

technical data

FT(Y)N-C FT(Y)S-B 紫

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



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



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

Specifications are subject to change without prior notice.

DAIKIN EUROPE N.V.

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

Features





- Lightweight and compact
- Extremely quiet in operation both indoors and outdoors
- Automatic air flow director ensures uniform air flow and temperature distribution
- Powerful mode can be selected for rapid cooling or heating.
- Air purification filter with photocatalytic deodorising function
 - deodorises the air
 - helps to prevent bacterial and viral propagation
 - powerful decomposes cigarette and pet odours
 - removes house dust and pollen
 - deactivates bacteria and viruses
- Washable front panel

- The outdoor unit can easily be mounted on a roof, a terrace or placed against an outside wall.
- The remote control has a 24 hour timer
- The indoor model also has a start/stop button mounted on the front panel
- Up to 5 indoor units can be operated from a single centralised control
- Purpose designed holder provided for your remote control









































NOMINAL CAPACITY and NOMINAL INPUT									
For indoor units only:									
INDOOR UNITS				FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVMB	
Nominal input	Cooling	nominal	kW	0.04	0.04	0.04	0.04	0.04	

For combination indoor + outdoor units (air cooled):										
INDOOR UNITS				FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVMB		
OUTDOOR UNITS				RN20CVMB	RN25CVMB	RN35CVMB	RS50BVMB	RS60BVMB		
NOMINAL CAPACITY (2-3)	Cooling (1)	nominal	kW	2.00	2.25	3.15	5.00	6.00		
NOMINAL INPUT	Cooling	nominal	kW	0.62	0.70	1.045	1.66	2.12		
EER				3.23	3.21	3.01	3.01	2.83		
ENERGY LABEL	Cooling			A	A	В	В	С		
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	310	350	522.5	830	1,060		

For indoor units on	ly:							
INDOOR UNITS	•			FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVME
DIMENSIONS	Unit	Н	mm		273		290	290
		W mm			784		795	1,050
		D	mm		185		230	230
WEIGHT	Unit		kg		7.5		9	12
COLOUR	Unit					White		
SOUND LEVEL	Sound pressure (cooling) (4)	high	dB(A)	38	38	39	44	45
	1 1 3/1/	low	dB(A)	26	26	26	35	36
	Sound power (cooling) (5)	high	dB(A)	56	56	57	63	63
FAN	Air flow rate (cooling)	high	m³/min	7.7	7.7	7.7	11.5	16.4
		low	m ³ /min	4.2	4.2	4.4	8.3	11.6
	Speed	steps				5 steps and auto		
		high	rpm	1,280	1,280	1,280	1,330	1,320
		medium	rpm	1,040	1,040	1,060	1,160	1,160
		low	rpm	810	810	840	980	1,000
	Туре			Cross flow fan				
	Motor output		W	18	18	18	4	0
HEAT EXCHANGER	Туре					ML fin - Ø7Hi - XA tube	2	
	Rows x stages x fin pitch		mm	2 x 12 x 1.4	2 x 12 x 1.4	2 x 12 x 1.4	2 x 16 x 1.4	2 x 16 x 1.4
AIR FILTER					Ren	novable/washable/mildew p	roof	
TEMPERATURE CONTROL						Microprocessor control		
PIPING CONNECTIONS		liquid	mm			Ø 6.4		
		gas	mm		Ø 9.5		Φ	12.7
		drain	mm			Ø 18.0		
Insulation Material	Heat insulation tape	·				Both liquid and gas pipes		

For outdoor units Pair application	See chapter: RN-C	See chapter: RS-B
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ELECTRICAL SPECIFICATIONS										
For indoor units only:				FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVMB		
CURRENT	Nominal running current	cooling	А	0.18	0.18	0.18	0.18	0.18		
	Maximum running current	cooling	Α	See chapter RN-C: electrical data			See chapter RS-	-B: electrical data		

For combination	on indoor units + outdoor unit		FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVMB		
				RN20CVMB	RN25CVMB	RN35CVMB	RS50BVMB	RS60BVMB	
CURRENT	Nominal running current	cooling	A	3.3 3.7 4.9			7.3	9.3	
	Maximum running current	cooling	A				See chapter RS-B: electrical data		
	Starting current	cooling	A	See chapter RN-C: electrical data See cha				K2-B; electrical data	

