

# technical data

**FHYKP-B** 



Ceiling Mounted Corner Cassette



air conditioning systems

Split Sky Air

# 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 Europe N.V. 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 units comply with the European regulations that guarantee the safety of the product.



Daikin Europe N.V. 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 EUROPE N.V.

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For capacity tables, please refer to part II: outdoor units



#### 1 Features





- 1
- Specially designed for rooms with shallow ceiling voids (unit height: only 21.5cm)
- Leaves maximum floor and wall space for furniture, decoration and fittings
- Fits flush into each ceiling
- Extremely quiet in operation both indoors and outdoors
- Automatic air flow director ensures uniform air flow and temperature distribution
- Choice between downward air discharge, frontal air discharge or a combination of both
- For equal distribution in larger rooms, up to 4 indoor units can be connected to 1 outdoor. They are operated from 1 remote control
- Up to 5 indoor units can be connected to 1 Multi outdoor unit. All indoor units are individually controllable with remote control and do not need to be installed in the same room.
- 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



































### 2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT									
For indoor units only:									
INDOOR UNITS			FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17			
NOMINAL INPUT	Cooling	kW	0.92	0.10	0.123				
	Heating	kW	0.59	0.67	0.90				

INDOOR UNITS	ndoor + outdoor units (air co	, orcuji	FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
OUTDOOR UNITS			-	-	-	RP71L7V1/W1-RP71B7T1
CAPACITY (3)	Cooling	kW		7.10		
NOMINAL INPUT	Cooling	kW	Twin/triple/double twin application only			2.63/2.56/2.62
EER						2.70/2.77/2.71
ENERGY LABEL Cooling			rwiii/tiipie/dodbie twiii appiication only			D/D/D
ANNUAL ENERGY CONSUMPTION	Cooling	kW/h				1,315/1,280/1,310

INDOOR UNITS			FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
OUTDOOR UNITS			-	-	-	RYP71L7V1/W1
CAPACITY (3) Cooling kW						7.10
	Heating	kW				8.00
Nominal input	Cooling	kW				2.66/2.53
	Heating	kW				2.63/2.49
EER	<u> </u>		T <sub>1</sub>	2.67/2.81		
COP			11	win/triple/double twin application o	ıııy	3.04/3.09
ENERGY LABEL	Cooling					D/C
	Heating					D/D
Annual Energy Consumption	Cooling	kW/h				1,330/1,265

For combination i	ndoor + outdoor units (ai	ir cooled):				
INDOOR UNITS			FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
OUTDOOR UNITS			-	-	-	RYEP71L7V1/W1
CAPACITY (3)	Cooling	kW				7.10
	Heating	kW				8.00
Nominal input	Cooling	kW		2.63/2.62		
	Heating kW					
EER			Twin/triple/double twin application only			2.70/2.71
COP			11	2.94/3.02		
ENERGY LABEL	Cooling			D/D		
	Heating					D/D
Annual Energy Consumption	Cooling	kW/h				1,315/1,310

### 2 Specifications



TECHNICAL SPEC							
For indoor units on	у:				ı	1	
INDOOR UNITS				FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
DIMENSIONS	Unit	Н	mm	215			
		W	mm	1,	110	<u> </u>	310
		D	mm		<u> </u>	10	
	Decoration panel	Н	mm		·	70	
		W	mm	1,	240	<u> </u>	140
		D	mm		8		
WEIGHT	Unit		kg	30	31		3
	Decoration panel		kg	3	3.5	9	.5
MATERIAL	Unit			Galvanised steel plate			
COLOUR	Decoration panel			White			
SOUND LEVEL	Sound pressure (1)	high	dB(A)		10	42	
		low	dB(A)	34	35	37	
	Sound power (2)	high	dB(A)		50	52	
		low	dB(A)	44	45	47	
FAN	Air flow rate	high	m³/min	12/12 17/17		/17	
	(cooling/heating)	low	m³/min	9/9	10/10	14	/14
	Speed	steps			2 s	teps	
	Туре			Sirocco fan			
	Qty x motor output		W	1 x 20	1 x 25	1 x 45	
HEAT EXCHANGER	Туре				Cross fin coil (Multi lou	ver fins and N-hiX tubes)	
	Rows x stages x fin pitch		mm	2 x 11 x 1.75		3 x 11 x 1.75	
	Face area		m <sup>2</sup>	0.	186		226
AIR FILTER					Resin net (with	mold resistant)	
PIPING CONNECTIONS		liquid (flare)	mm	ф	6.4	ф	9.5
		gas (flare)	mm	ф12.7		ф15.90	
		drain I.D.	mm			25	
		drain O.D.	mm		φ	32	
Insulation Material	Heat insulation			Both liquid and gas pipes			
	Sound absorbing insulation			Foamed polystyrene/foamed polyethylene			

