Air Conditioners

Technical Data

Wall mounted unit

EEDEN12-004

FTXN-L

TABLE OF CONTENTS

FTXN-L

1 Features

- Energy efficient units: full range A class energy labels
- Indoor unit silent operation: "silent" button on the remote control lowers the operation sound of the indoor unit by 3dBA
- Standard air filter removes airborne dust particles to ensure a steady supply of clean air
- 24 hour timer can be set to start heating or cooling anytime during a 24 hour period
- Vertical auto swing moves the discharge flaps up and down for efficient air and temperature distribution throughout the room
- Powerful mode can be selected for rapid heating and cooling
- Flat, stylish front panel blends easily within any interior décor and is more easy to clean

3 steps

2 Specifications

2-1 Technical Specifications					FTXN25L	FTXN35L	FTXN50L	FTXN60L
Power input	Cooling	Nom.		kW	0.037	0.042	0.037	0.063
	Heating	Nom.		kW	0.037	0.042	0.039	0.065
Casing	Colour				White			
Dimensions	Unit	Height/Width/Depth		mm	288/800/212		310/1,065/229	
	Packed unit	Height/Width/Depth		mm	350/894/280		386/1,136/314	
Weight	Unit			kg	9		14	
Heat exchanger	Rows	Quantity			2			
	Face area			m²	0.18		0.29	
	Tube material				Seamless Inner Grooved Copper			
	Tube diameter			mm	7			
	Fin	Type			Aluminium (hydrophilic fin)			
Fan	Type				Direct drive cross flow fan			
	Air flow rate	Cooling	Super high	m³/min	10.68	11.10	-	
				cfm	378	392	578	703
			High	m³/min	9.78	10.14	-	
				cfm	345	358	529	654
			Nom.	m³/min	7.68	7.98	-	
				cfm	272	282	471	585
			Low	m³/min	6.06	6.54	-	
				cfm	215	232	418	507
			Silent operation	m³/min	4.68		-	
				cfm	165		374	437
		Heating	Super high	m³/min	10.68	11.10	-	
				cfm	378	392	578	703
			High	m³/min	9.78	10.14	-	
				cfm	345	358	529	654
			Nom.	m³/min	7.68	7.98	-	
				cfm	272	282	471	585
			Low	m³/min	6.06	6.54	-	
				cfm	215	232	418	507
			Silent operation	m³/min	4.68		-	
				cfm	165		374	437
Fan motor	Model				Induction		Brushless	
	Index of Protection				44		20	
	Insulation grade				Class "E"			
	Poles				4		8	
	Output	High		W	18		40	
Sound pressure level	Cooling	Super high/High/Nom./Low/Silent operation		dBA	41/40/34/29/24	42/41/34/30/25	44/40/38/35/32	46/43/41/37/33
	Heating	Super high/High/Nom./Low/Silent operation		dBA	41/40/34/29/24	42/41/34/30/25	44/40/38/35/32	46/43/41/37/33
Refrigerant	Type				R-410A			
Piping connections	Liquid	Type/OD		mm	Flare valve/6.35			
	Gas	Type/OD		mm	Flare valve/9.52		Flare valve/12.70	Flare valve/15.90
Air direction control					Auto louver (up & down) & grille (left & right)			
Air filter	Type				Saranet		Washable Saranet	
	Quantity			pc	2			
Control	Operation				LCD Remote control			

2 Specifications

2-2 Electrical Specifications				FTXN25L	FTXN35L	FTXN50L	FTXN60L
Power supply	Name			V1			
	Phase			1~			
	Frequency		Hz	50			
	Voltage		V	220-240			
Current	Nominal running current (RLA) - 50Hz	Cooling	A	-		0.32	0.56
		Heating	A	-		0.33	0.56
Current - 50Hz	Nominal running current		A	0.19	0.21	-	
Current - 60Hz	Nominal running current		A	-			

Notes

(1) All units are being tested and comply to ISO 5151 (Non-ducted unit)

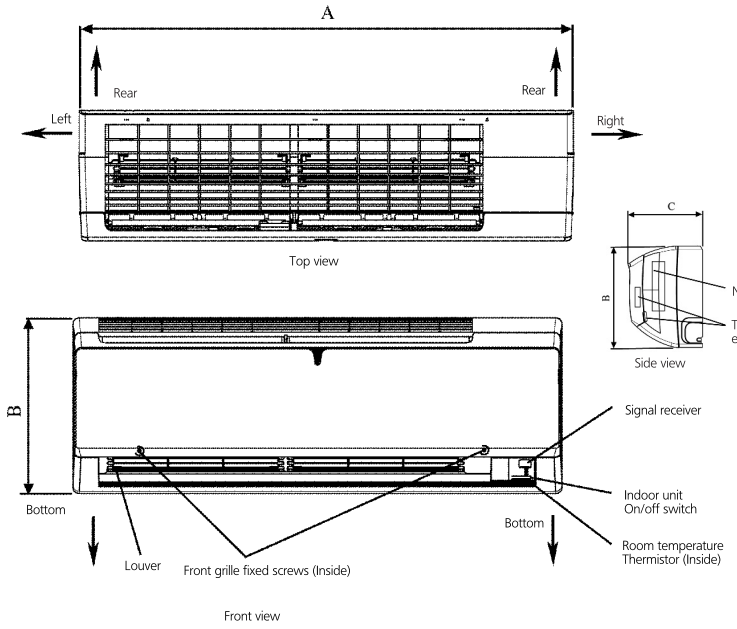
(2) All specifications are subjected to change by the manufacturer without prior notice.