For indoor units only:			FTN20CVMB	FTN25CVMB	FTN35CVMB	FTS50BVMB	FTS60BVMB
POWER SUPPLY			VM	VM	VM	VM	VM
NOMINAL DISTRIBUTION SYSTEM	Phase		1~	1~	1~	1~	1~
VOLTAGE	Frequency	Hz	50	50	50	50	50
	Voltage	٧	230	230	230	230	230

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NOTES

- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m * level difference: 0m.
- 2 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- 3 Units should be selected on nominal capacity. Maximum capacity is limited to peak periods.
- 4 The sound pressure level is measured via a microphone at a certain distance from the unit. For measuring conditions: please refer to item 6 of this chapter.
- 5 The sound power level is an absolute value indicating the "power" which a sound source generates.
- 6 Energy label: scale from A (most efficient) to G (less efficient).
- The Energy Label Directive 2002/31/EC will enter into force once the relevant measurement standard will be published in the European Official Standard.
- 8 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)





NOMINAL CAPACITY and NOMINAL INPUT										
For indoor units only:										
INDOOR UNITS				FTYN20CVMB	FTYN25CVMB	FTYN35CVMB	FTYS50BVMB	FTYS60BVMB		
NOMINAL INPUT	Cooling	nominal	kW	0.04	0.04	0.04	0.04	0.04		
	Heating	nominal	kW	0.04	0.04	0.04	0.04	0.04		

For combination indoor + outdoor units (air cooled):									
INDOOR UNITS				FTYN20CVMB	FTYN25CVMB	FTYN35CVMB	FTYS50BVMB	FTYS60BVMB	
OUTDOOR UNITS				RYN20CVMB	RYN25CVMB	RYN35CVMB	RYS50BVMB	RYS60BVMB	
NOMINAL CAPACITY (3-4)	Cooling (1)	nominal	kW	2.00	2.25	3.15	5.00	6.00	
	Heating (2)	nominal	kW	2.60	2.85	3.60	5.80	7.00	
NOMINAL INPUT	Cooling	nominal	kW	0.62	0.70	1.045	1.66	2.12	
	Heating	nominal	kW	0.76	0.835	1.055	1.70	2.09	
EER	Cooling			3.23	3.21	3.01	3.01	2.83	
	Heating			3.42	3.41	3.41	3.41	3.35	
ENERGY LABEL	Cooling			А	A	В	В	С	
	Heating			С	С	С	В	С	
Annual Energy Consumption	Cooling		kWh	310	350	522.5	830	1,060	

For indoor units on	ly:							
INDOOR UNITS	,			FTYN20CVMB	FTYN25CVMB	FTYN35CVMB	FTYS50BVMB	FTYS60BVMB
DIMENSIONS	Unit	Н	mm	273			290	290
		W	mm		784		795	1,050
		D	mm		195		230	230
WEIGHT	Unit		kg		7.5		9	12
COLOUR	Unit					White		
SOUND LEVEL	Sound pressure	high	dB(A)	38/38	38/38	39/39	44/42	45/44
	(cooling/heating) (5)	low	dB(A)	26/28	26/28	26/29	35/*	36/*
	Sound power (cooling/heating) (6)	high	dB(A)	56/56	56/56	57/57	63/60	63/62
FAN	Air flow rate (cooling/heating)	high	m³/min	7.7/7.8	7.7/7.8	7.7/8.1	11.5/12.2	16.4/17.5
		low	m³/min	4.2/5.3	4.2/5.3	4.4/5.3	8.3/8.8	11.6/12.8
	Speed (cooling/heating)	steps				5 steps and auto		
		high	rpm	1,280/1,240	1,280/1,240	1,280/1,280	1,330/1,370	1,320/1,330
		medium	rpm	1,040/1,080	1,040/1,080	1,060/1,100	1,160/1,190	1,160/1,180
		low	rpm	810/920	810/920	840/920	980/1,000	1,000/1,020
	Туре			Cross flow fan				
	Motor output		W	18	18	18	40	43
HEAT EXCHANGER	Туре					ML fin - Ø 7Hi - XA tube		
	Rows x stages x fin pitch		mm	2 x 12 x 1.4	2 x 12 x 1.4	2 x 12 x 1.4	2 x 16 x 1.4	2 x 16 x 1.4
AIR FILTER					Ren	novable/washable/mildew p	roof	
TEMPERATURE CONTROL						Microprocessor control		
PIPING CONNECTIONS liquic		liquid	mm			ф6.4		
		gas	mm		ф9.5		φ1	2.7
	drain mm			ф18.0				
Insulation Material	Heat insulation tape					Both liquid and gas pipes		

