

Air Conditioners

Technical Data

4-way blow ceiling suspended unit



EEDEN12-100

FUQ-B8

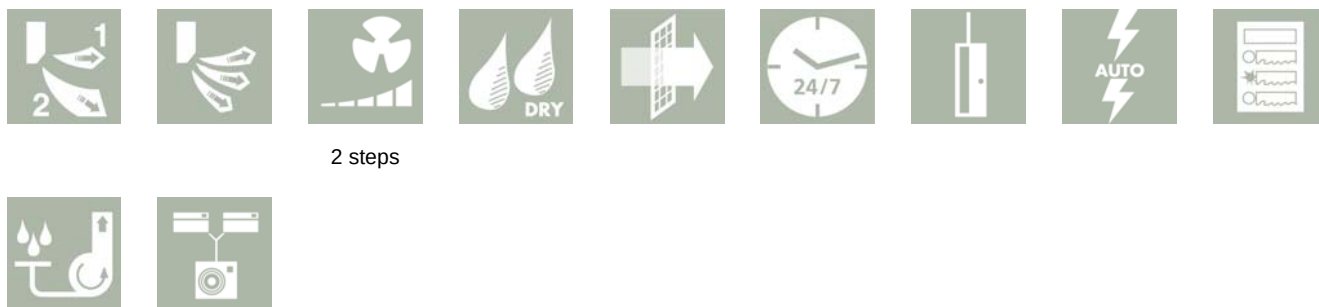
TABLE OF CONTENTS

FUQ-B8

1	Features	2
2	Specifications	3
	Technical Specifications	3
	Electrical Specifications	3
3	Safety device settings	4
	Safety Device Settings	4
4	Options	5
	Options	5
5	Dimensional drawings	6
	Dimensional Drawings	6
6	Piping diagrams	7
	Piping Diagrams	7
7	Wiring diagrams	8
	Wiring Diagrams - Single Phase	8
8	External connection diagrams	9
	External Connection Diagrams	9
9	Sound data	10
	Sound Pressure Spectrum	10
10	Air flow patterns	11
	Air Flow Pattern - Cooling	11
	Air Flow Pattern - Heating	14

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.
- Heat pumps are all-in-one heating & cooling solutions for residential & commercial applications. They extract thermal energy from the ambient air and are therefore more energy efficient and emit far less CO2 than comparable fossil fuel based boiler systems.
- Can be installed in both new and existing buildings
- Air can be discharged in any of 4 directions
- Different air flow configurations can be easily selected via the remote control for an even more comfortable space
- Air can be discharged in 5 different angles between 0 and 60°
- Auto swing function ensures efficient air and temperature distribution
- Possibility to shut 1 or 2 flaps for easy installation in corners
- Air flow distribution for ceiling heights up to 3.5m without capacity loss
- Vertical auto swing moves the discharge flaps up and down for efficient air and temperature distribution throughout the room
- Standard drain pump with 500mm lift



2 Specifications

2-1 Technical Specifications					FUQ71B8		FUQ100B8		FUQ125B8	
Power input	Cooling	Nom.		kW	0.180		0.289			
	Heating	Nom.		kW	0.160		0.269			
Casing	Colour				White					
	Material				Resin					
Dimensions	Unit	Height/Width/Depth		mm	165/895/895		230/895/895			
	Packed unit	Height/Width/Depth		mm	230/960/960		295/960/960			
Weight	Unit			kg	25		31			
	Packed unit			kg	31		38			
Heat exchanger	Length			mm	2,101					
	Rows	Quantity			3					
	Fin pitch			mm	1.5					
	Passes	Quantity			8			12		
	Face area			m ²	0.265		0.353			
	Stages	Quantity			6		8			
	Empty tubeplate hole	Quantity			0		4		0	
	Tube type				Cross fin coil (Multi louver fins and N-hix tubes)					
Fan	Type				Turbo fan					
	Quantity				1					
	Air flow rate	Cooling	High	m³/min	19		29		32	
			Low	m³/min	14		21		23	
		Heating	High	m³/min	19		29		32	
			Low	m³/min	14		21		23	
Fan motor	Model				QTS48A10M		QTS50B15M			
	Speed		Steps		2					
	Output		High		W	45		90		
	Phase x Voltage				V		1 x 220-240			
Sound power level	Cooling	High/Low		dBA	56/51		59/54		60/55	
	Heating	High/Low		dBA	56/51		59/54		60/55	
Sound pressure level	Cooling	High/Low		dBA	40/35		43/38		44/39	
	Heating	Super high/High/Low		dBA	-/40/35		-/43/38		-/44/39	
Refrigerant	Type				R-410A					
Piping connections	Liquid	Type/OD		mm	Flare connection/9.52					
	Gas	Type/OD		mm	Flare connection/15.9					
	Drain				I.D. 20/O.D. 26					
	Heat insulation				Heat resistant foamed polyethylene, regular foamed polyethylene					

Standard Accessories : Operation manual;

Standard Accessories : Installation manual;

Standard Accessories : Drain hose;

Standard Accessories : Clamp metal;

Standard Accessories : Insulation for fitting;

Standard Accessories : Sealing pad;

Standard Accessories : Clamps;

Standard Accessories : Screws;

Standard Accessories : Washer;

Standard Accessories : Joint;

Standard Accessories : Holding plate;

2-2 Electrical Specifications					FUQ71B8	FUQ100B8	FUQ125B8
Power supply	Name				V1		
	Phase				1~		
	Frequency		Hz		50		
	Voltage		V		220-240		
Current - 60Hz	Nominal running current		A		-		

3 Safety device settings

3 - 1 Safety Device Settings

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FUQ-B8

	Safety devices		71	100	125
FUQ-BWV1B	Fan motor thermal protector	°C	Off: 130±5	Off: 130±5	Off: 130±5

