



PMFY-P-VBM-E

PMFY-P-VBM-E

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- H
- V_a
- V_b
- BC
- CT

Cassette ceiling	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
	0.8HP	1.0HP	1.3HP	1.6HP	2.0HP	2.5HP	2.8HP	3.2HP	4.0HP	5.0HP	5.6HP	8.0HP	10.0HP
PMFY-P-VBM-E	●	●	●	●									

1. SPECIFICATIONS

R410A Data G4

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																				
		kcal / h	1,900	2,400	3,100	3,900																				
		Btu / h	7,500	9,600	12,300	15,400																				
	*2	kcal / h	2,000	2,500	3,150	4,000																				
		Power input	kW	0.042	0.044	0.044	0.054																			
		Current input	A	0.20	0.21	0.21	0.26																			
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																				
		Power input	kW	0.042	0.044	0.044	0.054																			
		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																							
		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 H x W x D	mm	30 x 1,000 x 470																							
		in.	1-3/16" x 39-3/8" x 18-9/16"																							
	Net Weight	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																					
Noise 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	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	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. ø26 (1")																							
Drawing	External		IU-BH01-C184																							
	Wiring		IU-RG79-A671																							
	Refrigerant cycle																									
Standard attachment	Document		Installation Manual, Instruction Book																							
	Accessory		Drain hose I.D. ø26 (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 : <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">*1 Nominal cooling conditions</td> <td style="width: 25%;">*2 Nominal cooling conditions</td> <td style="width: 25%;">*3 Nominal heating conditions</td> <td style="width: 25%; text-align: right;">Unit converter</td> </tr> <tr> <td>Indoor : 27° CDB/19° CWB (81° FDB/66° FWB)</td> <td>27° CDB/19.5° CWB (81° FDB/67° FWB)</td> <td>20° CDB (68° FDB)</td> <td>kcal/h = kW x 860</td> </tr> <tr> <td>Outdoor : 35° CDB (95° FDB)</td> <td>35° CDB (95° FDB)</td> <td>7° CDB/6° CWB (45° FDB/43° FWB)</td> <td>Btu/h = kW x 3,412</td> </tr> <tr> <td>Pipe length : 7.5 m (24-9/16 ft)</td> <td>5 m (16-3/8 ft)</td> <td>7.5 m (24-9/16 ft)</td> <td>cfm = m³/min x 35.31</td> </tr> <tr> <td>Level difference : 0 m (0 ft)</td> <td>0 m (0 ft)</td> <td>0 m (0 ft)</td> <td>lb = kg / 0.4536</td> </tr> </table> <p>* Nominal conditions *1, *3 are subject to JIS B8615-1. * Due to continuing improvement, above specification may be subject to change without notice.</p>							*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
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Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536																							
Ref.: Spec_PMFY-P20VBM-E																										

