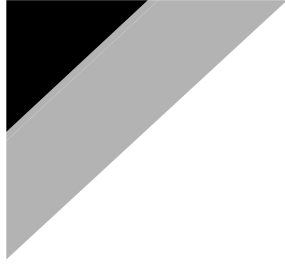


DAIKIN



TECHNICAL DATA

Split-Sky Air

FDYP-B7

Concealed Ceiling 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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FDYP-B7

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For capacity tables, please refer to the outdoor units concerned





1 Features

- Compact casing with a height of 350mm (125 class) or 450mm (220 and 250 class)
- Extremely quiet in operation both indoors and outdoors
- Fits flush into each ceiling
- High external static pressure, ranging from 150 to 250 Pa
- For equal distribution in larger rooms, up to 2 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



2

2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
NOMINAL INPUT	Cooling	kW	–	–	–

For combination indoor units + outdoor units:					
INDOOR UNITS			FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
OUTDOOR UNITS			RP125B7W1/T1	RP200B7W1	RP250B7W1
NOMINAL CAPACITY (2)	Cooling (1)	kW	12.4	20.0	25.0
NOMINAL INPUT	Cooling	kW	4.70	8.71	10.74

TECHNICAL SPECIFICATIONS						
For indoor units only:						
INDOOR UNITS				FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
DIMENSIONS	Unit	H	mm	350	450	450
		W	mm	1,400	1,400	1,400
		D	mm	662	900	900
WEIGHT	Unit		kg	59	90	92
MATERIAL	Unit	Galvanised steel plate				
COLOUR	Unit	–				
SOUND LEVEL	Sound pressure (3)	high	dBA	44	45	47
		low	dBA	–	–	–
	Sound power (4)		dBA	75	81	82
FAN	Air flow rate	high	m ³ /min	–	–	–
		medium	m ³ /min	43	69	89
		low	m ³ /min	–	–	–
	Speed	steps		3 steps		2 steps
		high	rpm	–	–	–
		low	rpm	–	–	–
	Type		–	–	–	
	Qty x model		1 x DPA216-178NB		1 x DPC241-241NB	
Qty x motor output	W	1 x 500		1 x 650	1 x 1,000	
Drive		Direct drive				
External static pressure	Pa	0~150		0~250	0~250	
HEAT EXCHANGER	Type		φ 7 Hi-Xa tube, NLH 7 fin-hydrophilia		φ 8 Hi-Xa tube, fin non-symmetric	
	Rows x stages x fin pitch	mm	3 x 14 x 1.75		3 x 24 x 2	
	Face area	m ²	0.338		0.634	0.634
AIR FILTER		–				
AIR DIRECTION CONTROL		–				
TEMPERATURE CONTROL		Computerised control				
PIPING CONNECTIONS		liquid	mm	φ9.52 (flare)	φ12.7 (flare)	φ15.9 (flare)
		gas	mm	φ19.10 (flare)	φ28.6	φ28.6
		drain	mm	I.D. φ23	I.D. φ23	I.D. φ23
		drain	mm	O.D. φ32	O.D. φ32	O.D. φ32
INSULATION MATERIAL	Heat insulation	–				
	Sound absorbing insulation	Flame and heat resistant foamed felt				

For outdoor units	Pair application	See chapter RGZ7/RP-B7
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2 Specifications



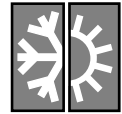
ELECTRICAL SPECIFICATIONS				FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
For indoor units only:						
CURRENT	Nominal running current	cooling	A	–	–	–
For combination indoor units + outdoor units:						
				FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
				RP125B7W1/T1	RP200B7W1	RP250B7W1
CURRENT	Nominal running current	cooling	A	–	14.4	17.2
	Maximum running current	cooling	A	–	17.9	27.5
For indoor units only:						
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency		Hz	50	50	50
	Voltage		V	230	230	230

2

NOTES

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

2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
NOMINAL INPUT	Cooling	kW	-	-	-
	Heating	kW	-	-	-

