

DAIKIN



TECHNICAL DATA

Split-Sky Air



FH(Y)GZ/BZ/FHYP-B
Ceiling Suspended Unit



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

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FH(Y)-GZ/BZ/FHYP-B

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* For capacity tables, please refer to the outdoor units concerned





1 Features

- Leaves maximum floor and wall space for furniture, decoration and fittings
- New and even more compact casing (only 960 mm width)
- Extremely quiet in operation both indoors and outdoors
- Automatic air flow director ensures uniform airflow and temperature distribution (FHY-only)
- Air flow distribution for ceiling heights up to 3.8m without loss of capacity
- The outdoor unit can easily be mounted on a roof, a terrace or placed against an outside wall
- For equal distribution in larger rooms, up to 3 indoor units can be connected to 1 outdoor. They are operated from 1 remote control
- 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



Optional



Optional



FHY



AUTO



DRY



FHY



2 steps



35-125



FH35-60



2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FH35BZV1	FH45BZV1	FH60BZV1
NOMINAL INPUT	Cooling	kW	0.111	0.111	0.115

For combination indoor units + outdoor units:					
INDOOR UNITS			FH35BZV1	FH45BZV1	FH60BZV1
OUTDOOR UNITS			R35GZ7V11	R45GZ7V11/W11	R60GZ7W1
NOMINAL CAPACITY	Cooling (1)	kW	3.75	5.20/5.20	6.50
(2)					
NOMINAL INPUT	Cooling	kW	1.50	2.15/2.05	2.67

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS			FH35BZV1	FH45BZV1	FH60BZV1	
DIMENSIONS	Unit	H	mm	195	195	195
		W	mm	960	960	1,160
		D	mm	680	680	680
WEIGHT	Unit	kg	23	24	26	
MATERIAL	Unit		-	-	-	
COLOUR	Unit			White		
SOUND LEVEL	Sound pressure (3)	high	dB(A)	37	38	38
		low	dB(A)	32	33	33
	Sound power (4)	high	dB(A)	53	54	54
		low	dB(A)	48	49	49
FAN	Air flow rate (cooling)	high	m ³ /min	13	13	16
		medium	m ³ /min	-	-	-
		low	m ³ /min	10	10	13
	Speed	steps		2 steps	2 steps	2 steps
		high	rpm	-	-	-
		low	rpm	-	-	-
	Type			Sirocco fan		
Qty x model			1 x 3D12K1AA1	1 x 3D12K1AA1	1 x 4D12K1AA1	
Qty x motor output	W		1 x 62	1 x 62	1 x 62	
HEAT EXCHANGER	Type		Cross fin coil (Multi louver fins and N-HiX tubes)			
	Rows x stages x fin pitch	mm	2 x 12 x 1.75	3 x 12 x 1.75	3 x 12 x 1.75	
	Face area	m ²	0.182	0.182	0.233	
AIR FILTER			-	-	-	
AIR DIRECTION CONTROL			-	-	-	
TEMPERATURE CONTROL			-	-	-	
PIPING CONNECTIONS	liquid	mm	φ6.4 (flare)	φ6.4 (flare)	φ6.4 (flare)	
		mm	φ12.7 (flare)	φ15.9 (flare)	φ15.9 (flare)	
	drain	mm	VP20 (I.D. φ20)	VP20 (I.D. φ20)	VP20 (I.D. φ20)	
		mm	VP20 (O.D. φ26)	VP20 (O.D. φ26)	VP20 (O.D. φ26)	
INSULATION MATERIAL	Heat insulation		Foamed polystyrene / Foamed polyethylene			
	Sound absorbing insulation		Foamed polyurethane/Glass wool			

For outdoor units only:		
Pair application		See chapter R-GZ7/RP-B7
Multi model application		See chapter MA-GZ7

2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHYP71BV1	FHYP100BV1	FHYP125BV1
NOMINAL INPUT	Cooling	kW	0.117	0.135	0.144

For combination indoor units + outdoor units:					
INDOOR UNITS			FHYP71BV1	FHYP100BV1	FHYP125BV1
OUTDOOR UNITS			RP71B7V1/W1/T1	RP100B7V1/W1/T1	RP125B7W1/T1
NOMINAL CAPACITY	Cooling (1)	kW	7.1/7.1/7.1	10.0/10.0/10.0	12.5/12.5
(2)					
NOMINAL INPUT	Cooling	kW	2.65/2.61/2.61	3.82/3.62/3.62	4.69/4.69

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FHYP71BV1	FHYP100BV1	FHYP125BV1
DIMENSIONS	Unit	H	mm	195	195	195
		W	mm	1,160	1,400	1,590
		D	mm	680	680	680
WEIGHT	Unit		kg	27	32	35
MATERIAL	Unit			-	-	-
COLOUR	Unit			White		
SOUND LEVEL	Sound pressure (3)	high	dB(A)	39	42	44
		low	dB(A)	35	37	39
	Sound power (4)	high	dB(A)	55	58	60
		low	dB(A)	51	53	55
FAN	Air flow rate (cooling)	high	m ³ /min	17	24	30
		medium	m ³ /min	-	-	-
		low	m ³ /min	14	20	25
	Speed	steps		2 steps	2 steps	2 steps
		high	rpm	-	-	-
		low	rpm	-	-	-
	Type			Sirocco fan		
Qty x model			1 x 4D12K1AA1	1 x 3D12K2AA1	1 x 4D12K2AA1	
Qty x motor output		W	1 x 62	1 x 130	1 x 130	
HEAT EXCHANGER	Type			Cross fin coil (Multi louver fins and N-HiX tubes)		
	Rows x stages x fin pitch		mm	3 x 12 x 1.75	3 x 12 x 1.75	3 x 12 x 1.75
	Face area		m ²	0.233	0.293	0.341
AIR FILTER				-	-	-
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		VP20 (I.D. φ20)	VP20 (I.D. φ20)	VP20 (I.D. φ20)
		mm		VP20 (O.D. φ26)	VP20 (O.D. φ26)	VP20 (O.D. φ26)
INSULATION MATERIAL	Heat insulation			Foamed polystyrene / Foamed polyethylene		
	Sound absorbing insulation			Foamed polyurethane/Glass wool		

For outdoor units only:	Pair application	See chapter R-GZ7/RP-B7
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2 Specifications



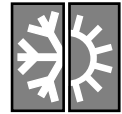
ELECTRICAL SPECIFICATIONS						
For indoor units only:				FH35BZV1	FH45BZV1	FH60BZV1
CURRENT	Nominal running current	cooling	A	-	-	-
For combination indoor units + outdoor units:				FH35BZV1	FH45BZV1	FH60BZV1
				R35GZ7V11	R45GZ7V11/W11	R60GZ7W1
CURRENT	Nominal running current	cooling	A	6.4	10.8/3.98	5.6/6.35
	Maximum running current	cooling	A	-	-	6.8/7.7
	Starting current	cooling	A	33.5	48/19	26
For indoor units only:				FH35BZV1	FH45BZV1	FH60BZV1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency		Hz	50	50	50
	Voltage		V	220-240	220-240	220-240

ELECTRICAL SPECIFICATIONS						
For indoor units only:				FHYP71BV1	FHYP100BV1	FHYP125BV1
CURRENT	Nominal running current		A	-	-	-
For combination indoor units + outdoor units:				FHYP71BV1	FHYP100BV1	FHYP125BV1
				RP71B7V1/W1/T1	RP100B7V1/W1/T1	RP125B7W1/T1
CURRENT	Nominal running current	cooling	A	-	-	-
	Maximum running current		A	-	-	-
For indoor units only:				FHYP71BV1	FHYP100BV1	FHYP125BV1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency		Hz	50	50	50
	Voltage		V	220-240	220-240	220-240

NOTES

- Nominal cooling capacities are based on: indoor temperature: 27°CDB/19°CWB * outdoor temperature: 35°CDB/24°CWB * refrigerant piping length: 7.5m * level difference 0m.
- Capacities are net, including a deduction for cooling for indoor fan motor heat.
- The sound pressure level is measured in an anechoic room at 1m 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.
- The sound power level is an absolute value indicating the "power" which a sound source generates.

