



technical data



FCQ-DAV3B
4-Way Blow
Ceiling Mounted Cassette

air conditioning systems

Split
Sky Air

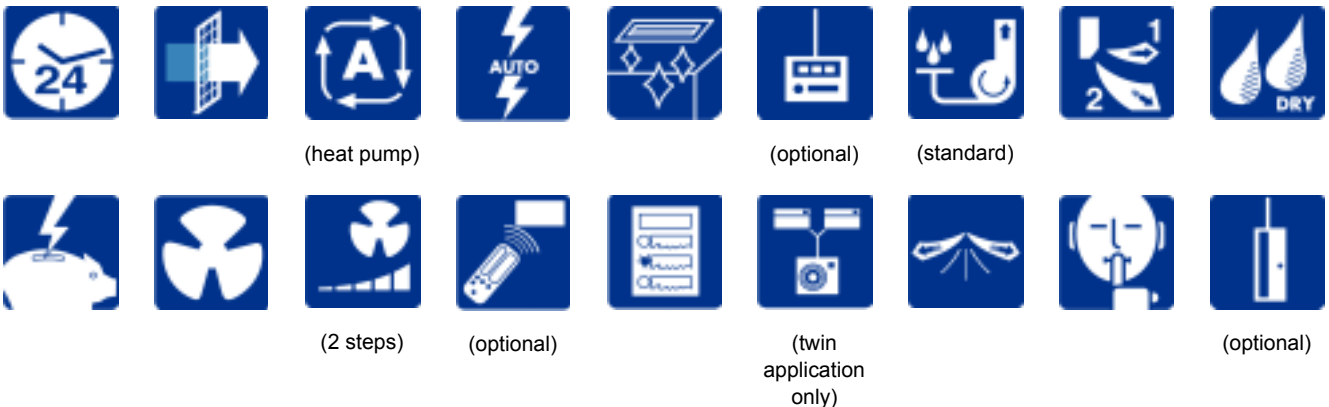
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FCQ-DAV3B

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1 Features

- Compact & stylish
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Fits flush into each ceiling
- Extremely quiet in operation
- Air can be discharged in any of 4 directions
- Possibility to shut 1 or 2 flaps for easy installation in corners or to use 1 or 2 branches
- Air flow distribution for ceiling heights up to 4.2m without loss of capacity.
- Daikin remote controls give you easy control at your fingertips.
- The wired remote control provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- The optional remote ON/OFF enables you to start/stop the air conditioning from a mobile phone via a telephone remote control (field supply).
- The optional forced OFF enables you to switch off the unit automatically. E.g. when a window is opened, the unit switches off.
- The 'home leave' operation button prevents large temperature differences by continuously operating at a minimum (heating mode) or maximum (cooling mode) preset level while you're out or sleeping. It also allows the indoor temperature to return quickly to your favourite comfort level.



2 Specifications

2-1 TECHNICAL SPECIFICATIONS				FCQ71DAV3B	FCQ100DAV3B	FCQ125DAV3B	FCQ140DAV3B
Casing	Colour			White			
Dimensions	Unit	Height	mm	246	288	288	288
		Width	mm	840	840	840	840
		Depth	mm	840	840	840	840
Weight	Unit	kg		24.0	28.0	28.0	28.0
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2
		Fin Pitch	mm	1.20	1.20	1.20	1.20
		Face Area	m ²	0.454	0.544	0.544	0.544
		Nr of Stages		10	12	12	12
	Fin	Type		Cross fin coil (Multi louver fins and Hi-XSS tubes)			
Fan	Type			Turbo fan			
Air Flow Rate	Cooling	High	m ³ /min	19.0	30.0	30.0	30.0
		Low	m ³ /min	14.0	21.0	24.0	25.0
Fan	Motor	Model		QTS46F15M	QTS46E17M	QTS46E17M	QTS46E17M
		Output (high)	W	30	120	120	120
Cooling	Sound Power	High	dBA	50.0	58.0	58.0	58.0
		Low	dBA	44.0	48.0	51.0	53.0
	Sound Pressure	High	dBA	34.0	43.0	43.0	43.0
		Low	dBA	28.0	33.0	36.0	38.0
Refrigerant	Type			R-410A			
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter (OD)	mm	9.5	9.5	9.5	9.5
	Gas	Type		Flare connection			
		Diameter (OD)	mm	15.9	15.9	15.9	15.9
	Drain	Diameter (OD)	mm	I.D. 25/O.D. 32			
Decoration Panel	Model			BYCP125DAW1			
	Colour			White			
	Dimensions	H	mm	45	45	45	45
		W	mm	950	950	950	950
		D	mm	950	950	950	950
Weight	kg		5.5	5.5	5.5	5.5	
Air Filter	Resin net with mold resistance						
Safety Devices	Low pressure switch			Low pressure switch	Low pressure switch	Low pressure switch	
	High pressure switch						
	Fuse						
Notes	Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.						
	Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m						
	In case of drain piping for the outdoor unit, a drain piping kit (option) is needed.						

2-2 ELECTRICAL SPECIFICATIONS				FCQ71DAV3B	FCQ100DAV3B	FCQ125DAV3B	FCQ140DAV3B
Power Supply	Name			V3			
	Phase			1	1	1	1
	Frequency	Hz		50	50	50	50
	Voltage	V		230	230	230	230

3 Options

3

Item	Remark		FCQ-D			
			71	100	125	140
Decoration panel			BYCP125DAW1			
Panel spacer			KDB55K160WA			
Fresh air intake kit	Chamber type	Without T-shape and fan	KDD55DA160			
		With T-shape, without fan	KDD55DA160K			
	Direct installation type		KDDJ55XA160			
High efficiency filter	(Colorimetric method 65%)		KAF556DA80	KAF556DA160		
	(Colorimetric method 90%)		KAF557DA80	KAF557DA160		
Replacement high efficiency filter	(Colorimetric method 65%)		KAF552HA80	KAF552HA160		
	(Colorimetric method 90%)		KAF553HA80	KAF553HA160		
Filter chamber			KDDF55DA160			
Long life filter			KAF551CA160			
Ultra-long life filter			KAF55DA160			
Replacement ultra long-life filter			KAF55KA160H			
Branch duct chamber			KDP55DA80	KDP55DA160		
Chamber connection kit			KKSJ55KA160			
Remote control	Wired type		BRC1D528			
	Infrared type		BRC7EA51W			
Central remote control			DCS302CA51			
Unified ON/OFF control			DCS301BA51			
Schedule timer			DST301BA51			
Adapter for wiring			KRP1BA59 *1			
Wiring adapter for electrical appendices (2)			KRP4AA53 *1			
Installation box for adapter PCB			KRP1DA98			

NOTE: *1: Installation box for adapter PCB (KRP1DA98) is necessary

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4 Dimensional drawing & centre of gravity

4 - 1 Dimensional drawing

FCQ71D

Note 2

Drain connection side

Pipe connection side

300 or less

860-910 (Ceiling opening) (Note 4)

680 Suspension position

420

780 (Suspension position)

860-890 (Ceiling opening) (Note 4)

12-M4 Hole

Branch duct connection

4-M4 Hole

12-M4 Hole

Branch duct connection

Outdoor air intake (direct connection)

B Arrow view

C Arrow view

D Arrow view

Required space

1500 mm or more *

1500 mm or more *

1500 mm or more *

* When the discharge grill is closed, the required space is 200mm or more

1500 mm or more (Required space) From the floor side 200 or more For height installation

Decoration panel	
BYCP125DJW1	White 10Y 9/0.5

Note:

1. Sticking location for manufacture's label
Manufacture's label for indoor unit: on the bell mouth inside suction grille.
Manufacture's label for decoration panel: on the inner frame inside suction grille.
2. In case of using an infrared remote control, this position will be a signal receiver.
Refer to the drawing of infrared remote control in detail
3. When it may exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, an additional insulation (Thickness 10mm or more of glasswool or polyethylene form) is required.
4. Though the installation is acceptable up to maximum of 910mm square ceiling opening, keep the clearance of 35mm or less between the main unit and the ceiling opening so that the panel overlap allowance can be ensured.