For combination indoor units + outdoor units:					
INDOOR UNITS			FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
OUTDOOR UNITS			RYP125B7W1	RYP200B7W1	RYP250B7W1
NOMINAL CAPACITY (3)	Cooling (1)	kW	12.4	19.5	25
	Heating (2)	kW	14.6	23.1	27
NOMINAL INPUT	Cooling	kW	4.70	8.69	10.20
	Heating	kW	4.51	7.59	8.76

TECHNICAL SPECIFICATIONS							
For indoor units only:							
INDOOR UNITS			FDYP125B7V1	FDYP200B7V1	FDYP250B7V1		
DIMENSIONS	Unit	H	mm	350	450	450	
		W	mm	1,400	1,400	1,400	
		D	mm	662	900	900	
WEIGHT	Unit		kg	59	90	92	
MATERIAL	Unit Galvanised steel plate						
COLOUR	Unit -						
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dBA	44/44	45/45	47/47	
		low	dBA	-	-	-	
	Sound power (cooling/heating) (5)	dBA	75/75	81/81	82/82		
FAN	Air flow rate	high	m ³ /min	-	-	-	
		medium	m ³ /min	43	69	89	
		low	m ³ /min	-	-	-	
	Speed	steps	3 steps				2 steps
		high	rpm	-	-	-	
		low	rpm	-	-	-	
	Type	-					
	Qty x model	1 x DPA216-178NB			1 x DPC241-241NB		
Qty x motor output	W	1 x 500		1 x 650		1 x 1,000	
Drive	Direct drive						
External static pressure	Pa	0~150		0~250		0~250	
HEAT EXCHANGER	Type	φ 7 Hi-Xa tube, NLH 7 fin-hydrophilia			φ 8 Hi-Xa tube, fin non-symmetric		
	Rows x stages x fin pitch	mm	3 x 14 x 1.75		3 x 24 x 2		
	Face area	m ²	0.338		0.634		
AIR FILTER	-						
AIR DIRECTION CONTROL	-						
TEMPERATURE CONTROL	Computerised control						
PIPING CONNECTIONS	liquid	mm	φ9.52 (flare)		φ12.7 (flare)		
	gas	mm	φ19.10 (flare)		φ28.6		
	drain	mm	I.D. φ23		I.D. φ23		
	drain	mm	O.D. φ25		O.D. φ25		
INSULATION MATERIAL	Heat insulation	-					
	Sound absorbing insulation	Flame and heat resistant foamed felt					

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

2 Specifications



ELECTRICAL SPECIFICATIONS				FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
For indoor units only:						
CURRENT	Nominal running current	cooling	A	–	–	–
		heating	A	–	–	–
For combination indoor units + outdoor units:						
				FDYP125B7V1	FDYP200B7V1	FDYP250B7V1
				RYP125B7W1	RYP200B7W1	RYP250B7W1
CURRENT	Nominal running current	cooling	A	–	14.4	17.2
		heating	A	–	14.4	17.2
	Maximum running current	cooling	A	–	17.9	27.5
		heating	A	–	17.9	27.5
For indoor units only:						
POWER SUPPLY				V1	V1	V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~	1~	1~
	Frequency		Hz	50	50	50
	Voltage		V	230	230	230

2 NOTES

- Nominal cooling capacities are based on: indoor temperature: 27°CDB/19°CWB * outdoor temperature: 35°CDB * equivalent refrigerant piping length: 7.5m * level difference: 0m
- Nominal heating capacities are based on: indoor temperature: 20°CDB* outdoor temperature: 7°CDB/6°CWB * equivalent refrigerant piping length: 7.5m * level difference: 0m
- 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

3

FDY(P)125B7

Notes:

- : Service space
- : Extra service space for optional drain pump

- 1 Power supply intake
- 2 Drain connection ϕ 25 O.D.
- 3 Gas pipe connection single union joint 3/4"
- 4 Liquid pipe connection single union joint 3/8"
- 5 Filter

3TW22804-1A

FDY(P)200-250B

Model	A	B
FDY(P)200B7V1	830	285
FDY(P)250B7V1	890	255

Notes:

