

PMFY-P-VBM-E

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1. SPECIFICATIONS

R410A Data G6

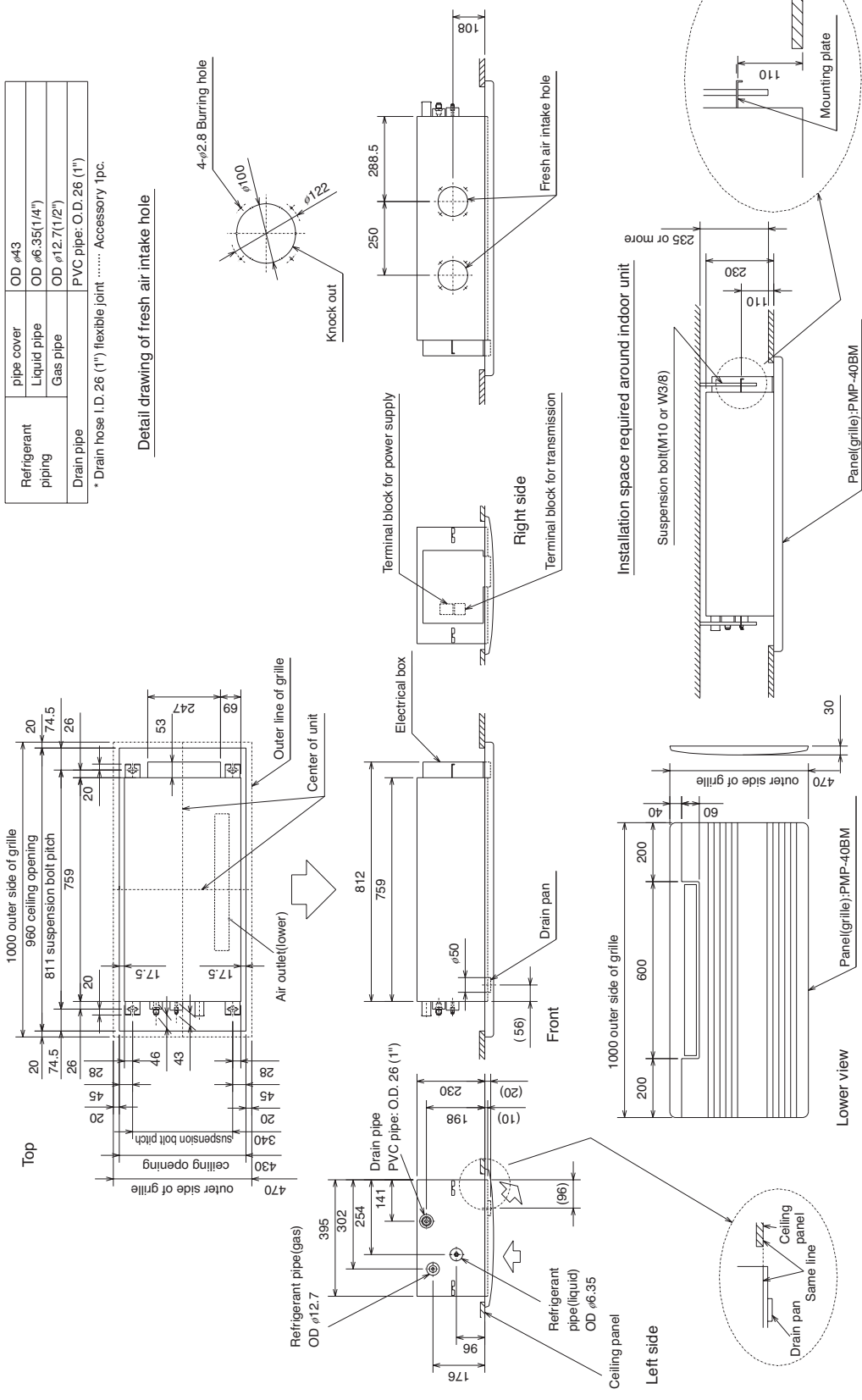
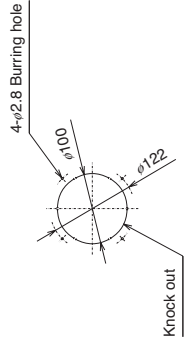
Model		PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E	
Power source		1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Cooling capacity (Nominal)	*1 kW	2.2	2.8	3.6	4.5	
	*1 kcal / h	1,900	2,400	3,100	3,900	
	*1 Btu / h	7,500	9,600	12,300	15,400	
	*2 kcal / h	2,000	2,500	3,150	4,000	
	*4 Power input kW	0.042	0.044	0.044	0.054	
*4 Current input A	0.20	0.21	0.21	0.26		
Heating capacity (Nominal)	*3 kW	2.5	3.2	4.0	5.0	
	*3 kcal / h	2,200	2,800	3,400	4,300	
	*3 Btu / h	8,500	10,900	13,600	17,100	
	*4 Power input kW	0.042	0.044	0.044	0.054	
	*4 Current input A	0.20	0.21	0.21	0.26	
External finish		Galvanized, with grey insulation sheet				
External dimension H x W x D		mm				
		230 x 812 x 395				
Net weight		in.				
		9-1/16 x 32 x 15-9/16				
Net weight		kg (lb)				
		14 (31)				
Decoration panel	Model	PMP-40BM	PMP-40BM	PMP-40BM	PMP-40BM	
	External finish	MUNSELL (0.98Y 8.99/0.63)				
	Dimension	mm				
	H x W x D	30 x 1,000 x 470				
	Net Weight	in.				
		1-3/16 x 39-3/8 x 18-9/16				
		kg (lb)				
		3 (7)				
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity	Line flow fan x 1				
	External static press.	Pa		0		
		mmH ₂ O		0		
	Motor type	1-phase induction motor				
	Motor output	kW				
			0.028			
	Driving mechanism	Direct-driven by motor				
Airflow rate (Low-Mid-High)	m ³ / min	6.5 - 7.2 - 8.0 - 8.7	7.3 - 8.0 - 8.6 - 9.3	7.3 - 8.0 - 8.6 - 9.3	7.7 - 8.7 - 9.7 - 10.7	
