



Air Conditioners

Technical Data

4-way blow ceiling mounted cassette



EEDEN12-100

FFQ-B9V

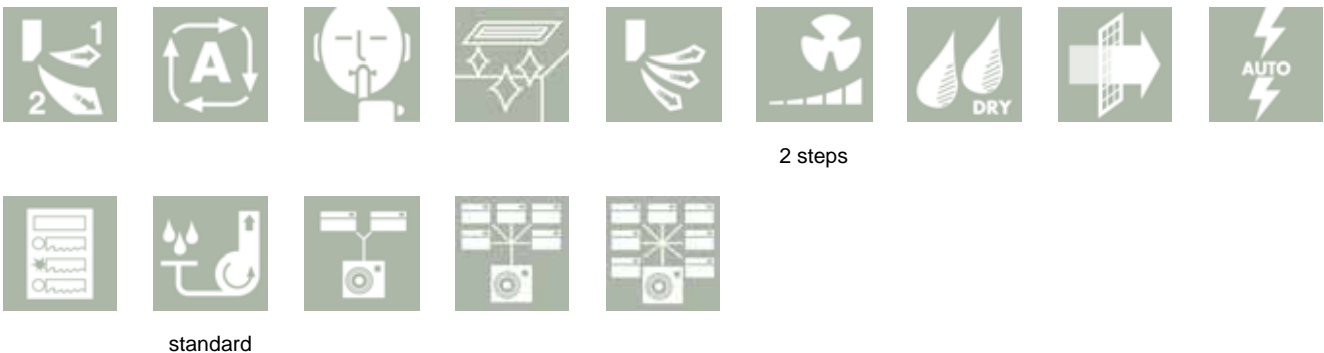
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FFQ-B9V

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1 Features

- Seasonal efficiency, optimized for all seasons.
- Seasonal efficiency gives an indication on how efficient an air conditioner operates over an entire heating or cooling season.
- Compact casing (575mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Modern style decoration panel in white (RAL9010)
- Whisper quiet operation: down to 24.5dBA sound pressure level
- Comfortable vertical auto swing ensures draughtfree operation and prevents ceiling soiling
- Fresh air intake for healthy living
- Since the flaps can move to a 0 degree position, virtually no draught can be experienced
- Possibility to shut 1 or 2 flaps for easy installation in corners
- Easy maintenance: switch box can be reached by simply removing the suction grille
- Standard drain pump with 750mm lift
- No optional adapter needed for DIII-connection: standard plug and play connection with centralised control systems, intelligent touch controller, intelligent manager, ...



2 Specifications

2-1 Technical Specifications				FFQ25B9V	FFQ35B9V	FFQ50B9V	FFQ60B9V	
Cooling capacity	Nom.	kW		2.5 (1)	3.4 (1)	4.7 (1)	5.8 (1)	
Heating capacity	Nom.	kW		3.2 (2)	4.5 (2)	5.5 (2)	7.0 (2)	
Casing	Colour			Unpainted				
	Material			Galvanised steel				
Dimensions	Unit	Height/Width/Depth		mm				
	Packed unit	Height/Width/Depth		mm				
Weight	Unit		kg	17.5				
	Packed unit		kg	21				
Decoration panel	Model			BYFQ60BW1				
	Colour			Pure White (RAL 9010)				
	Dimensions	Height/Width/Depth		mm				
	Weight		kg	2.7				
Heat exchanger	Rows	Quantity		2				
	Fin pitch		mm	1.5				
	Face area		m ²	0.269				
	Stages	Quantity		10				
	Tube type			ø7 Hi-XSS				
Fan	Type			Turbo fan				
	Quantity			1				
	Air flow rate	Cooling	High	m ³ /min	9.0	10.0	12.0	15.0
			Low	m ³ /min	6.5		8.0	10.0
Fan motor	Quantity			1				
	Drive			Direct drive				
	Output	High	W	55				
Sound power level	Cooling	High	dBA	46.5	49	53	58	
Sound pressure level	Cooling	High/Low	dBA	29.5/24.5	32/25	36/27	41/32	
	Heating	Super high	dBA	-				
Refrigerant	Type			R-410A				
Piping connections	Liquid	Type/OD	mm	Flare connection/6.35				
	Gas	Type/OD	mm	Flare connection/9.52		Flare connection/12.7		
	Drain			VP20 (I.D. 20/O.D. 26)				
Temperature control			Microprocessor thermostat for cooling and heating					
Safety devices	Item	01/02		Fuse/Fan motor thermal protection				

Standard Accessories : Washer for hanger bracket;

Standard Accessories : Screws;

Standard Accessories : Clamps;

Standard Accessories : Sealing pads;

Standard Accessories : Clamp metal;

Standard Accessories : Drain hose;

Standard Accessories : Paper pattern for installation;

Standard Accessories : Installation manual;

Standard Accessories : Operation manual;

Standard Accessories : Washer fixing plate;

Standard Accessories : Insulation for fitting;

2-2 Electrical Specifications				FFQ25B9V	FFQ35B9V	FFQ50B9V	FFQ60B9V
Power supply	Name			V1			
	Phase			1~			
	Frequency		Hz	50			
	Voltage		V	220-240			
Current - 60Hz	Nominal running current		A				

Notes

(1) Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m

(3) Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

(4) Nominal cooling and heating capacity is depending on the outdoor unit type

(5) PED unit category: Art3§3: excluded from scope of PED due to article 1, item 3.6 of 97/23/EC

3 Safety device settings

3 - 1 Safety Device Settings

FFQ-B9V

Safety devices		25	35	40 ● 50	60
FFQ-B9V1B	Fuse	250V 5A	250V 5A	250V 5A	250V 5A
	Fan motor thermal protector (°C)	OFF: 130±5 ON: 83±20	OFF: 130±5 ON: 83±20	OFF: 130±5 ON: 83±20	OFF: 130±5 ON: 83±20

3D006611T

3

4 Options

4 - 1 Options

FFQ-B9V						
Options						
Item	Model		FFQ25	FFQ35	FFQ50	FFQ60
Decoration panel				BYFQ60B		
Sealing member of air discharge outlet				KDBHQ44BA60		
Panel spacer				KDBQ44B60		
Long-life filter				KAFQ441BA60		
Fresh air intake kit	Direct installation type			KDDQ44XA60		
Control systems						
Item	Model		FFQ25	FFQ35	FFQ50	FFQ60
Remote controller	Infrared	H/P		BRC7E530W		
		C/O		BRC7E531W		
	Wired			BRC1D52		
				BRC1E52A7 *3 / BRC1E52B7 *4		
Central remote controller				DCS302B51		
Unified ON/OFF controller				DCS301B51		
Schedule timer				DST301B51		
Wiring adapter for electrical appendices *2				KRP1B57		
Wiring adapter for electrical appendices *2				KRP4A53		
Wiring adapter (hour meter)				EKRP1B2		
Installation box for adapter PCB				KRP1B101		
Remote sensor				KRCS01-1		
Interface adapter for Sky Air series				DTA112B51		
Remote "On / Off" and "Forced Off" kit				EKRORO		

3TW26479-1F

Notes:
 1. All options are supplied as kit.
 *2 The "Installation box for adapter PCB" is required.
 *3 Included languages are: English, German, French, Dutch, Spanish, Italian, Greek, Portuguese, Russian, Turkish and Polish.
 *4 Included languages are: English, German, Albanian, Bulgarian, Croatian, Czech, Hungarian, Romanian, Serbian, Slovak and Slovenian.

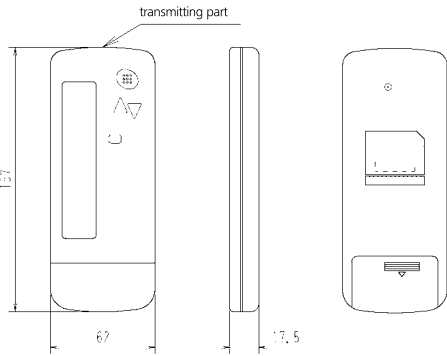
5 Dimensional drawings

5 - 1 Dimensional Drawings

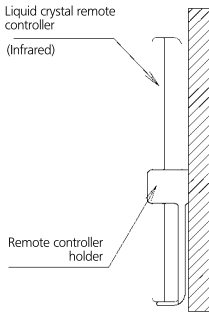
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FFQ-B9V

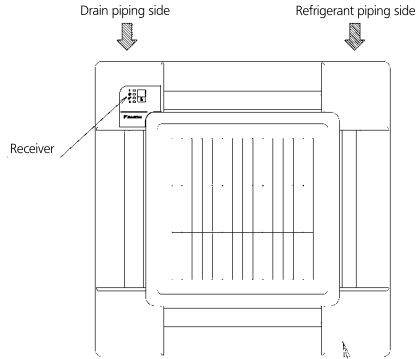
• Remote controller dimensions



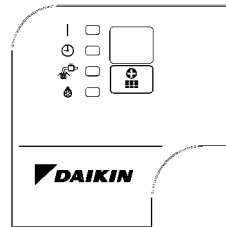
• Remote controller holder installation procedure
<Installation to wall surface>



