

DAIKIN



TECHNICAL DATA

Split-Sky Air



FUYP-B

**4-Way Blow Ceiling
Mounted Cassette**



Split Sky Air



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment



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



Daikin Europe NV is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



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

Specifications are subject to change without prior notice

DAIKIN PRODUCTS ARE DISTRIBUTED BY :



DAIKIN EUROPE NV Zandvoordestraat 300, B-8400 Oostende

Internet <http://www.daikin.be>



TABLE OF CONTENTS

FUYP-B

1	Features	2
2	Specifications	3
	Nominal capacity, capacity steps and nominal input	
	Technical specifications	
	Electrical specifications	
3	Dimensional drawings	7
4	Piping diagrams	8
5	Wiring diagrams	9
6	Sound level	10
	Sound level data	
	Sound pressure spectrum	
7	Air velocity and temperature distributions	11
8	Accessories	17
	Standard accessories	
	Optional accessories	
9	Control systems	19
10	Safety device settings	21
11	Installation	21

For capacity tables, please refer to the outdoor units concerned

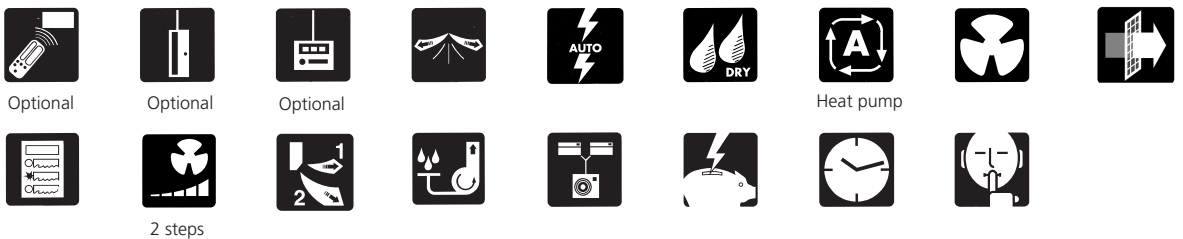




1 Features

- Ideal for refurbishment
- Leaves maximum floor and wall space for furniture, decoration and fittings
- Air can be discharged in any of four directions
- Air flow distribution for ceiling heights up to 3.5m without loss of capacity.
- Possibility to shut off 1 or 2 flaps for easy installation in corners
- Extremely quiet in operation both indoors and outdoors
- The air filter, drain pan and heat exchanger fin are mildew proof and anti-bacterial treated
- Drain-up pump with increased lift of 500mm
- Flexible installation: can be installed in the middle of a room or in a corner
- For equal distribution in larger rooms, up to 3 indoor units can be connected to 1 outdoor
- The (wired) remote control has a programmable timer
- Centralised control of several units can be achieved via 3 wired controls
 - centralised remote control
 - unified ON/OFF control
 - Schedule timer

1



2



2 Specifications

NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FUYP71BV1	FUYP100BV1	FUYP125BV1
NOMINAL INPUT	Cooling	kW	0.18	0.289	0.289

For combination indoor units + outdoor units:					
INDOOR UNITS			FUYP71BV1	FUYP100BV1	FUYP125BV1
OUTDOOR UNITS			RP71B7V1/W1/T1	RP100B7V1/W1/T1	RP125B7W1/T1
NOMINAL CAPACITY (2)	Cooling (1)	kW	7.1	10.0	12.5
NOMINAL INPUT	Cooling	kW	2.66/2.64/2.64	3.64/3.61/3.61	4.66/4.66

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				FUYP71BV1	FUYP100BV1	FUYP125BV1
DIMENSIONS	Unit	H	mm	165	230	230
		W	mm	895	895	895
		D	mm	895	895	895
WEIGHT	Unit		kg	25	31	31
MATERIAL	Unit			Resin		
COLOUR	Unit			White		
SOUND LEVEL	Sound pressure (cooling/heating) (3)	high	dBA	40	43	44
		low	dBA	35	38	39
	Sound power (cooling/heating) (4)	high	dBA	56	59	60
		low	dBA	51	54	55
FAN	Air flow rate	high	m ³ /min	19	29	32
		medium	m ³ /min	-	-	-
		low	m ³ /min	14	21	23
	Speed	steps		2 steps		
		high	rpm	-	-	-
		low	rpm	-	-	-
	Type	Turbo fan				
Qty x model			1 x QTS48A10M	1 x QTS50B15M		
Qty x motor output	W		1 x 45	1 x 90	1 x 90	
HEAT EXCHANGER	Type		Cross fin coil (Multi louver fins and Hi-XA tubes)			
	Rows x stages x fin pitch	mm	3 x 6 x 1.5	3 x 8 x 1.5	3 x 8 x 1.5	
	Face area	m ²	0.265	0.353	0.353	
AIR FILTER	Resin net (with mold resistant)					
AIR DIRECTION CONTROL	-					
TEMPERATURE CONTROL	-					
PIPING CONNECTIONS	liquid	mm	φ9.5 (flare)	φ9.5 (flare)	φ9.5 (flare)	
		mm	φ15.9 (flare)	φ19.1 (flare)	φ19.1 (flare)	
	drain	mm	I.D. φ20	I.D. φ20	I.D. φ20	
		mm	O.D. φ26	O.D. φ26	O.D. φ26	
INSULATION MATERIAL	Heat insulation		Heat resistant foamed polyethylene, regular foamed polyethylene			

For outdoor units	Pair application	See chapter R-GZ7/RP-B7
-------------------	------------------	-------------------------

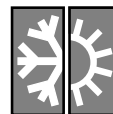


2 Specifications

ELECTRICAL SPECIFICATIONS				FUYP71BV1	FUYP100BV1	FUYP125BV1
For indoor units only:						
CURRENT	Nominal running current	cooling	A	-	-	-
For combination indoor units + outdoor units:				FUYP71BV1	FUYP100BV1	FUYP125BV1
				RP71B7V1/W1	RP100B7V1/W1	RP125B7W1
CURRENT	Nominal running current	cooling	A	-	-	-
	Maximum running current	cooling	A	-	-	-
For indoor units only:				FUYP71BV1	FUYP100BV1	FUYP125BV1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency		Hz	50	50	50
	Voltage		V	230	230	230

NOTES

- 1 Nominal cooling capacities are based on: indoor temperature: 27°CDB/19°CWB * outdoor temperature: 35°CDB * equivalent refrigerant piping length: 7.5m * level difference: 0m
- 2 Capacities are net, including a deduction for indoor fan motor heat.
- 3 The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
- 4 The sound power level is an absolute value indicating the "power" which a sound source generates.