	L / s	108 - 120 - 133 - 145	122 - 133 - 143 - 155	122 - 133 - 143 - 155	128 - 145 - 162 - 178	
	cfm	230 - 254 - 283 - 307	258 - 283 - 304 - 328	258 - 283 - 304 - 328	272 - 307 - 343 - 378	
Sound pressure level (Low-Mid-High) (measured in anechoic room)	dB <A>	27 - 30 - 33 - 35	32 - 34 - 36 - 37	32 - 34 - 36 - 37	33 - 35 - 37 - 39	
Insulation material		Polyester sheet				
Air filter		PP honeycomb fabric				
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) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare
		mm (in.)	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare
	Gas (R410A) (R22, R407C)	mm (in.)	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare
Field drain pipe size		mm (in.)				
		O.D. 26 (1)				
Drawing	External	IU-BH01-C184				
	Wiring	IU-RG79-A671				
	Refrigerant cycle					
Standard attachment	Document	Installation Manual, Instruction Book				
	Accessory	Drain hose I.D. 26 (1) (flexible joint)				
Remark	Optional parts					
	Decoration panel	PMP-40BM	PMP-40BM	PMP-40BM	PMP-40BM	
	*PMFY-P-VBM-E should used together with PMP-40BM					
Installation		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
Note :		*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 ³ /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.						
* Due to continuing improvement, above specification may be subject to change without notice.						
*4 The values are measured at the rated external static pressure.						
*Above specification data is subject to rounding variation.						