• Receiver installation procedure



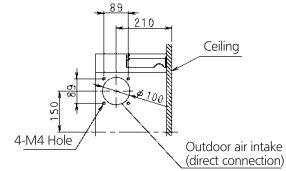
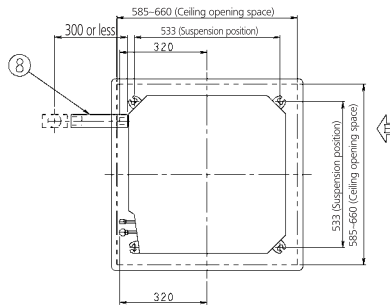
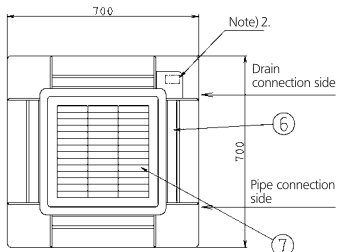
• Receiver detail



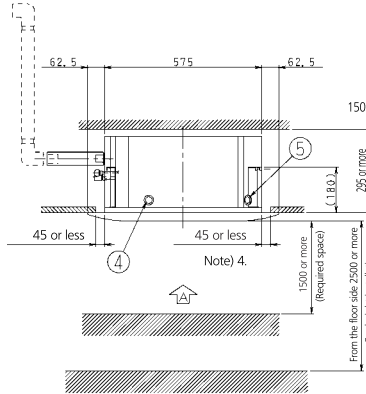
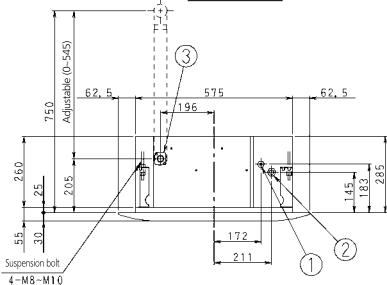
Decoration panel
(BYFQ60BW1)
(BYFQ60B7W1)
(BYFQ60B8W1)

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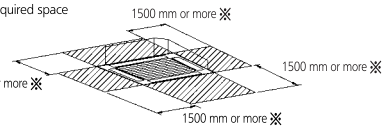
FFQ25-35B9V



B Arrow view



• Required space



※ When the discharge grille is closed, the required space is 200mm or more.

Note:

1. Sticking location for manufacturer's S label
Manufacturer's label for indoor unit: on the bell mouth inside suction grille.
Manufacturer's label for decoration panel: on the inner frame inside suction grille.
2. In case of using infrared remote controller, this position will be a signal receiver. Refer to the drawing of infrared remote controller in detail.
3. When the temperature and humidity in the ceiling exceed 30°C and RH 80% or the fresh air is inducted into the ceiling or the unit continues 24 hour operation, an additional insulation (thickness 10mm or more glasswool or polyethylene foam) is required.
4. Though the installation is acceptable up to maximum of 660mm square ceiling opening, keep the clearance of 45mm or less between the main unit and the ceiling opening so that the panel overlap allowance can be ensured.

Decoration panel

BYFQ60B8W1 White Ral 9010

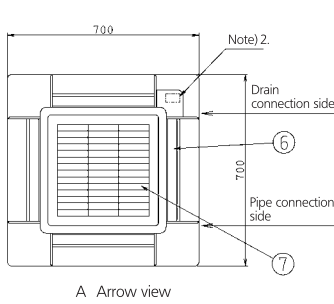
3D039003D

6

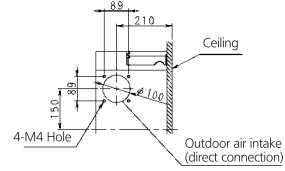
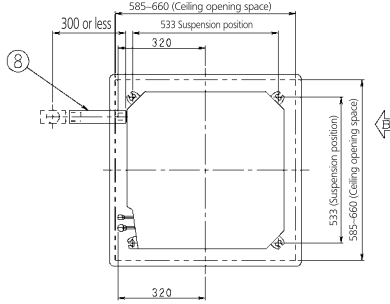
5 Dimensional drawings

5 - 1 Dimensional Drawings

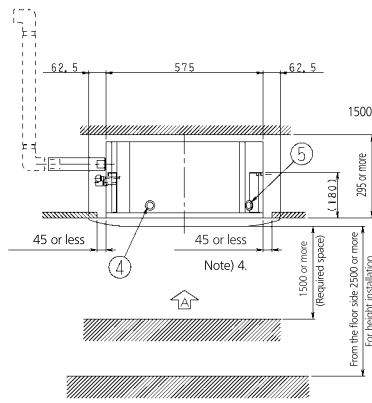
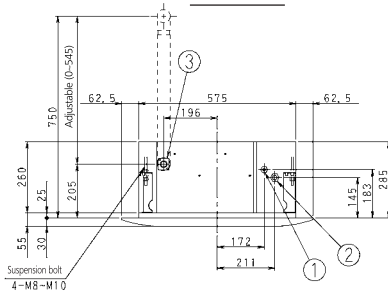
FFQ50-60B9V



A Arrow view

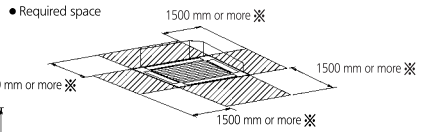


B Arrow view



Decoration panel

BYFQ60B8W1 White Ral 9010



※ When the discharge grille is closed, the required space is 200mm or more.

Note:

1. Sticking location for manufacturer's S label
Manufacturer's label for indoor unit: on the bell mouth inside suction grille.
Manufacturer's label for decoration panel: on the inner frame inside suction grille.
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Refer to the drawing of infrared remote controller in detail.
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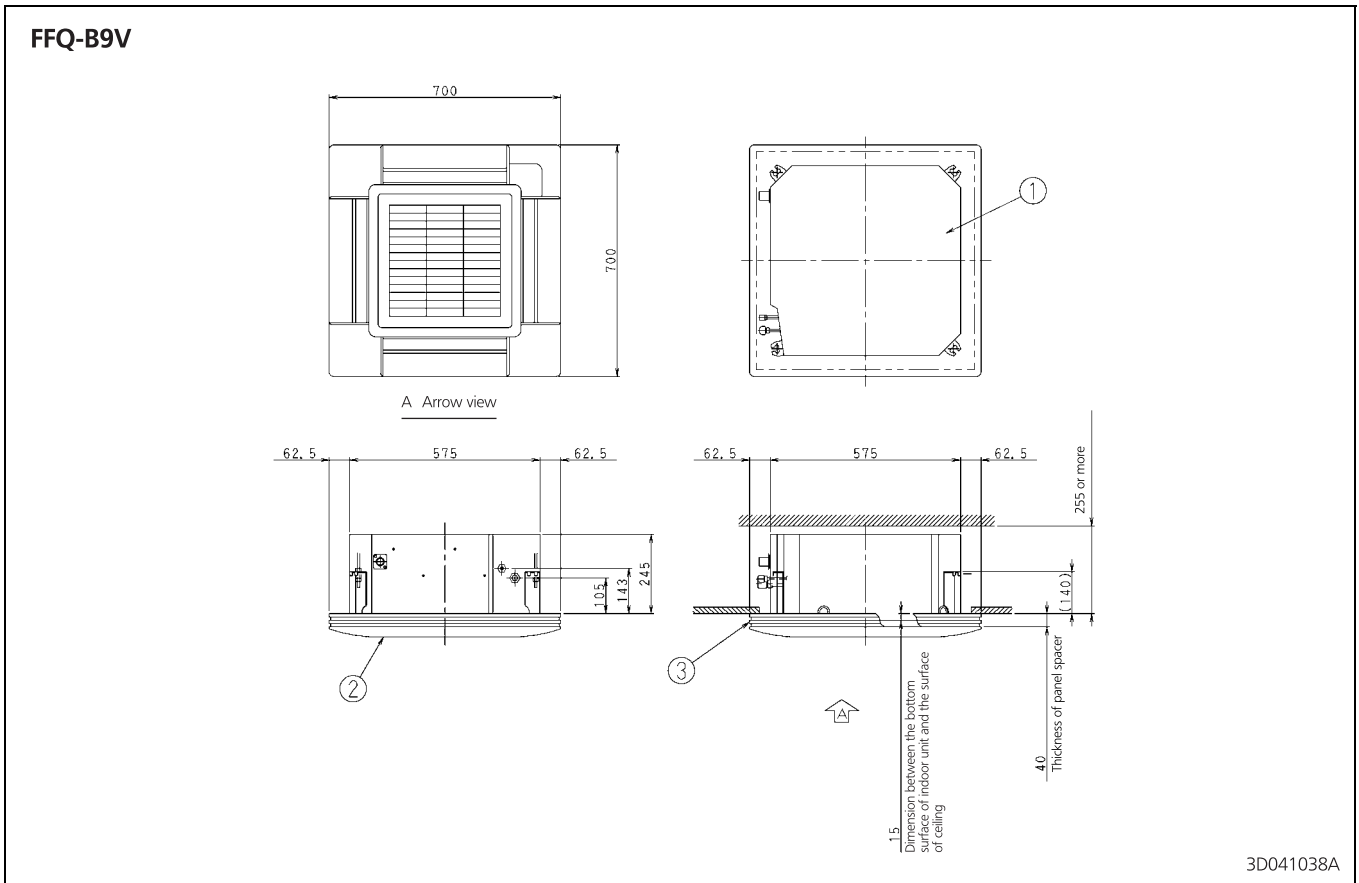
- 1 Liquid pipe connection ϕ 6.4 (Flare connection)
- 2 Gas pipe connection ϕ 12.7 (Flare connection)
- 3 Drain pipe connection VP20 (O.D. ϕ 26)
- 4 Power supply connection
- 5 Remote control code and control wiring connection
- 6 Air discharge grille
- 7 Suction grille
- 8 Drain hose (Accessory) I.D. ϕ 25 (Outlet)

