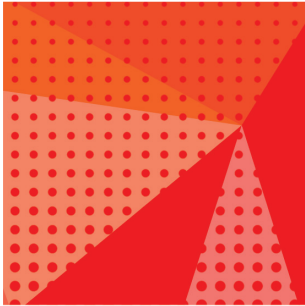


AIR CONDITIONING SYSTEMS

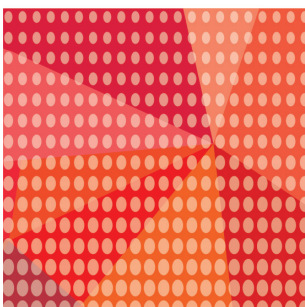
HYBRID
CITY MULTI



DATA BOOK

MODEL

PFFY-WP-VLRMM-E



PFFY-WP-VLRMM-E

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1. SPECIFICATIONS

Floor standing (Concealed type)

PFFY-WP-VLRMM-E

Model				PFFY-WP20VLRMM-E	PFFY-WP25VLRMM-E	PFFY-WP32VLRMM-E	PFFY-WP40VLRMM-E	
Power source				1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW		2.2	2.8	3.6	4.5	
		kcal/h		1,900	2,400	3,100	3,900	
		BTU/h		7,500	9,600	12,300	15,400	
	*2	Power input	kW	0.040	0.040	0.050	0.050	
		Current input	A	0.35	0.35	0.47	0.47	
Heating capacity (Nominal)	*3	kW		2.5	3.2	4.0	5.0	
		kcal/h		2,200	2,800	3,400	4,300	
		BTU/h		8,500	10,900	13,600	17,100	
	*2	Power input	kW	0.040	0.040	0.050	0.050	
		Current input	A	0.35	0.35	0.47	0.47	
External finish				Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	
External dimension H x W x D				mm	639 x 886 x 220	639 x 1,006 x 220	639 x 1,006 x 220	
				in.	25-3/16 x 34-15/16 x 8-11/16	25-3/16 x 39-5/8 x 8-11/16	25-3/16 x 39-5/8 x 8-11/16	25-3/16 x 49-1/16 x 8-11/16
Net weight				kg (lbs)	22 (49)	25 (56)	25 (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)	
Water Volume				L	0.9	1.3	1.3	
FAN	Type x Quantity			Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	
	*4	External static press.		Pa	20 - <40> - <60>	20 - <40> - <60>	20 - <40> - <60>	
				mmH ₂ O	2.0 - <4.1> - <6.1>	2.0 - <4.1> - <6.1>	2.0 - <4.1> - <6.1>	
	Motor Type				DC motor	DC motor	DC motor	
	Motor output				kW	0.096	0.096	0.096
	Driving mechanism				Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	
	Air flow rate				(Low-Mid-High)	(Low-Mid-High)	(Low-Mid-High)	
					m ³ /min	4.5 - 5.0 - 6.0	6.0 - 7.0 - 8.0	7.5 - 9.0 - 10.5
L/s					75 - 83 - 100	100 - 117 - 133	125 - 150 - 175	
cfm				159 - 177 - 212	212 - 247 - 282	265 - 318 - 371		
Sound pressure level (measured in anechoic room)				(Low-Mid-High)	(Low-Mid-High)	(Low-Mid-High)		
*2				dB <A>	31-33-38	31-33-38	31-35-38	
Insulation material				Polyethylene foam, Urethane foam	Polyethylene foam, Urethane foam	Polyethylene foam, Urethane foam		
Air filter				PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.		
Protection device				Fuse	Fuse	Fuse		
Refrigerant control device				-	-	-		
Connectable outdoor unit				HYBRID CITY MULTI/ CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/ CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/ CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB		
Water piping diameter	Connection size		Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw	
			Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw	
	*5 *6		Field pipe size	Inlet	mm I.D.	20	20	
				Outlet	mm I.D.	20	20	
Field drain pipe size				mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))>	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))>		
Drawing	External			KD94T792X01	KD94T792X01	KD94T792X01		
	Wiring			KD94T791X01	KD94T791X01	KD94T791X01		
	Refrigerant cycle			-	-	-		
Standard attachment	Document			Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book		
	Accessory			Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band	Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band	Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band		
Optional parts								
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: 27 °CD.B./19 °CW.B. (81 °FD.B./66 °FW.B.), Outdoor: 35 °CD.B. (95 °FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	kcal/h =kW x 860
2.The values are measured at the factory setting of external static pressure.	BTU/h =kW x 3,412
3.Nominal heating conditions Indoor: 20 °CD.B. (68 °FD.B.), Outdoor: 7 °CD.B./6 °CW.B. (45 °FD.B./43 °FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	cfm =m ³ /min x 35.31
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.	lbs =kg/0.4536
5.Be sure to install a valve on the water outlet.	*Above specification data is subject to rounding variation.
6.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.	
7.Please group units that operate on 1 branch.	