2 Specifications

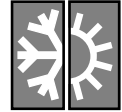


NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHY35GZ7V1	FHY45GZ7V1	FHYP60BV1
NOMINAL INPUT	Cooling	kW	-	-	0.115
	Heating	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FHY35GZ7V1	FHY45GZ7V1	FHYP71BV1
OUTDOOR UNITS			-	-	-
NOMINAL CAPACITY (3)	Cooling (1)	kW	For twin / triple / double twin application only		
	Heating (2)	kW			
NOMINAL INPUT	Cooling	kW			
	Heating	kW			

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS			FHY35GZ7V1	FHY45GZ7V1	FHYP60BV1	
DIMENSIONS	Unit	H	mm	188	188	195
		W	mm	1,100	1,100	1,160
		D	mm	600	600	680
WEIGHT	Unit		kg	26	27	26
MATERIAL	Unit	Cold rolled steel plate				-
COLOUR	Unit	White				
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dB(A)	38/38	39/39	38/38
		low	dB(A)	33/33	34/34	33/33
	Sound power (cooling/heating) (5)	high	dB(A)	54/54	55/55	54/54
		low	dB(A)	-	-	49/49
FAN	Air flow rate (cooling/heating)	high	m ³ /min	13/13	13/13	16/16
		medium	m ³ /min	-	-	-
		low	m ³ /min	10/10	10/10	13/13
	Speed (cooling/heating)	steps		2 steps		
		high	rpm	-	-	-
		low	rpm	-	-	-
	Type		Sirocco fan			
Qty x model		-	-	1 x 4D12K1AA1		
Qty x motor output	W	1 x 57		1 x 57		
HEAT EXCHANGER	Type		φ 7 Hi-XA tube	φ 7 Hi-XA tube	Cross fin coil (Multi louver fins and N-HiX tubes)	
	Rows x stages x fin pitch	mm	2 x 10 x 1.75	3 x 10 x 1.75	3 x 12 x 1.75	
	Face area	m ²	0.181	0.181	0.233	
AIR FILTER		Resin net (with mold resistant)				
AIR DIRECTION CONTROL						
TEMPERATURE CONTROL		Computerised control				
PIPING CONNECTIONS	liquid	mm	φ6.35	φ6.35	φ9.5 (flare)	
	gas	mm	φ12.7	φ15.9	φ15.9 (flare)	
	drain	mm	VP20 (I.D. φ20)	VP20 (I.D. φ20)	VP20 (I.D. φ20)	
	drain	mm	VP20 (O.D. φ26)	VP20 (O.D. φ26)	VP20 (O.D. φ26)	
INSULATION MATERIAL	Heat insulation	Both liquid and gas pipes				Foamed polystyrene / Foamed polyethylene
	Sound absorbing insulation	Flame and heat resistant foamed polyethylene, regular foamed polyethylene				Foamed polyurethane / Glass wool

2 Specifications



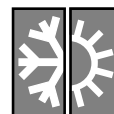
NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHYP71BV1	FHYP100BV1	FHYP125BV1
NOMINAL INPUT	Cooling	kW	0.117	0.135	0.144
	Heating	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FHYP71BV1	FHYP100BV1	FHYP125BV1
OUTDOOR UNITS			RYP71B7V1/W1	RYP100B7V1/W1	RYP125B7W1
NOMINAL CAPACITY (3)	Cooling (1)	kW	7.1/7.1	10.0/10.0	12.5
	Heating (2)	kW	7.7/7.7	11.0/11.0	14
NOMINAL INPUT	Cooling	kW	2.61/2.61	3.62/3.62	4.69
	Heating	kW	2.67/2.67	3.78/3.78	5.30

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS			FHYP71BV1	FHYP100BV1	FHYP125BV1	
DIMENSIONS	Unit	H	mm	195	195	195
		W	mm	1,160	1,400	1,590
		D	mm	680	680	680
WEIGHT	Unit		kg	27	32	35
MATERIAL	Unit			-	-	-
COLOUR	Unit				White	
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dB(A)	39/39	42/42	44/44
		low	dB(A)	35/35	37/37	39/39
	Sound power (cooling/heating) (5)	high	dB(A)	55/55	58/58	60/60
		low	dB(A)	51/51	53/53	55/55
FAN	Air flow rate (cooling/heating)	high	m ³ /min	17/17	24/24	30/30
		medium	m ³ /min	-	-	-
		low	m ³ /min	14/14	20/20	25/25
	Speed (cooling/heating)	steps		2 steps	2 steps	2 steps
		high	rpm	-	-	-
		low	rpm	-	-	-
	Type			Sirocco fan		
Qty x model			1 x 4D12K1AA1	1 x 3D12K2AA1	1 x 4D12K2AA1	
Qty x motor output	W		1 x 62	1 x 130	1 x 130	
HEAT EXCHANGER	Type		Cross fin coil (Multi louver fins and N-HiX tubes)			
	Rows x stages x fin pitch	mm	3 x 12 x 1.75	3 x 12 x 1.75	3 x 12 x 1.75	
	Face area	m ²	0.233	0.293	0.341	
AIR FILTER			-	-	-	
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	VP20 (I.D. φ20)	VP20 (I.D. φ20)	VP20 (I.D. φ20)	
		mm	VP20 (O.D. φ26)	VP20 (O.D. φ26)	VP20 (O.D. φ26)	
INSULATION MATERIAL	Heat insulation		Foamed polystyrene / Foamed polyethylene			
	Sound absorbing insulation		Foamed polyurethane/Glass wool			

For outdoor units only:	Pair application	See chapter RYP-B7
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2 Specifications



ELECTRICAL SPECIFICATIONS					FHY35GZ7V1	FHY45GZ7V1	FHYP60BV1
For indoor units only:							
CURRENT	Nominal running current	cooling	A	-	-	-	
		heating	A	-	-	-	
For combination indoor units + outdoor units:					FHY35GZ7V1	FHY45GZ7V1	FHYP60BV1
					-	-	-
CURRENT	Nominal running current	cooling	A	Twin/triple/double twin application only			
		heating	A				
	Maximum running current	cooling	A				
		heating	A				
For indoor units only:					FHY35GZ7V1	FHY45GZ7V1	FHYP60BV1
POWER SUPPLY					V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~	
	Frequency			Hz	50	50	
	Voltage			V	230	230	
				220-240	220-240		

ELECTRICAL SPECIFICATIONS					FHYP71BV1	FHYP100BV1	FHYP125BV1
For indoor units only:							
CURRENT	Nominal running current	cooling	A	-	-	-	
		heating	A	-	-	-	
For combination indoor units + outdoor units:					FHYP71BV1	FHYP100BV1	FHYP125BV1
					RYP71B7V1/W1	RYP100B7V1/W1	RYP125B7W1
CURRENT	Nominal running current	cooling	A	-	-	-	
		heating	A	-	-	-	
	Maximum running current	cooling	A	-	-	-	
		heating	A	-	-	-	
For indoor units only:					FHYP71BV1	FHYP100BV1	FHYP125BV1
POWER SUPPLY					V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~	
	Frequency			Hz	50	50	
	Voltage			V	220-240	220-240	
				220-240	220-240		

NOTES

- Nominal cooling capacities are based on: indoor temperature: 27°CDB/19°CWB * outdoor temperature: 35°CDB/24°CWB * refrigerant piping length: 7.5m * level difference 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB/15°CWB * outdoor temperature: 7°CDB/6°CWB * refrigerant piping length: 7.5m * level difference 0m.
- Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- The sound pressure level is measured in an anechoic room at 1m 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.
- The sound power level is an absolute value indicating the "power" which a sound source generates.

