

TECHNICAL MANUAL

Inverter Single Split Series Air Conditioner

FTK-J, FTXN-J Series

— Cooling only & Heatpump [50Hz] —

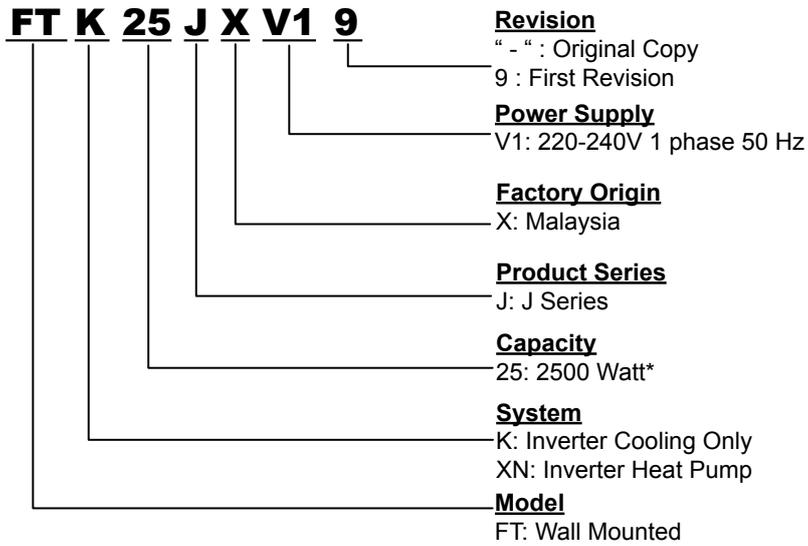


Table of Contents

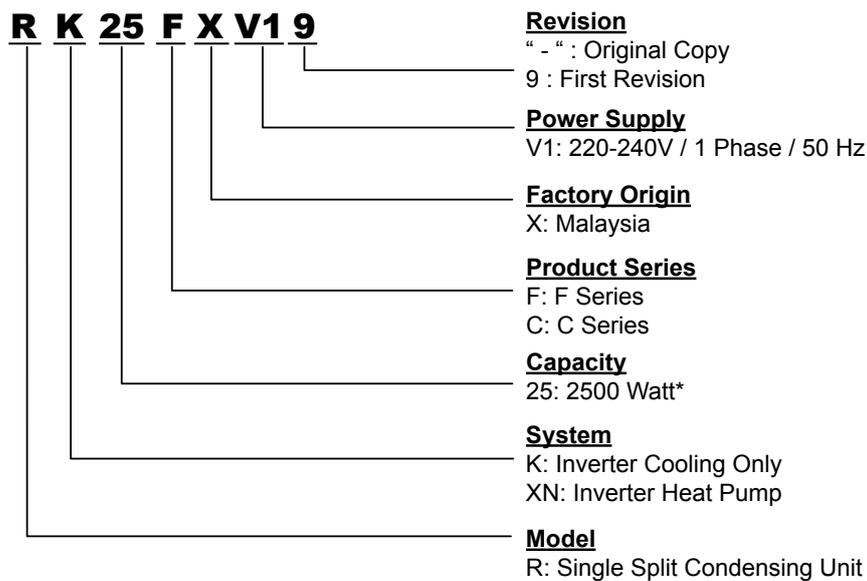
Nomenclature	1
Indoor	1
Outdoor.....	1
Product Line-Up.....	2
Application Information	4
Operating Range	4
Refrigerant Circuit Diagrams	5
Installation Guideline	6
Sound Data	10
Sound Pressure Level	10
NC Curve.....	11
Engineering & Physical Data	13
Performance Data	15
Calculation Steps.....	15
Performance Tables.....	17
Outline & Dimension	25
Wiring Diagram	28
Service & Maintenance	32
Troubleshooting	34

Nomenclature

Indoor



Outdoor



Remark:

* : Capacity value under Nomenclature is an indication.

Please refer to Engineering and Physical Data for exact capacity value.

Product Line-Up

**Indoor Unit
FTK, FTXN**

Nomenclature		Classification					
		Handset		PCB		Air Purification	
		BRC52A62	BRC52A61	W_2_03C	W_2_04A	Saranet Filter	Titanium Apatite Filter
COOLING	FTK25JXV19	X		X		X	X
	FTK35JXV19	X		X		X	X
	FTK50JXV19	X			X	X	X
	FTK60JXV19	X			X	X	X
HEATPUMP	FTXN25JXV1		X	X		X	X
	FTXN35JXV1		X	X		X	X
	FTXN50JXV1		X		X	X	X
	FTXN60JXV1		X		X	X	X

Outdoor Unit
RK, RXN

Nomenclature		Cap Tube		Refrigerant Control			PCB			Fin		Compressor	Others
			EXV	Main PCB (ADGPA31)	Main PCB (2P273854)	Filter PCB (3P273862)	Hydrophilic (Blue)	Hydrophilic (Gold)	Bare Aluminium	Swing	Drain Elbow		
COOLING	RK25FXV19		X	X					X	X			
	RK35FXV19		X	X					X	X			
	RK50CXV19		X		X	X			X	X			
	RK60CXV19		X		X	X			X	X			
HEATPUMP	RXN25FXV1		X	X			X			X	X		
	RXN35FXV1		X	X			X			X	X		
	RXN50CXV1		X		X	X	X			X	X		
	RXN60CXV1		X		X	X	X			X	X		

Application Information

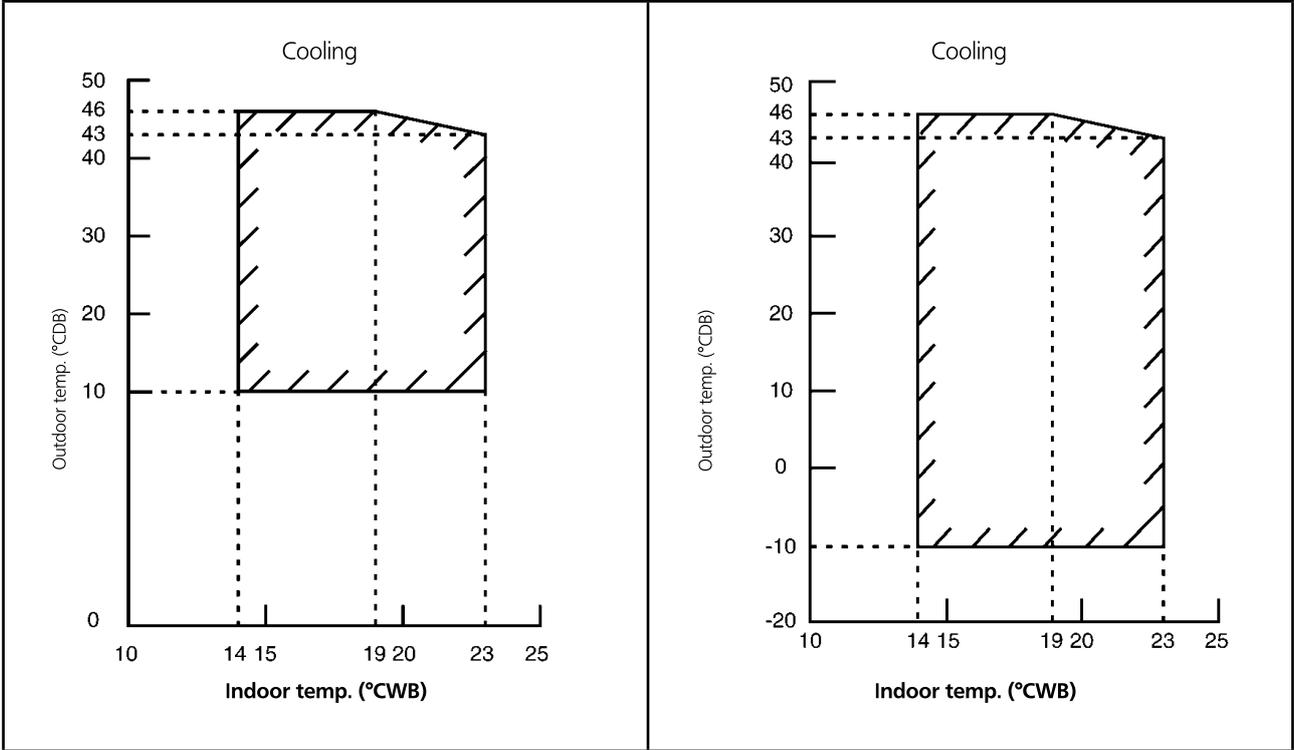
Operating Range

Ensure the operating temperature is in allowable range.

Cooling

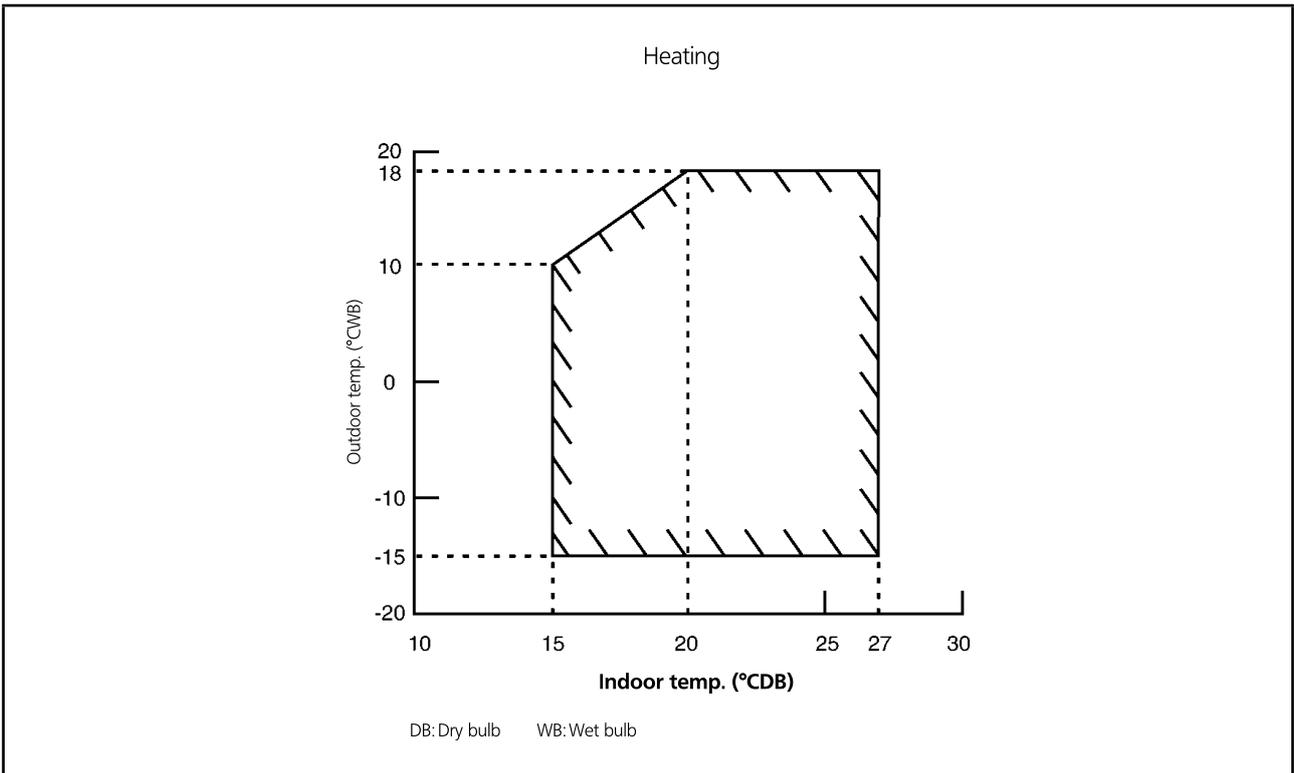
FTK25/35JXV19 – RK25/35FXV19
FTXN25/35JXV1 – RXN25/35FXV1

FTK50/60JXV19 – RK50/60CXV19
FTXN50/60JXV1 – RXN50/60CXV1



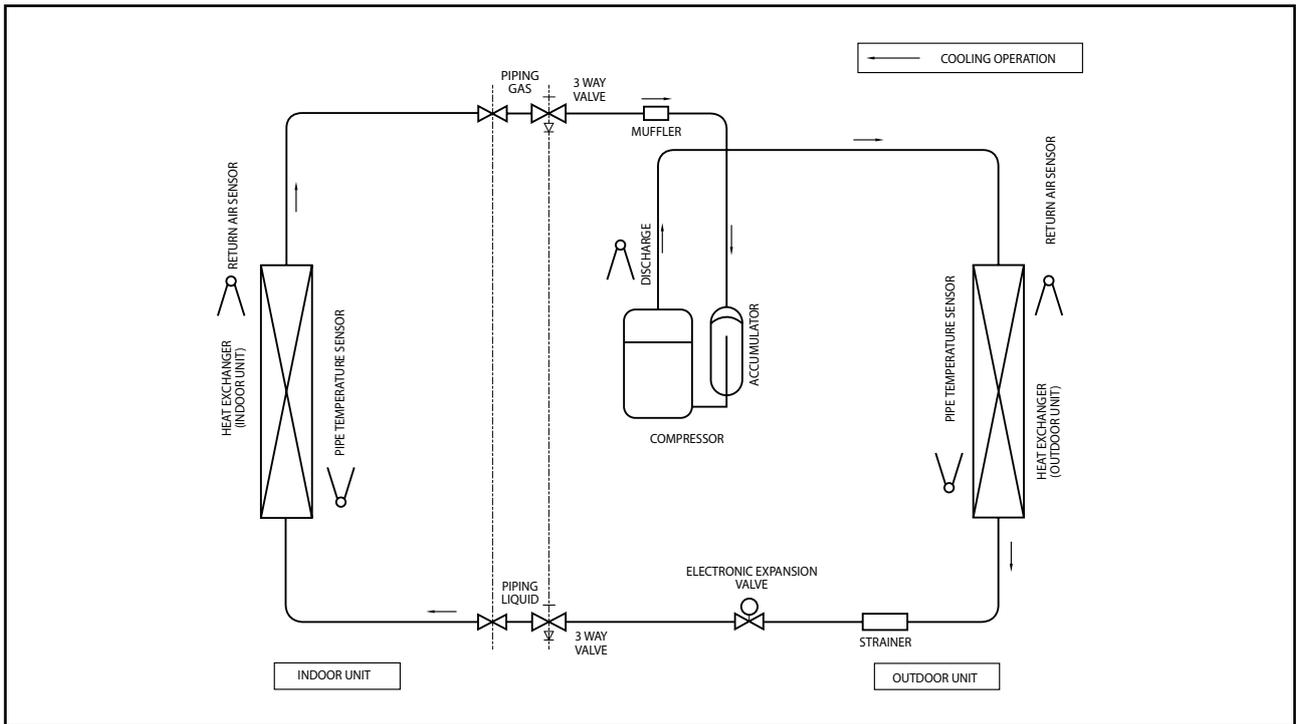
Heating

FTXN25/35/50/60JXV1 – RXN25/35FXV1;50/60CXV1

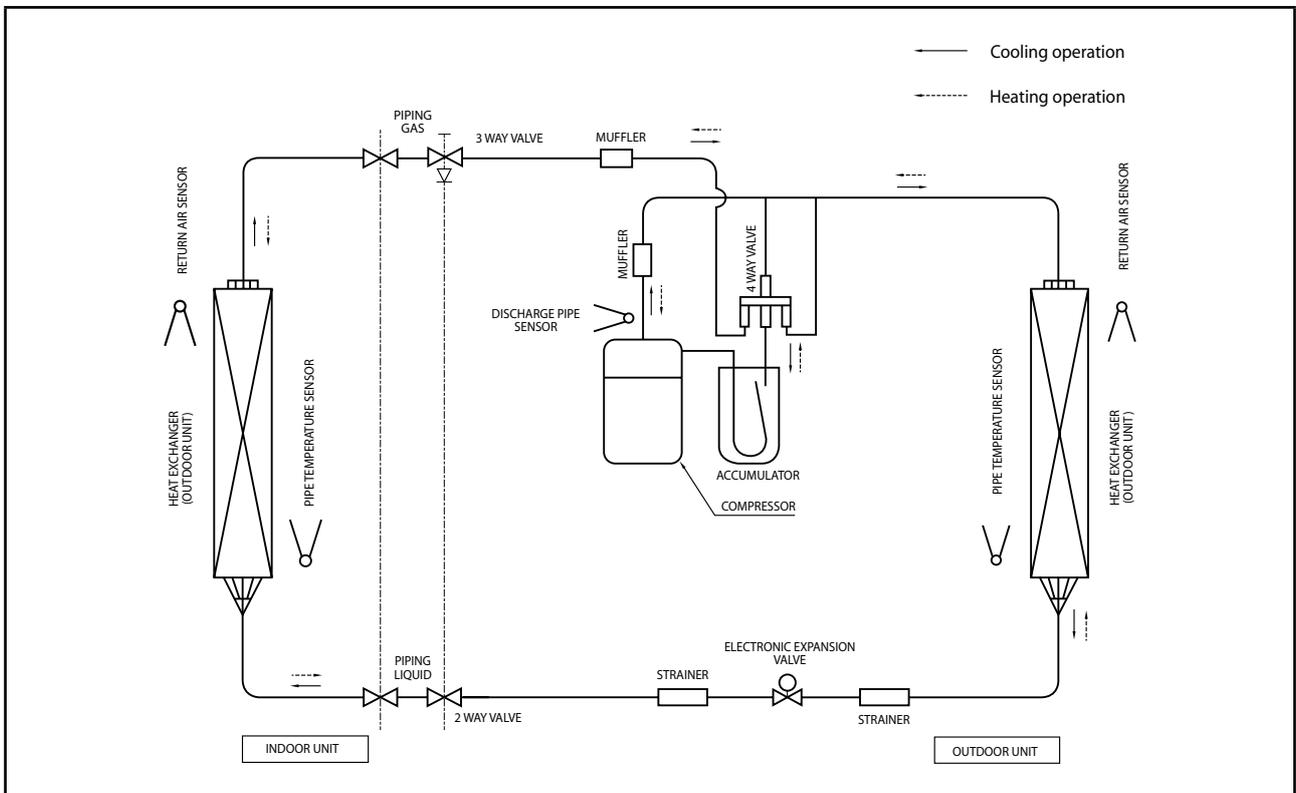


Refrigerant Circuit Diagrams

Model: FTK25JXV19 – RK25FXV19 / FTK35JXV19 – RK35FXV19 / FTK50JXV19 – RK50CXV19 / FTK60JXV19 – RK60CXV19



Model: FTXN25JXV1 – RXN25FXV1 / FTXN35JXV1 – RXN35FXV1 / FTXN50JXV1 – RXN50CXV1 / FTXN60JXV1 – RXN60CXV1



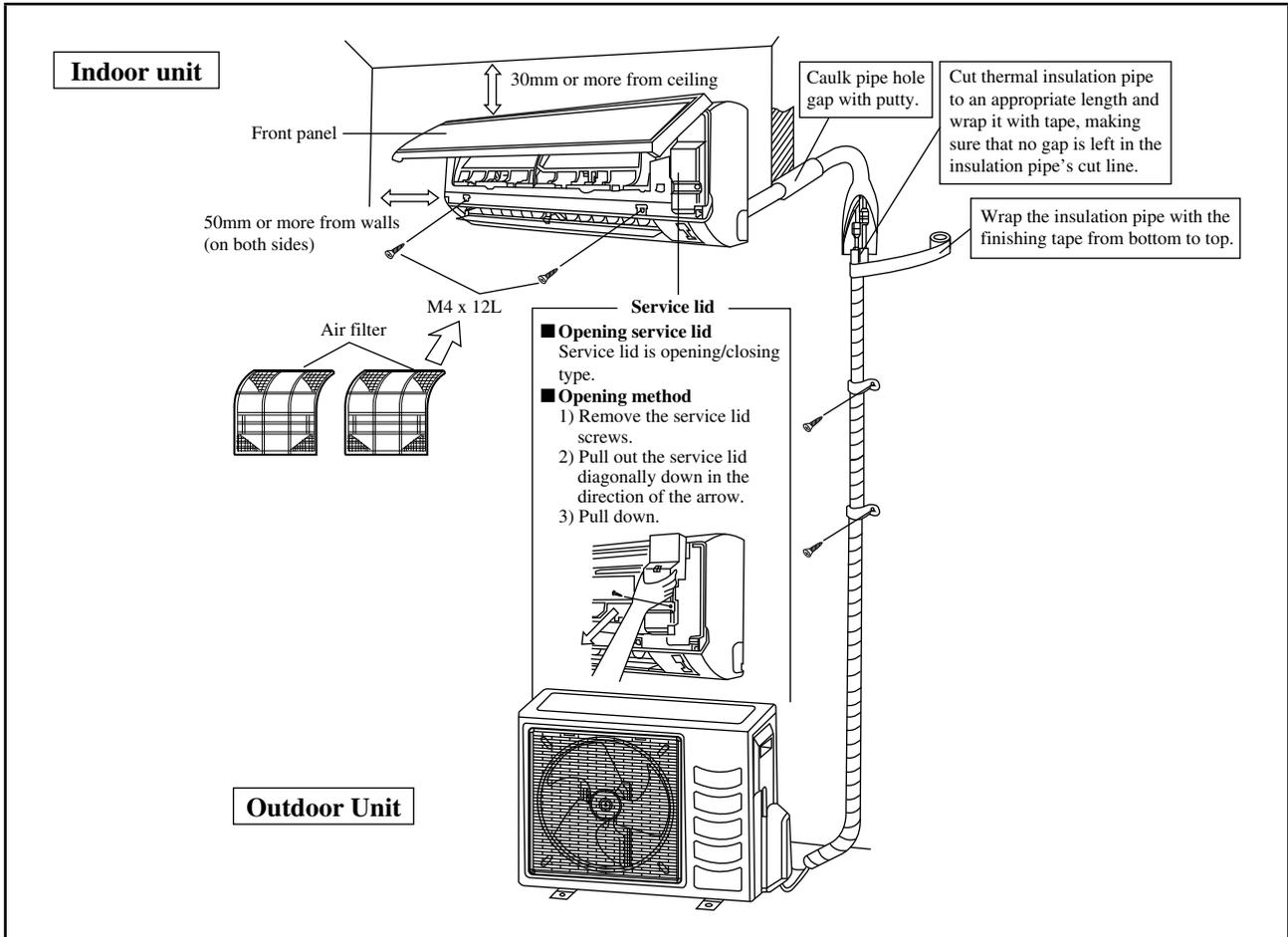
Installation Guideline



Caution

Sharp edges and coil surfaces are potential injury hazard. Avoid from contact with them.