1. SPECIFICATIONS

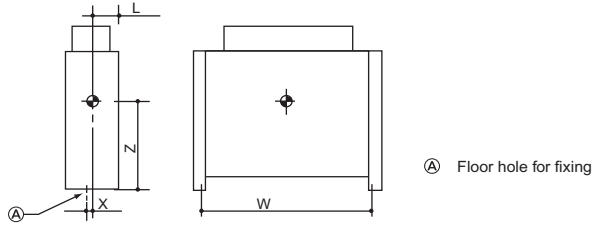
Floor standing (Concealed type)

PFFY-WP-VLRMM-E

Model		PFFY-WP50VLRMM-E				
Power source		1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	5.6			
	*1	kcal/h	4,800			
	*1	BTU/h	19,100			
	*2	Power input	kW	0.070		
	*2	Current input	A	0.65		
Heating capacity (Nominal)	*3	kW	6.3			
	*3	kcal/h	5,400			
	*3	BTU/h	21,500			
	*2	Power input	kW	0.070		
	*2	Current input	A	0.65		
External finish		Galvanized steel plate				
External dimension H x W x D		mm	639 x 1,246 x 220			
		in.	25-3/16 x 49-1/16 x 8-11/16			
Net weight		kg (lbs)	29 (64)			
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
Water Volume		L	1.5			
FAN	Type x Quantity		Sirocco fan x 2			
	*4	External static press.	Pa	20 - <40> - <60>		
			mmH ₂ O	2.0 - <4.1> - <6.1>		
	Motor Type		DC motor			
	Motor output		kW	0.096		
	Driving mechanism		Direct-driven by motor			
	Air flow rate		(Low-Mid-High)			
			m ³ /min	10.5 - 13.0 - 15.0		
L/s			175 - 217 - 250			
		cfm	371 - 459 - 530			
Sound pressure level (measured in anechoic room)		(Low-Mid-High)				
		*2	dB <A>	37-42-45		
Insulation material		Polyethylene foam, Urethane foam				
Air filter		PP honeycomb fabric.				
Protection device		Fuse				
Refrigerant control device		-				
Connectable outdoor unit		HYBRID CITY MULTI/ CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB				
Water piping diameter	Connection size	Inlet	in.	Rc 3/4 screw		
		Outlet	in.	Rc 3/4 screw		
	*5 *6	Field pipe size	Inlet	mm I.D.	20	
			Outlet	mm I.D.	20	
Field drain pipe size		mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))>			
Drawing	External		KD94T792X01			
	Wiring		KD94T791X01			
	Refrigerant cycle		-			
Standard attachment	Document		Installation Manual, Instruction Book			
	Accessory		Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band			
Optional parts						
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: 27 °CD.B./19 °CW.B. (81 °FD.B./66 °FW.B.), Outdoor: 35 °CD.B. (95 °FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	kcal/h =kW x 860
2.The values are measured at the factory setting of external static pressure.	BTU/h =kW x 3,412
3.Nominal heating conditions Indoor: 20 °CD.B. (68 °FD.B.), Outdoor: 7 °CD.B./6 °CW.B. (45 °FD.B./43 °FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	cfm =m ³ /min x 35.31
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.	lbs =kg/0.4536
5.Be sure to install a valve on the water outlet.	
6.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.	
7.Please group units that operate on 1 branch.	
	*Above specification data is subject to rounding variation.