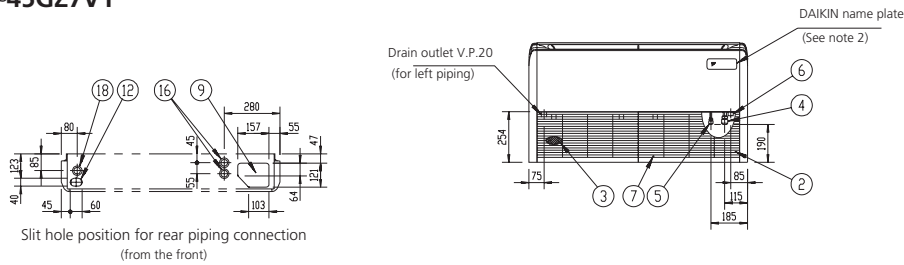


3 Dimensional drawings

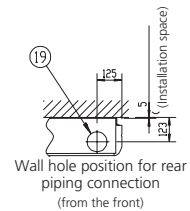
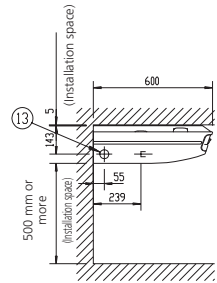
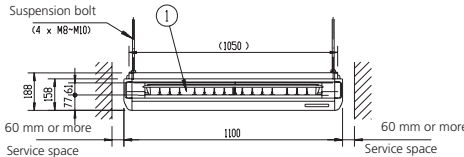
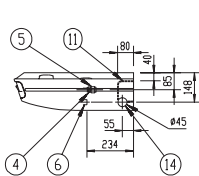
FHY35~45GZ7V1

unit (mm)

Model	A
FH35GZ	12.70
FHY35GZ	
FH45GZ	
FHY45GZ	15.90



Slit hole position for rear piping connection (from the front)



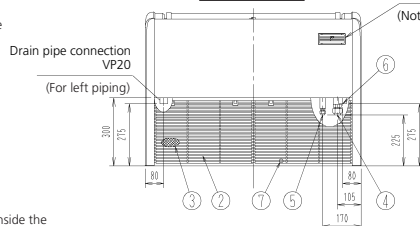
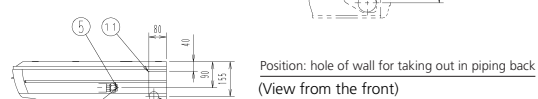
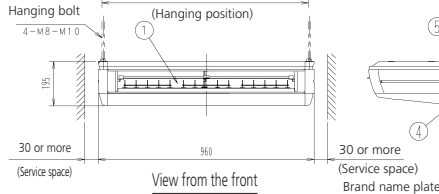
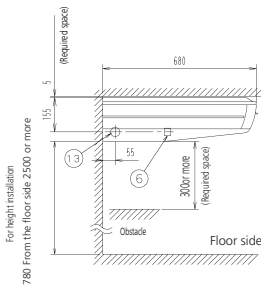
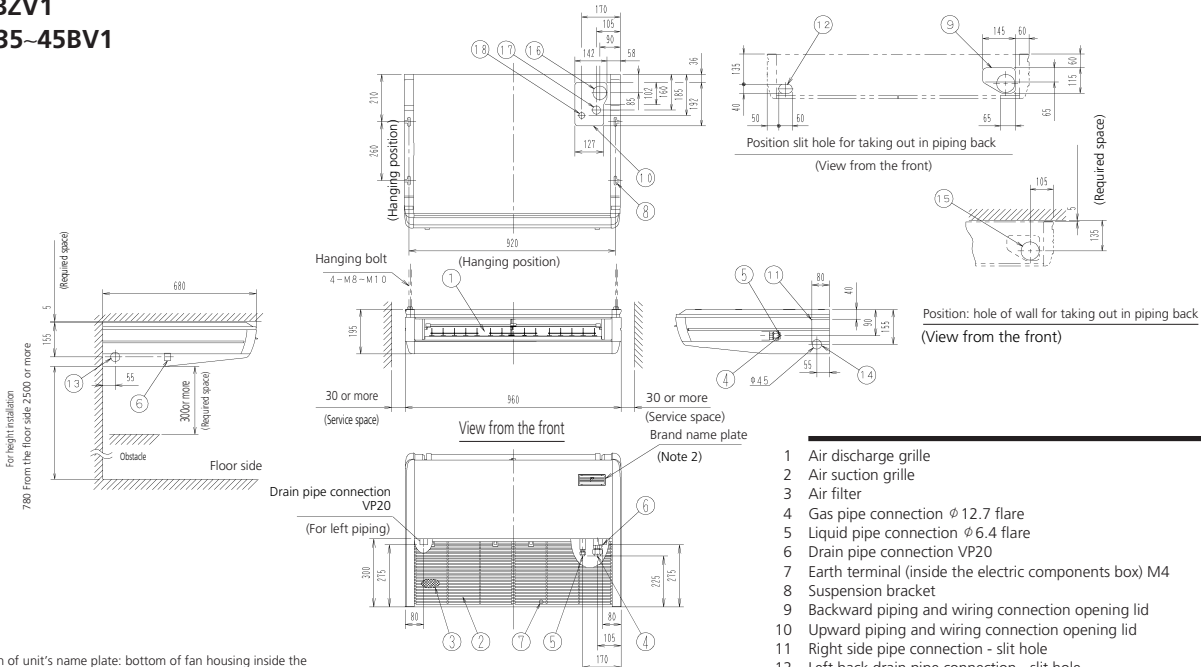
- 1 Air discharge grille
- 2 Air suction grille
- 3 Air filter
- 4 Gas pipe connection ϕA Flare connection
- 5 Liquid pipe connection $\phi 6.35$ Flare connection
- 6 Drain pipe connection V.P.20
- 7 Grounding terminal M4
- 8 Suspension bracket
- 9 Rear piping connection hole - slit hole
- 10 Upper refrigerant piping connection hole - slit hole
- 11 Right side piping connection hole - slit hole
- 12 Rear left side drain piping connection hole - slit hole
- 13 Left side drain piping connection hole - slit hole
- 14 Right side drain piping connection hole - slit hole
- 15 Power supply / control wiring connection (upper)
- 16 Power supply / control wiring connection (rear)
- 17 Remote control code connection (upper)
- 18 Remote control code connection (rear)
- 19 Rear piping connection hole - slit hole $\phi 100$

- Notes:
1. Name plate: stuck on the bottom part of fan housing in suction grille
 2. When using a remote controller, this position will be a signal receiver. Refer to the detailed drawing of the remote controller.
 3. The standard length of remote control cord is approximately 3m. (0.5mm x 2 cores x $\phi 5.4$ O.D.)

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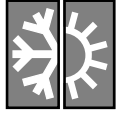
FH35BZV1 FHYP35~45BV1



- 1 Air discharge grille
- 2 Air suction grille
- 3 Air filter
- 4 Gas pipe connection $\phi 12.7$ flare
- 5 Liquid pipe connection $\phi 6.4$ flare
- 6 Drain pipe connection VP20
- 7 Earth terminal (inside the electric components box) M4
- 8 Suspension bracket
- 9 Backward piping and wiring connection opening lid
- 10 Upward piping and wiring connection opening lid
- 11 Right side pipe connection - slit hole
- 12 Left back drain pipe connection - slit hole
- 13 Right side drain pipe connection - slit hole
- 14 Right side drain piping connection hole- slit hole
- 15 Hole of wall for taking out in piping back $\phi 100$
- 16 Upward drain pipe connection $\phi 60$
- 17 Upward gas pipe connection $\phi 36$
- 18 Upward liquid pipe connection $\phi 26$

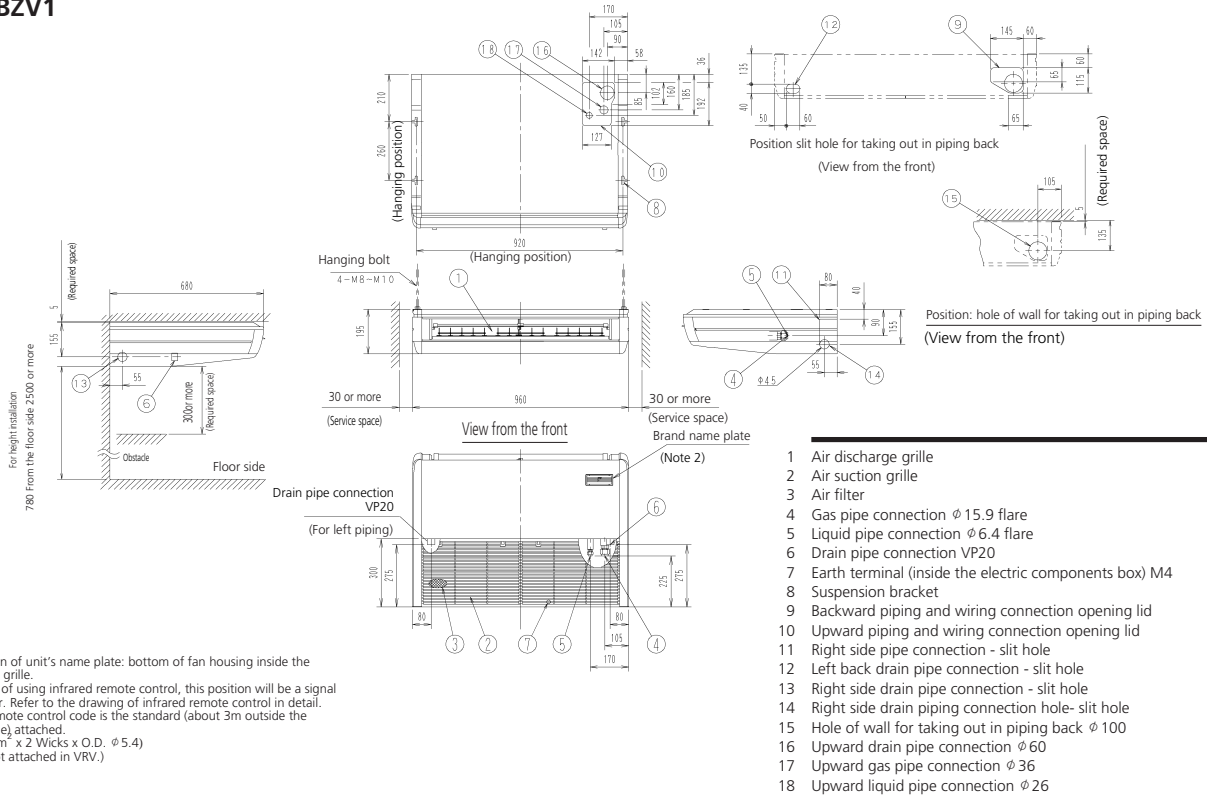
- Note:
1. Location of unit's name plate: bottom of fan housing inside the suction grille.
 2. In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.
 3. The remote control code is the standard (about 3m outside the machine) attached. (0.5 mm x 2 Wicks x O.D. $\phi 5.4$) (It is not attached in VRV.)