3D039005E

5 Dimensional drawings

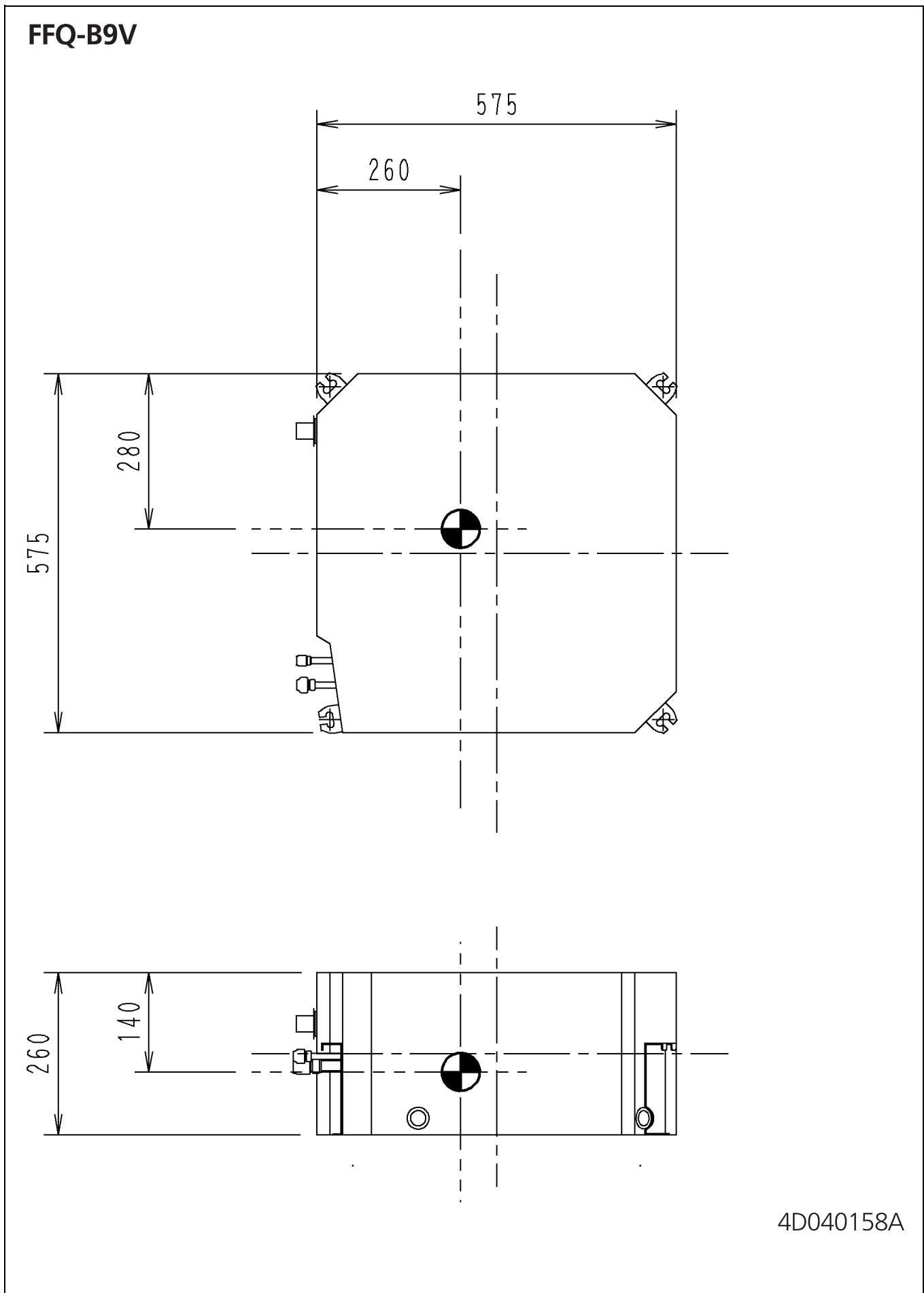
5 - 2 Dimensional Drawings with Accessories