Installation Diagram



Outdoor Clearance



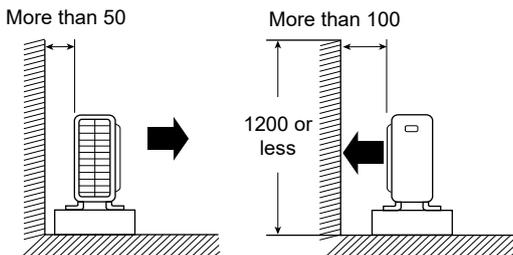
Caution

If the condensing unit is operated in an atmosphere containing oils (including machine oils), salt (coastal area), sulphide gas (near hot spring, oil refinery plant), such as substances may lead to failure of the unit.

- Where a wall or other obstacle is in the path of outdoor unit's intake or exhaust airflow, follow the installation guidelines below.
- For any of the below installation patterns, the wall height on the exhaust side should be 1200mm or less.

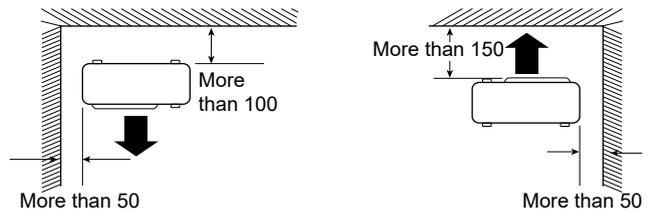
Model: RK25/35FXV19, RXN25/35FXV1

Wall facing one side



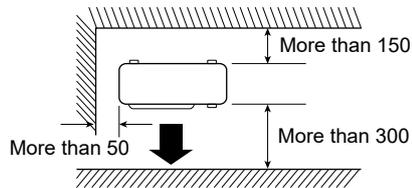
Side View

Wall facing two side



Top View

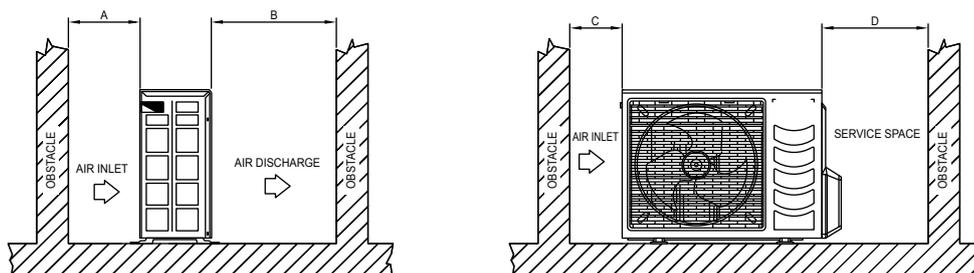
Wall facing three side



Top View

Unit : mm

Model: RK50/60CXV19, RXN50/60CXV1



ALL MODELS	A	B	C	D
Minimum Distance	300 mm	1000 mm	300 mm	500 mm

Cable Size

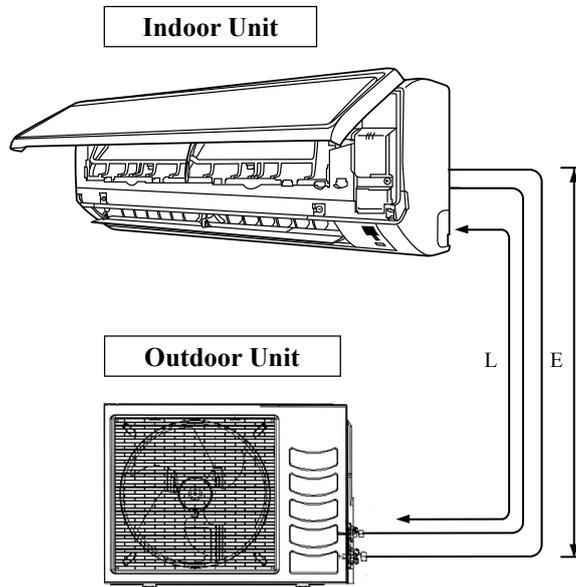
Model	Unit	FTK25JXV19	FTK35JXV19	FTK50JXV19	FTK60JXV19
		RK25FXV19	RK35FXV19	RK50CXV19	RK60CXV19
Power supply cable size	mm ²	1.5		2.5	
Number of wire		3		3	
Interconnection cable size	mm ²	1.5		2.5	
Number of wire		4		4	
Recommended fuse	A	16		20	

Model	Unit	FTXN25JXV1	FTXN35JXV1	FTXN50JXV1	FTXN60JXV1
		RXN25CXV19	RXN35CXV19	RXN50CXV19	RXN60CXV19
Power supply cable size	mm ²	1.5		2.5	
Number of wire		3		3	
Interconnection cable size	mm ²	1.5		2.5	
Number of wire		4		4	
Recommended fuse	A	16		20	

Refrigerant Piping

Piping Length and Elevation

When the pipe length becomes too long, both the capacity and reliability drop. As the number of bends increases, system piping resistance to the refrigerant flow increases, thus lowering the cooling capacity, and as the result the compressor may become defective. Always choose the shortest path and follow the recommendation as tabulated below:



Model	Indoor (FTXN/FTK)	25	35	50	60
	Outdoor (RXN/RK)	25	35	50	60
Min. Allowable Length (L), m		3		3	
Max. Allowable Length (L), m		20		30	
Max. Allowable Elevation (E), m		10		10	
Gas Pipe Size, mm/(in)		9.52 (3/8")		12.70 (1/2")	15.88 (5/8")
Liquid Pipe Size, mm/(in)		6.35 (1/4")		6.35 (1/4")	

Additional Charge

- The refrigerant gas is charged in the outdoor unit and, if the piping length is 7.5m, additional charge of the refrigerant after vacuuming is not necessary.
- When the piping length is more than 7.5m, additional refrigerant charge (g) per additional 1m length as tabulated:

Model	Indoor (FTXN/FTK)	25	35	50	60
	Outdoor (RXN/RK)	25	35	50	60
Additional charge [g/m]		20	20	20	20

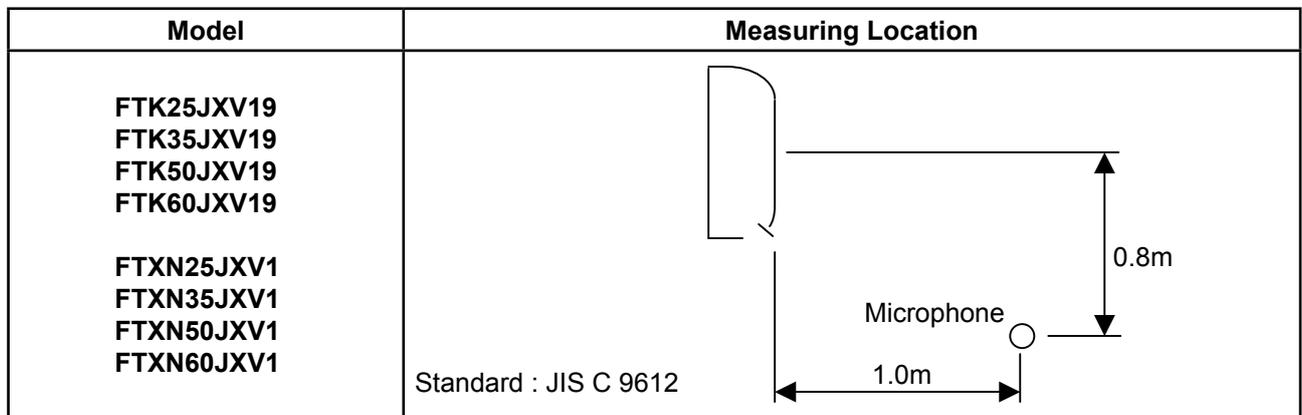
Example:

FTXN25 & RXN25 with 12m piping length, additional piping length is 4.5m.
 Thus, Additional charge = 4.5[m] x 20[g/m]
 = 90.0[g]

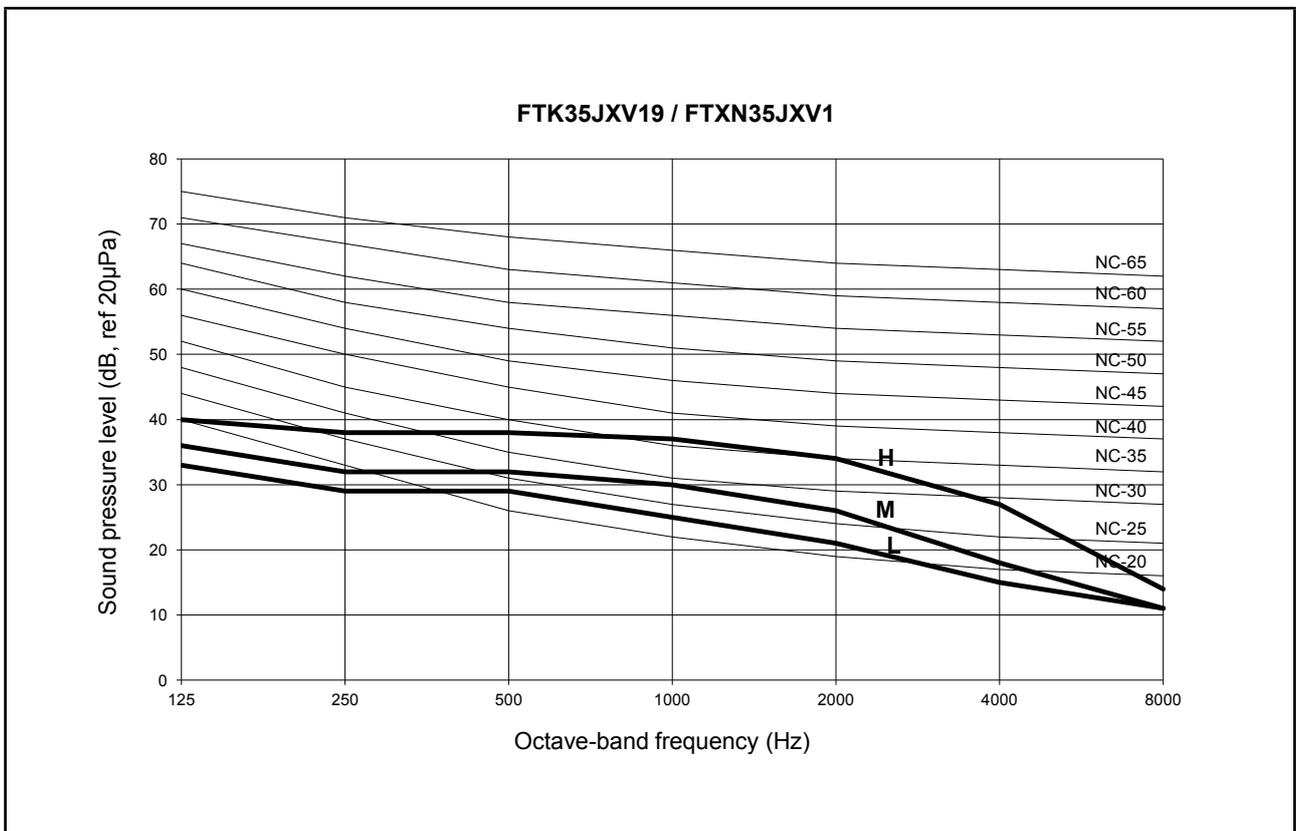
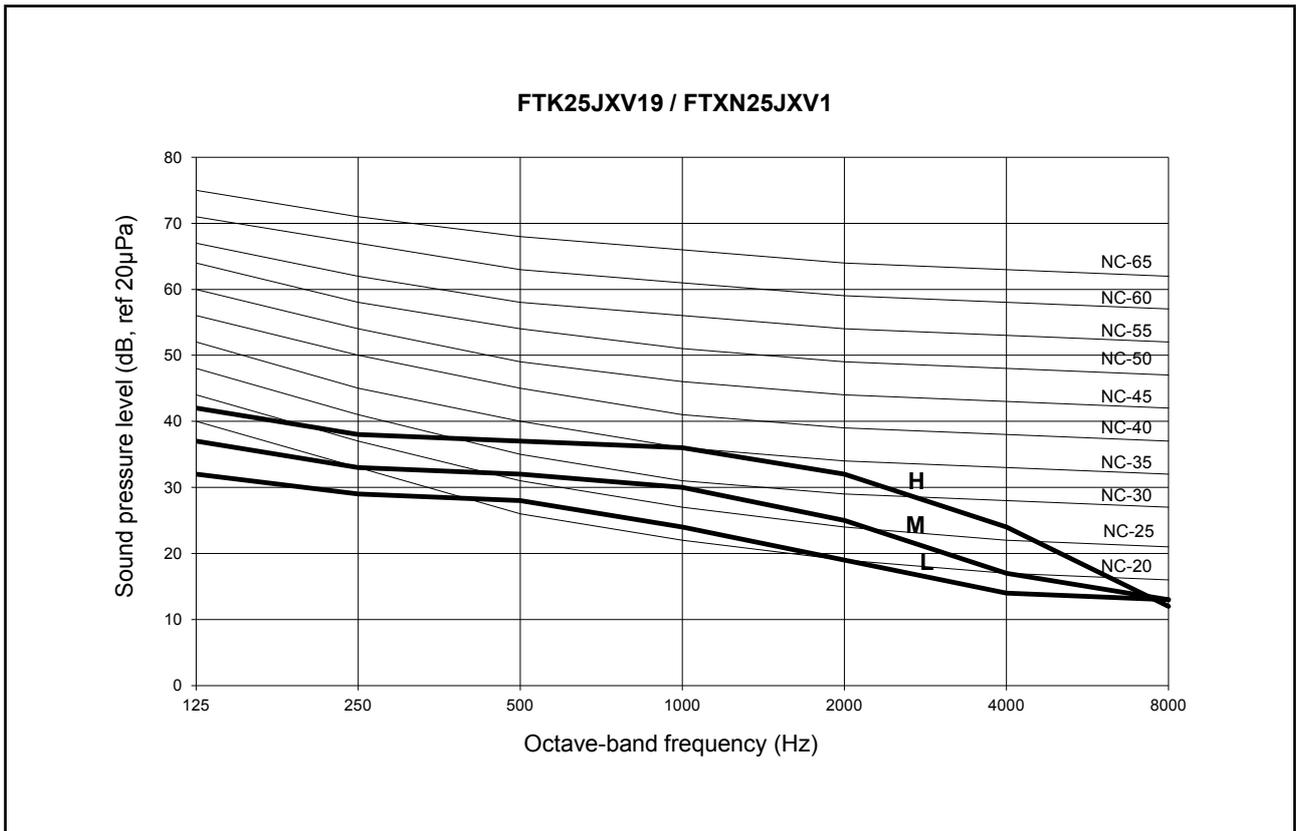
Sound Data