3D027536A



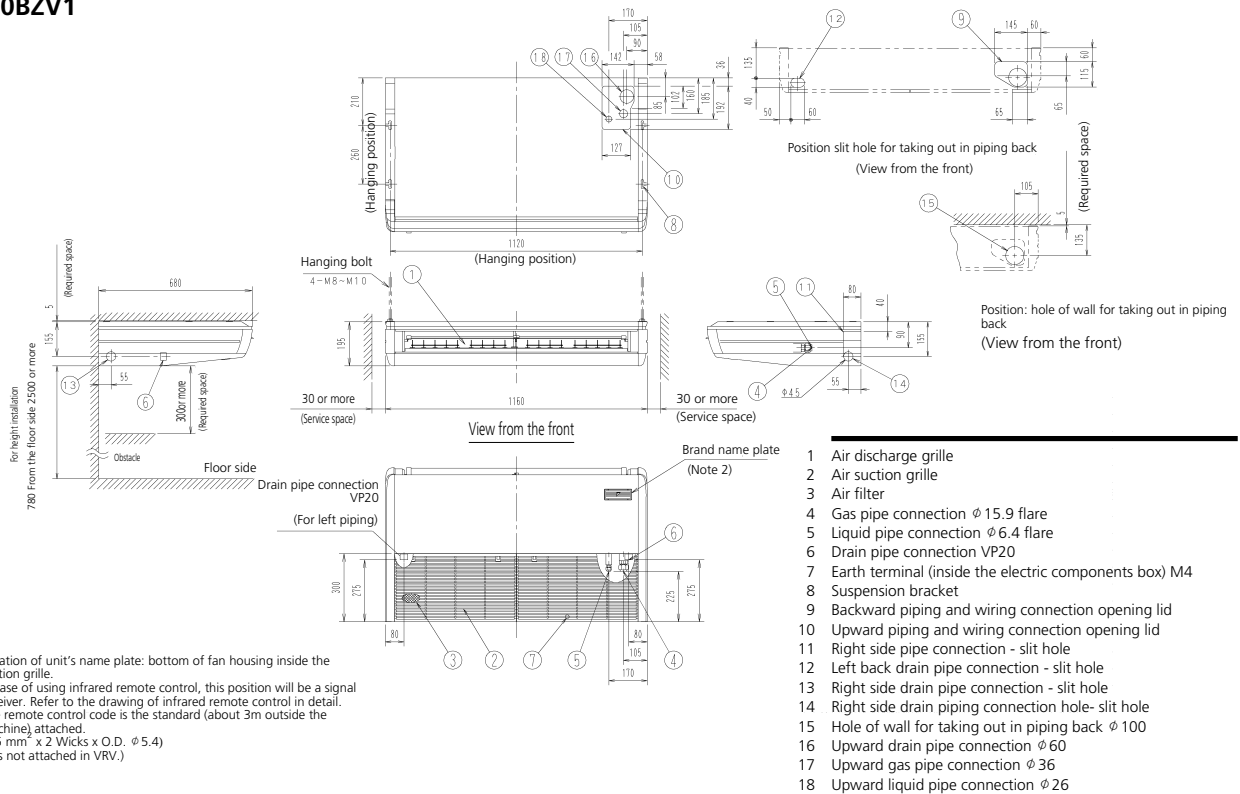
3 Dimensional drawings

FH45BZV1

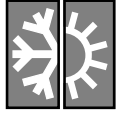


3D028600

FH60BZV1

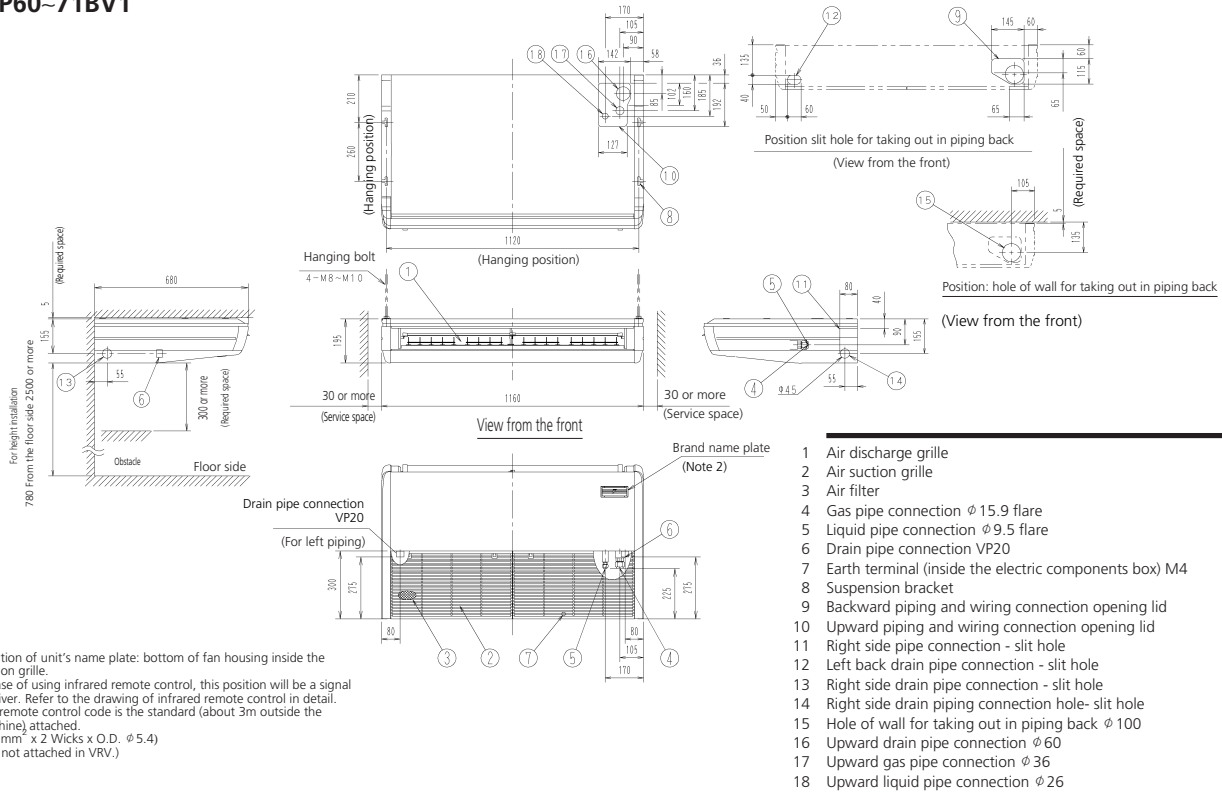


3D027537



3 Dimensional drawings

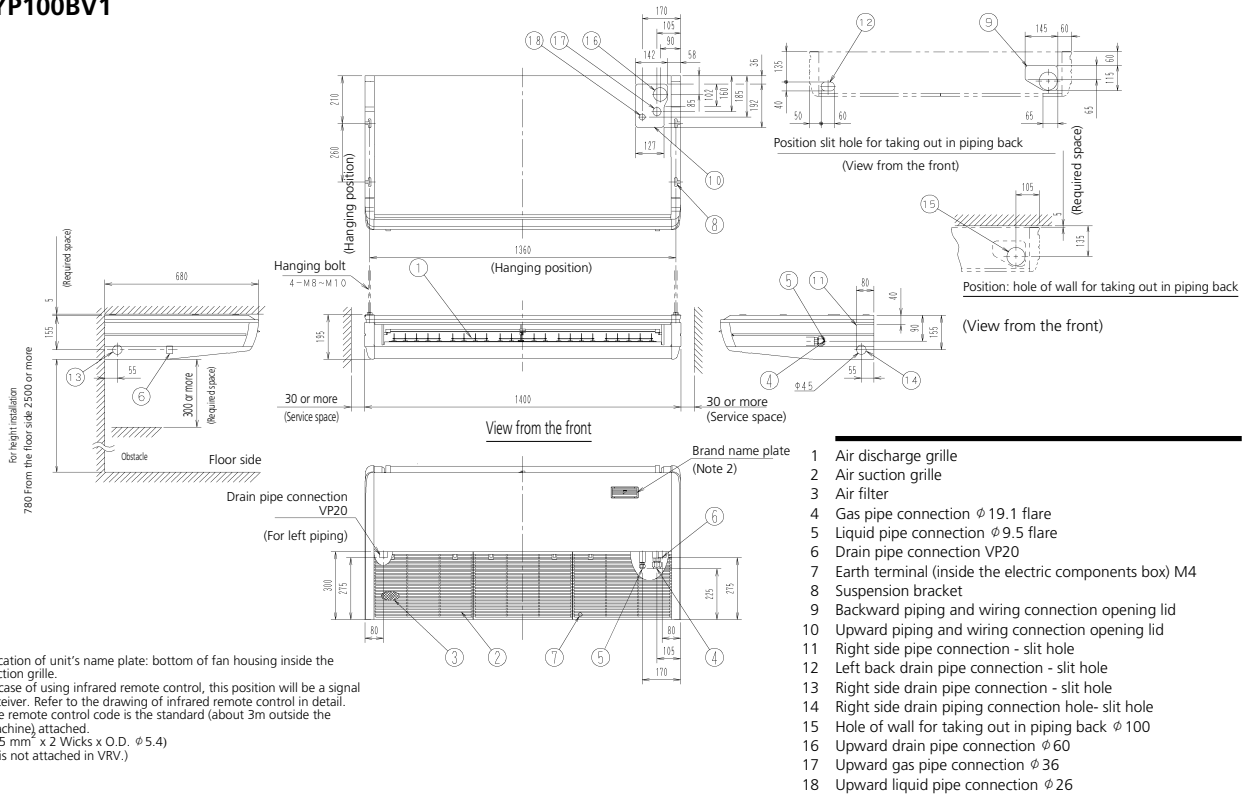
FHYP60-71BV1



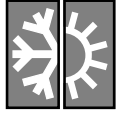