- 1 Liquid pipe connection ϕ 9.5 Flare connection
- 2 Gas pipe connection ϕ 15.9 Flare connection
- 3 Drain pipe connection VP25 (O.D. ϕ 32)
- 4 Power supply connection / wiring / remote control connection
- 5 Air outlet
- 6 Air suction grille
- 7 Corner decoration cover
- 8 Drain hose (option) O.D. ϕ 32 (outlet)

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FCQ100~140D

Note 2

Drain connection side

Pipe connection side

300 or less

860-910 (Ceiling opening) (Note 4)

680 Suspension position

420

780 (Suspension position)

860-890 (Ceiling opening) (Note 4)

12-M4 Hole

Branch duct connection

4-M4 Hole

12-M4 Hole

Branch duct connection

Outdoor air intake (direct connection)

B Arrow view

C Arrow view

D Arrow view

Required space

1500 mm or more *

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* When the discharge grill is closed, the required space is 200mm or more

1500 mm or more (Required space) From the floor side 200 or more For height installation

Decoration panel	
BYCP125DJW1	White 10Y 9/0.5

Note:

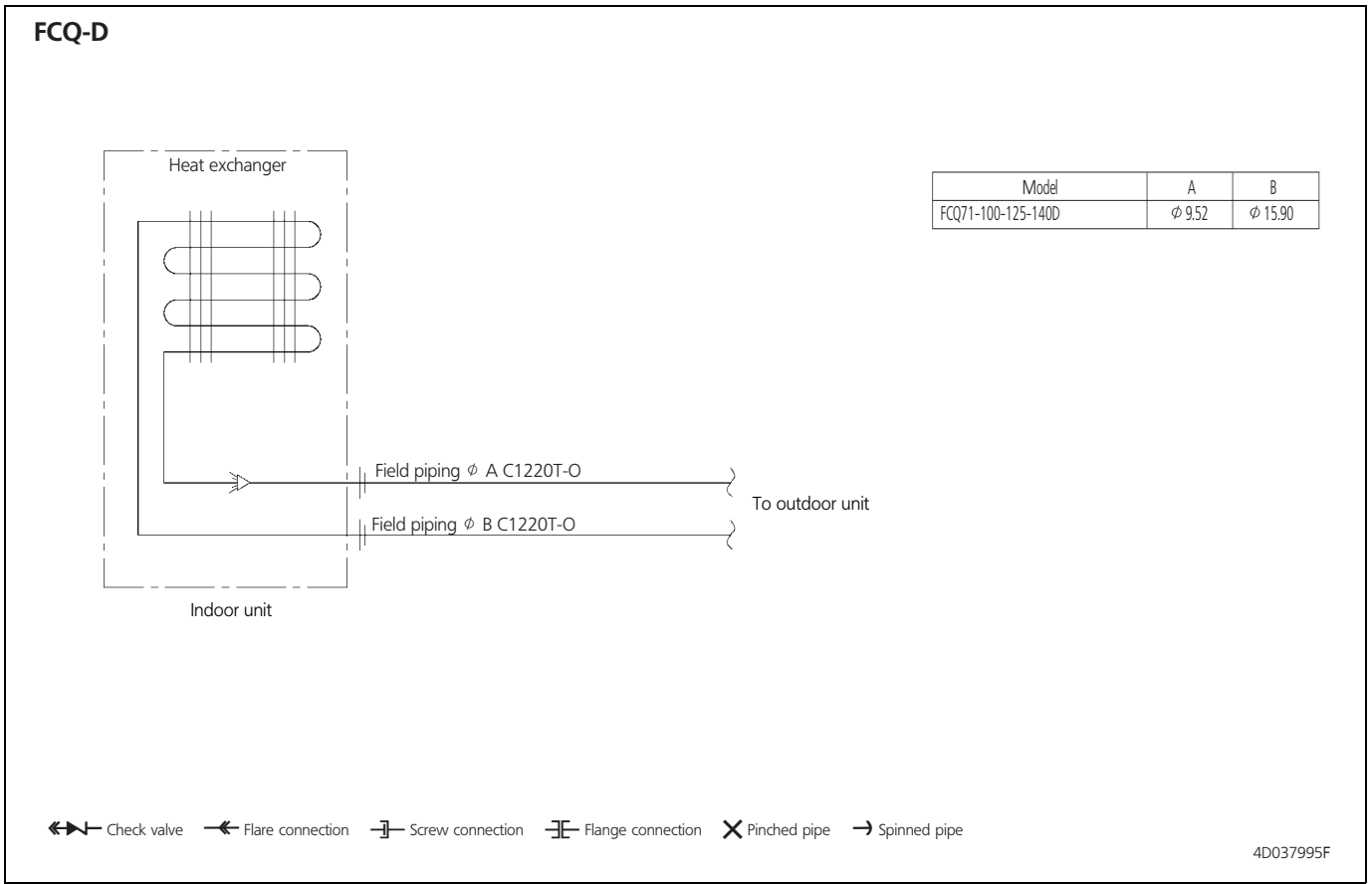
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- 7 Corner decoration cover
- 8 Drain hose (option) O.D. ϕ 32 (outlet)

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5 Piping diagram

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6 Wiring diagram

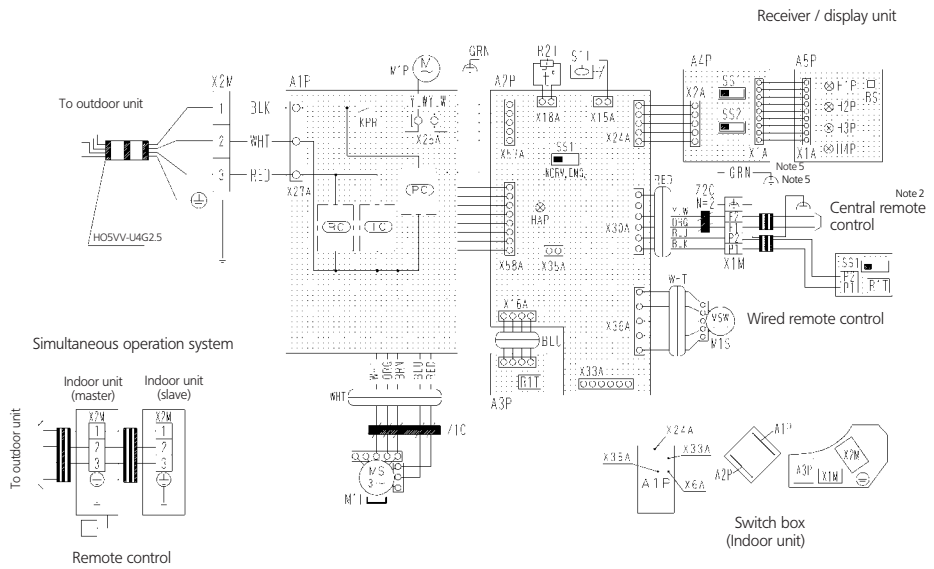
6 - 1 Wiring diagram

FCQ71-140D

Notes

1. In case using central remote control, connect it to the unit in accordance with the attached installation manual.
2. Remote controller model varies according to the combination system, confirm engineering data and catalogs, etc before connecting.
3. Confirm the method of setting the selector switch (SS1, SS2) by installation manual and engineering materials, etc.
4. Ground the shield of the remote controller cord to the indoor unit (in case of using shield wire). See technical data and catalogues before connecting.

