PEFY-P63VMS1-E	
Power source		220-240V (50/60Hz)			
Cooling capacity (Nominal)	*1 kW	4.5	5.6	7.1	
	*1 kcal / h	3,900	4,800	6,100	
	*1 Btu / h	15,400	19,100	24,200	
	*2 kcal / h	4,000	5,000	6,300	
	*4 Power input kW	0.07<0.05>	0.09<0.07>	0.09<0.07>	
*4 Current input A	0.56<0.45>	0.67<0.56>	0.72<0.61>		
Heating capacity (Nominal)	*3 kW	5.0	6.3	8.0	
	*3 kcal / h	4,300	5,400	6,900	
	*3 Btu / h	17,100	21,500	27,300	
	*4 Power input kW	0.05<0.05>	0.07<0.07>	0.07<0.07>	
	*4 Current input A	0.45<0.45>	0.56<0.56>	0.61<0.61>	
External finish		Galvanized			
External dimension H x W x D		mm	200 x 990 x 700	200 x 990 x 700	200 x 1190 x 700
		in.	7-7/8 x 39 x 27-9/16	7-7/8 x 39 x 27-9/16	7-7/8 x 46-7/8 x 27-9/16
Net weight		kg (lb)	24(53)<23(51)>	24(53)<23(51)>	28(62)<27(60)>
Heat exchanger		Cross fin (Aluminum fin and copper tube)			
FAN	Type x Quantity		Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 4
	External (220V) static press.	Pa	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>
		mmH <sub>2</sub> O	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>
	(230, 240V)	Pa	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>
		mmH <sub>2</sub> O	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>
	Motor type		DC brushless motor		
	Motor output kW		0.096	0.096	0.096
	Driving mechanism		Direct-driven		
Airflow rate (Low-Mid-High)	m <sup>3</sup> / min	8 - 9.5 - 11	9.5 - 11 - 13	12 - 14 - 16.5	
	L / s	133 - 158 - 183	158 - 183 - 217	200 - 233 - 275	
	cfm	282 - 335 - 388	335 - 388 - 459	424 - 494 - 583	
Sound pressure level (Low-Mid-High) (measured in anechoic room) *4		dB <A>	28 - 30 - 33 (15Pa,220-240V)	30 - 32 - 35 (15Pa,220-240V)	30 - 33 - 36 (15Pa,220-240V)
Insulation material		Polystyrene foam, Polyethylene foam, Urethane foam			
Air filter		PP Honeycomb fabric (washable)			
Protection device		Fuse			
Refrigerant control device		LEV			
Connectable outdoor unit		R410A, R407C, R22 CITY MULTI			
Diameter of refrigerant pipe	Liquid (R410A) (R22, R407C)	mm (in.)	ø6.35 (ø1/4) Brazed	ø6.35 (ø1/4) Brazed	ø9.52 (ø3/8) Brazed
		mm (in.)	ø6.35 (ø1/4) Brazed	ø9.52 (ø3/8) Brazed	ø9.52 (ø3/8) Brazed
	Gas (R410A) (R22, R407C)	mm (in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed
Field drain pipe size		mm (in.)	O.D. 32mm (1-1/4)		
Drawing	External	IU-KB94-G728(IU-KB94-G731)	IU-KB94-G728(IU-KB94-G731)	IU-KB94-G728(IU-KB94-G731)	
	Wiring	IU-KB94-G668	IU-KB94-G668	IU-KB94-G668	
	Refrigerant cycle	-	-	-	
Standard attachment	Document	Installation Manual, Instruction Book			
	Accessory	Drain hose (flexible joint)			
Remark	Optional parts				
	Control Box Replace kit	<PAC-KE70HS-E>	<PAC-KE70HS-E>	<PAC-KE70HS-E>	
	Installation	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			
<b>Note :</b>		*1 Nominal cooling conditions	*2 Nominal cooling conditions	*3 Nominal heating conditions	Unit converter
Indoor :		27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
Outdoor :		35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
Pipe length :		7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m <sup>3</sup> /min x 35.31
Level difference :		0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *1, *3 are subject to JIS B8615-1.		* The external static pressure is set to 15 Pa at factory shipment.		* Above specification data is subject to rounding variation.	
* Due to continuing improvement, above specification may be subject to change without notice.		* < > is in case of PEFY-P-VMS1-E model.			
*4 The values are measured at the rated external static pressure.					
*5 The figure in < > indicates the value when external static pressure is changed.					

# 1. SPECIFICATIONS

R410A Data G6

PEFY

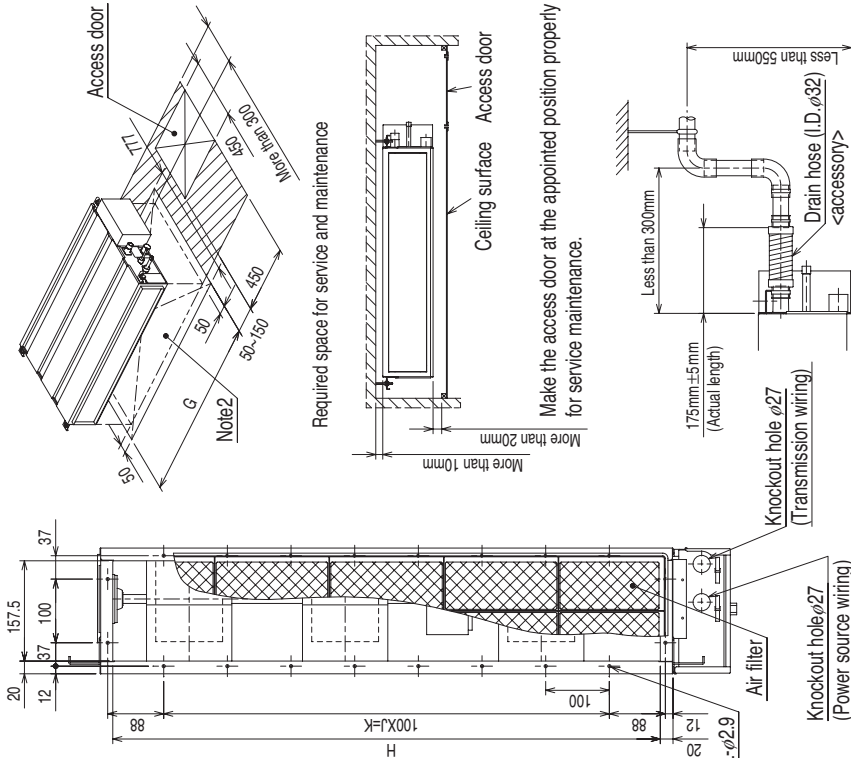
Model		PEFY-P80VMH-E	PEFY-P100VMH-E	PEFY-P125VMH-E	PEFY-P140VMH-E	
Power source		1-phase 220-240V 50Hz/60Hz				
Cooling capacity (Nominal)	*1 kW	9.0	11.2	14.0	16.0	
	*1 kcal / h	7,700	9,600	12,000	13,800	
	*1 Btu / h	30,700	38,200	47,800	54,600	
	*2 kcal / h	8,000	10,000	12,500	14,000	
	*4 Power input kW	0.32 / 0.40	0.48 / 0.58	0.48 / 0.58	0.48 / 0.59	
*4 Current input A	1.47 / 1.83	2.34 / 2.66	2.34 / 2.66	2.35 / 2.70		
Heating capacity (Nominal)	*3 kW	10.0	12.5	16.0	18.0	
	*3 kcal / h	8,600	10,800	13,800	15,500	
	*3 Btu / h	34,100	42,700	54,600	61,400	
	*4 Power input kW	0.32 / 0.40	0.48 / 0.58	0.48 / 0.58	0.48 / 0.59	
	*4 Current input A	1.47 / 1.83	2.34 / 2.66	2.34 / 2.66	2.35 / 2.70	
External finish		Galvanized				
External dimension H x W x D	mm	380 x 1,000 x 900	380 x 1,200 x 900	380 x 1,200 x 900	380 x 1,200 x 900	
	in.	15 x 39-3/8 x 35-7/16	15 x 47-1/4 x 35-7/16	15 x 47-1/4 x 35-7/16	15 x 47-1/4 x 35-7/16	
Net weight	kg (lb)	50 (111)	70 (155)	70 (155)	70 (155)	
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	External (220V) static press. (230, 240V)	Pa	<50> - 100 - <200>	<50> - 100 - <200>	<50> - 100 - <200>	<50> - 100 - <200>
		mmH <sub>2</sub> O	<5.1> - 10.2 - <20.4>	<5.1> - 10.2 - <20.4>	<5.1> - 10.2 - <20.4>	<5.1> - 10.2 - <20.4>
		Pa	<100> - 150 - <200>	<100> - 150 - <200>	<100> - 150 - <200>	<100> - 150 - <200>
		*5 mmH <sub>2</sub> O	<10.2> - 15.3 - <20.4>	<10.2> - 15.3 - <20.4>	<10.2> - 15.3 - <20.4>	<10.2> - 15.3 - <20.4>
	Motor type		1-phase induction motor			
	Motor output kW		0.180	0.260	0.260	0.260
	Driving mechanism		Direct-driven by motor			
	Airflow rate (Low-Mid-High)	m <sup>3</sup> / 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
cfm		636 - 883	936 - 1,342	936 - 1,342	989 - 1,413	
Sound pressure level (Low-Mid-High) (measured in anechoic room)	*4 dB <A>	35 - 41 (220V)	34 - 42 (220V)	34 - 42 (220V)	34 - 42 (220V)	
	*4 dB <A>	38 - 43 (230, 240V)	38 - 44 (230, 240V)	38 - 44 (230, 240V)	38 - 44 (230, 240V)	
Insulation material		Polystyrene foam, Polyethylene foam, Urethane foam				
Air filter		Option : Synthetic fiber unwoven cloth filter (long life)				
Protection device		Fuse				
Refrigerant control device		LEV				
Connectable outdoor unit		R410A, R407C, R22 CITY MULTI				
Diameter of refrigerant pipe	Liquid (R410A) (R22, R407C)	mm (in.) ø9.52 (ø3/8) Flare ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare ø9.52 (ø3/8) Flare	
	Gas (R410A) (R22, R407C)	mm (in.) ø15.88 (ø5/8) Flare ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare ø19.05 (ø3/4) Flare	ø15.88 (ø5/8) Flare ø19.05 (ø3/4) Flare	ø15.88 (ø5/8) Flare ø19.05 (ø3/4) Flare	
Field drain pipe size		mm (in.) O.D. 32mm (1-1/4)				
Drawing	External	IU-W27-5924				
	Wiring	IU-W65-3956				
	Refrigerant cycle	-				
Standard attachment	Document	Installation Manual, Instruction Book				
	Accessory	Drain hose I.D. 32mm (1-1/4) (flexible joint)				
Remark	Optional parts					
	Long life filter		PAC-KE88LAF	PAC-KE89LAF	PAC-KE89LAF	
	Filter box		PAC-KE80TB-F	PAC-KE140TB-F	PAC-KE140TB-F	
	Drain pump		PAC-KE04DM-F	PAC-KE04DM-F	PAC-KE04DM-F	
Installation		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
<b>Note :</b>		*1 Nominal cooling conditions	*2 Nominal cooling conditions	*3 Nominal heating conditions	Unit converter	
Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)		27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	20°CDB (68°FDB)	kcal/h = kW x 860	
Outdoor : 35°CDB (95°FDB)		35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412	
Pipe length : 7.5 m (24-9/16 ft)		5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	7.5 m (24-9/16 ft)	cfm = m <sup>3</sup> /min x 35.31	
Level difference : 0 m (0 ft)		0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536	
* Nominal conditions *1, *3 are subject to JIS B8615-1.					*Above specification data is subject to rounding variation.	
* Due to continuing improvement, above specification may be subject to change without notice.						
*4 The values are measured at the rated external static pressure.						
*5 The figure in <> indicates the value when external static pressure is changed.						

Ref.: Spec\_PEFY-VMH-E\_2

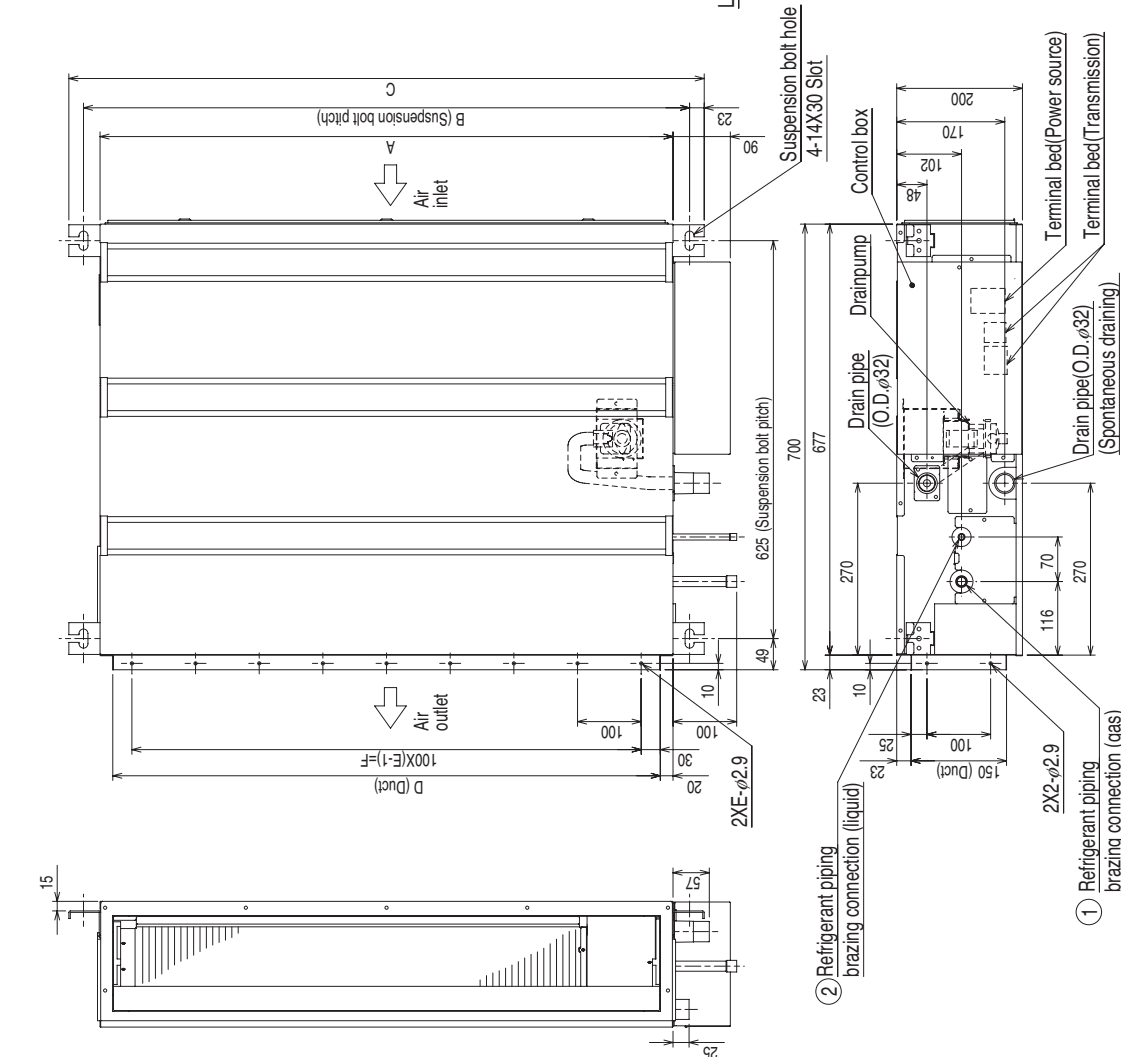
# 2. EXTERNAL DIMENSIONS

## PEFY-P15,20,25,32,40,50,63VMS1-E

Drw. : IU-KB94-G728  
Unit : mm



- Note 1. Use M10 screw for the Suspension bolt (field supply).  
 2. Keep the service space for the maintenance at the bottom.  
 3. This chart indicates for PEFY-P40-50VMS1-E models, which has 3 fans. PEFY-P15-32VMS1-E models have 2 fans. PEFY-P63VMS1-E model have 4 fans.  
 4. In case of the inlet duct is used, remove the air filter (supply with the unit), then install the filter (field supply) at suction side.

