



technical data

FH(Y)B-FK7



Concealed Ceiling Unit

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



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 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

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

Note: R-22 cooling only models, which are produced after 01/07/2002, cannot be sold inside countries that follow the European Regulation n°2037/2000 EE of 29/09/2000.



1 Features

Stylish and compact

- Blends unobtrusively with any interior décor
- Leaves maximum floor and wall space for furniture, decoration and fittings
- Fits flush into each ceiling
- Extremely quiet in operation both indoors and outdoors
- The position of the individual air discharge grilles can be altered, enabling a uniform temperature, even in irregularly shaped rooms: L-shaped room, U-shaped room, long room

Easy to install

- 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 7 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.

Easy control at your fingertips

- 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



FHYB



2 steps



FHYB35-125



FHB35-60



FHYB35-71



2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHB35FK7V15	FHB45FK7V15	FHB60FK7V15
NOMINAL INPUT	Cooling	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FHB35FK7V15	FHB45FK7V15	FHB60FK7V15
OUTDOOR UNITS			R35DC7V115	R45DC7V115/W115	R60FA7V15/W15
NOMINAL CAPACITY (2)	Cooling (1)	kW	3.95	5.30/5.30	6.50/6.50
NOMINAL INPUT	Cooling	kW	1.36	2.17/2.17	2.42/2.42

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FHB35FK7V15	FHB45FK7V15	FHB60FK7V15
DIMENSIONS	Unit	H	mm	300	300	300
		W	mm	700	700	1,000
		D	mm	800	800	800
	Decoration panel	H	mm	55	55	55
		W	mm	880	880	1,100
		D	mm	500	500	500
WEIGHT	Unit	kg	30	31	41	
	Decoration panel	kg	3.5	3.5	4.5	
MATERIAL	Decoration panel		Unpainted galvanised steel plate			
COLOUR	Decoration panel		White			
SOUND LEVEL	Sound pressure (3)	high	dBA	33	33	34
		low	dBA	29	29	30
	Sound power (4)		dBA	52	53	60
FAN	Air flow rate	high	m³/min	11.5	14	17
		low	m³/min	9	10	13
	Speed	steps	2 steps			
	Type		Sirocco fan			
	Qty x model		1 x D18H2AH1V1	1 x D18H2AH1V1	1 x 2D18H2AH1V1	
	Qty x motor output		W	1 x 65	1 x 85	1 x 110
	Drive		Direct drive			
	External static pressure (5)		Pa	88-49-20	88-49-20	88-49-20
HEAT EXCHANGER	Type		Cross fin coil (waffle louver fins & Hi-XA tubes)			
	Rows x stages x fin pitch		mm	3 x 14 x 1.75	3 x 14 x 1.75	3 x 14 x 1.75
	Face area		m²	0.132	0.132	0.221
AIR FILTER			Resin net (with mold resistant)			
TEMPERATURE CONTROL			Computerised control			
PIPING CONNECTIONS	liquid	mm	φ6.4	φ6.4	φ6.4	
	gas	mm	φ12.7	φ15.9	φ15.9	
	drain	mm	I.D. φ25	I.D. φ25	I.D. φ25	
	drain	mm	O.D. φ32	O.D. φ32	O.D. φ32	
INSULATION MATERIAL	Heat insulation tape			Both liquid and gas pipes		

For outdoor units	Pair application	See chapter R
	Multi model application	See chapter MA

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NOMINAL CAPACITY and NOMINAL INPUT						
For indoor units only:						
INDOOR UNITS			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1	
NOMINAL INPUT	Cooling	kW	-	-	-	

For combination indoor units + outdoor units:						
INDOOR UNITS			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1	
OUTDOOR UNITS			R71B7V15/W15	R100B7V15/W15	R125B7W15	
NOMINAL CAPACITY (2)	Cooling (1)	kW	7.20/7.20	10.50/10.50	12.40	
NOMINAL INPUT	Cooling	kW	3.10/2.90	3.80/3.50	4.60	

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
DIMENSIONS	Unit	H	mm	300	300	300
		W	mm	1,000	1,400	1,400
		D	mm	800	800	800
	Decoration panel	H	mm	55	55	55
		W	mm	1,100	1,500	1,500
		D	mm	500	500	500
WEIGHT	Unit	kg	41	51	52	
	Decoration panel	kg	4.5	6.5	6.5	
MATERIAL	Unpainted galvanised steel plate					
COLOUR	White					
SOUND LEVEL (2)	Sound pressure (3)	high	dBA	34	36	38
		low	dBA	30	31	32
	Sound power (4)	dBA	60	62	63	
FAN	Air flow rate	high	m³/min	19	27	35
		low	m³/min	14	20	24
	Speed	steps	2 steps			
	Type	Sirocco fan				
	Qty x model	1 x 2D18H2A1V1		1 x 3D18H2AN1V1	1 x 3D18H2AP1V1	
	Qty x motor output	W	1 x 125	1 x 135	1 x 225	
	Drive	Direct drive				
	External static pressure (5)	Pa	863-480.5	863-480.5	863-480.5	
HEAT EXCHANGER	Type	Cross fin coil (waffle louver fins & Hi-XA tubes)				
	Rows x stages x fin pitch	mm	3 x 14 x 1.75	3 x 14 x 1.75	3 x 14 x 1.75	
	Face area	m²	0,221	0,338	0,338	
AIR FILTER				Resin net (with mold resistant)		
TEMPERATURE CONTROL				Computerised control		
PIPING CONNECTIONS	liquid	mm	φ9.5	φ9.5	φ9.5	
	gas	mm	φ15.9	φ19.1	φ19.1	
	drain	mm	I.D. φ25	I.D. φ25	I.D. φ25	
	drain	mm	O.D. φ32	O.D. φ32	O.D. φ32	
INSULATION MATERIAL	Heat insulation tape			Both liquid and gas pipes		

For outdoor units	Pair application	See chapter R
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ELECTRICAL SPECIFICATIONS				
For indoor units only:			FHB35FK7V15	FHB45FK7V15
CURRENT	Nominal running current	A	See chapter R: Electrical data	
	Max. running current	A		

For combination indoor units + outdoor units:			FHB35FK7V15	FHB45FK7V15	FHB60FK7V15
			R35DC7V115	R45DC7V115/W115	R60FA7V15/W15
CURRENT	Nominal running current	A	6.1	10.8/4.4	10.4/5.2
	Maximum running current	A	See chapter R: Electrical data		
	Starting current	A	26	44/19	See chapter R: Electrical data

For indoor units only:			FHB35FK7V15	FHB45FK7V15	FHB60FK7V15
POWER SUPPLY			V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1~	1~	1~
	Frequency	Hz	50	50	50
	Voltage	V	230	230	230

ELECTRICAL SPECIFICATIONS				
For indoor units only:			FHYB71FK7V1	FHYB100FK7V1
CURRENT	Nominal running current	A	See chapter R: Electrical data	
	Max. running current	A		

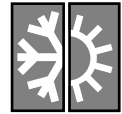
For combination indoor units + outdoor units:			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
			R71B7V15/W15	R100B7V15/W15	R125B7W15
CURRENT	Nominal running current	A	See chapter R: Electrical data		
	Maximum running current	A			
	Starting current	A			

For indoor units only:			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
POWER SUPPLY			V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1~	1~	1~
	Frequency	Hz	50	50	50
	Voltage	V	230	230	230

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.
- Capacities are net, including a deduction for cooling for indoor fan motor heat.
- 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.
- The sound power level is an absolute value indicating the "power" which a sound source generates.
- The external static pressure is changeable by programming on the remote control. This pressure means "High static pressure - Standard".

2 Specifications



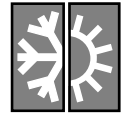
NOMINAL CAPACITY, CAPACITY STEPS and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHYB35FK7V1	FHYB45FK7V1	FHYB60FK7V1
NOMINAL INPUT	Cooling	kW	-	-	-
	Heating	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FHYB35FK7V1	FHYB45FK7V1	FHYB60FK7V1
OUTDOOR UNITS			RY35DA7V1	RY45DB7V1	RY60FA7V1
NOMINAL CAPACITY (3)	Cooling (1)	kW	3.80	4.45	6.15
	Heating (2)	kW	4.20	5.60	7.15
NOMINAL INPUT	Cooling	kW	1.64	2.15	2.51
	Heating	kW	1.45	1.96	2.40

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FHYB35FK7V1	FHYB45FK7V1	FHYB60FK7V1
DIMENSIONS	Unit	H	mm	300	300	300
		W	mm	700	700	1,000
		D	mm	800	800	800
	Decoration panel	H	mm	55	55	55
		W	mm	880	880	1,100
		D	mm	500	500	500
WEIGHT	Unit	kg		30	31	41
	Decoration panel	kg		3.5	3.5	4.5
MATERIAL	Decoration panel	Unpainted galvanised steel plate				
COLOUR	Decoration panel	White				
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dBA	33	33	34
		low	dBA	29	29	30
	Sound power (cooling/heating) (5)	high	dBA	52	53	60
FAN	Air flow rate (cooling/heating)	high	m ³ /min	11.5	14	17
		low	m ³ /min	9	10	13
	Speed (cooling/heating)	steps		2 steps		
	Type			Sirocco fan		
	Qty x model			1 x D18H2AH1V1	1 x D18H2AJ1V1	1 x 2D18H2AH1V1
	Qty x motor output	W		1 x 65	1 x 85	1 x 110
	Drive			Direct drive		
	External static pressure (6)	Pa		88-49-20	88-49-20	88-49-20
HEAT EXCHANGER	Type			Cross fin coil (waffle louver fins & Hi-XA tubes)		
	Rows x stages x fin pitch	mm		3 x 14 x 1.75	3 x 14 x 1.75	3 x 14 x 1.75
	Face area	m ²		0.132	0.132	0.221
AIR FILTER				Resin net (with mold resistant)		
TEMPERATURE CONTROL				Computerised control		
PIPING CONNECTIONS	liquid	mm		φ6.4	φ6.4	φ9.5
	gas	mm		φ12.7	φ12.7	φ15.9
	drain	mm		I.D. φ25	I.D. φ25	I.D. φ25
	drain	mm		O.D. φ32	O.D. φ32	O.D. φ32
INSULATION MATERIAL	Heat insulation tape			Both liquid and gas pipes		
For outdoor units	Pair application			See chapter R(E)Y		