Field wiring Terminal
 : Connector
 : Wire clamp
 : Protective earth (screw)
Colors
 BLK: Black / WHT: White / RED: Red / YLW: Yellow



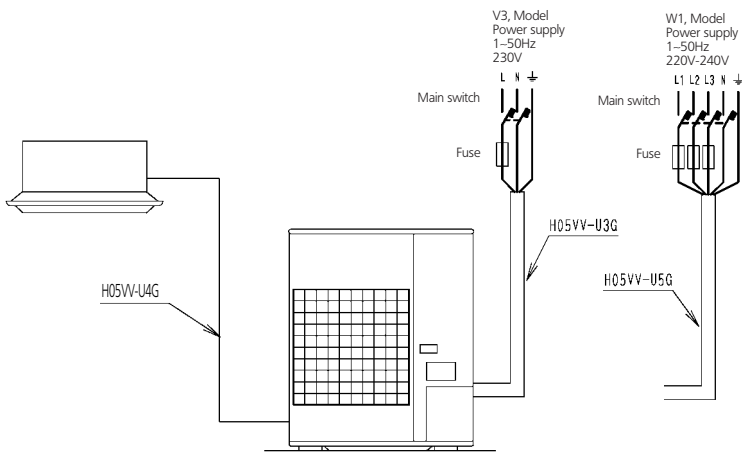
A1P	Printed circuit board (Power supply)	S1L	Float switch	Receiver / display unit (attached to infrared remote control)	Connector for optional parts
A2P	Printed circuit board (Control)	SS1	Selector switch (emergency)	A4P, A5P	Printed circuit board
A3P	Printed circuit board (Humidity sensor unit)	X1M	Terminal strip (power)	BS1	Push button (on/off)
HAP	Light emitting diode (service monitor green)	X2M	Terminal strip (control)	H1P	Light emitting diode (on-red)
KPR	Magnetic relay (M1P)	PC	Power circuit	H2P	Light emitting diode (timer-green)
M1F	Motor (indoor fan)	RC	Signal receiver circuit	H3P	Light emitting diode (filter sign-red)
M1P	Motor (drain pump)	TC	Signal transmission circuit	H4P	Light emitting diode (defrost-orange)
M1S	Motor (swing flap)	Z1C	Noise filter	SS1	Selector switch (main/sub)
R1T	Thermistor (air)	Z2C	Noise filter	SS2	Selector switch (wireless address set)
R2T	Thermistor (coil)		Wired remote control		
			R1T	Thermistor (air)	
			SS1	Selector switch (main/sub)	

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6 Wiring diagram

6 - 2 External connection diagram

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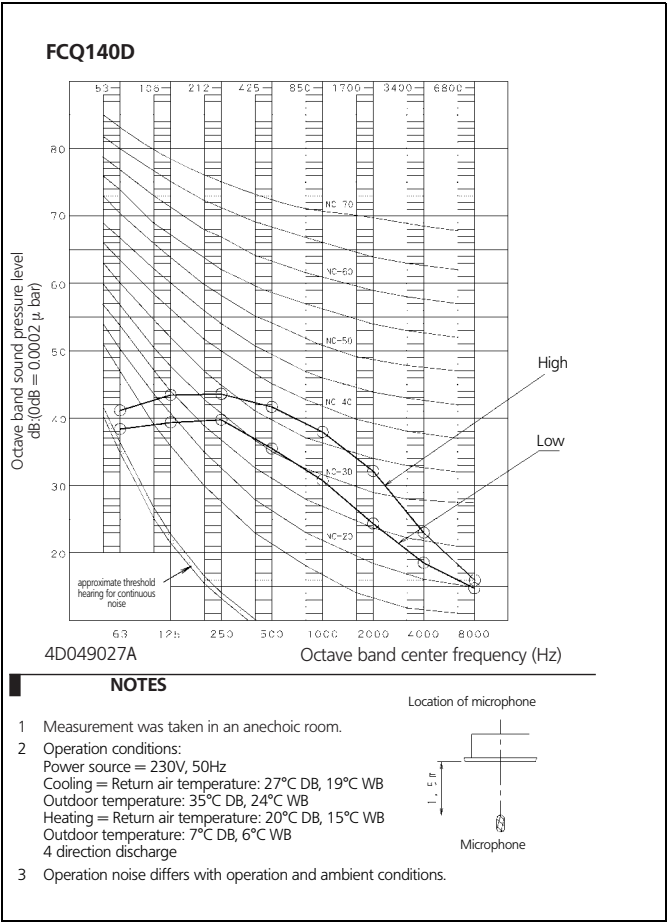
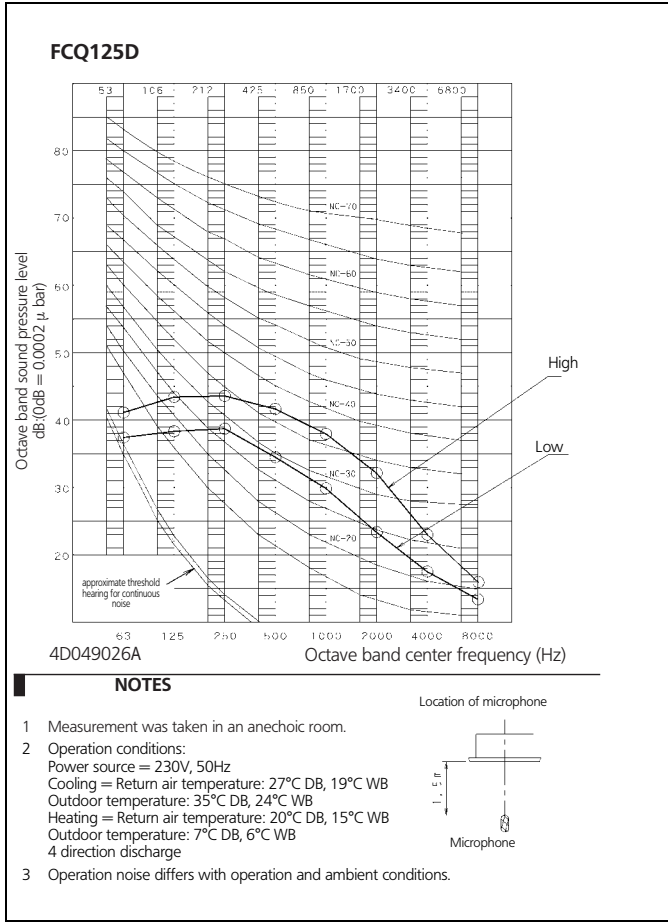
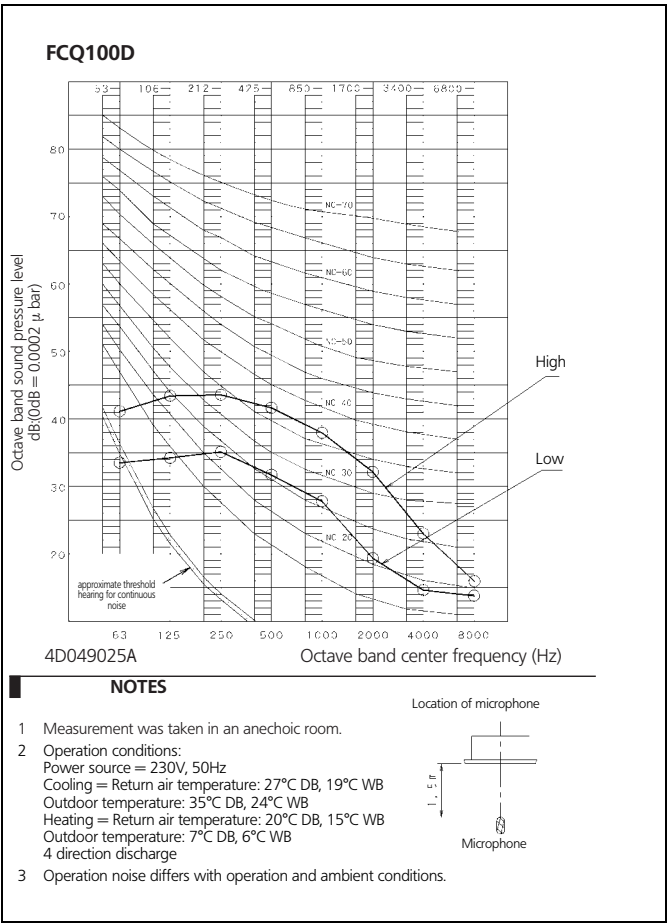
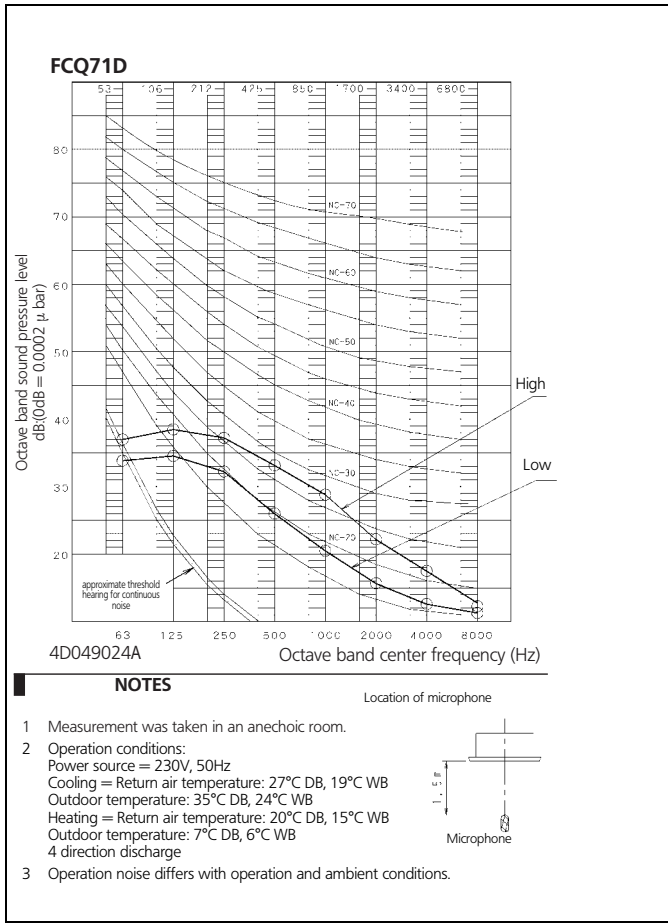
NOTES