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4 Options

4 - 1 Options

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Name of option	Remark		FUQ--BWV1B		
			71	100	125
Sealing member of air discharge outlet			KDBH49FA80	KDBH49FA140	
Decoration panel for air discharge			KDBT49FA80	KDBT49FA140	
Vertical flap kit			KDGI49FA80	KDGI49FA140	
Replacement long-life filter			KAF495FA140		
L connection piping kit			KHFP49MA140		
Remote controller	Wired type		BRC1D528		
	Infrared type	Heat pump use	BRC7CA528W		
		Cooling only use	BRC7CA529W		
Central remote controller			DCS302CA51		
Unified ON/OFF controller			DCS301BA51		
Schedule timer			DST301BA51		
Wiring adapter for electrical appendices			KRP4AA53 ... ✕ 2		
Interface adapter for Sky Air series			DTA112BA51		
Installation box for adapter PCB			KRP1BA97		
Remote sensor			KRCS01-1A		
Connector for forced on, forced off			EKROR0A		
Electrical box with earth terminal (3 blocks)			KJB311AA		
Electrical box with earth terminal (2 blocks)			KJB212AA		
Set back time clock			-		

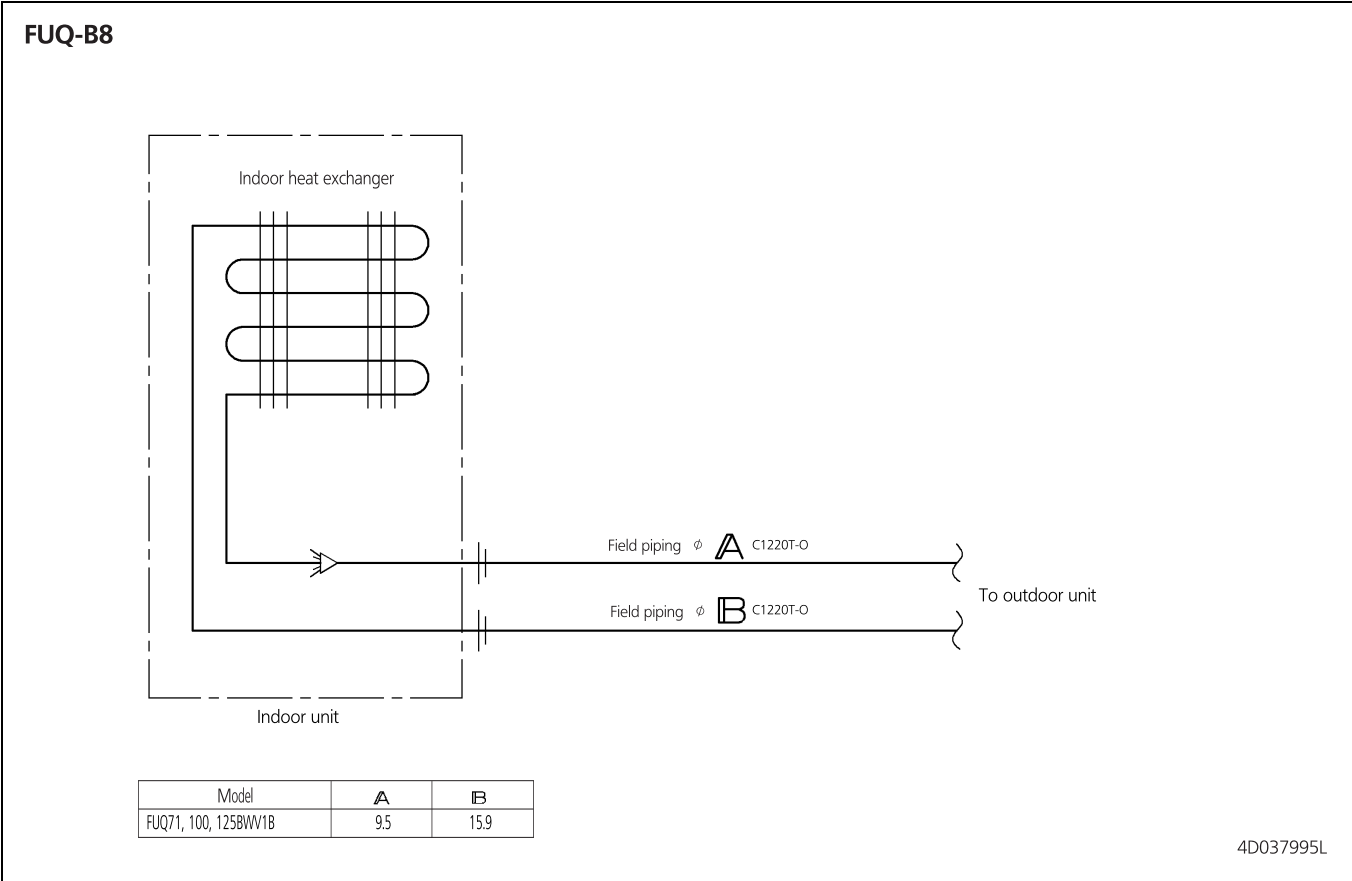
Note)

✕ 2; Installation box for adapter PCB (KRP1BA97) is necessary.