For outdoor units	Pair application	See chapter: RN-C	See chapter: RS-B

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ELECTRICAL	ELECTRICAL SPECIFICATIONS									
For indoor unit	s only:			FTYN20CVMB	FTYN25CVMB	FTYN35CVMB	FTYS50BVMB	FTYS60BVMB		
CURRENT	Nominal running current	cooling	А	0.18	0.18	0.18	0.18	0.18		
		heating	A	0.18	0.18	0.18	0.18	0.18		
	Maximum running current	cooling	А	Coo	See chapter RN-C: electrical data See chapter RS-B: electrical					
		heating	Α	366	criapter Kiv-C. electrical (Jdld	see chapter ks-	-D. EIECUICAI UALA		

For combination indoor units + outdoor units:				FTYN20CVMB RYN20CVMB	FTYN25CVMB RYN25CVMB	FTYN35CVMB RYN35CVMB	FTYS50BVMB RYS50BVMB	FTYS60BVMB RYS60BVMB	
CURRENT	Nominal running current	cooling	А	3.3	3.7	4.9	7.3	9.3	
		heating	А	4.0	4.4	4.9	7.5	9.2	
	Maximum running current	cooling	А						
		heating	A		chanter DN Coalectrical	Con aboutou DC D. alcomical data			
Starting current cooling A			А	See chapter RN-C: electrical data			See chapter RS-B: electrical data		
	heating A								

For indoor units only:			FTYN20CVMB	FTYN25CVMB	FTYN35CVMB	FTYS50BVMB	FTYS60BVMB
POWER SUPPLY			VM	VM	VM	VM	VM
NOMINAL DISTRIBUTION SYSTEM	Phase		1~	1~	1~	1~	1~
VOLTAGE	Frequency	Hz	50	50	50	50	50
	Voltage	٧	230	230	230	230	230

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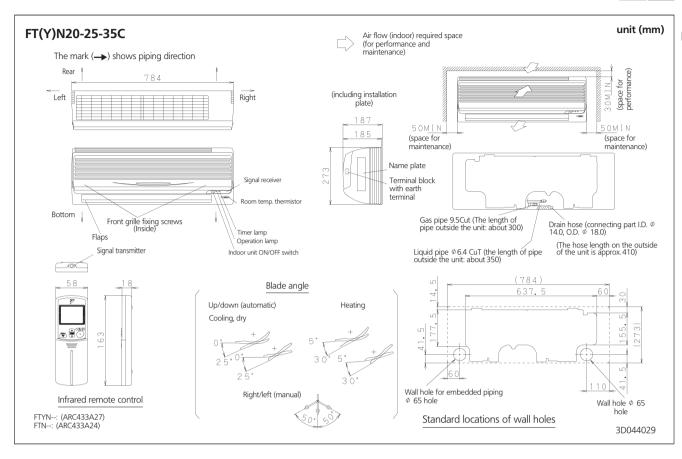
NOTES

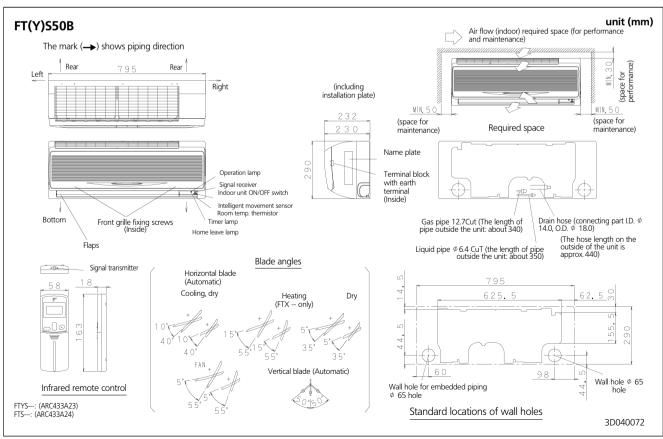
- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m * level difference: 0m.
- Nominal heating capacities are based on: indoor temperature 20°CDB * outdoor temperature 7°CDB/6°CWB * refrigerant piping length 7.5m (horizontal) * level difference 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- 4 Units should be selected on nominal capacity. Maximum capacity is limited to peak periods.
- The sound pressure level is measured via a microphone at a certain distance from the unit. 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.
- 7 Energy label: scale from A (most efficient) to G (less efficient).
- The Energy Label Directive 2002/31/EC will enter into force once the relevant measurement standard will be published in the European Official Standard
- 9 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)