For outdoor units	Pair application	See chapters RP-L7/B7, RYP-L7, RYEP-L7, RZP-D
l only:		

### 2 Specifications



ELECTRICAL SPECIFICATIONS									
For indoor units only: FHYKP35BV17 FHYKP45BV17 FHYKP60BV17 FHYKP71BV17									
CURRENT	Nominal running current	cooling/heating	А	See chapters RP-L7/B7, RYP-L7, RYEP-L7, RZP-D					
	Maximum running current	cooling/heating	А		See chapters RP-L7/B7,	RYP-L7, RYEP-L7, RZP-D			

For combination	For combination indoor units + outdoor units:				FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
				-	-	-	RP71L7V1/W1-RP71B7T1
CURRENT	Nominal running current	cooling	А				
	Maximum running current	cooling	A	Twin/triple/double twin application only			See chapters RP-L7/B7
	Starting current	cooling	А				

For combination indoor units + outdoor units:				FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
				-	-	-	RYP71L7V1/W1
CURRENT	Nominal running current	cooling/heating	А				
	Maximum running current	cooling/heating	A	Tv	See chapters RYP-L7		
	Starting current	cooling/heating	А				

For combination indoor units + outdoor units:				FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
				-	-	-	RYEP71L7V1/W1
CURRENT	Nominal running current	cooling/heating	А				
	Maximum running current	cooling/heating	А	Tv	See chapters RYEP-L7		
	Starting current	cooling/heating	А				

For indoor units only:			FHYKP35BV17	FHYKP45BV17	FHYKP60BV17	FHYKP71BV17
POWER SUPPLY			V1	V1	V1	V1
NOMINAL DISTRIBUTION	Phase		1~	1~	1~	1~
System voltage	Frequency	Hz	50	50	50	50
	Voltage	V	230	230	230	230

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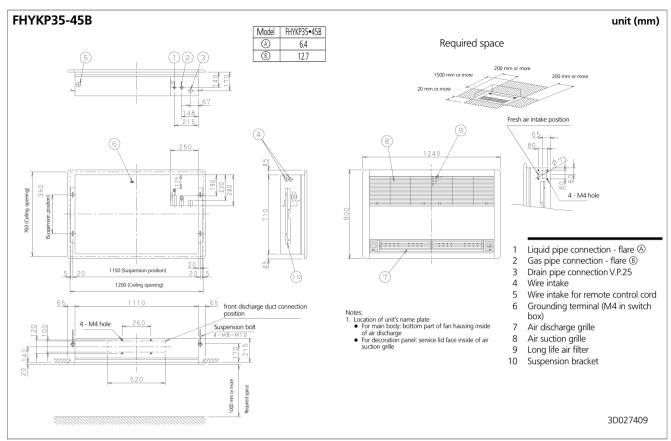
#### NOTES

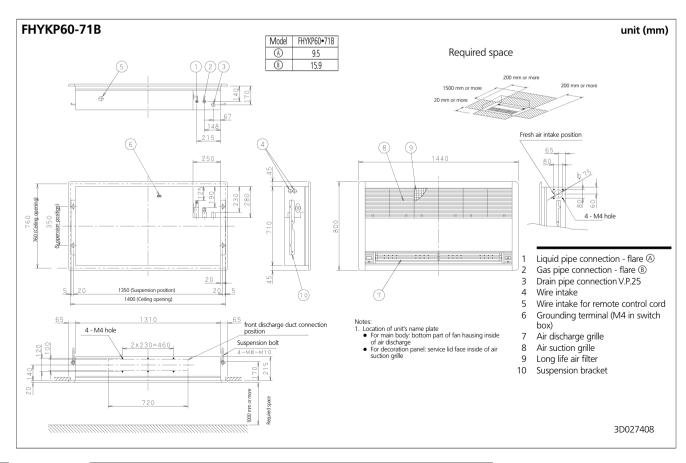
- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB \* outdoor temperature 35°CDB \* refrigerant piping length: 7.5m \* level difference: 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB \* outdoor temperature: 7°CDB/6°CWB \* refrigerant piping length: 7.5m \* level difference 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- The sound pressure level is measured at 1.5m 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.
- 6 Energy label: scale from A (most efficient) to G (less efficient).
- 7 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