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6 Piping diagrams

6 - 1 Piping Diagrams

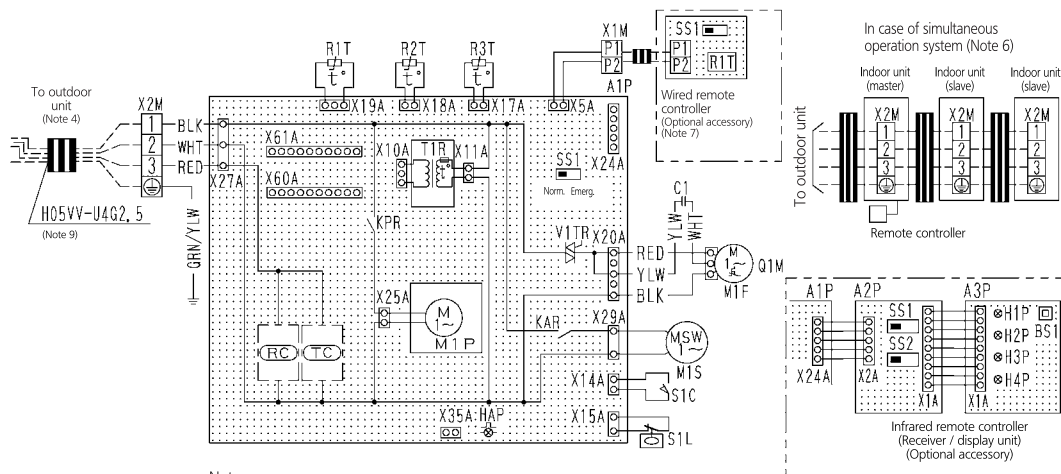


7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

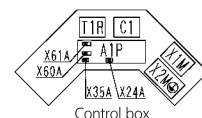
FUQ-B8

A1P	Printed circuit board
C1	Capacitor (MIF)
HAP	Flashing lamp (service monitor-green)
KAR	Magnetic relay (MIS)
KPR	Magnetic relay (MIS)
M1P	Motor (indoor fan)
M1S	Motor (drain pump)
M1T	Motor (sling flap)
Q1M	Thermal protector (M1T embedded)
R1T	Thermistor (air)
R2T	Thermistor (coil)
R3T	Thermistor (coil)
S1L	Reset switch
S1C	Limit switch (sling flap)
SS1	Selector switch (emergency)
T1R	Transformer (220-240V/22V)
V1TR	Triac (Phase control circuit)
X1M	Terminal block
X2M	Terminal block
RC	Signal receiver circuit
TC	Signal transmission circuit
Wired remote controller	
R1T	Thermistor (air)
SS1	Selector switch (main/sub)
Infrared remote controller (Receiver / display unit)	
A1P	Printed circuit board
A3P	Printed circuit board
BS1	Push button switch (ON/OFF)
H1P	Pilot lamp (on-red)
H2P	Pilot lamp (inter-green)
H3P	Pilot lamp (inter-red)
H4P	Pilot lamp (defrost-orange)
SS1	Selector switch (main/sub)
SS2	Selector switch (wireless address set)
Connector for optional parts	
X24A	Connector (wireless remote controller)
X35A	Connector (group control adapter)
X60A	Connector (interface adapter for sky air series)
X61A	Connector (interface adapter for sky air series)



Notes

1. : Terminal block
2. : Connector
3. : Field wiring
4. In case of simultaneous operation indoor unit system, see the indoor unit wiring only.
5. For the detail, see wiring diagram attached to outdoor unit.
6. In case using central remote controller, connect it to the unit in accordance with the attached installation manual.
7. In case of connection units varies according to the combination system, confirm technical guide and catalogs, etc, before connecting.
8. In case of main/sub changeover, see the installation manual attached to remote controller.
9. Symbols show as follows: BLK:Black RED:Red BLU:Blue WHT:White YLW:Yellow GRN:Green.
10. Shows only in case of protected pipes, use HO7RN-F in case of no protection.

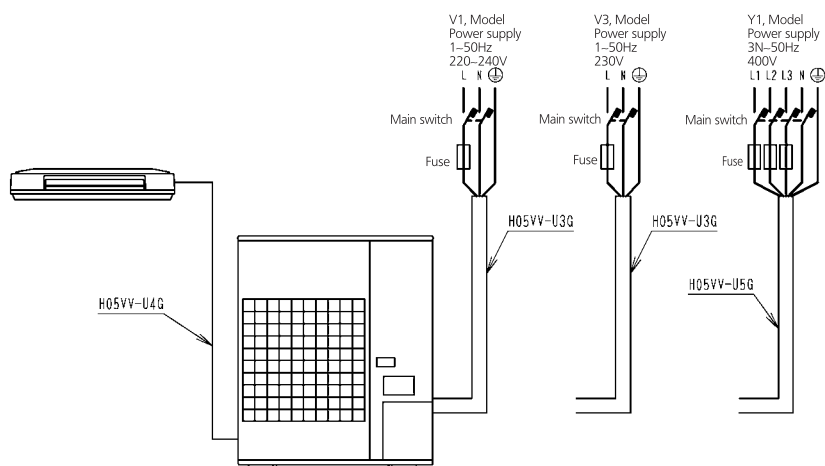


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8 External connection diagrams

8 - 1 External Connection Diagrams

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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 As for details, see wiring diagram.
- 5 Install fuse and main switch 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.

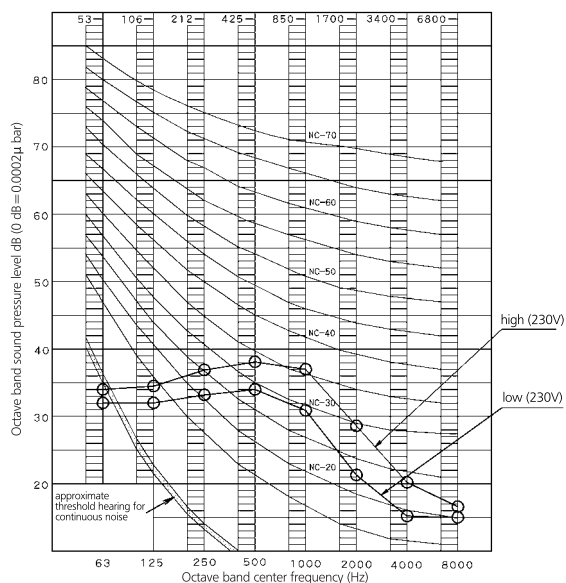
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9 Sound data