3 Dimensional drawings









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Wall hole Ø 80 hole

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3 Dimensional drawings

Air flow (indoor) required space (for performance and maintenance) unit (mm) FT(Y)S60B The mark (→) shows piping direction Rear ģ (space for maintenance) Right MIN. 50 (space for maintenance) Required space Operation lamp Signal receiver Name plate Indoor unit ON/OFF switch with earth terminal Bottom Timer lamp Front grille fixing screws (Inside) Drain hose (connecting part I.D. ϕ 14.0, O.D. ϕ 18.0) Home leave lamp Flaps 12.7 (The hose length on the outside of the unit is approx. 440) Liquid pipe ϕ A Cut (The length of pipe outside the unit: about 390) Signal transmitter Blade angle Horizontal blade (Automatic) Heating (FTX -- only) Dry Cooling

Wall hole for embedded piping

Standard locations of wall holes



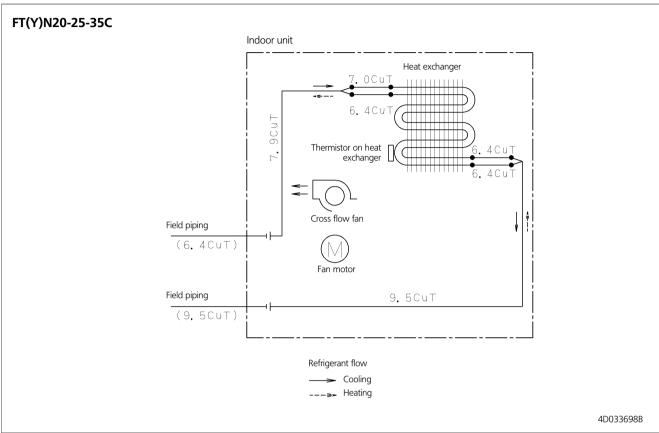
Infrared remote control

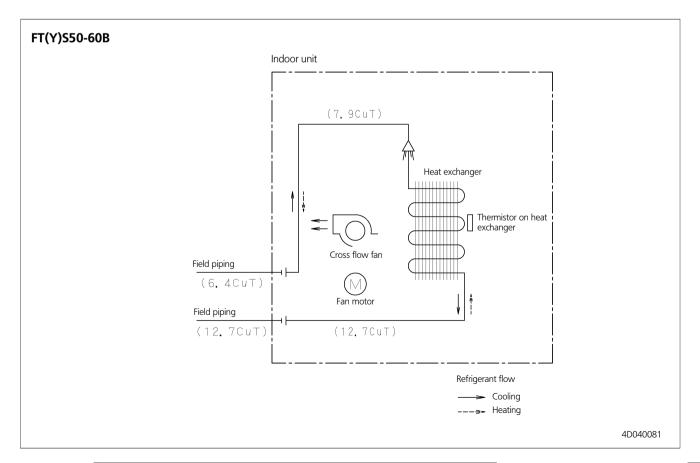
FTYS---: (ARC433A23) FTS---: (ARC433A24)