- 1  Line voltage wiring
 Control circuit wiring
- 2 All wiring, components and materials to be produced on the site must comply with the applicable local and national codes.
- 3 Use copper conductors only.
- 4 See wiring diagrams for details.
- 5 Install fuse and mainswitch for safety.
- 6 All field wiring and components must be provided by a licensed electrician.
- 7 The unit shall be grounded in compliance with the applicable local and national codes.
- 8 Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 9 Never share a common power supply with other equipment.

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7 Sound data

7 - 1 Sound pressure spectrum



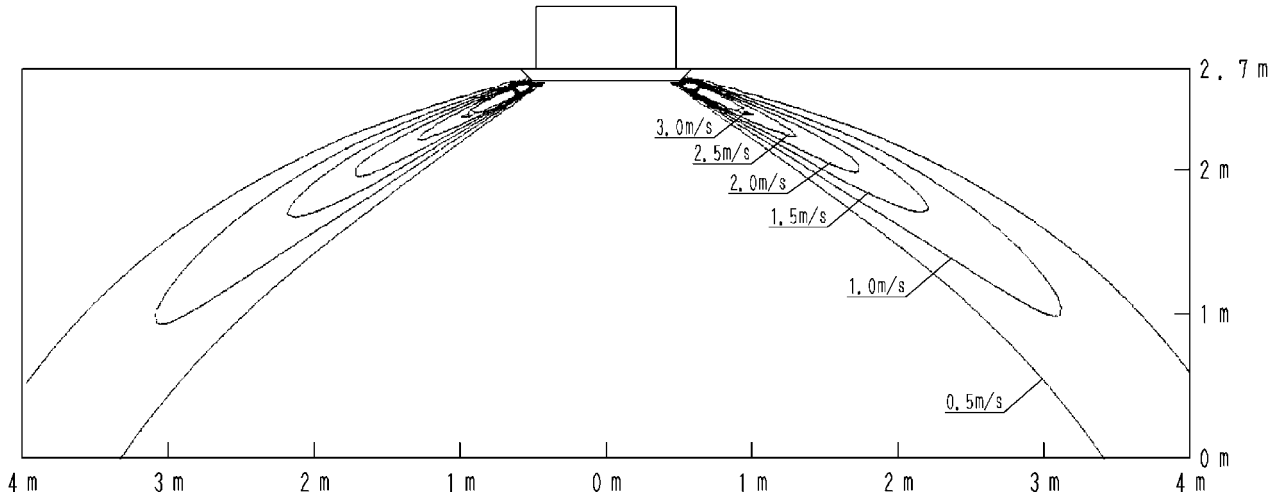
8 Air flow pattern

8

FCQ71D

Cooling - air velocity distribution

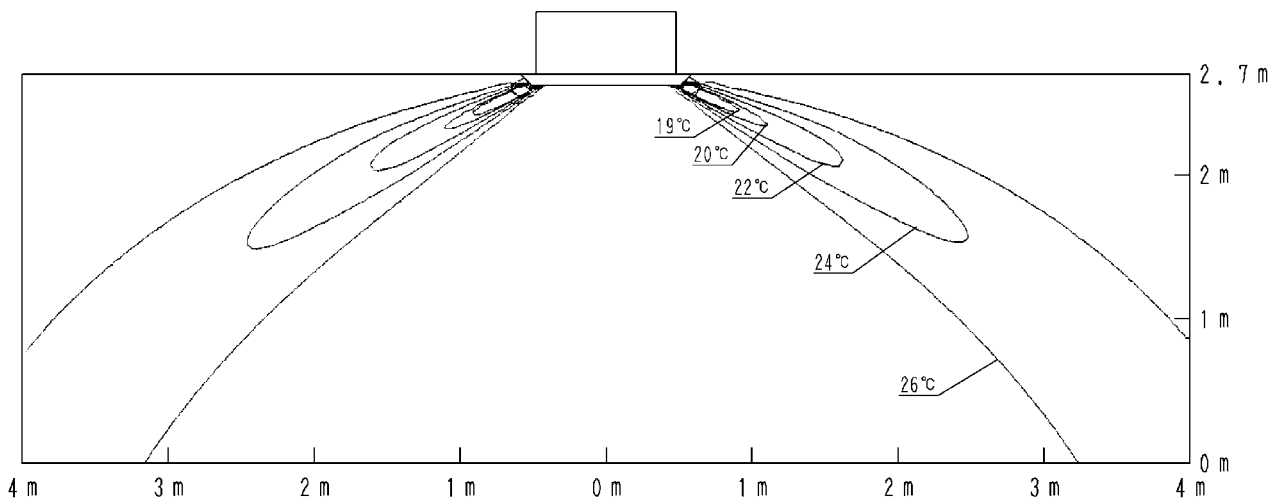
4-way discharge air flow direction: horizontal