3D027538A

3

FHYP100BV1

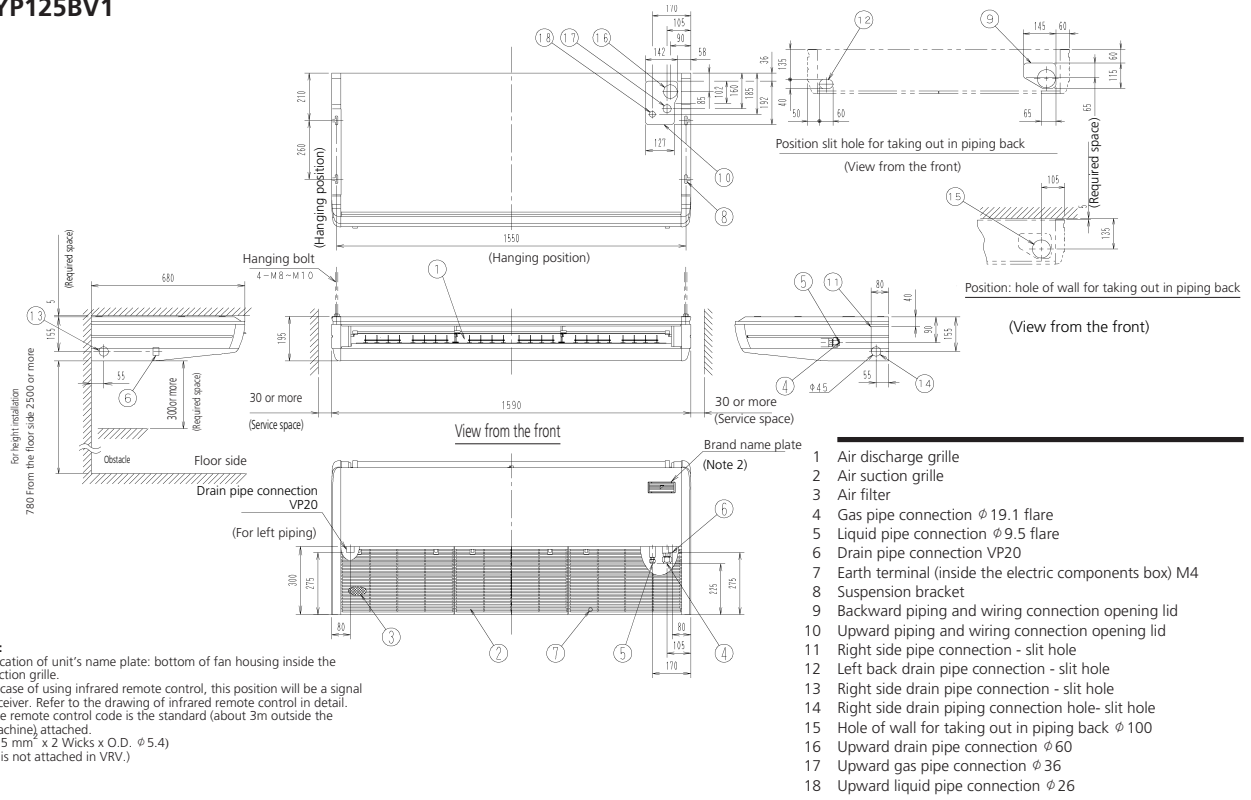


3D027539A



3 Dimensional drawings

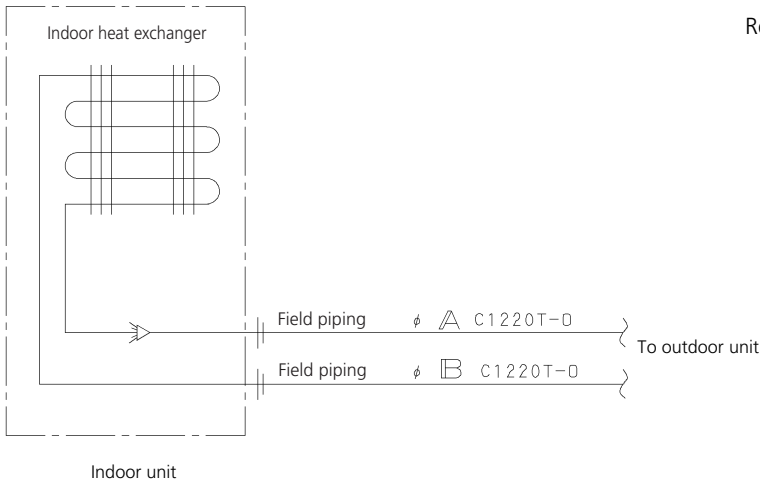
FHYP125BV1





4 Piping diagrams

FH35-60BZ
FHYP35-125B



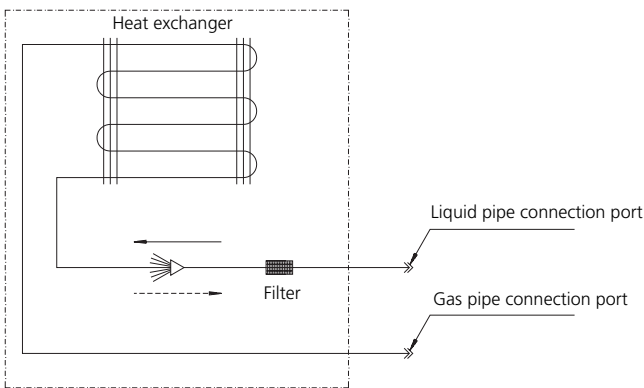
Refrigerant pipe connection port diameters