4 Piping diagrams







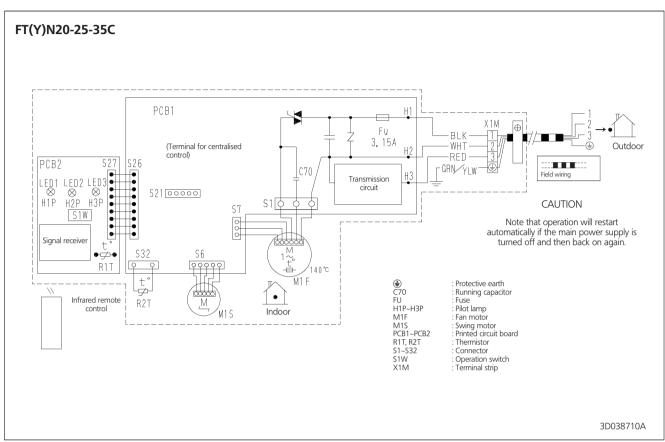


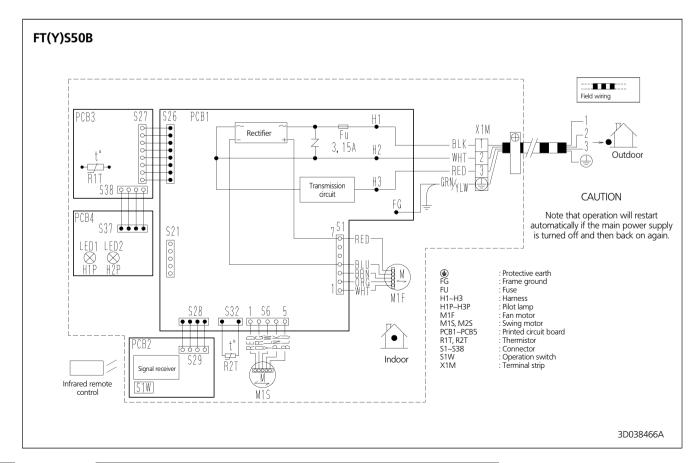
5 Wiring diagrams





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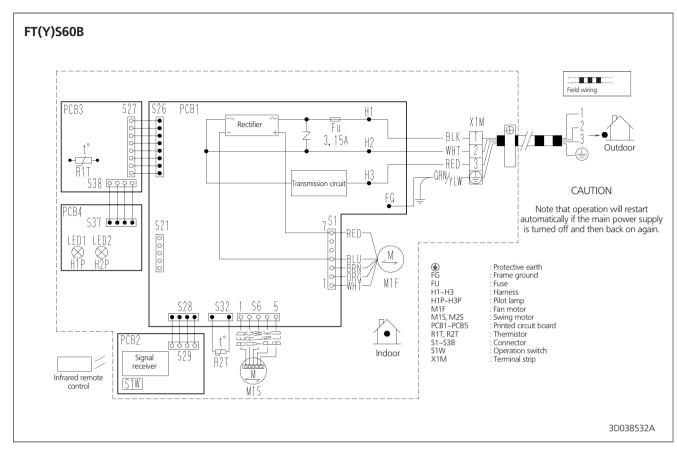




5 Wiring diagrams







6-1 Sound level data





6

Cooling only

6-1

		Sound pressure level			
Model	230V,	50Hz		Sound power level	
IVIouei	Coo	ling	Measuring location	(Cooling)	
	Н	L			
FTN20C	38	26	Location of microphone	56	
FTN25C	38	26		56	
FTN35C	39	26		57	
FTS50B	44	35		63	
FTS60B	45	36) O_I	63	

Heat pump

		Sound pressure level		
Model	230V,	50Hz		Sound power level
IVIOUEI	Cooling	/Heating	Measuring location	(Cooling/Heating)
	Н	L		
FTYN20C	38/38	26/28	Location of microphone	56/56
FTYN25C	38/38	26/28	<u> 1m_</u>	56/56
FTYN35C	39/39	26/29		57/57
FTYS50B	44/42	35/*		63/60
FTYS60B	45/44	36/*	<i>y</i> 0 <u>−</u>	63/62

^{*} This information was not available at the time of publication.

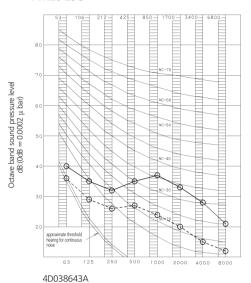
6–2 Sound pressure spectrum





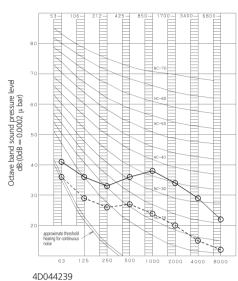
Cooling only

FTN20-25C



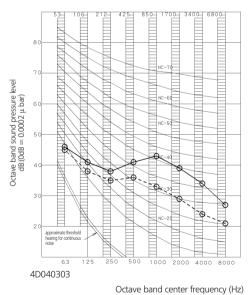
Octave band center frequency (Hz)

FTN35C

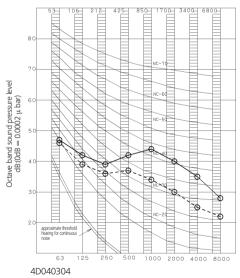


Octave band center frequency (Hz)

FTS50B



FTS60B



Octave band center frequency (Hz)

NOTE

Operation noise differs with operation and ambient conditions.