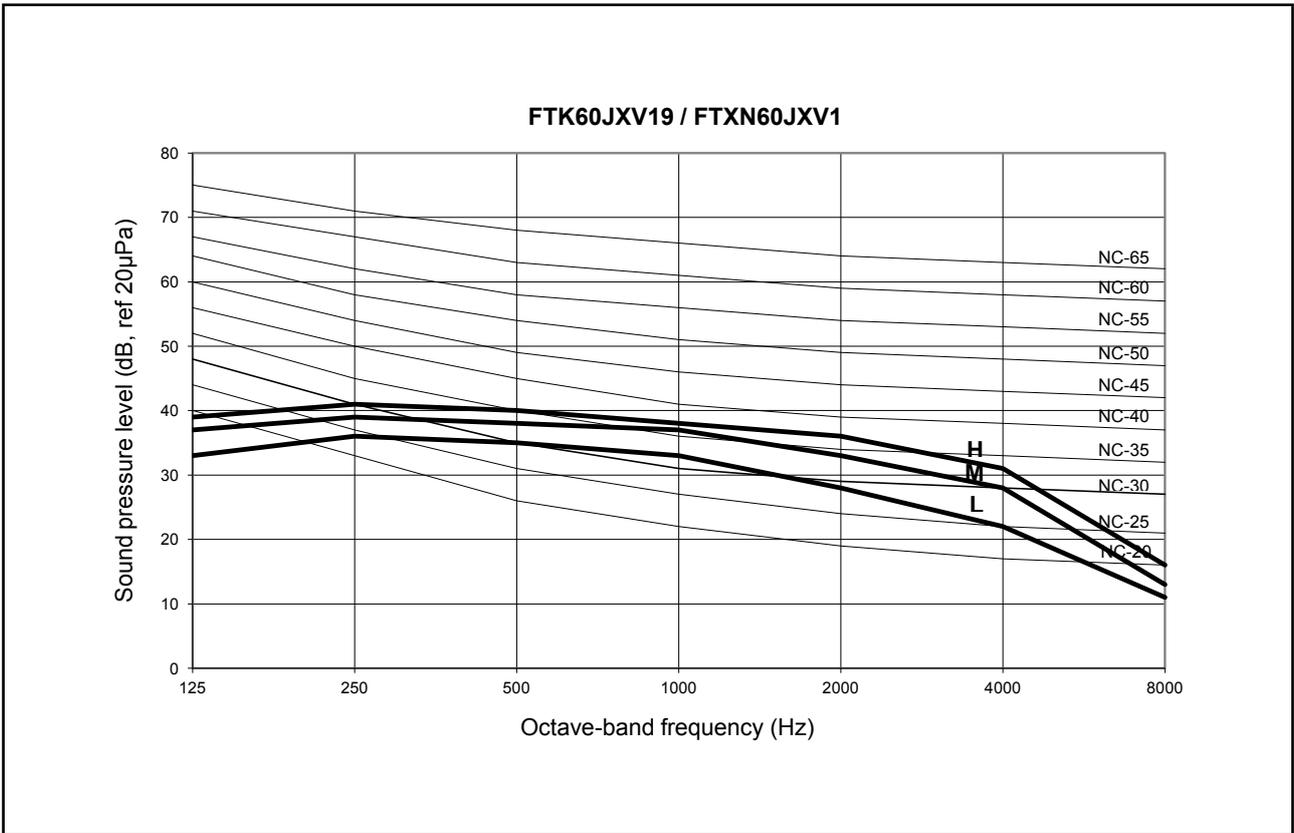
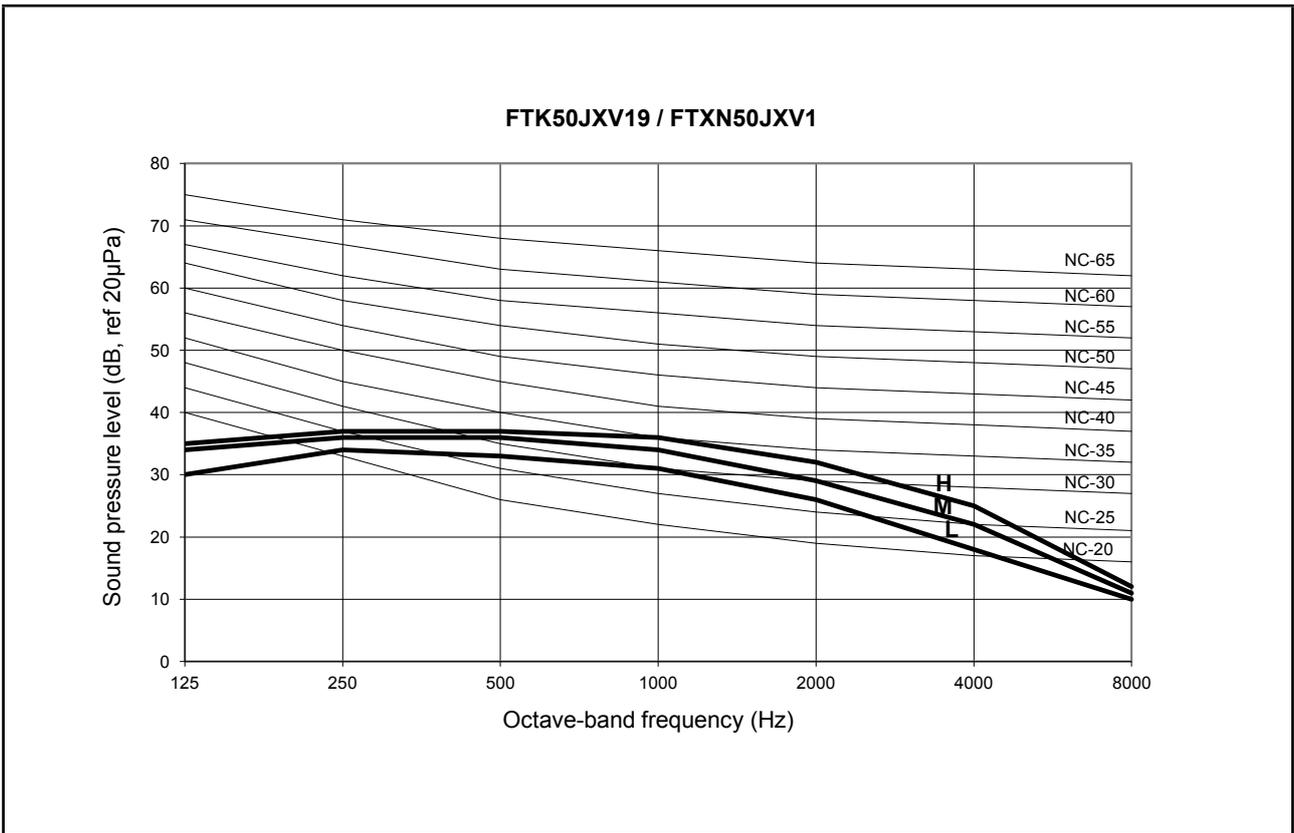
Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTK25JXV19 FTXN25JXV1	Turbo	43	39	37	37	33	26	13	41	36
	Hi	42	38	37	36	32	24	12	40	35
	Me	37	33	32	30	25	17	13	34	29
	Lo	32	29	28	24	19	14	13	29	22
	Quiet	21	22	20	15	10	7	8	21	-
FTK35JXV19 FTXN35JXV1	Turbo	41	39	38	38	36	29	15	42	37
	Hi	40	38	38	37	34	27	14	41	36
	Me	36	32	32	30	26	18	11	34	29
	Lo	33	29	29	25	21	15	11	30	23
	Quiet	24	22	21	17	11	7	7	22	-
FTK50JXV19 FTXN50JXV1	Turbo	39	41	40	40	37	29	16	44	39
	Hi	35	37	37	36	32	25	12	40	35
	Me	34	36	36	34	29	22	11	38	33
	Lo	30	34	33	31	26	18	10	35	30
	Quiet	28	32	30	28	22	14	10	32	26
FTK60JXV19 FTXN60JXV1	Turbo	42	44	43	42	40	35	20	46	41
	Hi	39	41	40	38	36	31	16	43	37
	Me	37	39	38	37	33	28	13	41	36
	Lo	33	36	35	33	28	22	11	37	32
	Quiet	28	33	32	28	23	17	9	33	26



NC Curve





Engineering & Physical Data

Engineering Data - R410A MODEL (Cooling Only)

MODEL		INDOOR UNIT		OUTDOOR UNIT		FTK25JXV19	FTK35JXV19	FTK50JXV19	FTK60JXV19	
						RK25FXV19	RK35FXV19	RK50CXV19	RK60CXV19	
NOMINAL COOLING CAPACITY (Max - Min)		Btu/h		8700 (4400 - 10200)	11600 (4400 - 13000)	19100 (5560 - 21150)	21500 (5970 - 22180)			
		W		2560 (1300 - 3000)	3410 (1300 - 3800)	5600 (1630 - 6200)	6300 (1750 - 6500)			
NOMINAL TOTAL INPUT POWER (COOLING)		W		693	1060	1650	1880			
NOMINAL RUNNING CURRENT (COOLING)		A		3.82	5.73	7.28	8.29			
EER		W/W		3.69	3.22	3.39	3.35			
REFRIGERANT CHARGE		kg		0.74	1.00	1.25	1.45			
POWER SOURCE		V/Ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50			
REFRIGERANT TYPE				R410A	R410A	R410A	R410A			
INDOOR UNIT	CONTROL	AIR DISCHARGE		AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)			
		OPERATION		WIRELESS REMOTE CONTROL	WIRELESS REMOTE CONTROL	WIRELESS REMOTE CONTROL	WIRELESS REMOTE CONTROL			
	AIR FLOW	TURBO	l/s / CFM	178 / 378	185 / 392	273 / 578	332 / 703			
		HIGH	l/s / CFM	163 / 345	169 / 358	250 / 529	309 / 654			
		MEDIUM	l/s / CFM	128 / 272	133 / 282	222 / 471	276 / 585			
		LOW	l/s / CFM	101 / 215	109 / 232	197 / 418	239 / 507			
		QUIET	l/s / CFM	78 / 165	78 / 165	177 / 374	206 / 437			
	SOUND PRESSURE LEVEL (T/H/M/L/Q)		dBA		41/40/34/29/21	42/41/34/30/22	44/40/38/35/32	46/43/41/37/33		
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH	mm	288 X800 X 212	288 X800 X 212	310 X 1065 X 228	310 X 1065 X 228		
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH	mm	344 X 874 X 274	344 X 874 X 274	386 X 1136 X 314	386 X 1136 X 314		
	UNIT WEIGHT			kg	9	9	14	14		
	CONDENSATE DRAIN SIZE			mm	19.05	19.05	19.05	19.05		
	FAN	TYPE			CROSS FLOW	CROSS FLOW	CROSS FLOW	CROSS FLOW		
		DRIVE			DIRECT	DIRECT	DIRECT	DIRECT		
	FAN MOTOR	TYPE			PERMANENT SPLIT CAPACITOR MOTOR	PERMANENT SPLIT CAPACITOR MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR		
		INDEX OF PROTECTION (IP)			IP44	IP44	IP20	IP20		
		INSULATION GRADE			CLASS E	CLASS E	CLASS E	CLASS E		
		RATED INPUT POWER		W		37	42	37	63	
RATED RUNNING CURRENT		A		0.19	0.21	0.32	0.56			
MOTOR OUTPUT		W		18	18	40	40			
POLES				4	4	8	8			
COIL	TUBE	MATERIAL		COPPER	COPPER	COPPER	COPPER			
		DIAMETER		mm	7	7	7	7		
	FIN	MATERIAL		ALUMINIUM	ALUMINIUM	ALUMINIUM	ALUMINIUM			
		FACE AREA		m ²	0.18	0.18	0.29	0.29		
ROW				2	2	2	2			
AIR QUALITY	FILTER			TITANIUM APATITE	TITANIUM APATITE	TITANIUM APATITE	TITANIUM APATITE			
CASING			COLOUR	WHITE	WHITE	WHITE	WHITE			
AIR FLOW		l/s / CFM		401 / 850	345 / 730	798 / 1796	848 / 1796			
SOUND PRESSURE LEVEL		dBA		45	46	51	51			
UNIT DIMENSION		HEIGHT X WIDTH X DEPTH	mm	550 X 658 X 289	550 X 658 X 289	753 X 855 X 328	753 X 855 X 328			
PACKING DIMENSION		HEIGHT X WIDTH X DEPTH	mm	580 X 775 X 355	580 X 775 X 355	793 X 990 X 415	793 X 990 X 415			
UNIT WEIGHT			kg	24	26	37	44			
PIPE CONNECTION	SIZE	TYPE		FLARE VALVE	FLARE VALVE	FLARE VALVE	FLARE VALVE			
		LIQUID	mm	6.35	6.35	6.35	6.35			
		GAS	mm	9.52	9.52	12.70	15.90			
PIPE LENGTH	PRE-CHARGED		m	7.5	7.5	7.5	7.5			
	MAXIMUM		m	20	20	30	30			
FAN	TYPE			PROPELLER	PROPELLER	PROPELLER	PROPELLER			
	DRIVE			DIRECT	DIRECT	DIRECT	DIRECT			
FAN MOTOR	TYPE			DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR			
	INDEX OF PROTECTION (IP)			IP24	IP24	IP23	IP23			
	INSULATION GRADE			CLASS E	CLASS E	CLASS E	CLASS E			
	RATED INPUT POWER		W		22	24	86	80		
	RATED RUNNING CURRENT		A		0.31	0.34	0.90	0.77		
	MOTOR OUTPUT		W		41	41	61	61		
	POLES				8	8	8	8		
COMPRESSOR	TYPE			HERMETIC SWING	HERMETIC SWING	HERMETIC SWING	HERMETIC SWING			
	OIL TYPE			DAPHNE FVC50K (Ether Oil)						
COIL	TUBE	MATERIAL		COPPER	COPPER	COPPER	COPPER			
		DIAMETER		mm	7	7	7	7		
	FIN	MATERIAL		ALUMINIUM	ALUMINIUM	ALUMINIUM	ALUMINIUM			
		FACE AREA		m ²	0.33	0.32	0.62	0.62		
ROW				1	2	2	2			
CASING			COLOUR	IVORY WHITE	IVORY WHITE	IVORY WHITE	IVORY WHITE			
OPERATING RANGE COOLING			°C DB	10 ~ 46	10 ~ 46	-10 ~ 46	-10 ~ 46			

- 1) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).
 2) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	
INDOOR:	27°C DB / 19°C WB
OUTDOOR:	35°C DB / 24°C WB

Engineering Data - R410A MODEL (Heatpump)

MODEL	INDOOR UNIT	FTXN25JXV1	FTXN35JXV1	FTXN50JXV1	FTXN60JXV1		
	OUTDOOR UNIT	RXN25FXV1	RXN35FXV1	RXN50CXV1	RXN60CXV1		
NOMINAL COOLING CAPACITY (Max - Min)	Btu/h	8700 (4400 - 10200)	11600 (4400 - 13000)	19100 (5560 - 21150)	21500 (5970 - 22180)		
	W	2560 (1300 - 3000)	3410 (1300 - 3800)	5600 (1630 - 6200)	6300 (1750 - 6500)		
NOMINAL HEATING CAPACITY (Max - Min)	Btu/h	9700 (4400 - 13600)	12200 (4400 - 16200)	19200 (3990 - 22520)	21800 (4100 - 27300)		
	W	2840 (1300 - 4000)	3580 (1300 - 4750)	5620 (1170 - 6600)	6400 (1200 - 8000)		
NOMINAL TOTAL INPUT POWER (COOLING) (Max - Min)	W	693	1060	1650	1880		
NOMINAL TOTAL INPUT POWER (HEATING) (Max - Min)	W	700	950	1550	1680		
NOMINAL RUNNING CURRENT (COOLING) (Max - Min)	A	3.82	5.73	7.28	8.29		
NOMINAL RUNNING CURRENT (HEATING) (Max - Min)	A	3.83	5.19	6.86	7.46		
EER	W/W	3.69	3.22	3.39	3.35		
COP	W/W	4.06	3.77	3.63	3.81		
REFRIGERANT CHARGE	kg	0.74	1.00	1.25	1.45		
POWER SOURCE	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50		
REFRIGERANT TYPE		R410A	R410A	R410A	R410A		
INDOOR UNIT	CONTROL	AIR DISCHARGE	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	AUTO LOUVER (UP & DOWN) & MANUAL GRILLE (LEFT & RIGHT)	
		OPERATION	WIRELESS REMOTE CONTROL				
	AIR FLOW	TURBO	l/s / CFM	178 / 378	185 / 392	273 / 578	332 / 703
		HIGH	l/s / CFM	163 / 345	169 / 358	250 / 529	309 / 654
		MEDIUM	l/s / CFM	128 / 272	133 / 282	222 / 471	276 / 585
		LOW	l/s / CFM	101 / 215	109 / 232	197 / 418	239 / 507
		QUIET	l/s / CFM	78 / 165	78 / 165	177 / 374	206 / 437
	SOUND PRESSURE LEVEL (T/H/M/L/Q)	dBA	41/40/34/29/21	42/41/34/30/22	44/40/38/35/32	46/43/41/37/33	
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	288 X800 X 212	288 X800 X 212	310 X 1065 X 228	310 X 1065 X 228
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	344 X 874 X 274	344 X 874 X 274	386 X 1136 X 314	386 X 1136 X 314
	UNIT WEIGHT	kg	9	9	14	14	
	CONDENSATE DRAIN SIZE	mm	19.05	19.05	19.05	19.05	
	FAN	TYPE		CROSS FLOW	CROSS FLOW	CROSS FLOW	CROSS FLOW
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		PERMANENT SPLIT CAPACITOR MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR
INDEX OF PROTECTION (IP)			IP44	IP44	IP20	IP20	
INSULATION GRADE			CLASS E	CLASS E	CLASS E	CLASS E	
RATED INPUT POWER		W	37	42	37	63	
RATED RUNNING CURRENT		A	0.19	0.21	0.32	0.56	
MOTOR OUTPUT		W	18	18	40	40	
POLES			4	4	8	8	
COIL	TUBE	MATERIAL	COPPER	COPPER	COPPER	COPPER	
		DIAMETER	mm	7	7	7	7
	FIN	MATERIAL	ALUMINIUM	ALUMINIUM	ALUMINIUM	ALUMINIUM	
		FACE AREA	m ²	0.18	0.18	0.29	0.29
ROW		2	2	2	2		
AIR QUALITY	FILTER	TYPE	TITANIUM APATITE	TITANIUM APATITE	TITANIUM APATITE	TITANIUM APATITE	
QUANTITY	pc	2	2	2	2		
CASING	COLOUR	WHITE	WHITE	WHITE	WHITE		
OUTDOOR UNIT	AIR FLOW	l/s / CFM	401 / 850	345 / 730	798 / 1796	848 / 1796	
	SOUND PRESSURE LEVEL	dBA	45	46	51	51	
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	550 X 658 X 289	550 X 658 X 289	753 X 855 X 328	753 X 855 X 328
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	580 X 775 X 355	580 X 775 X 355	793 X 990 X 415	793 X 990 X 415
	UNIT WEIGHT	kg	24	26	37	44	
	PIPE CONNECTION	SIZE	TYPE	FLARE VALVE	FLARE VALVE	FLARE VALVE	FLARE VALVE
			LIQUID	mm	6.35	6.35	6.35
		GAS	mm	9.52	9.52	12.70	15.90
	PIPE LENGTH	PRE-CHARGED	m	7.5	7.5	7.5	7.5
		MAXIMUM	m	20	20	30	30
	FAN	TYPE		PROPELLER	PROPELLER	PROPELLER	PROPELLER
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR	DIRECT CURRENT MOTOR
		INDEX OF PROTECTION (IP)		IP24	IP24	IP23	IP23
		INSULATION GRADE		CLASS E	CLASS E	CLASS E	CLASS E
RATED INPUT POWER		W	22	24	86	80	
RATED RUNNING CURRENT		A	0.31	0.34	0.90	0.77	
MOTOR OUTPUT		W	41	41	61	61	
POLES			8	8	8	8	
COMPRESSOR	TYPE		HERMETIC SWING	HERMETIC SWING	HERMETIC SWING	HERMETIC SWING	
	OIL TYPE		DAPHNE FVC50K (Ether Oil)				
	OIL AMOUNT	cm ³	375	375	650	650	
COIL	TUBE	MATERIAL	COPPER	COPPER	COPPER	COPPER	
		DIAMETER	mm	7	7	7	7
	FIN	MATERIAL	ALUMINIUM	ALUMINIUM	ALUMINIUM	ALUMINIUM	
		FACE AREA	m ²	0.33	0.32	0.62	0.62
ROW		1	2	2	2		
CASING	COLOUR	IVORY WHITE	IVORY WHITE	IVORY WHITE	IVORY WHITE		
OPERATING RANGE	COOLING	°C DB	10 ~ 46	10 ~ 46	-10 ~ 46	-10 ~ 46	
	HEATING	°C WB	-15 ~ 18	-15 ~ 18	-15 ~ 18	-15 ~ 18	

1) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).
 2) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	HEATING
INDOOR: 27°C DB / 19°C WB	INDOOR: 20°C DB
OUTDOOR: 35°C DB / 24°C WB	OUTDOOR: 8°C DB / 6°C WB

Performance Data

Calculation Steps

Interpolation method can be used to get the total cooling capacity, **TC** and sensible cooling capacity, **SC** and power input, **PI** at those temperatures which are not stated out in the table. Extrapolation method is not allowed to be used.

Example:

Model: FTK25JXV19 - RK25FXV19

Indoor Condition: 25°C DB, 17°C WB

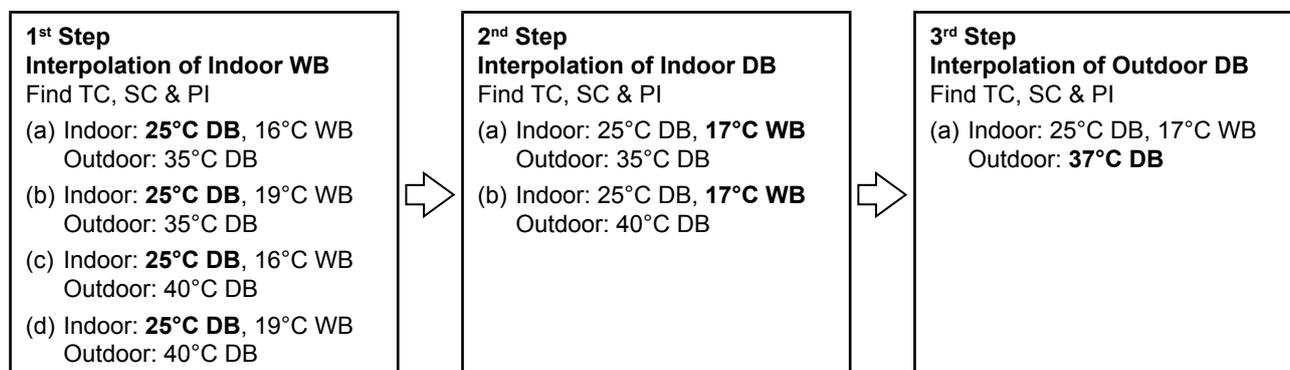
Outdoor Condition: 37°C DB

Fan Speed: High

Solution:

Based on the Performance Table,

- Refer to the Indoor DB column,
 - **25°C** is located between 24°C & 27°C for 16°C WB.
 - **25°C** is located between 24°C & 27°C for 19°C WB.
 - Thus, Interpolation needs to be applied.
- Refer to the Indoor WB column,
 - **17°C** is located between 16°C & 19°C for 25°C DB.
 - Thus, Interpolation needs to be applied.
- Refer to the Outdoor DB column,
 - **37°C** is located between 35°C & 40°C.
 - Thus, Interpolation needs to be applied.