PFFY-WP20, 25, 32, 40, 50VLRMM-E

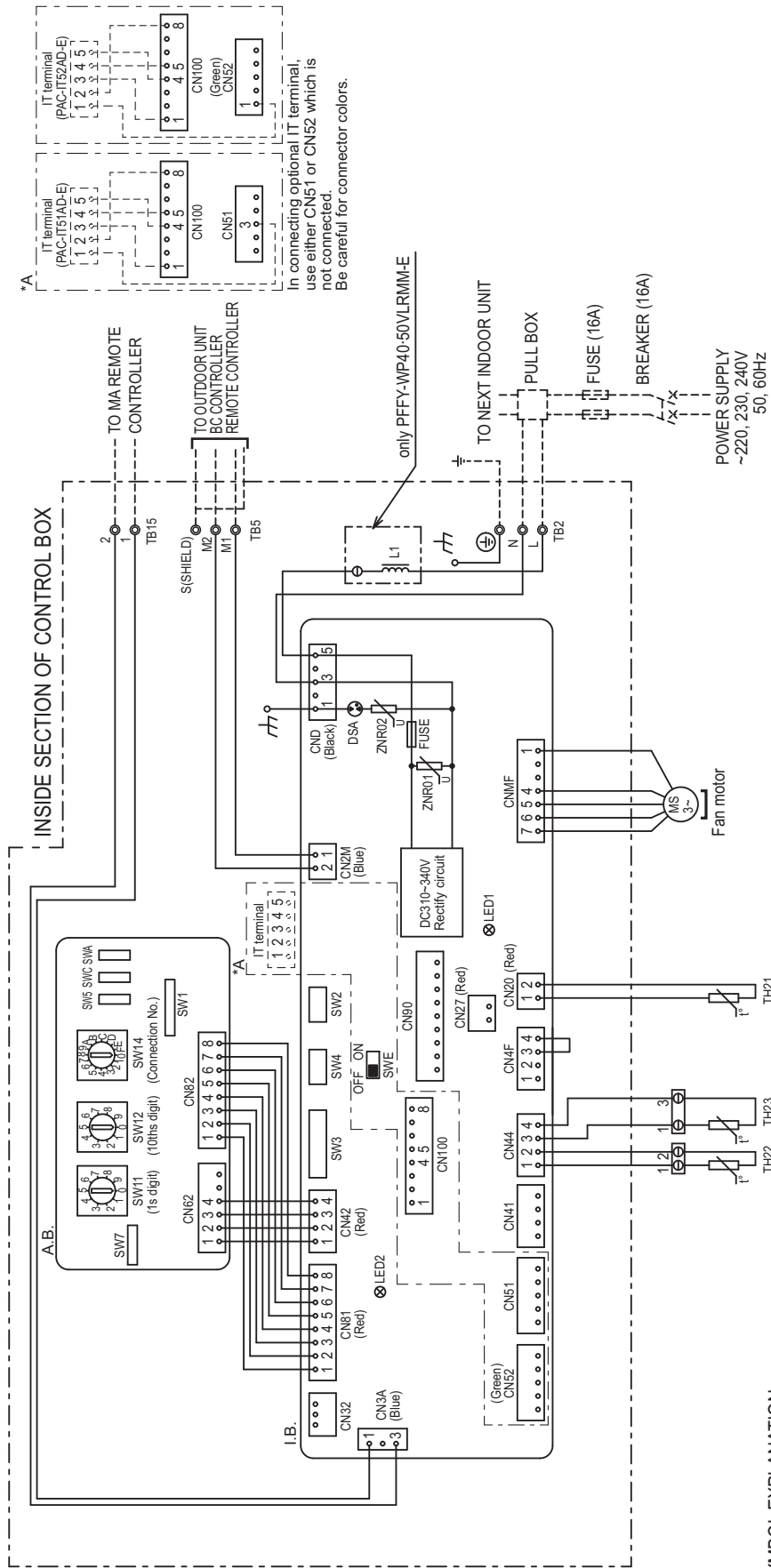


Ⓐ Floor hole for fixing

(mm)[in]

Model name	W	L	X	Z
PFFY-WP20VLRMM-E	640 [25-1/4]	100 [3-15/16]	17 [11/16]	335 [13-1/4]
PFFY-WP25VLRMM-E	760 [29-15/16]	100 [3-15/16]	17 [11/16]	335 [13-1/4]
PFFY-WP32VLRMM-E	760 [29-15/16]	100 [3-15/16]	17 [11/16]	335 [13-1/4]
PFFY-WP40VLRMM-E	1000 [39-3/8]	100 [3-15/16]	17 [11/16]	335 [13-1/4]
PFFY-WP50VLRMM-E	1000 [39-3/8]	100 [3-15/16]	17 [11/16]	335 [13-1/4]

PFFY-WP20, 25, 32, 40, 50VLRMM-E



NOTE: Symbols used in wiring diagram above are,
 --- (HEAVY DOTTED LINE): FIELD WIRING
 - - - (THIN DOTTED LINE): OPTIONAL PARTS
 ⊖ : CONNECTOR
 ⊙ : TERMINAL

OPERATION OF LED FOR INDOOR CIRCUIT BOARD SERVICE

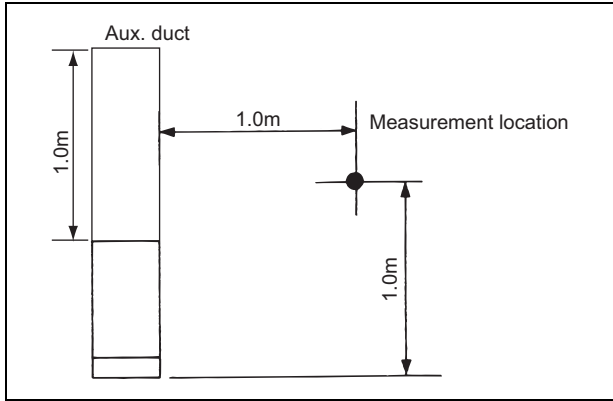
SYMBOL	LED operation under normal state
LED1	At applying main power source → Lighting
LED2	At receiving MA transmission power source → Lighting

SYMBOL EXPLANATION

SYMBOL	NAME	SYMBOL	NAME
I.B.	Indoor controller board	A.B.	Address board
FUSE	Fuse <AC250V 6.3A>	SW1	Switch (for mode selection)
ZNR01,02	Varistor	SW5	Switch (for mode selection)
DSA	Arrester	SW7	Switch (for model selection)
CN27	Connector (Damper)	SW11	Switch (for model selection)
CN32	Connector (Remote switch)	SW12	Switch (1s digit address set)
CN41	Connector (HA terminal-A)	SW14	Switch (connection No.set)
CN51	Connector (Centrally control)	SWA	Switch (for static pressure selection)
CN52	Connector (Remote indication)	SWC	Switch (for static pressure selection)
CN60	Connector (Wireless)	TB2	Power source terminal block
CN100	Connector (IT terminal)	TB5	Transmission terminal block
SW2	Switch (for capacity code)	TB15	Transmission terminal block
SW3	Switch (for mode selection)	TH21	Thermistor (inlet air temp.detection)
SW4	Switch (for model selection)	TH22	Thermistor (piping temp.detection/water in)
SWE	Connector (emergency operation)	TH23	Thermistor (piping temp.detection/water out)
L1	AC reactor(Power factor improvement)		