2. EXTERNAL DIMENSIONS

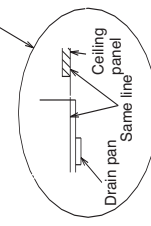
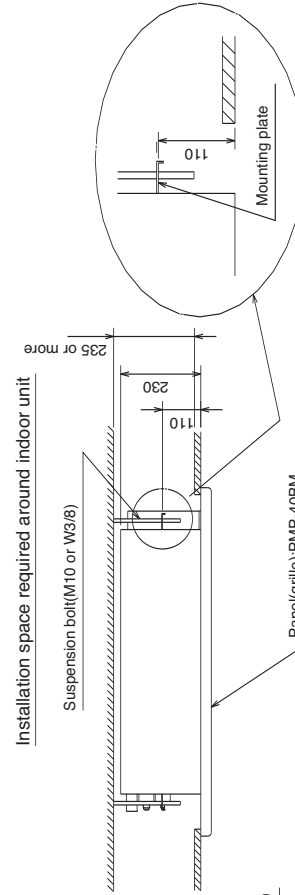
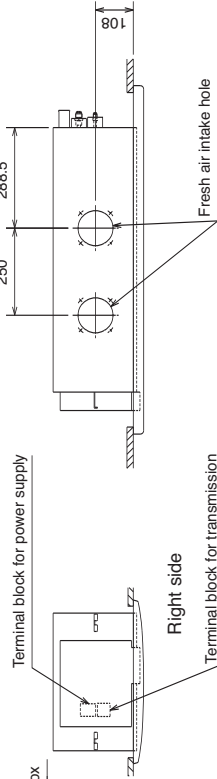
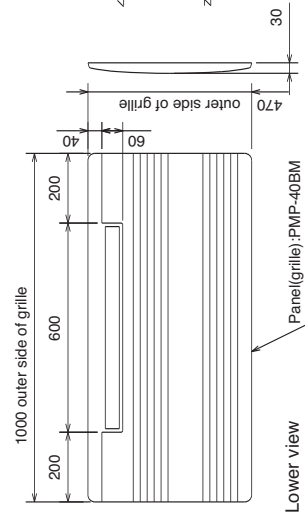
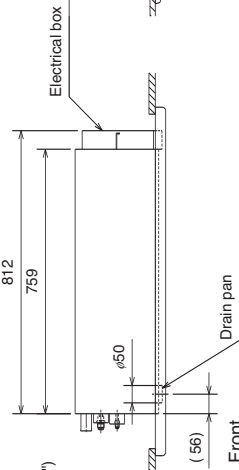
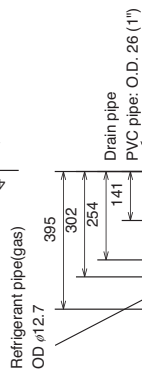
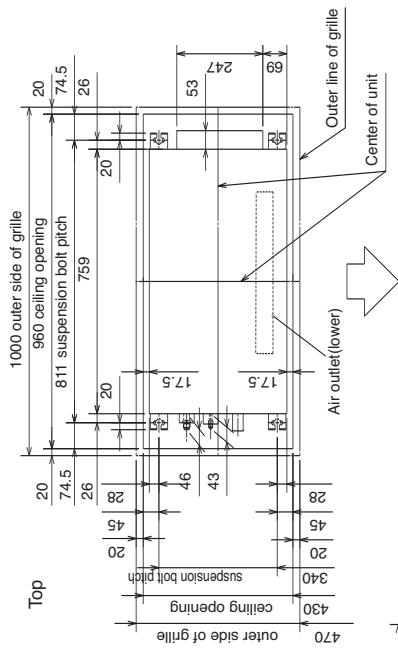
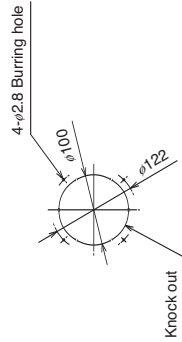
PMFY-P20,25,32,40VBM-E

Draw. : IU-BH01-C184
Unit : mm

Refrigerant piping	pipe cover OD ϕ 43
Drain pipe	Liquid pipe OD ϕ 6.35(1/4")
	Gas pipe OD ϕ 12.7(1/2")
	PVC pipe: O.D. 26 (1")