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2 Specifications



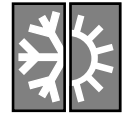
NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
NOMINAL INPUT	Cooling	kW	-	-	-
	Heating	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
OUTDOOR UNITS			RY71B7V1/W1	RY100B7V1/W1	RY125B7W1
NOMINAL CAPACITY (3)	Cooling (1)	kW	7.20/7.20	10.00/10.00	12.40
	Heating (2)	kW	8.60/8.60	11.60/11.60	15.20
NOMINAL INPUT	Cooling	kW	3.20/3.10	4.00/3.90	4.50
	Heating	kW	3.150/3.10	4.30/4.10	4.80

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
DIMENSIONS	Unit	H	mm	300	300	300
		W	mm	1,000	1,400	1,400
		D	mm	800	800	800
	Decoration panel	H	mm	55	55	55
		W	mm	1,100	1,500	1,500
		D	mm	500	500	500
WEIGHT	Unit	kg		41	51	52
	Decoration panel	kg		4.5	6.5	6.5
MATERIAL	Decoration panel	Unpainted galvanised steel plate				
COLOUR	Decoration panel	White				
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dBA	34/34	36/36	38/38
		low	dBA	30/30	31/31	32/32
	Sound power (cooling/heating) (5)	high	dBA	60/60	62/62	63/63
FAN	Air flow rate (cooling/heating)	high	m ³ /min	19/19	27/27	35/35
		low	m ³ /min	14/14	20/20	24/24
	Speed (cooling/heating)	steps		2 steps		
	Type			Sirocco fan		
	Qty x model			1 x 2D18H2AJ1V1	1 x 3D18H2AN1V1	1 x 3D18H2AP1V1
	Qty x motor output	W		1 x 125	1 x 135	1 x 225
	Drive			Direct drive		
	External static pressure (6-7)	Pa		88-49-20	88-49	88-49
HEAT EXCHANGER	Type			Cross fin coil (waffle louver fins & Hi-XA tubes)		
	Rows x stages x fin pitch	mm		3 x 14 x 1,75	3 x 14 x 1,75	3 x 14 x 1,75
	Face area	m ²		0.221	0.338	0.338
AIR FILTER				Resin net (with mold resistant)		
TEMPERATURE CONTROL				Computerised control		
PIPING CONNECTIONS	liquid	mm		φ9.5	φ9.5	φ9.5
	gas	mm		φ15.9	φ19.1	φ19.1
	drain	mm		I.D. φ25	I.D. φ25	I.D. φ25
	drain	mm		O.D. φ32	O.D. φ32	O.D. φ32
INSULATION MATERIAL	Heat insulation tape			Both liquid and gas pipes		

For outdoor units	Pair application	See chapter R(E)Y
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2 Specifications

ELECTRICAL SPECIFICATIONS				
For indoor units only:				
CURRENT	Nominal running current	cooling	A	See chapter R(E)Y: Electrical data
		heating	A	
	Starting current	cooling	A	
		heating	A	

For combination indoor units + outdoor units:						
				FHYB35FK7V1 RY35DA7V1	FHYB45FK7V1 RY45DB7V1	FHYB60FK7V1 RY60FA7V1
CURRENT	Nominal running current	cooling	A	6.8	8.9	10.9
		heating	A	6.3	8.1	10.7
	Maximum running current	cooling	A	8.8	11.5	13.5
		heating	A	8.8	11.5	13.5
	Starting current	cooling	A	35	39	53
		heating	A	35	39	53

For indoor units only:				FHYB35FK7V1	FHYB45FK7V1	FHYB60FK7V1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency	Hz		50	50	50
	Voltage	V		230	230	230

ELECTRICAL SPECIFICATIONS				
For indoor units only:				
CURRENT	Nominal running current	cooling	A	See chapter R(E)Y: Electrical data
		heating	A	
	Max. running current	cooling	A	
		heating	A	

For combination indoor units + outdoor units:						
				FHYB71FK7V1 RY71B7V1/W1	FHYB100FK7V1 RY100B7V1/W1	FHYB125FK7V1 RY125B7W1
CURRENT	Nominal running current	cooling	A	See chapter R(E)Y: Electrical data		
		heating	A			
	Maximum running current	cooling	A			
		heating	A			
	Starting current	cooling	A			
		heating	A			

For indoor units only:				FHYB71FK7V1	FHYB100FK7V1	FHYB125FK7V1
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency	Hz		50	50	50
	Voltage	V		230	230	230

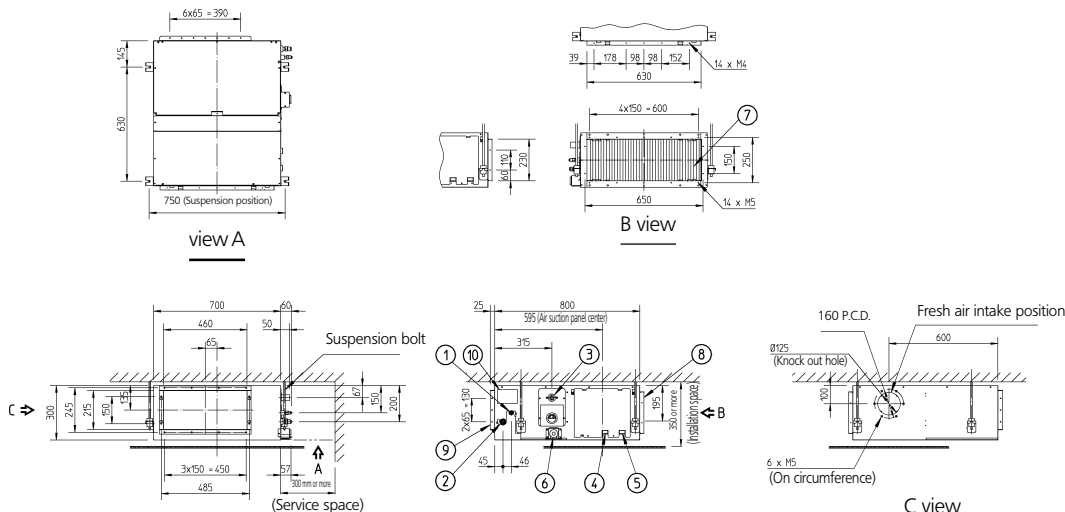
NOTES

- 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
- Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- 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. The sound pressure values are mentioned for a unit installed with rear suction.
- The sound power level is an absolute value indicating the "power" which a sound source generates. For measuring conditions: please refer to item 6 of this chapter.
- The external static pressure is changeable by programming on the remote control. This pressure means "High static pressure - Standard - Low static pressure".
- The external static pressure is changeable by programming on the remote control. This pressure means "High static pressure - Standard".



3 Dimensional drawings

FH(Y)B35-45FK7



Notes:

1. Refer to 'dimensional drawing for installing optional accessories' when installing optional accessories.
2. The required ceiling depth varies according to configuration of the specific system.
3. For maintenance of the air filter, it is necessary to provide a service access panel according to the installation method. (Refer to the 'filter installation method' drawing)

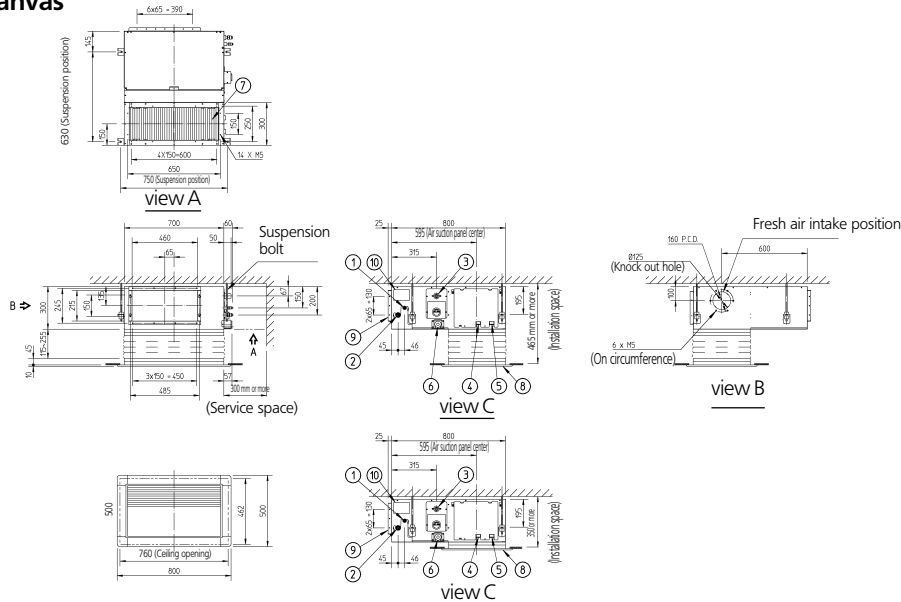
- 1 Liquid pipe connection ϕ A Flare connection
- 2 Gas pipe connection ϕ B Flare connection
- 3 Drain pipe connection VP25 (O.D. ϕ 32, I.D. ϕ 25) VP25 (I.D. ϕ 32, I.D. ϕ 25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole (I.D. ϕ 32, I.D. ϕ 25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FHB35FK7	6.35	12.70
FHYB35FK7	6.35	12.70
FHB45FK7	6.35	15.90
FHYB45FK7	6.35	12.70