Ref.: Spec_PMFY-P20VBM-E

Refrigerant piping	pipe cover	OD φ43
	Liquid pipe	OD φ6.35(1/4")
	Gas pipe	OD φ12.7(1/2")
Drain pipe	PVC pipe: O.D. 26 (1")	

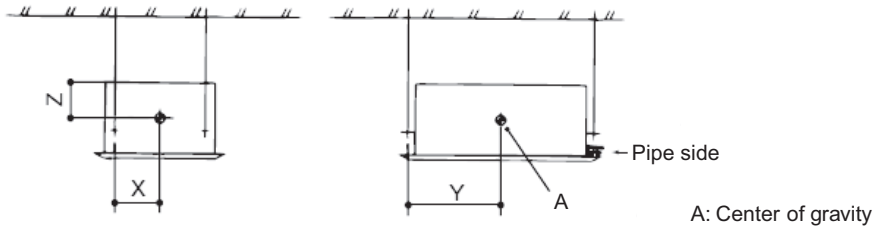
* Drain hose I.D. 26 (1") flexible joint Accessory 1pc.

Detail drawing of fresh air intake hole



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PMFY-P20,25,32,40VBM-E

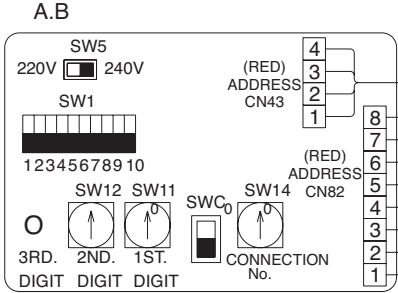
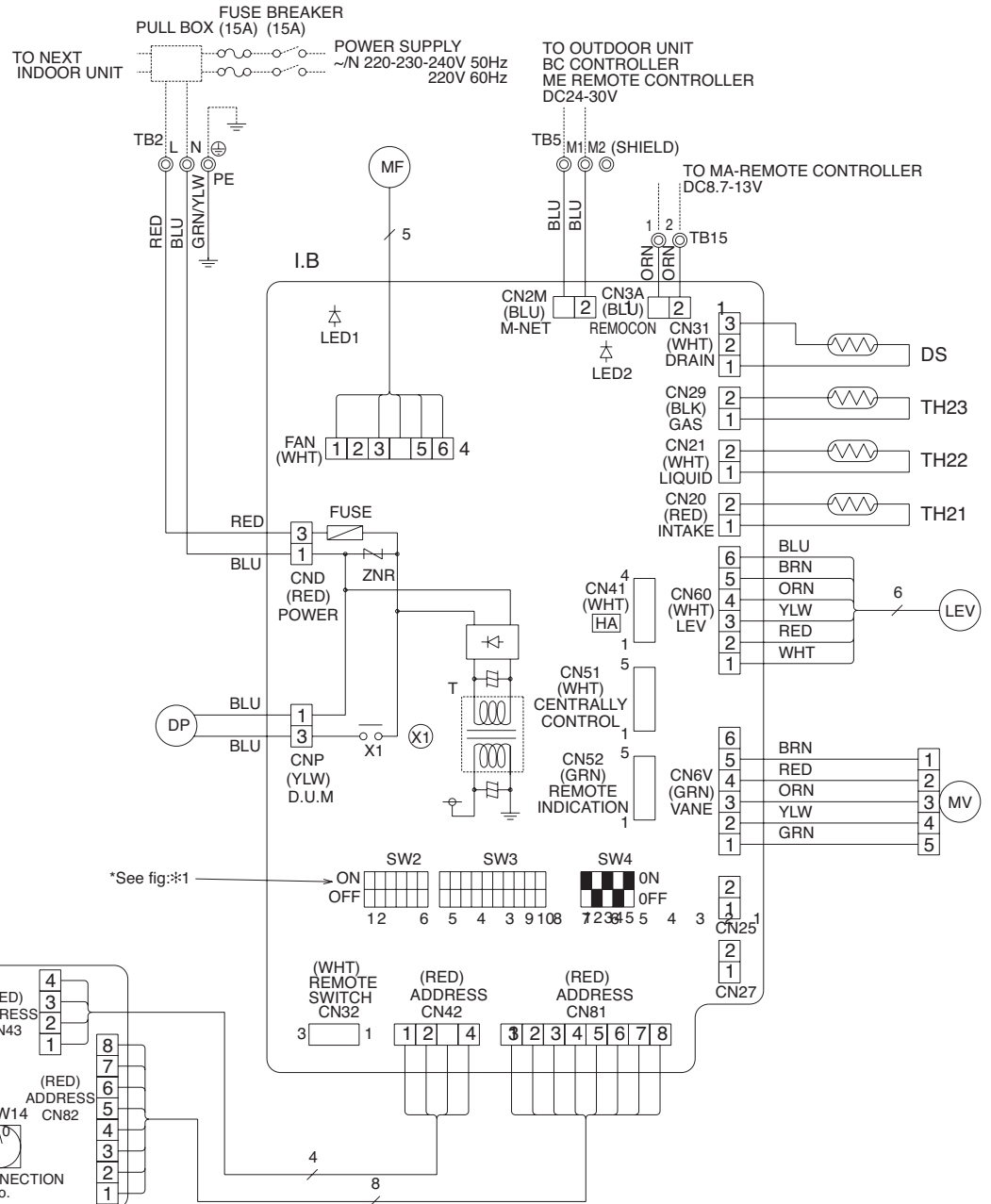