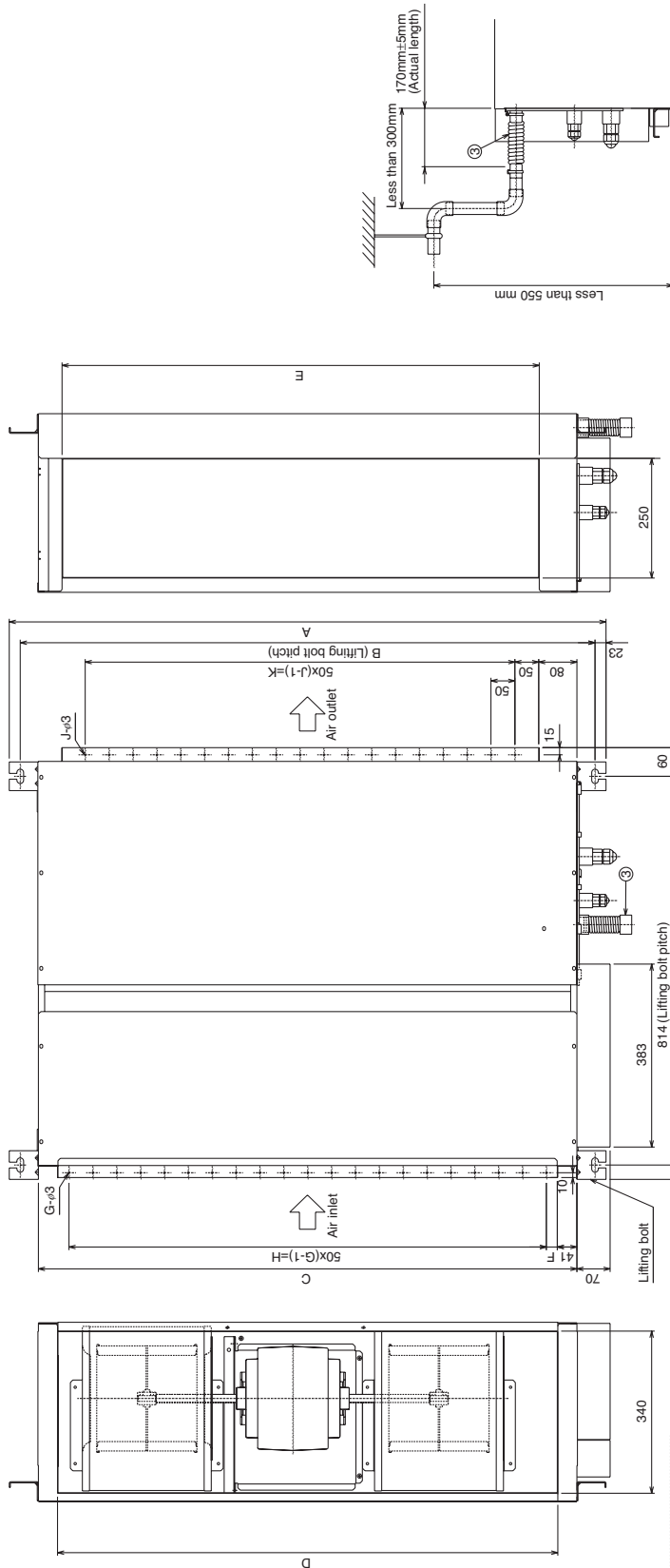


\*1: R410A outdoor unit  
 \*2: R407C, R22 outdoor unit

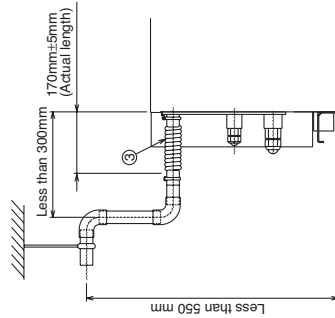
Model	A	B	C	D	E	F	G	H	J	K	L	① Gas pipe	② Liquid pipe
PEFY-P15,20,25,32VMS1-E	700	752	798	660	7	600	800	660	5	500	16	$\phi 12.7$	$\phi 6.35$
PEFY-P40VMS1-E	900	952	998	860	9	800	1000	860	7	700	20	*1 $\phi 12.7$	$\phi 6.35$
PEFY-P50VMS1-E												*2 $\phi 15.88$	$\phi 9.52$
PEFY-P63VMS1-E	1100	1152	1198	1060	11	1000	1200	1060	9	900	24	$\phi 15.88$	$\phi 9.52$

## PEFY-P80,100,125,140VMH-E

Drw. : IU-W27-5924  
Unit : mm

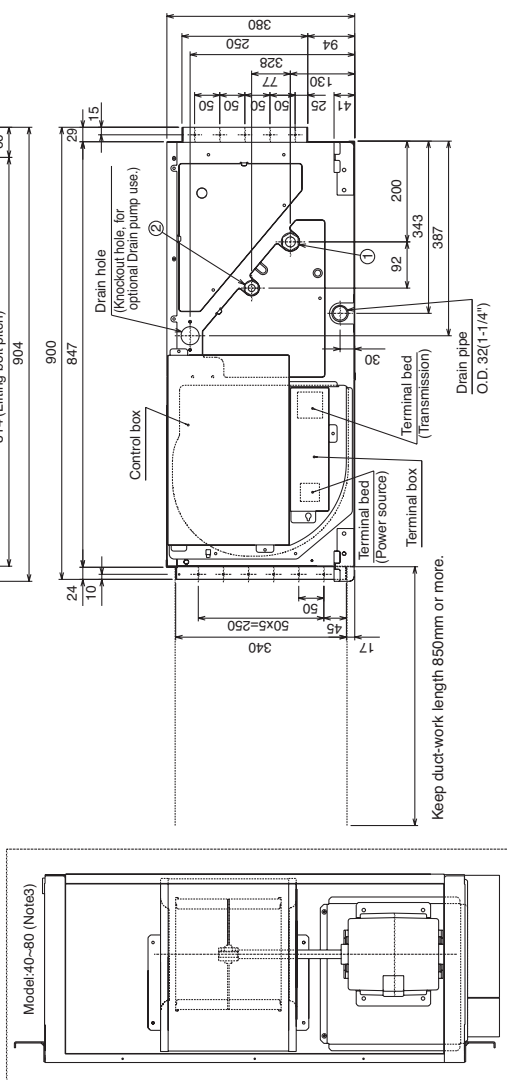


When installing the drain water lifting-up mech (option).



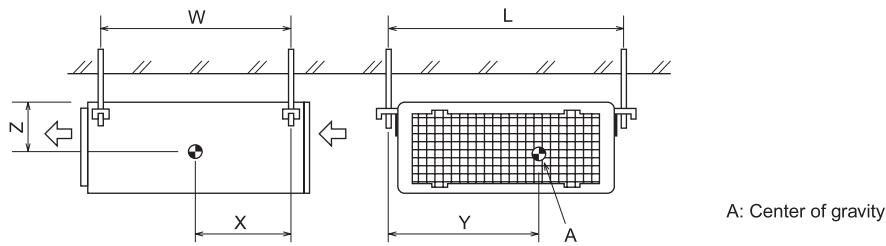
Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P(Liquid)	P(Gas)
P80VMH-E	1050	1004	830	850	800	25	17	800	15	700	1030	φ15.88	φ9.52	22	29
P100-125-140VMH-E	1250	1204	1130	1050	1000	25	21	1000	19	900	1230	φ15.88	φ9.52	φ15.88	φ9.52

- ※1:R410A outdoor unit  
※2:R407C,R22 outdoor unit
- Note : 1. Use M10 screw for the lifting bolt (field supply).  
2. Keep the service space for the maintenance from the bottom when the heat exchanger is cleaned.  
3. This chart indicates for PEFY-P100-125-140VMH-E models, which have 2 fans.  
4. PEFY-P80 models have 1 fan.  
5. Make sure to install the air filler(field supply) on the air intake side.  
6. In case field supplied air filler is used, attach it where the filter service is easily done.  
7. On Model :100, 125, 140, you would use flare nut when connecting the Outdoor Unit for R407C, R22.  
8. In order to increase the strength of the flare nut, the size of some of them has been increased.  
9. Refrigerant piping flare connection (gas M copper tube) ..... ①  
10. Refrigerant piping flare connection (liquid N copper tube) ..... ②  
11. Drain hose I.D. 32(1-1/4") <flexible joint, 200mm> (accessory) ..... ③



Model:40-80 (Noted)

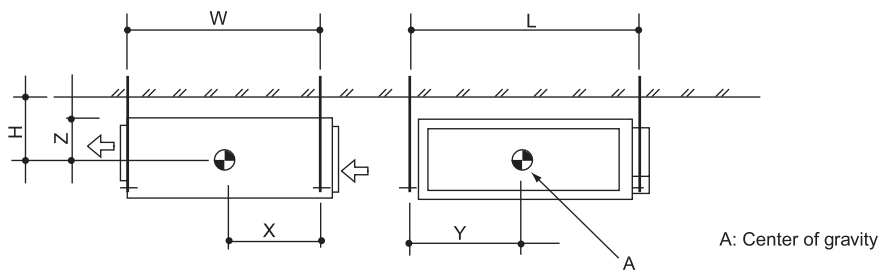
#### PEFY-P15,20,25,32,40,50,63VMS1-E



(mm)[in]

Model name	W	L	X	Y	Z
PEFY-P15VMS1-E	625 [24-5/8]	752 [29-5/8]	263 [10-3/8]	338 [13-5/16]	105 [4-5/32]
PEFY-P20VMS1-E	625 [24-5/8]	752 [29-5/8]	263 [10-3/8]	338 [13-5/16]	105 [4-5/32]
PEFY-P25VMS1-E	625 [24-5/8]	752 [29-5/8]	263 [10-3/8]	338 [13-5/16]	105 [4-5/32]
PEFY-P32VMS1-E	625 [24-5/8]	752 [29-5/8]	275 [10-27/32]	340 [13-13/32]	104 [4-1/8]
PEFY-P40VMS1-E	625 [24-5/8]	952 [37-1/2]	280 [11-1/32]	422 [16-5/8]	104 [4-1/8]
PEFY-P50VMS1-E	625 [24-5/8]	952 [37-1/2]	280 [11-1/32]	422 [16-5/8]	104 [4-1/8]
PEFY-P63VMS1-E	625 [24-5/8]	1152 [45-3/8]	285 [11-1/4]	511 [20-1/8]	104 [4-1/8]