5



6 Centre of gravity

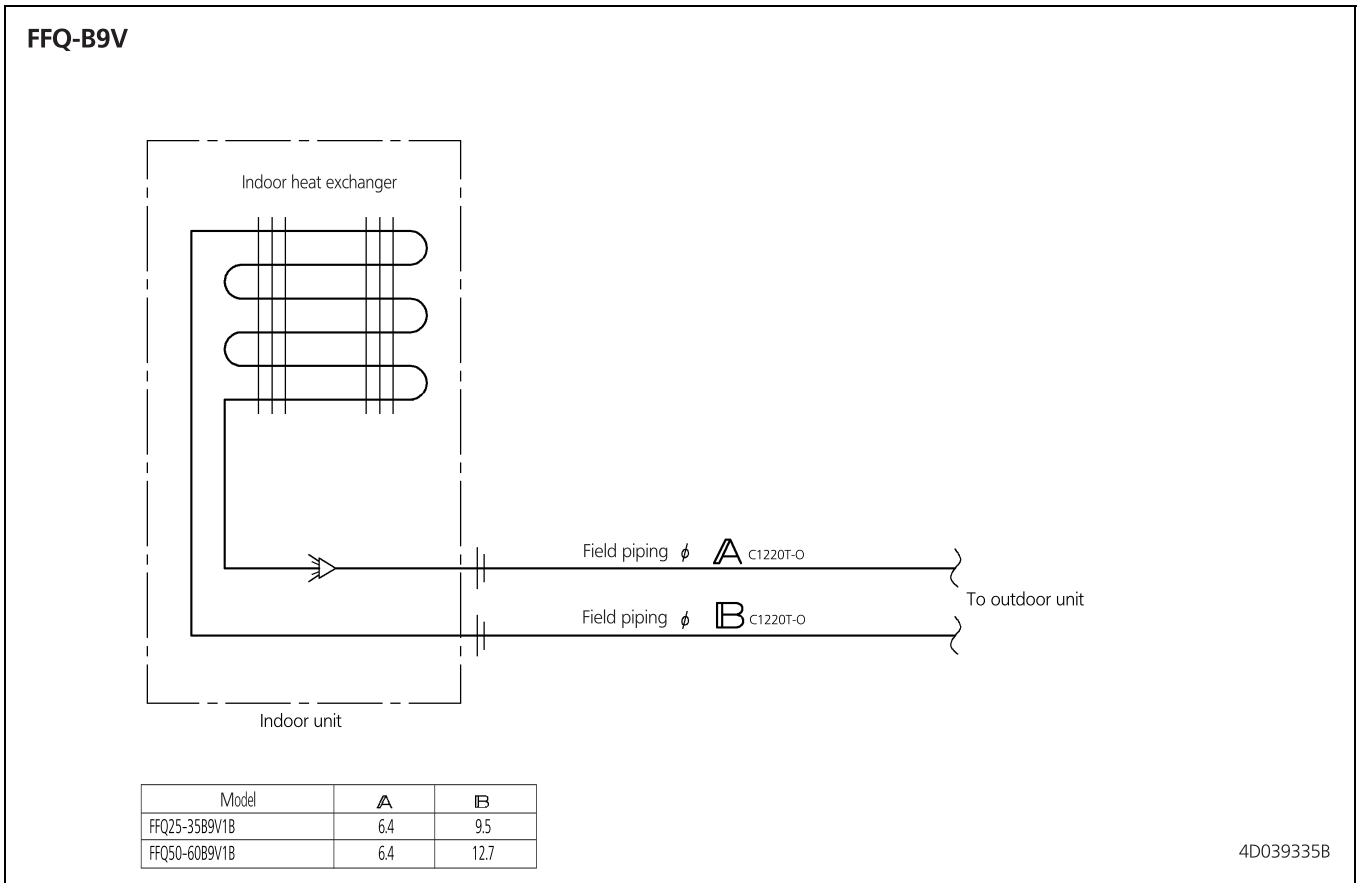
6 - 1 Centre of Gravity



7 Piping diagrams

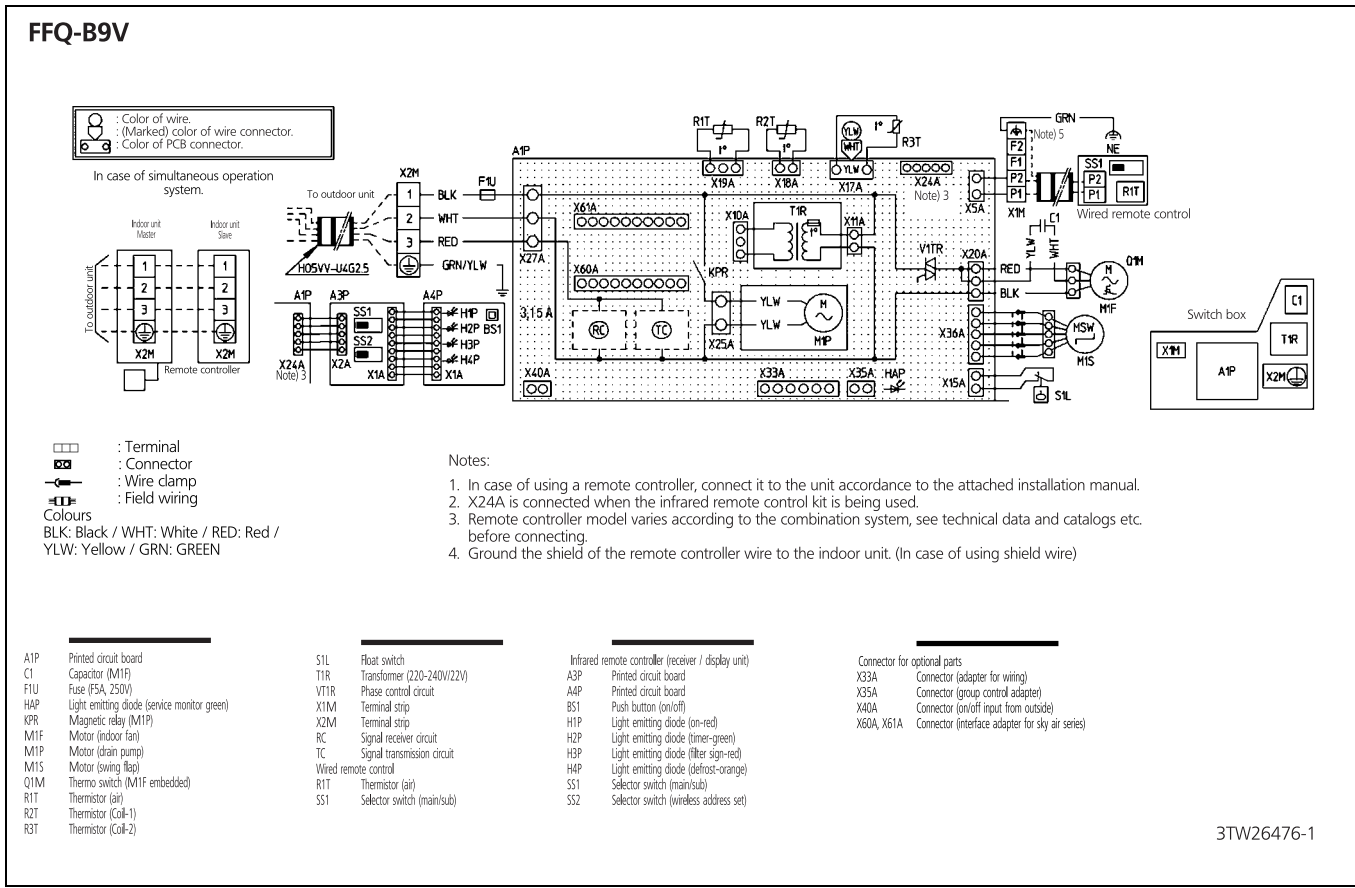
7 - 1 Piping Diagrams

7



8 Wiring diagrams

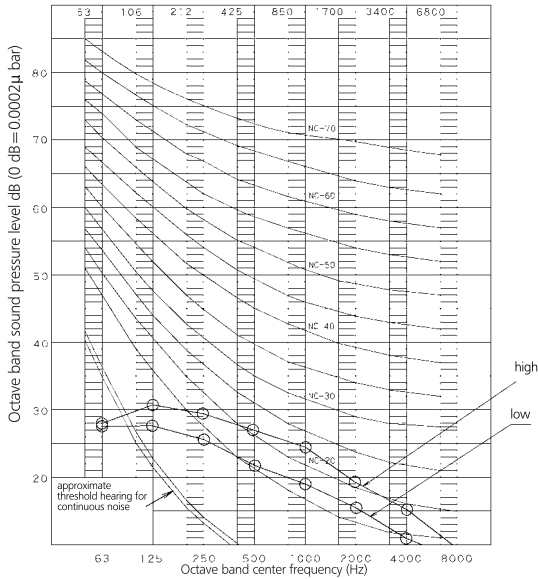
8 - 1 Wiring Diagrams - Single Phase



9 Sound data

9 - 1 Sound Pressure Spectrum

FFQ25B9V



NOTES

- Overall (dB)

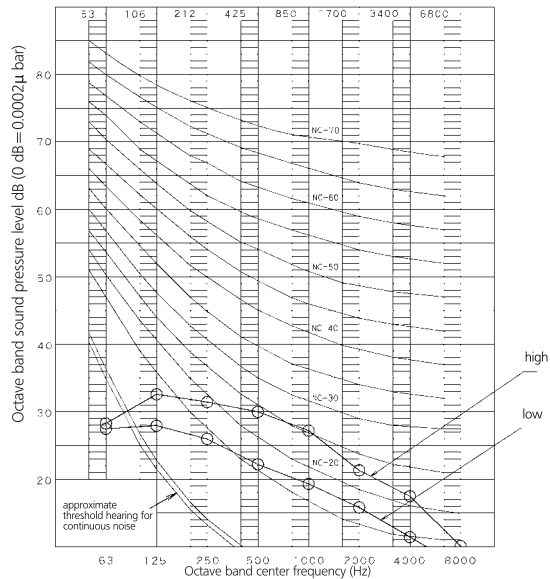
Scale	high	low
A	29.5	24.5
C	36.1	32.3

(BGN is already rectified)
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions.
- Operating conditions: Power source: 230V 50Hz
- Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
- Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
- 4 direction discharge
- Location of microphone



4D040176A

FFQ35B9V

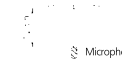


NOTES

- Overall (dB)

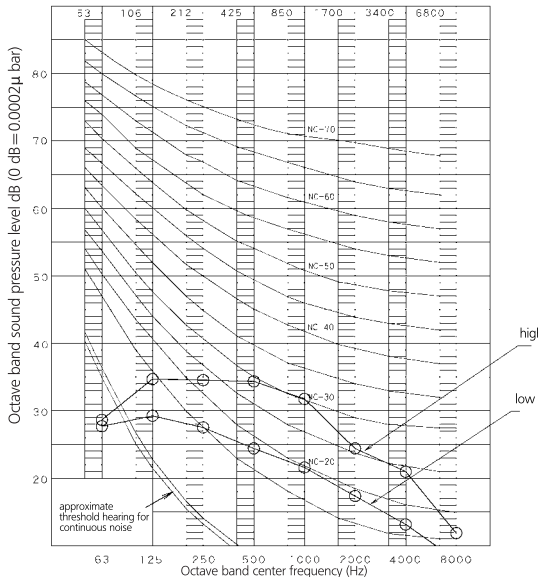
Scale	high	low
A	32.0	25.0
C	38.0	32.7

(BGN is already rectified)
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions.
- Operating conditions: Power source: 230V 50Hz
- Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
- Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
- 4 direction discharge
- Location of microphone



4D040177A

FFQ50B9V



NOTES

- Overall (dB)

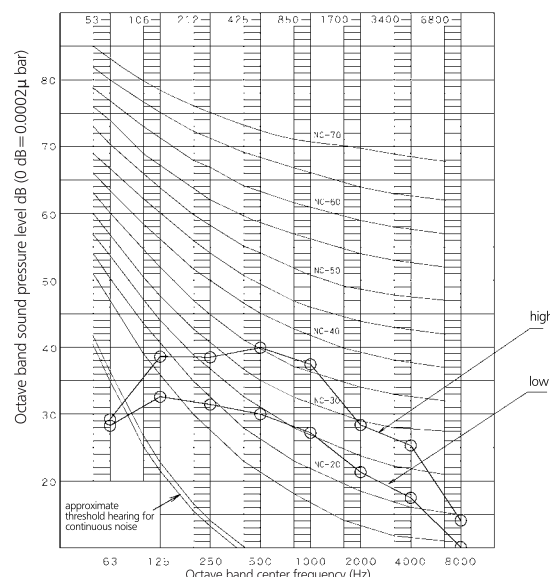
Scale	high	low
A	36.0	27.0
C	41.0	34.2

(BGN is already rectified)
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions.
- Operating conditions: Power source: 230V 50Hz
- Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
- Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
- 4 direction discharge
- Location of microphone