- : Service space
- : Extra service space for optional drain pump

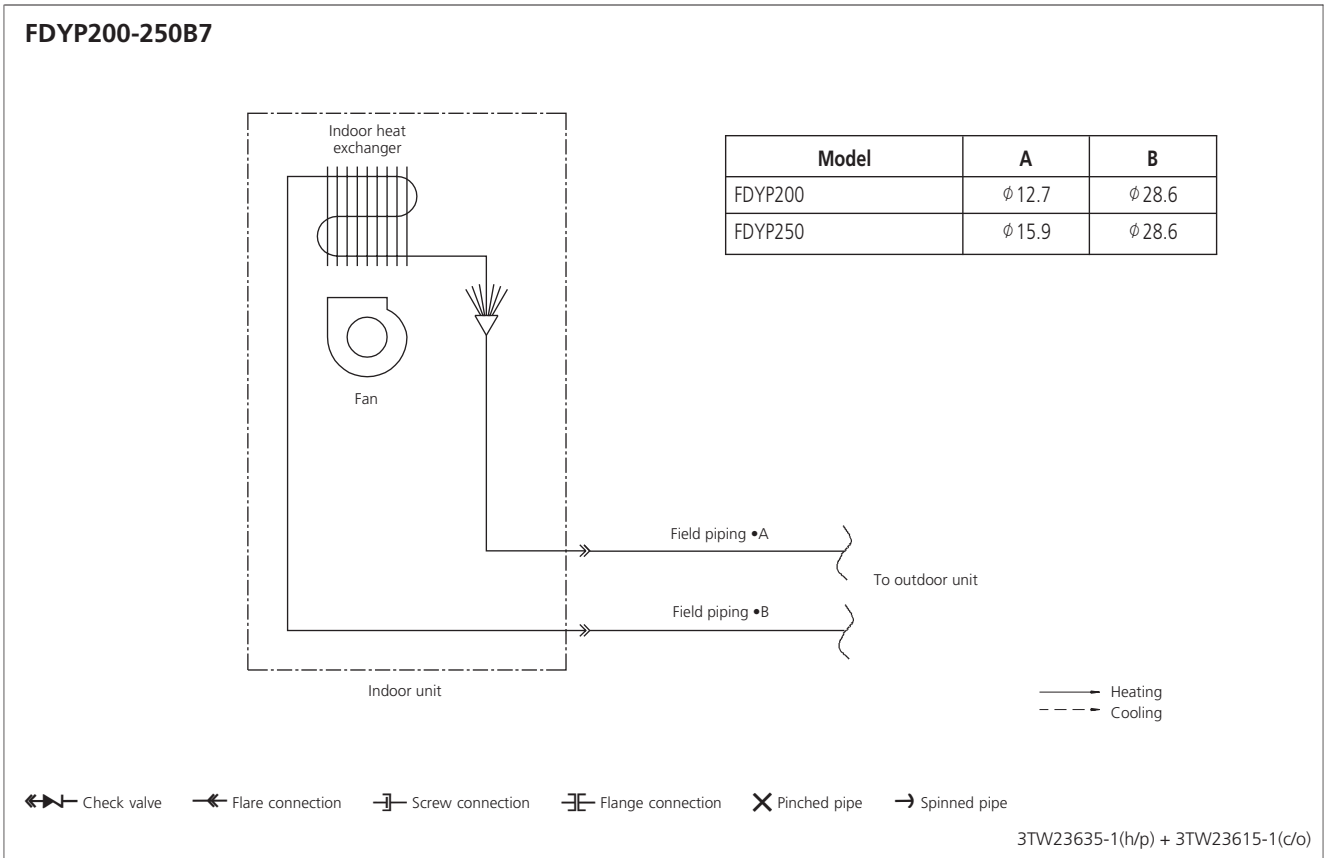
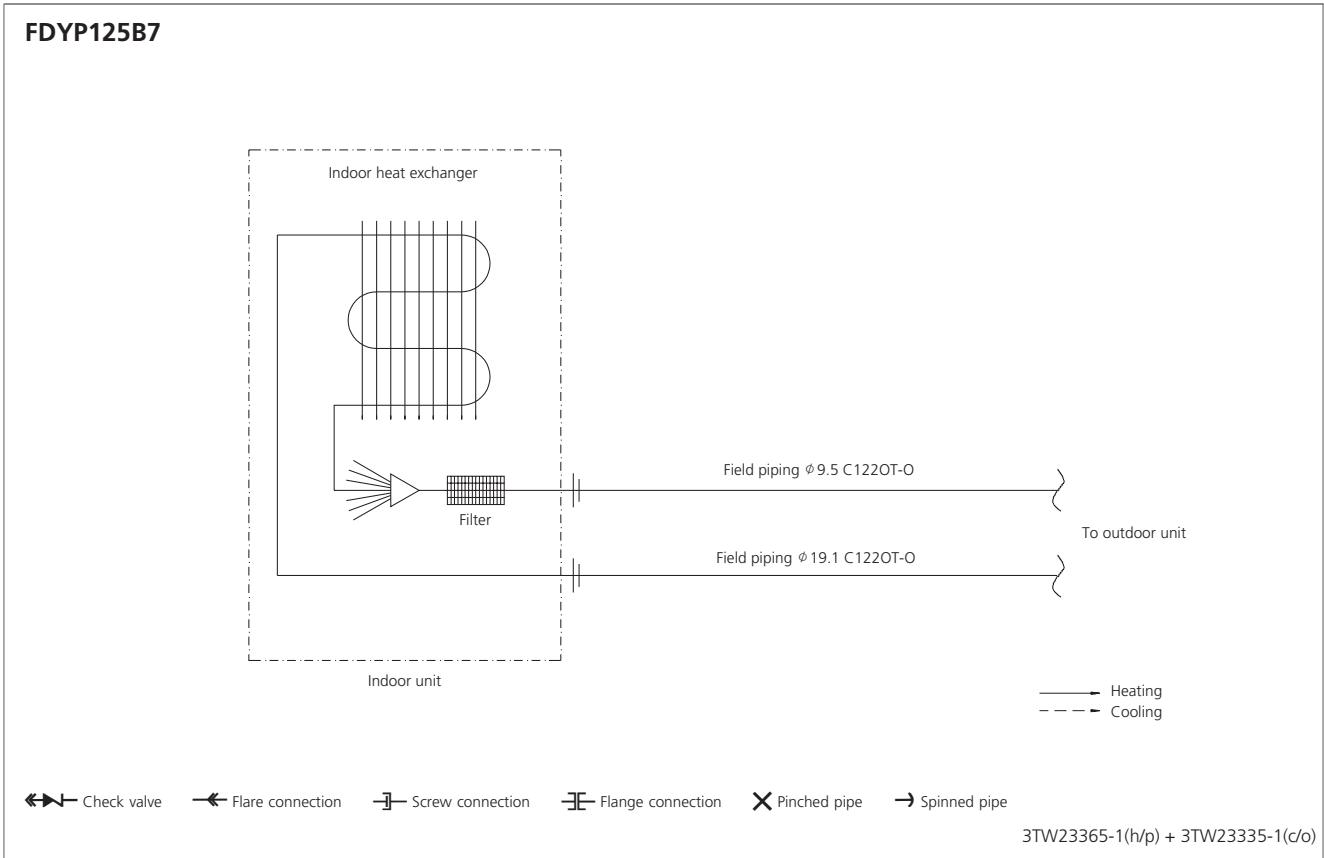
- 1 Power supply intake
- 2 Drain connection ϕ 25 O.D.
- 3 Gas pipe connection: FDY(P)200B/250B: 1 1/8" O.D. or 28.6 mm O.D.
- 4 Liquid pipe connection: FDY(P)200B: Single union joint 1/2" or 12.7mm
FDY(P)250B: Single union joint 5/8" or 15.9mm
- 5 Filter