#### PEFY-P80,100,125,140,VMH-E



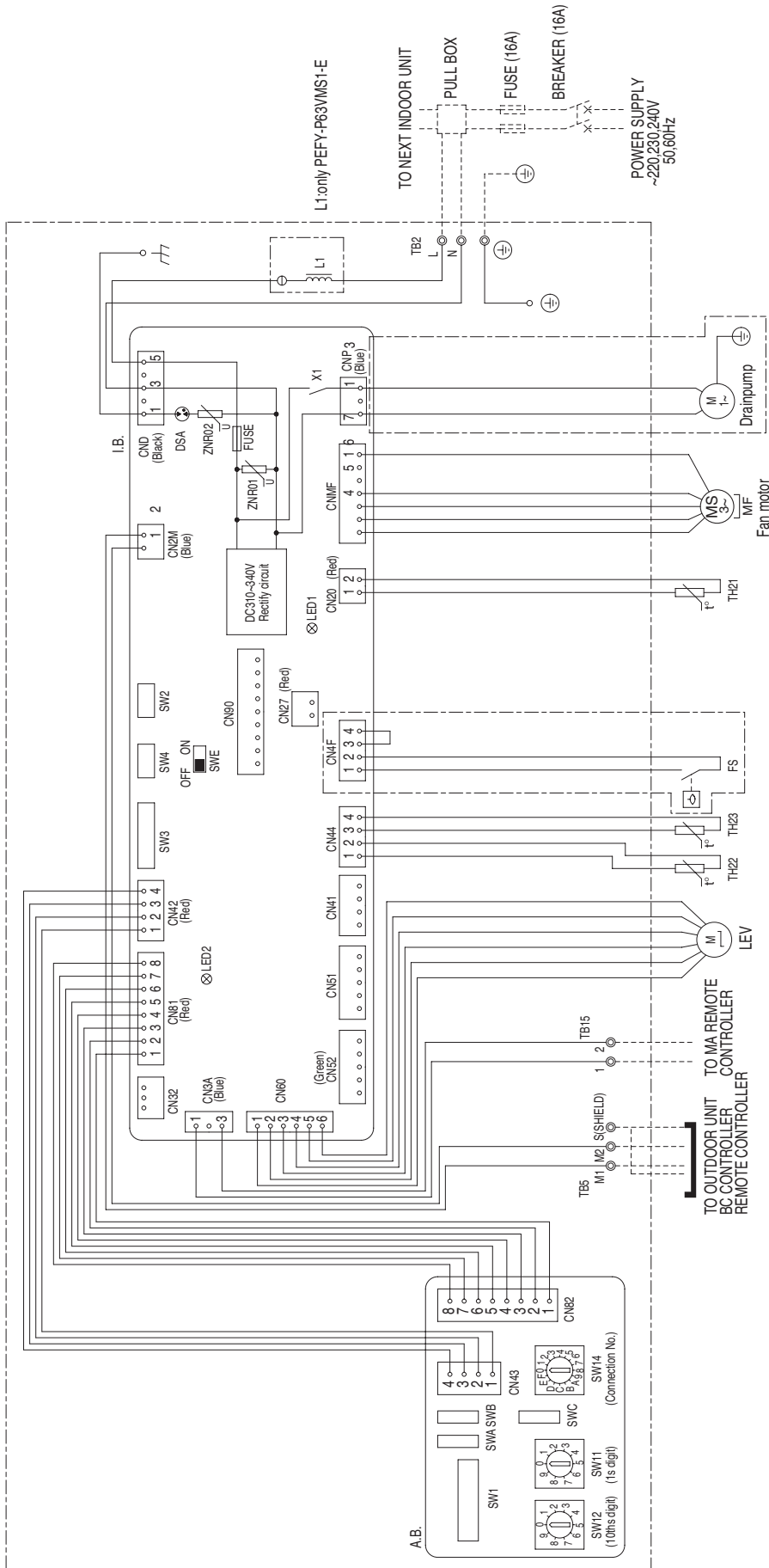
(mm)[in]

Model name	W	L	H	X	Y	Z
PEFY-P80VMH-E	814 [32-1/16]	1004 [39-17/32]	210 [8-9/32]	394 [15-17/32]	584 [22-32/32]	190 [7-1/2]
PEFY-P100VMH-E	814 [32-1/16]	1204 [47-13/32]	210 [8-9/32]	364 [14-11/32]	649 [25-9/16]	190 [7-1/2]
PEFY-P125VMH-E	814 [32-1/16]	1204 [47-13/32]	210 [8-9/32]	364 [14-11/32]	649 [25-9/16]	190 [7-1/2]
PEFY-P140VMH-E	814 [32-1/16]	1204 [47-13/32]	210 [8-9/32]	364 [14-11/32]	649 [25-9/16]	190 [7-1/2]

## PEFY-P15,20,25,32,40,50,63VMS1-E

Drw. : IU-KB94-G668

INSIDE SECTION OF CONTROL BOX



### SYMBOL EXPLANATION

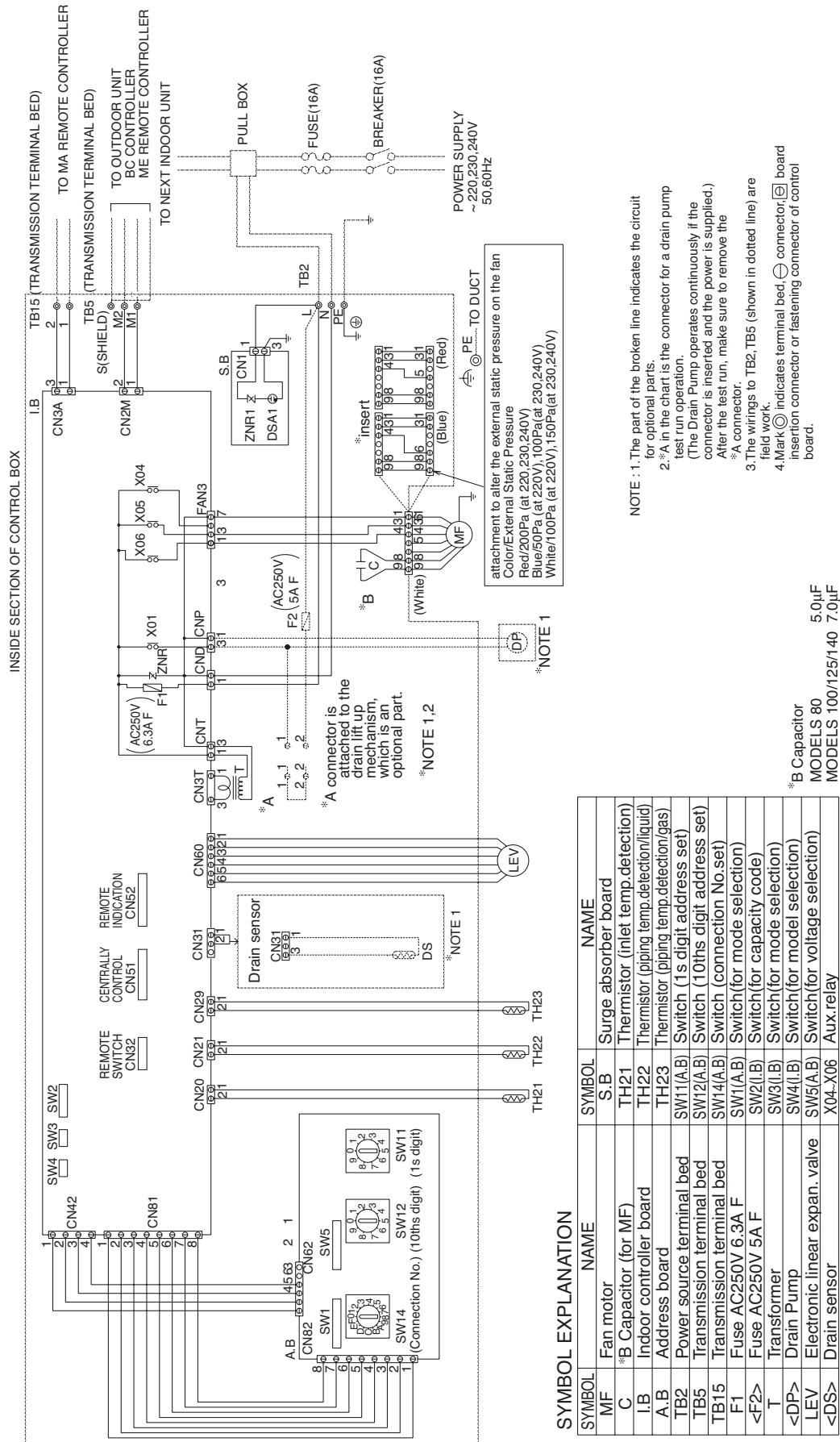
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
I.B.	Indoor controller board	SW4(L.B.)	Connector (Remote switch)	SW4(L.B.)	Switch (for model selection)
A.B.	Address board	CN41	Connector (HA terminal-A)	SWE(L.B.)	Connector (emergency operation)
TB5	Power source terminal bed	CN51	Connector (Centrally control)	SW1(A.B.)	Switch (for mode selection)
TB15	Transmission terminal bed	CN52	Connector (Remote indication)	SW11(A.B.)	Switch (1s digit address set)
FUSE	Fuse AC250V 6.3A	CN90	Connector (Wireless)	SW12(A.B.)	Switch (10ths digit address set)
ZNR01,02	Varistor	FS	Floater switch	SW14(A.B.)	Switch (connection No.set)
DSA	Arrester	TH21	Thermistor (inlet air temp.detection)	SWA(A.B.)	Switch (for static pressure selection)
X1	Aux. relay	TH2	Thermistor (piping temp.detection/liquid)	SWB(A.B.)	Switch (for model selection)
L1	AC reactor(Power factor improvement)	TH23	Thermistor (piping temp.detection/gas)	SWC(A.B.)	Switch (for static pressure selection)
CN27	Connector (Damper)	SW3(L.B.)	Switch (for capacity code)		
		SW3(L.B.)	Switch (for mode selection)		

NOTE:1.The wirings to TB2, TB5, TB15 shown in dotted line are field work.  
2.Mark ⊕ indicates terminal bed, ⊕ connector.



PEFY-P80,100,125,140VMH-E

Drw. : IU-W65-3956



- NOTE : 1. The part of the broken line indicates the circuit for optional parts.  
2. \*A in the chart is the connector for a drain pump test run operation.  
(The Drain Pump operates continuously if the connector is inserted and the power is supplied.)  
After the test run, make sure to remove the \*A connector.  
3. The wirings to TB2, TB5 (shown in dotted line) are field work.  
4. Mark ⊕ indicates terminal bed, ⊖ connector, ⊕ board insertion connector or fastening connector of control board.

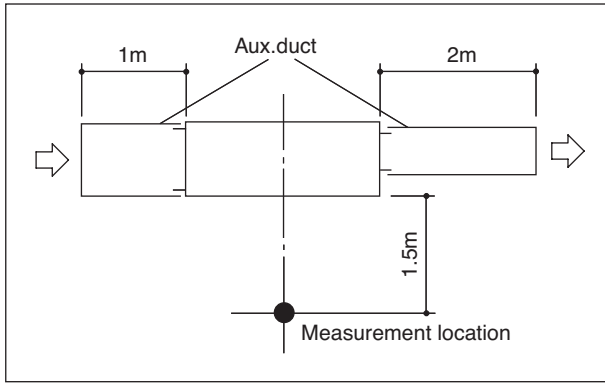
SYMBOL EXPLANATION

SYMBOL	NAME	SYMBOL	NAME
MF	Fan motor	S, B	Surge absorber board
C	*B Capacitor (for MF)	TH21	Thermistor (inlet temp. detection)
I, B	Indoor controller board	TH22	Thermistor (piping temp. detection/liquid)
A, B	Address board	TH23	Thermistor (piping temp. detection/gas)
TB2	Power source terminal bed	SW11(A, B)	Switch (1s digit address set)
TB5	Transmission terminal bed	SW12(A, B)	Switch (10ths digit address set)
F1	Fuse AC250V 6.3A F	SW14(A, B)	Switch (connection No. set)
<F2>	Fuse AC250V 5A F	SW21(A, B)	Switch (for mode selection)
T	Transformer	SW22(I, B)	Switch (for capacity code)
<DP>	Drain Pump	SW3(I, B)	Switch (for mode selection)
LEV	Electronic linear expans. valve	SW4(I, B)	Switch (for model selection)
<DS>	Drain sensor	SW5(A, B)	Switch (for voltage selection)
		X04-X06	Aux. relay

inside < > is the optional parts

## 5-1. Sound levels

PEFY-P,VMS1-E,VMH-E



\* Measured in anechoic room.

Sound level at anechoic room : Low-Mid-High

		Sound level dB (A)			
		5Pa	15Pa	35Pa	50Pa
PEFY-P15VMS1-E	220-240V	22-24-26	22-24-28	23-26-29	23-27-30
PEFY-P20VMS1-E	220-240V	22-25-28	23-25-29	24-27-30	25-28-32
PEFY-P25VMS1-E	220-240V	22-25-29	23-26-30	24-28-31	25-29-33
PEFY-P32VMS1-E	220-240V	23-27-30	23-27-32	24-28-33	25-29-34
PEFY-P40VMS1-E	220-240V	26-28-30	28-30-33	30-32-35	31-33-36
PEFY-P50VMS1-E	220-240V	29-31-34	30-32-35	31-34-37	32-34-38
PEFY-P63VMS1-E	220-240V	29-32-35	30-33-36	31-35-39	32-36-40

Sound level at anechoic room : Low-High

		Sound level dB (A)		
		Low*	Mid*	High*
PEFY-P80VMH-E	220V	32-39	35-41	37-43
	230, 240V	37-41	38-43	39-45
PEFY-P100,125VMH-E	220V	32-40	34-42	36-46
PEFY-P140VMH-E	230, 240V	36-42	38-44	38-47

\* External static pressure of PEFY-P80-140VMH-E

Low : 50Pa at 220V, 100Pa at 230, 240V

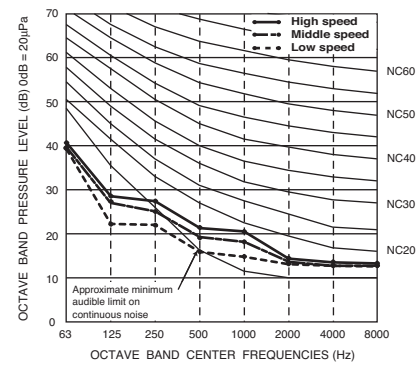
Mid : 100Pa at 220V, 150Pa at 230, 240V

High : 200Pa at 220V, 200Pa at 230, 240V

## 5-2. NC curves

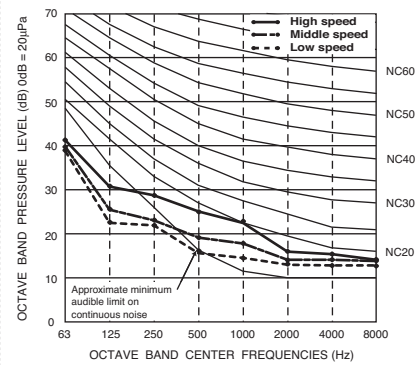
### PEFY-P15VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



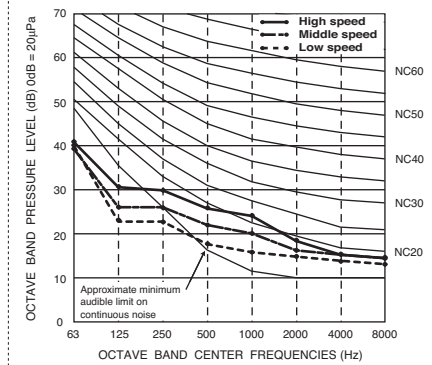
### PEFY-P15VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