4D040178A

FFQ60B9V

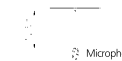


NOTES

- Overall (dB)

Scale	high	low
A	41.0	32.0
C	44.8	38.0

(BGN is already rectified)
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions.
- Operating conditions: Power source: 230V 50Hz
- Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
- Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
- 4 direction discharge
- Location of microphone



4D040179A

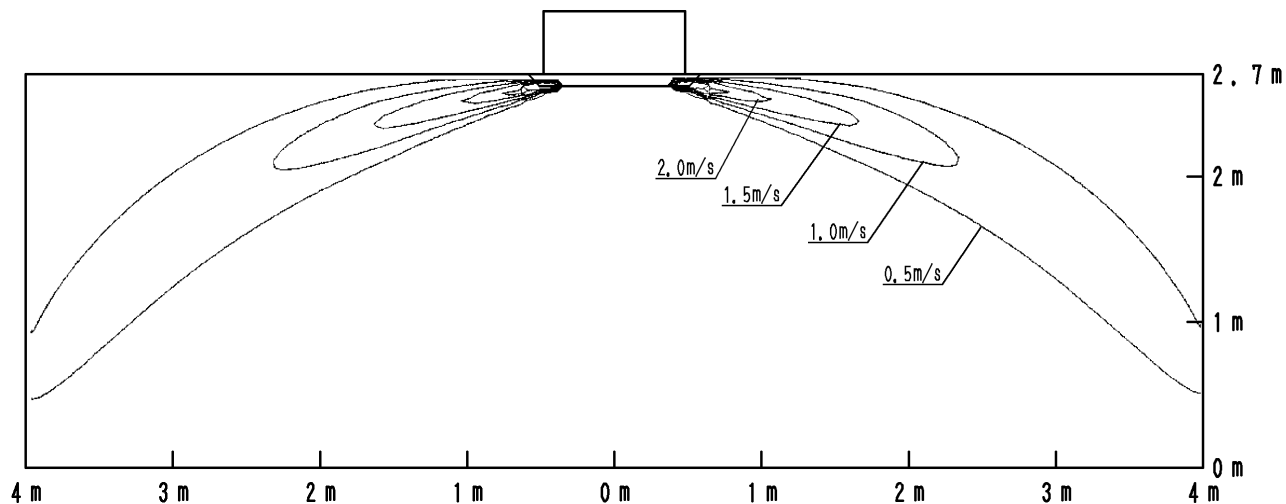
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

FFQ25B9V

Cooling air velocity distribution

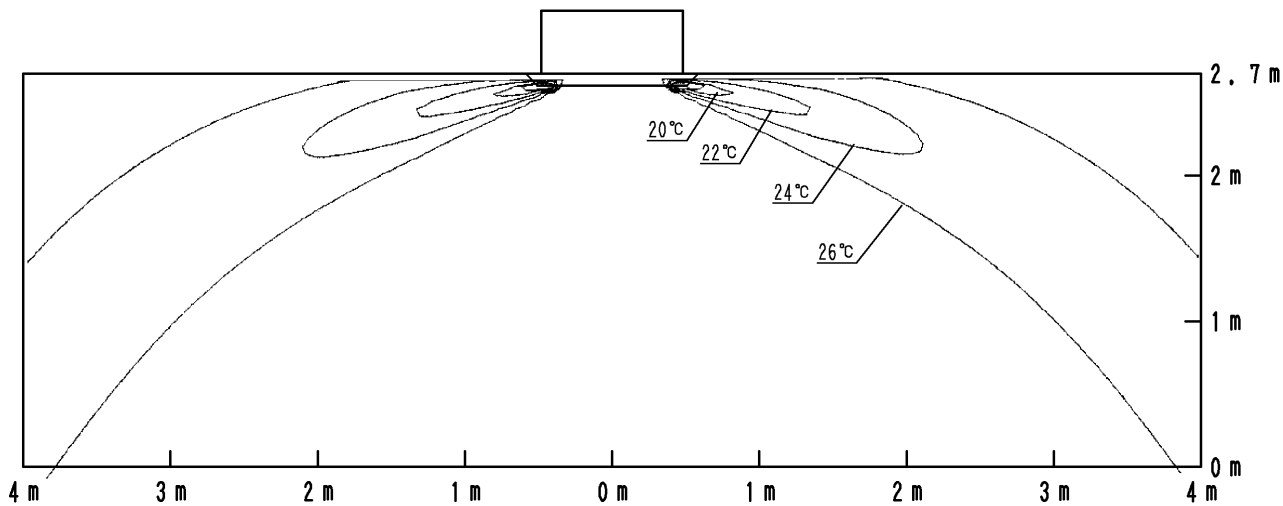
4-way discharge, air flow direction: horizontal



10

Cooling air temperature distribution

4-way discharge, air flow direction: horizontal



4D039738D

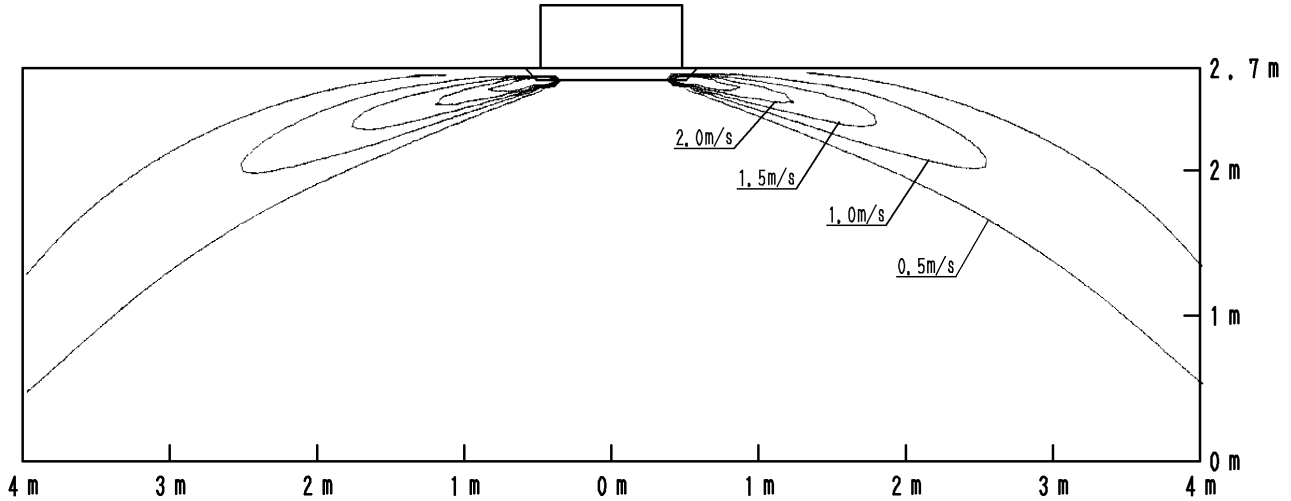
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