FCQ71D

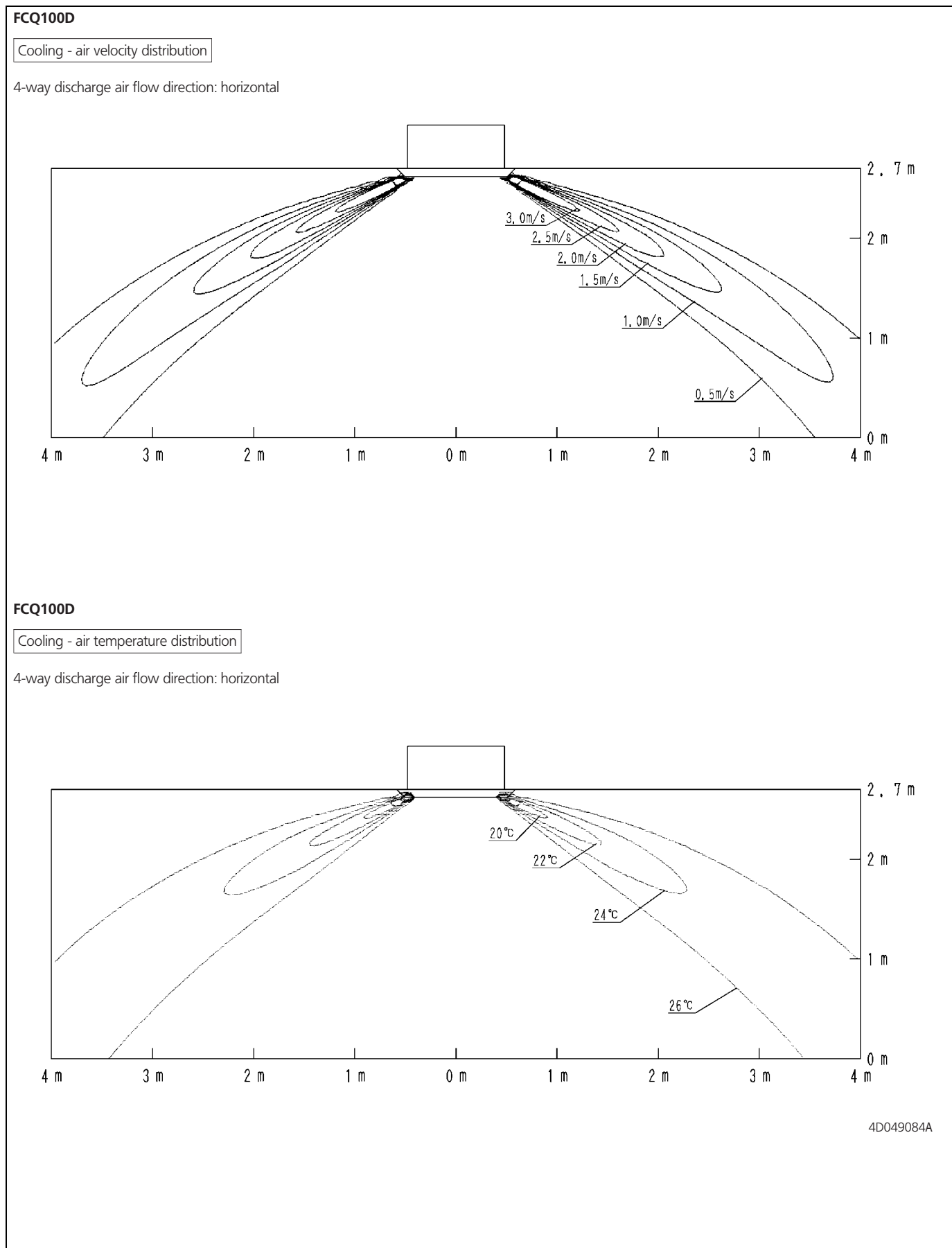
Cooling - air temperature distribution

4-way discharge air flow direction: horizontal



4D049080A

8 Air flow pattern



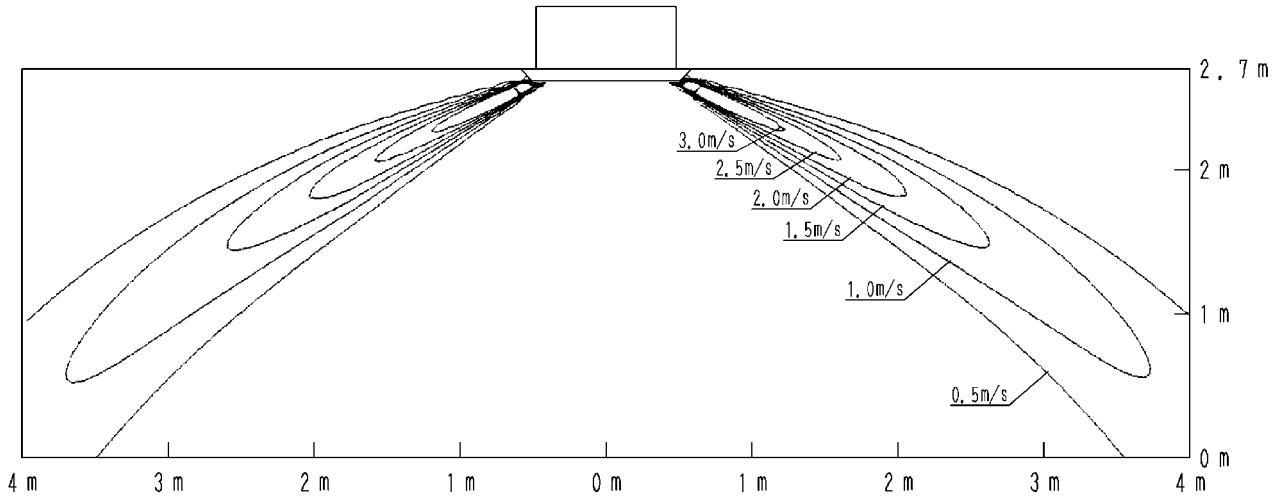
8 Air flow pattern

8

FCQ125D

Cooling - air velocity distribution

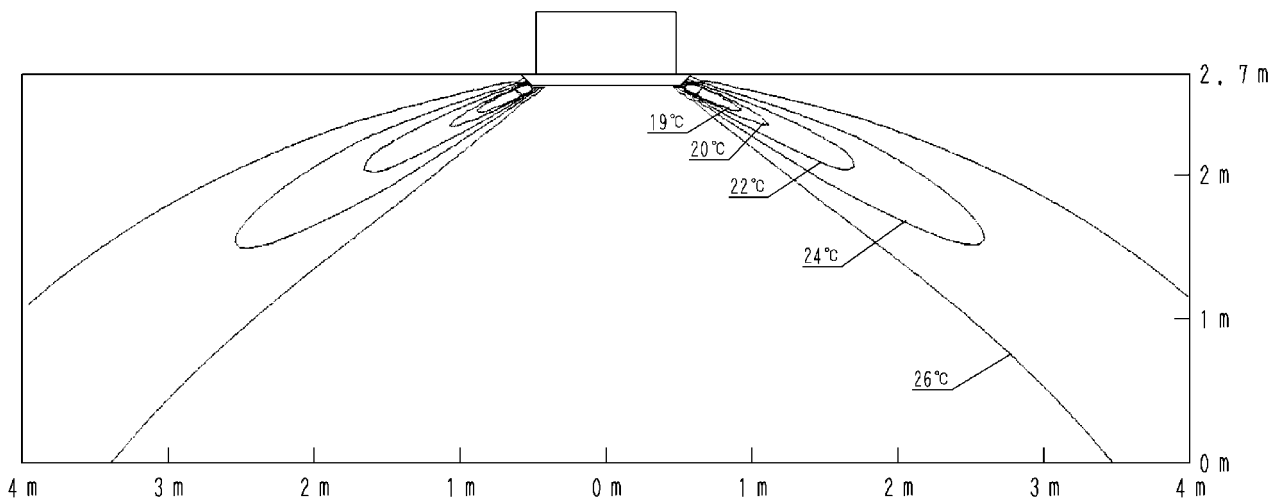
4-way discharge air flow direction: horizontal