2 Specifications

NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FUYP71BV1	FUYP100BV1	FUYP125BV1
NOMINAL INPUT	Cooling	W	0.18	0.289	0.289
	Heating	W	0.16	0.269	0.269

For combination indoor units + outdoor units:					
INDOOR UNITS			FUYP71BV1	FUYP100BV1	FUYP125BV1
OUTDOOR UNITS			RYP71B7V1/W1	RYP100B7V1/W1	RYP125B7W1
NOMINAL CAPACITY (3)	Cooling (1)	kW	7.1	10.0	12.5
	Heating (2)	kW	7.7	11.0	14.0
NOMINAL INPUT	Cooling	kW	2.66/2.64	3.64/3.61	4.66
	Heating	kW	2.62/2.60	3.60/3.57	4.91

TECHNICAL SPECIFICATIONS							
INDOOR UNITS				FUYP71BV1	FUYP100BV1	FUYP125BV1	
DIMENSIONS	Unit	H	mm	165	230	230	
		W	mm	895	895	895	
		D	mm	895	895	895	
WEIGHT	Unit			kg	25	31	
MATERIAL	Unit			Resin			
COLOUR	Unit			White			
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dBA	40/40	43/43	44/44	
		low	dBA	35/35	38/38	39/39	
	Sound power (cooling/heating) (5)	high	dBA	56/56	59/59	60/60	
		low	dBA	51/51	54/54	55/55	
FAN	Air flow rate (cooling/heating)	high	m ³ /min	19/19	29/29	32/32	
		medium	m ³ /min	-	-	-	
		low	m ³ /min	14/14	21/21	23/23	
	Speed	steps		2 steps			
		high	rpm	-	-	-	
		low	rpm	-	-	-	
	Type	Turbo fan					
Qty x model			1 x QTS48A10M	1 x QTS50B15M			
Qty x motor output	W		1 x 45	1 x 90	1 x 90		
HEAT EXCHANGER	Type Cross fin coil (Multi louver fins and Hi-XA tubes)						
	Rows x stages x fin pitch	mm		3 x 6 x 1.5	3 x 8 x 1.5	3 x 8 x 1.5	
	Face area	m ²		0.265	0.353	0.353	
AIR FILTER	Resin net (with mold resistant)						
AIR DIRECTION CONTROL	-						
TEMPERATURE CONTROL	-						
PIPING CONNECTIONS	liquid	mm	φ9.5 (flare)	φ9.5 (flare)	φ9.5 (flare)		
		mm	φ15.9 (flare)	φ19.1 (flare)	φ19.1 (flare)		
	drain	mm	I.D. φ20	I.D. φ20	I.D. φ20		
	drain	mm	O.D. φ26	O.D. φ26	O.D. φ26		
INSULATION MATERIAL	Heat insulation		Heat resistant foamed polyethylene, regular foamed polyethylene				

For outdoor units	Pair application	See chapter RY-EAZ7/RYP-B7
-------------------	------------------	----------------------------

2



2 Specifications

ELECTRICAL SPECIFICATIONS				FUYP71BV1	FUYP100BV1	FUYP125BV1
For indoor units only:						
CURRENT	Nominal running current	A	-	-	-	
	Heating	A	-	-	-	
For combination indoor units + outdoor units:				FUYP71BV1	FUYP100BV1	FUYP125BV1
				RYP71B7V1/W1	RYP100B7V1/W1	RYP125B7W1
CURRENT	Nominal running current	cooling	A	-	-	-
		heating	A	-	-	-
	Maximum running current	cooling	A	-	-	-
		heating	A	-	-	-
For indoor units only:				FUYP71BV1	FUYP100BV1	FUYP125BV1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency	Hz		50	50	50
	Voltage	V		230	230	230

NOTES

- 1 Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m * level difference: 0m.
- 2 Nominal heating capacities are based on: indoor temperature: 20°CDB* outdoor temperature: 7°CDB/6°CWB * equivalent refrigerant piping length: 7.5m * level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- 4 The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
- 5 The sound power level is an absolute value indicating the "power" which a sound source generates.



3 Dimensional drawings

FUYP71B unit (mm)

Drain connection location for upper piping

Drain connection location for rear piping

※ Drain pipe can be raised up to 350mm from the top surface of the product.

Brand name plate (note 2)

Required space

※ 1500 mm or more

※ 1500 mm or more

※ 1500 mm or more

※ When closing the discharge grill, the required space is 30mm or more. (Note 3)

895

790 (Suspension position)

895

790 (Suspension position)

30

180

83

52

109

110

7

8

145

185

3

1

110

80

58

40

20

165

1000mm or more (required space)

Suspension bolt
4-M8-M10

Height of suspension bracket

Note:

1. Location for manufacture's label: on bell mouth.
2. This is where the signal of remote control is received. Refer to the drawing of remote control in detail.
3. When closing the discharge grill (2 or 3 way discharge), direction of pipe connection will be limited, please refer to installation manual.

1 Liquid pipe connection - ϕ 9.5 flare
 2 Gas pipe connection ϕ 15.9 flare
 3 Drain pipe connection V.P.20
 4 Air outlet
 5 Air suction grille
 6 Corner decoration cover
 7 Right pipe / wiring connection
 8 Rear pipe / wiring connection
 9 Pipe through cover
 10 Accessory drain elbow

3D013860A

3

FUYP100-125B unit (mm)

Drain connection location for upper piping

Drain connection location for rear piping

※ Drain pipe can be raised up to 350mm from the top surface of the product.

Brand name plate (note 2)

Required space

※ 1500 mm or more

※ 1500 mm or more

※ 1500 mm or more

※ When closing the discharge grill, the required space is 30mm or more. (Note 3)

895

790 (Suspension position)

895

790 (Suspension position)

30

180

83

52

109

177

7

8

145

185

3

1

110

80

58

40

20

230

1000mm or more (required space)

Suspension bolt
4-M8-M10

Height of suspension bracket

Note:

1. Location for manufacture's label: on bell mouth.
2. This is where the signal of remote control is received. Refer to the drawing of remote control in detail.
3. When closing the discharge grill (2 or 3 way discharge), direction of pipe connection will be limited, please refer to installation manual.

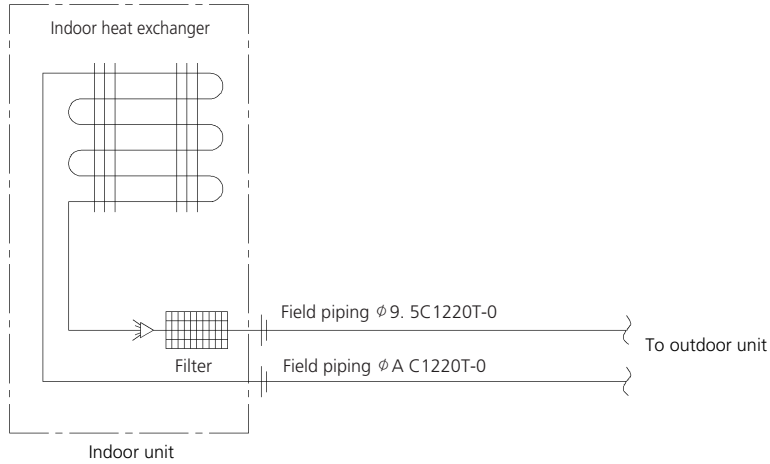
1 Liquid pipe connection - ϕ 9.5 flare
 2 Gas pipe connection ϕ 15.9 flare
 3 Drain pipe connection V.P.20
 4 Air outlet
 5 Air suction grille
 6 Corner decoration cover
 7 Right pipe / wiring connection
 8 Rear pipe / wiring connection
 9 Pipe through cover
 10 Accessory drain elbow