3TW22814-1A



4 Piping diagrams

4



8



6 Sound level

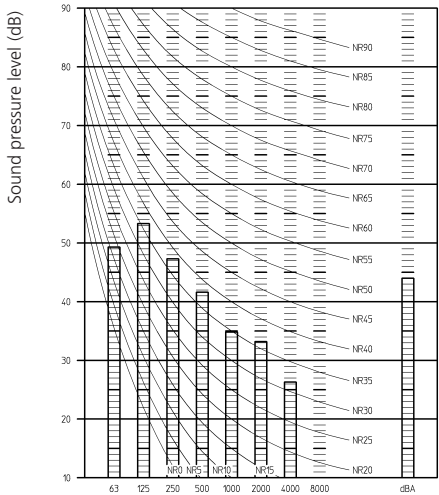
6-1 Sound level data

Model	Sound pressure level		Measuring location	Sound power level
	230V			
	50 Hz			
	Cooling	Heating		
FDYP125B7V1	44	44		75
FDYP200B7V1	45	45		81
FDYP250B7V1	47	47		82

6-2 Sound pressure spectrum

6
6-1

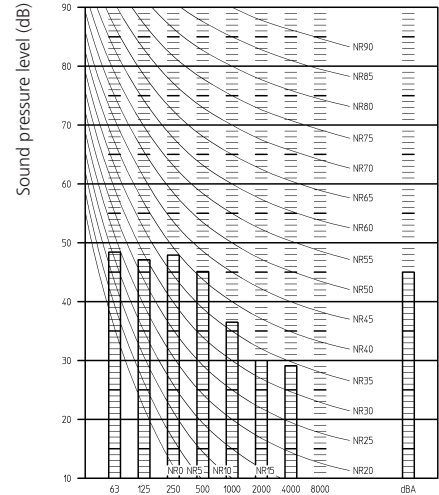
FDYP125B7V1



3TW22807-1

Octave band center frequency (Hz)

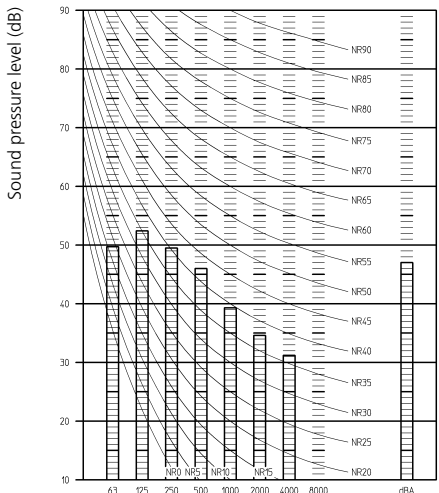
FDYP200B7V1



3TW22817-1

Octave band center frequency (Hz)

FDYP250B7V1



3TW22827-1

Octave band center frequency (Hz)

Legend

- High speed
- Low speed

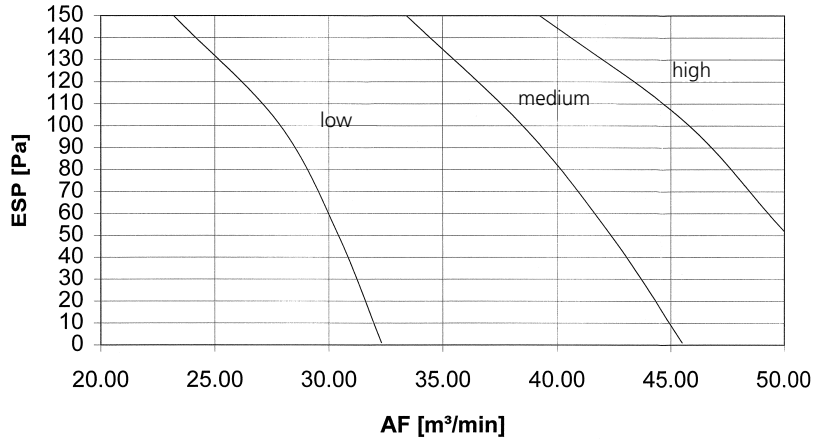
Notes

- Data is valid at free field condition
- Data is valid at nominal operation condition (at 62 Pa ESP, 90m³/min)
- dBA = A-weighted sound pressure level (A-scale according to IEC)
- Reference acoustic pressure 0dB = 20μPa
- the indicated sound pressure is the casing radiated sound pressure.