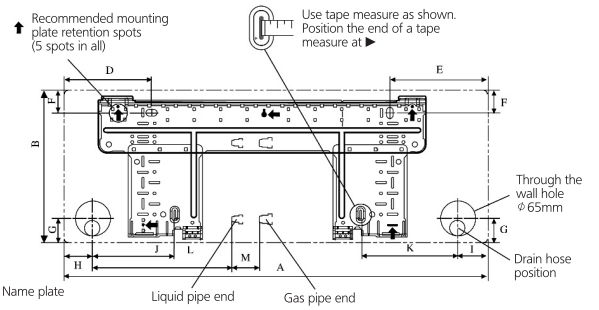
3 Dimensional drawings

3 - 1 Dimensional Drawings

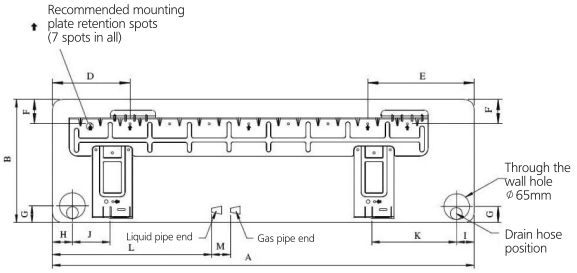
FTXN-L

The mark (→) shows piping direction





Installation plate FTXN25/35L



Installation plate FTXN50/60L

All dimensions are in mm

Model \ Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M
FTXN25/35L	800	288	212	166	184	42	46	55	56	154	182	263	52
FTXN50/60L	1065	310	229	190	173	61	40	45	48	91	219	580	45

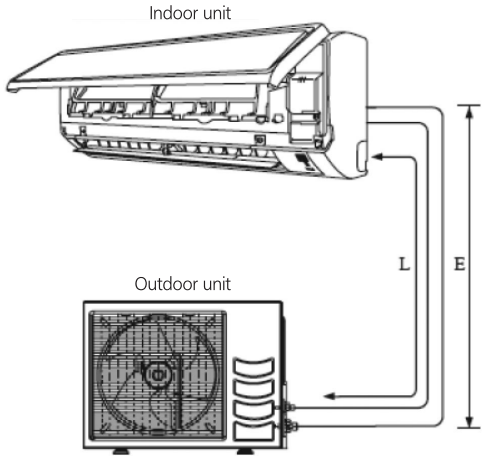
4 Piping diagrams

4 - 1 Piping Diagrams

FTXN-L

Allowable piping length

If the pipe is too long, both the capacity and reliability of the unit will drop. As the number of bends increases, resistance to the flow of refrigerant system increases, thus lowering cooling capacity. As a result, the compressor may become defective. Always choose the shortest path and follow the recommendations as tabulated below:



Model	FTXN25L	FTXN35L	FTXN50L	FTXN60L
Min. allowable length (L), m	3		3	
Max. allowable length (L), m	15		30	
Max. allowable elevation (E), m	10		10	
Gas pipe size, mm/(inch)	9.52 (3/8″)		12.70 (1/2″)	15.88 (5/8″)
Liquid pipe size, mm/(inch)	6.35 (1/4″)		6.35 (1/4″)	

*Be sure to add the proper amount of additional refrigerant. Failure to do so may result in reduced performance.

Remark: The refrigerant pre-charged in the outdoor unit is for piping length up to 7.5m.

Additional charge

The refrigerant is pre-charged in the outdoor unit. If the piping length is less than 7.5m, then additional charge after vacuuming is not necessary. If the piping length is more than 7.5m, then use the additional charge value as indicated in the table.