Details of Calculation:

1st Step:

To obtain the TC, SC & PI for

(a) Indoor Condition: 25°C DB, 16°C WB

Outdoor Condition: 35°C DB

EWB	EDB	Outdoor temperature			
		35°C			
		TC	SC	PI	
		⋮	⋮	⋮	
16	24	2.33	2.32	0.68	
	25	----- x ₁	y ₁	z ₁	
	27	2.40	2.40	0.68	

By Interpolation Method

$$\Rightarrow \frac{25^\circ\text{C} - 24^\circ\text{C}}{27^\circ\text{C} - 24^\circ\text{C}} = \frac{x_1 - 2.33 \text{ kW}}{2.40 \text{ kW} - 2.33 \text{ kW}}$$

$$\Rightarrow x_1 = 2.35 \text{ kW}$$

Similarly,

$$y_1 = 2.35 \text{ kW}$$

$$z_1 = 0.68 \text{ kW}$$

(b) Indoor Condition: 25°C DB, 19°C WB
Outdoor Condition: 35°C DB

EWB	EDB	Outdoor temperature			
		35°C			
		TC	SC	PI	
		⋮	⋮	⋮	
19	24	2.55	1.82	0.69	
	25	x ₂	y ₂	z ₂	
	27	2.56	2.12	0.69	

By Interpolation Method

$$\Rightarrow \frac{25^\circ\text{C} - 24^\circ\text{C}}{27^\circ\text{C} - 24^\circ\text{C}} = \frac{y_2 - 1.82 \text{ kW}}{2.12 \text{ kW} - 1.82 \text{ kW}}$$

$$\Rightarrow y_2 = 1.92 \text{ kW}$$

Similarly,

$$x_2 = 2.55 \text{ kW}$$

$$z_2 = 0.69 \text{ kW}$$

Repeat the same process for (c) & (d) in 1st Step

(c) x₃ = 2.17 kW; y₃ = 2.17 kW; z₃ = 0.69 kW

(d) x₄ = 2.34 W; y₄ = 1.80 kW; z₄ = 0.75 kW

2nd Step:

To obtain the TC, SC & PI for

(a) Indoor Condition: 25°C DB, 17°C WB
Outdoor Condition: 35°C DB

EWB	EDB	Outdoor temperature			
		35°C			
		TC	SC	PI	
		⋮	⋮	⋮	
16	25	2.35	2.35	0.68	
17		x ₅	y ₅	z ₅	
19		2.55	1.92	0.69	

By Interpolation Method

$$\Rightarrow \frac{17^\circ\text{C} - 16^\circ\text{C}}{19^\circ\text{C} - 16^\circ\text{C}} = \frac{x_5 - 2.35 \text{ kW}}{2.55 \text{ kW} - 2.35 \text{ kW}}$$

$$\Rightarrow x_5 = 2.42 \text{ kW}$$

Similarly,

$$y_5 = 2.21 \text{ kW}$$

$$z_5 = 0.68 \text{ kW}$$

Repeat the same process for (b) in 2nd Step

(c) x₆ = 2.22 kW; y₆ = 2.05 kW; z₆ = 0.71 kW

3rd Step:

To obtain the TC, SC & PI for

(a) Indoor Condition: 25°C DB, 17°C WB
Outdoor Condition: 37°C DB

EWB	EDB	Outdoor temperature								
		35°C			37°C			40°C		
		TC	SC	PI	TC	SC	PI	TC	SC	PI
		⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
25	17	2.42	2.21	0.68	x	y	z	2.22	2.05	0.71

By Interpolation Method

$$\Rightarrow \frac{37^\circ\text{C} - 35^\circ\text{C}}{40^\circ\text{C} - 35^\circ\text{C}} = \frac{x - 2.42 \text{ kW}}{2.22 \text{ kW} - 2.42 \text{ kW}}$$

$$\Rightarrow x = 2.34 \text{ kW}$$

Similarly,

$$y = 2.15 \text{ kW}$$

$$z = 0.69 \text{ kW}$$

Performance Tables

R410A Cooling Only

Model: FTK25JXV19 - RK25FXV19

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
215	16°C	21°C	2.41	1.89	0.53	2.33	1.84	0.57	2.24	1.79	0.62	2.15	1.74	0.67	1.98	1.62	0.73	1.82	1.52	0.80
		24°C	2.42	2.26	0.53	2.33	2.21	0.57	2.24	2.16	0.62	2.15	2.10	0.67	1.98	1.97	0.73	1.83	1.83	0.80
		27°C	2.44	2.44	0.53	2.35	2.35	0.57	2.27	2.27	0.62	2.19	2.19	0.67	2.02	2.02	0.73	1.88	1.88	0.80
		30°C	2.51	2.51	0.53	2.44	2.44	0.57	2.36	2.36	0.62	2.29	2.29	0.68	2.12	2.12	0.73	1.98	1.98	0.81
	19°C	24°C	2.66	1.76	0.53	2.57	1.72	0.58	2.47	1.67	0.63	2.38	1.63	0.68	2.18	1.51	0.74	2.02	1.43	0.81
		27°C	2.66	2.02	0.53	2.57	1.97	0.58	2.48	1.93	0.63	2.38	1.88	0.68	2.19	1.76	0.74	2.02	1.67	0.81
		30°C	2.67	2.49	0.54	2.58	2.44	0.58	2.48	2.38	0.63	2.39	2.32	0.68	2.20	2.17	0.74	2.04	2.04	0.81
		33°C	2.70	2.70	0.54	2.61	2.61	0.58	2.53	2.53	0.63	2.44	2.44	0.68	2.26	2.26	0.74	2.11	2.11	0.82
	22°C	27°C	2.93	1.73	0.54	2.83	1.68	0.59	2.72	1.64	0.64	2.62	1.60	0.69	2.41	1.49	0.75	2.23	1.40	0.83
		30°C	2.93	2.10	0.54	2.83	2.06	0.59	2.72	2.01	0.64	2.62	1.96	0.69	2.41	1.84	0.75	2.23	1.74	0.83
		33°C	2.93	2.46	0.54	2.83	2.41	0.59	2.73	2.36	0.64	2.62	2.31	0.69	2.41	2.17	0.75	2.23	2.06	0.83
		36°C	2.94	2.79	0.55	2.84	2.73	0.59	2.74	2.67	0.64	2.64	2.61	0.70	2.44	2.44	0.75	2.27	2.27	0.83
272	16°C	21°C	2.51	1.97	0.53	2.42	1.92	0.57	2.33	1.87	0.62	2.23	1.82	0.67	2.05	1.69	0.73	1.89	1.59	0.81
		24°C	2.52	2.39	0.53	2.43	2.34	0.57	2.34	2.28	0.62	2.24	2.22	0.68	2.06	2.06	0.73	1.90	1.90	0.81
		27°C	2.55	2.55	0.53	2.46	2.46	0.58	2.38	2.38	0.62	2.29	2.29	0.68	2.12	2.12	0.74	1.97	1.97	0.81
		30°C	2.66	2.66	0.54	2.58	2.58	0.58	2.50	2.50	0.63	2.42	2.42	0.68	2.24	2.24	0.74	2.09	2.09	0.82
	19°C	24°C	2.77	1.86	0.54	2.67	1.82	0.58	2.57	1.77	0.63	2.46	1.72	0.69	2.26	1.60	0.74	2.09	1.51	0.82
		27°C	2.77	2.15	0.54	2.67	2.10	0.58	2.57	2.05	0.63	2.47	2.00	0.69	2.27	1.87	0.75	2.10	1.77	0.82
		30°C	2.78	2.65	0.54	2.69	2.59	0.59	2.59	2.53	0.63	2.49	2.47	0.69	2.29	2.29	0.75	2.13	2.13	0.82
		33°C	2.83	2.83	0.54	2.74	2.74	0.59	2.66	2.66	0.64	2.57	2.57	0.69	2.38	2.38	0.75	2.22	2.22	0.83
	22°C	27°C	3.04	1.83	0.55	2.93	1.78	0.60	2.82	1.74	0.65	2.71	1.69	0.70	2.49	1.58	0.76	2.30	1.49	0.84
		30°C	3.04	2.24	0.55	2.94	2.19	0.60	2.83	2.14	0.65	2.71	2.09	0.70	2.49	1.96	0.76	2.31	1.86	0.84
		33°C	3.05	2.62	0.55	2.94	2.57	0.60	2.83	2.52	0.65	2.72	2.47	0.70	2.51	2.32	0.76	2.32	2.20	0.84
		36°C	3.07	2.97	0.55	2.97	2.91	0.60	2.86	2.85	0.65	2.76	2.76	0.70	2.55	2.55	0.76	2.37	2.37	0.84
345	16°C	21°C	2.60	2.06	0.54	2.51	2.00	0.58	2.41	1.95	0.63	2.31	1.90	0.68	2.12	1.77	0.74	1.96	1.66	0.81
		24°C	2.62	2.50	0.54	2.52	2.44	0.58	2.43	2.38	0.63	2.33	2.32	0.68	2.14	2.14	0.74	1.98	1.98	0.81
		27°C	2.66	2.66	0.54	2.57	2.57	0.58	2.49	2.49	0.63	2.40	2.40	0.68	2.22	2.22	0.74	2.06	2.06	0.82
		30°C	2.79	2.79	0.54	2.71	2.71	0.59	2.63	2.63	0.64	2.54	2.54	0.69	2.35	2.35	0.75	2.20	2.20	0.83
	19°C	24°C	2.87	1.97	0.54	2.76	1.92	0.59	2.66	1.87	0.64	2.55	1.82	0.69	2.34	1.70	0.75	2.16	1.60	0.83
		27°C	2.88	2.28	0.54	2.77	2.23	0.59	2.67	2.18	0.64	2.56	2.12	0.69	2.35	1.99	0.75	2.17	1.88	0.83
		30°C	2.90	2.81	0.55	2.80	2.75	0.59	2.70	2.68	0.64	2.59	2.59	0.69	2.39	2.39	0.75	2.22	2.22	0.83
		33°C	2.96	2.96	0.55	2.87	2.87	0.59	2.79	2.79	0.65	2.69	2.69	0.70	2.50	2.50	0.76	2.33	2.33	0.84
	22°C	27°C	3.15	1.93	0.55	3.03	1.89	0.60	2.92	1.84	0.65	2.80	1.79	0.71	2.57	1.67	0.77	2.38	1.58	0.84
		30°C	3.15	2.38	0.55	3.04	2.33	0.60	2.93	2.28	0.65	2.81	2.23	0.71	2.58	2.09	0.77	2.39	1.98	0.84
		33°C	3.16	2.79	0.56	3.05	2.74	0.60	2.94	2.68	0.65	2.83	2.62	0.71	2.60	2.46	0.77	2.41	2.33	0.85
		36°C	3.19	3.15	0.56	3.09	3.09	0.60	2.98	2.98	0.65	2.88	2.88	0.71	2.66	2.66	0.77	2.48	2.48	0.85

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Model: FTK35JXV19 - RK35FXV19

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
232	16°C	21°C	3.21	2.27	0.81	3.10	2.21	0.87	2.99	2.15	0.94	2.87	2.09	1.02	2.63	1.95	1.11	2.43	1.83	1.22
		24°C	3.22	2.72	0.81	3.10	2.66	0.87	2.99	2.60	0.94	2.87	2.53	1.02	2.64	2.37	1.11	2.44	2.23	1.22
		27°C	3.24	3.09	0.81	3.14	3.02	0.87	3.03	2.95	0.95	2.91	2.87	1.03	2.69	2.67	1.11	2.50	2.50	1.23
		30°C	3.34	3.34	0.81	3.25	3.25	0.88	3.15	3.15	0.95	3.05	3.05	1.03	2.83	2.83	1.12	2.64	2.64	1.24
	19°C	24°C	3.55	2.12	0.82	3.42	2.07	0.89	3.30	2.01	0.96	3.16	1.96	1.04	2.91	1.82	1.13	2.69	1.72	1.24
		27°C	3.55	2.43	0.82	3.42	2.37	0.89	3.30	2.32	0.96	3.17	2.26	1.04	2.91	2.12	1.13	2.69	2.01	1.24
		30°C	3.55	3.00	0.82	3.43	2.93	0.89	3.31	2.87	0.96	3.18	2.80	1.04	2.93	2.62	1.13	2.72	2.48	1.25
		33°C	3.60	3.60	0.82	3.48	3.48	0.89	3.37	3.37	0.96	3.25	3.25	1.05	3.01	3.01	1.14	2.81	2.81	1.25
	22°C	27°C	3.90	2.08	0.83	3.77	2.03	0.90	3.63	1.98	0.98	3.49	1.92	1.06	3.21	1.79	1.15	2.97	1.69	1.27
		30°C	3.90	2.53	0.83	3.77	2.48	0.90	3.63	2.42	0.98	3.49	2.36	1.06	3.21	2.21	1.15	2.97	2.10	1.27
		33°C	3.90	2.96	0.83	3.77	2.90	0.90	3.63	2.84	0.98	3.49	2.78	1.06	3.21	2.61	1.15	2.98	2.48	1.27
		36°C	3.92	3.35	0.83	3.79	3.29	0.90	3.66	3.22	0.98	3.52	3.15	1.06	3.25	2.95	1.15	3.02	2.80	1.27
282	16°C	21°C	3.34	2.37	0.81	3.22	2.31	0.88	3.10	2.25	0.95	2.98	2.19	1.03	2.73	2.04	1.12	2.52	1.92	1.23
		24°C	3.35	2.88	0.81	3.23	2.81	0.88	3.11	2.74	0.95	2.99	2.68	1.03	2.74	2.50	1.12	2.54	2.36	1.23
		27°C	3.40	3.27	0.81	3.28	3.19	0.88	3.17	3.11	0.96	3.05	3.02	1.04	2.82	2.80	1.13	2.63	2.62	1.24
		30°C	3.54	3.54	0.82	3.43	3.43	0.89	3.33	3.33	0.96	3.22	3.22	1.05	2.99	2.99	1.14	2.79	2.79	1.26
	19°C	24°C	3.69	2.24	0.83	3.55	2.19	0.89	3.42	2.13	0.97	3.28	2.07	1.05	3.01	1.93	1.14	2.79	1.82	1.26
		27°C	3.69	2.58	0.83	3.56	2.53	0.89	3.43	2.47	0.97	3.29	2.41	1.05	3.02	2.25	1.14	2.79	2.13	1.26
		30°C	3.71	3.19	0.83	3.58	3.12	0.90	3.45	3.05	0.97	3.32	2.97	1.05	3.06	2.78	1.14	2.84	2.63	1.26
		33°C	3.77	3.77	0.83	3.66	3.66	0.90	3.54	3.54	0.98	3.42	3.42	1.06	3.17	3.17	1.15	2.96	2.96	1.27
	22°C	27°C	4.05	2.20	0.84	3.91	2.15	0.91	3.76	2.09	0.99	3.61	2.03	1.07	3.32	1.90	1.16	3.07	1.79	1.28
		30°C	4.05	2.70	0.84	3.91	2.64	0.91	3.77	2.58	0.99	3.62	2.52	1.07	3.32	2.36	1.16	3.07	2.24	1.28
		33°C	4.06	3.16	0.84	3.92	3.10	0.91	3.78	3.04	0.99	3.63	2.97	1.07	3.34	2.79	1.16	3.09	2.65	1.28
		36°C	4.09	3.57	0.84	3.95	3.50	0.91	3.82	3.43	0.99	3.68	3.35	1.08	3.39	3.14	1.17	3.16	2.96	1.29
358	16°C	21°C	3.47	2.48	0.82	3.34	2.41	0.89	3.21	2.35	0.96	3.08	2.28	1.04	2.83	2.13	1.13	2.60	2.00	1.24
		24°C	3.49	3.01	0.82	3.36	2.94	0.89	3.23	2.86	0.96	3.10	2.79	1.04	2.85	2.60	1.13	2.63	2.45	1.25
		27°C	3.54	3.45	0.82	3.43	3.36	0.89	3.31	3.26	0.96	3.19	3.16	1.05	2.95	2.93	1.14	2.75	2.74	1.25
		30°C	3.72	3.72	0.83	3.61	3.61	0.90	3.50	3.50	0.98	3.39	3.39	1.06	3.13	3.13	1.15	2.93	2.93	1.27
	19°C	24°C	3.82	2.37	0.83	3.68	2.32	0.90	3.54	2.26	0.98	3.40	2.20	1.06	3.12	2.05	1.15	2.88	1.93	1.27
		27°C	3.83	2.75	0.83	3.69	2.68	0.90	3.55	2.62	0.98	3.41	2.56	1.06	3.13	2.39	1.15	2.89	2.26	1.27
		30°C	3.86	3.38	0.83	3.72	3.31	0.90	3.59	3.23	0.98	3.45	3.15	1.06	3.18	2.94	1.15	2.95	2.77	1.27
		33°C	3.94	3.94	0.84	3.83	3.83	0.91	3.71	3.71	0.99	3.59	3.59	1.07	3.33	3.33	1.16	3.11	3.11	1.28
	22°C	27°C	4.19	2.32	0.85	4.04	2.27	0.92	3.89	2.21	1.00	3.73	2.16	1.08	3.43	2.01	1.17	3.17	1.90	1.29
		30°C	4.20	2.86	0.85	4.05	2.81	0.92	3.90	2.75	1.00	3.74	2.69	1.08	3.44	2.52	1.17	3.18	2.38	1.29
		33°C	4.21	3.36	0.85	4.07	3.30	0.92	3.92	3.23	1.00	3.76	3.16	1.08	3.46	2.96	1.17	3.21	2.81	1.29
		36°C	4.25	3.79	0.85	4.12	3.72	0.92	3.98	3.64	1.00	3.83	3.55	1.09	3.54	3.31	1.18	3.30	3.12	1.30

Remark:

- AFR: Air flow rate (CFM)
- EWB: Entering Wet Bulb Temp. (°C)
- EDB: Entering Dry Bulb Temp. (°C)
- TC: Total Cooling Capacity (kW)
- SC: Sensible Cooling Capacity (kW)
- PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Model: FTK50JXV19 - RK50CXV19