3D013859A



4 Piping diagrams

FUYP71-125B



Refrigerant pipe connection port diameters

Model	A
FUYP71	φ15.9
FUYP100•125	φ19.1

4

- Check valve
- Flare connection
- Screw connection
- Flange connection
- Pinched pipe
- Spinned pipe

4D013899A

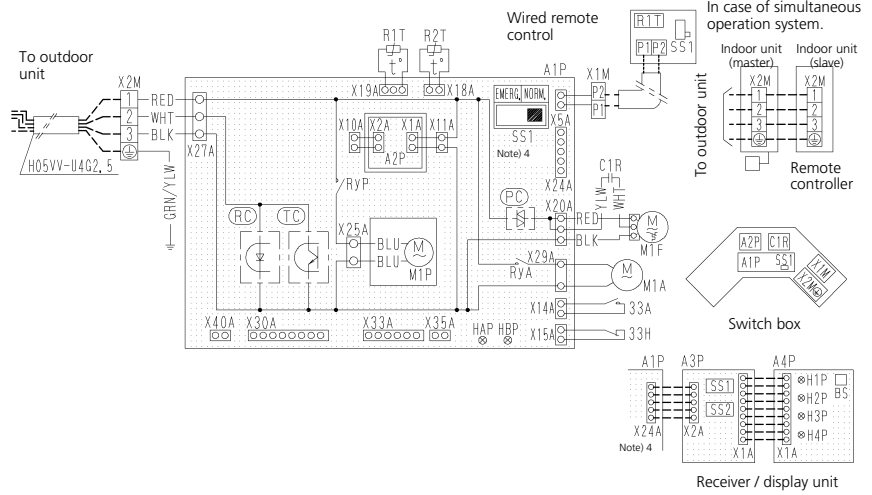


5 Wiring diagrams

FUYP71-125B

Notes

- Terminal : Connector
- : Protective earth (screw)
- : Field wiring
- In case using central remote controller, connect it to the unit in accordance with the attached instruction manual. X24A is connected when the remote controller kit is being used.
- Remote controller model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
- Symbols show as follows Red:red, Blk:black, Ylw:yellow, Org:orange, Gry:gray, Prp:purple, Blu:blue
- Confirm the method of setting the selector switch (SS1, SS2) by installation manual and engineering materials, etc.



1-RED, 2-WHITE, 3-BLACK	R1T	Thermistor (air)
33A	R2T	Thermistor (coil)
33H	RVA	Magnetic relay (M1A)
A1P	RVP	Magnetic relay
A2P	SS1	Selector switch (emergency)
(Transformer) 230V/16V	X1M	Terminal strip
C1R	X2M	Terminal strip
Capacitor (M1F)	HAP	Light emitting diode (service monitor green)
HAP	HBP	Light emitting diode (service monitor green)
M1A	M1P	Motor (indoor fan)
Motor (swing flap)	M1P	Motor (drain pump)
M1F	Q1F	Thermo switch (M1F embedded)

R1T	Thermistor (air)
R2T	Thermistor (coil)
RVA	Magnetic relay (M1A)
RVP	Magnetic relay
SS1	Selector switch (emergency)
X1M	Terminal strip
X2M	Terminal strip
HAP	Light emitting diode (service monitor green)
HBP	Light emitting diode (service monitor green)
M1A	Motor (indoor fan)
M1P	Motor (drain pump)
Q1F	Thermo switch (M1F embedded)

Receiver / display unit (attached to wireless remote controller)	A3P	Printed circuit board
A4P	Printed circuit board	
BS	Push button (on/off)	
H1P	Light emitting diode (service monitor red)	
H2P	Light emitting diode (service monitor green)	
H3P	Light emitting diode (service monitor red)	
H4P	Light emitting diode (service monitor orange)	
SS1	Selector switch (main/sub)	
SS2	Selector switch (wireless address set)	

Connector for optional parts	X30A	Connector (interface adaptor for sky air series)
X33A	Connector (adaptor for wiring)	
X35A	Connector (group control adaptor)	
X40A	Connector	
ON/OFF input from outside		

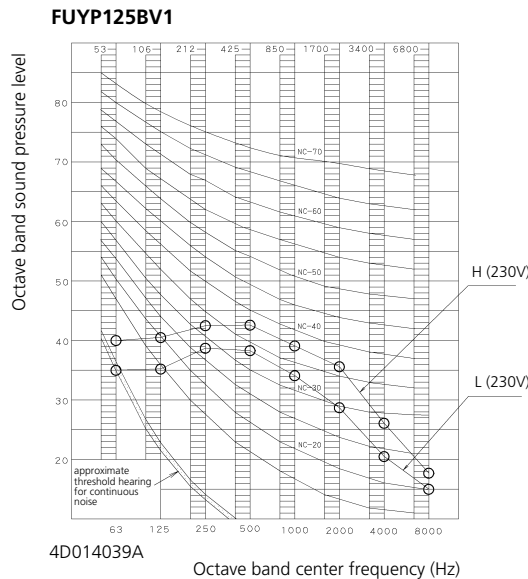
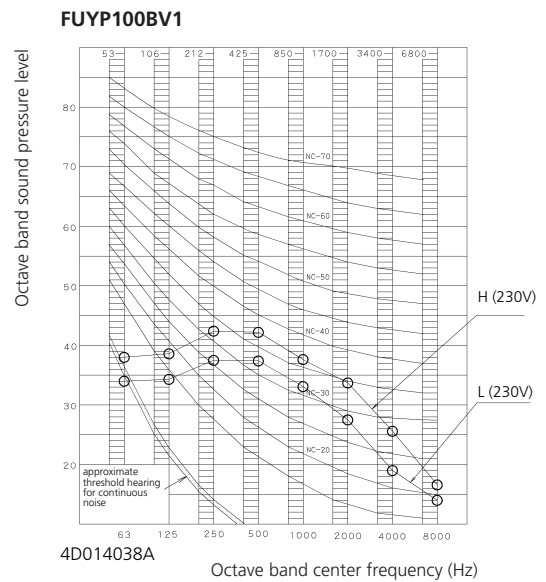
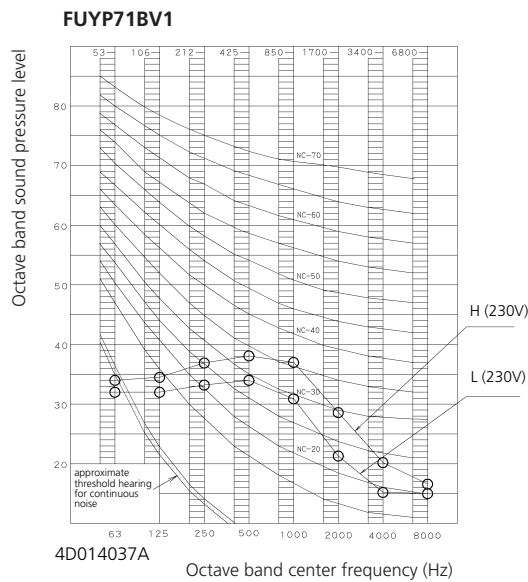


6 Sound level

6-1 Sound level data

Model	Sound pressure level			Sound power level	
	230V				
	50Hz				
	Cooling (H/L)	Heating (H/L)	Measuring location	Cooling (H/L)	Heating (H/L)
FUYP71BV1	40/35	40/35		56/51	56/51
FUYP100BV1	43/38	43/38		59/54	59/54
FUYP125BV1	44/39	44/39		60/55	60/55

6-2 Sound pressure spectrum



- Note:
1. Sound pressure levels are measured in an anechoic room.
 2. Operation sound levels are valid at nominal operation condition
 3. Operation sound level differs with operation and ambient conditions.