5-1. Sound levels

PFFY-WP-VLRMM-E



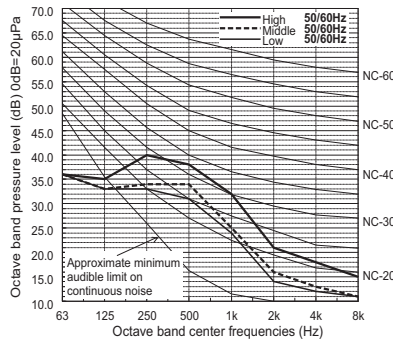
* Measured in anechoic room

Sound level at anechoic room : Low-Middle-High

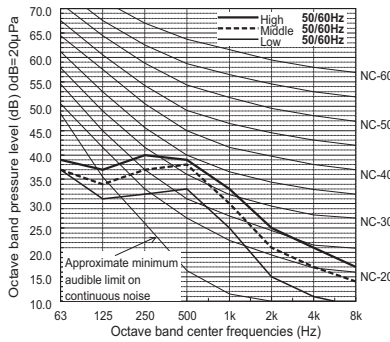
	Sound level dB (A)		
	20Pa	40Pa	60Pa
PFFY-WP20VLRMM-E	31-33-38	32-37-39	36-38-42
PFFY-WP25VLRMM-E	31-33-38	32-37-39	36-38-42
PFFY-WP32VLRMM-E	31-35-38	34-37-40	36-40-42
PFFY-WP40VLRMM-E	34-37-40	37-39-43	37-41-44
PFFY-WP50VLRMM-E	37-42-45	38-44-47	39-45-48

5-2. NC curves

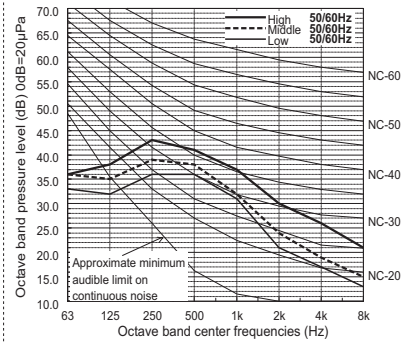
PFFY-WP20VLRMM-E
External Static Pressure: 20Pa
Power Source: 220-230-240V, 50/60Hz



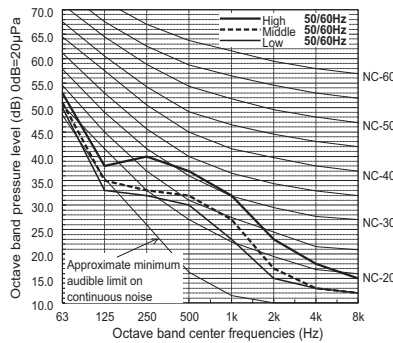
PFFY-WP20VLRMM-E
External Static Pressure: 40Pa
Power Source: 220-230-240V, 50/60Hz



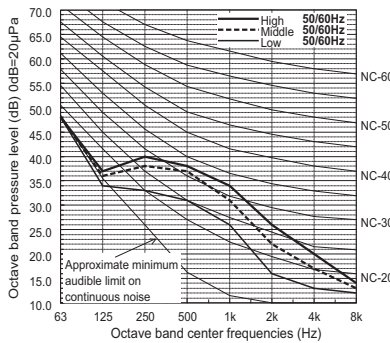
PFFY-WP20VLRMM-E
External Static Pressure: 60Pa
Power Source: 220-230-240V, 50/60Hz



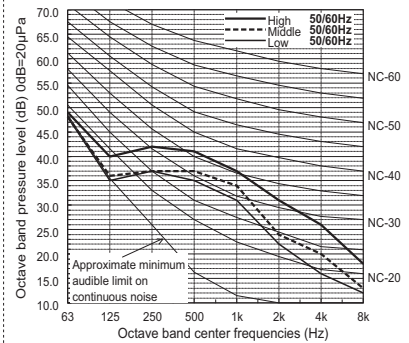
PFFY-WP25VLRMM-E
External Static Pressure: 20Pa
Power Source: 220-230-240V, 50/60Hz



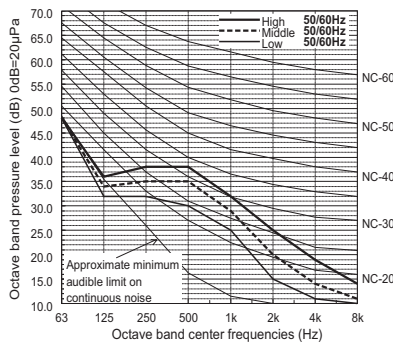
PFFY-WP25VLRMM-E
External Static Pressure: 40Pa
Power Source: 220-230-240V, 50/60Hz



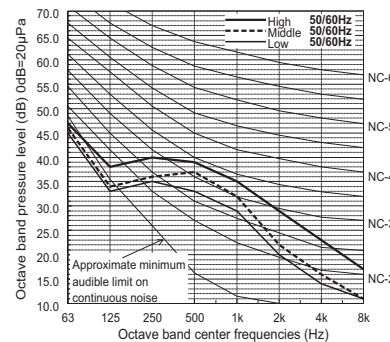
PFFY-WP25VLRMM-E
External Static Pressure: 60Pa
Power Source: 220-230-240V, 50/60Hz



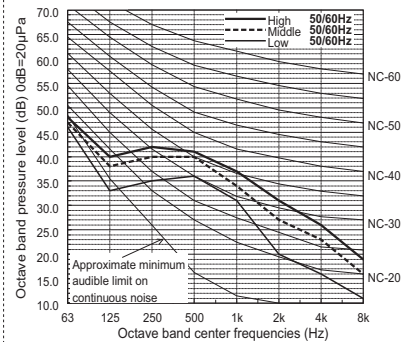
PFFY-WP32VLRMM-E
External Static Pressure: 20Pa
Power Source: 220-230-240V, 50/60Hz