Additional refrigerant charge [g] per additional 1m length as tabulated

Indoor	FTXN25L	FTXN35L	FTXN50L	FTXN60L
Outdoor	RXN25L	RXN35L	RXN50L	RXN60L
Additional charge [g/m]	20	20	20	20

Example:

FTXN25LV1B & RXN25LV1B with 12m piping length, additional piping length is 4.5m, Thus,
Additional charge = 4.5[m] x 20[g/m]
= 90.0[g]

4 Piping diagrams

4 - 1 Piping Diagrams

FTXN-L

Piping works and flaring technique

- Do not use contaminated or damaged copper tubing. If any piping, evaporator or condensor had been exposed or had been opened for 15 seconds or more, the system must be vacuumed. Generally do not remove plastic, rubber plugs and brass nuts from the valves, fittings, tubing and coils until it is ready to connect suction or liquid line into valves or fittings.
- If any brazing work is required, ensure that nitrogen gas is passed through coil and joints while the brazing work is being done. This will eliminate soot formation on the inside wall of copper tubings.
- Cut the pipe stages by stages, advancing the blade of pipe cutter slowly. Extra force and a deep cut will cause more disortion of pipe and therefore extra burr. See figure I.
- Remove burrs from cut edges of the pipes with remover. See figure II. Hold the pipe on top position and burr removel at lower position to prevent metal chips from entering the pipe. This will avoid unevenness on the flare faces which will cause gas leak.
- Insert the flare nuts, mounted on the connection parts of both the indoor unit and outdoor unit, into the copper pipes.
- The exact length of pipe protruding from the top surface of the swaging block is determined by the flaring tool. See figure III.
- Fix the pipe firmly on the swaging block. Match the centers of both the swaging block and the flaring punch, then tighten the flaring punch fully.
- The refrigerant pipe connection are insulated by closed cell polyurethane.

Piping connection to the units

- Align the center of the piping and tighten the flare nut sufficiently with fingers. See figure IV.
- Finally, tighten the flare nut with torque wrench untill the wrench clicks.
- When tightening the flare nut with the torque wrench, ensure that the tightening direction follows the arrow indicated on the wrench.
- The refrigerant pipe connection are insulated by closed cell polyurethane.

Pipe size, mm (inch)	Torque, Nm / (ft-lb)
6.35 (1/4″)	18 (13.3)
9.52 (3/8″)	42 (31.0)
12.70 (1/2″)	55 (40.6)
15.88 (5/8″)	65 (48.0)
19.05 (3/4″)	78 (57.6)

Figure I

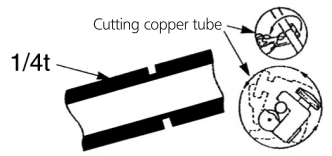


Figure II

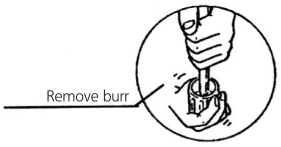
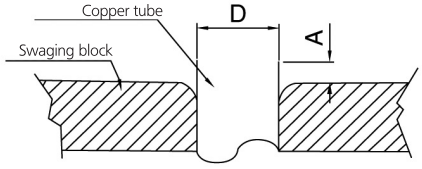
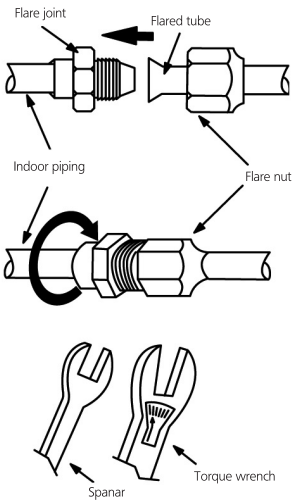


Figure III



∅ Tube, D		A (mm)	
inch	mm	Imperial (Wing-nut type)	Rigid (Clutch type)
1/4″	6.35	1.3	0.7
3/8″	9.52	1.6	1.0
1/2″	12.70	1.9	1.3
5/8″	15.88	2.2	1.7
3/4″	19.05	2.5	2.0