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
418	16°C	21°C	5.28	3.54	1.25	5.09	3.44	1.36	4.90	3.35	1.47	4.71	3.26	1.59	4.32	3.03	1.73	3.99	2.85	1.90
		24°C	5.29	4.24	1.25	5.10	4.14	1.36	4.91	4.04	1.47	4.71	3.94	1.59	4.33	3.68	1.73	4.01	3.47	1.91
		27°C	5.33	4.80	1.26	5.15	4.69	1.36	4.97	4.58	1.47	4.78	4.47	1.60	4.41	4.16	1.73	4.11	3.90	1.91
		30°C	5.49	5.49	1.26	5.34	5.34	1.37	5.17	5.17	1.48	5.01	5.01	1.61	4.64	4.64	1.75	4.34	4.34	1.93
	19°C	24°C	5.82	3.30	1.27	5.62	3.22	1.38	5.41	3.13	1.49	5.20	3.04	1.62	4.78	2.84	1.76	4.42	2.67	1.94
		27°C	5.83	3.78	1.27	5.62	3.69	1.38	5.42	3.61	1.49	5.20	3.52	1.62	4.78	3.29	1.76	4.42	3.12	1.94
		30°C	5.84	4.66	1.27	5.64	4.56	1.38	5.44	4.46	1.50	5.23	4.35	1.62	4.82	4.07	1.76	4.47	3.85	1.94
		33°C	5.91	5.91	1.28	5.71	5.71	1.38	5.53	5.53	1.50	5.34	5.34	1.63	4.94	4.94	1.77	4.62	4.62	1.95
	22°C	27°C	6.41	3.23	1.30	6.19	3.15	1.40	5.96	3.08	1.52	5.73	2.99	1.65	5.27	2.79	1.79	4.88	2.63	1.97
		30°C	6.41	3.94	1.30	6.19	3.86	1.40	5.96	3.77	1.52	5.73	3.68	1.65	5.27	3.44	1.79	4.88	3.27	1.97
		33°C	6.41	4.60	1.30	6.19	4.51	1.40	5.97	4.42	1.52	5.73	4.33	1.65	5.28	4.07	1.79	4.89	3.86	1.98
		36°C	6.43	5.22	1.30	6.22	5.11	1.41	6.01	5.01	1.53	5.79	4.90	1.66	5.34	4.59	1.80	4.96	4.35	1.98
471	16°C	21°C	5.49	3.69	1.26	5.30	3.59	1.37	5.09	3.50	1.48	4.89	3.40	1.61	4.48	3.17	1.74	4.14	2.98	1.92
		24°C	5.51	4.48	1.27	5.31	4.37	1.37	5.11	4.27	1.48	4.91	4.16	1.61	4.51	3.88	1.74	4.17	3.66	1.92
		27°C	5.58	5.09	1.27	5.39	4.97	1.37	5.20	4.84	1.49	5.02	4.69	1.61	4.63	4.36	1.75	4.31	4.08	1.93
		30°C	5.81	5.81	1.28	5.64	5.64	1.38	5.47	5.47	1.50	5.29	5.29	1.63	4.90	4.90	1.77	4.58	4.58	1.95
	19°C	24°C	6.05	3.49	1.29	5.84	3.40	1.39	5.62	3.31	1.51	5.39	3.22	1.63	4.95	3.00	1.77	4.57	2.83	1.95
		27°C	6.06	4.02	1.29	5.85	3.93	1.39	5.63	3.84	1.51	5.40	3.75	1.64	4.96	3.51	1.77	4.59	3.32	1.96
		30°C	6.09	4.96	1.29	5.88	4.85	1.39	5.67	4.74	1.51	5.45	4.63	1.64	5.02	4.33	1.78	4.66	4.09	1.96
		33°C	6.19	6.19	1.29	6.01	6.01	1.40	5.81	5.81	1.52	5.62	5.62	1.65	5.21	5.21	1.79	4.87	4.87	1.98
	22°C	27°C	6.65	3.42	1.31	6.42	3.34	1.42	6.18	3.25	1.54	5.93	3.16	1.67	5.45	2.95	1.81	5.04	2.78	1.99
		30°C	6.66	4.19	1.31	6.42	4.11	1.42	6.18	4.01	1.54	5.94	3.92	1.67	5.46	3.67	1.81	5.05	3.48	1.99
		33°C	6.67	4.91	1.31	6.44	4.82	1.42	6.20	4.72	1.54	5.96	4.62	1.67	5.48	4.33	1.81	5.08	4.11	2.00
		36°C	6.71	5.55	1.31	6.49	5.45	1.42	6.27	5.33	1.54	6.04	5.21	1.67	5.57	4.88	1.82	5.20	4.60	2.00
529	16°C	21°C	5.70	3.85	1.28	5.49	3.75	1.38	5.28	3.65	1.49	5.06	3.55	1.62	4.64	3.31	1.76	4.28	3.11	1.94
		24°C	5.73	4.68	1.28	5.52	4.57	1.38	5.31	4.45	1.50	5.10	4.34	1.62	4.68	4.05	1.76	4.32	3.82	1.94
		27°C	5.82	5.36	1.28	5.63	5.22	1.39	5.44	5.07	1.50	5.24	4.92	1.63	4.85	4.56	1.77	4.52	4.25	1.95
		30°C	6.11	6.11	1.29	5.93	5.93	1.40	5.75	5.75	1.52	5.56	5.56	1.65	5.15	5.15	1.79	4.81	4.81	1.98
	19°C	24°C	6.27	3.69	1.30	6.04	3.60	1.40	5.81	3.51	1.52	5.58	3.41	1.65	5.12	3.18	1.79	4.73	3.00	1.97
		27°C	6.29	4.27	1.30	6.06	4.17	1.40	5.84	4.08	1.52	5.60	3.98	1.65	5.14	3.72	1.79	4.75	3.52	1.97
		30°C	6.34	5.26	1.30	6.12	5.14	1.41	5.90	5.02	1.53	5.67	4.90	1.65	5.22	4.57	1.79	4.85	4.31	1.98
		33°C	6.48	6.48	1.31	6.29	6.29	1.42	6.10	6.10	1.54	5.89	5.89	1.67	5.46	5.46	1.81	5.11	5.11	2.00
	22°C	27°C	6.88	3.61	1.32	6.64	3.53	1.43	6.39	3.44	1.55	6.13	3.35	1.68	5.63	3.13	1.82	5.20	2.95	2.01
		30°C	6.90	4.45	1.32	6.65	4.37	1.43	6.40	4.27	1.55	6.14	4.18	1.68	5.64	3.91	1.82	5.22	3.71	2.01
		33°C	6.92	5.22	1.32	6.68	5.13	1.43	6.43	5.02	1.55	6.18	4.91	1.69	5.69	4.60	1.83	5.27	4.37	2.01
		36°C	6.98	5.89	1.33	6.76	5.78	1.44	6.53	5.66	1.56	6.29	5.52	1.69	5.81	5.15	1.84	5.42	4.84	2.03

Remark:

AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SC: Sensible Cooling Capacity (kW)
PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

Model: FTK60JXV19 - RK60CXV19

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
507	16°C	21°C	5.94	4.09	1.43	5.73	3.98	1.54	5.52	3.88	1.67	5.30	3.77	1.81	4.86	3.50	1.97	4.49	3.30	2.17
		24°C	5.95	4.90	1.43	5.74	4.79	1.55	5.52	4.68	1.67	5.30	4.56	1.81	4.87	4.26	1.97	4.51	4.02	2.17
		27°C	6.00	5.55	1.43	5.80	5.43	1.55	5.59	5.30	1.68	5.38	5.16	1.82	4.97	4.81	1.97	4.62	4.51	2.18
		30°C	6.18	6.18	1.44	6.00	6.00	1.56	5.82	5.82	1.69	5.63	5.63	1.83	5.22	5.22	1.99	4.89	4.89	2.20
	19°C	24°C	6.55	3.82	1.45	6.32	3.72	1.57	6.09	3.62	1.70	5.85	3.52	1.85	5.38	3.28	2.00	4.97	3.09	2.21
		27°C	6.56	4.37	1.45	6.33	4.27	1.57	6.09	4.17	1.70	5.85	4.07	1.85	5.38	3.81	2.00	4.98	3.61	2.21
		30°C	6.57	5.39	1.45	6.34	5.28	1.57	6.12	5.16	1.70	5.88	5.04	1.85	5.42	4.71	2.01	5.03	4.46	2.21
		33°C	6.64	6.64	1.46	6.43	6.43	1.58	6.22	6.22	1.71	6.01	6.01	1.86	5.56	5.56	2.02	5.20	5.20	2.22
	22°C	27°C	7.21	3.74	1.48	6.96	3.65	1.60	6.71	3.56	1.74	6.44	3.46	1.88	5.93	3.22	2.04	5.48	3.04	2.25
		30°C	7.21	4.56	1.48	6.96	4.46	1.60	6.71	4.36	1.74	6.44	4.25	1.88	5.93	3.98	2.04	5.49	3.78	2.25
		33°C	7.21	5.32	1.48	6.97	5.22	1.60	6.71	5.12	1.74	6.45	5.01	1.88	5.93	4.70	2.04	5.50	4.47	2.25
		36°C	7.24	6.03	1.48	7.00	5.91	1.60	6.76	5.79	1.74	6.51	5.66	1.89	6.00	5.31	2.05	5.58	5.04	2.26
585	16°C	21°C	6.18	4.27	1.44	5.96	4.16	1.56	5.73	4.05	1.69	5.50	3.93	1.83	5.04	3.66	1.98	4.65	3.45	2.19
		24°C	6.20	5.18	1.44	5.98	5.06	1.56	5.75	4.94	1.69	5.52	4.81	1.83	5.07	4.49	1.99	4.69	4.24	2.19
		27°C	6.27	5.88	1.45	6.06	5.74	1.56	5.85	5.60	1.69	5.64	5.43	1.84	5.21	5.04	2.00	4.85	4.72	2.20
		30°C	6.54	6.54	1.46	6.35	6.35	1.58	6.15	6.15	1.71	5.95	5.95	1.86	5.52	5.52	2.02	5.16	5.16	2.23
	19°C	24°C	6.81	4.04	1.46	6.57	3.93	1.59	6.32	3.83	1.72	6.07	3.73	1.86	5.57	3.47	2.02	5.15	3.27	2.23
		27°C	6.82	4.65	1.47	6.58	4.55	1.59	6.33	4.44	1.72	6.08	4.34	1.86	5.58	4.06	2.02	5.16	3.84	2.23
		30°C	6.85	5.74	1.47	6.62	5.61	1.59	6.38	5.49	1.72	6.13	5.35	1.87	5.65	5.00	2.03	5.24	4.73	2.23
		33°C	6.97	6.97	1.47	6.76	6.76	1.59	6.54	6.54	1.73	6.32	6.32	1.88	5.86	5.86	2.04	5.48	5.48	2.25
	22°C	27°C	7.48	3.95	1.49	7.22	3.86	1.62	6.95	3.76	1.75	6.67	3.66	1.90	6.13	3.41	2.06	5.67	3.22	2.27
		30°C	7.49	4.85	1.49	7.23	4.75	1.62	6.96	4.64	1.75	6.68	4.53	1.90	6.14	4.25	2.06	5.68	4.03	2.27
		33°C	7.50	5.68	1.49	7.24	5.57	1.62	6.98	5.46	1.75	6.70	5.34	1.90	6.17	5.01	2.06	5.72	4.76	2.27
		36°C	7.55	6.42	1.50	7.31	6.30	1.62	7.05	6.17	1.76	6.80	6.03	1.91	6.27	5.64	2.07	5.85	5.32	2.28
654	16°C	21°C	6.41	4.45	1.45	6.17	4.34	1.57	5.94	4.22	1.70	5.69	4.11	1.84	5.22	3.82	2.00	4.81	3.60	2.20
		24°C	6.44	5.41	1.45	6.21	5.28	1.57	5.98	5.15	1.70	5.73	5.02	1.85	5.27	4.68	2.00	4.86	4.41	2.21
		27°C	6.55	6.20	1.46	6.33	6.04	1.58	6.12	5.87	1.71	5.90	5.69	1.86	5.45	5.27	2.02	5.08	4.92	2.23
		30°C	6.87	6.87	1.47	6.67	6.67	1.59	6.47	6.47	1.73	6.26	6.26	1.88	5.79	5.79	2.04	5.41	5.41	2.25
	19°C	24°C	7.05	4.27	1.48	6.80	4.16	1.60	6.54	4.06	1.73	6.27	3.95	1.88	5.76	3.68	2.04	5.32	3.47	2.24
		27°C	7.08	4.94	1.48	6.82	4.83	1.60	6.56	4.71	1.73	6.30	4.60	1.88	5.78	4.30	2.04	5.35	4.07	2.25
		30°C	7.13	6.08	1.48	6.88	5.95	1.60	6.63	5.81	1.74	6.38	5.67	1.88	5.87	5.29	2.04	5.45	4.99	2.25
		33°C	7.29	7.29	1.49	7.08	7.08	1.61	6.86	6.86	1.75	6.63	6.63	1.90	6.14	6.14	2.06	5.75	5.75	2.28
	22°C	27°C	7.74	4.18	1.50	7.47	4.09	1.63	7.19	3.98	1.77	6.90	3.88	1.92	6.33	3.62	2.08	5.85	3.42	2.29
		30°C	7.76	5.15	1.51	7.48	5.05	1.63	7.20	4.94	1.77	6.91	4.83	1.92	6.35	4.52	2.08	5.87	4.29	2.29
		33°C	7.78	6.04	1.51	7.51	5.93	1.63	7.24	5.81	1.77	6.95	5.68	1.92	6.40	5.32	2.08	5.93	5.05	2.29
		36°C	7.85	6.81	1.51	7.61	6.69	1.64	7.34	6.54	1.78	7.08	6.38	1.93	6.54	5.95	2.09	6.10	5.60	2.31

Remark:

- AFR: Air flow rate (CFM)
- EWB: Entering Wet Bulb Temp. (°C)
- EDB: Entering Dry Bulb Temp. (°C)
- TC: Total Cooling Capacity (kW)
- SC: Sensible Cooling Capacity (kW)
- PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

R410A Heatpump

Model: FTXN25JXV1 - RXN25FXV1

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
215	16°C	21°C	2.41	1.89	0.53	2.33	1.84	0.57	2.24	1.79	0.62	2.15	1.74	0.67	1.98	1.62	0.73	1.82	1.52	0.80
		24°C	2.42	2.26	0.53	2.33	2.21	0.57	2.24	2.16	0.62	2.15	2.10	0.67	1.98	1.97	0.73	1.83	1.83	0.80
		27°C	2.44	2.44	0.53	2.35	2.35	0.57	2.27	2.27	0.62	2.19	2.19	0.67	2.02	2.02	0.73	1.88	1.88	0.80
		30°C	2.51	2.51	0.53	2.44	2.44	0.57	2.36	2.36	0.62	2.29	2.29	0.68	2.12	2.12	0.73	1.98	1.98	0.81
	19°C	24°C	2.66	1.76	0.53	2.57	1.72	0.58	2.47	1.67	0.63	2.38	1.63	0.68	2.18	1.51	0.74	2.02	1.43	0.81
		27°C	2.66	2.02	0.53	2.57	1.97	0.58	2.48	1.93	0.63	2.38	1.88	0.68	2.19	1.76	0.74	2.02	1.67	0.81
		30°C	2.67	2.49	0.54	2.58	2.44	0.58	2.48	2.38	0.63	2.39	2.32	0.68	2.20	2.17	0.74	2.04	2.04	0.81
		33°C	2.70	2.70	0.54	2.61	2.61	0.58	2.53	2.53	0.63	2.44	2.44	0.68	2.26	2.26	0.74	2.11	2.11	0.82
	22°C	27°C	2.93	1.73	0.54	2.83	1.68	0.59	2.72	1.64	0.64	2.62	1.60	0.69	2.41	1.49	0.75	2.23	1.40	0.83
		30°C	2.93	2.10	0.54	2.83	2.06	0.59	2.72	2.01	0.64	2.62	1.96	0.69	2.41	1.84	0.75	2.23	1.74	0.83
		33°C	2.93	2.46	0.54	2.83	2.41	0.59	2.73	2.36	0.64	2.62	2.31	0.69	2.41	2.17	0.75	2.23	2.06	0.83
		36°C	2.94	2.79	0.55	2.84	2.73	0.59	2.74	2.67	0.64	2.64	2.61	0.70	2.44	2.44	0.75	2.27	2.27	0.83
272	16°C	21°C	2.51	1.97	0.53	2.42	1.92	0.57	2.33	1.87	0.62	2.23	1.82	0.67	2.05	1.69	0.73	1.89	1.59	0.81
		24°C	2.52	2.39	0.53	2.43	2.34	0.57	2.34	2.28	0.62	2.24	2.22	0.68	2.06	2.06	0.73	1.90	1.90	0.81
		27°C	2.55	2.55	0.53	2.46	2.46	0.58	2.38	2.38	0.62	2.29	2.29	0.68	2.12	2.12	0.74	1.97	1.97	0.81
		30°C	2.66	2.66	0.54	2.58	2.58	0.58	2.50	2.50	0.63	2.42	2.42	0.68	2.24	2.24	0.74	2.09	2.09	0.82
	19°C	24°C	2.77	1.86	0.54	2.67	1.82	0.58	2.57	1.77	0.63	2.46	1.72	0.69	2.26	1.60	0.74	2.09	1.51	0.82
		27°C	2.77	2.15	0.54	2.67	2.10	0.58	2.57	2.05	0.63	2.47	2.00	0.69	2.27	1.87	0.75	2.10	1.77	0.82
		30°C	2.78	2.65	0.54	2.69	2.59	0.59	2.59	2.53	0.63	2.49	2.47	0.69	2.29	2.29	0.75	2.13	2.13	0.82
		33°C	2.83	2.83	0.54	2.74	2.74	0.59	2.66	2.66	0.64	2.57	2.57	0.69	2.38	2.38	0.75	2.22	2.22	0.83
	22°C	27°C	3.04	1.83	0.55	2.93	1.78	0.60	2.82	1.74	0.65	2.71	1.69	0.70	2.49	1.58	0.76	2.30	1.49	0.84
		30°C	3.04	2.24	0.55	2.94	2.19	0.60	2.83	2.14	0.65	2.71	2.09	0.70	2.49	1.96	0.76	2.31	1.86	0.84
		33°C	3.05	2.62	0.55	2.94	2.57	0.60	2.83	2.52	0.65	2.72	2.47	0.70	2.51	2.32	0.76	2.32	2.20	0.84
		36°C	3.07	2.97	0.55	2.97	2.91	0.60	2.86	2.85	0.65	2.76	2.76	0.70	2.55	2.55	0.76	2.37	2.37	0.84
345	16°C	21°C	2.60	2.06	0.54	2.51	2.00	0.58	2.41	1.95	0.63	2.31	1.90	0.68	2.12	1.77	0.74	1.96	1.66	0.81
		24°C	2.62	2.50	0.54	2.52	2.44	0.58	2.43	2.38	0.63	2.33	2.32	0.68	2.14	2.14	0.74	1.98	1.98	0.81
		27°C	2.66	2.66	0.54	2.57	2.57	0.58	2.49	2.49	0.63	2.40	2.40	0.68	2.22	2.22	0.74	2.06	2.06	0.82
		30°C	2.79	2.79	0.54	2.71	2.71	0.59	2.63	2.63	0.64	2.54	2.54	0.69	2.35	2.35	0.75	2.20	2.20	0.83
	19°C	24°C	2.87	1.97	0.54	2.76	1.92	0.59	2.66	1.87	0.64	2.55	1.82	0.69	2.34	1.70	0.75	2.16	1.60	0.83
		27°C	2.88	2.28	0.54	2.77	2.23	0.59	2.67	2.18	0.64	2.56	2.12	0.69	2.35	1.99	0.75	2.17	1.88	0.83
		30°C	2.90	2.81	0.55	2.80	2.75	0.59	2.70	2.68	0.64	2.59	2.59	0.69	2.39	2.39	0.75	2.22	2.22	0.83
		33°C	2.96	2.96	0.55	2.87	2.87	0.59	2.79	2.79	0.65	2.69	2.69	0.70	2.50	2.50	0.76	2.33	2.33	0.84
	22°C	27°C	3.15	1.93	0.55	3.03	1.89	0.60	2.92	1.84	0.65	2.80	1.79	0.71	2.57	1.67	0.77	2.38	1.58	0.84
		30°C	3.15	2.38	0.55	3.04	2.33	0.60	2.93	2.28	0.65	2.81	2.23	0.71	2.58	2.09	0.77	2.39	1.98	0.84
		33°C	3.16	2.79	0.56	3.05	2.74	0.60	2.94	2.68	0.65	2.83	2.62	0.71	2.60	2.46	0.77	2.41	2.33	0.85
		36°C	3.19	3.15	0.56	3.09	3.09	0.60	2.98	2.98	0.65	2.88	2.88	0.71	2.66	2.66	0.77	2.48	2.48	0.85

Remark:

AFR: Air flow rate (CFM)
 EWB: Entering Wet Bulb Temp. (°C)
 EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling Capacity (kW)
 SC: Sensible Cooling Capacity (kW)
 PI: Power Input (kW)

Notes:

- Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
- shows nominal capacities.
- Direct interpolation is permissible. Do not extrapolate.
- Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Heating Mode

Indoor DB°C	Outdoor WB°C											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	1.42	0.50	1.77	0.54	2.11	0.57	2.46	0.61	2.87	0.65	3.14	0.68
18	1.41	0.53	1.75	0.56	2.10	0.60	2.44	0.63	2.85	0.68	3.13	0.70
20	1.40	0.55	1.74	0.59	2.09	0.62	2.43	0.66	2.84	0.70	3.11	0.73
21	1.39	0.56	1.73	0.60	2.08	0.63	2.42	0.67	2.84	0.71	3.11	0.74
22	1.38	0.58	1.73	0.61	2.07	0.65	2.41	0.68	2.83	0.72	3.10	0.75
24	1.37	0.61	1.71	0.64	2.06	0.68	2.40	0.71	2.81	0.75	3.08	0.78

Remark:

EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling / Heating Capacity (kW)
 PI: Power Input (kW)

Notes:

- Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
- shows nominal capacities.
- Direct interpolation is permissible. Do not extrapolate.
- Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Model: FTXN35JXV1 - RXN35FXV1