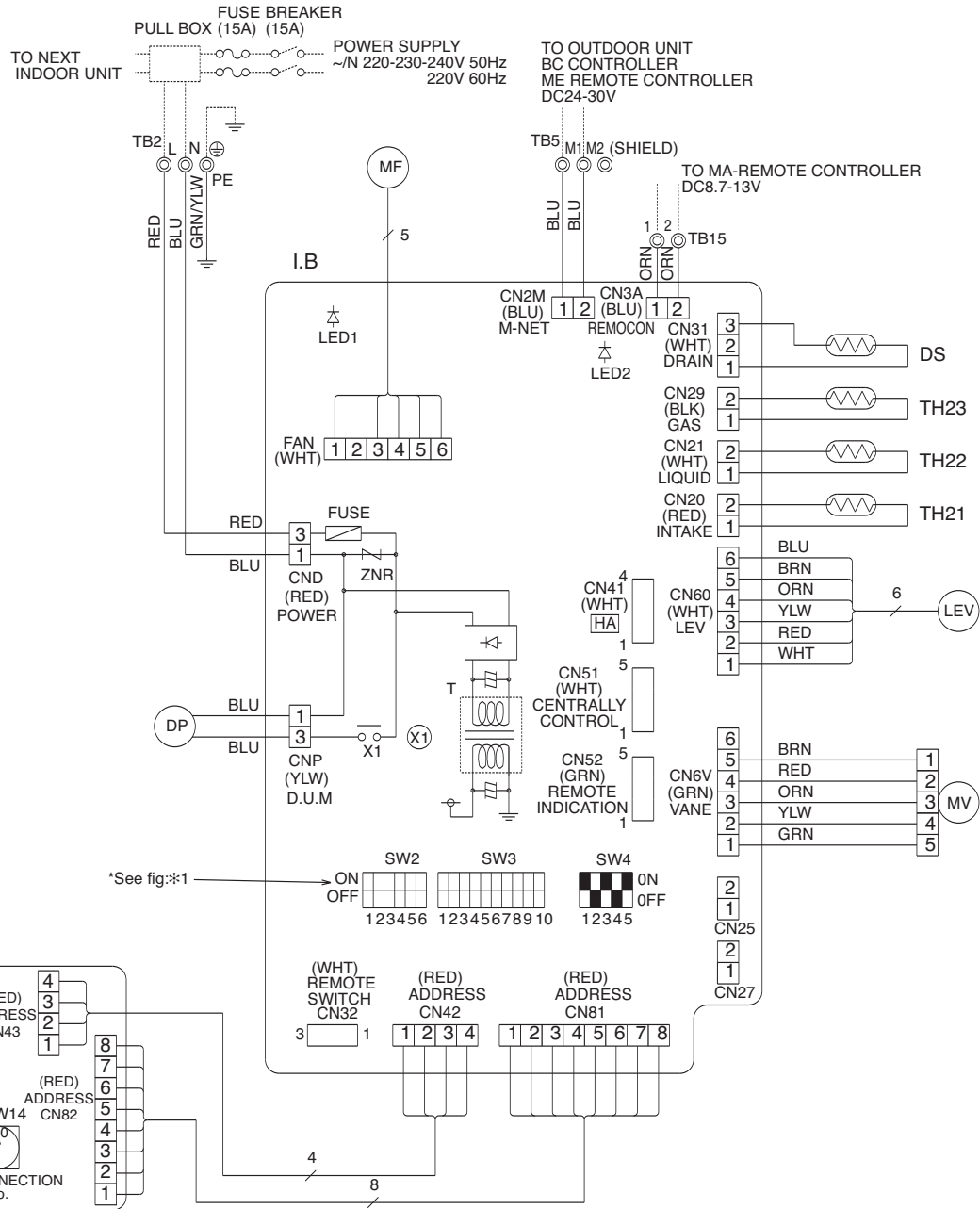
* Drain hose I.D. 26 (1") flexible joint Accessory 1pc.

Detail drawing of fresh air intake hole



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

Drw. : 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	VARIATOR	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)		
A.B	CIRCUIT BOARD		
SW1	SWITCH		
SW5	SWITCH		
SW11	SWITCH		
SW12	SWITCH		
SW14	SWITCH		

<*:1>

MODELS	SW2	SW3
P20	ON OFF 123456	ON OFF 12345678910
P25	ON OFF 123456	ON OFF 12345678910
P32	ON OFF 123456	ON OFF 12345678910
P40	ON OFF 123456	ON OFF 12345678910

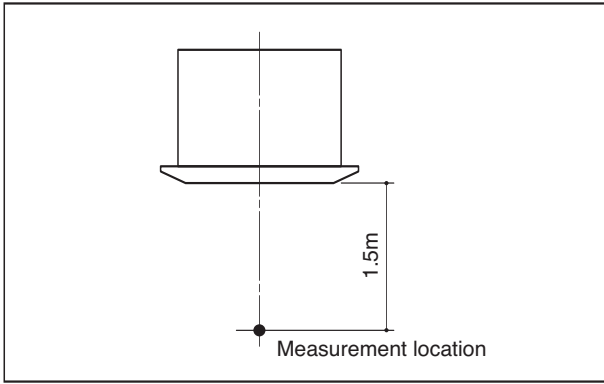
NOTES:

- 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.