### 3 Dimensional drawings





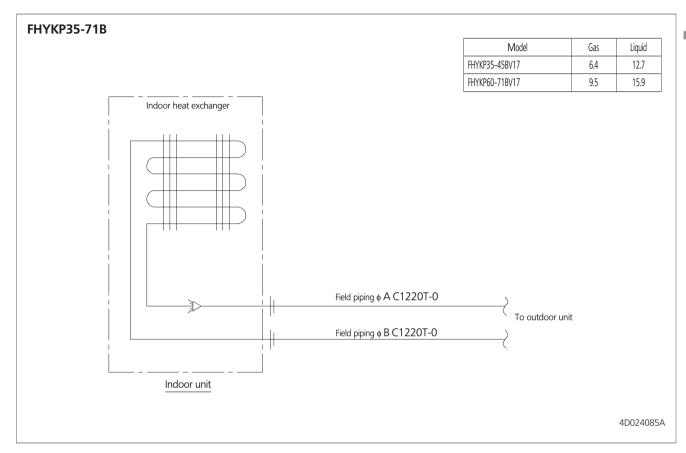




### 4 Piping diagrams



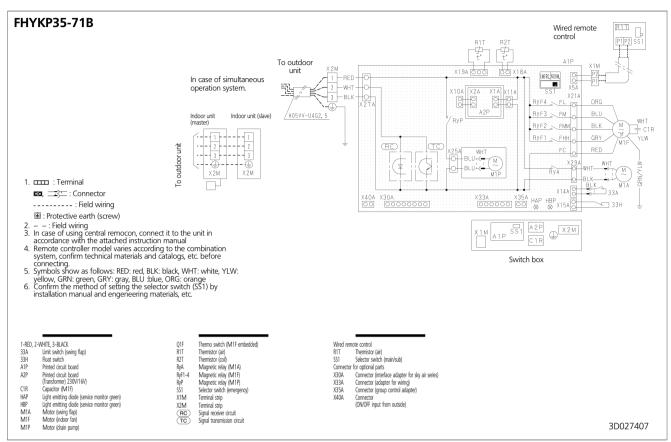


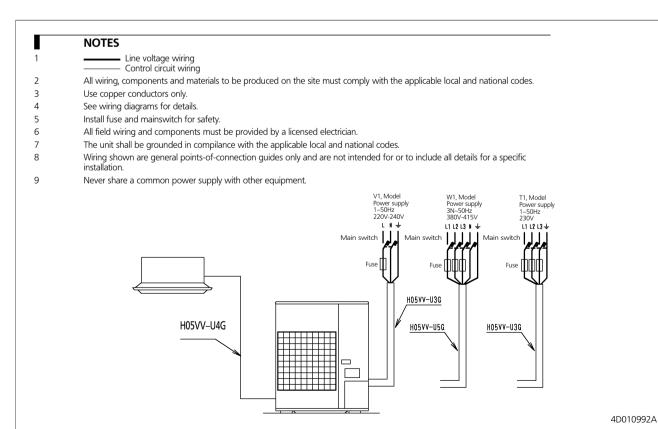


#### 5 Wiring diagrams









#### 6 Sound level

### 6–1 Sound level data

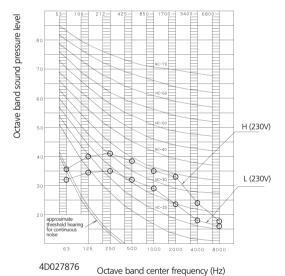




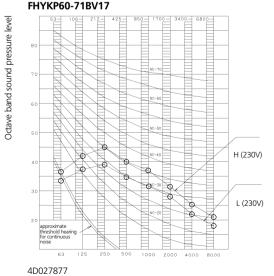
	Sound pressure level			Sound power level	
Model	50Hz-230V			Sound power level	
IVIOUEI	Н	L	Measuring location	Н	L
	cooling/heating	cooling/heating		cooling/heating	cooling/heating
FHYKP35BV17	40/40	34/34	Location of microphone	50/50	44/44
FHYKP45BV17	40/40	35/35		50/50	45/45
FHYKP60BV17	42/42	37/37		52/52	47/47
FHYKP71BV17	42/42	37/37	1 m	52/52	47/47