9 - 1 Sound Pressure Spectrum

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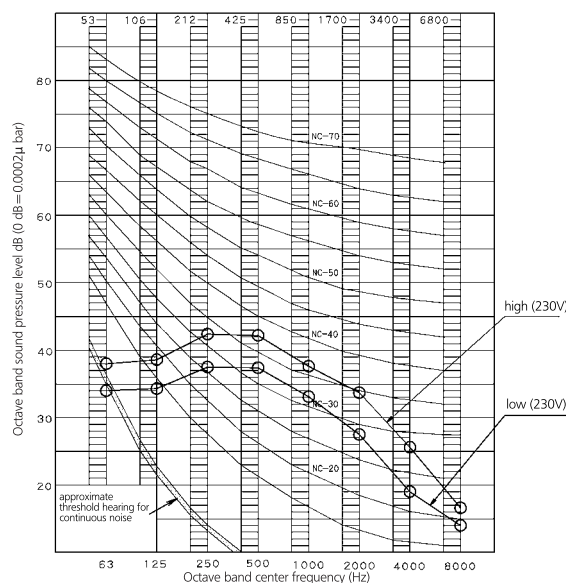
NOTES

- Overall (dB)
Scale: 230V
A: 40, 35
C: 44, 40
(B/C 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°CDB, 19°CWB
Outdoor temperature: 35°CDB, 24°CWB
- Heating: Return air temperature: 20°CDB, 15°CWB
Outdoor temperature: 7°CDB, 6°CWB
- 4 direction discharge
O: 230V
- Location of microphone



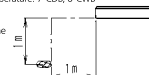
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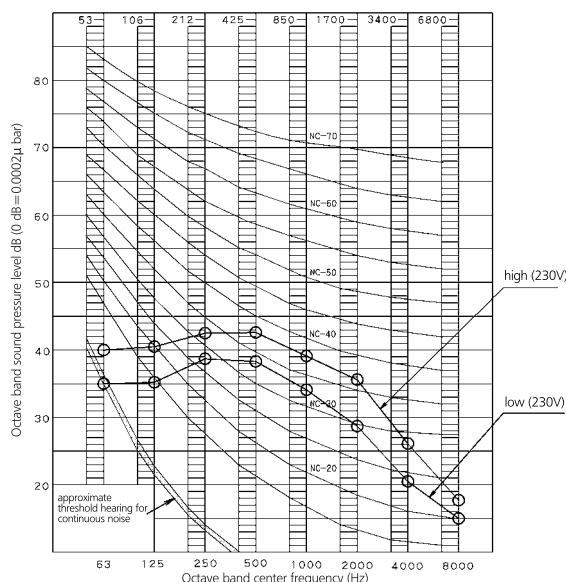
NOTES

- Overall (dB)
Scale: 230V
A: 43, 38
C: 48, 43
(B/C 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°CDB, 19°CWB
Outdoor temperature: 35°CDB, 24°CWB
- Heating: Return air temperature: 20°CDB, 15°CWB
Outdoor temperature: 7°CDB, 6°CWB
- 4 direction discharge
O: 230V
- Location of microphone



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FUQ125B8



NOTES

- Overall (dB)
Scale: 230V
A: 44, 39
C: 49, 44
(B/C 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°CDB, 19°CWB
Outdoor temperature: 35°CDB, 24°CWB
- Heating: Return air temperature: 20°CDB, 15°CWB
Outdoor temperature: 7°CDB, 6°CWB
- 4 direction discharge
O: 230V
- Location of microphone



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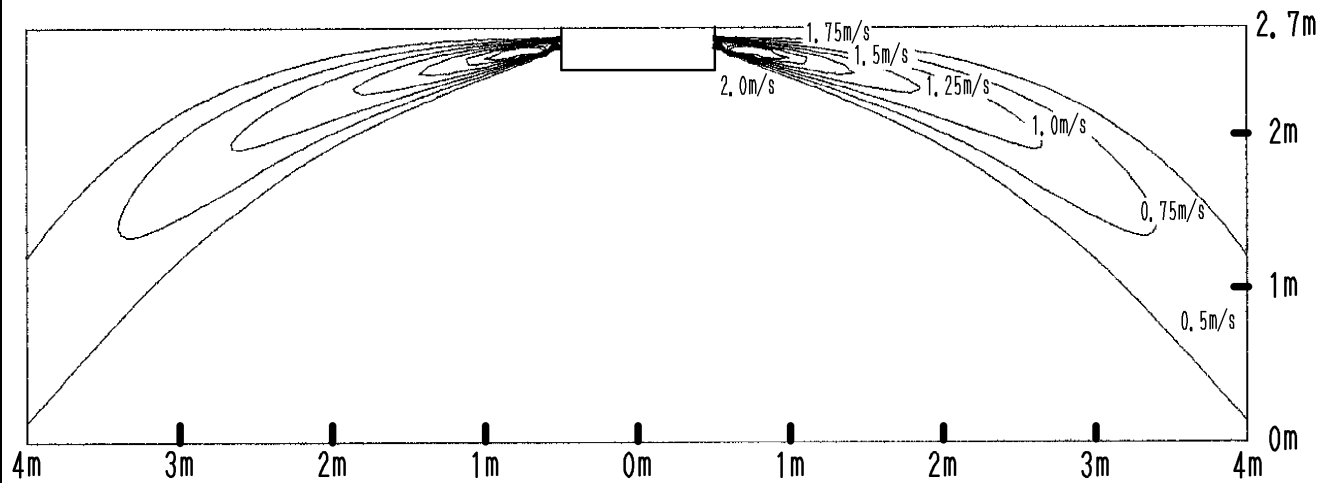
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