4. SOUND LEVELS

4-1. Sound levels

PMFY-P-VBM-E

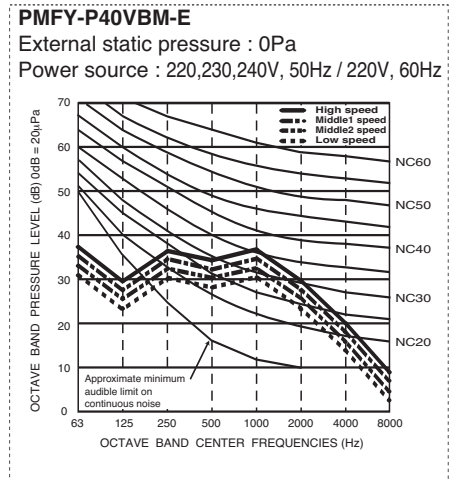
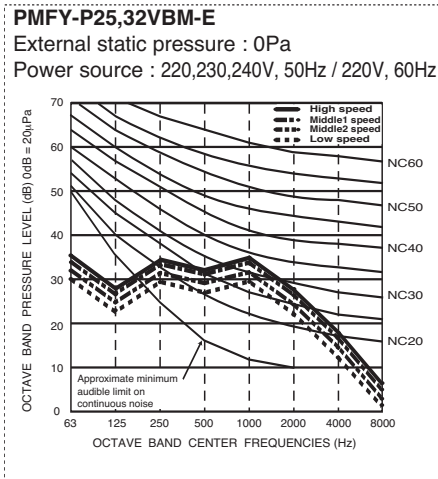
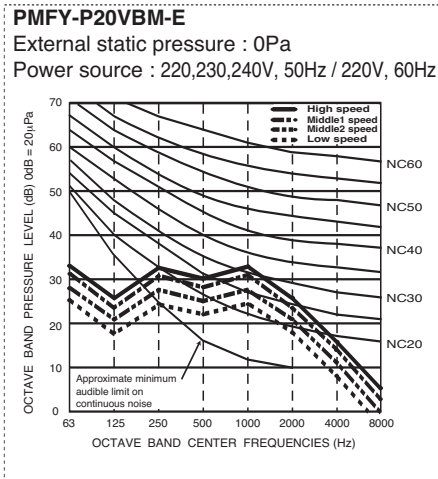


Sound level at anechoic room : Low-Middle2-Middle1-High

	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

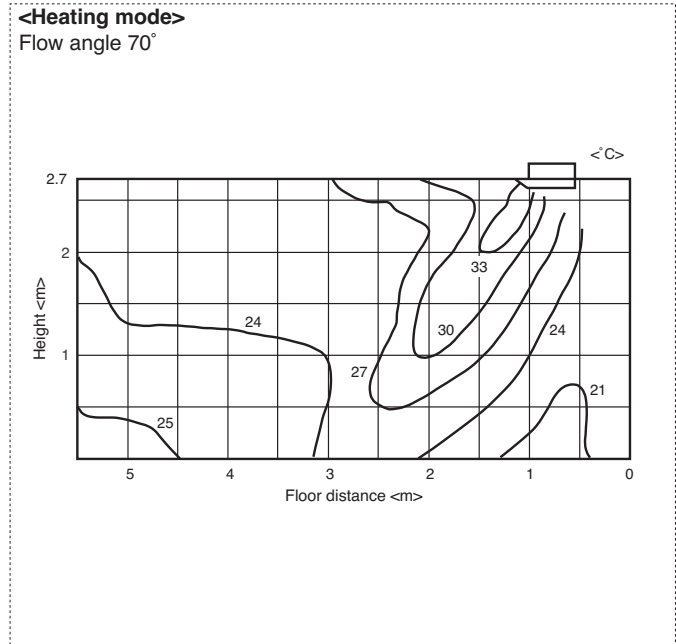
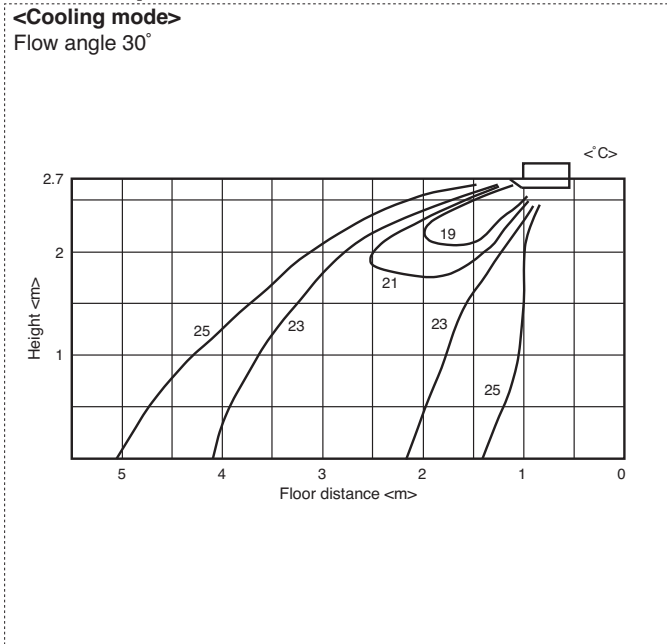
* Measured in anechoic room.