(mm)[in]

Model name	X	Y	Z
PMFY-P20VBM-E	165 [6-1/2]	390 [15-3/8]	130 [5-1/8]
PMFY-P25VBM-E	165 [6-1/2]	390 [15-3/8]	130 [5-1/8]
PMFY-P32VBM-E	165 [6-1/2]	390 [15-3/8]	130 [5-1/8]
PMFY-P40VBM-E	165 [6-1/2]	390 [15-3/8]	130 [5-1/8]

PMFY-P20,25,32,40VBM-E

Draw. : IU-RG79-A671



<SYMBOL EXPLANATION>

SYMBOL	NAME	SYMBOL	NAME
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR
CN25	HUMIDIFIER	MV	VANE MOTOR
CN27	DAMPER	DP	DRAIN WATER LIFTING-UP MACH.
CN32	CONNECTOR	DS	DRAIN SENSOR
CN41	HA TERMINAL-A	TB2	TERMINAL BLOCK
CN51	CENTRALLY CONTROL	TB5	TERMINAL BLOCK
CN52	REMOTE INDICATION	TB15	TERMINAL BLOCK
SW2	SWITCH	TH21	THERMISTOR
SW3	SWITCH	TH22	THERMISTOR
SW4	SWITCH	TH23	THERMISTOR
ZNR	VARISTOR	LEV	LINEAR EXPANSION VALVE
FUSE	FUSE(6.3A/250V)		
X1	AUX.RELAY (DRAIN PUMP)		
T	TRANSFORMER		
LED1	POWER SUPPLY(I.B)		
LED2	POWER SUPPLY(I.B)		

SYMBOL	NAME
A.B	CIRCUIT BOARD
SW1	MODE SELECTION
SW5	VOLTAGE SELECTION
SW11	SWITCH
SW12	SWITCH
SW14	SWITCH

<:*1>

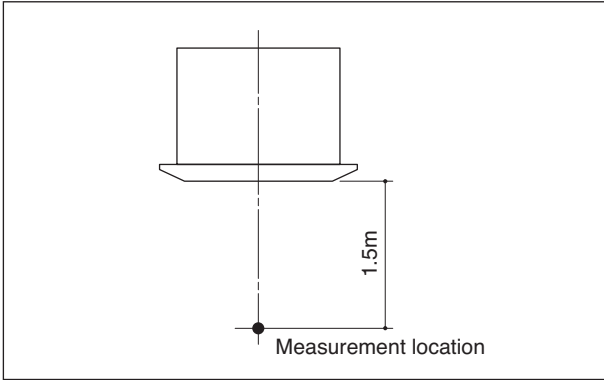
MODELS	SW2	SW3
P20	ON OFF [Diagram]	ON OFF [Diagram]
P25	ON OFF [Diagram]	ON OFF [Diagram]
P32	ON OFF [Diagram]	ON OFF [Diagram]
P40	ON OFF [Diagram]	ON OFF [Diagram]

- NOTES:
- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
 - Symbol [S] of TB5 is the shield wire connection.
 - Symbols used in wiring diagram above are, :terminal block, :connector.
 - The setting of the SW2 dip switches differs in the capacity for the detail, see the table <:*1>.
 - Please set the switch SW5 according to the power supply voltage. Set SW5 to 240V side when the power supply is 230 and 240 volts. When the power supply is 220 volts, set SW5 to 220V side.