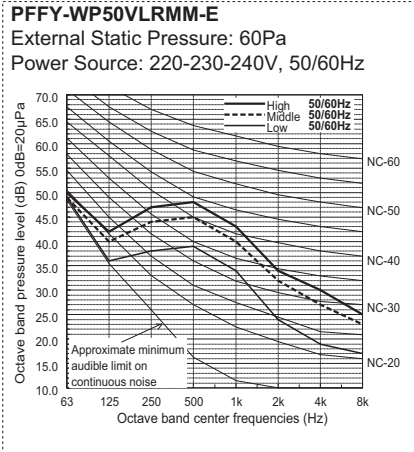
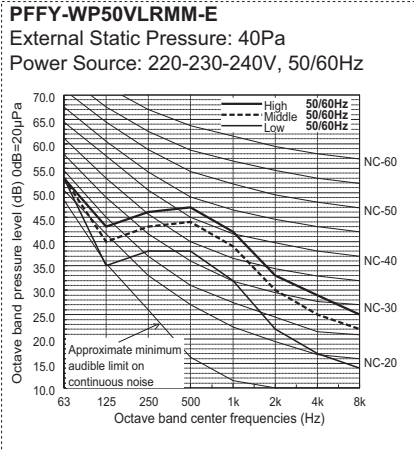
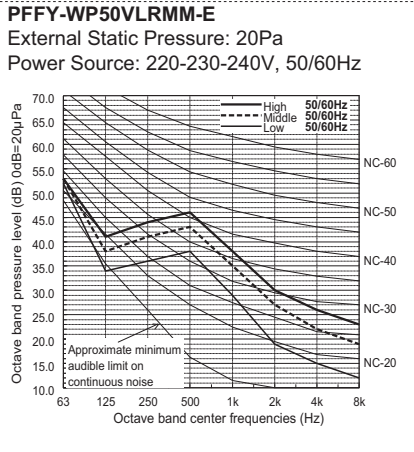
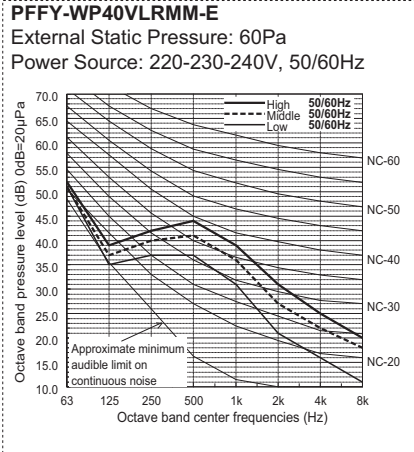
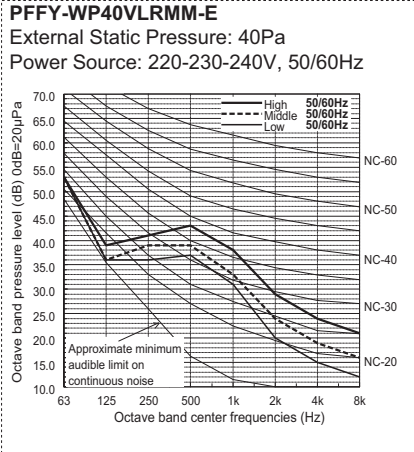
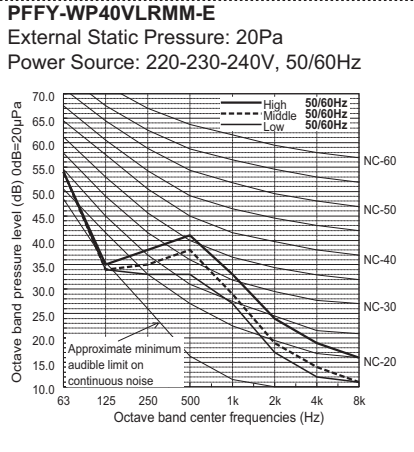


PFFY-WP32VLRMM-E
External Static Pressure: 40Pa
Power Source: 220-230-240V, 50/60Hz



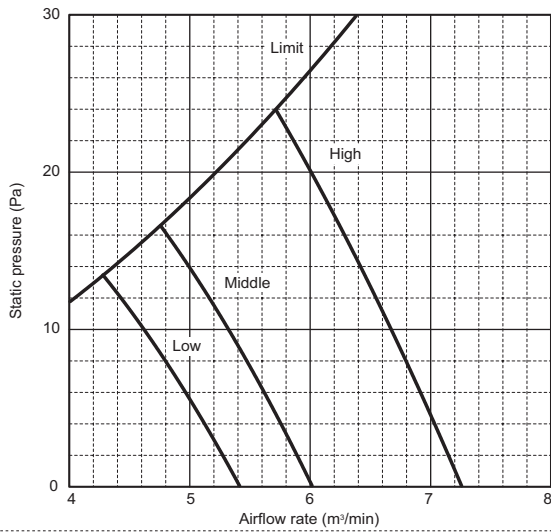
PFFY-WP32VLRMM-E
External Static Pressure: 60Pa
Power Source: 220-230-240V, 50/60Hz