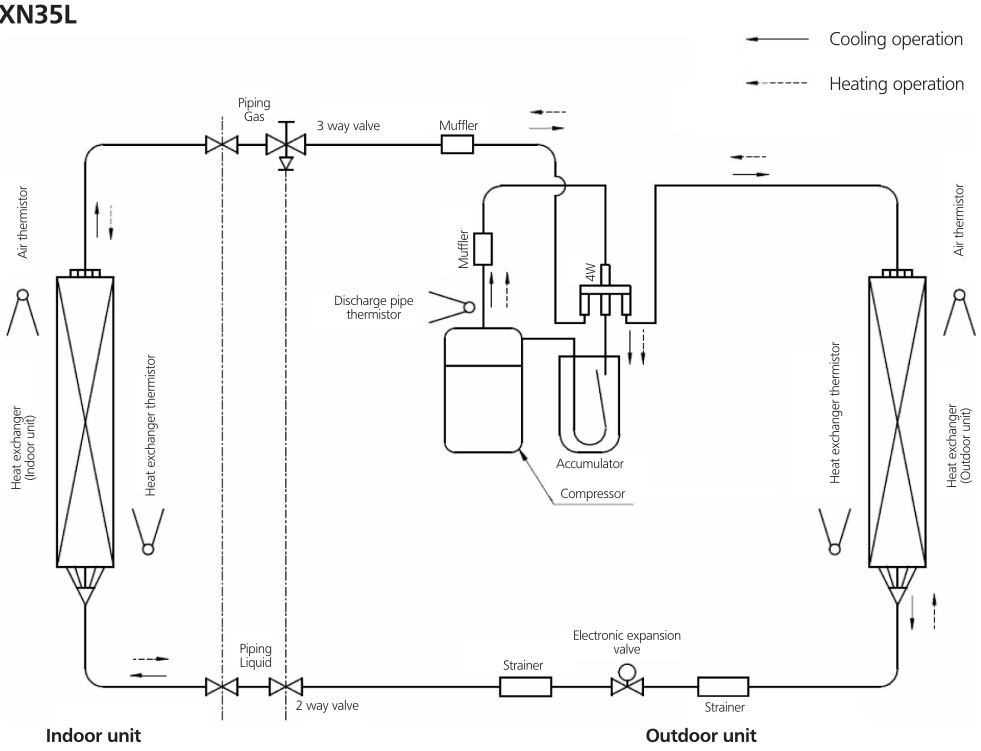
Figure IV



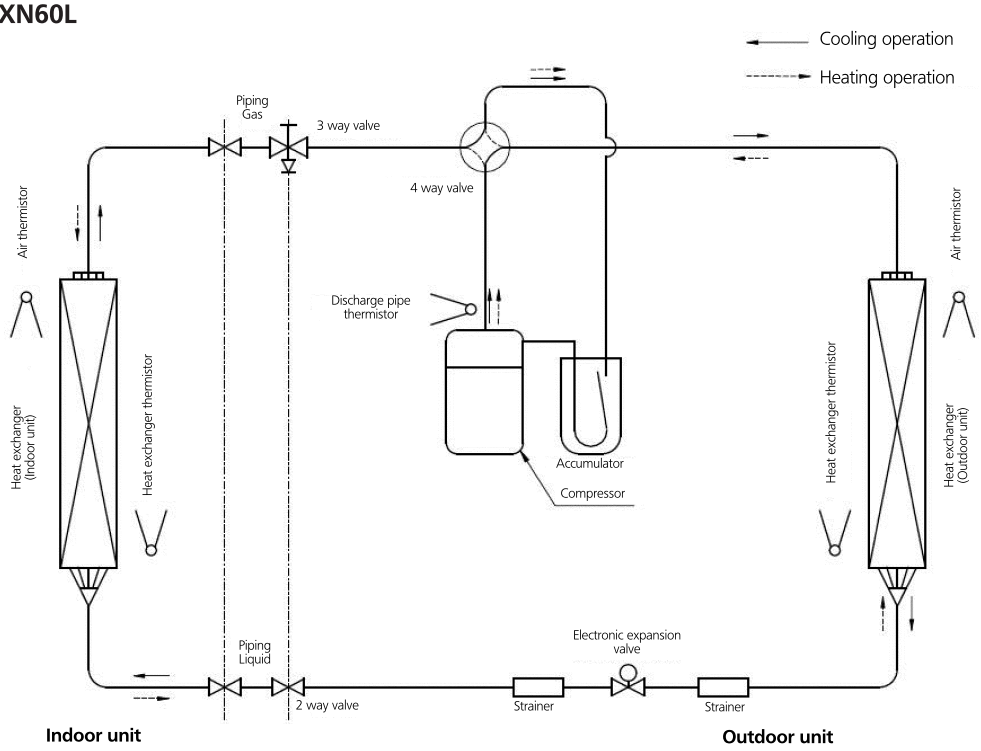
4 Piping diagrams

4 - 1 Piping Diagrams

FTXN25L+RXN25L
FTXN35L+RXN35L



FTXN50L+RXN50L
FTXN60L+RXN60L

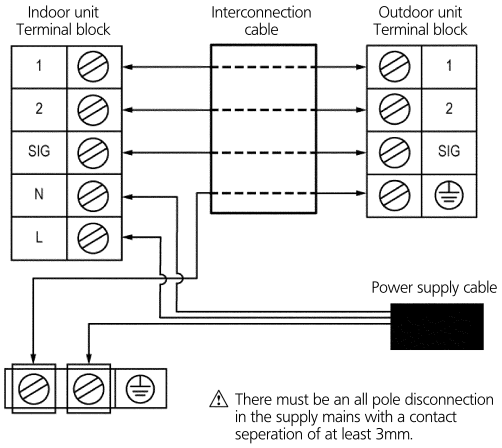


5 Wiring diagrams

5 - 1 Wiring Diagrams - Single Phase

FTXN-L+RXN-L

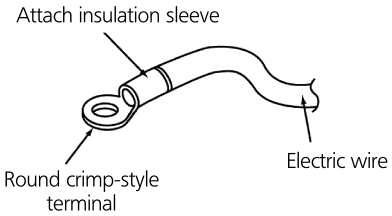
IMPORTANT:
* The figures shown in the table are for information purpose only. They should be checked and selected to comply with the local/national codes of regulations. This is also subject to the type of installation and conductors used.
** The appropriate voltage range should be checked with label data on the unit.