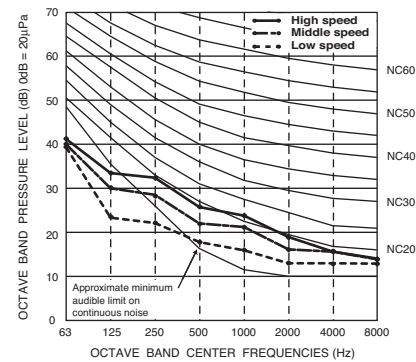
### PEFY-P15VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



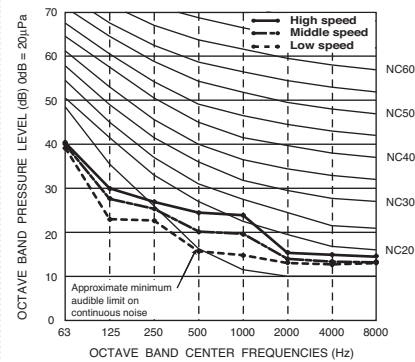
### PEFY-P15VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



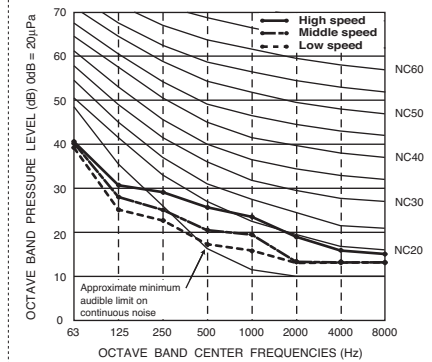
### PEFY-P20VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



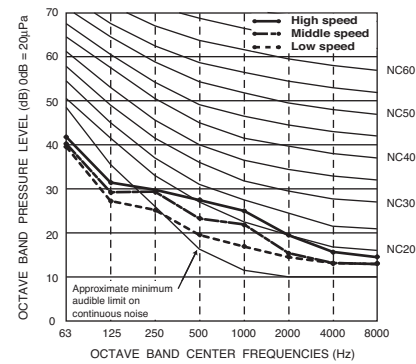
### PEFY-P20VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



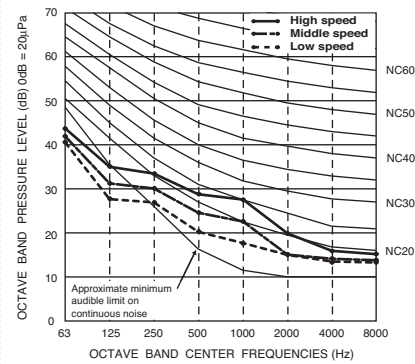
### PEFY-P20VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



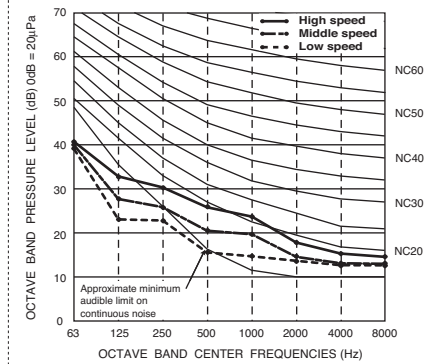
### PEFY-P20VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



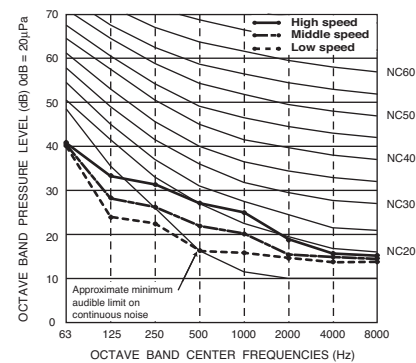
### PEFY-P25VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



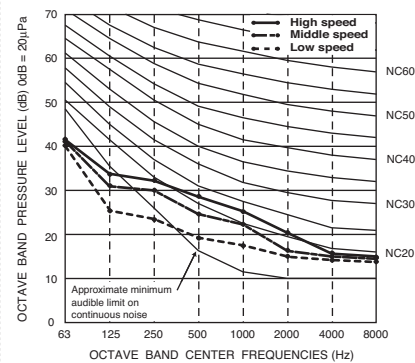
### PEFY-P25VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



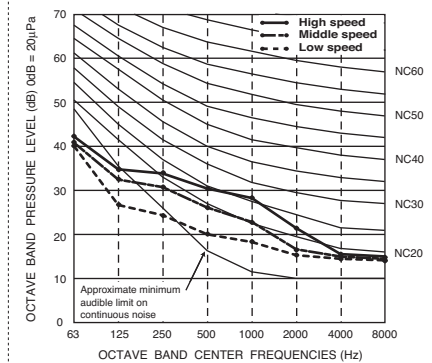
### PEFY-P25VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



### PEFY-P25VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz

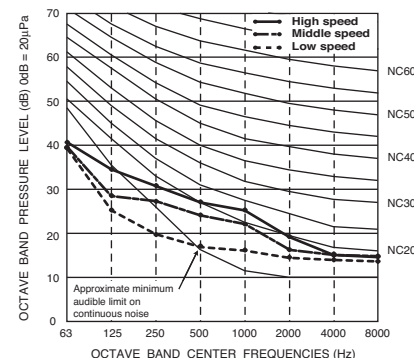


## 5-2. NC curves

PEFY

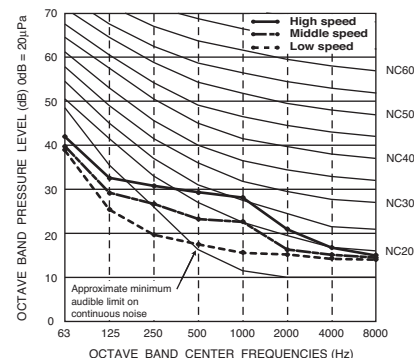
### PEFY-P32VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



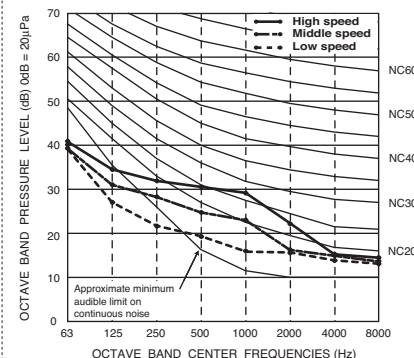
### PEFY-P32VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



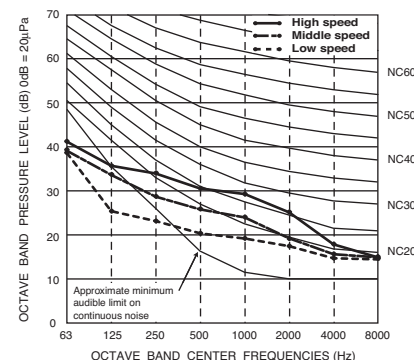
### PEFY-P32VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



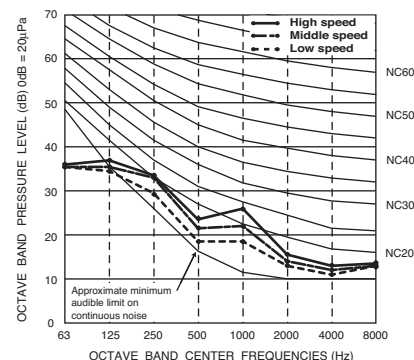
### PEFY-P32VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



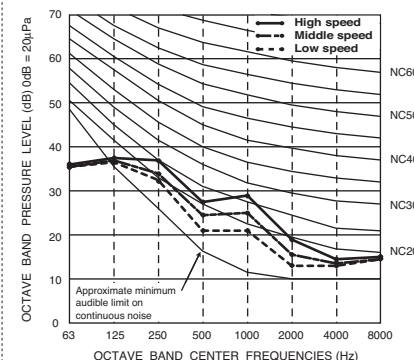
### PEFY-P40VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



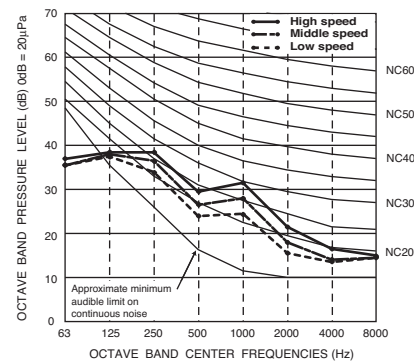
### PEFY-P40VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



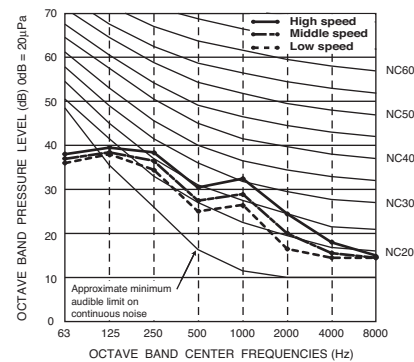
### PEFY-P40VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



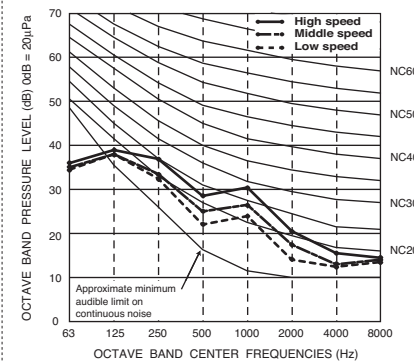
### PEFY-P40VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



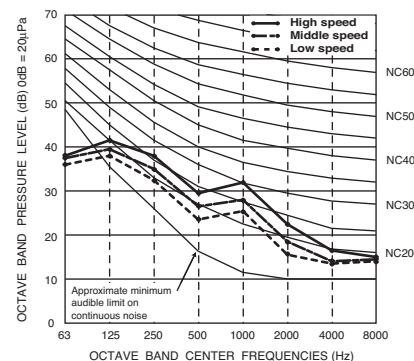
### PEFY-P50VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



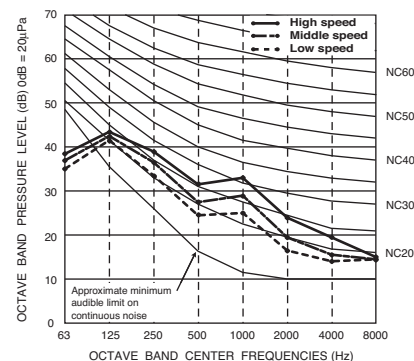
### PEFY-P50VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



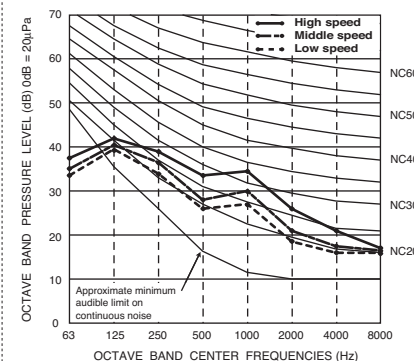
### PEFY-P50VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



### PEFY-P50VMS1-E

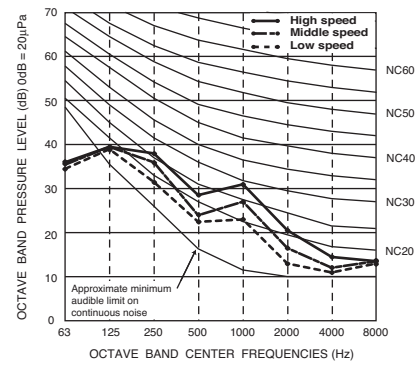
External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



## 5-2. NC curves

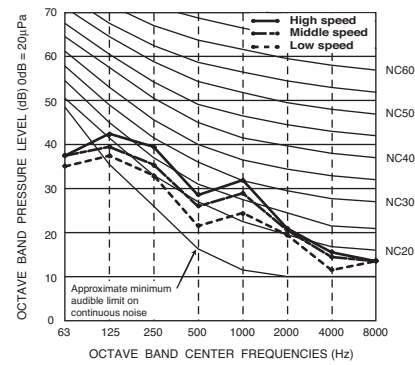
### PEFY-P63VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz



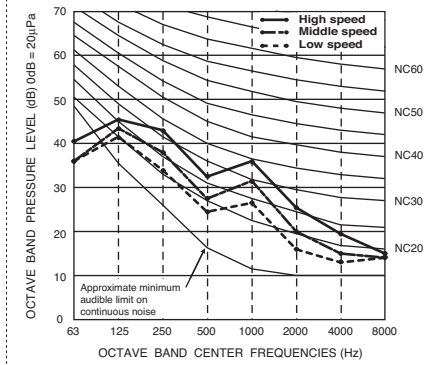
### PEFY-P63VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz



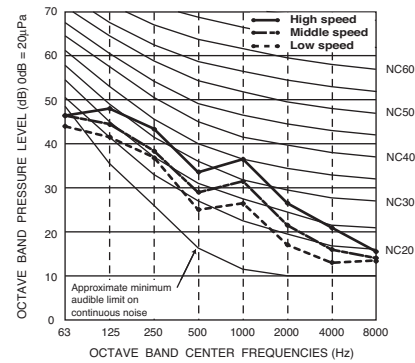
### PEFY-P63VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz



### PEFY-P63VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz



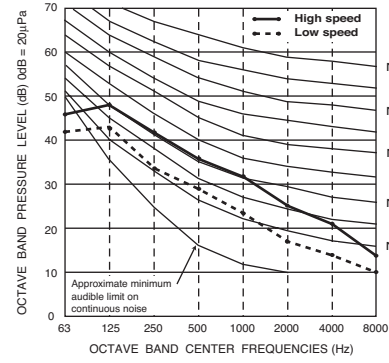
PEFY

5-2. NC curves

PEFY

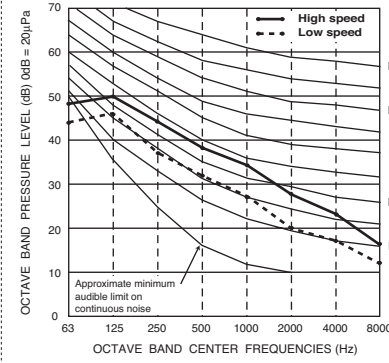
**PEFY-P80VMH-E**

External static pressure : 50Pa  
Power source : 220V, 50/60Hz



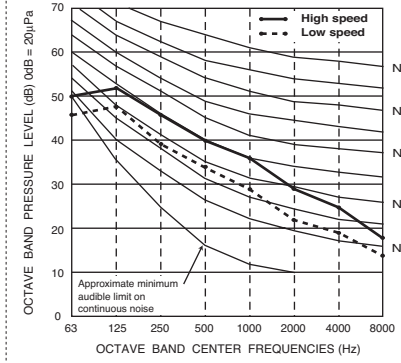
**PEFY-P80VMH-E**

External static pressure : 100Pa  
Power source : 220V, 50/60Hz



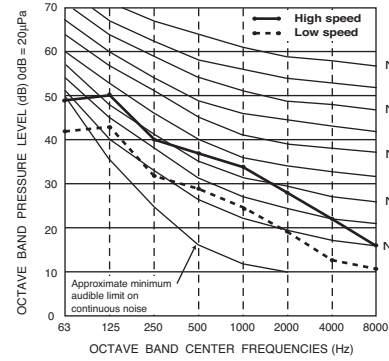
**PEFY-P80VMH-E**

External static pressure : 200Pa  
Power source : 220V, 50/60Hz



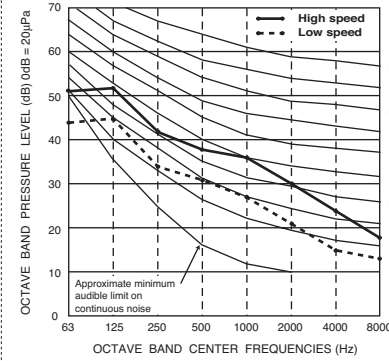
**PEFY-P100,125,140VMH-E**

External static pressure : 50Pa  
Power source : 220V, 50/60Hz



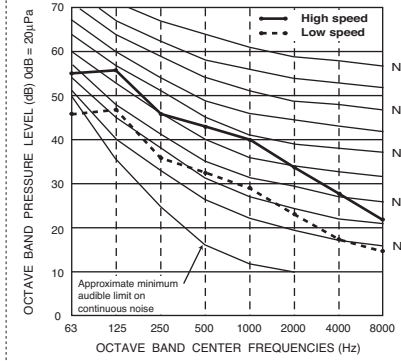
**PEFY-P100,125,140VMH-E**

External static pressure : 100Pa  
Power source : 220V, 50/60Hz



**PEFY-P100,125,140VMH-E**

External static pressure : 200Pa  
Power source : 220V, 50/60Hz

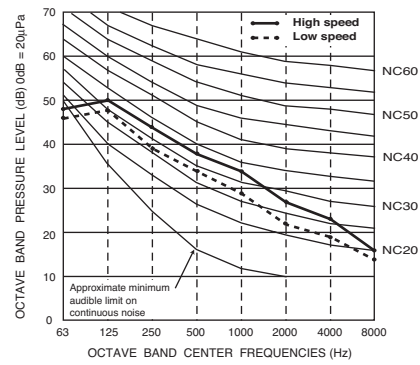




## 5-2. NC curves

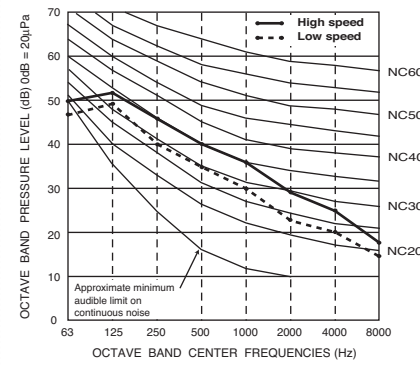
### PEFY-P80VMH-E

External static pressure : 100Pa  
Power source : 230,240V, 50/60Hz



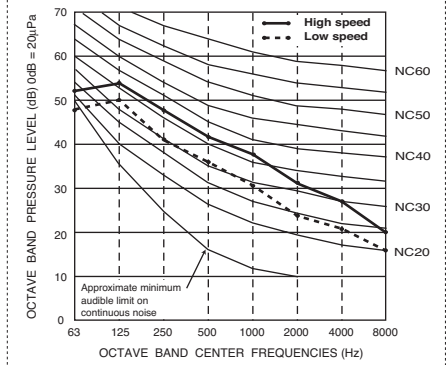
### PEFY-P80VMH-E

External static pressure : 150Pa  
Power source : 230,240V, 50/60Hz



### PEFY-P80VMH-E

External static pressure : 200Pa  
Power source : 230,240V, 50/60Hz

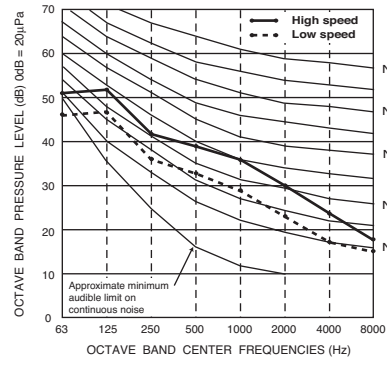


PEFY

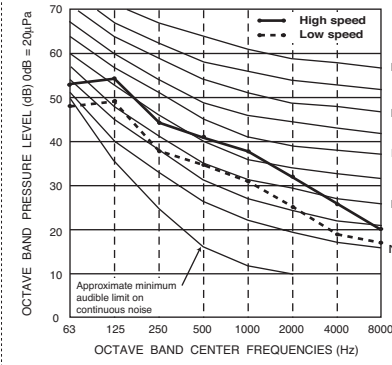
PEFY

5-2. NC curves

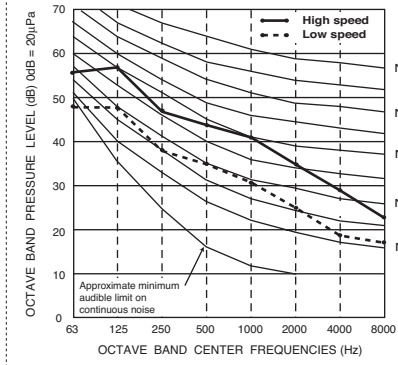
**PEFY-P100,125,140VMH-E**  
 External static pressure : 100Pa  
 Power source : 230,240V, 50/60Hz



**PEFY-P100,125,140VMH-E**  
 External static pressure : 150Pa  
 Power source : 230,240V, 50/60Hz



**PEFY-P100,125,140VMH-E**  
 External static pressure : 200Pa  
 Power source : 230,240V, 50/60Hz





# 5. SOUND LEVELS

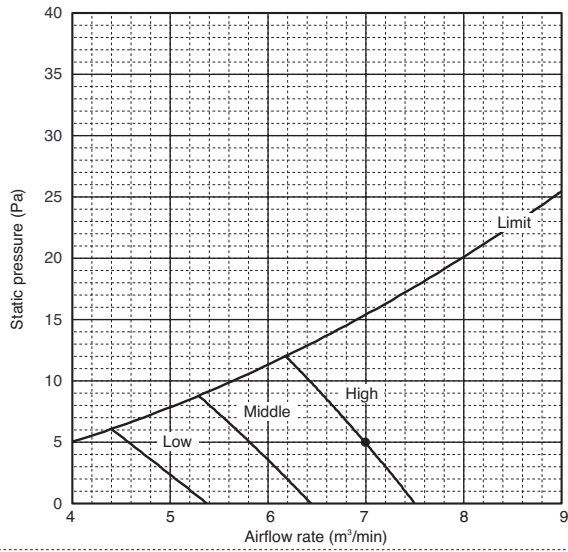
## 5-3. Fan characteristics curves

### PEFY-P15VMS1-E

External static pressure : 5Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

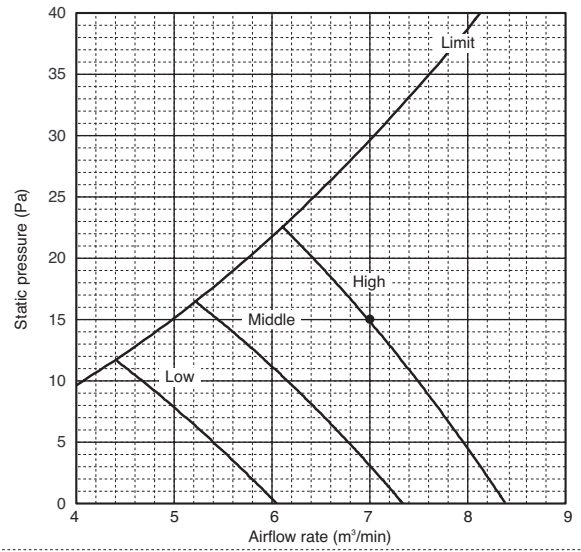


### PEFY-P15VMS1-E

External static pressure : 15Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz



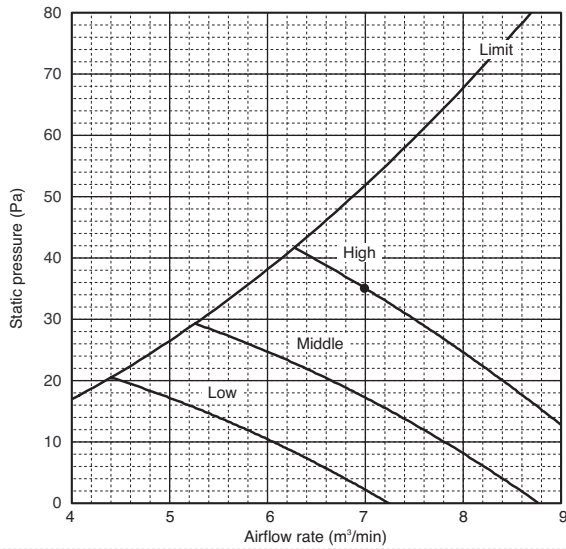
5-3. Fan characteristics curves

**PEFY-P15VMS1-E**

External static pressure : 35Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

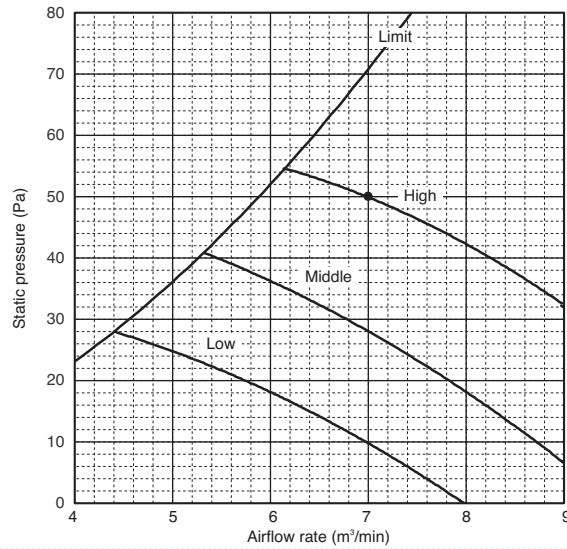


**PEFY-P15VMS1-E**

External static pressure : 50Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

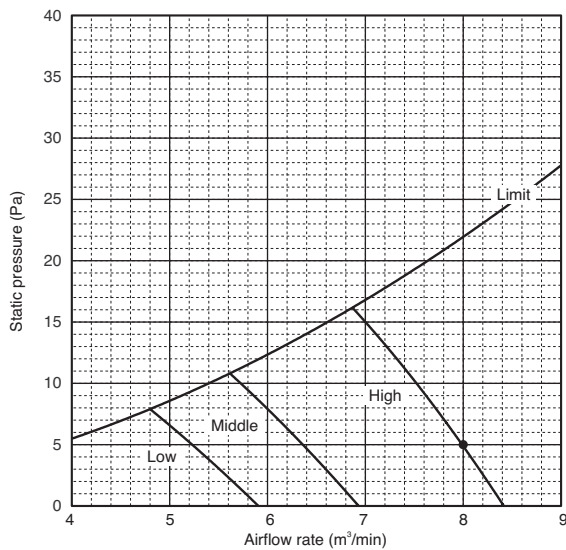


**PEFY-P20VMS1-E**

External static pressure : 5Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

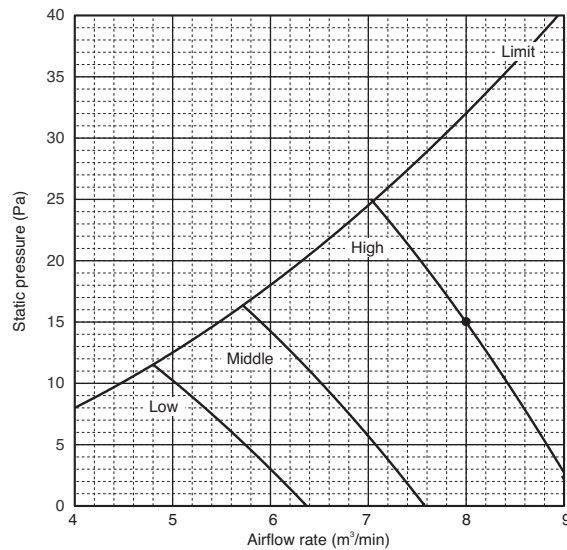


**PEFY-P20VMS1-E**

External static pressure : 15Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

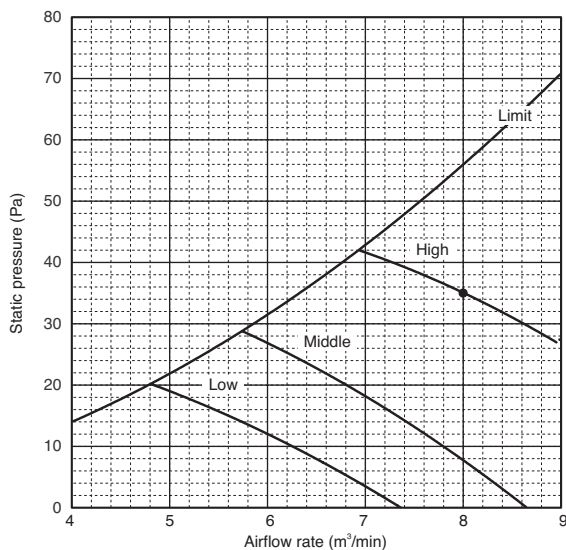


**PEFY-P20VMS1-E**

External static pressure : 35Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