5. SOUND LEVELS

5-1. Sound levels

PMFY-P-VBM-E



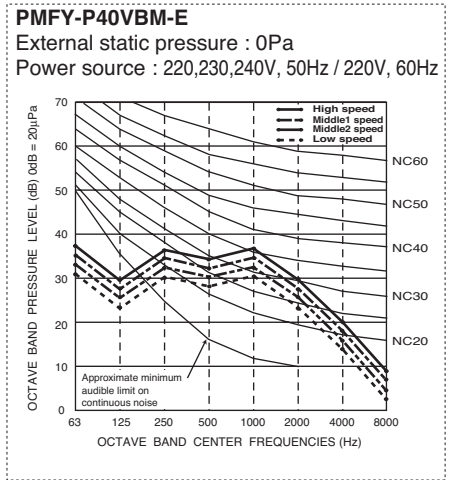
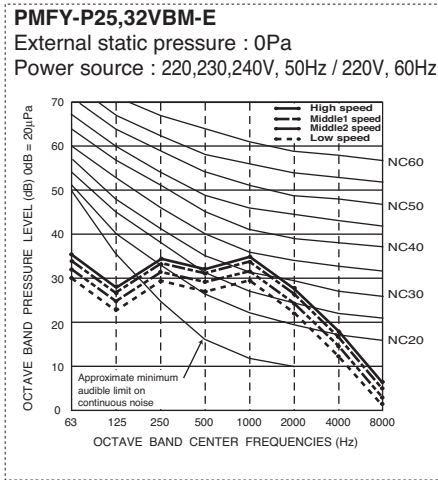
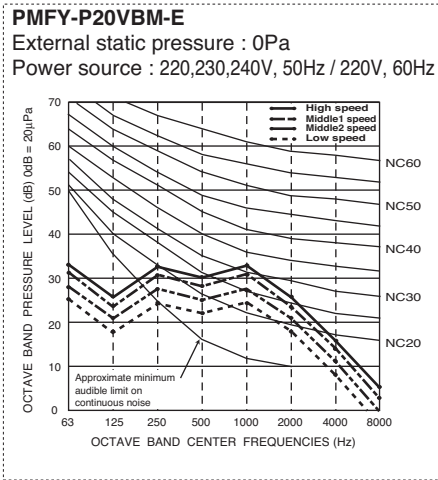
Sound level at anechoic room : Low-Middle2-Middle1-High

	Sound level dB (A)
PMFY-P20VBM-E	27-30-33-35
PMFY-P25VBM-E	32-34-36-37
PMFY-P32VBM-E	
PMFY-P40VBM-E	33-35-37-39

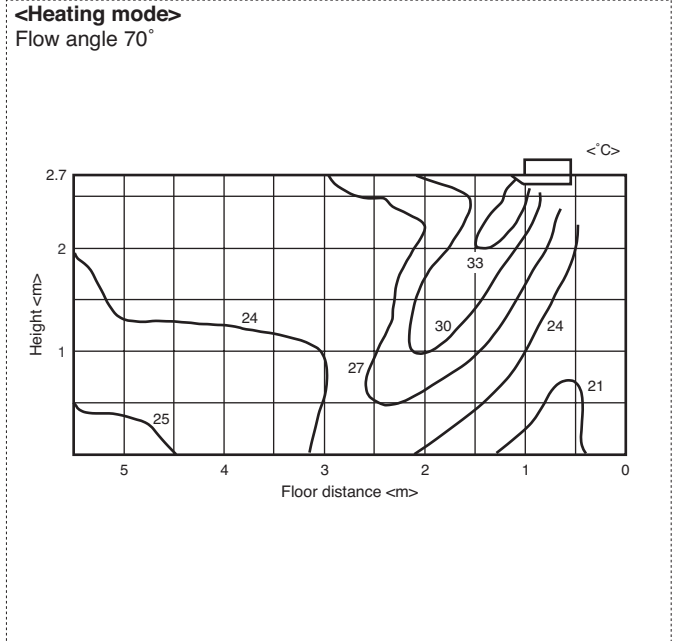
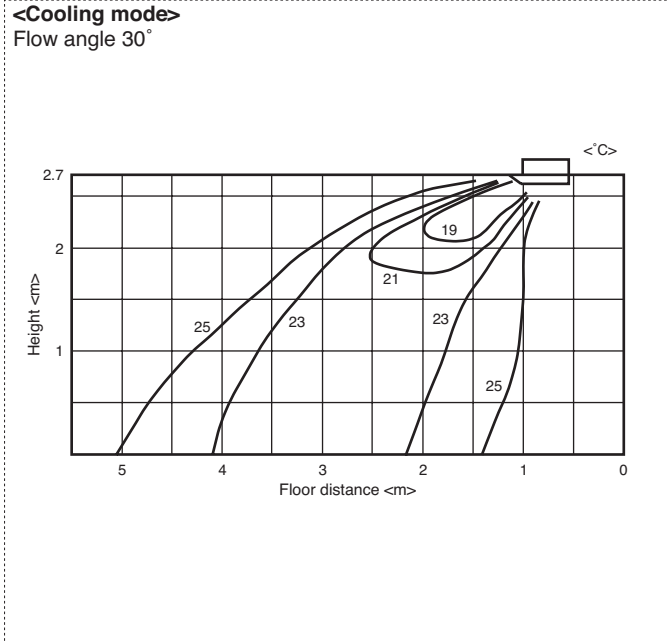
* Measured in anechoic room.