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
232	16°C	21°C	3.21	2.27	0.81	3.10	2.21	0.87	2.99	2.15	0.94	2.87	2.09	1.02	2.63	1.95	1.11	2.43	1.83	1.22
		24°C	3.22	2.72	0.81	3.10	2.66	0.87	2.99	2.60	0.94	2.87	2.53	1.02	2.64	2.37	1.11	2.44	2.23	1.22
		27°C	3.24	3.09	0.81	3.14	3.02	0.87	3.03	2.95	0.95	2.91	2.87	1.03	2.69	2.67	1.11	2.50	2.50	1.23
		30°C	3.34	3.34	0.81	3.25	3.25	0.88	3.15	3.15	0.95	3.05	3.05	1.03	2.83	2.83	1.12	2.64	2.64	1.24
	19°C	24°C	3.55	2.12	0.82	3.42	2.07	0.89	3.30	2.01	0.96	3.16	1.96	1.04	2.91	1.82	1.13	2.69	1.72	1.24
		27°C	3.55	2.43	0.82	3.42	2.37	0.89	3.30	2.32	0.96	3.17	2.26	1.04	2.91	2.12	1.13	2.69	2.01	1.24
		30°C	3.55	3.00	0.82	3.43	2.93	0.89	3.31	2.87	0.96	3.18	2.80	1.04	2.93	2.62	1.13	2.72	2.48	1.25
		33°C	3.60	3.60	0.82	3.48	3.48	0.89	3.37	3.37	0.96	3.25	3.25	1.05	3.01	3.01	1.14	2.81	2.81	1.25
	22°C	27°C	3.90	2.08	0.83	3.77	2.03	0.90	3.63	1.98	0.98	3.49	1.92	1.06	3.21	1.79	1.15	2.97	1.69	1.27
		30°C	3.90	2.53	0.83	3.77	2.48	0.90	3.63	2.42	0.98	3.49	2.36	1.06	3.21	2.21	1.15	2.97	2.10	1.27
		33°C	3.90	2.96	0.83	3.77	2.90	0.90	3.63	2.84	0.98	3.49	2.78	1.06	3.21	2.61	1.15	2.98	2.48	1.27
		36°C	3.92	3.35	0.83	3.79	3.29	0.90	3.66	3.22	0.98	3.52	3.15	1.06	3.25	2.95	1.15	3.02	2.80	1.27
282	16°C	21°C	3.34	2.37	0.81	3.22	2.31	0.88	3.10	2.25	0.95	2.98	2.19	1.03	2.73	2.04	1.12	2.52	1.92	1.23
		24°C	3.35	2.88	0.81	3.23	2.81	0.88	3.11	2.74	0.95	2.99	2.68	1.03	2.74	2.50	1.12	2.54	2.36	1.23
		27°C	3.40	3.27	0.81	3.28	3.19	0.88	3.17	3.11	0.96	3.05	3.02	1.04	2.82	2.80	1.13	2.63	2.62	1.24
		30°C	3.54	3.54	0.82	3.43	3.43	0.89	3.33	3.33	0.96	3.22	3.22	1.05	2.99	2.99	1.14	2.79	2.79	1.26
	19°C	24°C	3.69	2.24	0.83	3.55	2.19	0.89	3.42	2.13	0.97	3.28	2.07	1.05	3.01	1.93	1.14	2.79	1.82	1.26
		27°C	3.69	2.58	0.83	3.56	2.53	0.89	3.43	2.47	0.97	3.29	2.41	1.05	3.02	2.25	1.14	2.79	2.13	1.26
		30°C	3.71	3.19	0.83	3.58	3.12	0.90	3.45	3.05	0.97	3.32	2.97	1.05	3.06	2.78	1.14	2.84	2.63	1.26
		33°C	3.77	3.77	0.83	3.66	3.66	0.90	3.54	3.54	0.98	3.42	3.42	1.06	3.17	3.17	1.15	2.96	2.96	1.27
	22°C	27°C	4.05	2.20	0.84	3.91	2.15	0.91	3.76	2.09	0.99	3.61	2.03	1.07	3.32	1.90	1.16	3.07	1.79	1.28
		30°C	4.05	2.70	0.84	3.91	2.64	0.91	3.77	2.58	0.99	3.62	2.52	1.07	3.32	2.36	1.16	3.07	2.24	1.28
		33°C	4.06	3.16	0.84	3.92	3.10	0.91	3.78	3.04	0.99	3.63	2.97	1.07	3.34	2.79	1.16	3.09	2.65	1.28
		36°C	4.09	3.57	0.84	3.95	3.50	0.91	3.82	3.43	0.99	3.68	3.35	1.08	3.39	3.14	1.17	3.16	2.96	1.29
358	16°C	21°C	3.47	2.48	0.82	3.34	2.41	0.89	3.21	2.35	0.96	3.08	2.28	1.04	2.83	2.13	1.13	2.60	2.00	1.24
		24°C	3.49	3.01	0.82	3.36	2.94	0.89	3.23	2.86	0.96	3.10	2.79	1.04	2.85	2.60	1.13	2.63	2.45	1.25
		27°C	3.54	3.45	0.82	3.43	3.36	0.89	3.31	3.26	0.96	3.19	3.16	1.05	2.95	2.93	1.14	2.75	2.74	1.25
		30°C	3.72	3.72	0.83	3.61	3.61	0.90	3.50	3.50	0.98	3.39	3.39	1.06	3.13	3.13	1.15	2.93	2.93	1.27
	19°C	24°C	3.82	2.37	0.83	3.68	2.32	0.90	3.54	2.26	0.98	3.40	2.20	1.06	3.12	2.05	1.15	2.88	1.93	1.27
		27°C	3.83	2.75	0.83	3.69	2.68	0.90	3.55	2.62	0.98	3.41	2.56	1.06	3.13	2.39	1.15	2.89	2.26	1.27
		30°C	3.86	3.38	0.83	3.72	3.31	0.90	3.59	3.23	0.98	3.45	3.15	1.06	3.18	2.94	1.15	2.95	2.77	1.27
		33°C	3.94	3.94	0.84	3.83	3.83	0.91	3.71	3.71	0.99	3.59	3.59	1.07	3.33	3.33	1.16	3.11	3.11	1.28
	22°C	27°C	4.19	2.32	0.85	4.04	2.27	0.92	3.89	2.21	1.00	3.73	2.16	1.08	3.43	2.01	1.17	3.17	1.90	1.29
		30°C	4.20	2.86	0.85	4.05	2.81	0.92	3.90	2.75	1.00	3.74	2.69	1.08	3.44	2.52	1.17	3.18	2.38	1.29
		33°C	4.21	3.36	0.85	4.07	3.30	0.92	3.92	3.23	1.00	3.76	3.16	1.08	3.46	2.96	1.17	3.21	2.81	1.29
		36°C	4.25	3.79	0.85	4.12	3.72	0.92	3.98	3.64	1.00	3.83	3.55	1.09	3.54	3.31	1.18	3.30	3.12	1.30

Remark:

AFR: Air flow rate (CFM)
 EWB: Entering Wet Bulb Temp. (°C)
 EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling / Heating Capacity (kW)
 SHC: Sensible Cooling / Heating Capacity (kW)
 PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Heating Mode

Indoor DB°C	Outdoor WB°C											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	1.80	0.68	2.23	0.73	2.66	0.78	3.10	0.83	3.62	0.88	3.96	0.92
18	1.78	0.72	2.21	0.77	2.65	0.81	3.08	0.86	3.60	0.92	3.94	0.96
20	1.76	0.75	2.19	0.80	2.63	0.84	3.06	0.89	3.58	0.95	3.93	0.99
21	1.75	0.77	2.19	0.82	2.62	0.86	3.05	0.91	3.57	0.97	3.92	1.01
22	1.74	0.78	2.18	0.83	2.61	0.88	3.04	0.93	3.56	0.98	3.91	1.02
24	1.72	0.82	2.16	0.87	2.59	0.92	3.02	0.96	3.54	1.02	3.89	1.06

Remark:

EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling / Heating Capacity (kW)
 PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 10°C to 46°C without pressure trip.

Model: FTXN50JXV1 - RXN50CXV1

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
418	16°C	21°C	5.28	3.54	1.25	5.09	3.44	1.36	4.90	3.35	1.47	4.71	3.26	1.59	4.32	3.03	1.73	3.99	2.85	1.90
		24°C	5.29	4.24	1.25	5.10	4.14	1.36	4.91	4.04	1.47	4.71	3.94	1.59	4.33	3.68	1.73	4.01	3.47	1.91
		27°C	5.33	4.80	1.26	5.15	4.69	1.36	4.97	4.58	1.47	4.78	4.47	1.60	4.41	4.16	1.73	4.11	3.90	1.91
		30°C	5.49	5.49	1.26	5.34	5.34	1.37	5.17	5.17	1.48	5.01	5.01	1.61	4.64	4.64	1.75	4.34	4.34	1.93
	19°C	24°C	5.82	3.30	1.27	5.62	3.22	1.38	5.41	3.13	1.49	5.20	3.04	1.62	4.78	2.84	1.76	4.42	2.67	1.94
		27°C	5.83	3.78	1.27	5.62	3.69	1.38	5.42	3.61	1.49	5.20	3.52	1.62	4.78	3.29	1.76	4.42	3.12	1.94
		30°C	5.84	4.66	1.27	5.64	4.56	1.38	5.44	4.46	1.50	5.23	4.35	1.62	4.82	4.07	1.76	4.47	3.85	1.94
		33°C	5.91	5.91	1.28	5.71	5.71	1.38	5.53	5.53	1.50	5.34	5.34	1.63	4.94	4.94	1.77	4.62	4.62	1.95
	22°C	27°C	6.41	3.23	1.30	6.19	3.15	1.40	5.96	3.08	1.52	5.73	2.99	1.65	5.27	2.79	1.79	4.88	2.63	1.97
		30°C	6.41	3.94	1.30	6.19	3.86	1.40	5.96	3.77	1.52	5.73	3.68	1.65	5.27	3.44	1.79	4.88	3.27	1.97
		33°C	6.41	4.60	1.30	6.19	4.51	1.40	5.97	4.42	1.52	5.73	4.33	1.65	5.28	4.07	1.79	4.89	3.86	1.98
		36°C	6.43	5.22	1.30	6.22	5.11	1.41	6.01	5.01	1.53	5.79	4.90	1.66	5.34	4.59	1.80	4.96	4.35	1.98
471	16°C	21°C	5.49	3.69	1.26	5.30	3.59	1.37	5.09	3.50	1.48	4.89	3.40	1.61	4.48	3.17	1.74	4.14	2.98	1.92
		24°C	5.51	4.48	1.27	5.31	4.37	1.37	5.11	4.27	1.48	4.91	4.16	1.61	4.51	3.88	1.74	4.17	3.66	1.92
		27°C	5.58	5.09	1.27	5.39	4.97	1.37	5.20	4.84	1.49	5.02	4.69	1.61	4.63	4.36	1.75	4.31	4.08	1.93
		30°C	5.81	5.81	1.28	5.64	5.64	1.38	5.47	5.47	1.50	5.29	5.29	1.63	4.90	4.90	1.77	4.58	4.58	1.95
	19°C	24°C	6.05	3.49	1.29	5.84	3.40	1.39	5.62	3.31	1.51	5.39	3.22	1.63	4.95	3.00	1.77	4.57	2.83	1.95
		27°C	6.06	4.02	1.29	5.85	3.93	1.39	5.63	3.84	1.51	5.40	3.75	1.64	4.96	3.51	1.77	4.59	3.32	1.96
		30°C	6.09	4.96	1.29	5.88	4.85	1.39	5.67	4.74	1.51	5.45	4.63	1.64	5.02	4.33	1.78	4.66	4.09	1.96
		33°C	6.19	6.19	1.29	6.01	6.01	1.40	5.81	5.81	1.52	5.62	5.62	1.65	5.21	5.21	1.79	4.87	4.87	1.98
	22°C	27°C	6.65	3.42	1.31	6.42	3.34	1.42	6.18	3.25	1.54	5.93	3.16	1.67	5.45	2.95	1.81	5.04	2.78	1.99
		30°C	6.66	4.19	1.31	6.42	4.11	1.42	6.18	4.01	1.54	5.94	3.92	1.67	5.46	3.67	1.81	5.05	3.48	1.99
		33°C	6.67	4.91	1.31	6.44	4.82	1.42	6.20	4.72	1.54	5.96	4.62	1.67	5.48	4.33	1.81	5.08	4.11	2.00
		36°C	6.71	5.55	1.31	6.49	5.45	1.42	6.27	5.33	1.54	6.04	5.21	1.67	5.57	4.88	1.82	5.20	4.60	2.00
529	16°C	21°C	5.70	3.85	1.28	5.49	3.75	1.38	5.28	3.65	1.49	5.06	3.55	1.62	4.64	3.31	1.76	4.28	3.11	1.94
		24°C	5.73	4.68	1.28	5.52	4.57	1.38	5.31	4.45	1.50	5.10	4.34	1.62	4.68	4.05	1.76	4.32	3.82	1.94
		27°C	5.82	5.36	1.28	5.63	5.22	1.39	5.44	5.07	1.50	5.24	4.92	1.63	4.85	4.56	1.77	4.52	4.25	1.95
		30°C	6.11	6.11	1.29	5.93	5.93	1.40	5.75	5.75	1.52	5.56	5.56	1.65	5.15	5.15	1.79	4.81	4.81	1.98
	19°C	24°C	6.27	3.69	1.30	6.04	3.60	1.40	5.81	3.51	1.52	5.58	3.41	1.65	5.12	3.18	1.79	4.73	3.00	1.97
		27°C	6.29	4.27	1.30	6.06	4.17	1.40	5.84	4.08	1.52	5.60	3.98	1.65	5.14	3.72	1.79	4.75	3.52	1.97
		30°C	6.34	5.26	1.30	6.12	5.14	1.41	5.90	5.02	1.53	5.67	4.90	1.65	5.22	4.57	1.79	4.85	4.31	1.98
		33°C	6.48	6.48	1.31	6.29	6.29	1.42	6.10	6.10	1.54	5.89	5.89	1.67	5.46	5.46	1.81	5.11	5.11	2.00
	22°C	27°C	6.88	3.61	1.32	6.64	3.53	1.43	6.39	3.44	1.55	6.13	3.35	1.68	5.63	3.13	1.82	5.20	2.95	2.01
		30°C	6.90	4.45	1.32	6.65	4.37	1.43	6.40	4.27	1.55	6.14	4.18	1.68	5.64	3.91	1.82	5.22	3.71	2.01
		33°C	6.92	5.22	1.32	6.68	5.13	1.43	6.43	5.02	1.55	6.18	4.91	1.69	5.69	4.60	1.83	5.27	4.37	2.01
		36°C	6.98	5.89	1.33	6.76	5.78	1.44	6.53	5.66	1.56	6.29	5.52	1.69	5.81	5.15	1.84	5.42	4.84	2.03

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SHC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

Heating Mode

Indoor DB°C	Outdoor WB°C											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	2.82	1.11	3.50	1.19	4.18	1.27	4.86	1.35	5.68	1.44	6.22	1.50
18	2.79	1.17	3.47	1.25	4.16	1.32	4.84	1.40	5.65	1.50	6.19	1.56
20	2.76	1.22	3.44	1.30	4.13	1.38	4.81	1.46	5.62	1.55	6.16	1.61
21	2.75	1.25	3.43	1.33	4.11	1.40	4.79	1.49	5.61	1.58	6.15	1.64
22	2.73	1.28	3.42	1.36	4.10	1.43	4.78	1.51	5.59	1.60	6.13	1.67
24	2.70	1.34	3.39	1.41	4.07	1.50	4.75	1.57	5.56	1.66	6.10	1.72

Remark:

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

Model: FTXN60JXV1 - RXN60CXV1

Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
507	16°C	21°C	5.94	4.09	1.43	5.73	3.98	1.54	5.52	3.88	1.67	5.30	3.77	1.81	4.86	3.50	1.97	4.49	3.30	2.17
		24°C	5.95	4.90	1.43	5.74	4.79	1.55	5.52	4.68	1.67	5.30	4.56	1.81	4.87	4.26	1.97	4.51	4.02	2.17
		27°C	6.00	5.55	1.43	5.80	5.43	1.55	5.59	5.30	1.68	5.38	5.16	1.82	4.97	4.81	1.97	4.62	4.51	2.18
		30°C	6.18	6.18	1.44	6.00	6.00	1.56	5.82	5.82	1.69	5.63	5.63	1.83	5.22	5.22	1.99	4.89	4.89	2.20
	19°C	24°C	6.55	3.82	1.45	6.32	3.72	1.57	6.09	3.62	1.70	5.85	3.52	1.85	5.38	3.28	2.00	4.97	3.09	2.21
		27°C	6.56	4.37	1.45	6.33	4.27	1.57	6.09	4.17	1.70	5.85	4.07	1.85	5.38	3.81	2.00	4.98	3.61	2.21
		30°C	6.57	5.39	1.45	6.34	5.28	1.57	6.12	5.16	1.70	5.88	5.04	1.85	5.42	4.71	2.01	5.03	4.46	2.21
		33°C	6.64	6.64	1.46	6.43	6.43	1.58	6.22	6.22	1.71	6.01	6.01	1.86	5.56	5.56	2.02	5.20	5.20	2.22
	22°C	27°C	7.21	3.74	1.48	6.96	3.65	1.60	6.71	3.56	1.74	6.44	3.46	1.88	5.93	3.22	2.04	5.48	3.04	2.25
		30°C	7.21	4.56	1.48	6.96	4.46	1.60	6.71	4.36	1.74	6.44	4.25	1.88	5.93	3.98	2.04	5.49	3.78	2.25
		33°C	7.21	5.32	1.48	6.97	5.22	1.60	6.71	5.12	1.74	6.45	5.01	1.88	5.93	4.70	2.04	5.50	4.47	2.25
		36°C	7.24	6.03	1.48	7.00	5.91	1.60	6.76	5.79	1.74	6.51	5.66	1.89	6.00	5.31	2.05	5.58	5.04	2.26
585	16°C	21°C	6.18	4.27	1.44	5.96	4.16	1.56	5.73	4.05	1.69	5.50	3.93	1.83	5.04	3.66	1.98	4.65	3.45	2.19
		24°C	6.20	5.18	1.44	5.98	5.06	1.56	5.75	4.94	1.69	5.52	4.81	1.83	5.07	4.49	1.99	4.69	4.24	2.19
		27°C	6.27	5.88	1.45	6.06	5.74	1.56	5.85	5.60	1.69	5.64	5.43	1.84	5.21	5.04	2.00	4.85	4.72	2.20
		30°C	6.54	6.54	1.46	6.35	6.35	1.58	6.15	6.15	1.71	5.95	5.95	1.86	5.52	5.52	2.02	5.16	5.16	2.23
	19°C	24°C	6.81	4.04	1.46	6.57	3.93	1.59	6.32	3.83	1.72	6.07	3.73	1.86	5.57	3.47	2.02	5.15	3.27	2.23
		27°C	6.82	4.65	1.47	6.58	4.55	1.59	6.33	4.44	1.72	6.08	4.34	1.86	5.58	4.06	2.02	5.16	3.84	2.23
		30°C	6.85	5.74	1.47	6.62	5.61	1.59	6.38	5.49	1.72	6.13	5.35	1.87	5.65	5.00	2.03	5.24	4.73	2.23
		33°C	6.97	6.97	1.47	6.76	6.76	1.59	6.54	6.54	1.73	6.32	6.32	1.88	5.86	5.86	2.04	5.48	5.48	2.25
	22°C	27°C	7.48	3.95	1.49	7.22	3.86	1.62	6.95	3.76	1.75	6.67	3.66	1.90	6.13	3.41	2.06	5.67	3.22	2.27
		30°C	7.49	4.85	1.49	7.23	4.75	1.62	6.96	4.64	1.75	6.68	4.53	1.90	6.14	4.25	2.06	5.68	4.03	2.27
		33°C	7.50	5.68	1.49	7.24	5.57	1.62	6.98	5.46	1.75	6.70	5.34	1.90	6.17	5.01	2.06	5.72	4.76	2.27
		36°C	7.55	6.42	1.50	7.31	6.30	1.62	7.05	6.17	1.76	6.80	6.03	1.91	6.27	5.64	2.07	5.85	5.32	2.28
654	16°C	21°C	6.41	4.45	1.45	6.17	4.34	1.57	5.94	4.22	1.70	5.69	4.11	1.84	5.22	3.82	2.00	4.81	3.60	2.20
		24°C	6.44	5.41	1.45	6.21	5.28	1.57	5.98	5.15	1.70	5.73	5.02	1.85	5.27	4.68	2.00	4.86	4.41	2.21
		27°C	6.55	6.20	1.46	6.33	6.04	1.58	6.12	5.87	1.71	5.90	5.69	1.86	5.45	5.27	2.02	5.08	4.92	2.23
		30°C	6.87	6.87	1.47	6.67	6.67	1.59	6.47	6.47	1.73	6.26	6.26	1.88	5.79	5.79	2.04	5.41	5.41	2.25
	19°C	24°C	7.05	4.27	1.48	6.80	4.16	1.60	6.54	4.06	1.73	6.27	3.95	1.88	5.76	3.68	2.04	5.32	3.47	2.24
		27°C	7.08	4.94	1.48	6.82	4.83	1.60	6.56	4.71	1.73	6.30	4.60	1.88	5.78	4.30	2.04	5.35	4.07	2.25
		30°C	7.13	6.08	1.48	6.88	5.95	1.60	6.63	5.81	1.74	6.38	5.67	1.88	5.87	5.29	2.04	5.45	4.99	2.25
		33°C	7.29	7.29	1.49	7.08	7.08	1.61	6.86	6.86	1.75	6.63	6.63	1.90	6.14	6.14	2.06	5.75	5.75	2.28
	22°C	27°C	7.74	4.18	1.50	7.47	4.09	1.63	7.19	3.98	1.77	6.90	3.88	1.92	6.33	3.62	2.08	5.85	3.42	2.29
		30°C	7.76	5.15	1.51	7.48	5.05	1.63	7.20	4.94	1.77	6.91	4.83	1.92	6.35	4.52	2.08	5.87	4.29	2.29
		33°C	7.78	6.04	1.51	7.51	5.93	1.63	7.24	5.81	1.77	6.95	5.68	1.92	6.40	5.32	2.08	5.93	5.05	2.29
		36°C	7.85	6.81	1.51	7.61	6.69	1.64	7.34	6.54	1.78	7.08	6.38	1.93	6.54	5.95	2.09	6.10	5.60	2.31