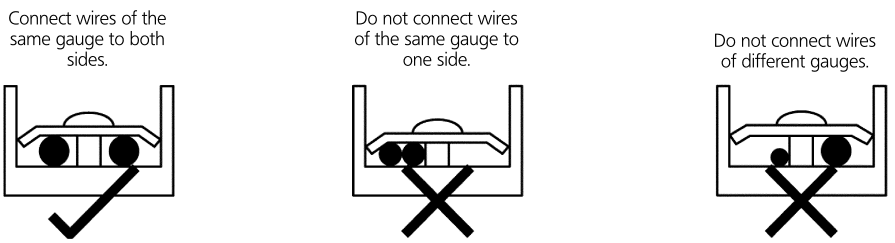
Model	FTXN25/35L RXN25/35L	FTXN50/60L RXN50/60L
Voltage range**	220V - 240V / 1Ph / 50Hz+ ⏚	
Power supply cable size* mm^2 Number of conductors	1.5 3	1.5 3
Interconnection cable size* mm^2 Number of conductors	1.5 4	1.5 4
Recommended time delay fuse A	15	20

* If the length of the cable is more than 2m, use cable with bigger size.

- All wires must be firmly connected.
- Make sure all the wires do not touch the refrigerant pipings, compressor or any moving parts.
- The connecting wire between the indoor and the outdoor unit must be clamped by using provided cord anchorage.
- The power supply cord must be equivalent to H07RN-F which is the minimum requirement.
- Make sure no external pressure is applied to the terminal connectors and wires.
- Make sure all the covers are properly fixed to avoid any gap.
- Use round crimp-style terminal for connecting wires to the power supply terminal block. Connect the wires by matching to the indication on terminal block. (Refer to the wiring diagram attached to the unit.)



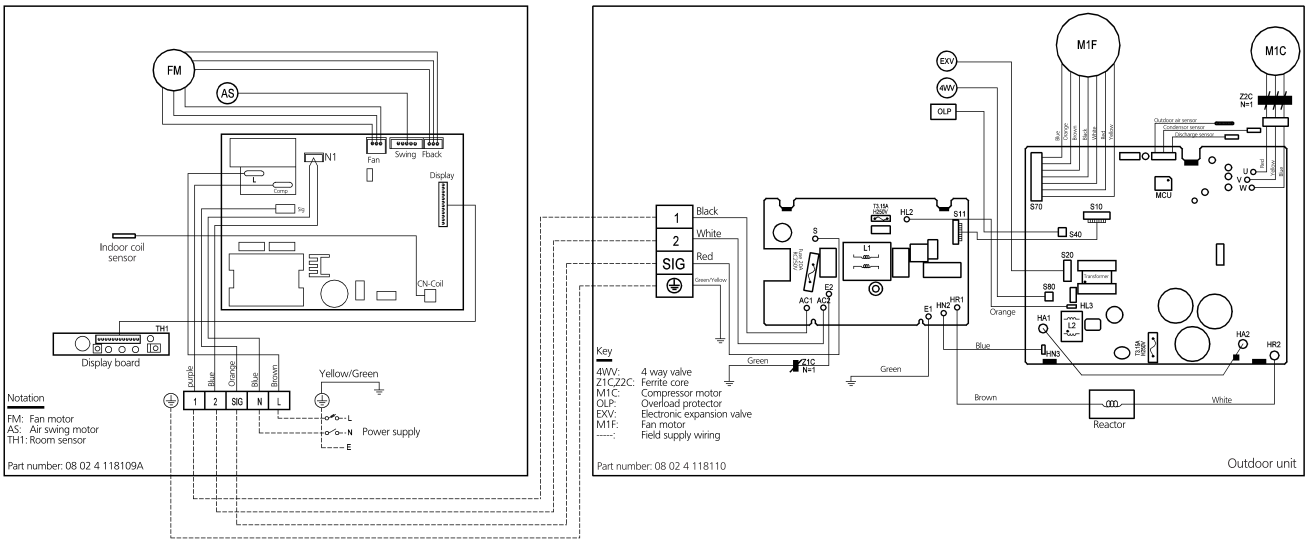
- Use the correct screwdriver for terminal screw tightening. Unsuitable screwdrivers can damage the screw head.
- Over tightening can damage the terminal screws.
- Do not connect wire of different gauge to same terminal.
- Keep wiring in an orderly manner. Prevent the wiring from obstructing other parts and the terminal box cover.