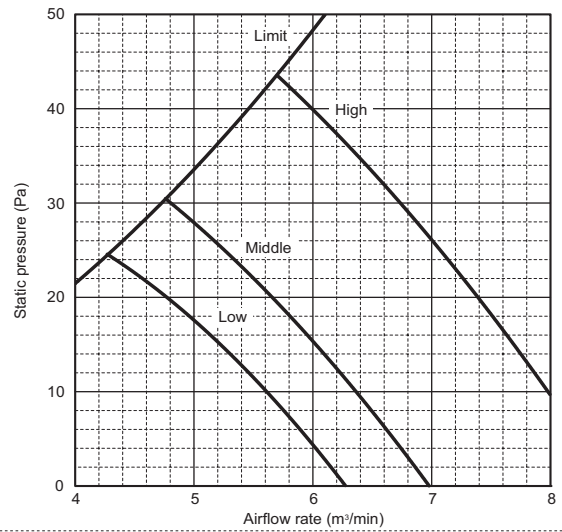
PFFY-WP20VLRMM-E

External static pressure : 20Pa
Power source : 220-230-240V, 50/60Hz



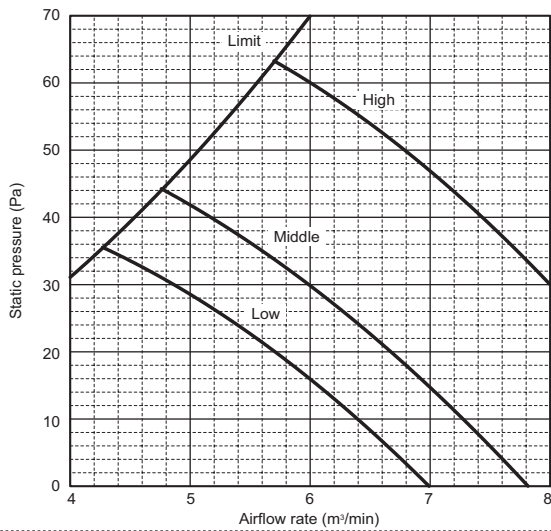
PFFY-WP20VLRMM-E

External static pressure : 40Pa
Power source : 220-230-240V, 50/60Hz



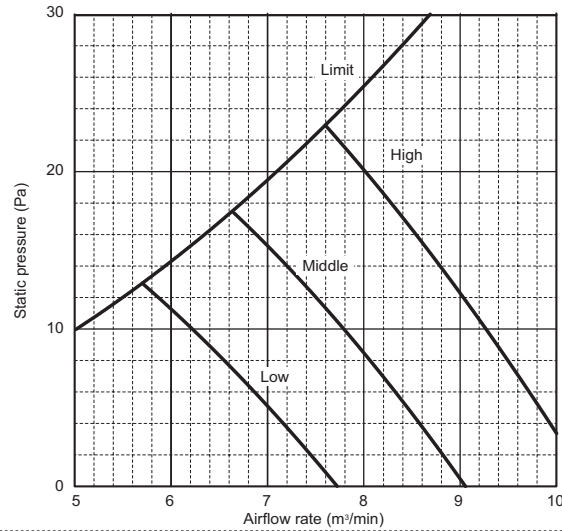
PFFY-WP20VLRMM-E

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



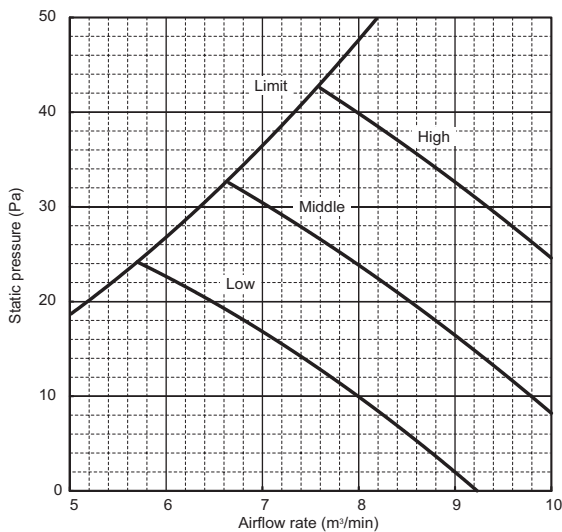
PFFY-WP25VLRMM-E

External static pressure : 20Pa
Power source : 220-230-240V, 50/60Hz



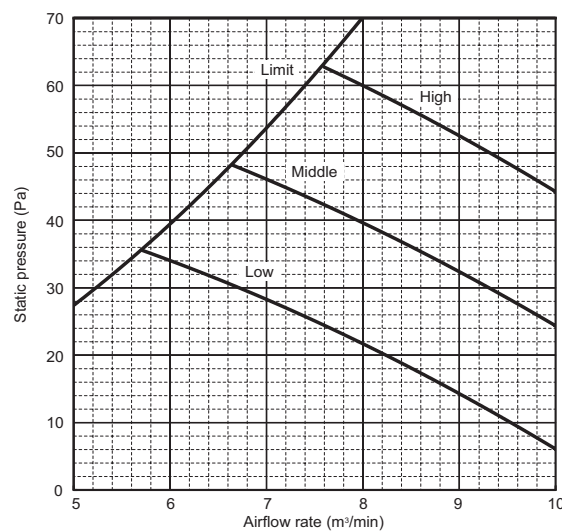
PFFY-WP25VLRMM-E

External static pressure : 40Pa
Power source : 220-230-240V, 50/60Hz



PFFY-WP25VLRMM-E

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



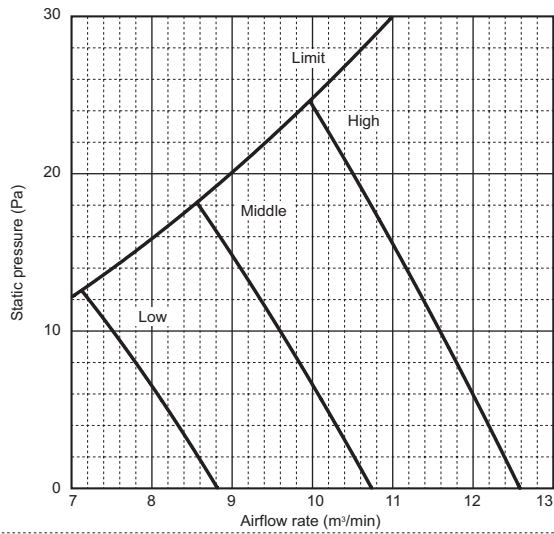
6. FAN CHARACTERISTICS CURVES

Floor standing (Concealed type)