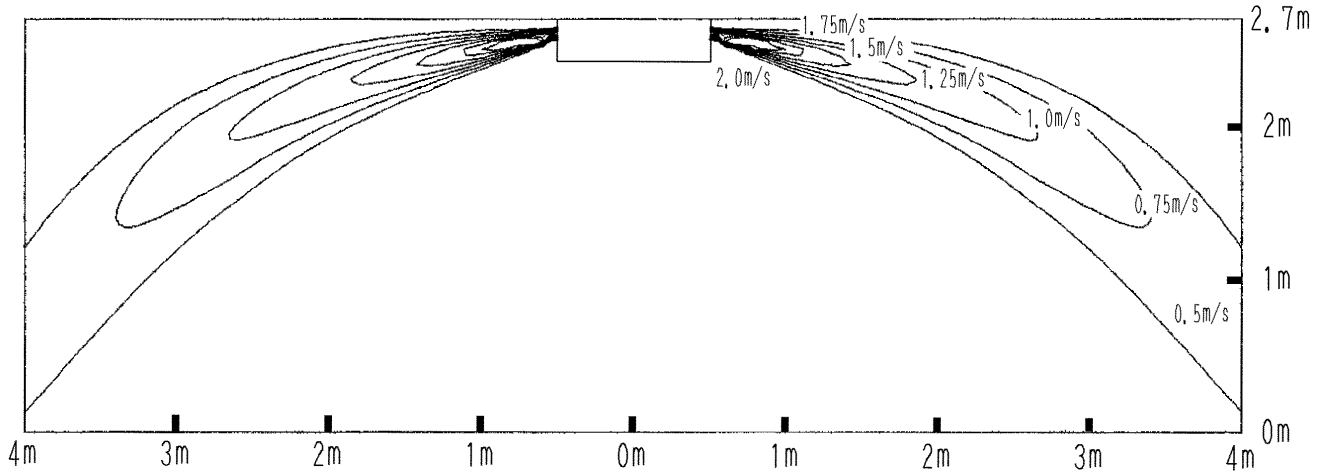


7 Air velocity and temperature distributions

FUYP71BV1

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal

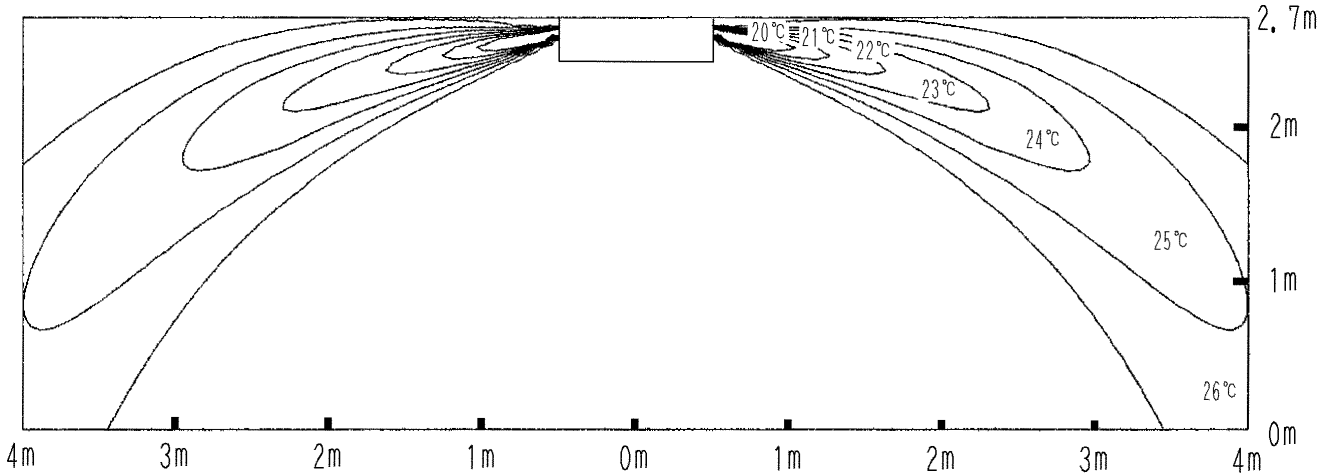


7

FUYP71BV1

Cooling - air temperature distribution

4-way discharge air flow direction: horizontal



4D028396

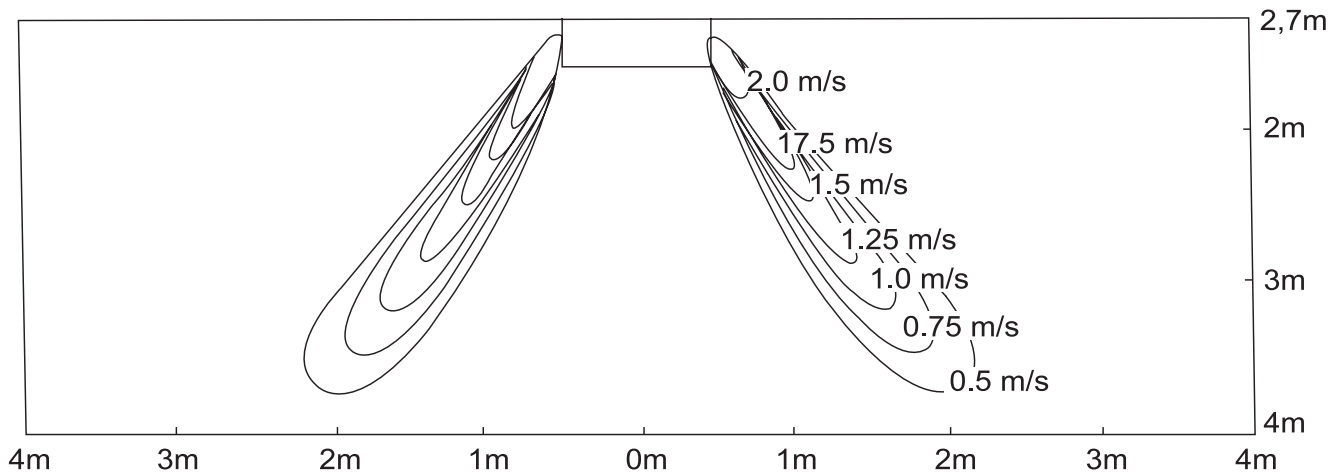


7 Air velocity and temperature distributions

FUYP71BV1

Heating - air velocity distribution

4-way discharge, air flow direction: down

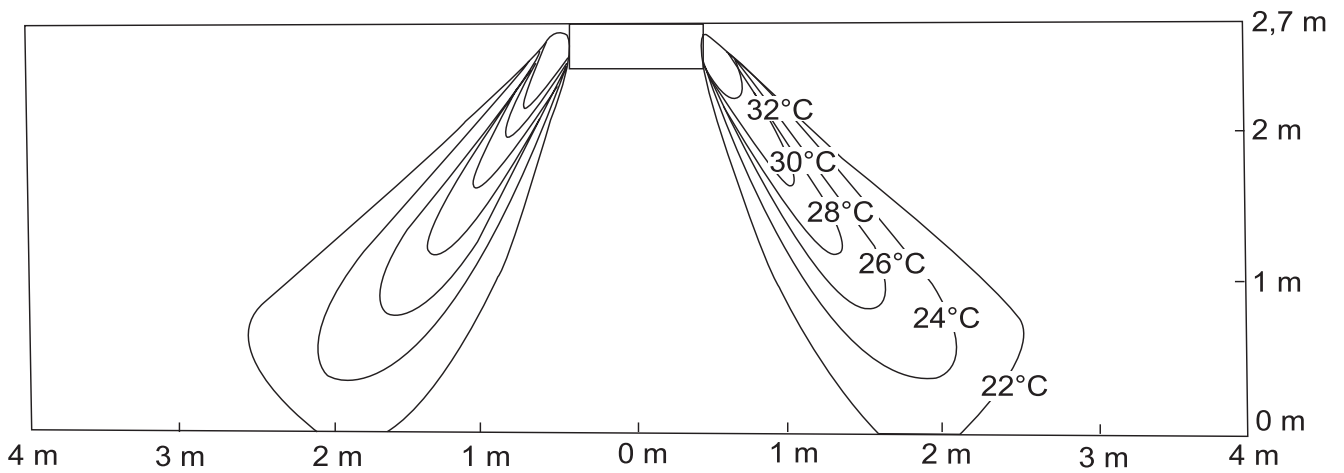


7

FUYP71BV1

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D013863A

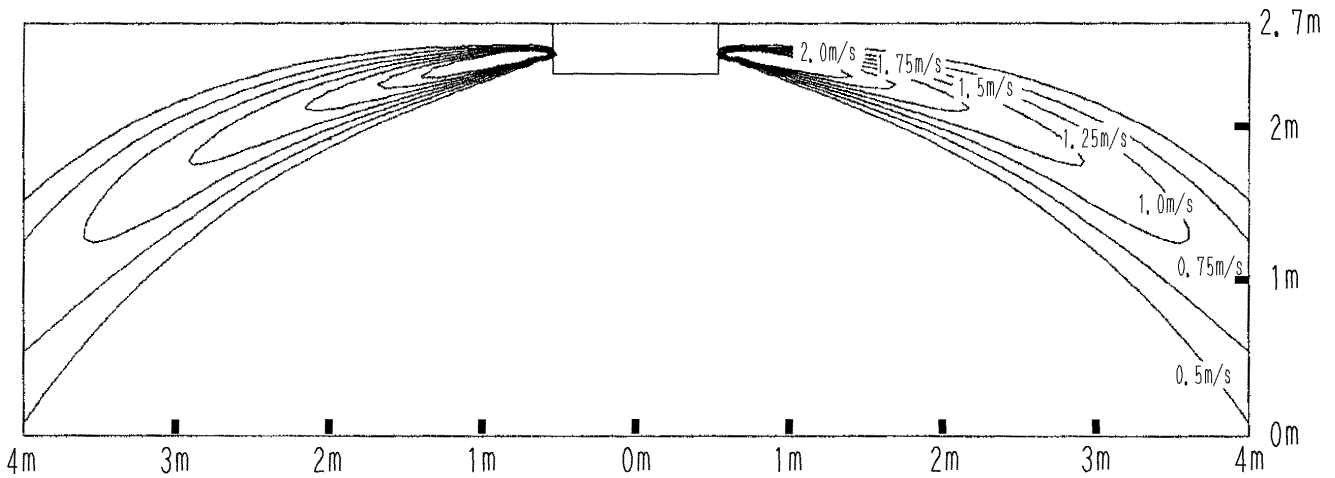