Remark:

AFR: Air flow rate (CFM)
 EWB: Entering Wet Bulb Temp. (°C)
 EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling / Heating Capacity (kW)
 SHC: Sensible Cooling / Heating Capacity (kW)
 PI: Power Input (kW)

Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

Heating Mode

Indoor DB°C	Outdoor WB°C											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	3.21	1.21	3.98	1.29	4.76	1.37	5.54	1.46	6.47	1.56	7.08	1.63
18	3.18	1.26	3.95	1.35	4.73	1.43	5.51	1.52	6.43	1.62	7.05	1.69
20	3.14	1.32	3.92	1.41	4.70	1.49	5.47	1.58	6.40	1.68	7.02	1.75
21	3.13	1.35	3.91	1.44	4.68	1.52	5.45	1.61	6.39	1.71	7.01	1.78
22	3.11	1.38	3.90	1.47	4.67	1.55	5.44	1.64	6.37	1.74	6.98	1.81
24	3.08	1.45	3.86	1.53	4.63	1.62	5.41	1.70	6.33	1.80	6.95	1.87

Remark:

EDB: Entering Dry Bulb Temp. (°C)
 TC: Total Cooling / Heating Capacity (kW)
 PI: Power Input (kW)

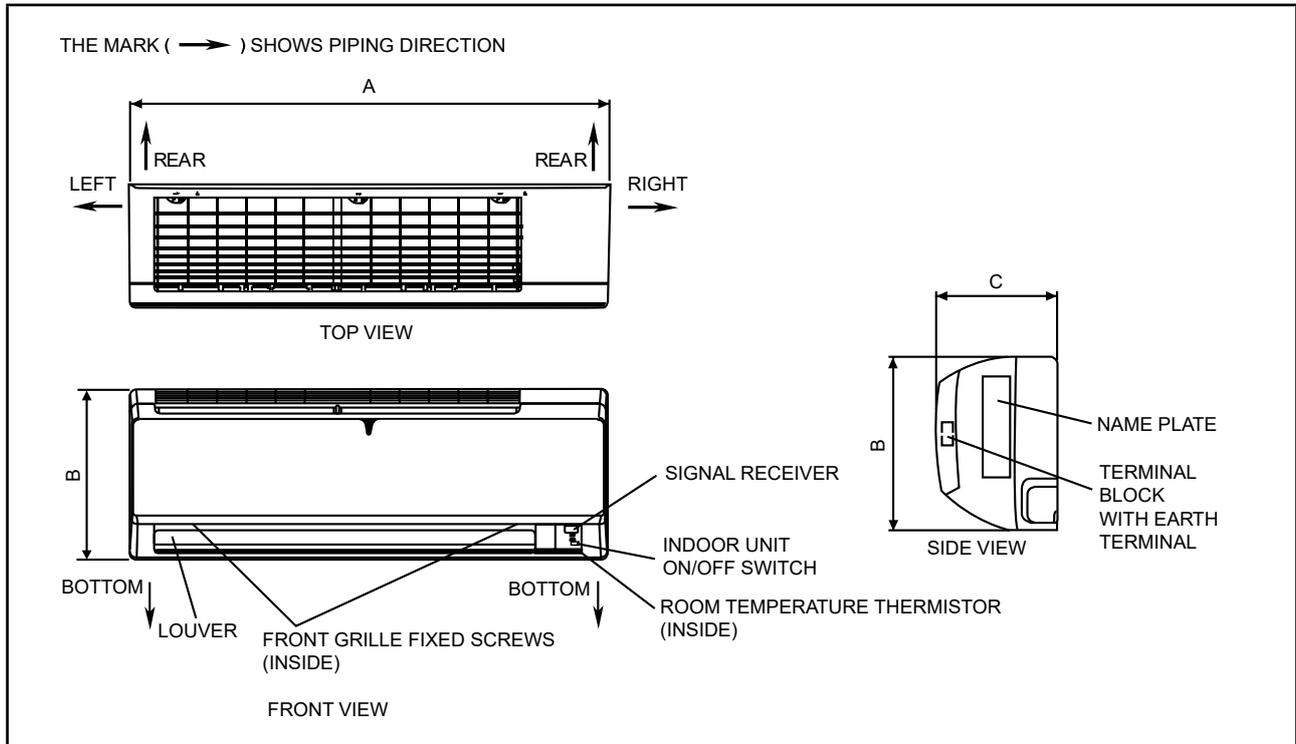
Notes:

1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from -10°C to 46°C without pressure trip.

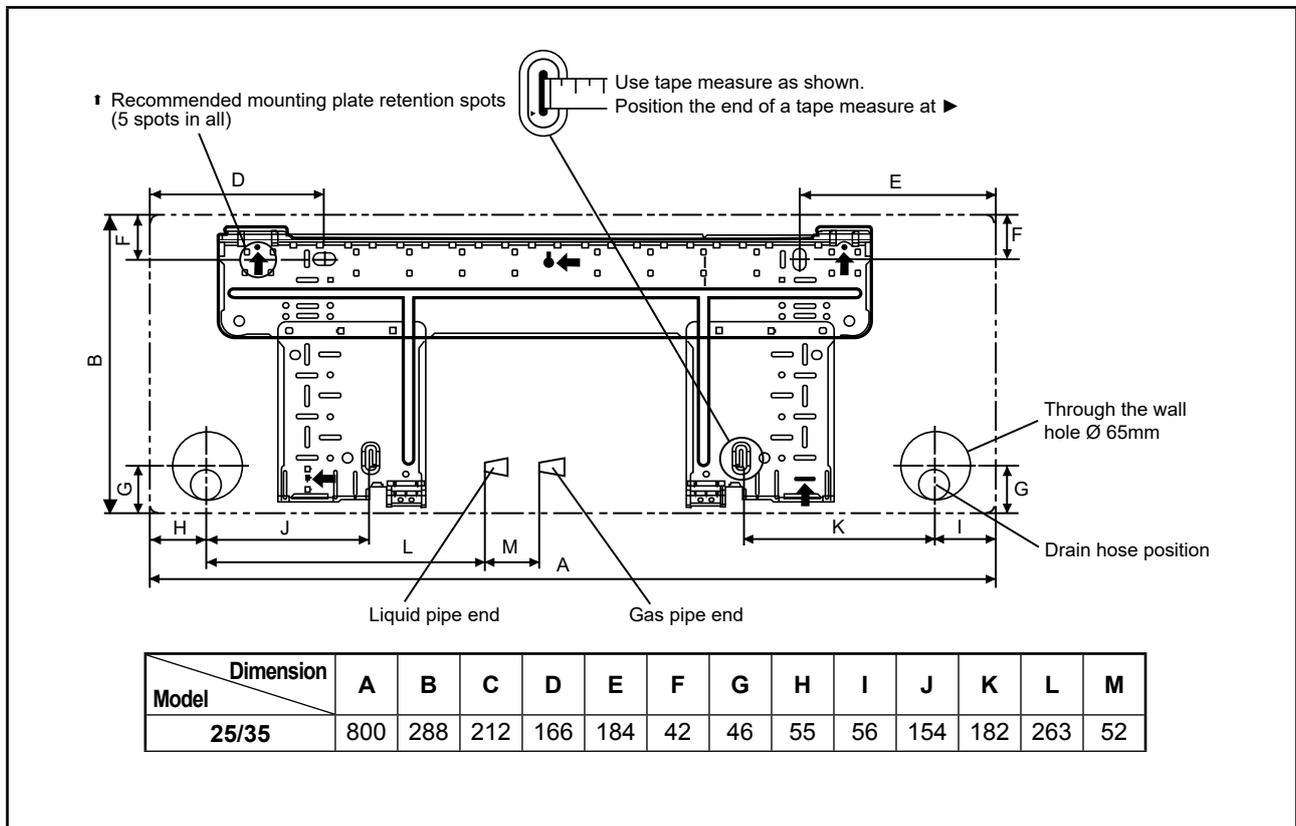
Outline & Dimension

Indoor Unit

Model: FTK25/35/50/60JXV19, FTXN25/35/50/60JXV1

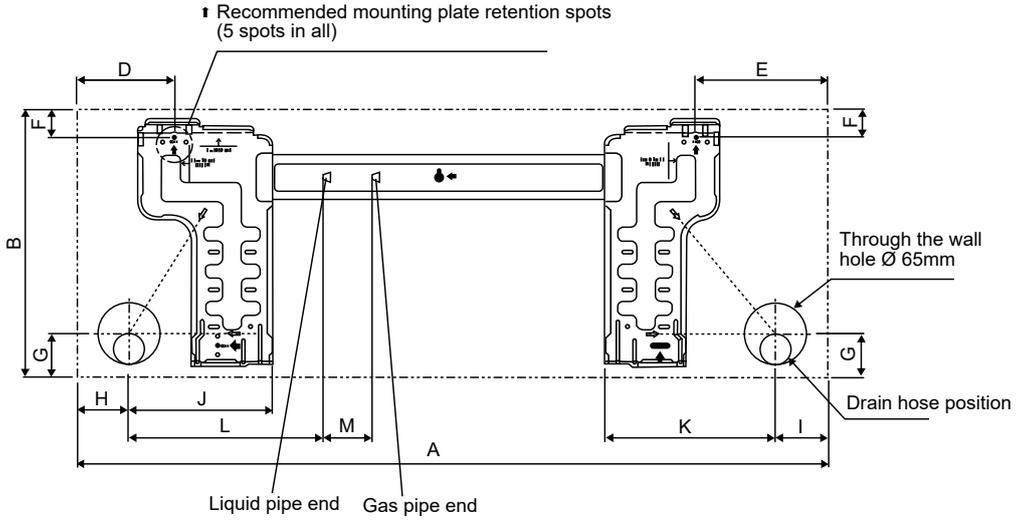


Note: Dimension in mm



Note: Dimension in mm

All dimensions are in mm

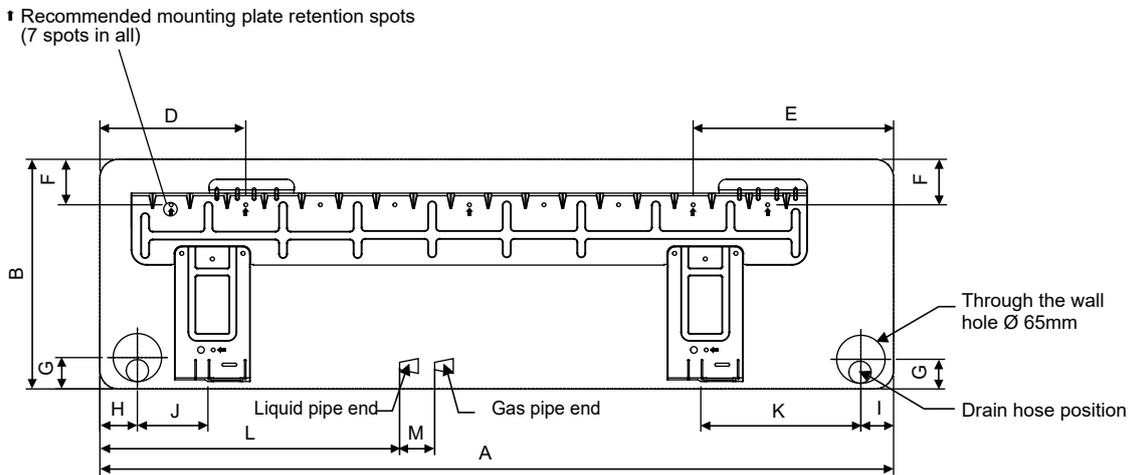


ALTERNATIVE INSTALLATION PLATE 25/35

Dimension Model	A	B	C	D	E	F	G	H	I	J	K	L	M
25/35	800	288	212	104	141	30	46	55	56	153	181	207	52

Note: Dimension in mm

All dimensions are in mm



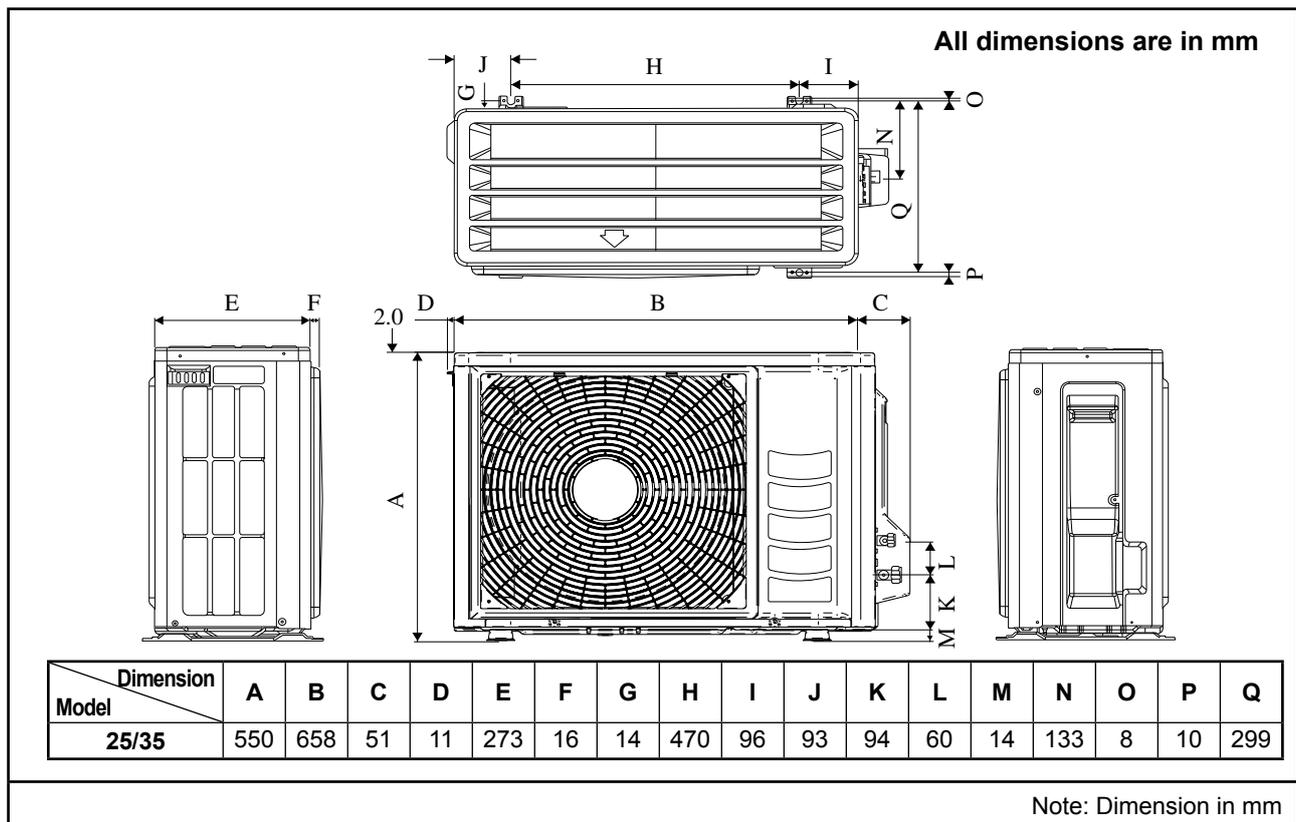
INSTALLATION PLATE 50/60

Dimension Model	A	B	C	D	E	F	G	H	I	J	K	L	M
50/60	1065	310	228	190	173	61	40	45	48	91	219	580	45