FFQ35B9V

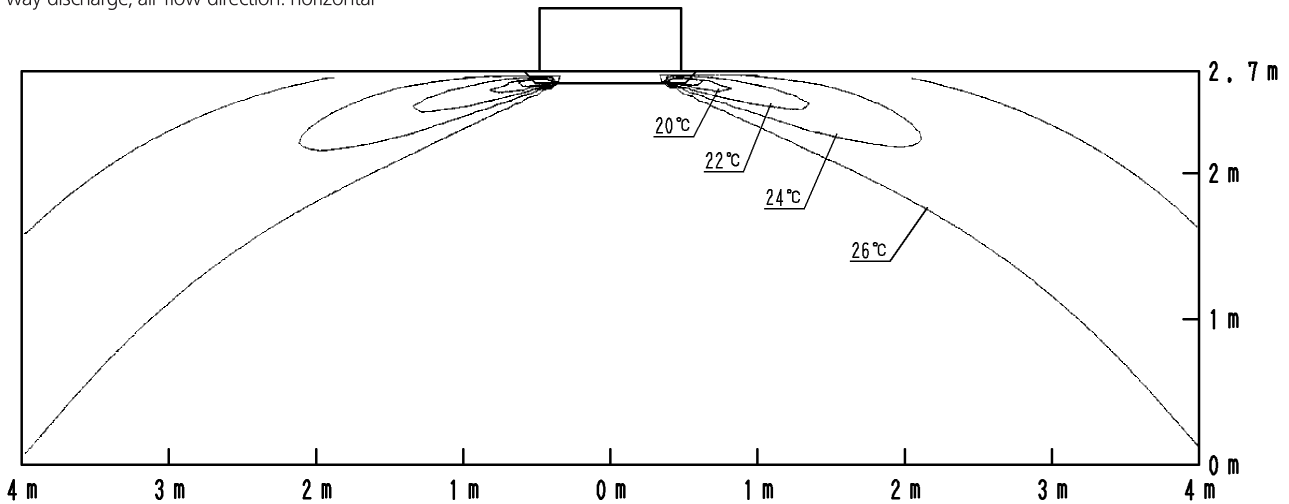
Cooling air velocity distribution

4-way discharge, air flow direction: horizontal



Cooling air temperature distribution

4-way discharge, air flow direction: horizontal



4D039816B

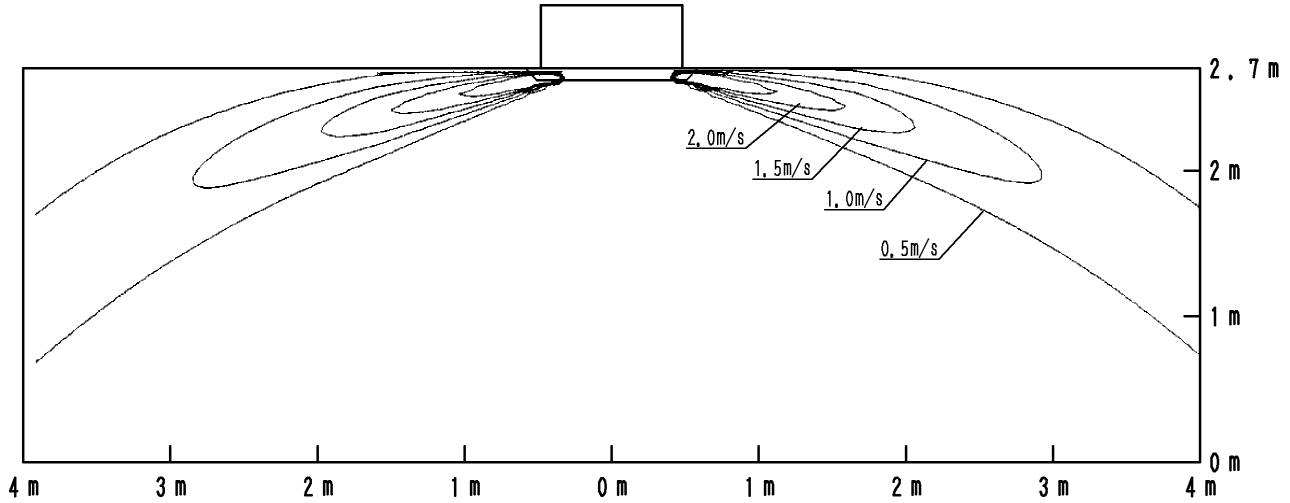
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