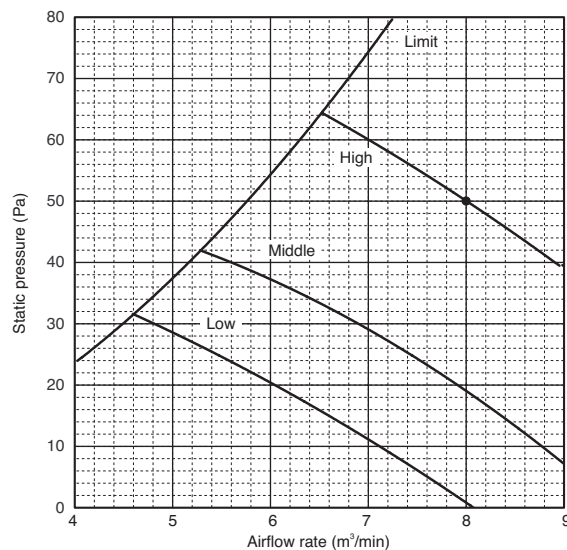


**PEFY-P20VMS1-E**

External static pressure : 50Pa

Power source : 220,230,240V, 50/60Hz

Suction : Back inlet

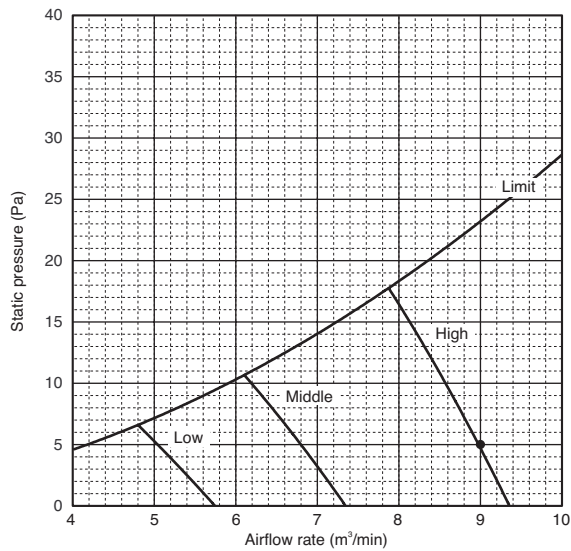


## 5-3. Fan characteristics curves

### PEFY-P25VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz

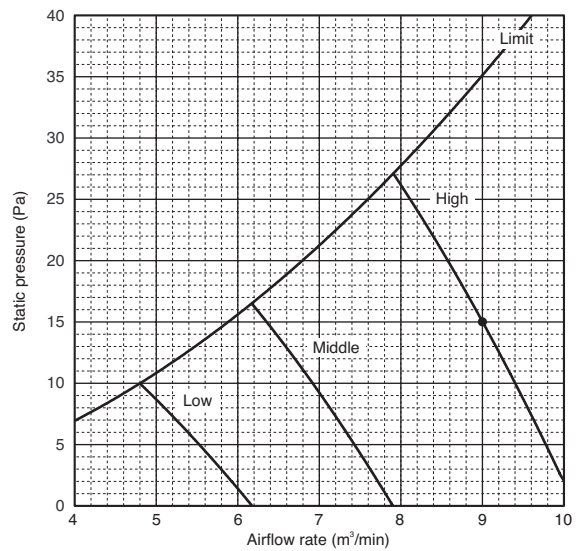
Suction : Back inlet



### PEFY-P25VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz

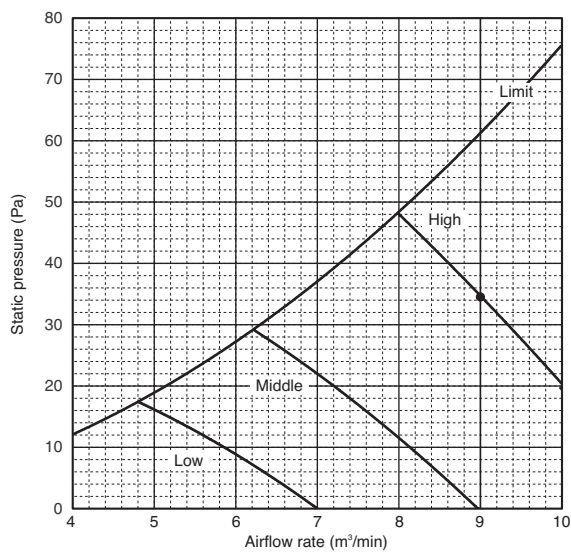
Suction : Back inlet



### PEFY-P25VMS1-E

External static pressure : 35Pa  
Power source : 220,230,240V, 50/60Hz

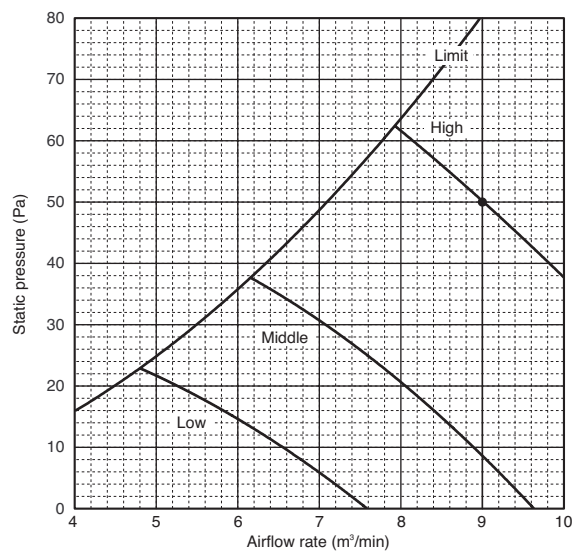
Suction : Back inlet



### PEFY-P25VMS1-E

External static pressure : 50Pa  
Power source : 220,230,240V, 50/60Hz

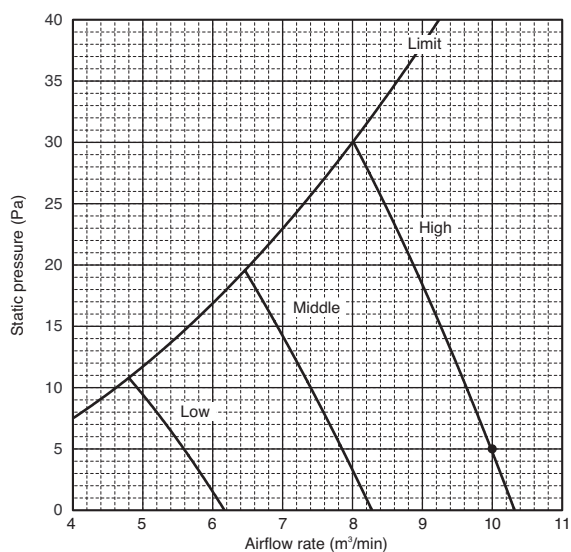
Suction : Back inlet



### PEFY-P32VMS1-E

External static pressure : 5Pa  
Power source : 220,230,240V, 50/60Hz

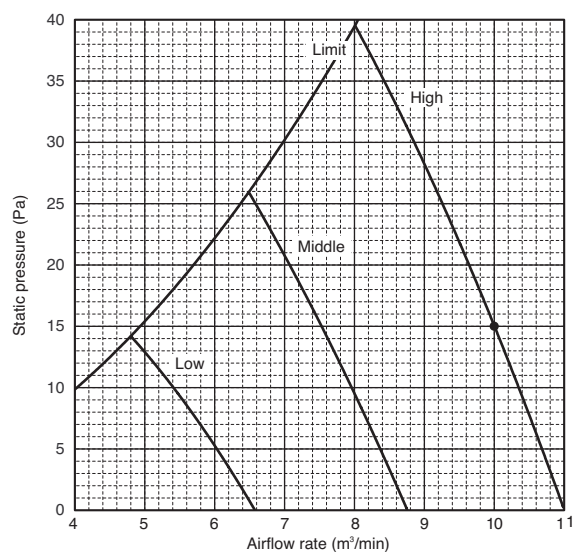
Suction : Back inlet



### PEFY-P32VMS1-E

External static pressure : 15Pa  
Power source : 220,230,240V, 50/60Hz

Suction : Back inlet



# 5. SOUND LEVELS

PEFY

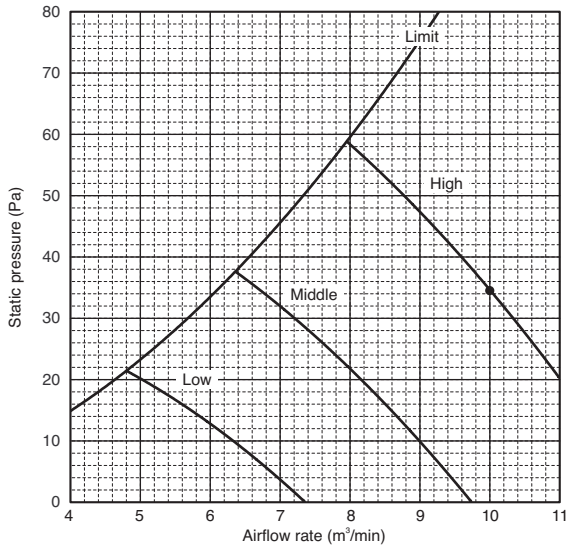
## 5-3. Fan characteristics curves

### PEFY-P32VMS1-E

External static pressure : 35Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

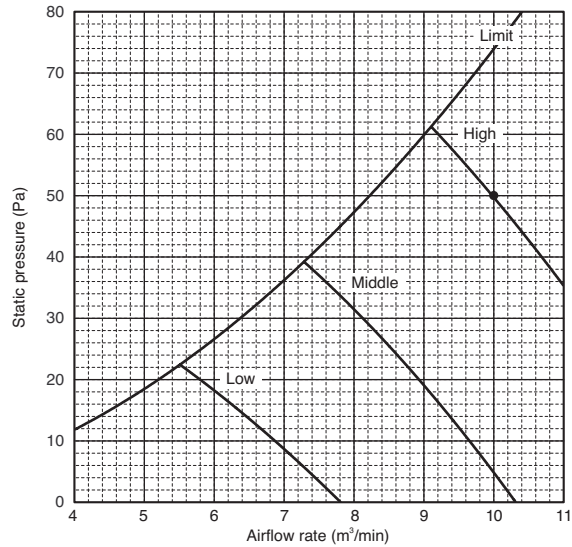


### PEFY-P32VMS1-E

External static pressure : 50Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

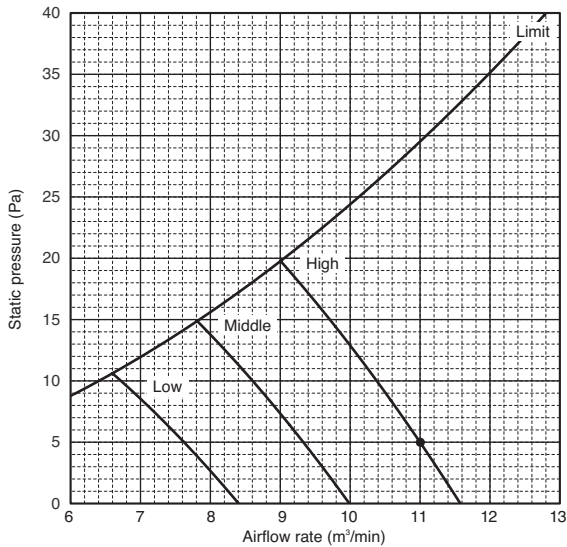


### PEFY-P40VMS1-E

External static pressure : 5Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

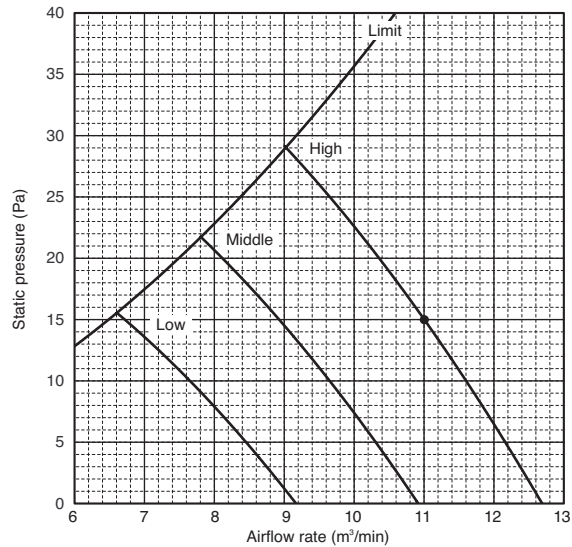


### PEFY-P40VMS1-E

External static pressure : 15Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

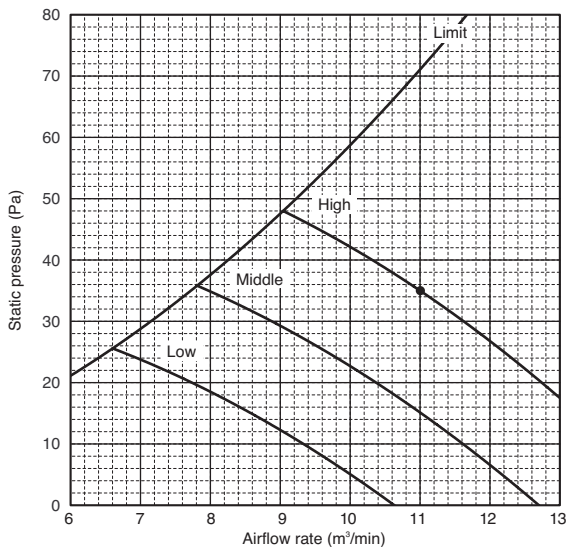


### PEFY-P40VMS1-E

External static pressure : 35Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

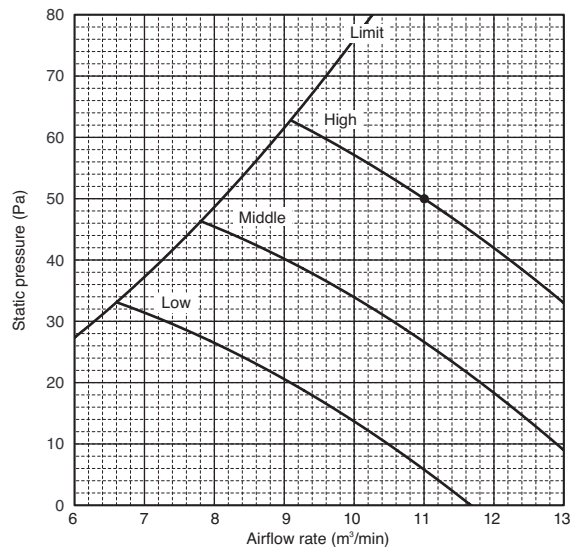


### PEFY-P40VMS1-E

External static pressure : 50Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