7 Air velocity and temperature distributions

FUYP100BV1

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal

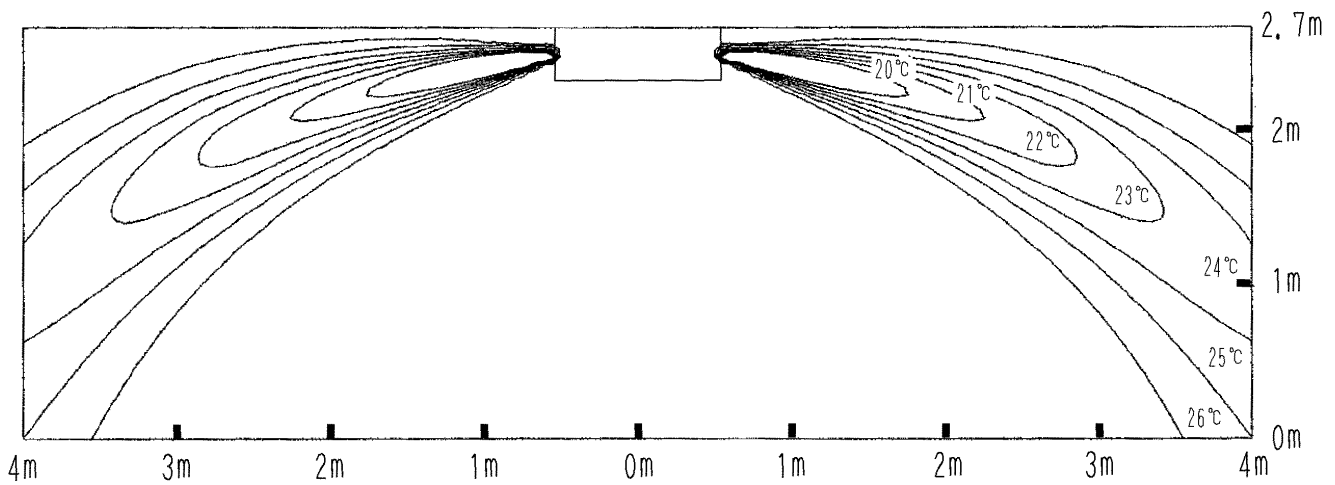


7

FUYP100BV1

Cooling - air temperature distribution

4-way discharge air flow direction: horizontal



4D028397

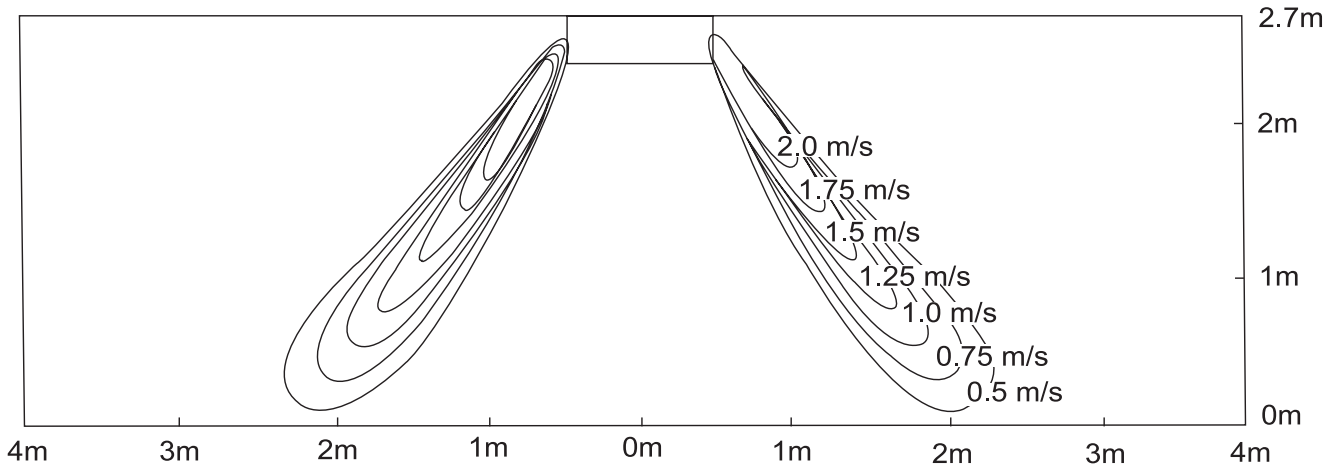


7 Air velocity and temperature distributions

FUYP100BV1

Heating - air velocity distribution

4-way discharge, air flow direction: down

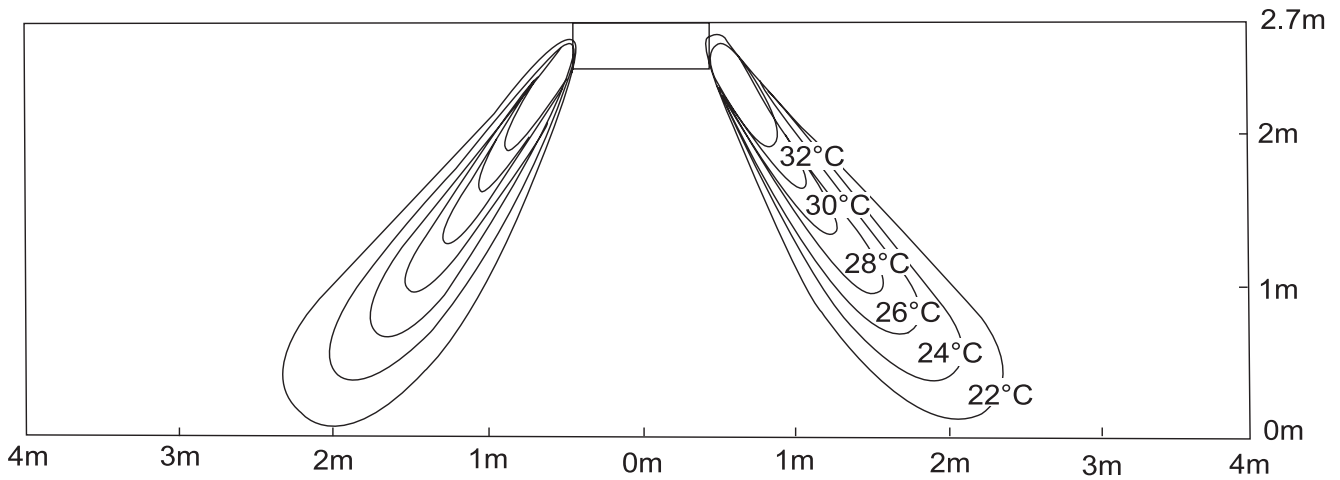


7

FUYP100BV1

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D014054A

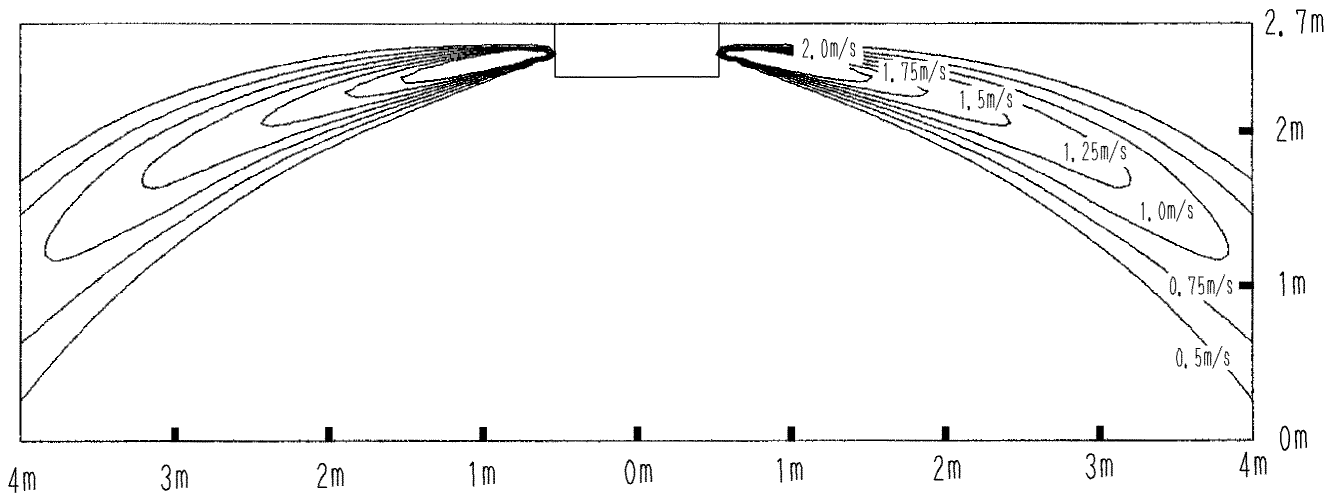