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3

FH(Y)B35-45FK7 With canvas



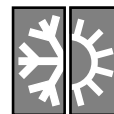
Notes:

1. Refer to 'dimensional drawing for installing optional accessories' when installing optional accessories.
2. Optional decoration panel: BYB545DJW1 (light ivory white 10Y9/0.5).
3. The required ceiling depth varies according to configuration of the specific system

- 1 Liquid pipe connection ϕ A Flare connection
- 2 Gas pipe connection ϕ B Flare connection
- 3 Drain pipe connection VP25 (I.D. ϕ 32, I.D. ϕ 25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole VP25 (O.D. ϕ 32, I.D. ϕ 25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

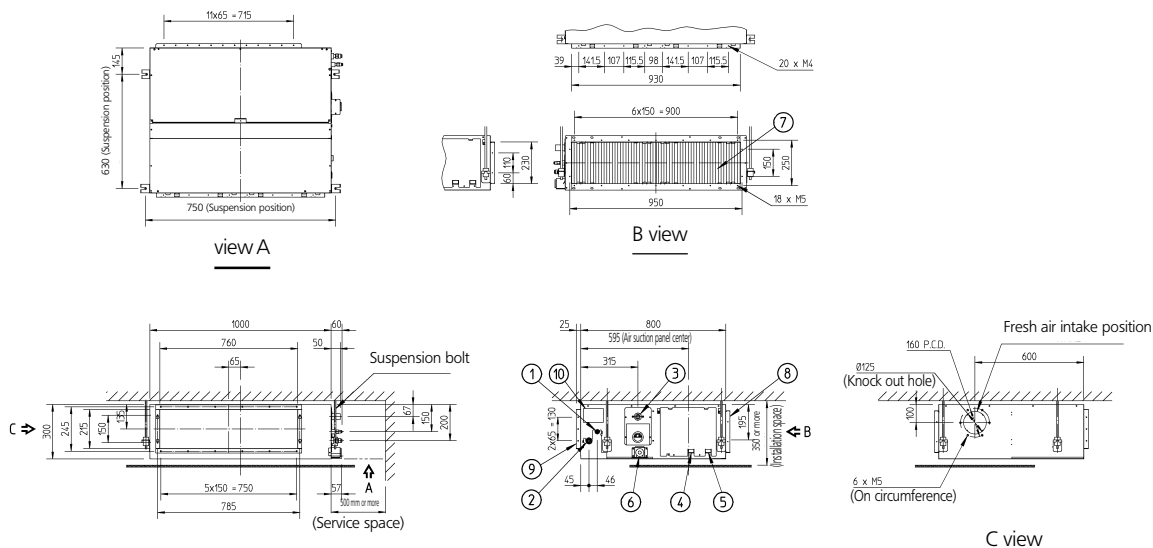
Model	A	B
FHB35FK7	6.35	12.70
FHYB35FK7	6.35	12.70
FHB45FK7	6.35	15.90
FHYB45FK7	6.35	12.70

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3 Dimensional drawings

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Notes:

1. Refer to 'dimensional drawing for installing optional accessories' when installing optional accessories.
2. The required ceiling depth varies according to configuration of the specific system.
3. For maintenance of the air filter, it is necessary to provide a service access panel according to the installation method. (Refer to the 'filter installation method' drawing)

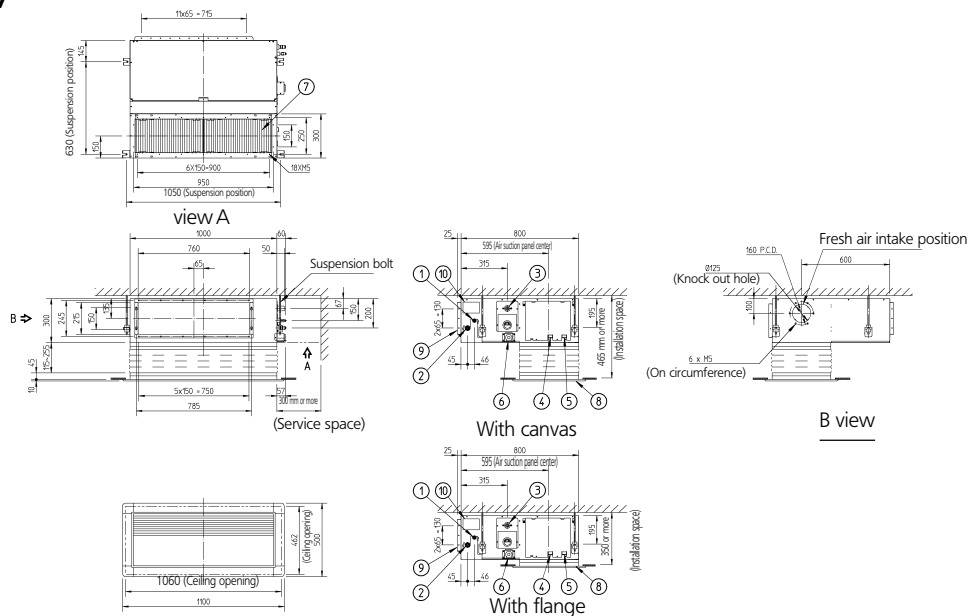
- 1 Liquid pipe connection ϕ A Flare connection
- 2 Gas pipe connection ϕ B Flare connection
- 3 Drain pipe connection VP25 (I.D. ϕ 32, I.D. ϕ 25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole (I.D. ϕ 32, I.D. ϕ 25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FHB60	6.35	15.90
FHYB60	9.52	15.90
FHYB71	9.52	15.90

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With canvas



Notes:

1. Refer to 'dimensional drawing for installing optional accessories' when installing optional accessories.
2. Optional decoration panel: BYB571DW1 (light ivory white 10Y9/0.5)
3. The required ceiling depth varies according to configuration of the specific system.

- 1 Liquid pipe connection ϕ A Flare connection
- 2 Gas pipe connection ϕ B Flare connection
- 3 Drain pipe connection VP25 (I.D. ϕ 32, I.D. ϕ 25)
- 4 Remote control wiring connection
- 5 Power supply connection
- 6 Drain hole (VP25, I.D. ϕ 32, I.D. ϕ 25)
- 7 Air filter
- 8 Air suction side
- 9 Air discharge side
- 10 Name plate

Model	A	B
FHYB71	9.52	15.90

3TW22244-2B



4

Piping diagrams

FH(Y)B-FK7

Refrigerant flow

Cooling
Heating

Refrigerant pipe connection port diameters

Model	Gas	Liquid
FH(Y)B35FK, FHYB4FK	φ 12.70	φ 6.35
FHB45FK, FHB60FK	φ 15.90	φ 6.35
FHYB60FK, FHYB71FK	φ 15.90	φ 9.52
FHYB100FK, FHYB125FK	φ 19.10	φ 9.52

Heat exchanger

Liquid pipe connection port

Gas pipe connection port

Filter

Check valve

Flare connection

Screw connection

Flange connection

Pinched pipe

Spinned pipe

3TW20435-1G



5 Wiring diagrams

FHB35-60FK7

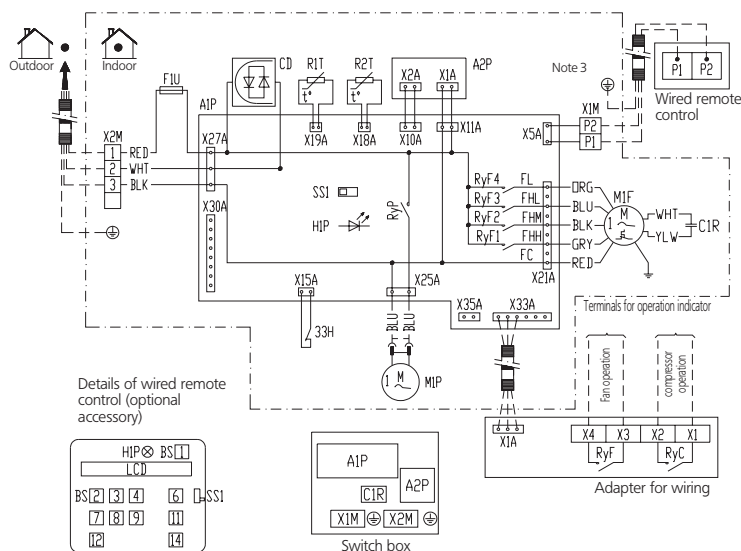
Notes

- When using the central remote control, see manual for connection to the unit.
- The infrared remote controller model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.
- Ground the shield of the remote control cord to the indoor unit.