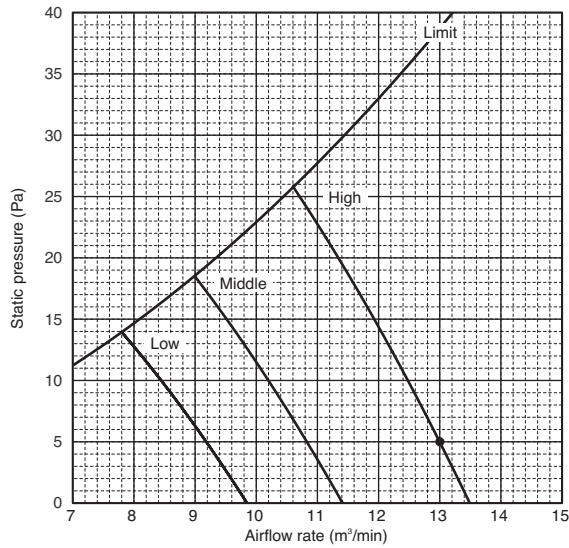




## 5-3. Fan characteristics curves

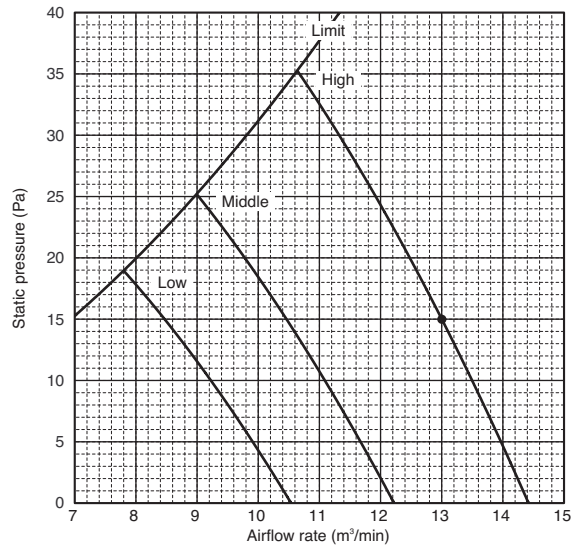
### PEFY-P50VMS1-E

External static pressure : 5Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



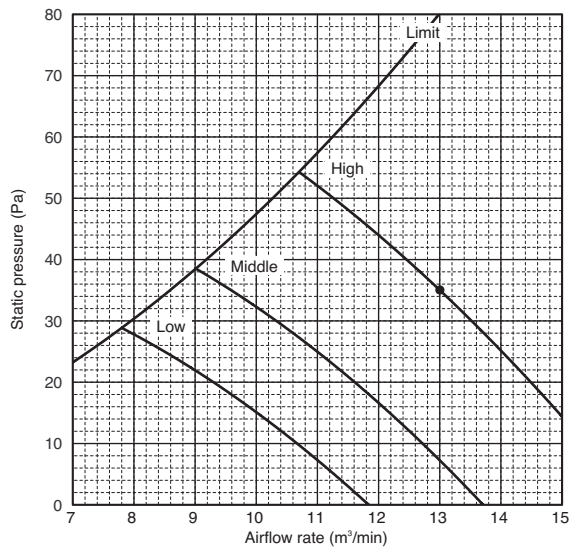
### PEFY-P50VMS1-E

External static pressure : 15Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



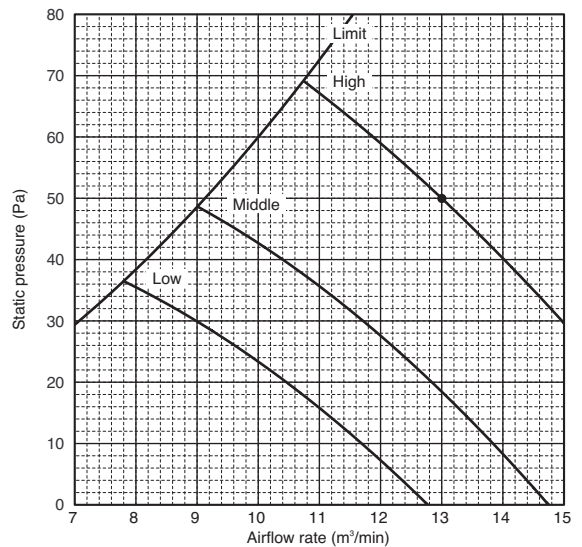
### PEFY-P50VMS1-E

External static pressure : 35Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



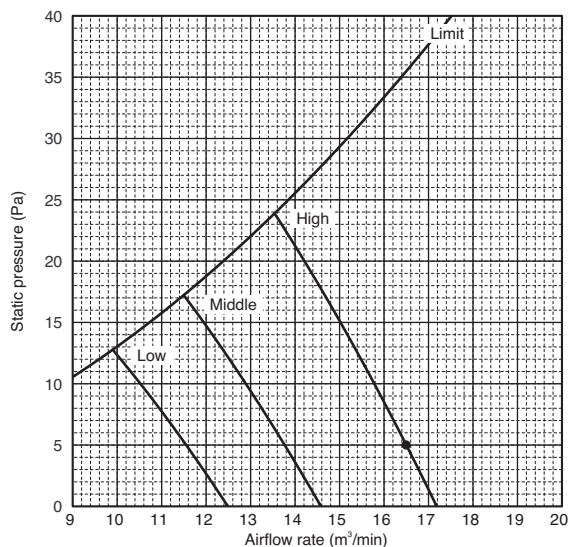
### PEFY-P50VMS1-E

External static pressure : 50Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



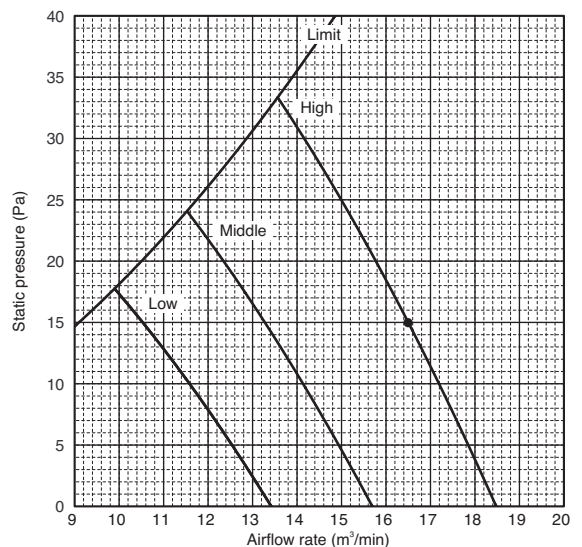
### PEFY-P63VMS1-E

External static pressure : 5Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



### PEFY-P63VMS1-E

External static pressure : 15Pa Suction : Back inlet  
Power source : 220,230,240V, 50/60Hz



PEFY

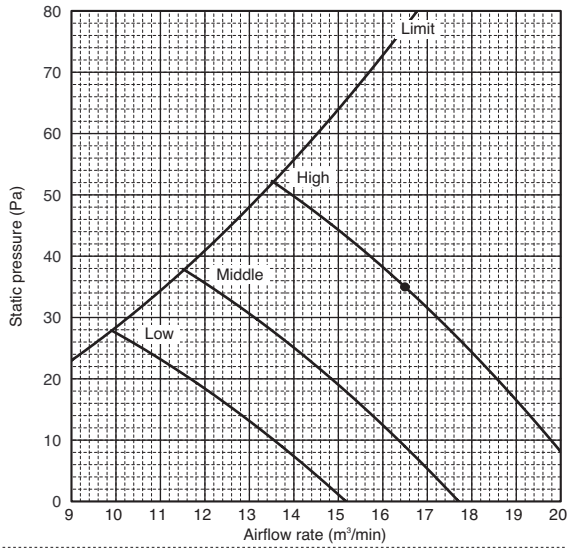
5-3. Fan characteristics curves

**PEFY-P63VMS1-E**

External static pressure : 35Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

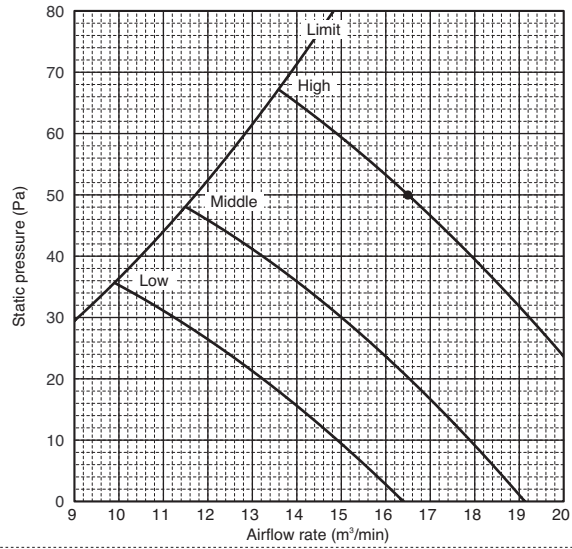


**PEFY-P63VMS1-E**

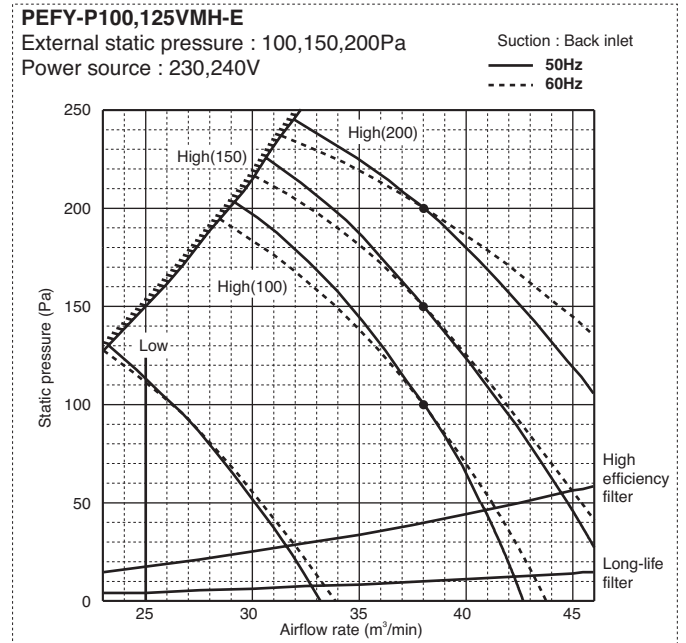
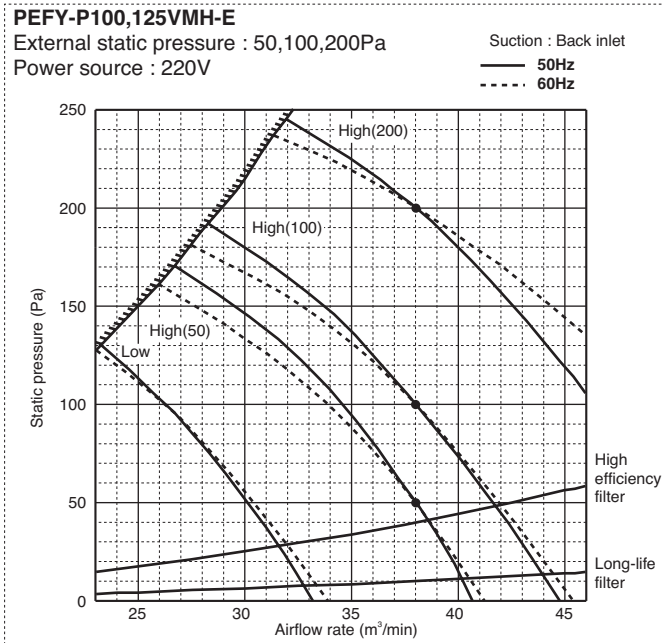
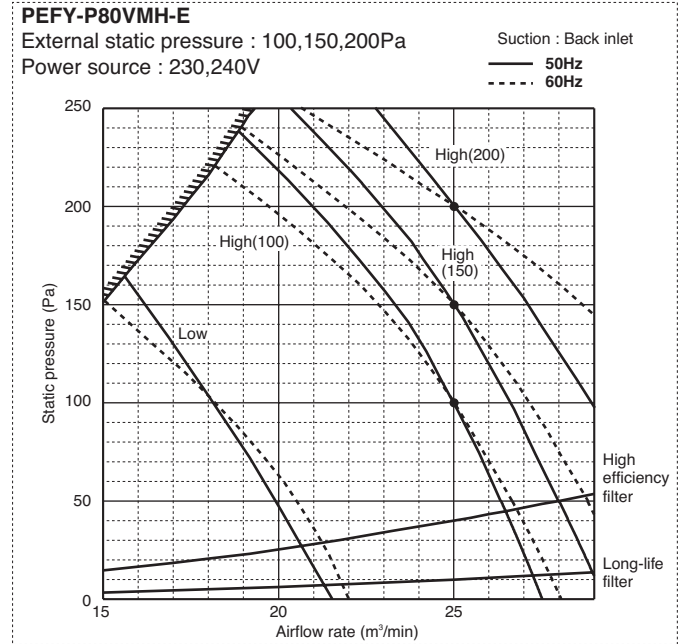
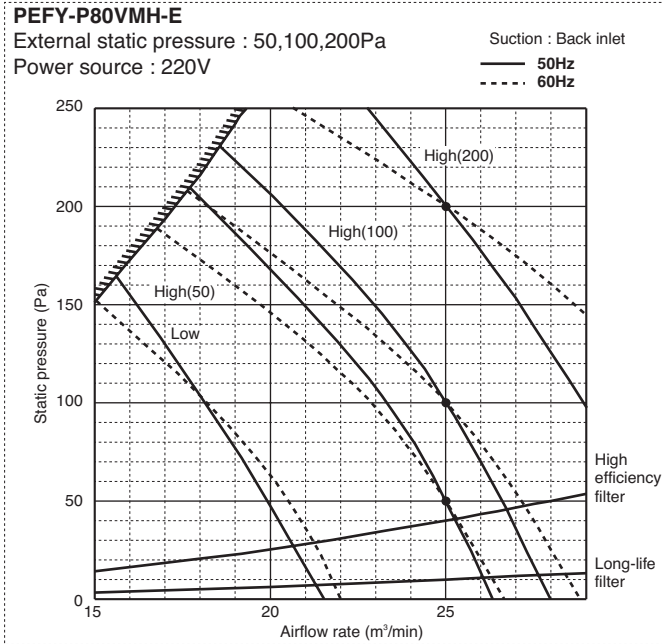
External static pressure : 50Pa