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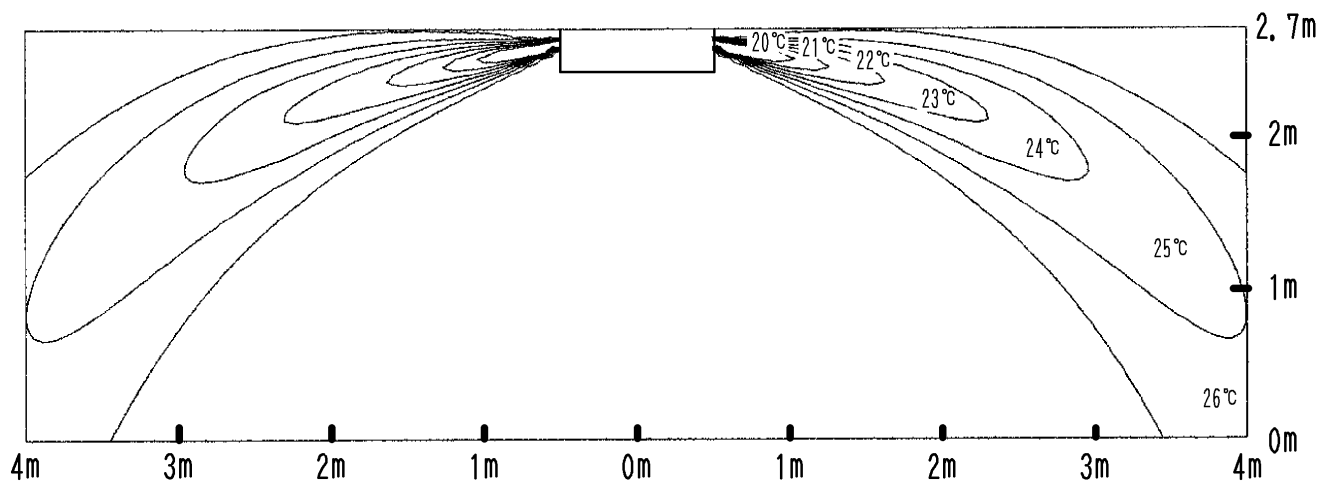
Cooling • Air velocity distribution

4 way discharge Air flow direction: horizontal



Cooling • Air temperature distribution

4 way discharge Air flow direction: horizontal



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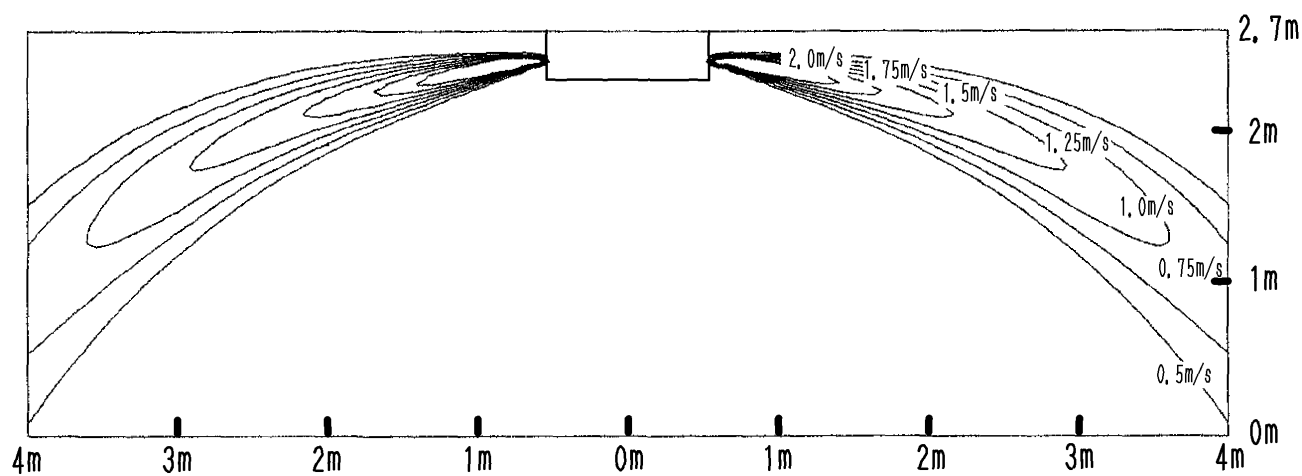
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