### 6–2 Sound pressure spectrum

#### FHK35BZV17 FHYKP35BV17

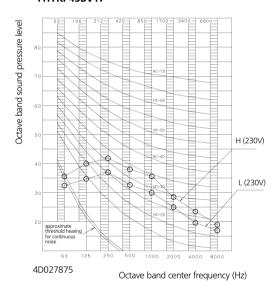


#### FHK60BZV17 FHYKP60-71BV17



Octave band center frequency (Hz)

#### FHK45BZV17 FHYKP45BV17



#### NOTES

- 1 Operation sound is measured in an anechoic chamber.
- 2 Operation sound level differs with operation and ambient conditions.
- Sound levels are valid at nominal operation conditions.

6-1



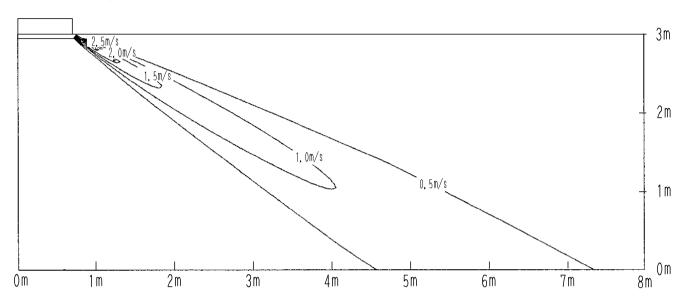


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#### FHYKP35-45BV17

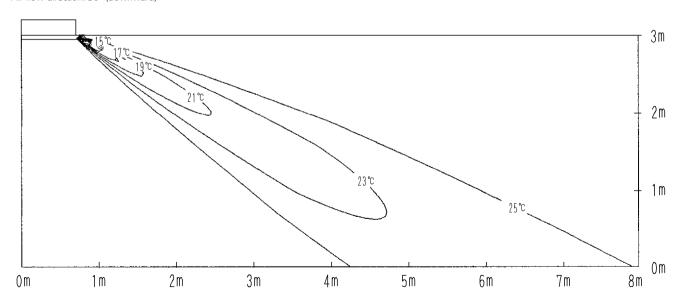
Cooling - air velocity distribution

Air flow direction: 30° (downward)



Cooling - air temperature distribution

Air flow direction: 30° (downward)



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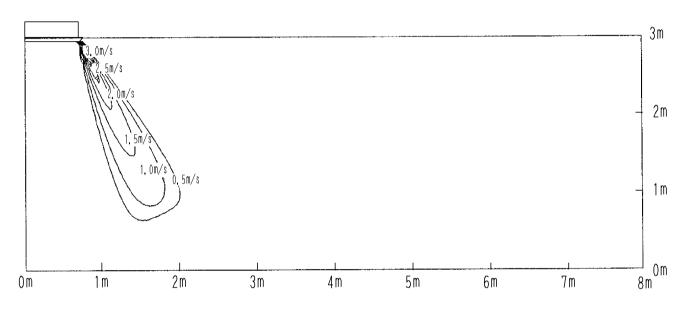




FHYKP35-45BV17

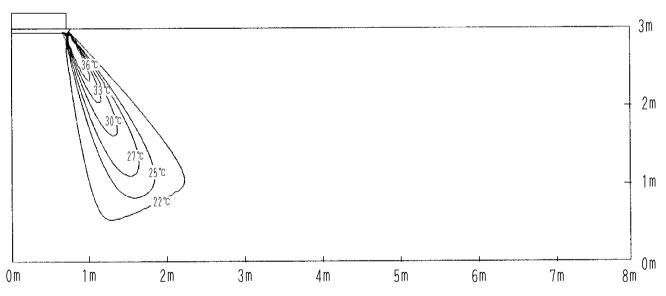
Heating - air velocity distribution

Air flow direction: 65°C (downward)