5 Wiring diagrams

5 - 1 Wiring Diagrams - Single Phase

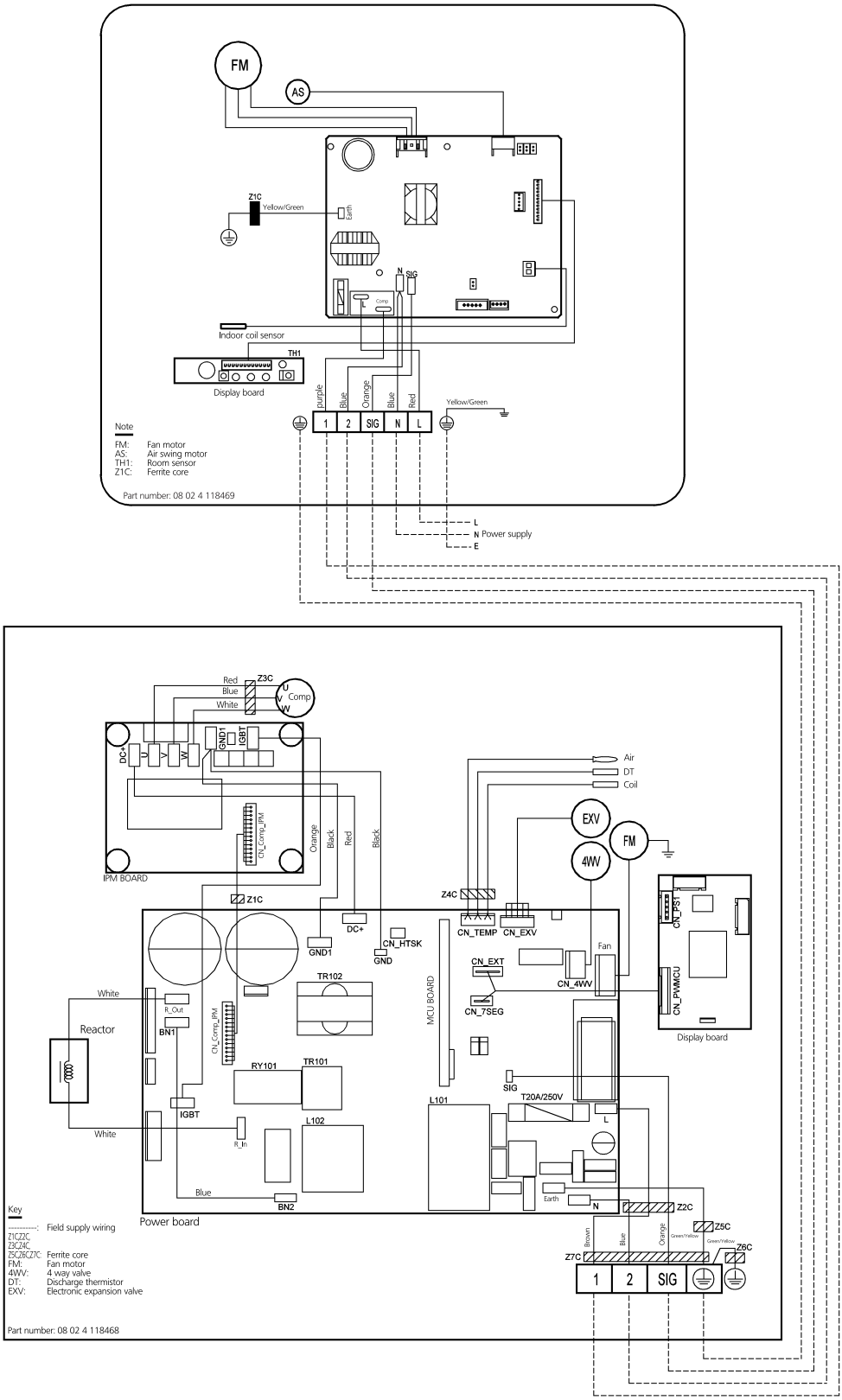
FTXN25-35L



5 Wiring diagrams

5 - 1 Wiring Diagrams - Single Phase

FTXN50-60L

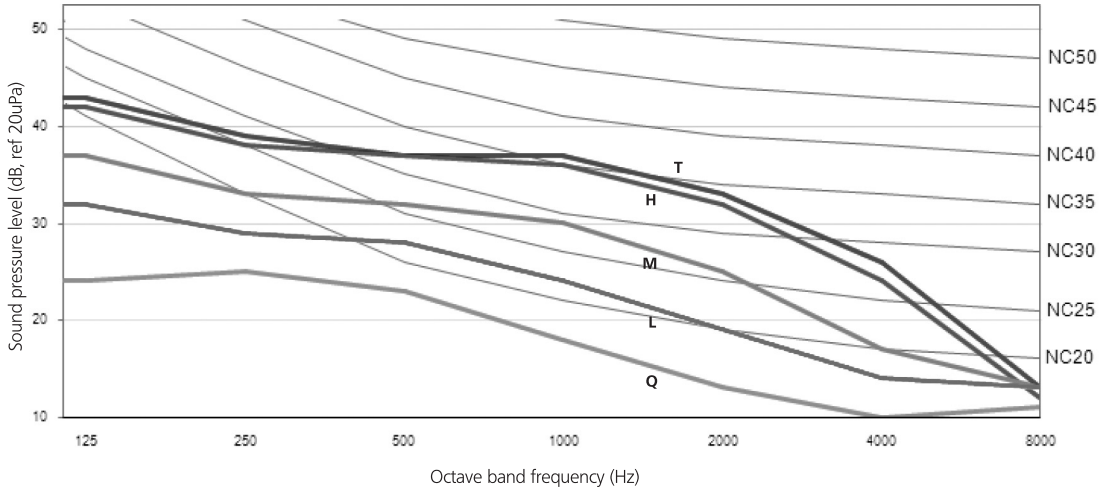


Part number: 70 03 4 119689

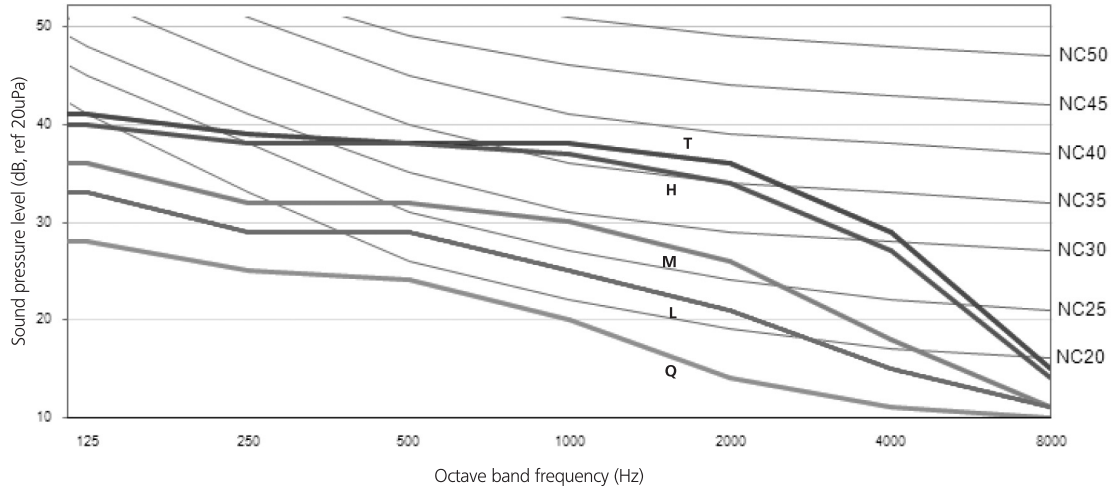
6 Sound data

6 - 1 Sound Pressure Spectrum

FTXN25L



FTXN35L



Legend

T: Turbo
H: High
M: Medium
L: Low
Q: Quiet

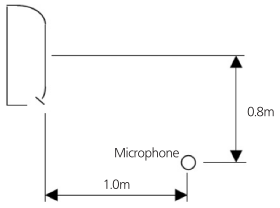
6 Sound data

6 - 1 Sound Pressure Spectrum

FTXN25-35L

Sound pressure level