Model	A	B
FHYP35-45BV1 FH35BZV1	6.4	12.7
FH45-60BZV1	6.4	15.9
FHYP60-71BV1	9.5	15.9
FHYP100-125BV1	9.5	19.1

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

4D024085A

FHY35-45GZ



Refrigerant flow

Cooling

Heating

Refrigerant pipe connection port diameters

Model	Gas	Liquid
FHY35GZ	φ 12.70	φ 6.35
FHY45GZ	φ 15.90	φ 6.35

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

3TW20435-1E



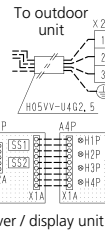
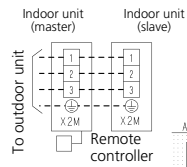
5 Wiring diagrams

FHYP35~125BV1

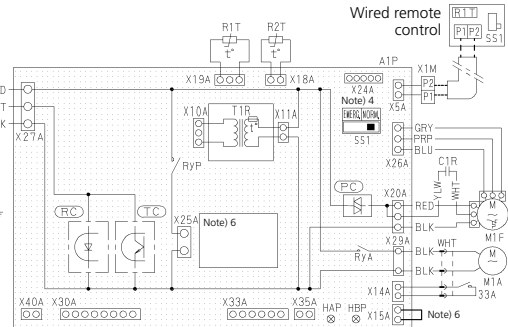
Notes

- Terminal symbol: : Terminal Connector symbol: : Connector
- Protective earth (screw) symbol:
- Field wiring symbol:
- 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.

In case of simultaneous operation system.



Receiver / display unit

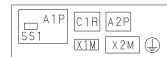


1-RED, 2-WHITE, 3-BLACK	RyA	Magnetic relay (M1A)
33A	RyP	Magnetic relay (M1P)
A1P	SS1	Selector switch (emergency)
C1R	T1R	Transformer
HAP	X1M	Terminal strip
HBP	X2M	Terminal strip
M1A	X2M	Terminal strip
M1A	(RC)	Signal receiver circuit
Q1F	(TC)	Signal transmission circuit
M1F	(PC)	Phase control circuit
Thermo switch (M1F embedded)	Wired remote control	
R1T	R1T	Thermistor (air)
R2T		Thermistor (coil)

RyA	Magnetic relay (M1A)
RyP	Magnetic relay (M1P)
SS1	Selector switch (main/sub)
T1R	Transformer
X1M	Terminal strip
X2M	Terminal strip
(RC)	Signal receiver circuit
(TC)	Signal transmission circuit
(PC)	Phase control circuit
Wired remote control	
R1T	Thermistor (air)

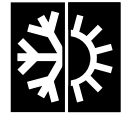
SS1	Selector switch (main/sub)
Infrared remote control	
Receiver / display unit	
A3P	Printed circuit board
A4P	Printed circuit board
BS	Push button (on/off)
H1P	Light emitting diode (service monitor red)
H2P	Light emitting diode (service monitor green)
H3P	Light emitting diode (service monitor red)
H4P	Light emitting diode (service monitor orange)
SS1	Selector switch (main/sub)

SS2	Selector switch (wireless address set)
Connector for optional parts	
X15A	Connector (float switch)
X25A	Connector (drain pump)
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	



Switch box

3D027503-1



6 Sound level

6-1 Sound level data

Model	Sound pressure level		Measuring location	Sound power level (H) (cooling)
	230V			
	50Hz			
Cooling only	H	L		
FH35BZ	37	32		53
FH45BZ	38	33		54
FH60BZ	38	33		54
FHYP71B	39	35		55
FHYP100B	42	37		58
FHYP125B	44	39		60

Model	Sound pressure level		Measuring location	Sound power level (H) (cooling/heating)
	230V			
	50Hz			
Heat pump	H (cooling/heating)	L (cooling/heating)		
FHY35GZ7	38/38	33/33		54/54
FHY45GZ7	39/39	34/34		55/55
FHYP35B	37/37	32/32		53/53
FHYP45B	38/38	33/33		54/54
FHYP60B	38/38	33/33		54/54
FHYP71B	39/39	35/35		55/55
FHYP100B	42/42	37/37		58/58
FHYP125B	44/44	39/39		60/60

6
6-1

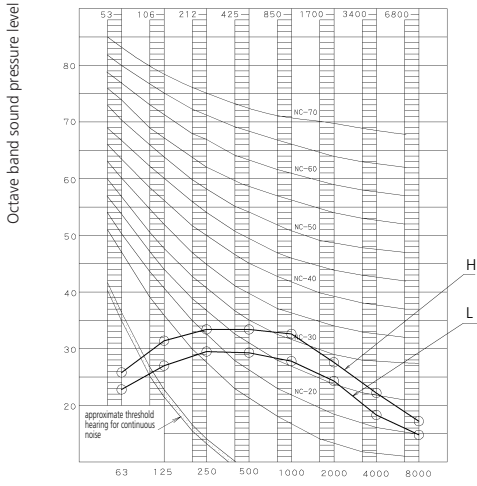


6 Sound level

6-2 Sound pressure spectrum

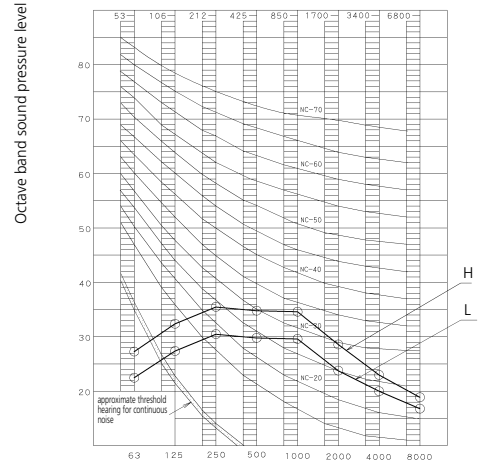
Cooling only

FH35BZV1/FHYP35BV1



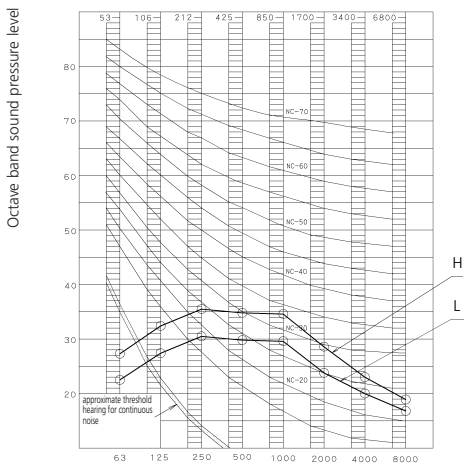
4D028280 Octave band center frequency (Hz)

FH45BZV1/FHYP45BV1



4D028281 Octave band center frequency (Hz)

FH60BZV1/FHYP60BV1

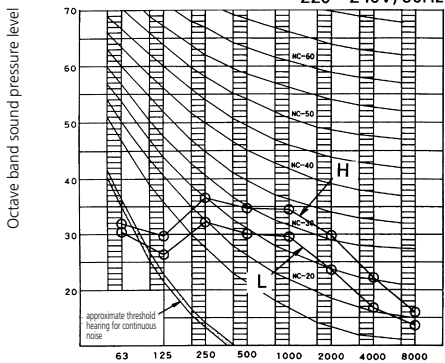


4D028282 Octave band center frequency (Hz)

Heat pump

FHY35GZ

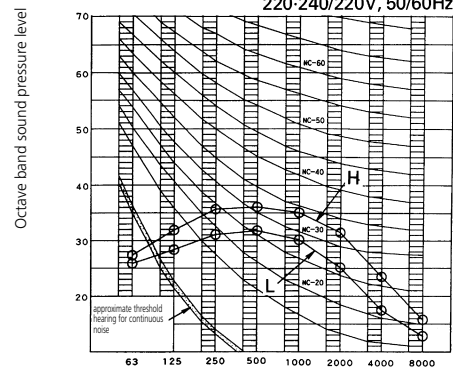
220~240V, 50Hz



DU423-489 Octave band center frequency (Hz)