Field wiring Terminal
 Connector
 Wire clamp
 Protective earth (screw)

Colours

BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



33H	Float switch
A1P	Printed circuit board
A2P	Printed circuit board (transformer 220-240V/16V)
C1R	Capacitor (fan)
F1T	Thermal fuse (152°C) (M1F embedded)
F1U	Fuse (250V, 5A)
H1P	Light emitting diode (service monitor green)
M1F	Motor
M1P	Motor

R1T	Thermistor (air)
R2T	Thermistor (coil)
RyC	Magnetic relay (outdoor unit compressor)
RyF1-4	Magnetic relay (fan)
RyP	Magnetic relay (drain pump)
SS1	Selector switch (emergency)
X1M	Terminal strip
X2M	Terminal strip
RC	Signal receiver circuit

Wired remote control	
B51	On/Off button
B52	Timer mode start/stop button
B53,B58	Programming time button
B54,B59	Temperature setting button
B56	Operation mode selector button
B57	Timer on/off button
B511	Fan speed control button
B512	Inspection/test button

BS14	Filter sign reset button
H1P	Light emitting diode (service monitor red)
LCD	Liquid crystal display (LCD)
SS1	Selector switch (main/sub)

Adapter for wiring	
RyC/RyF	Magnetic relay
Connector for optional parts	
X30A	Connector (interface adapter for sky air series)
X33A	Connector (adapter for wiring)
X35A	Connector (group control adapter)

2TW22046-1C

5

FHYB35-71FK7

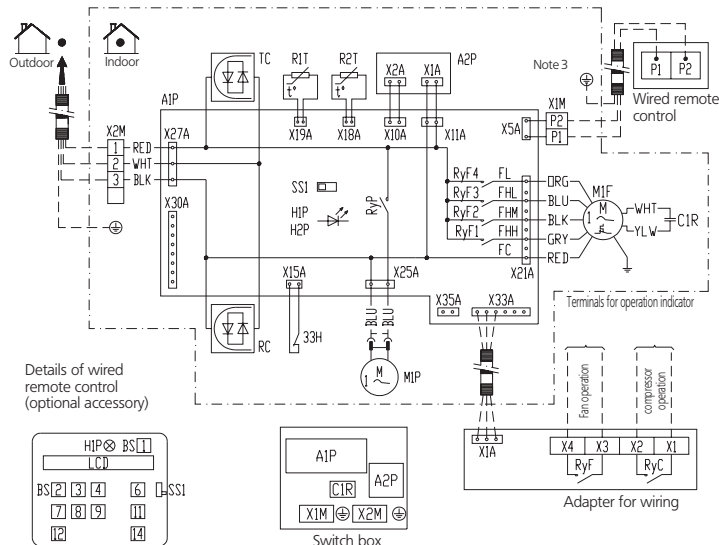
Notes

- When using the central remote control, see manual for connection to the unit.
- The infrared remote controller model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.
- Ground the shield of the remote control cord to the indoor unit.

Field wiring Terminal
 Connector
 Wire clamp
 Protective earth (screw)

Colours

BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



33H	Float switch
A1P	Printed circuit board
A2P	Printed circuit board (transformer 220-240V/16V)
C1R	Capacitor (fan)
F1T	Thermal fuse (152°C) (M1F embedded)
H1P, H2P	Light emitting diode (service monitor green)
M1F	Motor
M1P	Motor

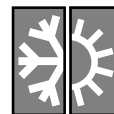
R1T	Thermistor (air)
R2T	Thermistor (coil)
RyF1-4	Magnetic relay (fan)
RyP	Magnetic relay (drain pump)
SS1	Selector switch (emergency)
X1M	Terminal strip
X2M	Terminal strip
TC	Signal transmission circuit

Wired remote control	
B51	On/Off button
B52	Timer mode start/stop button
B53,B58	Programming time button
B54,B59	Temperature setting button
B56	Operation mode selector button
B57	Timer on/off button
B511	Fan speed control button
B512	Inspection/test button

BS14	Filter sign reset button
H1P	Light emitting diode (service monitor red)
LCD	Liquid crystal display (LCD)
SS1	Selector switch (main/sub)

Adapter for wiring	
RyC/RyF	Magnetic relay
Connector for optional parts	
X30A	Connector (interface adapter for sky air series)
X33A	Connector (adapter for wiring)
X35A	Connector (group control adapter)

2TW22076-1B



5 Wiring diagrams

FHYB100-125FK7

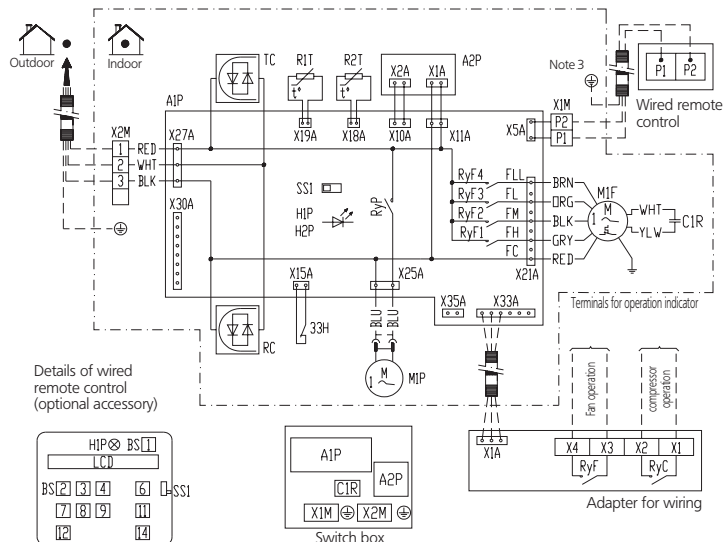
Notes

1. When using the central remote control, see manual for connection to the unit.
2. The infrared remote controller model varies according to the combination system. refer to technical materials and catalogues, etc. before connecting.
3. Ground the shield of the remote control cord to the indoor unit.

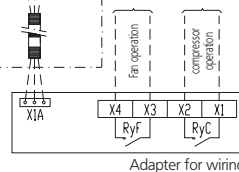
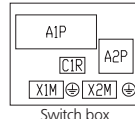
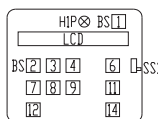
Field wiring Terminal
 Connector
 Wire clamp
 Protective earth (screw)

Colours

BLK: Black / WHT: White / RED: Red / BLU: Blue / GRY: Grey / ORG: Orange



Details of wired remote control (optional accessory)



33H	Float switch	R1T	Thermistor (air)	Wired remote control	BS14	Filter sign reset button	Adapter for wiring
A1P	Printed circuit board	R2T	Thermistor (coil)	BS1	On/Off button	H51P	Magnetic relay
A2P	Printed circuit board (transformer 220-240V/16V)	RyF1-4	Magnetic relay (fan)	BS2	Timer mode start/stop button	Light emitting diode (service monitor red)	Connector for optional parts
C1R	Capacitor (fan)	RyP	Magnetic relay (drain pump)	BS3,BS5	Programming time button	LCD	X30A
F1T	Thermal fuse (152°C) (M1F embedded)	SS1	Selector switch (emergency)	BS4,BS9	Temperature setting button	SS1	Selector switch (main/sub)
H1P, H2P	Light emitting diode (service monitor green)	X1M	Terminal strip	BS6	Operation mode selector button		X33A
M1F	Motor	X2M	Terminal strip	BS7	Timer on/off button		Connector (adapter for wiring)
M1P	Motor	RC	Signal receiver circuit	BS11	Fan speed control button		X35A
		TC	Signal transmission circuit	BS12	Inspection/test button		Connector (group control adapter)

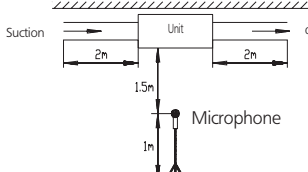
2TW22096-1B



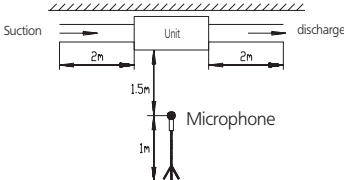
6 Sound level

6-1 Sound level data

Cooling only

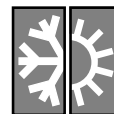
Model	Sound pressure level		Measuring location	Sound power level (H)
	230V			
	50Hz			
	H	L		
FHB35FK7V15	33	29		52
FHB45FK7V15	33	29		53
FHB60FK7V15	34	30		60
FHYB71FK7V1	34	30		60
FHYB100FK7V1	36	31		62
FHYB125FK7V1	38	32		63

Heat pump

Model	Sound pressure level			Sound power level (H)
	230V			
	50Hz			
	H (cooling/heating)	L (cooling/heating)		
FHYB35FK7V1	33 / 33	29 / 29		52 / 52
FHYB45FK7V1	33 / 33	29 / 29		53 / 53
FHYB60FK7V1	34 / 34	30 / 30		60 / 60
FHYB71FK7V1	34 / 34	30 / 30		60 / 60
FHYB100FK7V1	36 / 36	31 / 31		62 / 62
FHYB125FK7V1	38 / 38	32 / 32		63 / 63