FUQ100B8

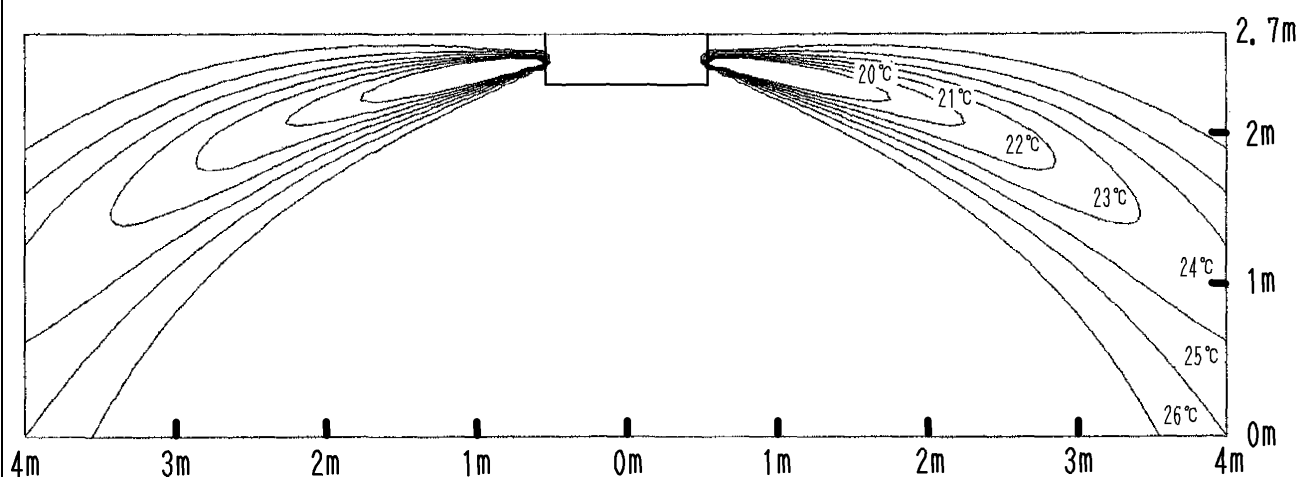
Cooling • Air velocity distribution

4 way discharge Air flow direction: horizontal



Cooling • Air temperature distribution

4 way discharge Air flow direction: horizontal



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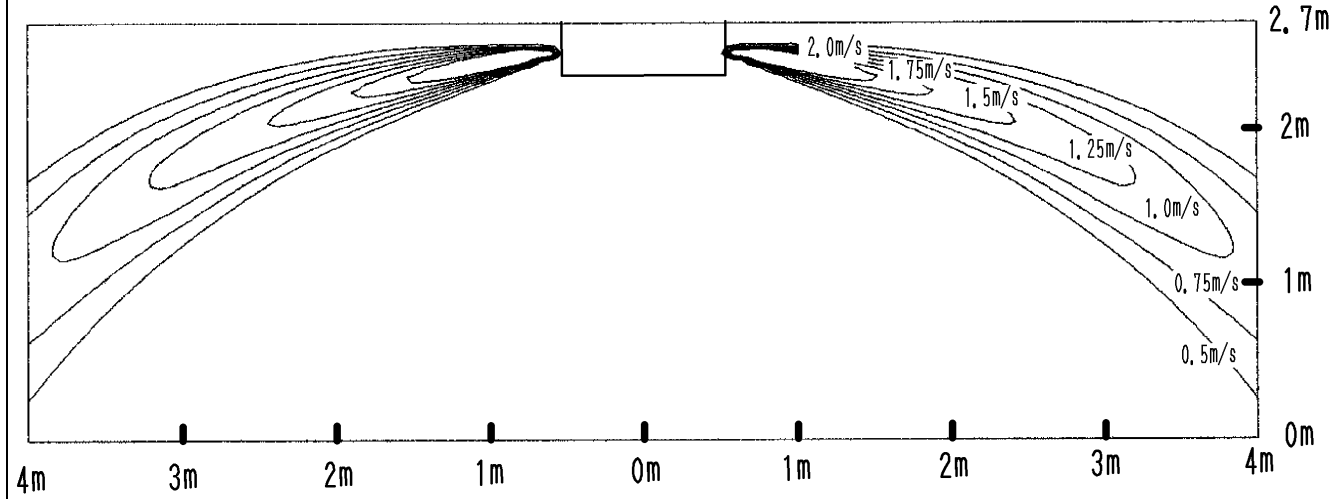
10 Air flow patterns

10 - 1 Air Flow Pattern - Cooling

FUQ125B8

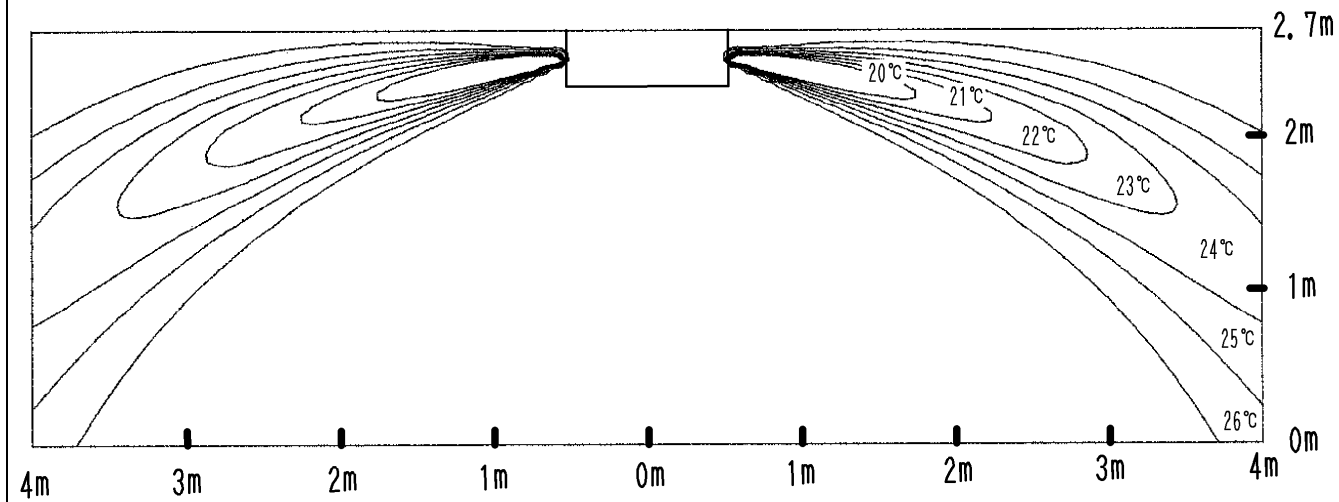
Cooling • Air velocity distribution

4 way discharge Air flow direction: horizontal



Cooling • Air temperature distribution

4 way discharge Air flow direction: horizontal



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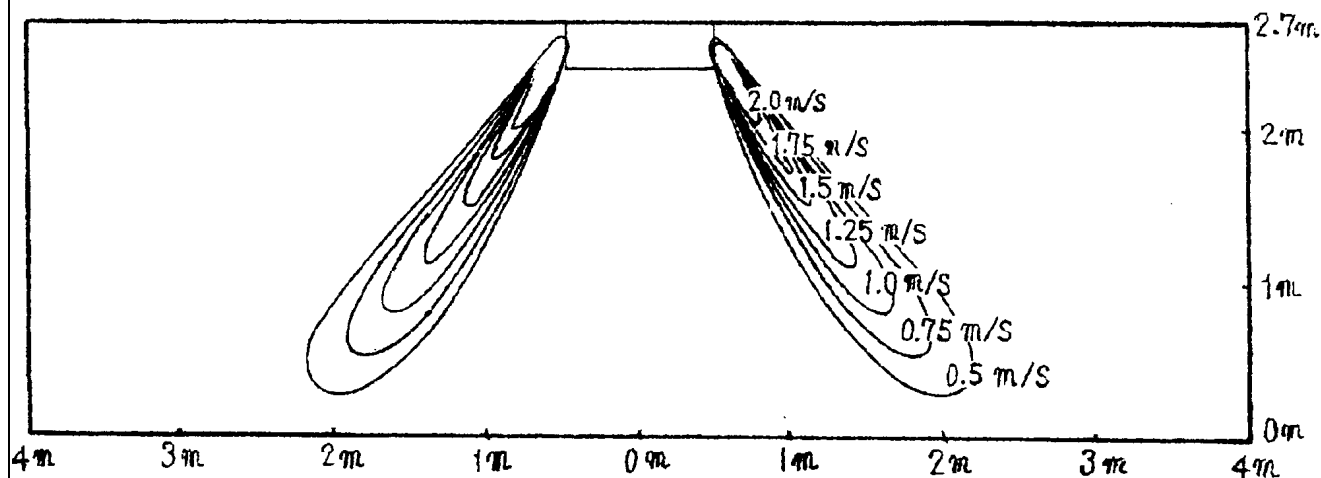
10 Air flow patterns