PFFY-WP-VLRMM-E

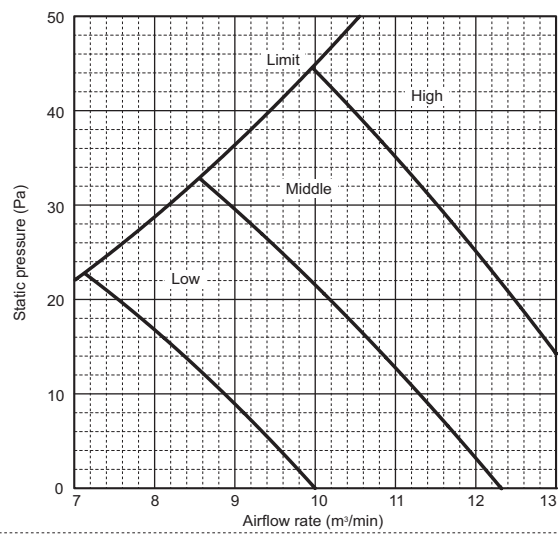
PFFY-WP32VLRMM-E

External static pressure : 20Pa
Power source : 220-230-240V, 50/60Hz



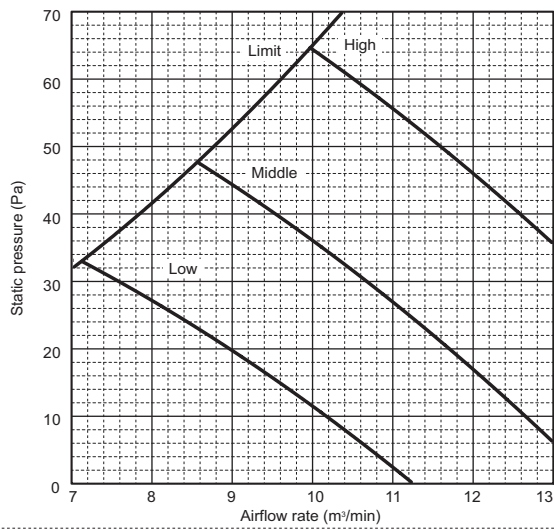
PFFY-WP32VLRMM-E

External static pressure : 40Pa
Power source : 220-230-240V, 50/60Hz



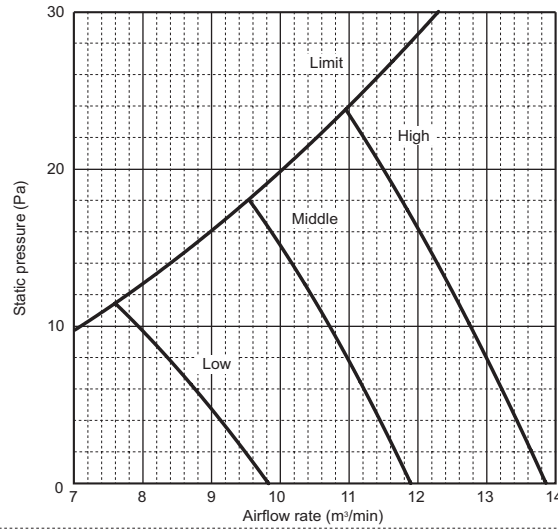
PFFY-WP32VLRMM-E

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



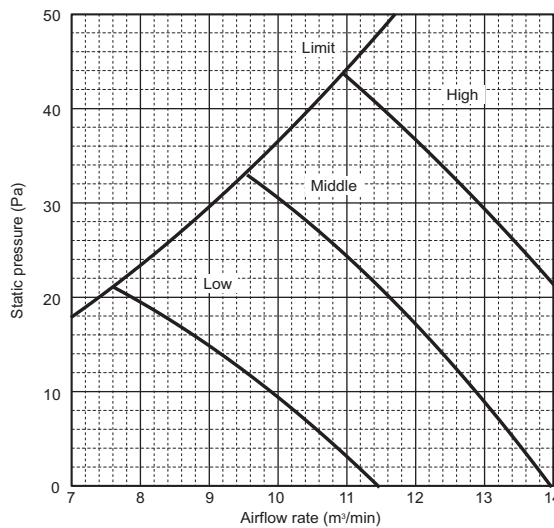
PFFY-WP40VLRMM-E

External static pressure : 20Pa
Power source : 220-230-240V, 50/60Hz



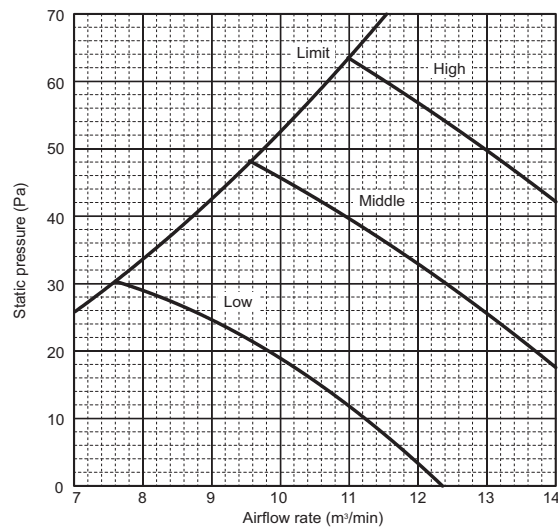
PFFY-WP40VLRMM-E

External static pressure : 40Pa
Power source : 220-230-240V, 50/60Hz



PFFY-WP40VLRMM-E

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



6. FAN CHARACTERISTICS CURVES

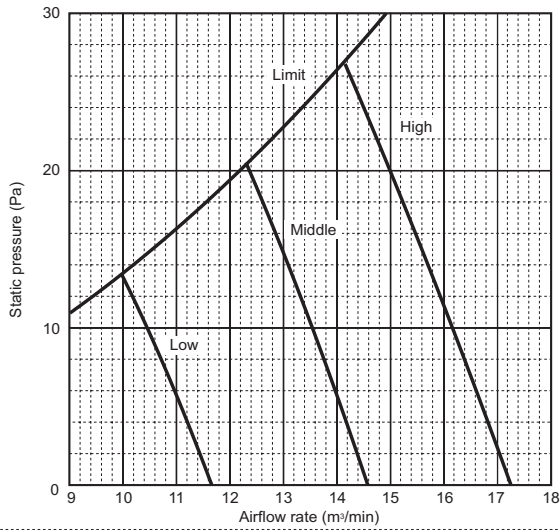
Floor standing (Concealed type)

PFFY-WP-VLRMM-E

PFFY-WP50VLRMM-E

External static pressure : 20Pa