6

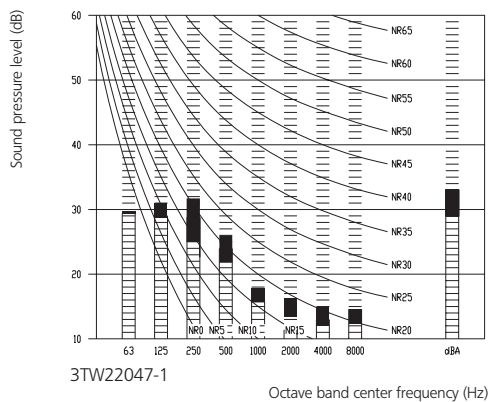
6-1



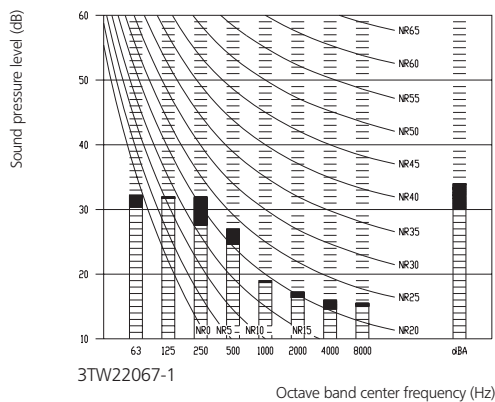
6 Sound level

6-2 Sound pressure spectrum

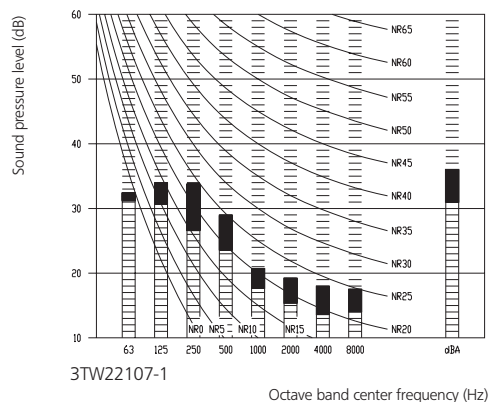
FH(Y)B35-45FK7



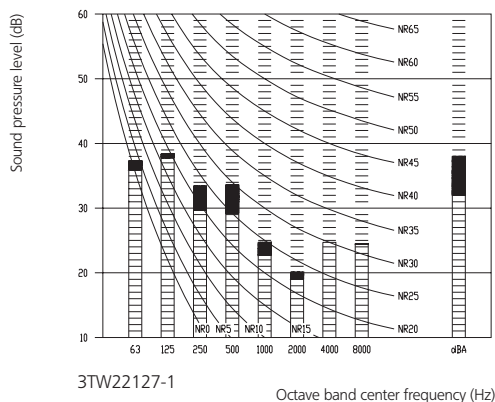
FH(Y)B60-71FK7



FHYB100FK7



FHYB125FK7



NOTES

- 1 Data is valid at free field condition
- 2 Operation sound levels are valid at nominal operation condition 230V
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20μPa

Legend

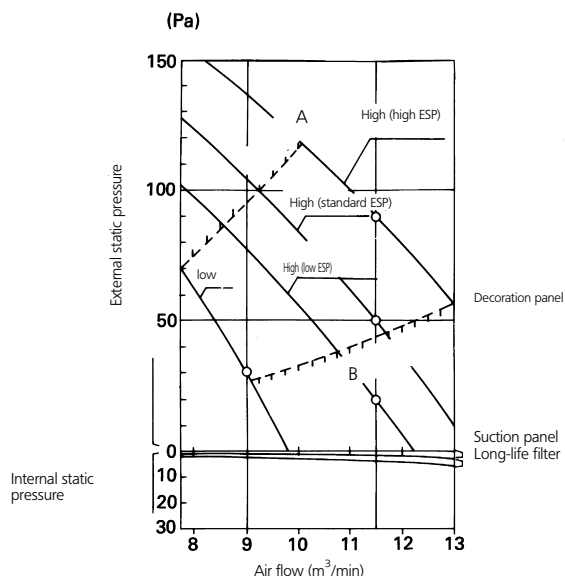
- High speed
- Low speed



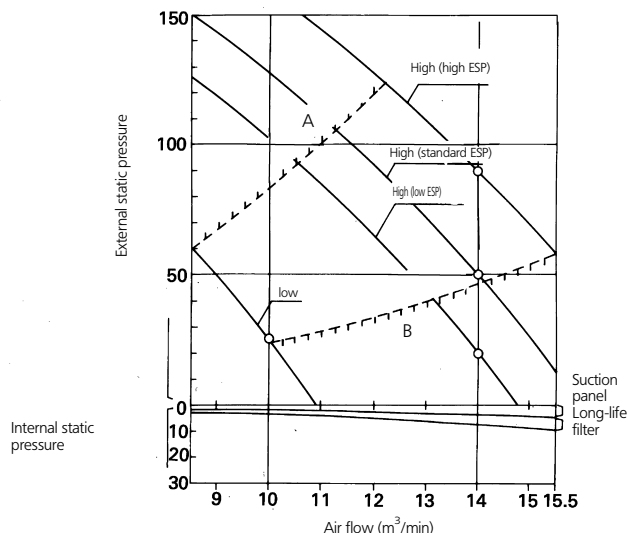
7 Fan characteristics

Cooling only

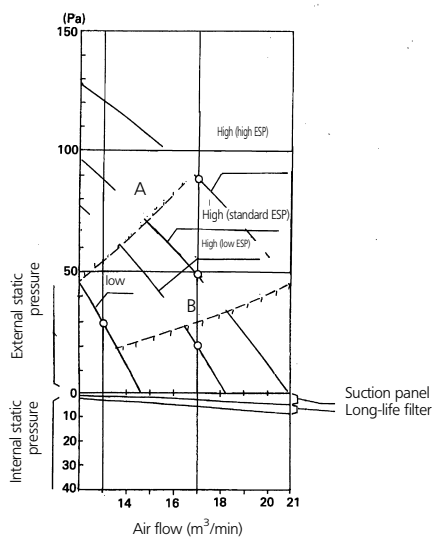
FHB35FK7



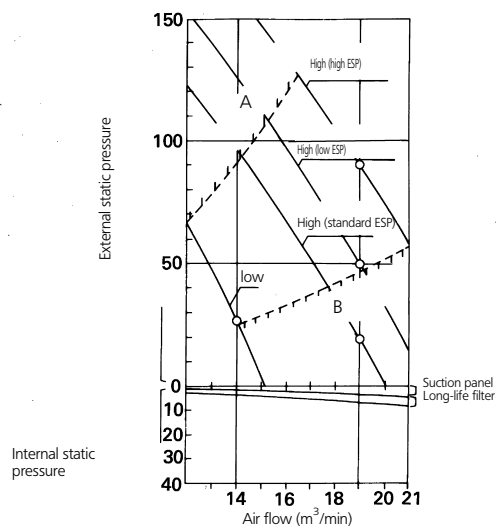
FHB45FK7



FHB60FK7



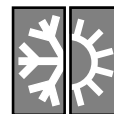
FHYB71FK7



NOTES

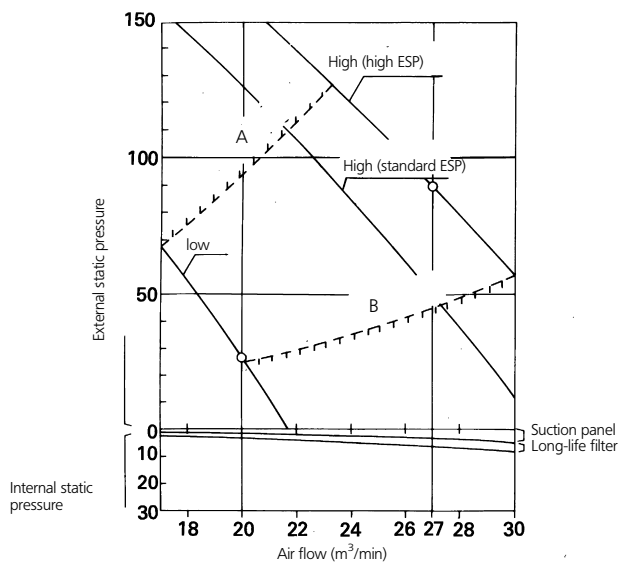
1. The remote control can be used to switch between 'high' and 'low'
2. The air flow is set to 'standard' before leaving the factory.
It is possible to switch between 'standard EPS' and 'high EPS' by programming on the remote control.
3. The internal static pressure indicates the characteristics of the fan when a suction panel (optional accessory) and a canvas for the suction panel (optional accessory) are incorporated into the main unit (with a long-life filter).