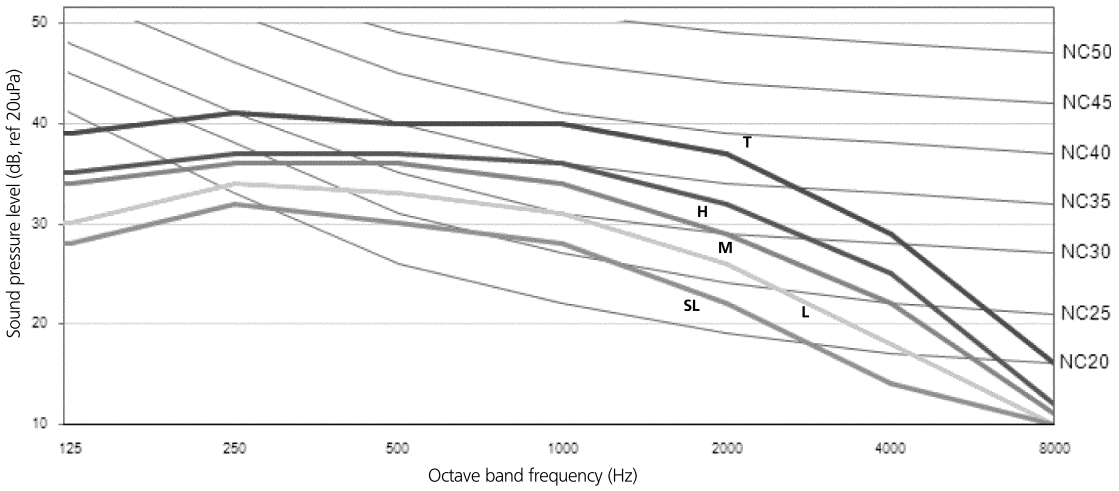
Model	Speed	1/1 Octave A-Weighted Sound Pressure (dBA), ref. 20µPa							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTXN25L	Turbo	43	39	37	37	33	26	13	41	36
	High	42	38	37	36	32	24	12	40	35
	Medium	37	33	32	30	25	17	13	34	29
	Low	32	29	28	24	19	14	13	29	22
	Quiet	24	25	23	18	13	10	11	24	-
FTXN35L	Turbo	41	39	38	38	36	29	15	42	37
	High	40	38	38	37	34	27	14	41	36
	Medium	36	32	32	30	26	18	11	34	29
	Low	33	29	29	25	21	15	11	30	23
	Quiet	28	25	24	20	14	11	10	25	-