7 Air velocity and temperature distributions

FUYP125BV1

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal

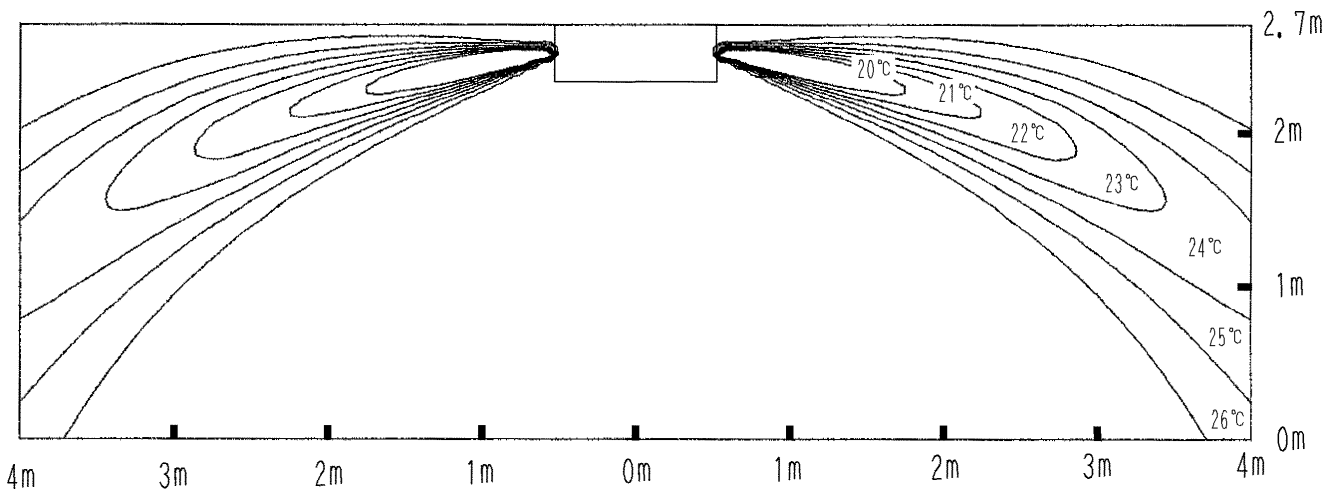


7

FUYP125BV1

Cooling - air temperature distribution

4-way discharge air flow direction: horizontal



4D028398

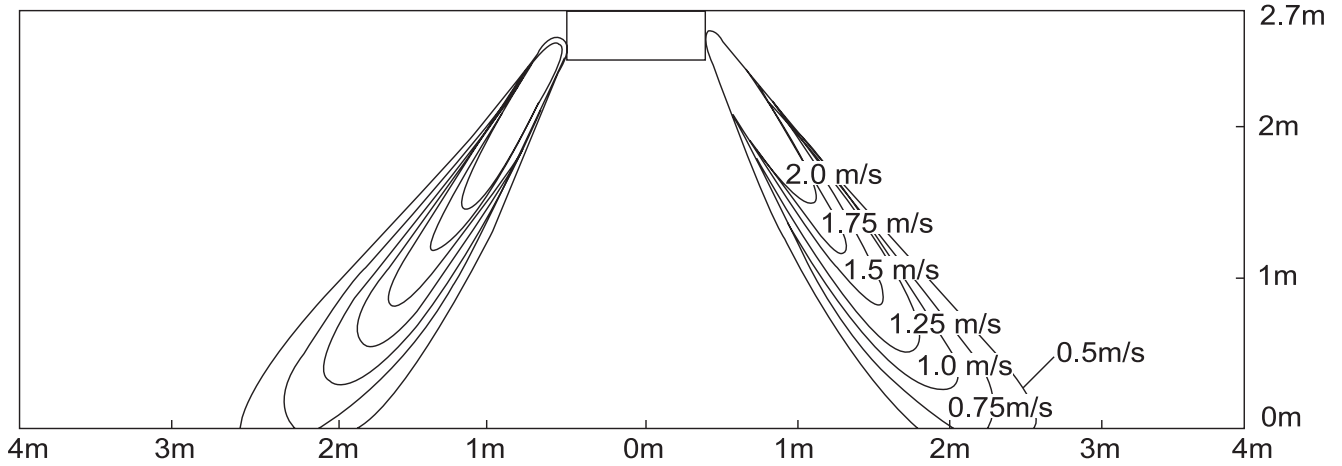


7 Air velocity and temperature distributions

FUYP125BV1

Heating - air velocity distribution

4-way discharge, air flow direction: down

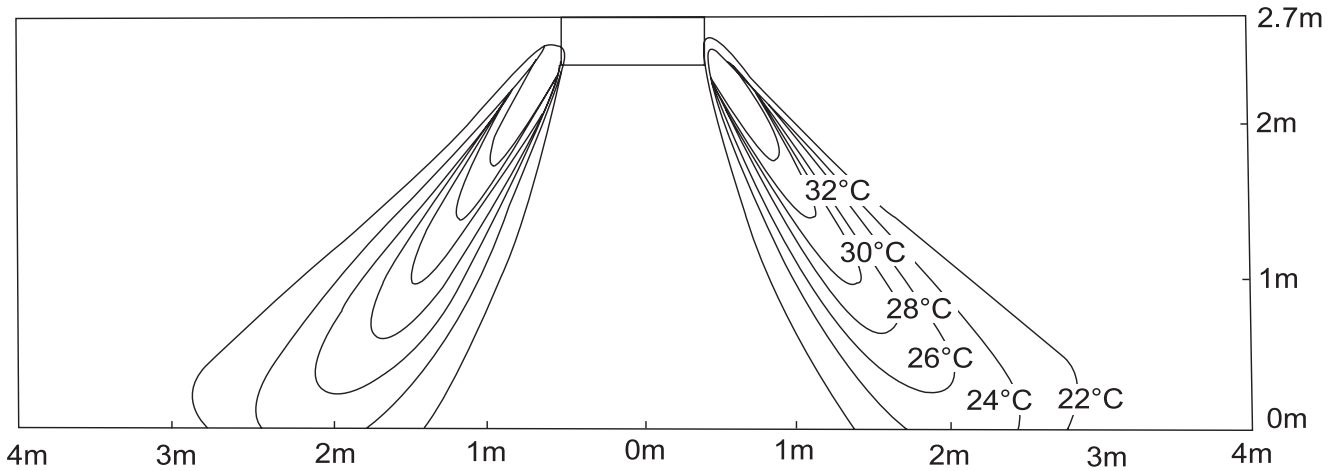


7

FUYP125BV1

Heating - air temperature distribution

4-way discharge, air flow direction: down












4D014055A








8 Accessories

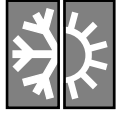
8-1 Standard accessories

Name	① Drain hose	② Clamp	③ Washer for hanging bracket	④ Clamp
Quantity	1 pc.	1 pc.	8 pcs.	6 pcs.
Shape				

Name	⑤ Washer fixing plate	Insulation for fitting	⑧ Sealing pad	⑫ Elbow
Quantity	4 pcs.	1 of each	1 pc.	1 pc.
Shape		 ⑥ For gas pipe  ⑦ For liquid pipe		

Name	⑩ Paper pattern for installation	⑪ Blocking pad	⑬ Retainer for blocking pad	⑭ Retainer for blocking pad
Quantity	1 pc.	2 pcs.	2 pcs.	2 pcs.
Shape	Also used as packing material 			

Name	⑭ Center retainer for blocking pad	(Other) • Installation manual • Operation manual
Quantity	2 pcs.	
Shape		