10 - 2 Air Flow Pattern - Heating

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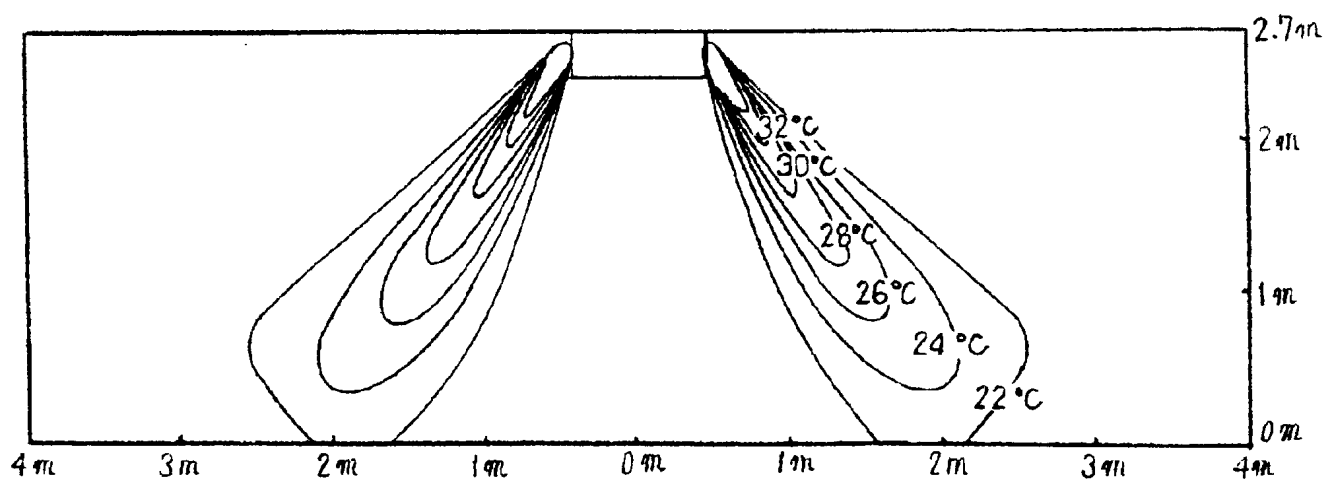
Heating • Air velocity distribution

4 way discharge Air flow direction: down



Heating • Air temperature distribution

4 way discharge Air flow direction: down



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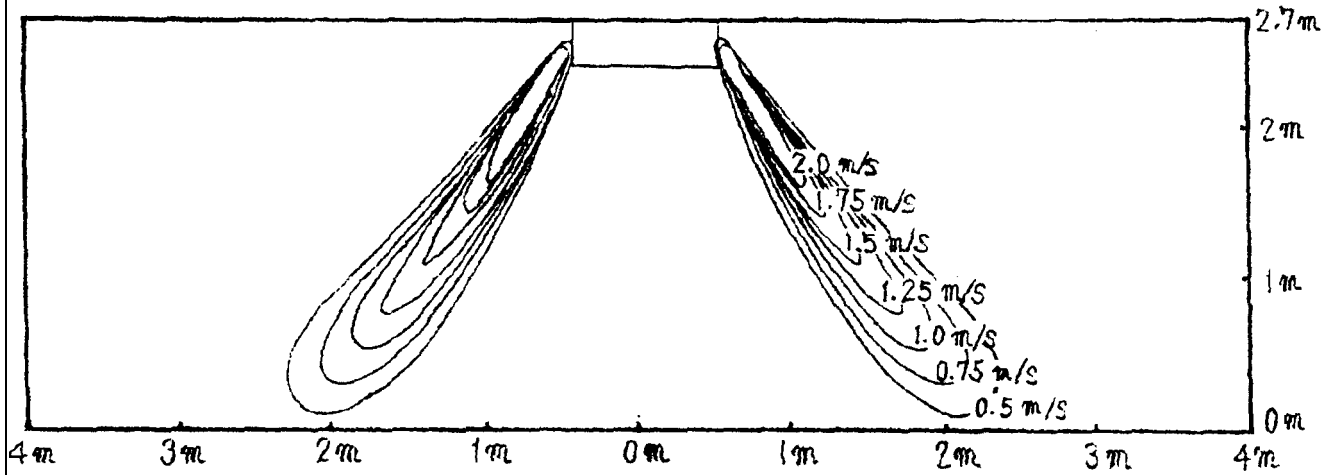
10 Air flow patterns