4-2. NC curves



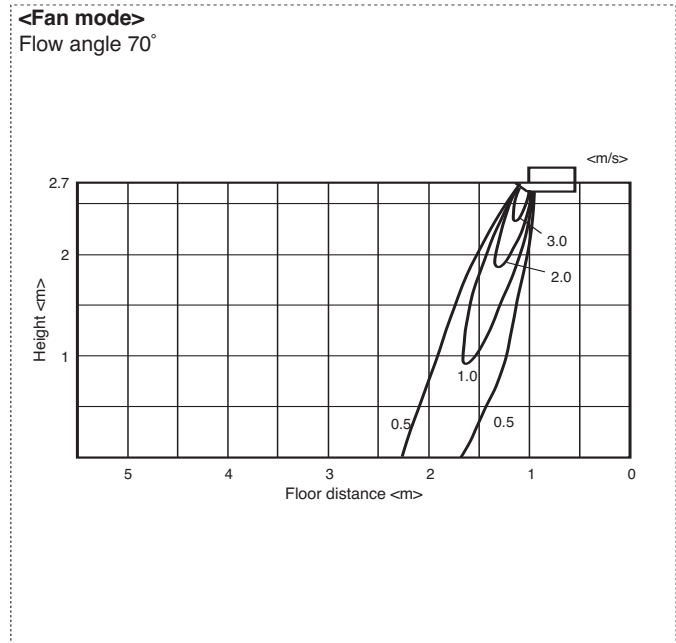
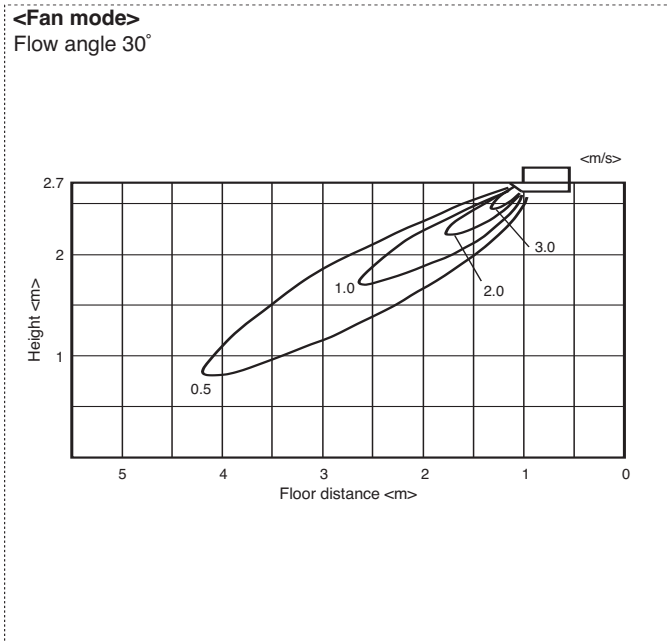
A
B
C
D
E
F
G
H
V_a
V_b
BC
C

5-1. 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.

5-2. 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.