FHY45GZ

220-240/220V, 50/60Hz



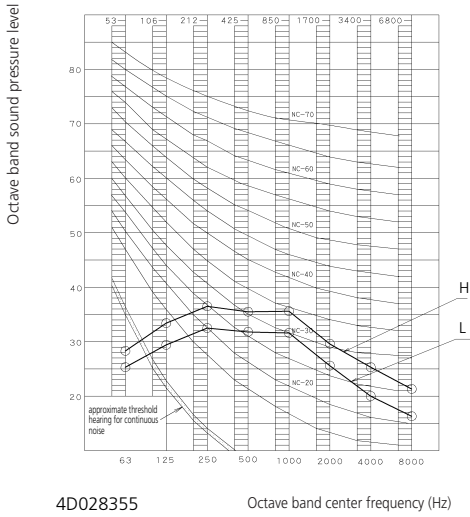
DU425-4156A Octave band center frequency (Hz)



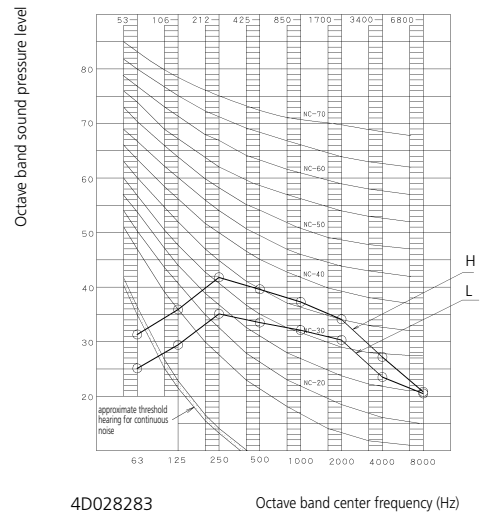
6 Sound level

6-2 Sound pressure spectrum

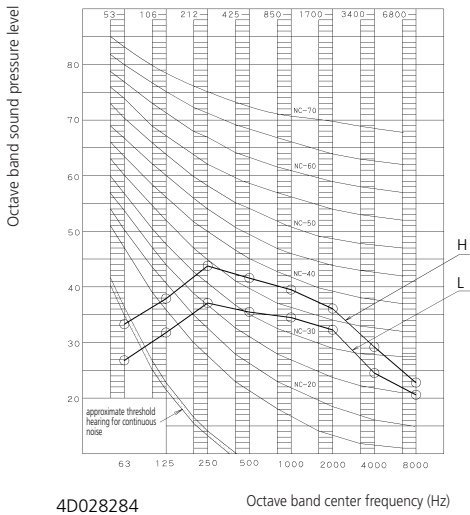
FHYP71BV1



FHYP100BV1



FHYP125BV1



Note:







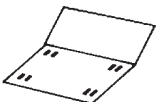




1. Operation sound is measured in an anechoic chamber.
2. Operation sound level differs with operation and ambient conditions.
3. Sound levels are valid at nominal operation conditions.



7 Accessories






7-1 Standard accessories





FH(Y)-GZ

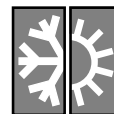
 Remote control cord 1 set		 Staple x4 flat head screw X4		 Drain hose 1 pc.	
 Clamp 1 pc.		 Washer for hanging bracket 8 pcs.		 Clamp 4 pcs.	
 Paper pattern for installation 1 pc.		 For gas pipe		 For liquid pipe	
 Large		 medium		Sealing pad 1 of each	
Other: installation manual, operation manual					

7
7-1

FHYP-B

Name	① Drain hose	② Clamp	③ Washer for hanging bracket	④ Clamp	⑤ Washer fixing plate
Quantity	1 pc.	1 pc.	8 pcs.	6 pcs.	1 pc.
Shape					

Name	Insulation for fitting	Sealing pad	(Other) • Installation manual • Operation manual
Quantity	1 of each	1 pc.	
Shape	 ⑥ For gas pipe  ⑦ For liquid pipe	 ⑧ Large  ⑨ Small	



7 Accessories

7-2 Optional accessories

Name of option	Remark:	FHY-GZ	
		35	45
Drain pump kit		KDUJ5F50	
Replacement long-life filter	Resin net	KAFJ501F56	
L-type piping kit (for upward direction)	for FHY	KHFJ5F50	
Remote control (wired type)	for FHY	BRC1B517	
Central remote control		DCS302B51	
unified ON/OFF control		DCS301B51	
Schedule timer		DST301B51	
Adaptor for wiring		KRP1B54	
Group control adaptor PCB (*1)		KRP4A52	
Interface adaptor for Sky Air series		DTA102A52	
Installation box for adaptor PCB		KRP1B93	

Note *1: Installation box for adaptor PCB (KRP1B93) is necessary

Name of option	Remark	FHYP-BV1, FH-BZV1					
		35	45	60	71	100	125
Replacement long-life filter		KAFJ501D56			KAFJ501D80	KAFJ501D112	KAFJ501D160
Drain up kit		KDU50B50VE		KDU50B71VE		KDU50B125VE	
L-type piping kit (for upward direction)	For FHY	KHFJ5F50		KHFJ5F80		KHFJ5F160	
	For FH	KHFJ5F50	KHFJ5F60		—		
Remote controller	Wired type	BRC1C517					
	Infrared type	For FHY	BRC7E63W				
		For FH	BRC7E66				
Central remote control		DCS302B61					
Unified ON/OFF control		DCS301B61					
Schedule timer		DST301B61					
Adaptor for wiring		KRP1B54					
Wiring adapter for electrical appendices ✕1		KRP4A52					
Interface adaptor for Sky Air series		DTA102A52					
Installation box for adaptor PCB		KRP1C93					

3D028285

Note *1: Installation box for adapter PCB (KRP1C93) is necessary.

7
7-2



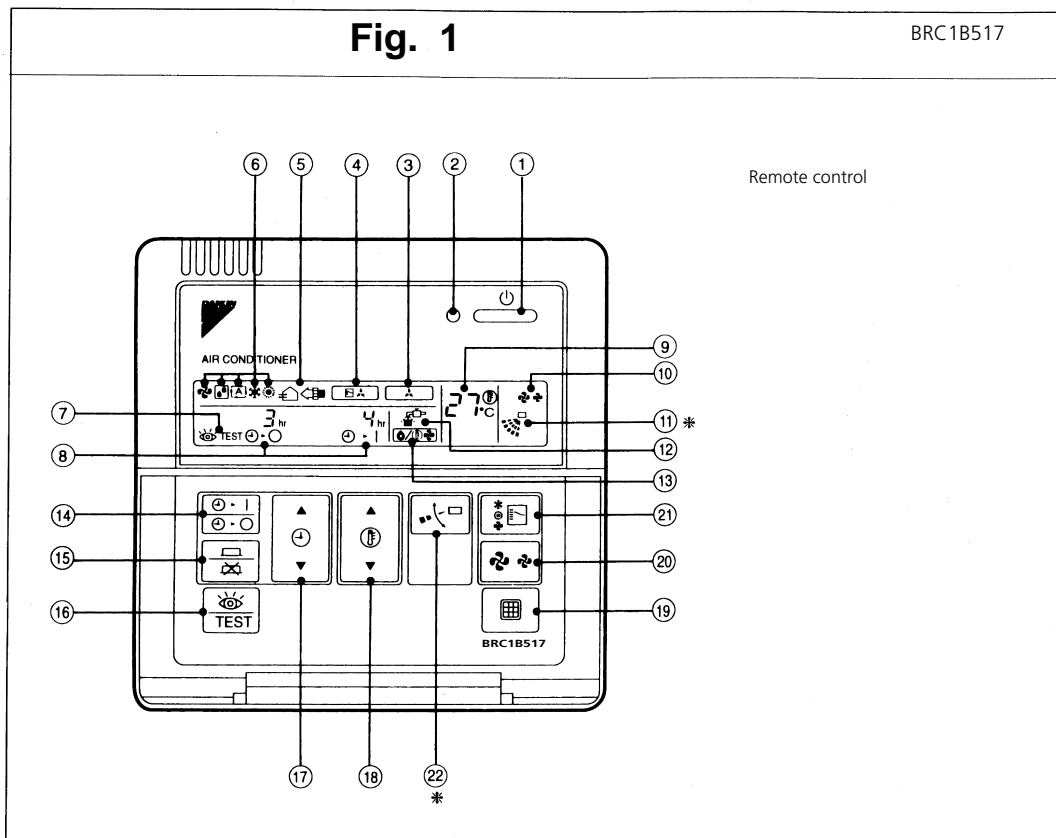
8 Control systems

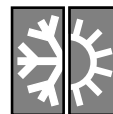
8-1 Wired remote control

BRC1B517	FH(Y)-GZ
----------	----------

Fig. 1

BRC1B517





8 Control systems

8-1 Wired remote control

NAME AND FUNCTION OF EACH SWITCH AND DISPLAY ON THE REMOTE CONTROL (Fig.1)