FFQ50B9V

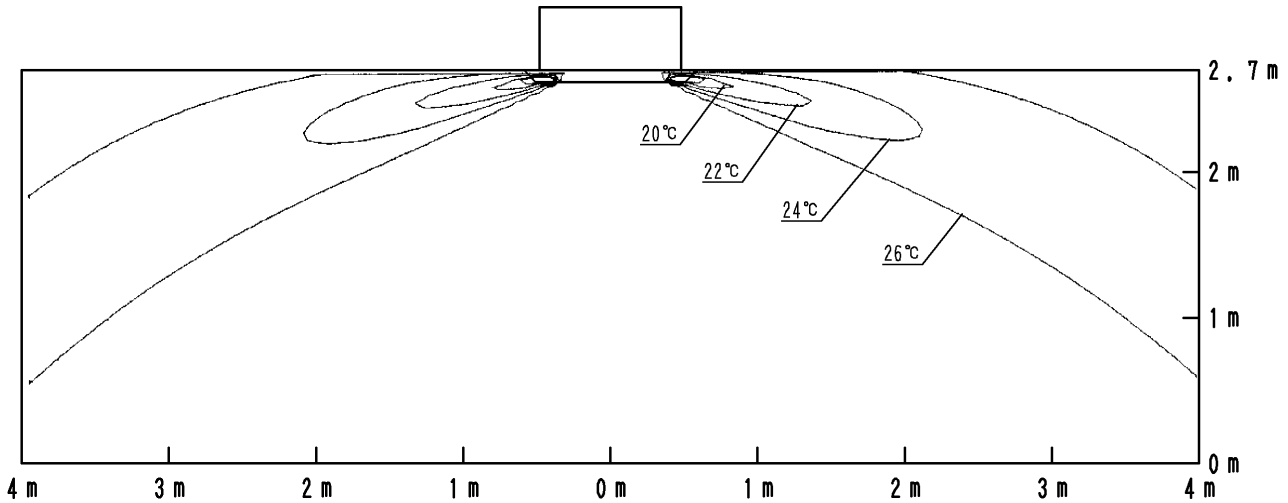
Cooling air velocity distribution

4-way discharge, air flow direction: horizontal



Cooling air temperature distribution

4-way discharge, air flow direction: horizontal

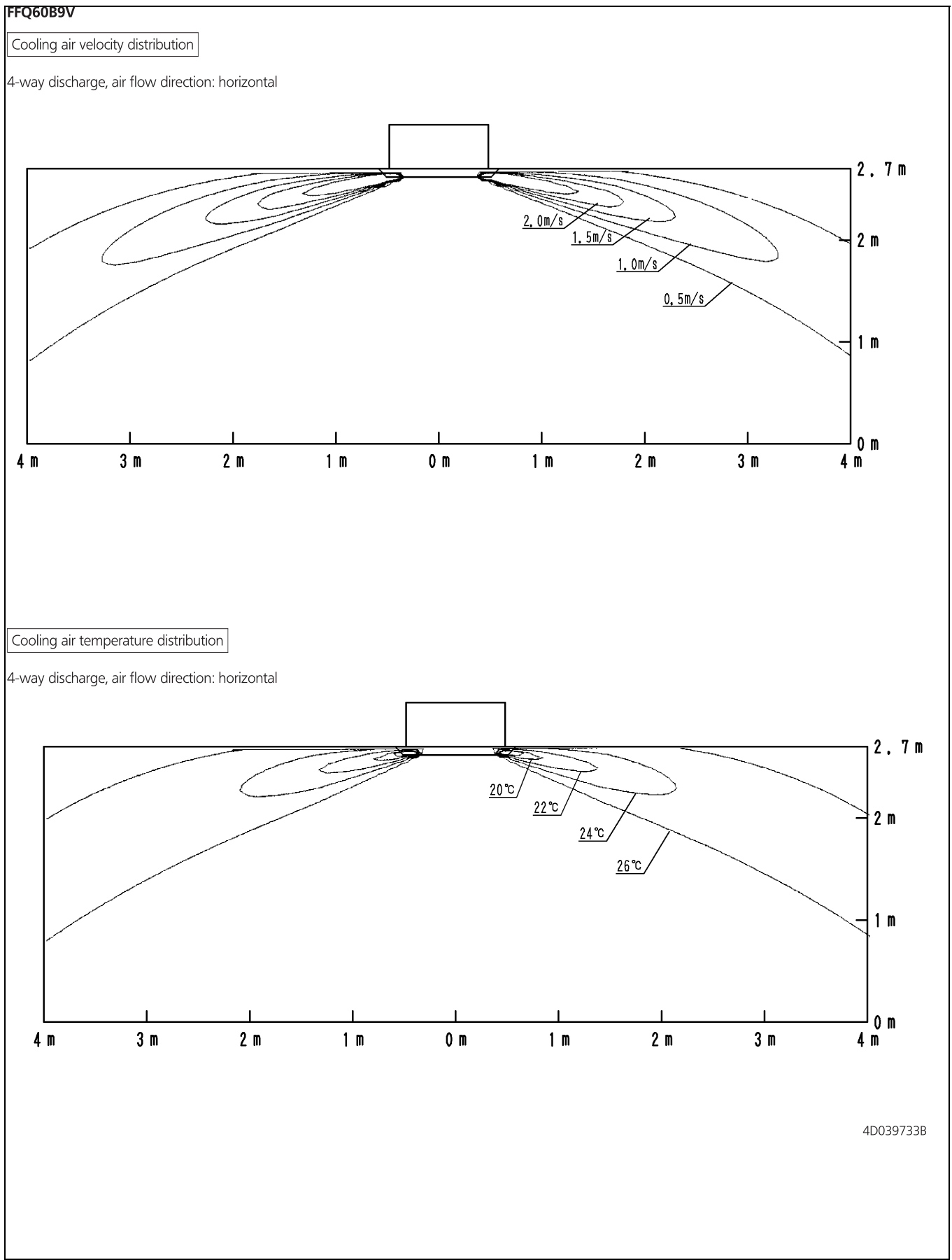


4D039815B

10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

10



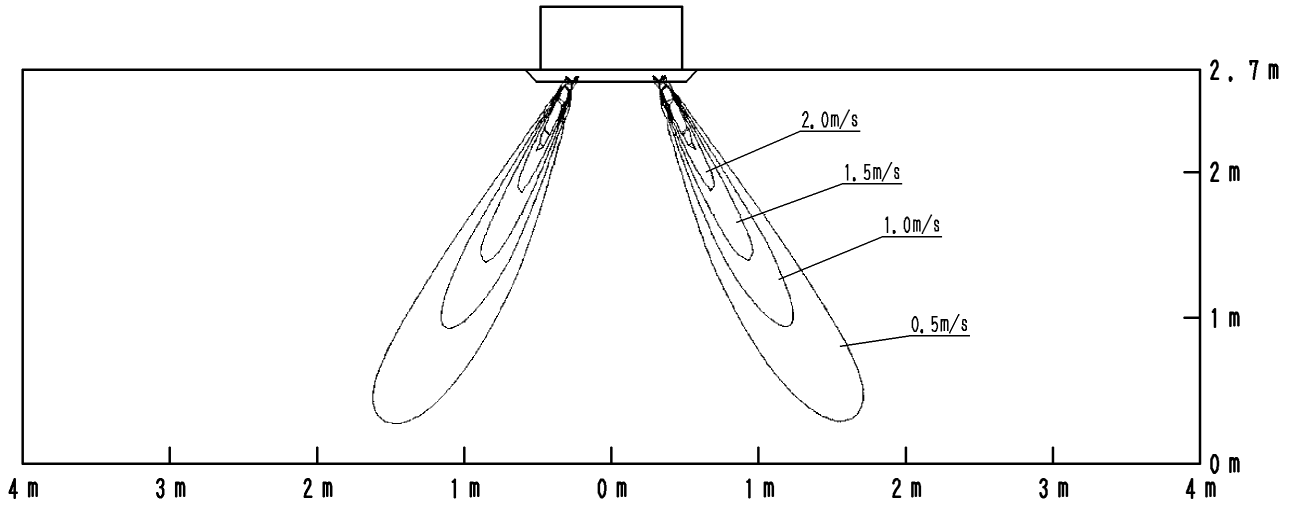
10 Air flow patterns

10 - 2 Air Flow Pattern - Heating

FFQ25B9V

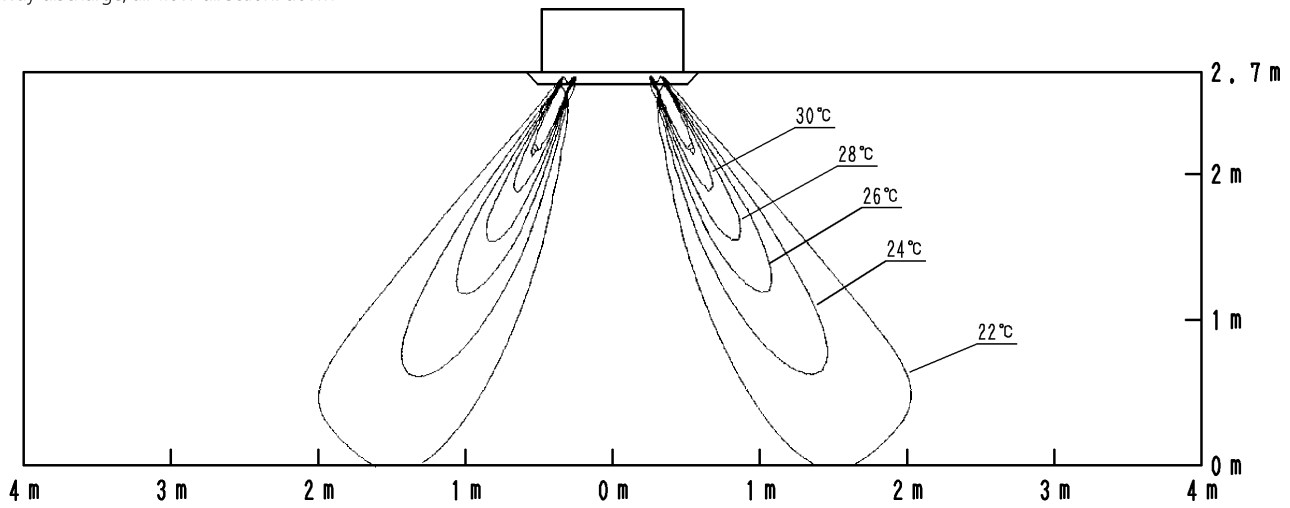
Heating air velocity distribution

4-way discharge, air flow direction: down



Heating air temperature distribution

4-way discharge, air flow direction: down



4D039820D

10 Air flow patterns

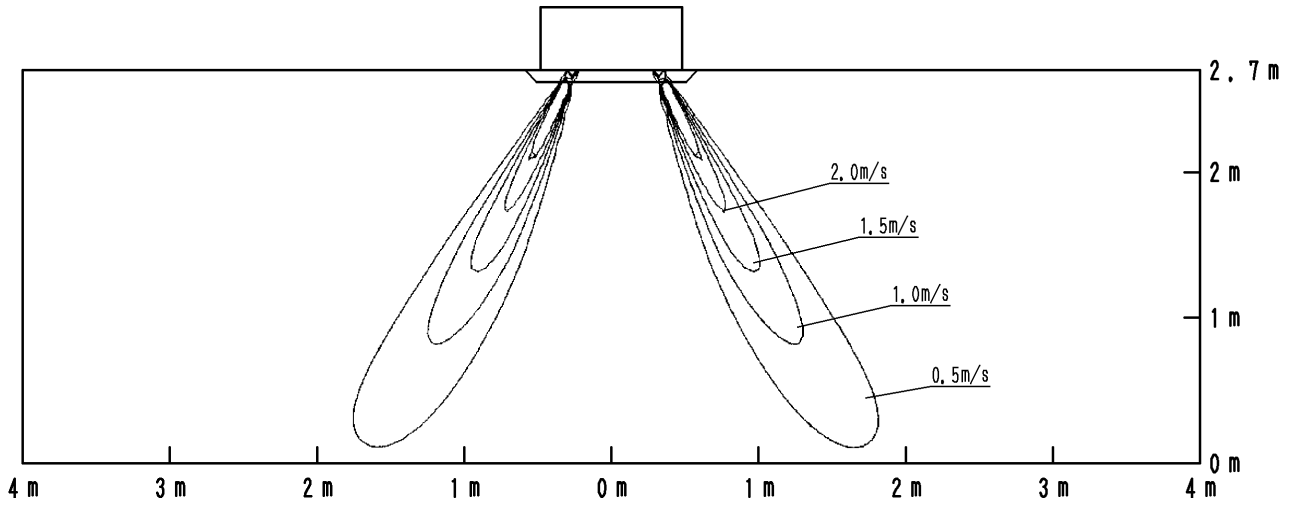
10 - 2 Air Flow Pattern - Heating

10

FFQ35B9V

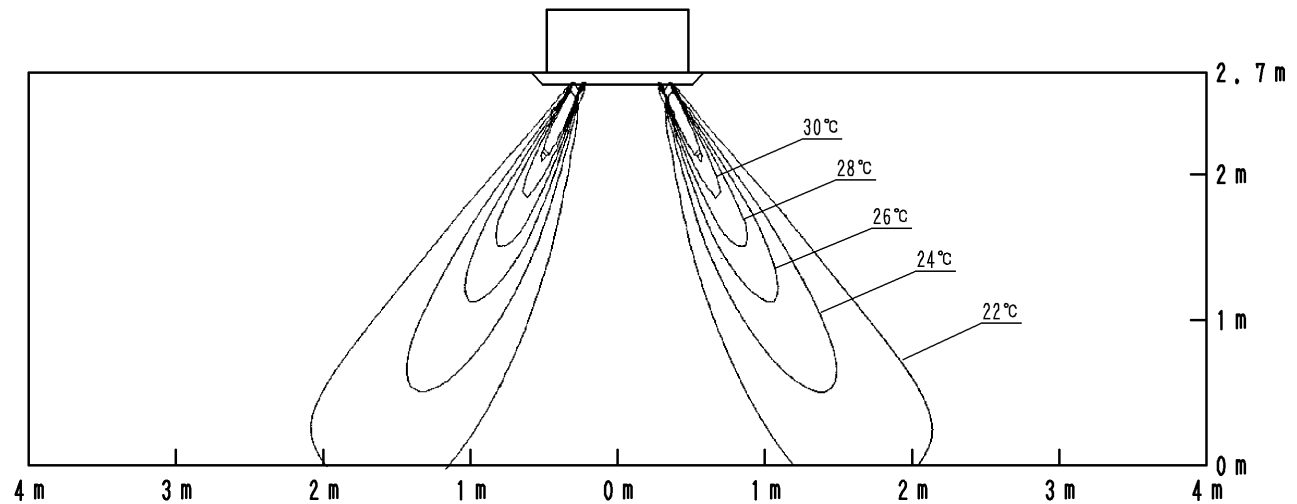
Heating air velocity distribution