FCQ125D

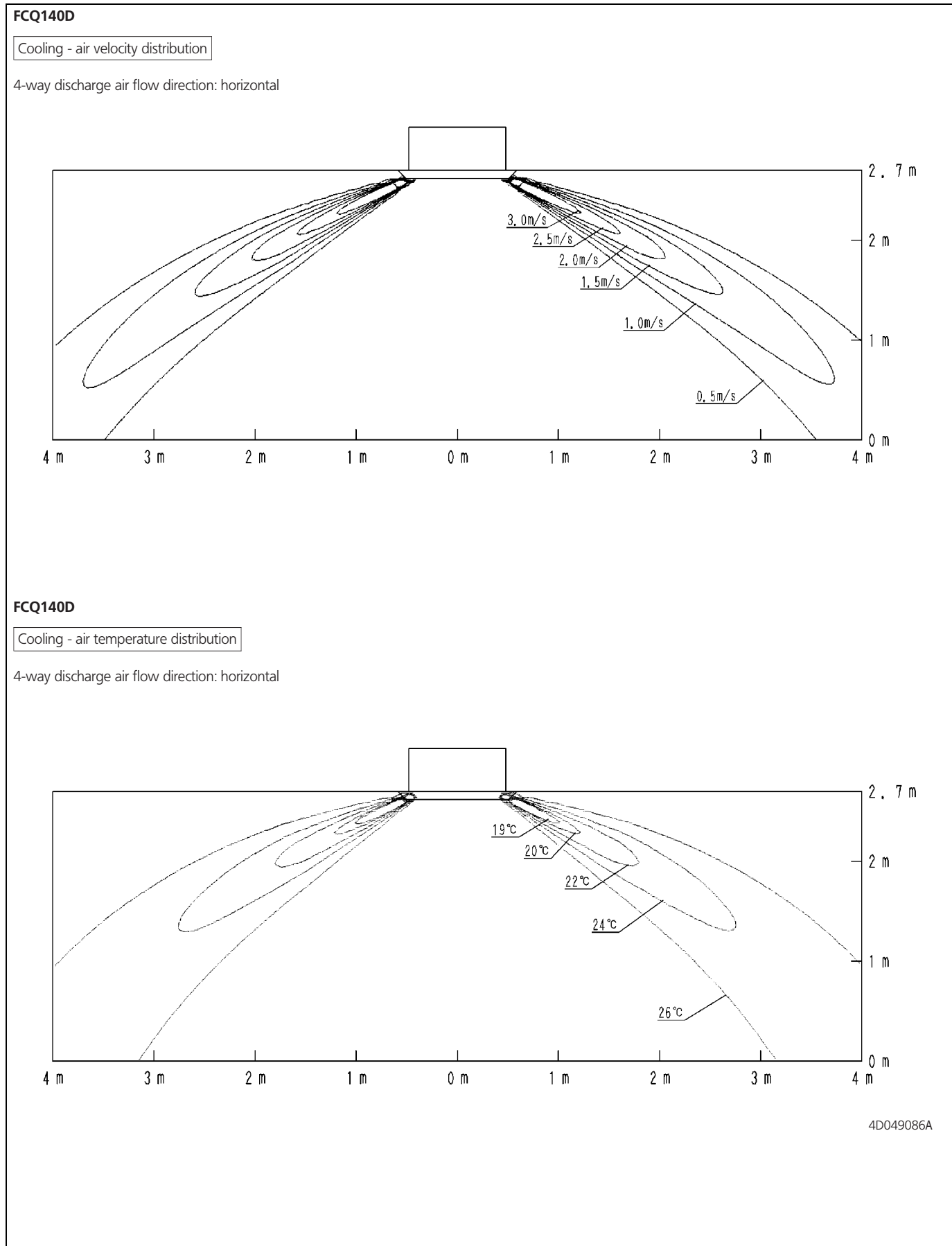
Cooling - air temperature distribution

4-way discharge air flow direction: horizontal



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8 Air flow pattern



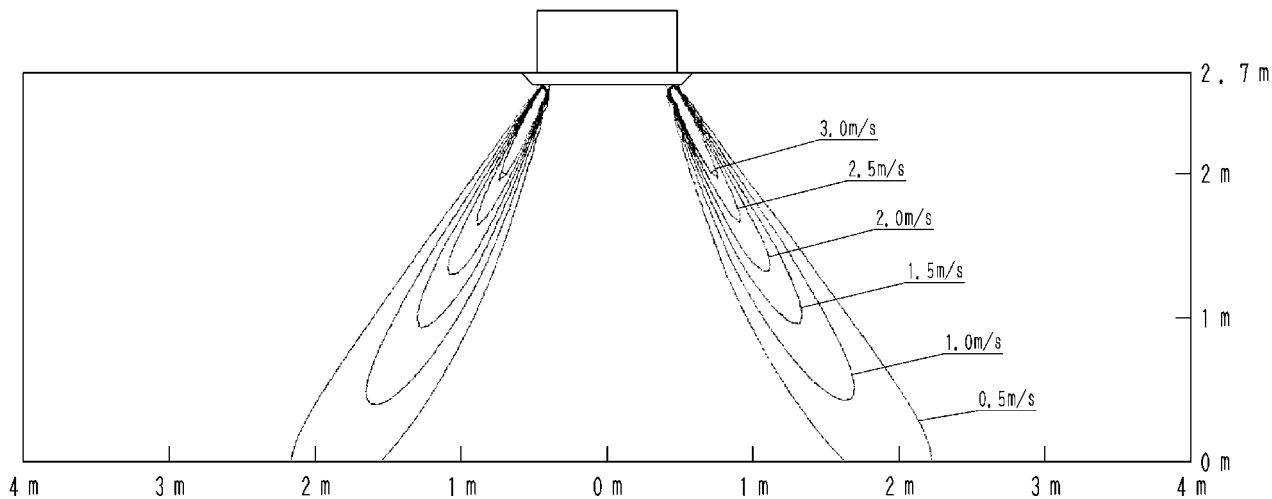
8 Air flow pattern

8

FCQ71D

Heating - air velocity distribution

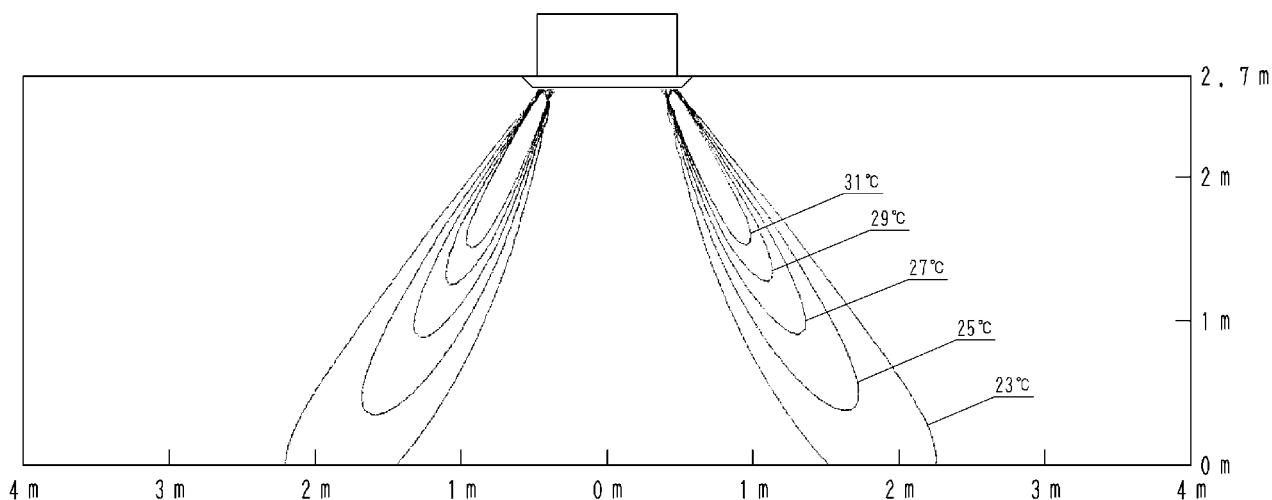
4-way discharge, air flow direction: down



FCQ71D

Heating - air temperature distribution