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O---O 50/60Hz 220-240/220-230V(H)
O---O 50/60Hz 220-240/220-230V(L)

6–2 Sound pressure spectrum

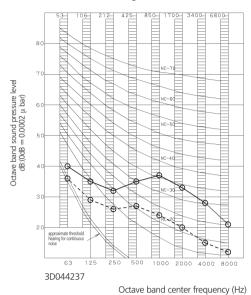




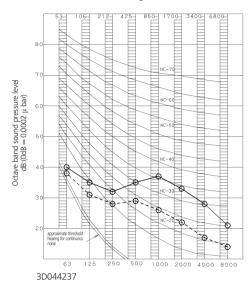
6

Heat pump

6-2 **FTYN20-25C (Cooling)**

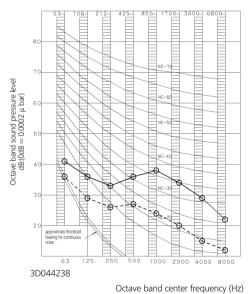


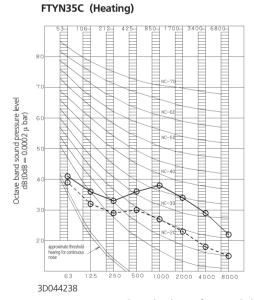
FTYN20-25C (Heating)



Octave band center frequency (Hz)

FTYN35C (Cooling)





Octave band center frequency (Hz)

NOTE

Operation noise differs with operation and ambient conditions.

Legend

O---O 50/60Hz 220-240/220-230V(L) O---O 50/60Hz 220-240/220-230V(L)

6-2 Sound pressure spectrum

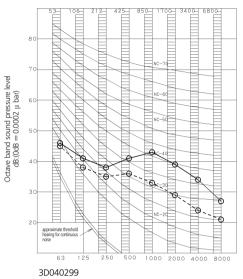




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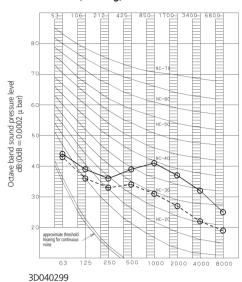
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FTYS50B (Cooling)



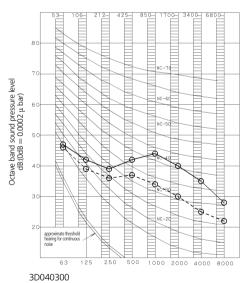
Octave band center frequency (Hz)

FTYS50B (Heating)



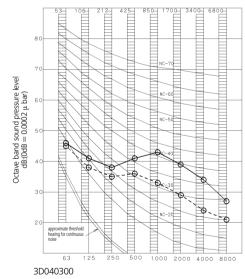
Octave band center frequency (Hz)

FTYS60B (Cooling)



Octave band center frequency (Hz)

FTYS60B (Heating)



Octave band center frequency (Hz)

NOTE

Operation noise differs with operation and ambient conditions.

egend

O--O 50/60Hz 220-240/220-230V(H)
O--O 50/60Hz 220-240/220-230V(L)

Accessories

7-1 Standard accessories





FT(Y)N20-25-35C

Mounting plate	1	© Remote control holder	1	© Operation manual	1
Air purification filter with photocatalytic deodorising function	2	© AAA dry-cell batteries	2	(Installation manual	1
① Infrared remote control	1	(H) Indoor unit fixing screws M4x12L	2		

FT(Y)S50-60B

Mounting plate	1	© Remote control holder	1	© Operation manual	2
Air purification filter with photocatalytic deodorising function	2	© AAA dry-cell batteries	1		1
① Infrared remote control	1	(H) Indoor unit fixing screws M4x12L	2		

7-2 Optional accessories

FT(Y)N/S-C/B

Option name	20	25	35	50	60		
Military adenter for time alone / remate control (4)	Normal open contact	KRP413A1S					
Wiring adapter for time clock / remote control (1)	Normal open pulse contact		KRP413A1S				
Centralised control board	1 up to 5 rooms (2) KRC72						
Central remote control		DCS302B51					
Unified ON/OFF control		DCS301B51					
Schedule timer		DST301B51					
Interface adapter (3)		KRP928A2S					
Air purification filter with photocatalytic deodorising function (with frame)		KAF918A43					
Air purification filter with photocatalytic deodorising function (without frame)		KAF918A44					
Anti-theft protection for remote control		KKF917A4					