A = Upper limit of external static pressure (high ESP)
B = Lower limit of external static pressure (high ESP)

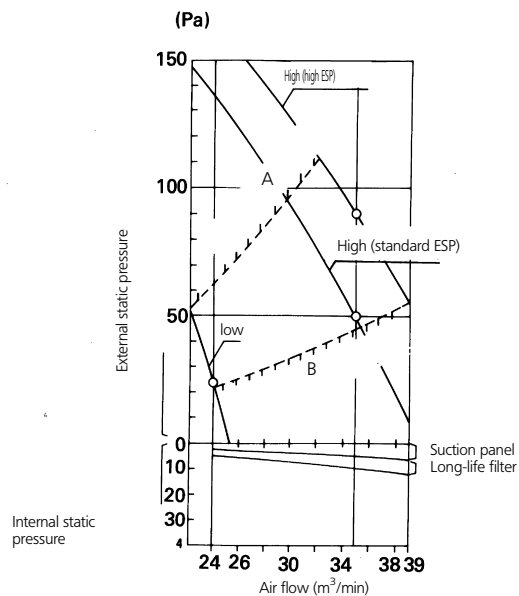


7 Fan characteristics

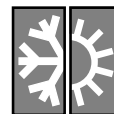
FHYB100FK7
(Pa)



FHYB125FK7



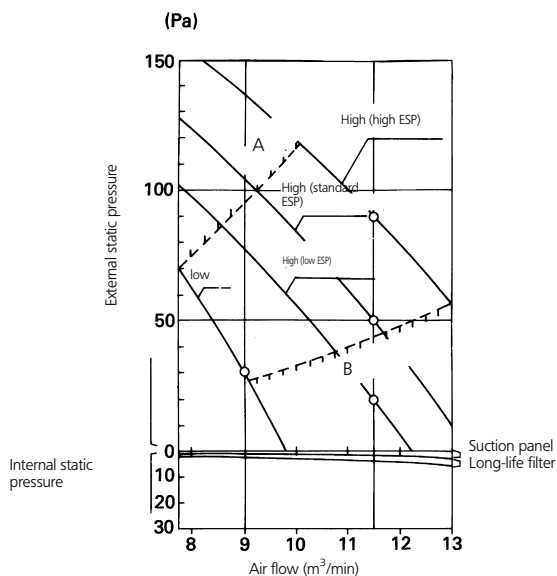
A = Upper limit of external static pressure (high ESP)
B = Lower limit of external static pressure (high ESP)



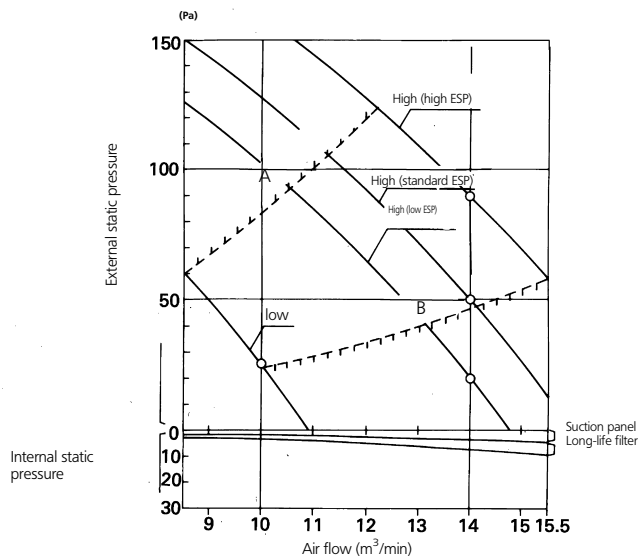
7 Fan characteristics

Heat pump

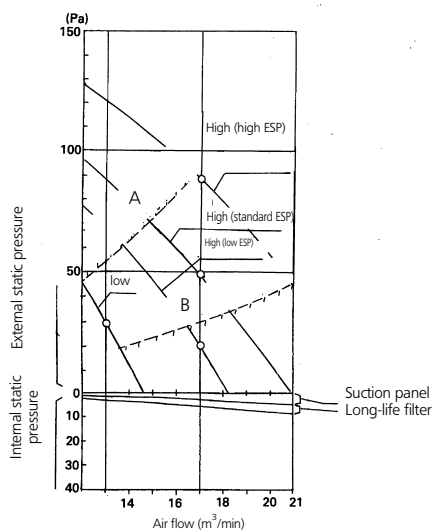
FHYB35FK7



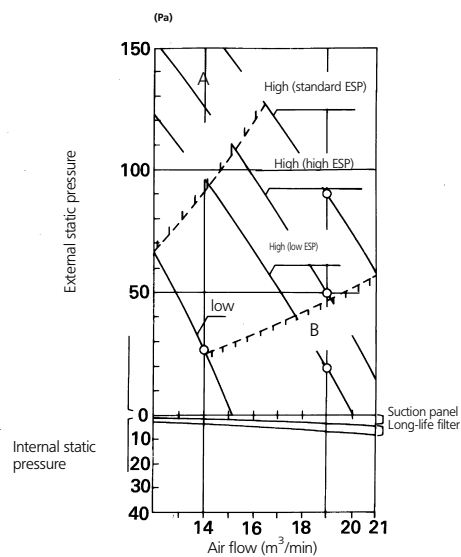
FHYB45FK7



FHYB60FK7



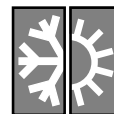
FHYB71FK7



NOTES

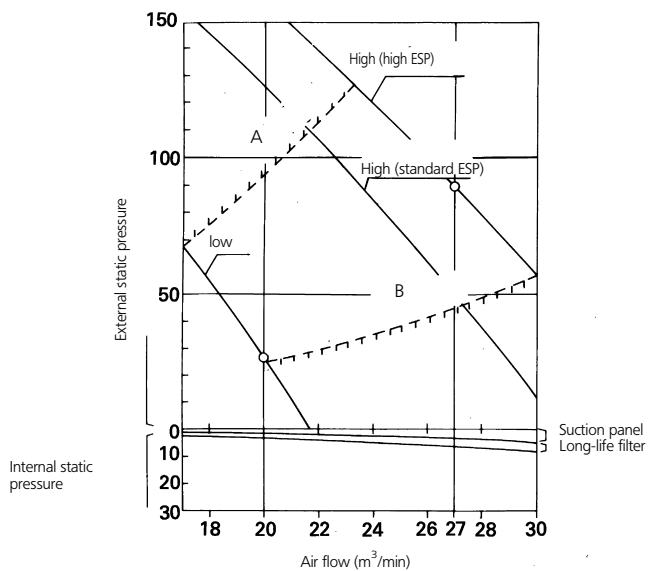
1. The remote control can be used to switch between 'high' and 'low'
2. The air flow is set to 'standard' before leaving the factory
It is possible to switch between 'standard EPS' and 'high EPS' by programming on the remote control
3. The internal static pressure indicates the characteristics of the fan when a suction panel (optional accessory) and a canvas for the suction panel (optional accessory) are incorporated into the main unit (with a long-life filter).

A = Upper limit of external static pressure (high ESP)
B = Lower limit of external static pressure (high ESP)

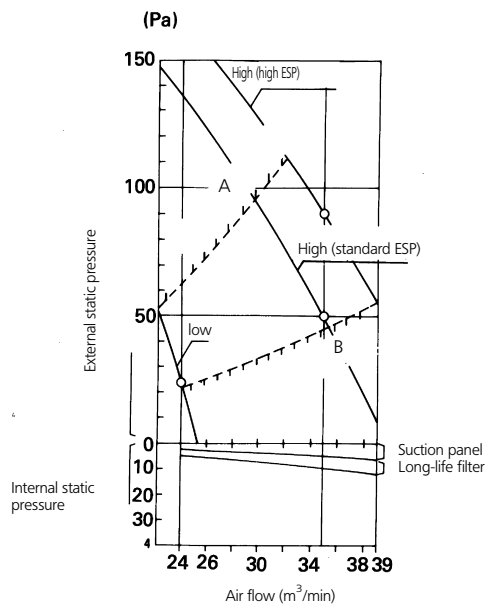


7 Fan characteristics

FHYB100FK7
(Pa)



FHYB125FK7
(Pa)



A = Upper limit of external static pressure (high ESP)
B = Lower limit of external static pressure (high ESP)

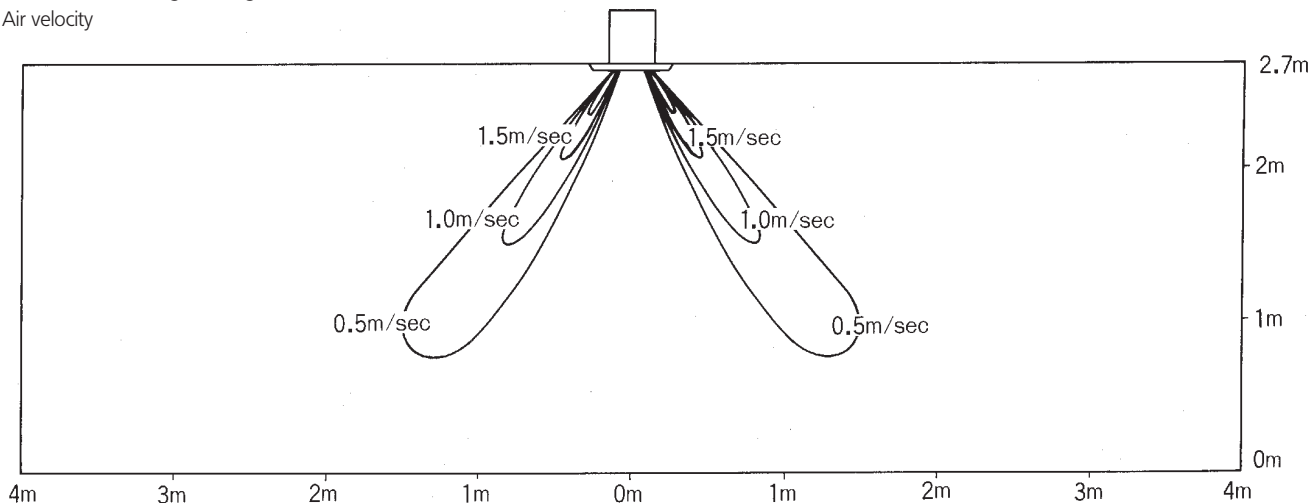


8 Air flow patterns

FHYB71FK7V1

9m³/min when using discharge unit (KDGS90D9)