10 - 2 Air Flow Pattern - Heating

FUQ100B8

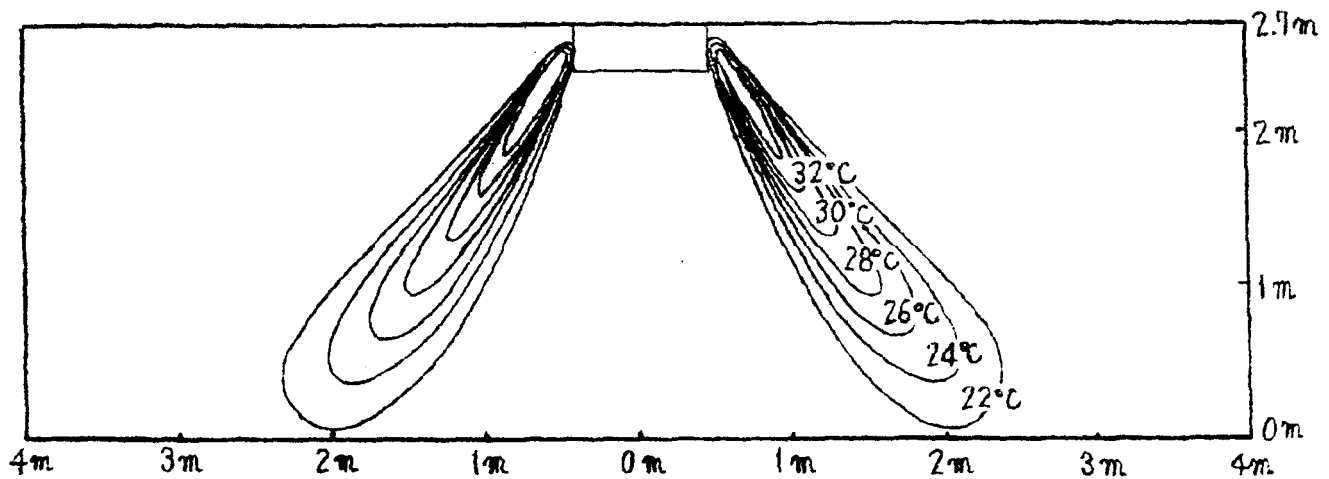
Heating • Air velocity distribution

4 way discharge Air flow direction: down



Heating • Air temperature distribution

4 way discharge Air flow direction: down



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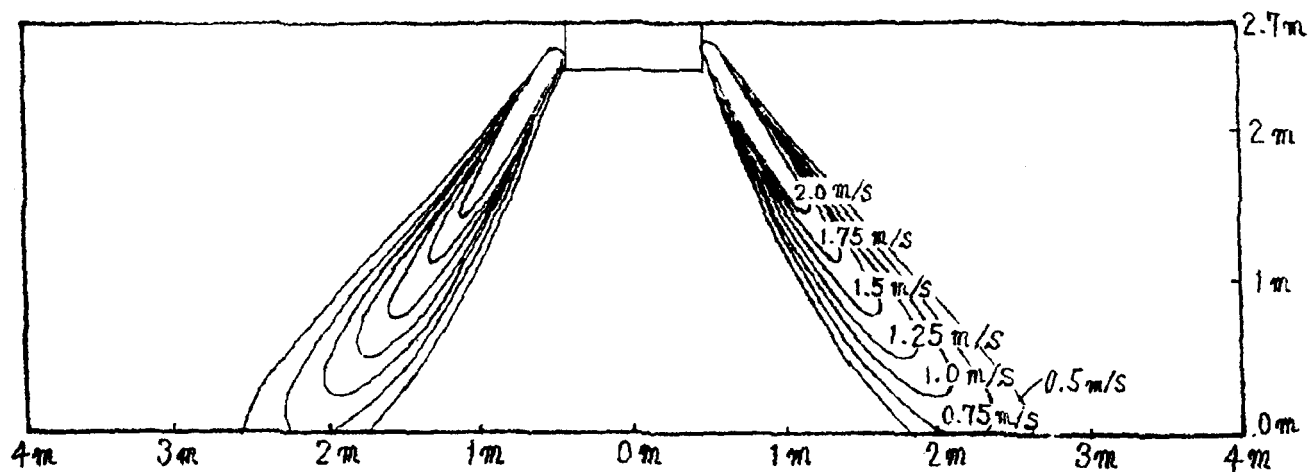
10 Air flow patterns

10 - 2 Air Flow Pattern - Heating

FUQ125B8

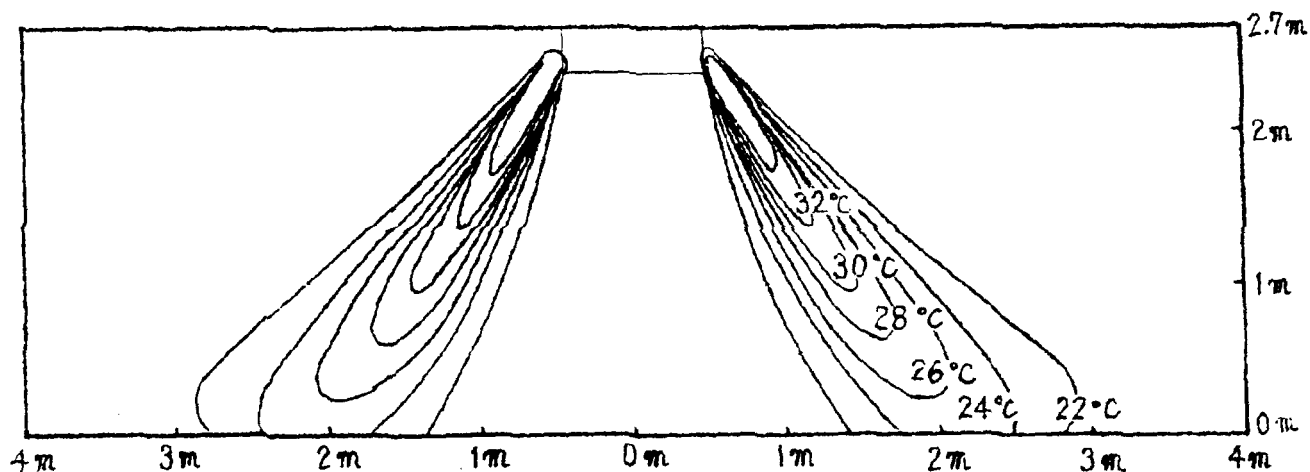
Heating • Air velocity distribution

4 way discharge Air flow direction: down



Heating • Air temperature distribution

4 way discharge Air flow direction: down



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