4-way discharge, air flow direction: down



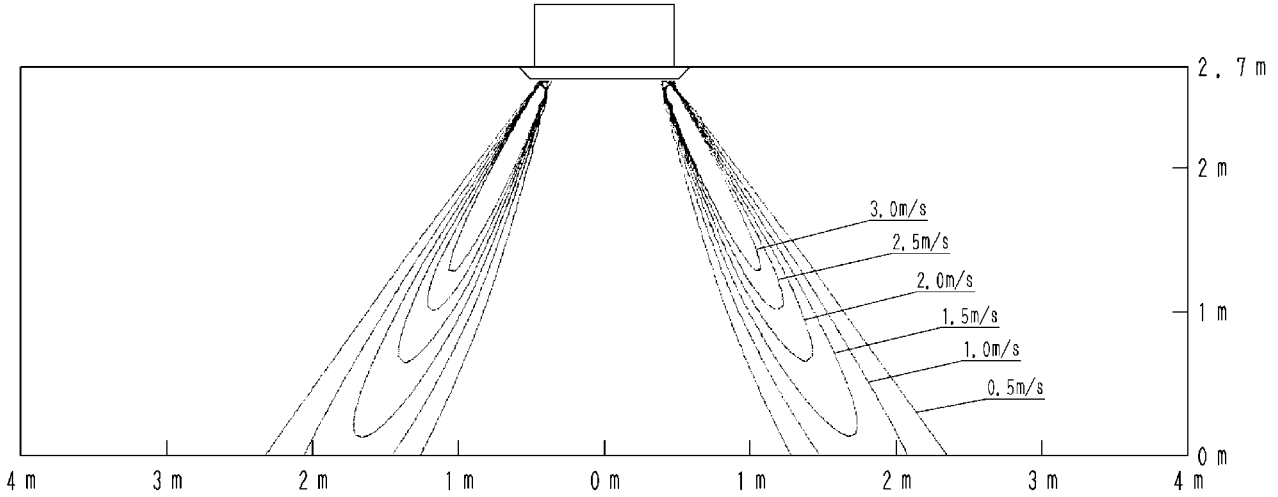
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8 Air flow pattern

FCQ100D

Heating - air velocity distribution

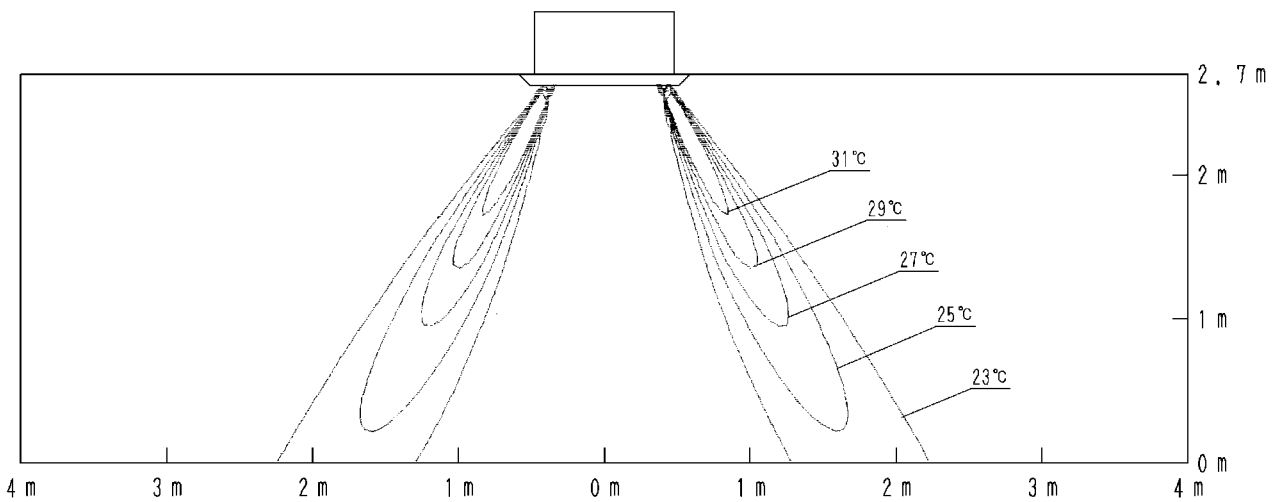
4-way discharge, air flow direction: down



FCQ100D

Heating - air temperature distribution

4-way discharge, air flow direction: down



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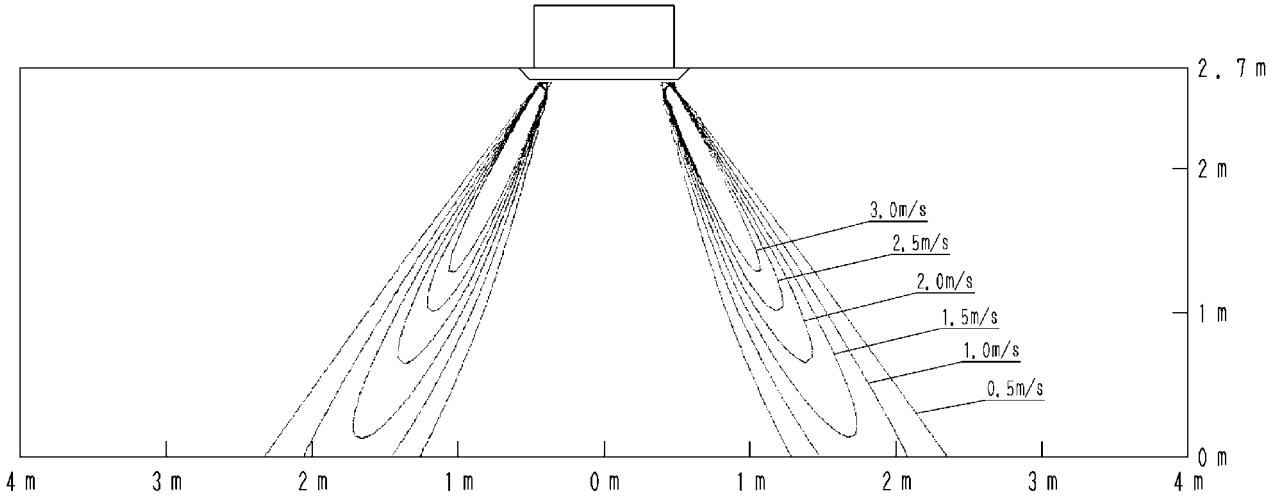
8 Air flow pattern