4-way discharge, air flow direction: down



Heating air temperature distribution

4-way discharge, air flow direction: down



4D039846B

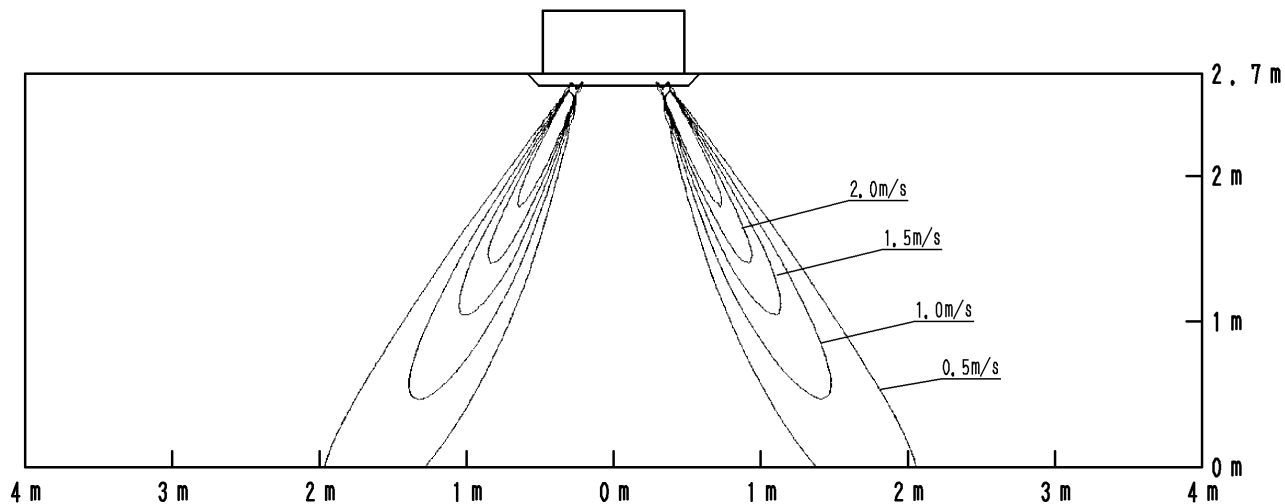
10 Air flow patterns

10 - 2 Air Flow Pattern - Heating

FFQ50B9V

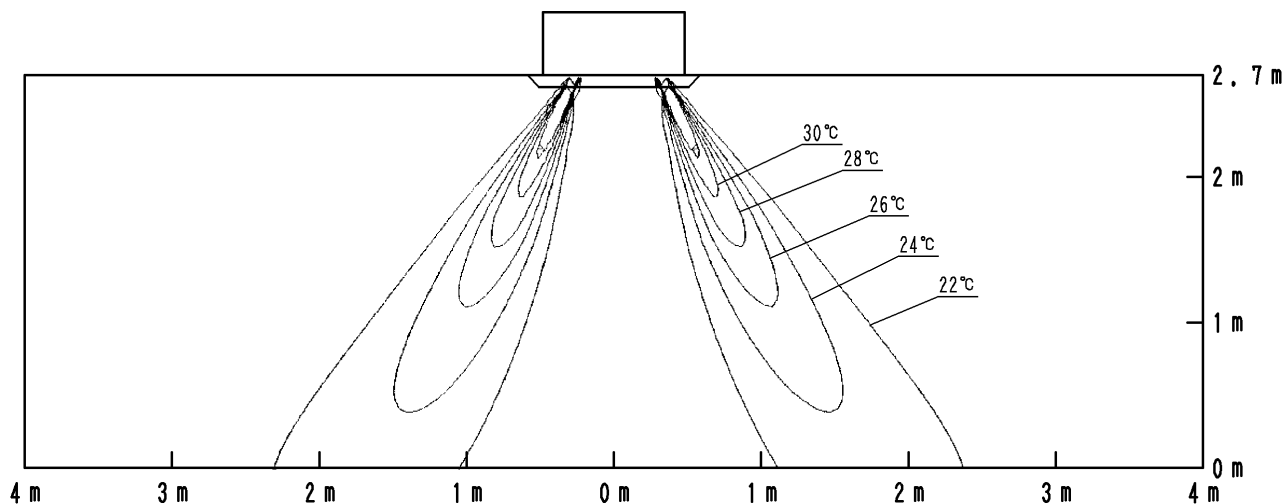
Heating air velocity distribution

4-way discharge, air flow direction: down



Heating air temperature distribution

4-way discharge, air flow direction: down



4D039848B

10 Air flow patterns

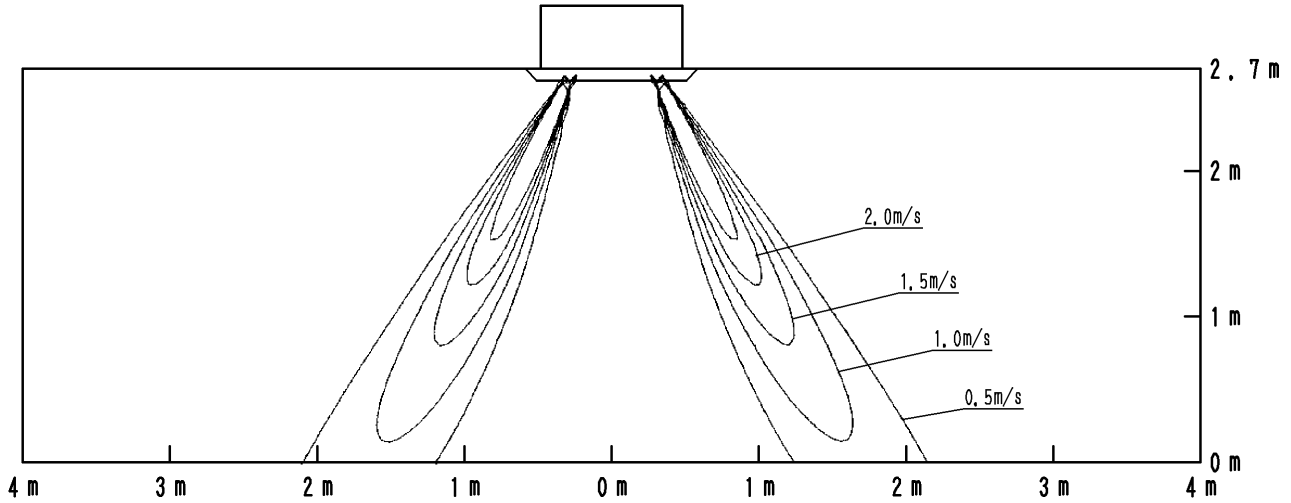
10 - 2 Air Flow Pattern - Heating

10

FFQ60B9V

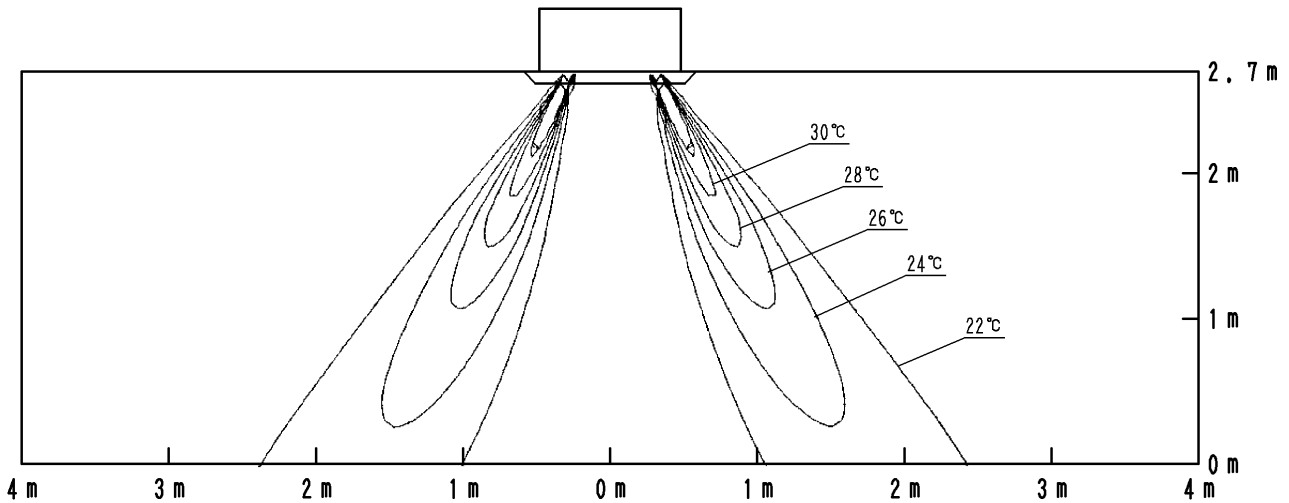
Heating air velocity distribution

4-way discharge, air flow direction: down



Heating air temperature distribution

4-way discharge, air flow direction: down



4D039849B



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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