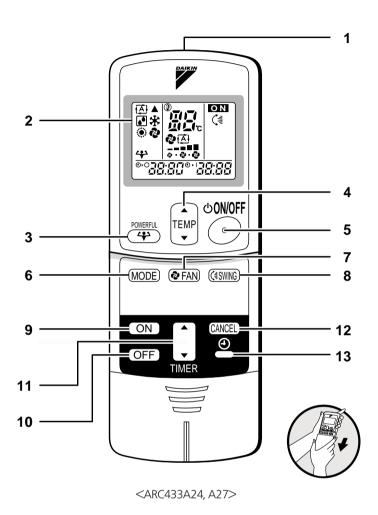
⁽¹⁾ Wiring adapter is also required for each indoor unit.(2) Wiring adapter supplied by Daikin. Time clock and other devices: field supply.(3) For DIII-NET adapter

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8–1 Infrared remote control

FT(Y)N20-25-35C



- 1 Signal transmitter:
 - It sends signals to the indoor unit.
- 2 Display:
 - It displays the current settings. (In this illustration, each section is shown with all its displays ON for the purpose of explanation.)
- 3 POWERFUL button:

for POWERFUL operation

- 4 TEMPERATURE adjustment buttons:
 - It changes the temperature setting
- 5 ON/OFF button:
 - Press this button once to start operation. Press once again to stop it.
- 6 MODE selector button:
 - It selects the operation mode (Auto $\[\]$ / Dry $\[\]$ / Cool $\[\]$ / Heat $\[\]$ / Fan $\[\]$)

- 7 FAN setting button:
 - It selects the air flow rate setting.
- 8 SWING button
- 9 ON TIMER button
- 10 OFF TIMER button
- 11 TIMER setting button:
- It changes the time settingTIMER CANCEL button:
- It cancels the timer setting.
- 13 **CLOCK button**

8

8-1

8 Control systems

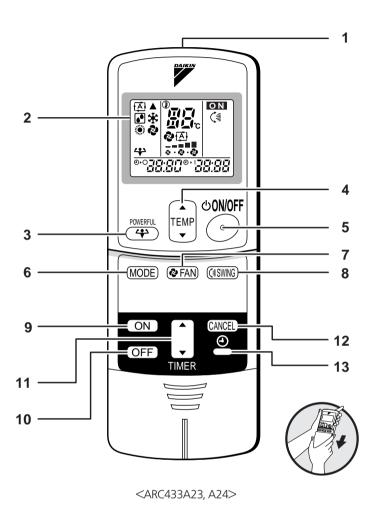
8–1 Infrared remote control





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FT(Y)S50-60B



- 1 Signal transmitter:
 - It sends signals to the indoor unit.
- 2 Display:
 - It displays the current settings. (In this illustration, each section is shown with all its displays ON for the purpose of explanation.)
- 3 POWERFUL button:

for POWERFUL operation

- 4 TEMPERATURE adjustment buttons:
 - It changes the temperature setting
- 5 ON/OFF button:
 - Press this button once to start operation. Press once again to stop it.
- 6 MODE selector button:
 - It selects the operation mode (Auto $\[\]$ / Dry $\[\]$ / Cool $\[\]$ / Heat $\[\]$ / Fan $\[\]$)

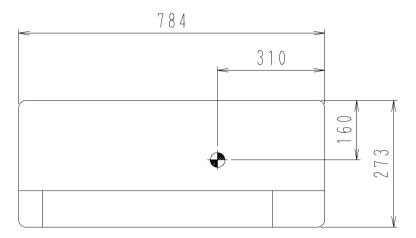
- 7 FAN setting button:
 - It selects the air flow rate setting.
- 8 SWING button
 - Flap (horizontal blade)
- 9 ON TIMER button
- 10 **OFF TIMER button**
- 11 TIMER setting button:
- It changes the time setting
- 12 **TIMER CANCEL button:** It cancels the timer setting.
- 13 **CLOCK button**