8

FCQ125D

Heating - air velocity distribution

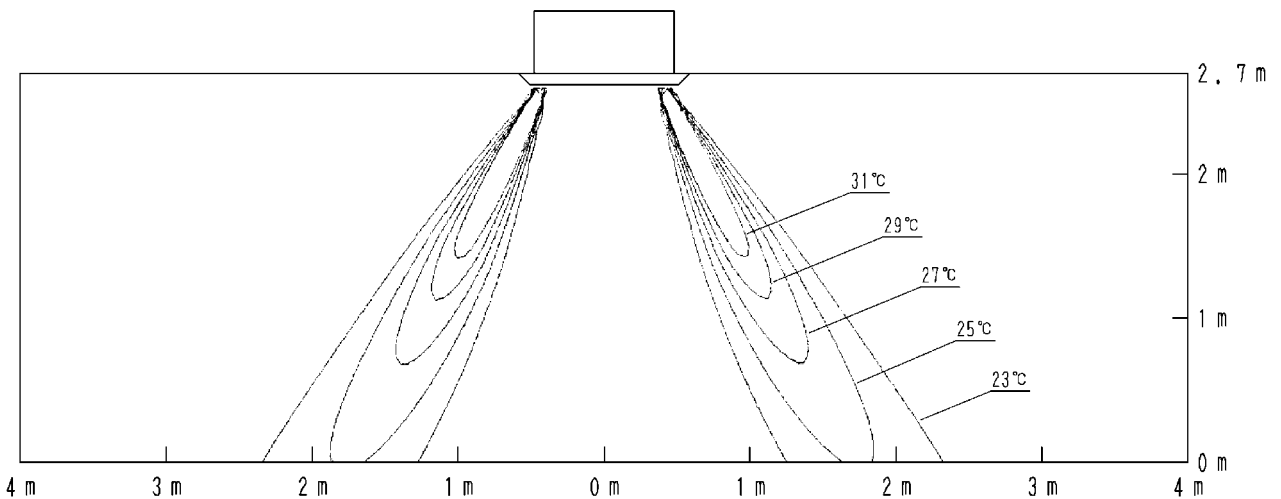
4-way discharge, air flow direction: down



FCQ125D

Heating - air temperature distribution

4-way discharge, air flow direction: down



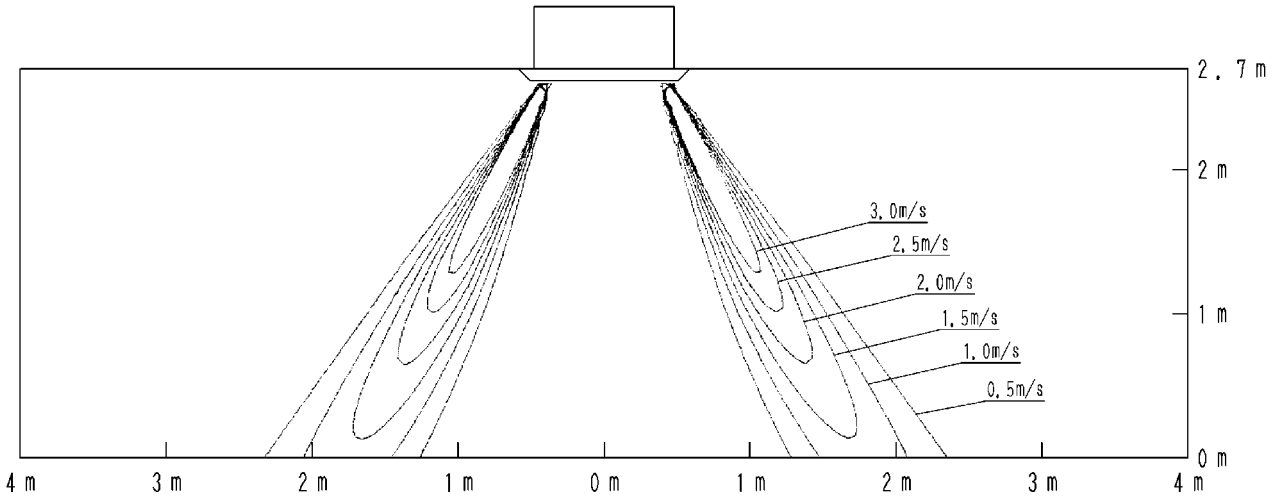
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8 Air flow pattern

FCQ140D

Heating - air velocity distribution

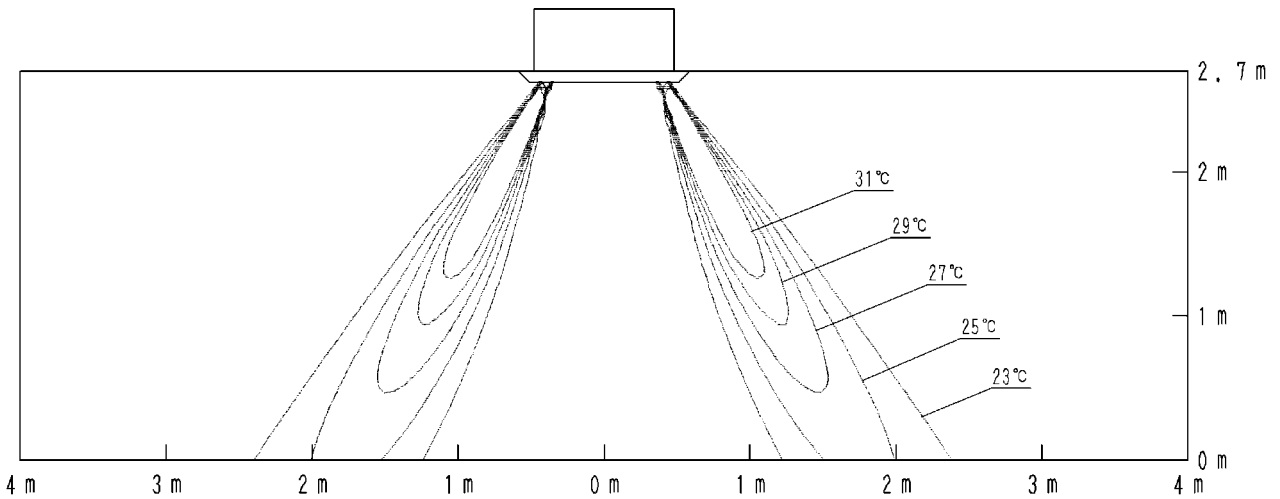
4-way discharge, air flow direction: down



FCQ140D

Heating - air temperature distribution

4-way discharge, air flow direction: down



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Split - Sky Air

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Daikin units comply with the European regulations that guarantee the safety of the product.



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Daikin Europe N.V. is participating in the EUROVENT Certification Programme. Products are as listed in the EUROVENT Directory of Certified Products.

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