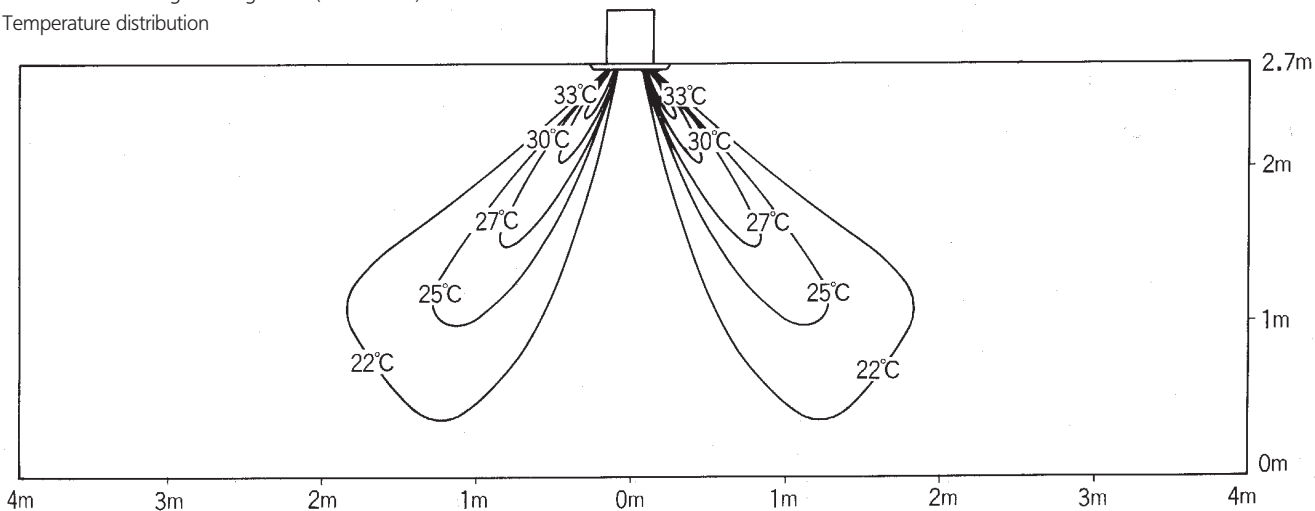
Air velocity



FHYB71FK7V1

9m³/min when using discharge unit (KDGS90D9)

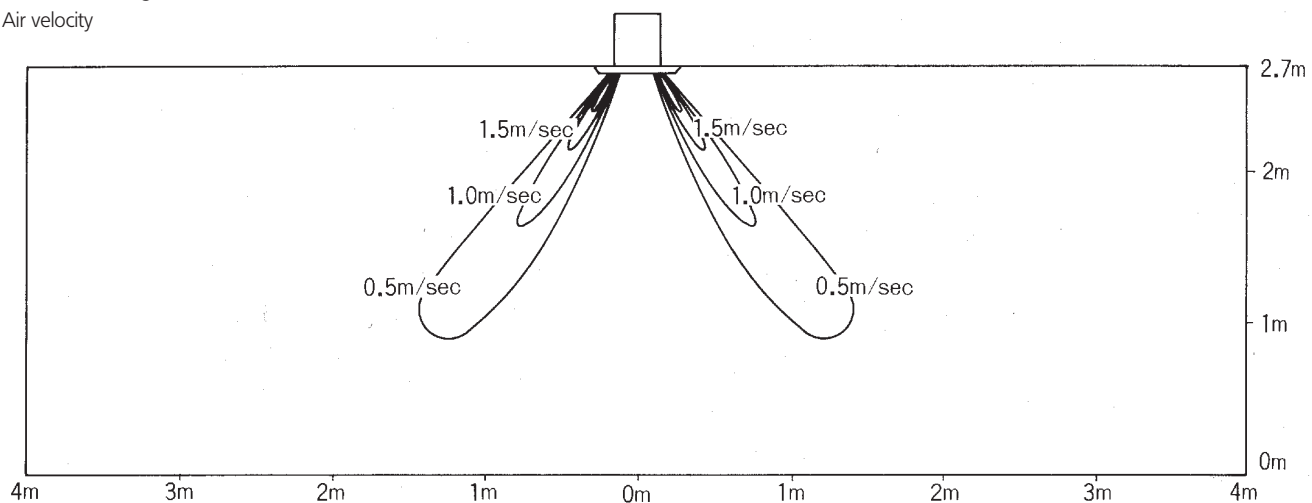
Temperature distribution

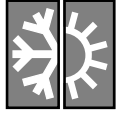


FHYB125FK7V1

9m³/min discharge unit (KDGS90D9)

Air velocity



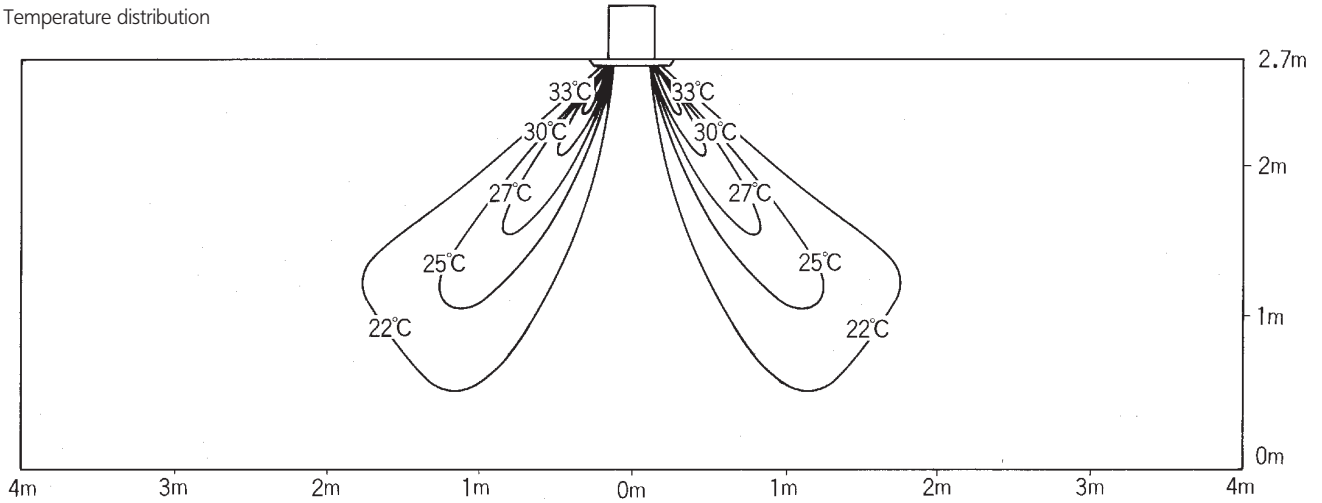


8 Air flow patterns

FHYB125FK7V1

9m³/min when using discharge unit (KDGS90D9)

Temperature distribution





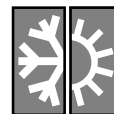
9 Accessories

9-1 Standard accessories

Check if the following accessories are included with your unit.

 Metal clamp 1 pc.	Also used as packing material  Paper pattern for installation 1 pc.	 Drain hose 1 pc.
 For gas pipe	Insulation for fitting 1 of each  For liquid pipe	 Washer for hanging bracket 8 pcs.
FH(Y)B35-45: 8 pcs. FHYBP35-45: 8 pcs. FH(Y)B60: 12 pcs. FHYB71: 12 pcs. FHYBP60-71: 12 pcs. FHYB(P)100-125: 16 pcs.		 Screws for duct flanges
		 Screws for fixing the paper pattern for installation 6 pcs.
Other: installation manual, operation manual		

Screws for fixing panels are attached to the air inlet panel.



9 Accessories

9-2 Optional accessories

Options

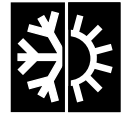
Nr	Item		FH(Y)B35,45	FH(Y)B60,71	FHYB100,125
1	Panel related	Decoration panel	BYBS45DJW18	BYBS125DJW18	BYBS125DJW18
		Service access panel	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
2	Filter related	High-efficiency filter 65% (colorimetric method) *1	KAFJ25L56	KAFJ25L80	KAFJ25L160
		High-efficiency filter 90% (colorimetric method) *1	KAFJ25L56	KAFJ25L80	KAFJ25L160
		Filter chamber for bottom suction	KAJ25L56D	KAJ25L80D	KAJ25L160D
		Filter chamber for rear suction	KAJ25L56B	KAJ25L80B	KAJ25L160B
3	Air inlet and air discharge outlet related	Air suction canvas	KSAJ25K56	KSAJ25K80	KSAJ25K160
		Blind board/screening door	KBBJ25K56	KBBJ25K80	KBBJ25K160
		Air discharge adapter for round duct	KDAJ25K56	KDAJ25K71	KDAJ25K140

Operation control

Nr	Item	Type	FH(Y)B35,45	FH(Y)B60,71	FHYB100,125
1	Remote control	Wired type		BRC1C517	
2	Set back time clock			BRC15A51	
3	Central remote control			DCS302A51	
4	unified ON/OFF control			DCS301A51	
5	Schedule timer			DST301A51	
6	Adapter for wiring (interlock for fresh air intake fan)			KRP1B54	
7	Wiring adaptor for electrical appendices			KRP4A51	
8	Interface adapter for Sky Air series			DTA102A52	

3TW22049-6B

*1 If installing a high efficiency filter on the unit, an assembly chamber for either bottom or rear suction is required.