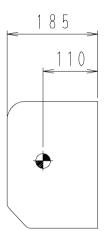
9 Center of gravity





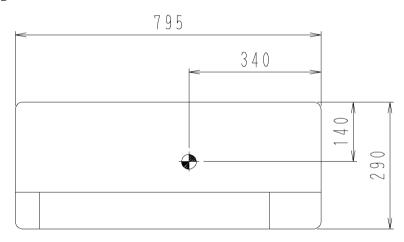
FT(Y)N20-25-35C

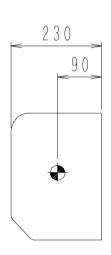




4D020686H

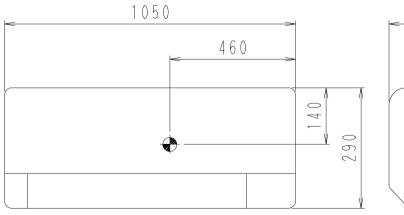
FT(Y)S50B

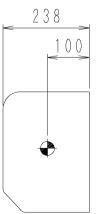




4D040312

FT(Y)S60B





4D040313

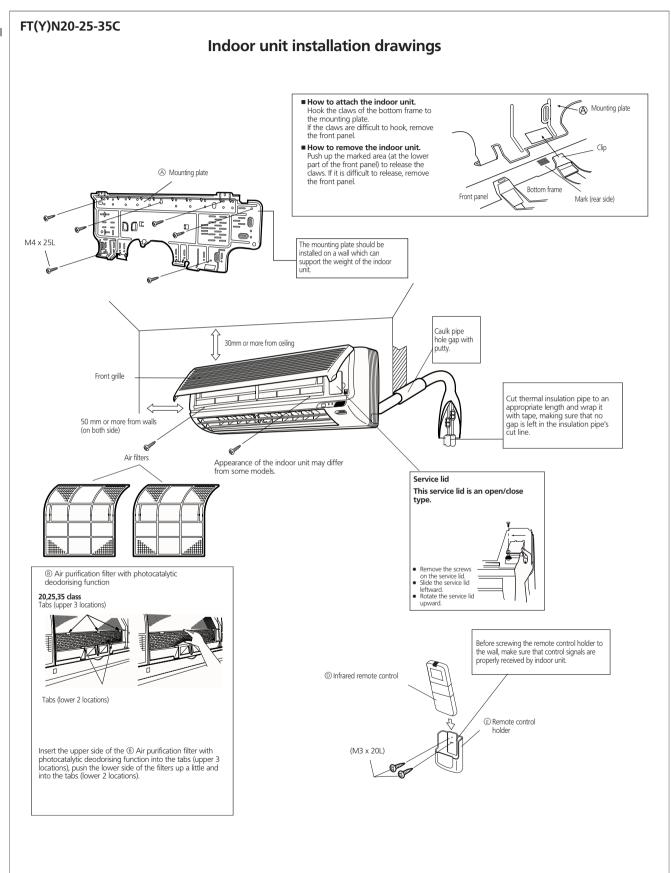
q

10 Installation





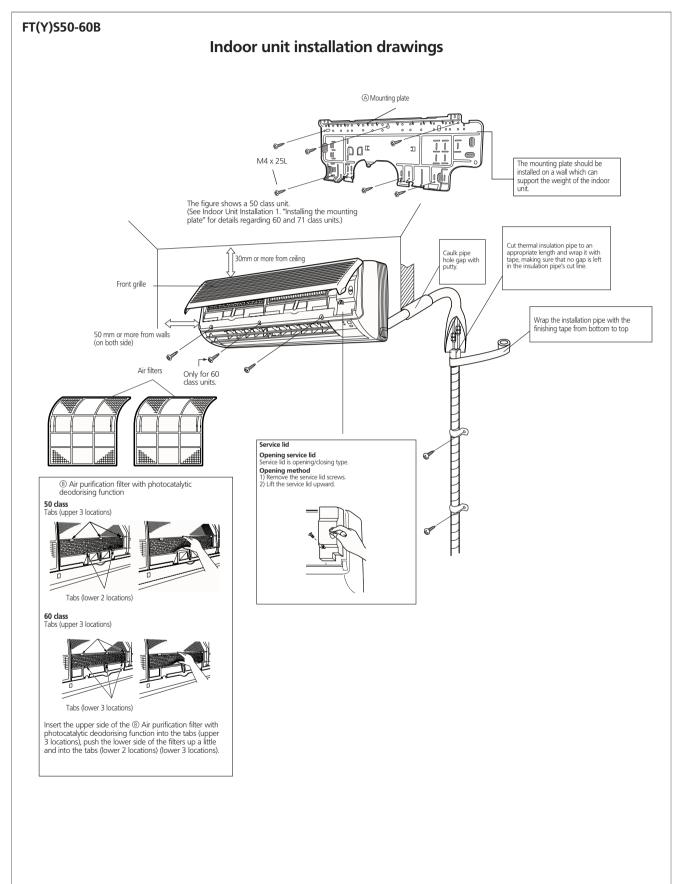
10



10 Installation







10