Heating - air temperature distribution

Air flow direction: 65°C (downward)



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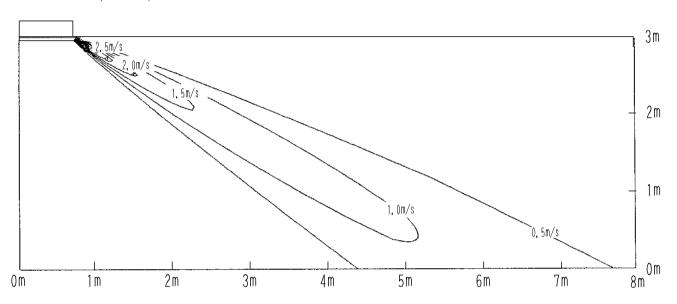




**7** FHYKP60-71BV17

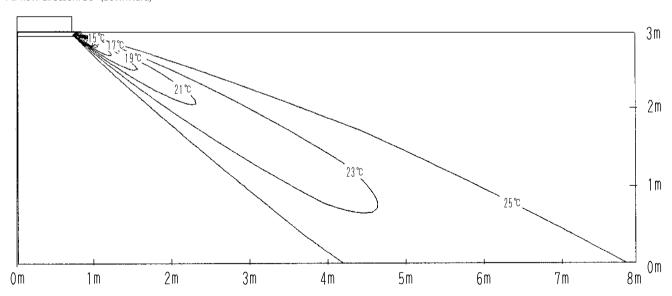
Cooling - air velocity distribution

Air flow direction: 30° (downward)



Cooling - air temperature distribution

Air flow direction: 30° (downward)



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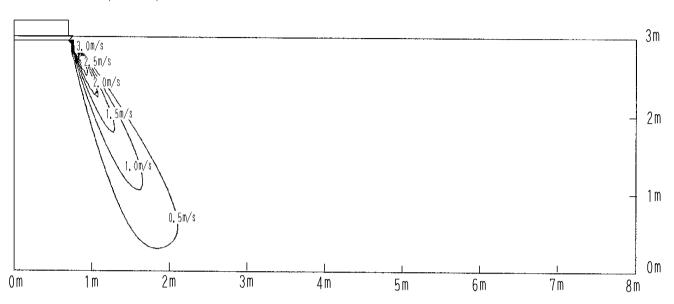




FHYKP60-71BV17

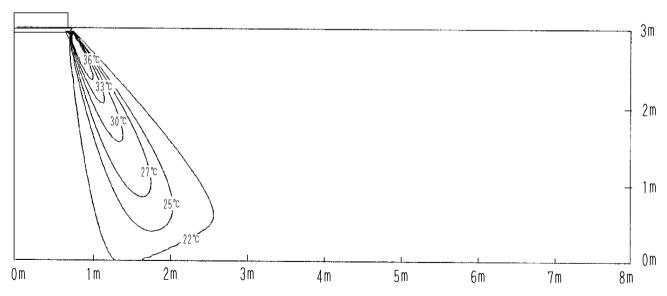
Heating - air velocity distribution

Air flow direction: 65°C (downward)



Heating - air temperature distribution

Air flow direction: 65°C (downward)



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#### **Accessories** 8

#### 8-1 Standard accessories





U	.
	' -

Name	① Clamp	② Paper pattern for installation	③ Drain hose	Insulation for fitting
Quantity	1 pc.	1 pc.	1 pc.	1 of each
Shape				(4) For gas pipe (5) For liquid pipe

Name	Sealing pad	
Quantity	1 of each	
Shape	© Large	

Name	100 Installation guide	① Washer for hanging bracket	① Clamp
Quantity	2 each	8 pcs.	7 pcs.
Shape	Screws x 4	<b>©</b>	

Name	(3) Insulation for hanging bracket	① Air outlet blocking pad	
Quantity	4 pcs.	1 pc.	
			(Other)
	_		Installation manual
Shape			Operation manual

• Screws for fixing panels are attached to the decoration panel.