7 Fan characteristics

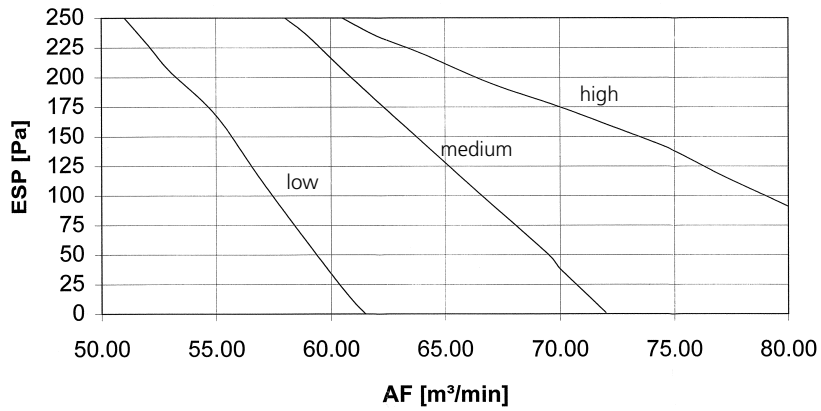
FDYP125B7V1



3TW22808-1

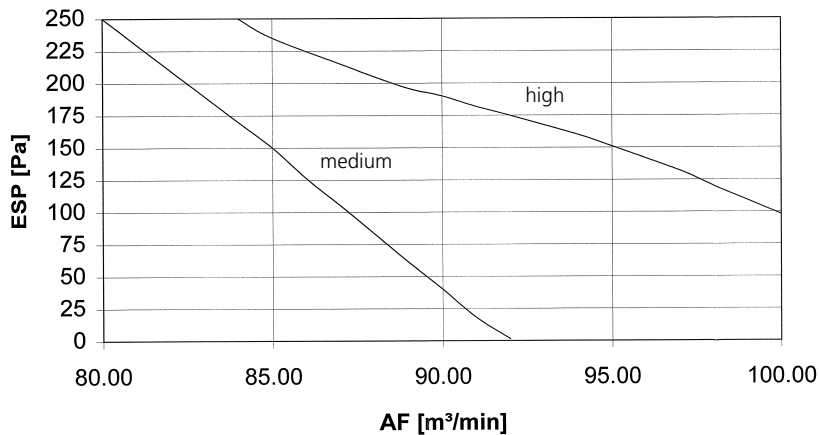
FDYP200B7V1

7



3TW22818-1

FDYP250B7V1



3TW22828-1



8 Accessories

8-1 Standard accessories



Installation manual Operation manual

8

8-1

8-2 Optional accessories

Name of option	Kit name		
	FDYP125B7	FDYP200B7	FDYP250B7
Wiring adaptor for electrical appendices	KRP4A51		
Adaptor for wiring (interlock for fresh air intake)	KRP1B54		
Interface adaptor for Sky Air series	DTA102A52		
Central remote control	DCS302A51		
unified ON/OFF control	DCS301A51		
Schedule timer	DST301A51		
Electric heater PCB kit	EKRP1B2		
Drain pump	EKDU125A1		
Remote controller	Wired type	BRC1C517	