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5-2. NC curves

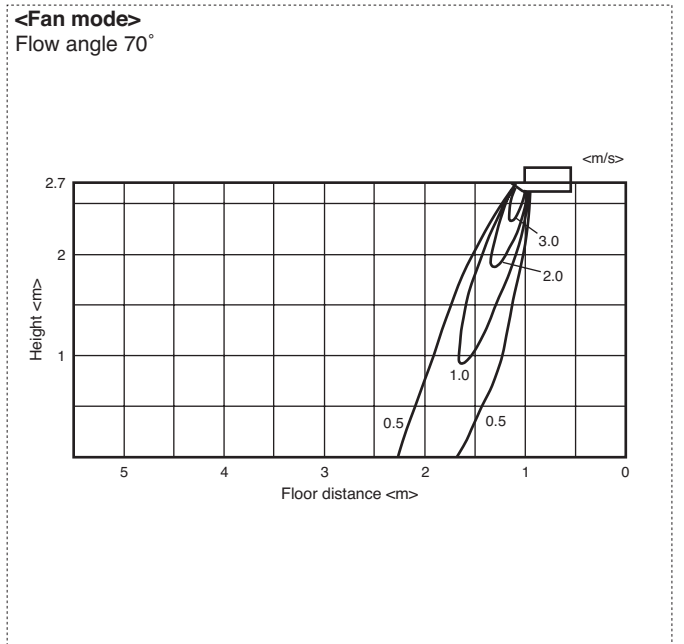
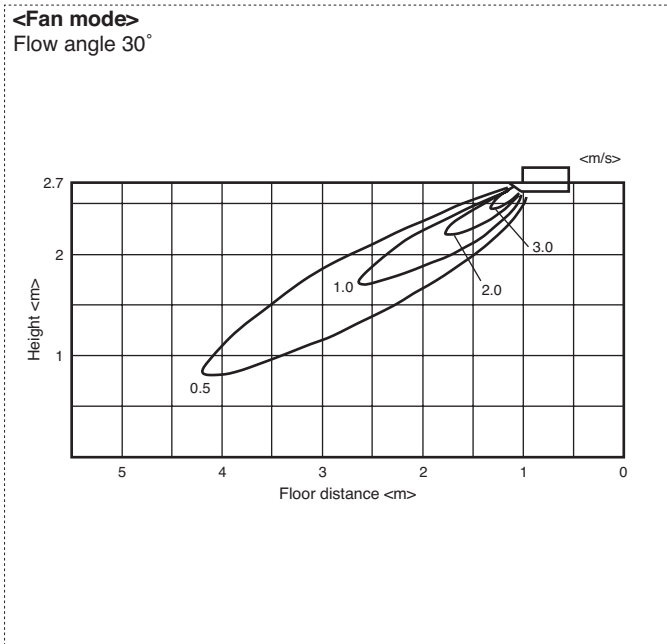


6-1. Temperature distributions



Note : These figures show typical temperature distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

6-2. Airflow distributions



Note : These figures show typical airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

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