Suction : Back inlet

Power source : 220,230,240V, 50/60Hz

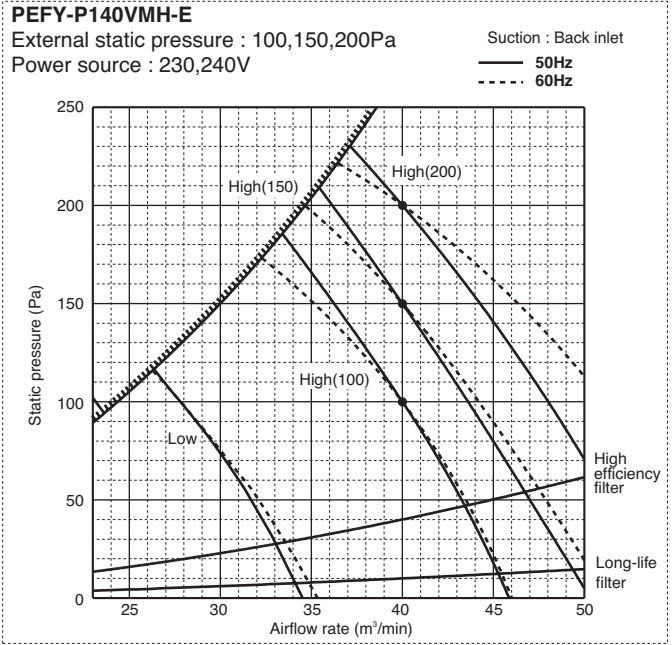
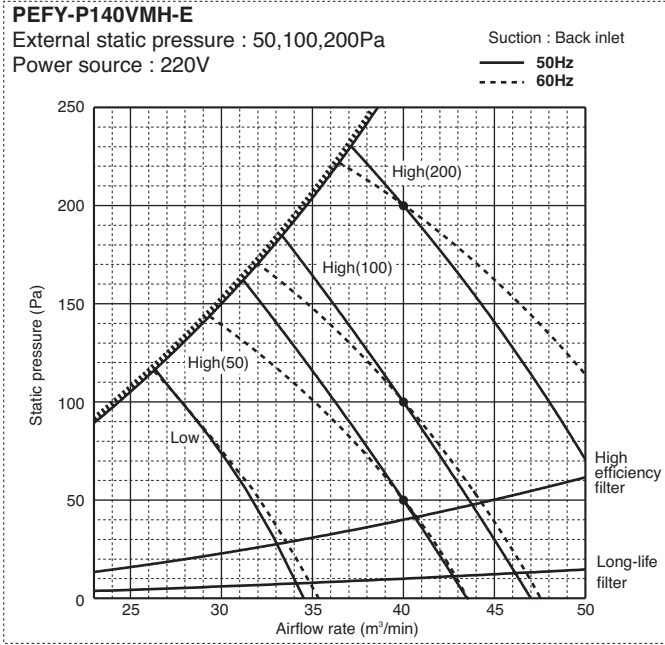


## 5-3. Fan characteristics curves



PEFY

5-3. Fan characteristics curves





## 6. Optional parts for PEFY-P-VMS1-E,VMH-E

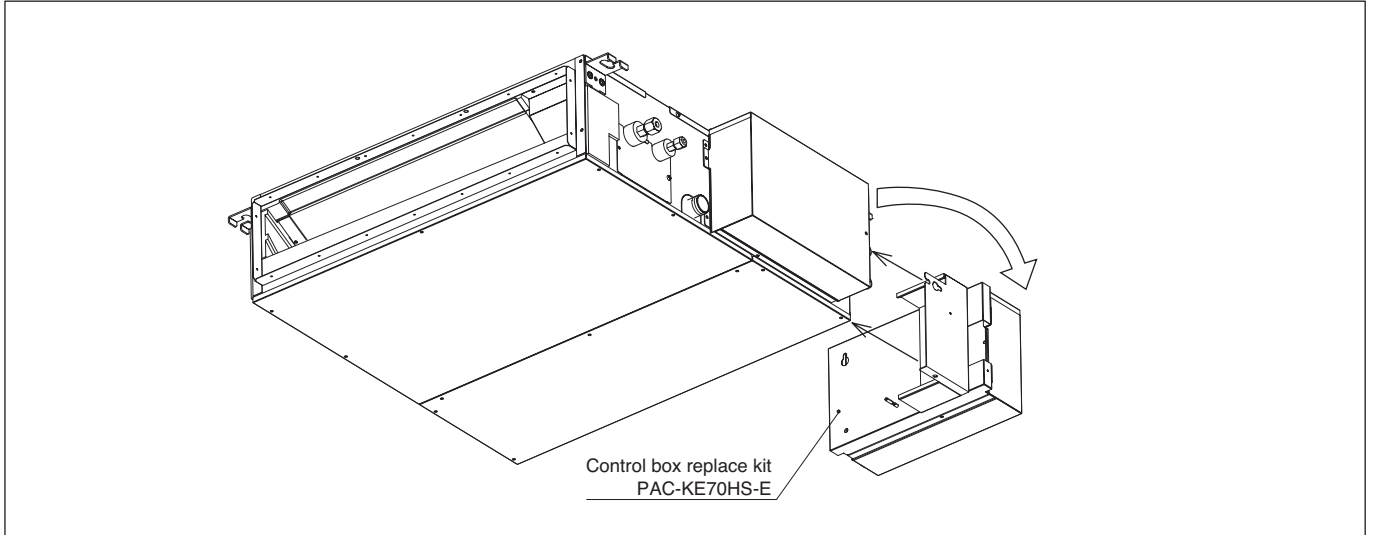
R410A Data G6

PEFY

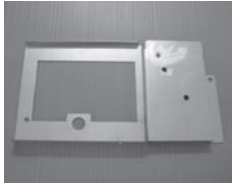
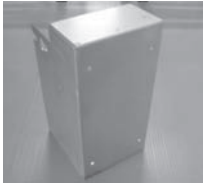

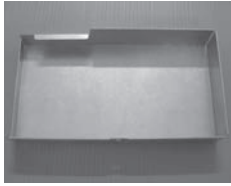
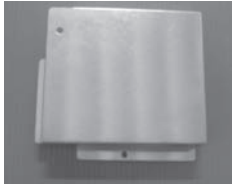















### ■ Optional parts line up for the Indoor unit

	Drain pump	Control box replace kit
PEFY-P15,20,25,32,40,50,63VMS1-E	-	PAC-KE70HS-E

### ■ PEFY-P-VMS1-E



## ■ Control box replace kit PAC-KE70HS-E

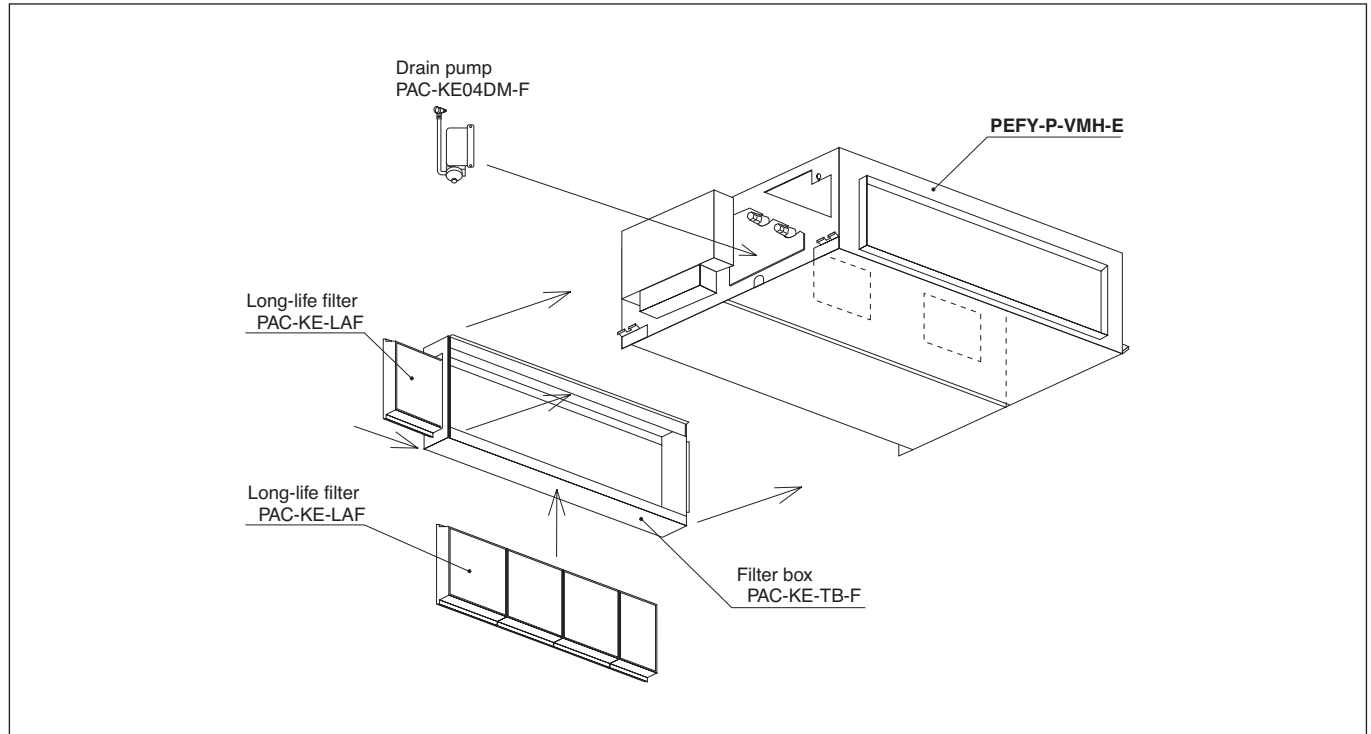
Parts	① PLATE A	② PLATE B	③ PLATE C	④ COVER A
Q'ty	1	1	1	1
Shape				
Parts	⑤ COVER B	⑥ LEAD WIRE MOTOR	⑦ LEAD WIRE LEV	⑧ LEAD WIRE THM A
Q'ty	1	1	1	1
Shape		 White 7-pin connector	 White 6-pin connector	 White 4-pin connector
Parts	⑨ LEAD WIRE THM B	⑩ LEAD WIRE EARTH	⑪ LEAD WIRE PUMP	⑫ LEAD WIRE FS
Q'ty	1	1	1	1
Shape	 Red 2-pin connector	 Ring terminal on both ends	 Blue 3-pin connector	 White 4-pin connector
Parts	⑬ INSULATOR	⑭ Connecting terminals	⑮ BAND	⑯ CLAMP
Q'ty	3	4	6	4
Shape				
Parts	⑰ SCREW 1	⑱ SCREW 2	⑲ SCREW 3	⑳ FERRITE CORE
Q'ty	2	4	5	1
Shape	 4X10	 4X10 with a washer	 5X10 with a washer	

When installing the control box replace kit on the air inlet on the unit, ⑫ LEAD WIRE FS is not used.

## Optional parts line up for the Indoor unit

	Long-life filter	Filter box	Drain pump
PEFY-P80VMH-E PEFY-P100,125,140VMH-E	PAC-KE88LAF PAC-KE89LAF	PAC-KE80TB-F PAC-KE140TB-F	PAC-KE04DM-F PAC-KE04DM-F

### ● PEFY-P-VMH-E



## Optional parts line up for the Indoor unit

	Long-life filter	Filter box	Drain pump
PEFY-P80VMH-E PEFY-P100,125,140VMH-E	PAC-KE88LAF PAC-KE89LAF	PAC-KE80TB-F PAC-KE140TB-F	PAC-KE04DM-F PAC-KE04DM-F

## Long-life filter PAC-KE-LAF and filter box PAC-KE-TB-F for PEFY-P-VMH-E

Life span: 2,500 hr (Dust concentration 0.15mg/m<sup>3</sup>)

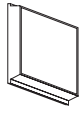
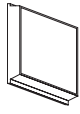
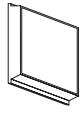
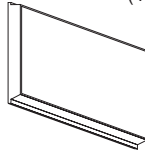
\*. The actual dust situation affects the filter life span, which should be considered at the applying site.

Material: Synthetic fiber unweaved cloth filter

Static pressure loss is referred to 3-3 "Fan characteristics curves".


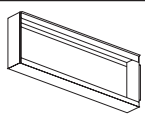

Long-life filter should be used together with filter box PAC-KE-TB-F.

### 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 (WT02574X04)

### PAC-KE-TB-F

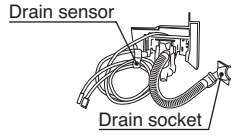
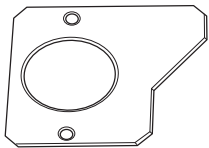


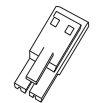

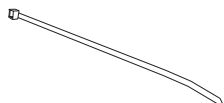

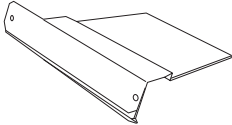
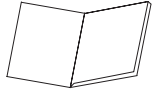
Item	① Screw	② Filter box	③ Installation manual	
Quantity	10/12*	1	1	
Shape				*PAC-KE250TB has 12 pieces of screw.

Detailed installation information should be referred to its Installation Manual (WT03018X02, WT03019X02)

## Drain pump PAC-KE04DM-F

If drain water can not flow out the Indoor unit by gravity and gradient, a Drain-pump for draining is needed.

Drain pump PAC-KE04DM-F can pump water up to 550mm high from the drain pan.

Item	① Drain pump ass'y	② Separator	③ Rubber plug	④ Connector	⑤ Dummy connector
Quantity	1	1	2	1	1
Shape					
Item	⑥ Rubber bushing	⑦ Band	⑧ PTT screw 4X10	⑨ Fixing plate	⑩ Installation manual
Quantity	1	2	6+1 (spare)	1	1
Shape					

Detailed installation information should be referred to its Installation Manual (WT03312X02)