8 Accessories

8-2 Optional accessories

Name of option		Remark	FUYP-BV1		
			71	100	125
Sealing member of air discharge outlet			KDBHJ49F80	KDBHJ49F140	
Decoration panel for air discharge			KDBTJ49F80	KDBTJ49F140	
Vertical flap kit			KDGJ49F80	KDGJ49F140	
Replacement long-life filter			KAFJ495F140		
L connection piping kit			KHFJ49F80	KHFJ49F140	
Remote controller	Wired type		BRC1C517		
	Infrared type	Heat pump use	BRC7C528W		
		Cooling only use	BRC7C529W		
Central remote control			DCS302B51		
Unified ON/OFF control			DCS302B51		
Schedule timer			DCS301B51		
Group control adaptor ※1			KRP4A53		
Interface adaptor for Sky Air series			DTA102A52		
Installation box for adaptor PCB			KRP1B97		
Remote sensor			KRCS01-1		
Connector for forced on, forced off			EKF0F0		

Note *1; installation box for adaptor PCB (KRP1B97) is necessary.

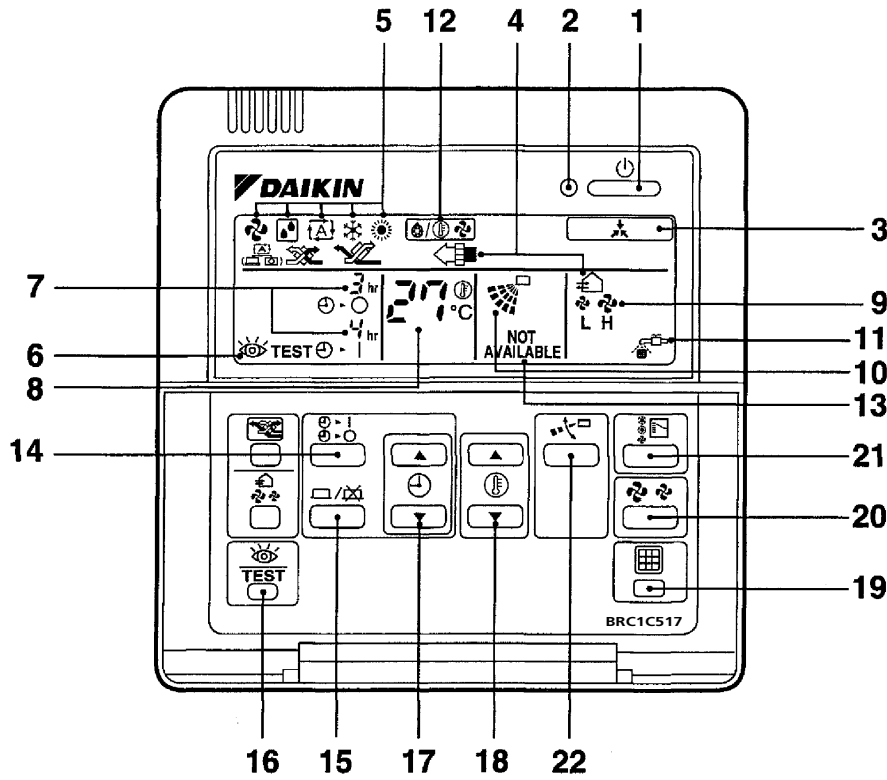


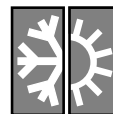
9 Control systems

Figure 1

BRC1C517

Remote control





9 Control systems

Name and function of each switch and display on the remote control

1	ON/OFF BUTTON	12	DISPLAY "❄️/🌞" (DEFROST)	
	Press the button and the system will start. Press the button again and the system will stop.	13	NON-FUNCTIONING DISPLAY	
2	OPERATION LAMP (RED)		If that particular function is not available, pressing the button may display the words "NOT AVAILABLE" for a few seconds. When running multiple units simultaneously, the "NOT AVAILABLE" message will only appear if none of the indoor units is equipped with the function. If even one unit is equipped with the function, the display will not appear.	
3	DISPLAY '🏠' (UNDER CENTRALISED CONTROL)	14	TIMER MODE START/STOP BUTTON.	
	When this display shows, the system is UNDER CENTRALIED CONTROL.	15	TIMER ON/OFF BUTTON	
4	DISPLAY "🌬️", "🌬️", "🌬️", "🌬️", "🌬️", "🌬️" (VENTILATION / AIR CLEANING)	16	INSPECTION/TEST OPERATION BUTTON	
	This display shows that the total heat exchange unit and the air cleaning unit are in operation. These are optional accessories.		This button is used only by qualified service persons for maintenance purposes.	
5	DISPLAY '🌞', '🌞', '🌞', '🌞', '🌞' (OPERATION MODE)	17	PROGRAMMING TIME BUTTON	
	This display shows the current OPERATION MODE. For cooling only type, '🏠' (Auto) and '🌞' (Heating) are not installed.		Use this button for programming 'START and/or STOP' time.	
6	DISPLAY '👁️' (INSPECTION/TEST OPERATION)	18	TEMPERATURE SETTING BUTTON	
	When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in.		Use this button for SETTING TEMPERATURE.	
7	DISPLAY '🕒' (PROGRAMMED TIME)	19	FILTER SIGN RESET BUTTON	
	This display shows PROGRAMMED TIME of the system start or stop.		FAN SPEED CONTROL BUTTON	
8	DISPLAY '🌡️' (SET TEMPERATURE)	20	Press this button to select the fan speed, HIGH or LOW, of your choice.	
	This display shows the set temperature.		21	OPERATION MODE SELECTOR BUTTON
9	DISPLAY '🌀' (FAN SPEED)	Press this button to select OPERATION MODE.		22
	The display shows the set fan speed.			
10	DISPLAY '🌬️' (AIR FLOW FLAP)			
11	DISPLAY "🕒" (TIME TO CLEAN AIR FILTER)			

(NOTE)

- For the sake of explanation, all indications are shown on the display contrary to actual running situations.



10 Safety device settings

Model	Safety devices	FUYP71BV1	FUYP100BV1	FUYP125BV1
FUYP-BV1	Fuse	-	-	-
	Fan motor thermal fuse (°C)	-	-	-
	Fan motor thermal protector (°C)	Off: 130±5	Off: 130±5	Off: 130±5

4D013856A

11 Installation

Names and functions of parts

- Ⓐ Indoor unit
- Ⓑ Outdoor unit
- Ⓒ Remote controller
- Ⓓ Inlet air
- Ⓔ Discharged air
- Ⓕ Air outlet
- Ⓖ Air flow flap (at air outlet)
- Ⓗ Refrigerant piping, connection electric wire
- Ⓘ Drain pipe
- Ⓚ Air inlet
- Ⓛ The built-in air filter removes dust and dirt.
- Ⓜ Ground wire
- Ⓝ Wire to ground from the outdoor unit to prevent electrical shocks.
- Ⓟ Drain pumping out device (built-in)
- Ⓠ Drains water removed from the room during cooling