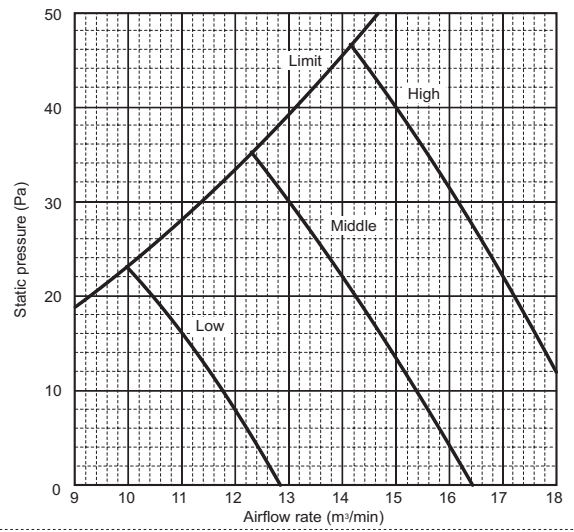
Power source : 220-230-240V, 50/60Hz



PFFY-WP50VLRMM-E

External static pressure : 40Pa

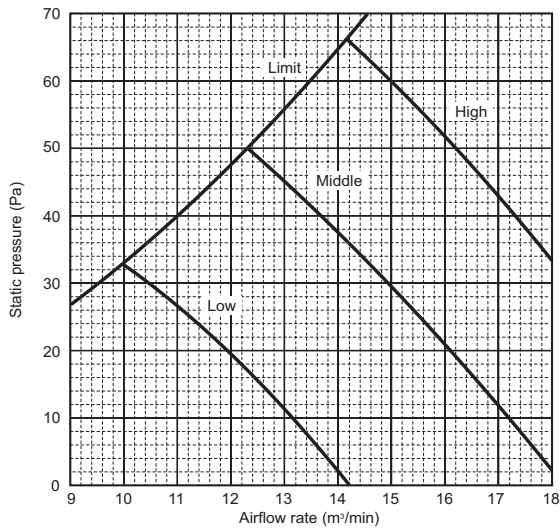
Power source : 220-230-240V, 50/60Hz



PFFY-WP50VLRMM-E

External static pressure : 60Pa

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



7. ELECTRICAL CHARACTERISTICS

Floor standing (Concealed type)

PFFY-WP-VLRMM-E	Power supply			IFM	
	Volts/Hz	Range +-10%	MCA(A)	Output (kW)	FLA(A)
PFFY-WP20VLRMM-E	220-240V/50Hz 220-240V/60Hz	Max.: 264V Min.: 198V	0.61	0.096	0.49
PFFY-WP25VLRMM-E			0.69	0.096	0.55
PFFY-WP32VLRMM-E			0.93	0.096	0.74
PFFY-WP40VLRMM-E			0.93	0.096	0.74
PFFY-WP50VLRMM-E			1.28	0.096	1.02

PFFY-WP-VLRMM-E



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

⚠ 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/R32.

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