Model	Measuring location
FTXN25L & FTXN35L	 Standard: JIS C 9612

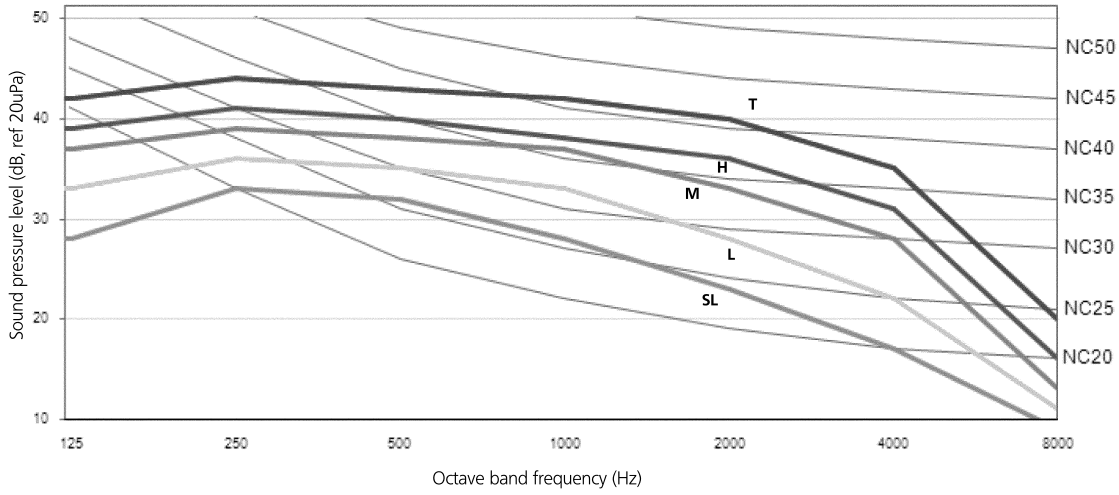
6 Sound data

6 - 1 Sound Pressure Spectrum

FTXN50L



FTXN60L



Legend

T: Turbo
H: High
M: Medium
L: Low
SL: Super low

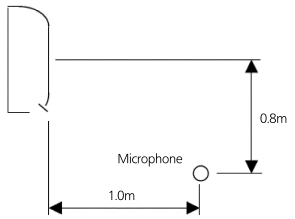
6 Sound data

6 - 1 Sound Pressure Spectrum

FTXN50-60L

Sound pressure level

Model	Speed	1/1 Octave A-Weighted Sound Pressure (dBA), ref. 20µPa							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTXN50L	Turbo	39	41	40	40	37	29	16	44	39
	High	35	37	37	36	32	25	12	40	35
	Medium	34	36	36	34	29	22	11	38	33
	Low	30	34	33	31	26	18	10	35	30
	Quiet	28	32	30	28	22	14	10	32	26
FTXN60L	Turbo	42	44	43	42	40	35	20	46	41
	High	39	41	40	38	36	31	16	43	37
	Medium	37	39	38	37	33	28	13	41	36
	Low	33	36	35	33	28	22	11	37	32
	Quiet	28	33	32	28	23	17	9	33	26

Model	Measuring location
FTXN50L & FTXN60L	 Standard: JIS C 9612

Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.

Daikin Europe N.V. participates in the Eurovent Certification programme for Air conditioners (AC), Liquid Chilling Packages (LCP), Air handling units (AHU) and Fan coil units (FCU), Check ongoing validity of certificate online: www.eurovent-certification.com or using: www.certiflash.com"

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The present publication supersedes EEDEN11-004
Printed on non-chlorinated paper. Prepared by Goekint Graphics NV, Belgium
Responsible Editor: Daikin Europe N.V., Zandvoordestraat 300, B-8400 Oostende