### 8 Accessories

### 8–2 Optional accessories





Name of option Remark		FHYKP-BV17					
			35	45	60	71	
Decoration panel			BYK45FJW1 BYK71FJW1		1FJW1		
Panel spacer	Panel spacer		KPBJ52	2F56W	KPBJ5	KPBJ52F80W	
Air discharge blind panel	Air discharge blind panel		KDBJ52	2F56W	KDBJ52F80W		
Replacement long-life filter		Resin net	KAFJ5:	21F56	KAFJ5	521F80	
Discharge grille			KDGJ52	2F56W	KDGJ5	2F80W	
Flexible duct with shutter			KFDJ5	52F56	KFDJ	52F80	
Remote control	Wired type		BRC1D517				
	Infrared type	Heat pump	BRC4C61				
		Cooling only	BRC4C63				
Central remote control			DCS302B51				
Unified ON/OFF control			DCS301B51				
Schedule timer			DST301B51				
Option PCB for external electr	rical heater, humidifier and/or hour	meter	EKRP1B2				
Adapter for wiring (interlock f	for fresh air intake fan)		KRP1B51				
Group control adapter		KRP4A51					
Interface adapter for Sky Air series		DTA102A52					
Remote sensor	Remote sensor		KRCS01-1				
Remote ON/OFF, forced OFF		EKRORO					

DU423-9100B

#### 8 Accessories

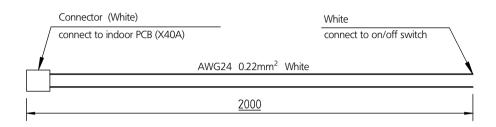
### 8–2 Optional accessories



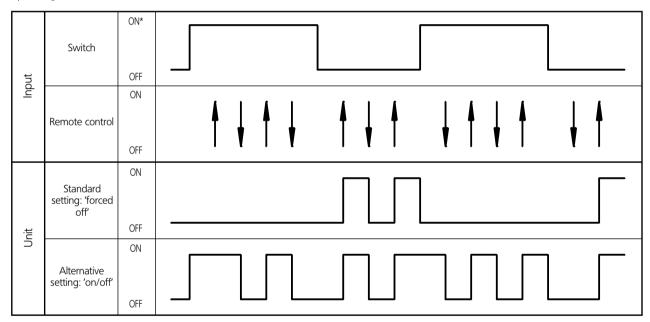


#### Specifications EKRORO

Wire specifications



#### Operating method



<sup>\*</sup> Input 'ON' = closed contact.

Forced off	On/off operation	
Input 'on' stops operation + disables control	Input off—on: starts operation, remote control is still enabled.	
Input 'off' enables control	Input on→off: stops operation, remote control is still enabled.	

#### Selection of 'FORCED OFF' and 'ON/OFF' operation

Setting	Mode NO	First code NO	Second code NO
Forced off	12 (22)	1	01
On/off operation			02

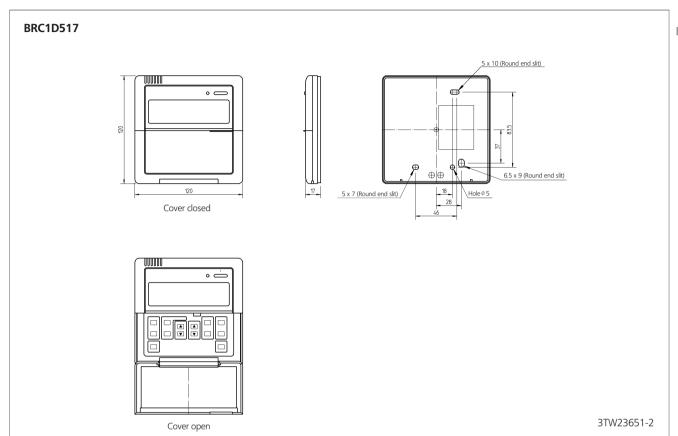
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### 9 Control systems

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### 9–1 Wired remote control



#### Safety device settings 10





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Model	Safety devices	35	45	60	71
	Fuse	_	_	_	_
FHYKP-BV17	Fan motor thermal fuse (°C)	_	_	_	_
FHYKP-BV1/	Fan motor thermal protector (°C)	OFF: 120±5 ON: 105 or less			

DU423-9101H

#### 11 Installation

#### Names and functions of parts

- Names and functions of parts

  illindoor unit

  Outdoor unit

  Outdoor unit

  Infrared remote control

  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