1	ON/OFF BUTTON	13	DISPLAY '☀/☁' (DEFROST)
	Press the button and the system will start. Press the button again and the system will stop.	14	TIMER MODE START/STOP BUTTON
2	OPERATION LAMP (RED)	15	TIMER ON/OFF BUTTON
	The lamp lights up during operation.	16	INSPECTION/TEST OPERATION BUTTON
DISPLAY 'A' (UNDER CENTRALISED CONTROL)	This button is used only by qualified service persons for maintenance purposes.		
3	When this display shows, the system is UNDER CENTRALISED CONTROL. (This is not a standard specification).	17	PROGRAMMING TIME BUTTON
	DISPLAY 'A' (CHANGEOVER UNDER CONTROL)		Use this button for programming 'START and/or STOP' time. (Operates with the front cover of the remote control)
4	This display shows when the outdoor unit is individual operation system.	18	TEMPERATURE SETTING BUTTON
	DISPLAY 'A' (VENTILATION/AIR CLEANING)		Use this button for SETTING TEMPERATURE.
5	This display shows that the total heat exchange unit and the air cleaning unit are in operation. These are optional accessories.	19	FILTER SIGN RESET BUTTON
	DISPLAY 'A' 'A' 'A' 'A' 'A' 'A' (OPERATION MODE)	20	FAN SPEED CONTROL BUTTON
This display shows the current OPERATION MODE. For cooling only type, 'A' (Auto) and 'A' (Heating) are not installed.	Press this button to select the fan speed, HIGH or LOW, of your choice.		
7	DISPLAY 'A' (INSPECTION/TEST OPERATION)	21	OPERATION MODE SELECTOR BUTTON
	When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in.		Press this button to select OPERATION MODE.
8	DISPLAY 'A' (PROGRAMMED TIME)	22	AIR FLOW DIRECTION ADJUST BUTTON
	This display shows PROGRAMMED TIME of the system start or stop.		
9	DISPLAY 'A' (SET TEMPERATURE)		
	This display shows the set temperature.		
10	DISPLAY 'A' (FAN SPEED)		
	The display shows the set fan speed.		
11	DISPLAY 'A' (AIR FLOW FLAP)		
12	DISPLAY 'A' (TIME TO CLEAN AIR FILTER)		

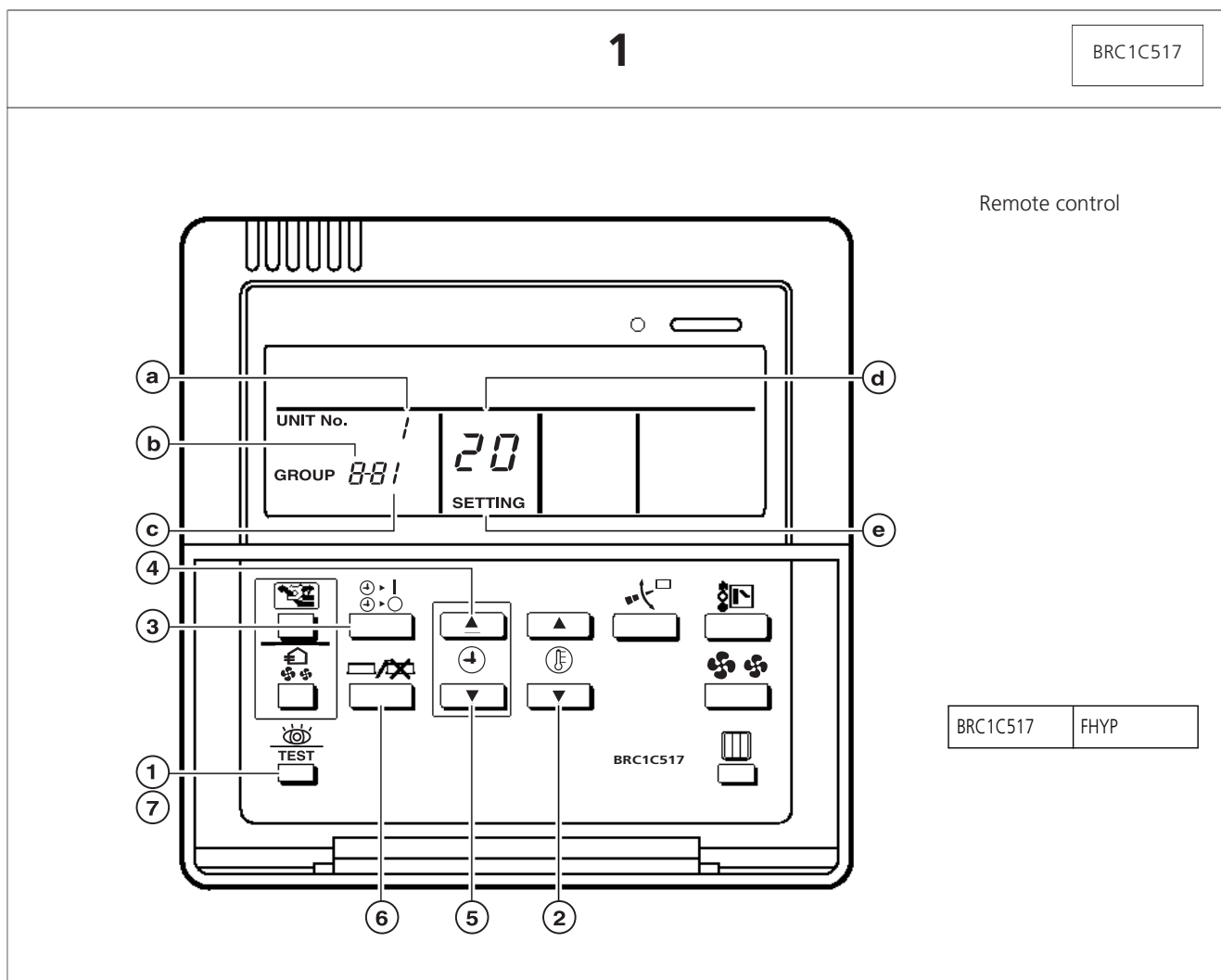
(NOTE)

- For the sake of explanation, all indications are shown on the display in Figure 3 & 4 contrary to actual running situations.



8 Control systems

8-2 Operation procedure wired remote control



Field settings

- a. Unit NO
- b. First code NO
- c. Second code NO
- d. Mode NO
- e. Field set mode

Procedure

1. When in the normal mode, press the "TEST" button for a minimum of four seconds, and the FIELD SET MODE is entered.
2. Select the desired MODE NO. With the "MODE" button.
3. During group control, when setting by each indoor unit, push the "INDOOR" button and select the INDOOR UNIT NO. To be set. (This operation is unnecessary when setting by group.)
4. Push the "UP" upper button and select FIRST CODE NO.
5. Push the "DOWN" lower button and select the SECOND CODE NO.
6. Push the "SET" button once and the present settings are SET.
7. Push the "TEST" button to return to the NORMAL MODE.



9 Safety device settings

FHY-GZ

Model	Safety devices	35	45
FHY-GZ	Fuse	-	-
	Fan motor thermal fuse (°C)	-	-
	Fan motor thermal protector (°C)	Off: 130±5 On: 83±20	Off: 130±5 On: 83±20

3TW21009-2A

Model	Safety devices	35	50	60	71	100	125
FHYP-BV1	Fuse	-	-	-	-	-	-
	Fan motor thermal fuse (°C)	-	-	-	-	-	-
	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	OFF: 130±5 ON: 83±20	OFF: 130±5 ON: 83±20
FH-BZV1	Fuse	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A
	Fan motor thermal fuse (°C)	-	-	-	-	-	-
	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	OFF: 130±5 ON: 83±20	OFF: 130±5 ON: 83±20

3D006611C

10 Installation

9

Names and functions of parts

- Ⓐ Indoor unit
- Ⓑ Outdoor unit
- Ⓒ Remote control
- Ⓓ Inlet air
- Ⓔ Discharged air
- Ⓕ Air outlet
- Ⓖ Blade (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.