3TW22809-1

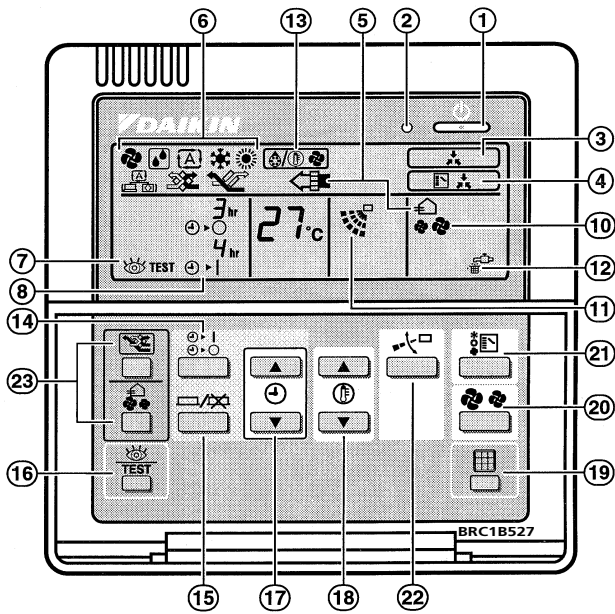


9 Control systems

9-1 Remote control

Fig. 1

BRC1B527





9 Control systems

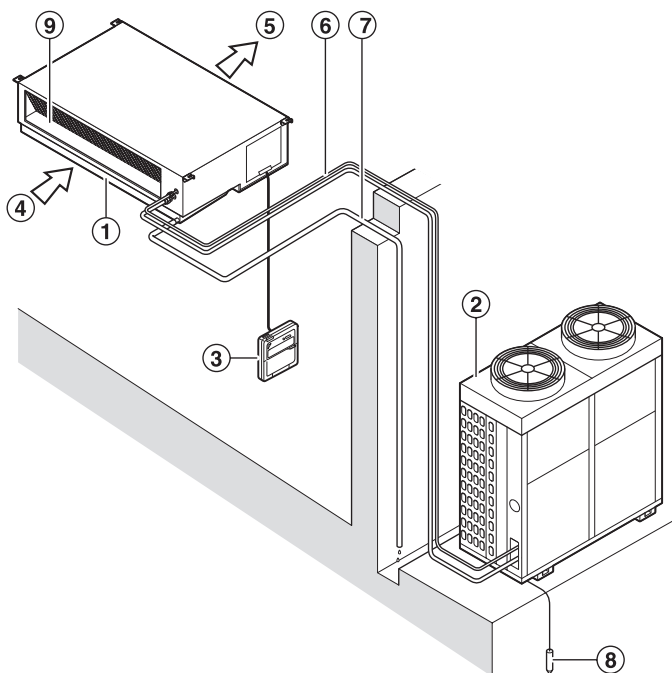
9-1 Remote control

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
DISPLAY ' ' (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 ' ' (CHANGEOVER UNDER CONTROL)		Use this button for programming 'START and/or STOP' time.
4	This display shows when the outdoor unit is individual operation system.	18	TEMPERATURE SETTING BUTTON
	DISPLAY " ", " ", " ", " ", " ", " " (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 ' ' (FAN SPEED CONTROL BUTTON)	20	FAN SPEED CONTROL BUTTON
DISPLAY ' ' (OPERATION MODE)	Press this button to select the fan speed, HIGH or LOW, of your choice.		
6	This display shows the current OPERATION MODE. For cooling only type, ' ' (Auto) and ' ' (Heating) are not installed.	21	OPERATION MODE SELECTOR BUTTON
	DISPLAY ' ' (INSPECTION/TEST OPERATION)		Press this button to select OPERATION MODE.
7	When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in.	22	AIR FLOW DIRECTION ADJUST BUTTON
	DISPLAY ' ' (PROGRAMMED TIME)	23	NOT APPLICABLE
8	This display shows PROGRAMMED TIME of the system start or stop.	<p>NOTE</p> <ul style="list-style-type: none"> For the sake of explanation, all indications are shown on the display contrary to actual running situations. 	
	DISPLAY ' ' (SET TEMPERATURE)		
9	This display shows the set temperature.		
	DISPLAY ' ' (FAN SPEED)		
10	The display shows the set fan speed.		
	DISPLAY ' ' (AIR FLOW FLAP)		
11	DISPLAY ' ' (TIME TO CLEAN AIR FILTER)		



10 Installation



Number	Description
1	Indoor unit
2	Outdoor unit
3	Remote control
4	Inlet air
5	Discharged air
6	Refrigerant piping, connection electric wire
7	Drain pipe
8	Ground wire Wire to ground from the outdoor unit to prevent electrical shocks.
9	Air filter