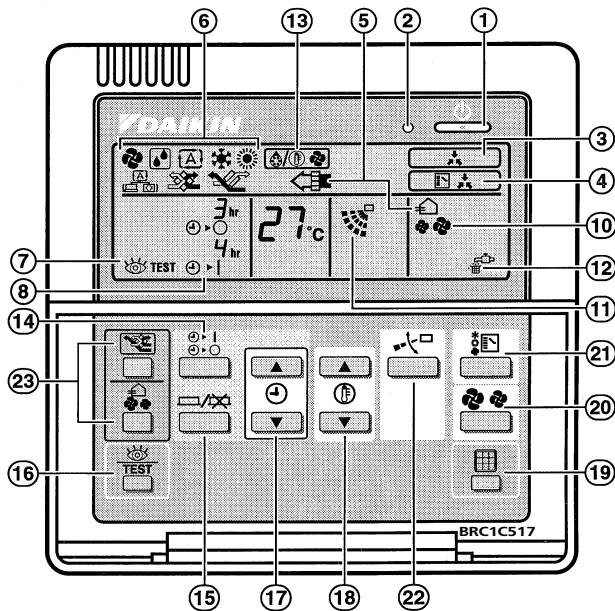


10 Control systems

10-1 Wired remote control

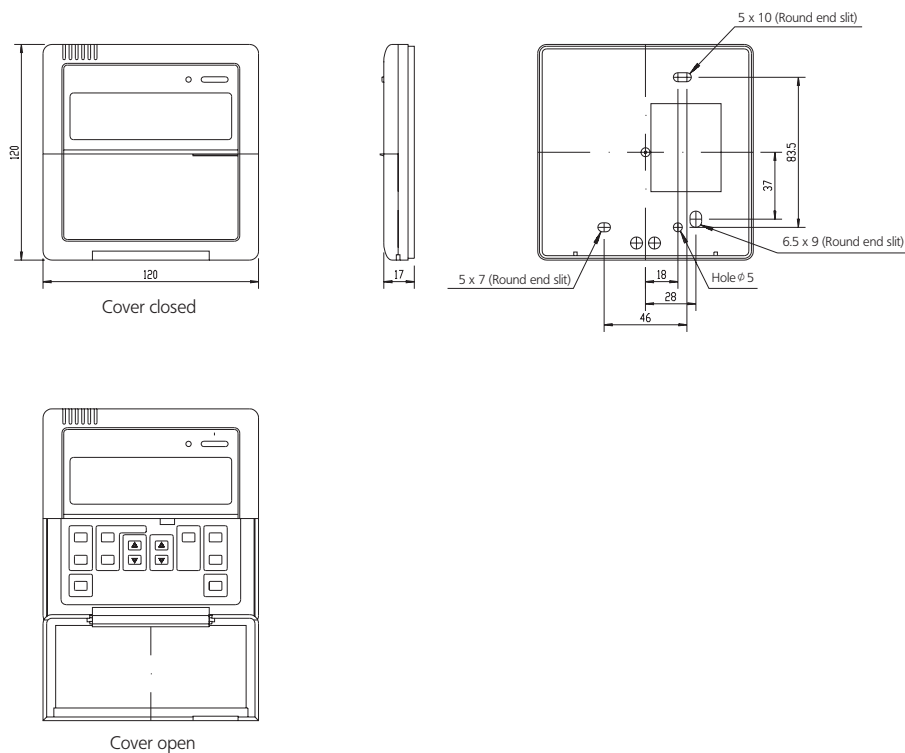
Fig. 1

BRC1C517

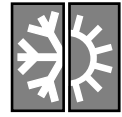


10
10-1

Fig. 2



3TW23651-1A



10 Control systems

10-1 Wired remote control

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

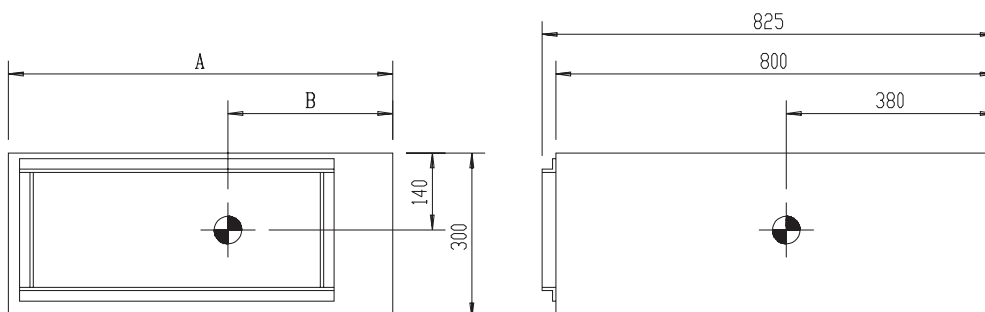
1	ON/OFF BUTTON	13	DISPLAY " / " (DEFROST)
	Press the button and the system will start. Press the button again and the system will stop.	14	TIMER MODE START/STOP BUTTON
2	OPERATION LAMP (RED)	15	TIMER ON/OFF BUTTON
	The lamp lights up during operation.	16	INSPECTION/TEST OPERATION BUTTON
3	DISPLAY ' ' (UNDER CENTRALISED CONTROL)	17	This button is used only by qualified service persons for maintenance purposes.
	When this display shows, the system is UNDER CENTRALISED CONTROL. (This is not a standard specification).		PROGRAMMING TIME BUTTON
4	DISPLAY ' ' (CHANGEOVER UNDER CONTROL)	18	Use this button for programming 'START and/or STOP' time.
	This display shows when the outdoor unit is individual operation system.		TEMPERATURE SETTING BUTTON
5	DISPLAY " , " , " , " , " " (VENTILATION / AIR CLEANING)	19	FILTER SIGN RESET BUTTON
	This display shows that the total heat exchange unit and the air cleaning unit are in operation. These are optional accessories.	20	FAN SPEED CONTROL BUTTON
6	DISPLAY ' ' ' ' (OPERATION MODE)	21	Press this button to select the fan speed, HIGH or LOW, of your choice.
	This display shows the current OPERATION MODE. For cooling only type, ' ' (Auto) and ' ' (Heating) are not installed.		OPERATION MODE SELECTOR BUTTON
7	DISPLAY ' ' (INSPECTION/TEST OPERATION)	22	AIR FLOW DIRECTION ADJUST BUTTON
	When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in.	23	NOT APPLICABLE
8	DISPLAY ' ' (PROGRAMMED TIME)		
	This display shows PROGRAMMED TIME of the system start or stop.		
9	DISPLAY ' ' (SET TEMPERATURE)		
	This display shows the set temperature.		
10	DISPLAY ' ' (FAN SPEED)		
	The display shows the set fan speed.		
11	DISPLAY ' ' (AIR FLOW FLAP)		
12	DISPLAY " " (TIME TO CLEAN AIR FILTER)		

NOTE

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



11 Centre of gravity



Model	A	B
FH(Y)B35,45	700	300
FH(Y)B60,71	1,000	460
FHYB71	1,000	460
FHYB100,125	1,400	640

4TW20169-2D

11

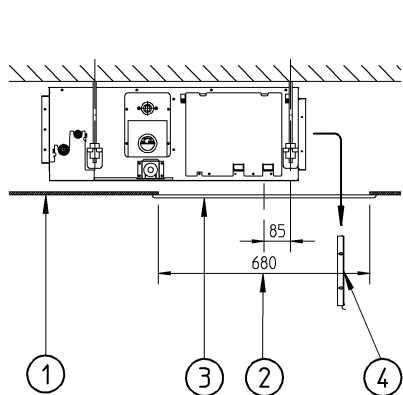
12 Safety device settings

Model	Safety devices	35	45	60	71	100	125
FHYB-FK	Fuse	—	—	—	—	—	—
	Fan motor thermal fuse (°C)	152±2	152±2	152±2	152±2	152±2	152±2
	Fan motor thermal protector (°C)	—	—	—	—	—	—
FHB-FK	Fuse	—	—	—	—	—	—
	Fan motor thermal fuse (°C)	152±2	152±2	152±2	152±2	152±2	152±2
	Fan motor thermal protector (°C)	—	—	—	—	—	—

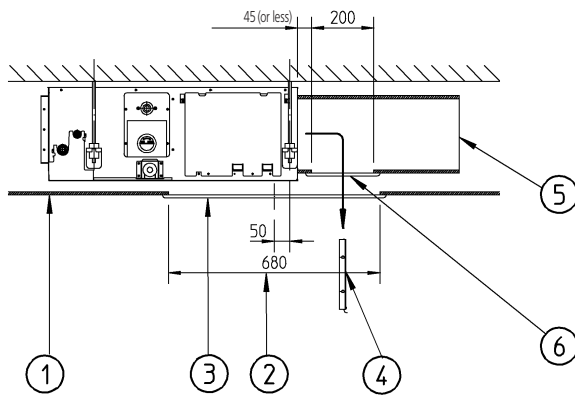
3TW21009-2B



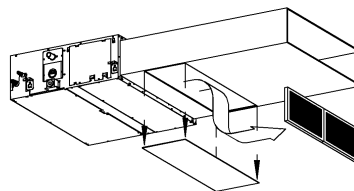
13 Installation



Installation without duct



Installation with duct

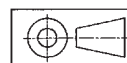


Number	Description
1	False ceiling
2	Ceiling opening
3	Service access panel (optional)
4	Air filter
5	Air inlet duct
6	Duct service opening

NOTES

- When installing the unit with rear suction, a service opening is necessary for the maintenance of the air filters.
- When installing the unit with a suction duct, a service opening must be provided in the duct.
- An optional service access panel is available:

Model	Service access panel
FH(Y)B35,45	KTBJ25K56W
FH(Y)B60,71	KTBJ25K80W
FH(Y)B100,125	KTBJ25K160W



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