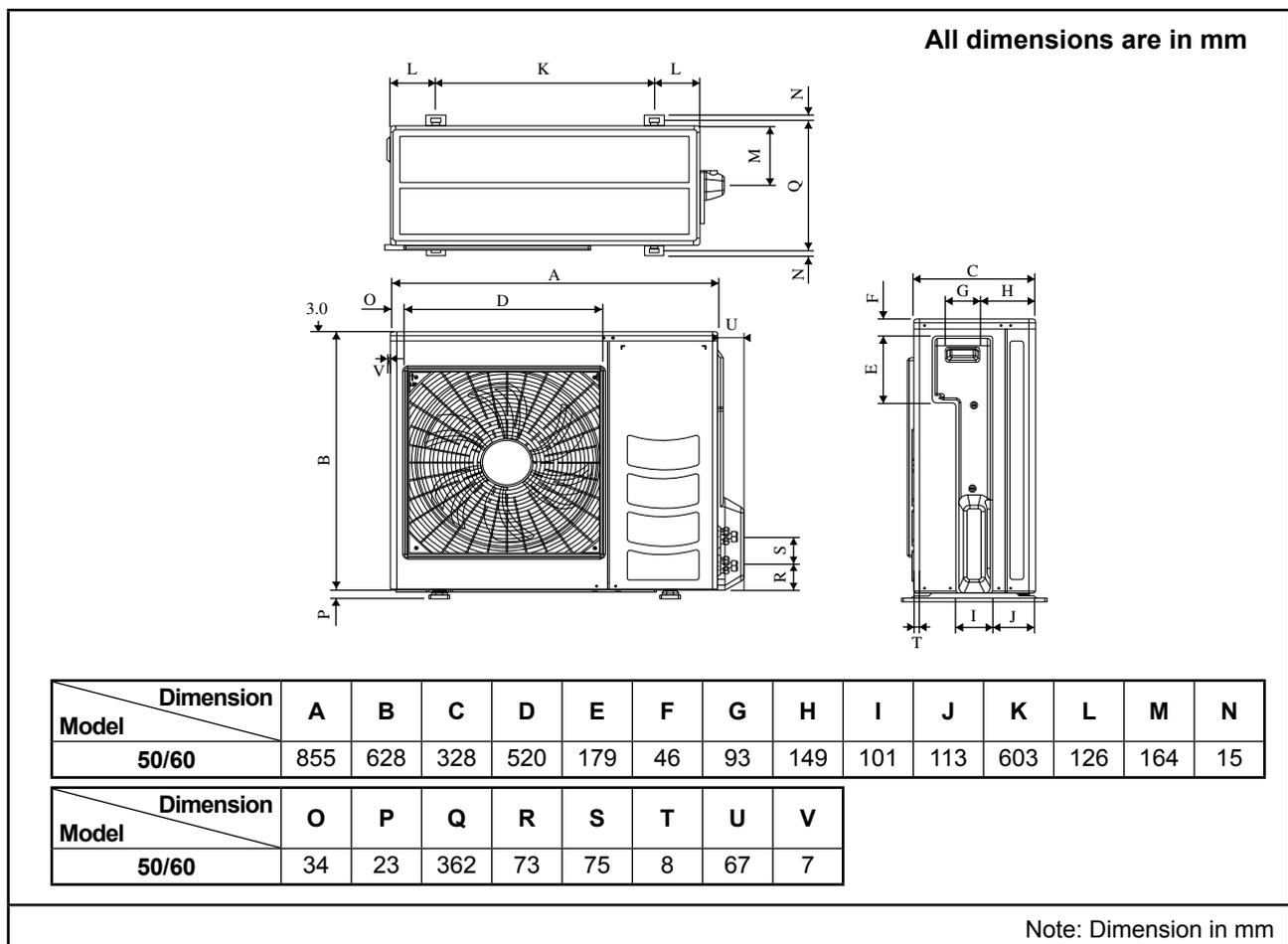
Note: Dimension in mm

Outdoor Unit

Model: RK25/35FXV19, RXN25/35FXV1



Model: RK50/60CXV19, RXN50/60CXV1

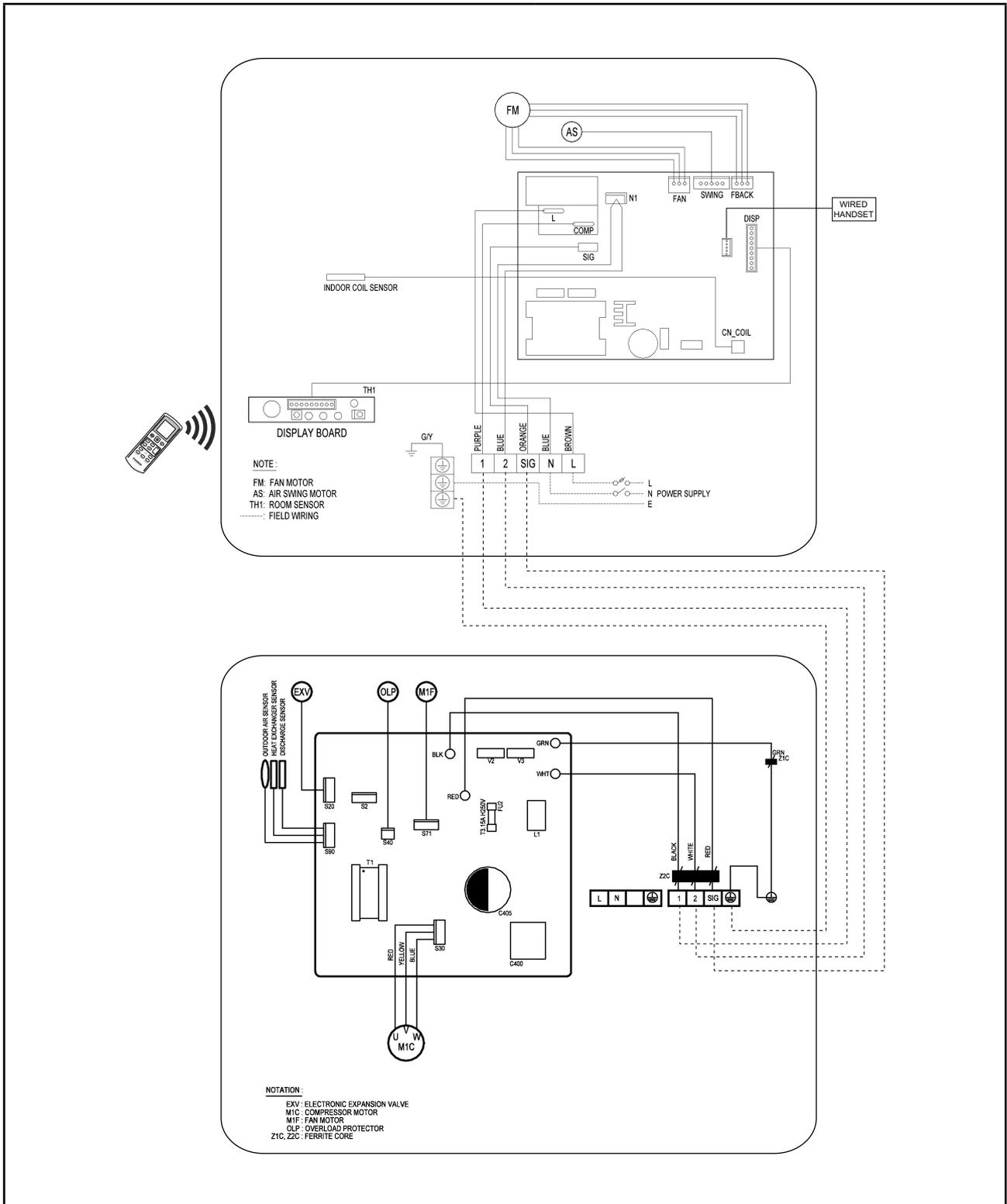


Wiring Diagram

Cooling Only

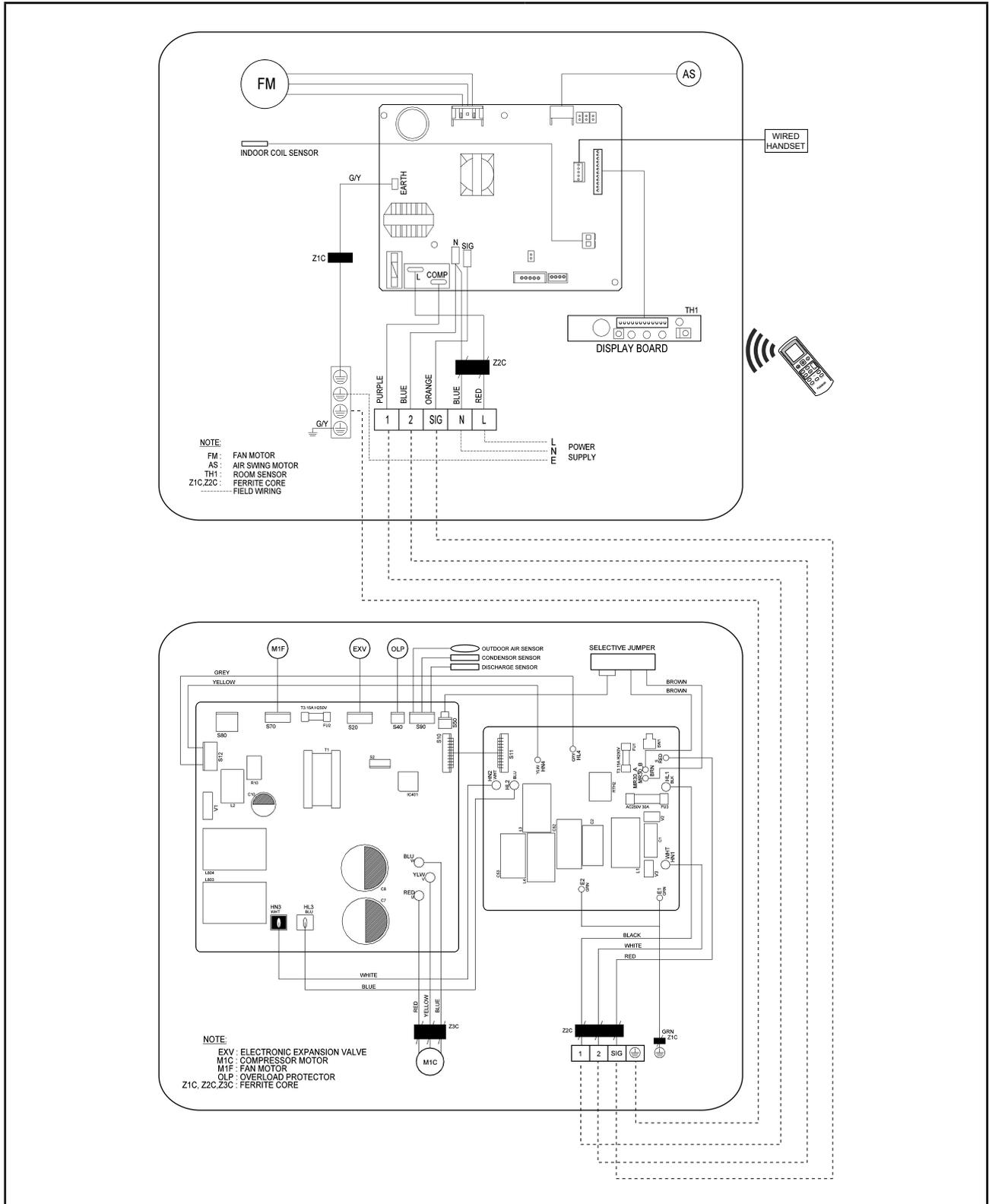
Indoor Unit
Model: FTK25/35JXV19

Outdoor Unit
Model: RK25/35FXV19



Indoor Unit
Model: FTK50/60JXV19

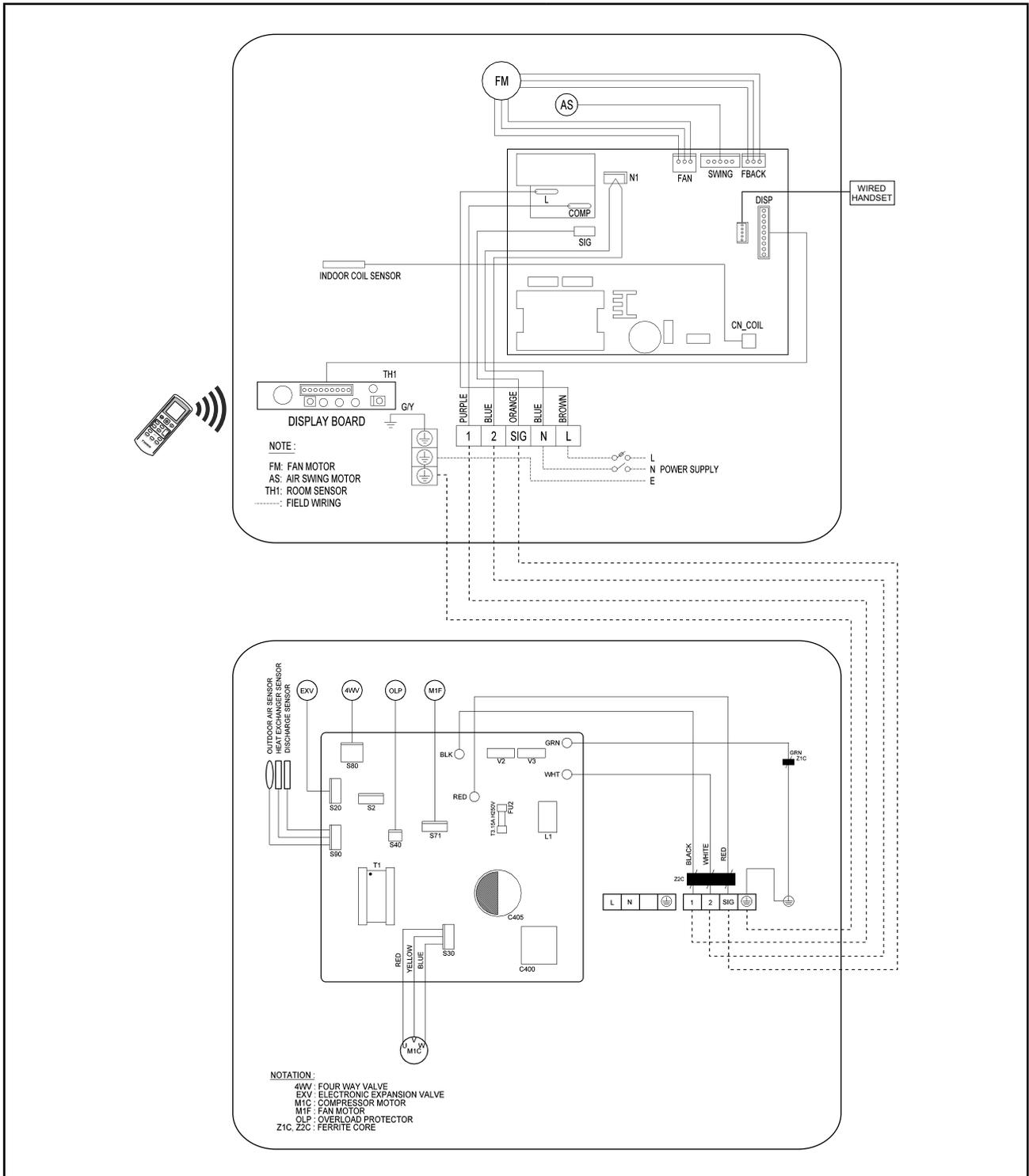
Outdoor Unit
Model: RK50/60CXV19



Heatpump

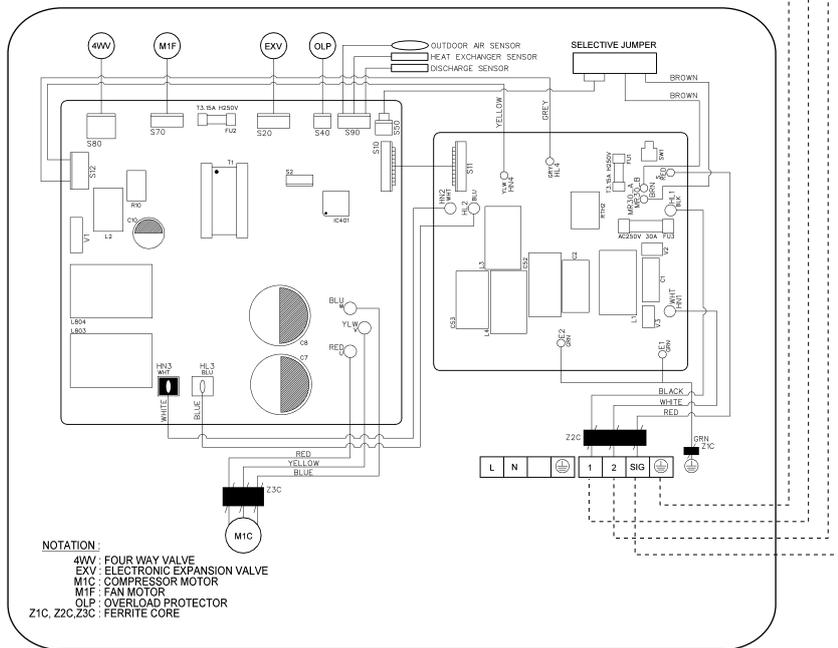
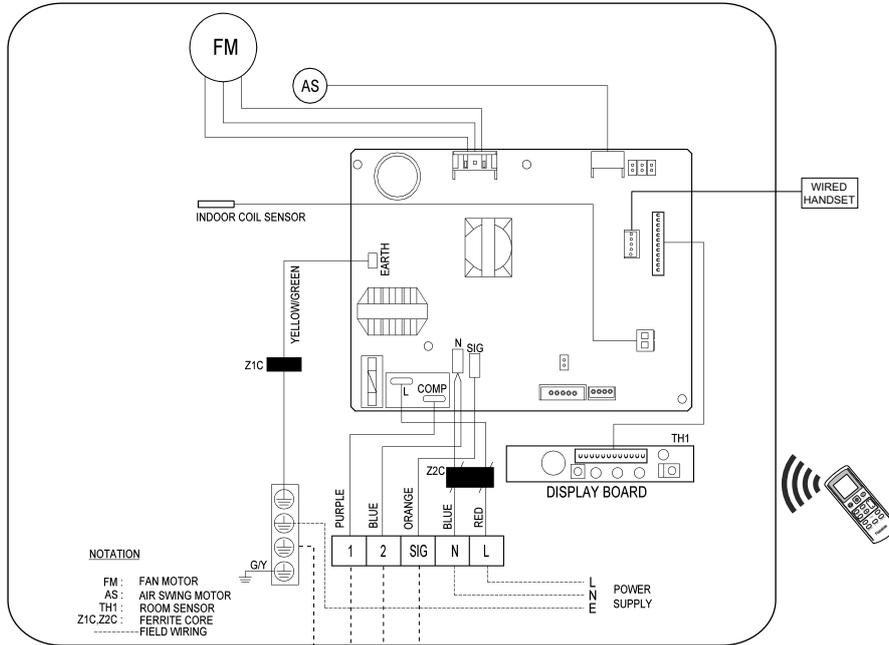
Indoor Unit
Model: FTXN25/35JXV1

Outdoor Unit
Model: RXN25/35FXV1



Indoor Unit
Model: FTXN50/60JXV1

Outdoor Unit
Model: RXN50/60CXV1



Service & Maintenance



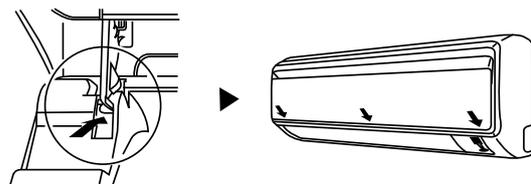
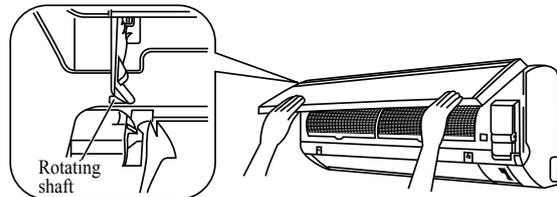
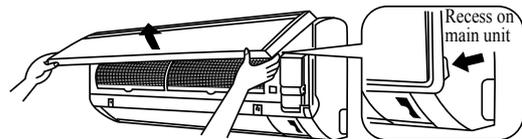
Warning

- Disconnect from main supply before servicing the air conditioner.
- The unit is designed to give long life operation with minimum maintenance required. However, it should be regularly checked and the following items should be given due attention.

Components	Maintenance Procedures	Period
Air Filter (Indoor Unit)	<ol style="list-style-type: none"> 1. Remove any dust adhering to the filter by using a vacuum cleaner or wash in lukewarm water (below 40°C) with a neutral cleaning detergent. 2. Rinse the filter well and dry before placing it back onto the unit. 3. Note: Never use gasoline, volatile substances or chemicals to clean the filter. 	At least once every 2 weeks. More frequently if necessary.
Indoor Unit	<ol style="list-style-type: none"> 1. Clean any dirt or dust on the grille or panel by wiping it with a soft cloth soaked in lukewarm water (below 40°C) and a neutral detergent solution. 2. Note: Never use gasoline, volatile substances or chemicals to clean the indoor unit. 	At least once every 2 weeks. More frequently if necessary.
Condense Drain Pan & Pipe	<ol style="list-style-type: none"> 1. Check the cleanliness and clean it if necessary. 2. Check the condensate water flow. 	Every 3 months.
Indoor Fan	Check if there is any abnormal noise.	If necessary.
Indoor / Outdoor Coil	<ol style="list-style-type: none"> 1. Check and remove the dirt between the fins. 2. Check and remove any obstacles which hinder air flow through the indoor or outdoor. 	Every month.
Power Supply	<ol style="list-style-type: none"> 1. Check the running current and voltage for indoor and outdoor unit. 2. Check the electrical wiring and tighten the wire onto the terminal block if necessary. 	Every 2 months. Every year.
Compressor	No maintenance needed if refrigerant circuit remains sealed. However, check for refrigerant leak at joint and fitting.	Every 6 months.

Indoor Models

1. Open the front panel
 - Hold the panel at the recesses on the main unit (2 recesses on right and left sides) and lift it until it stops.
2. Remove the front panel
 - While lifting the front panel further, slide it to the right and pull it to the front side. The left rotating shaft is detached. Slide the right rotating shaft to the left and pull it to the front side to remove it.
3. Attach the front panel
 - Align the right and left rotating shafts of the front panel with the grooves and push them all the way in.
 - Gently close the front panel. (Push both ends and the center on the front panel.)



Caution

- Don't touch the metal parts of the indoor unit. It may cause an injury.
- When removing or attaching the front panel, use a robust and stable stool and watch your steps carefully.
- When removing or attaching the front panel, support the panel securely with hand to prevent from it falling.
- For cleansing, do not use hot water above 40°C, benzene, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.

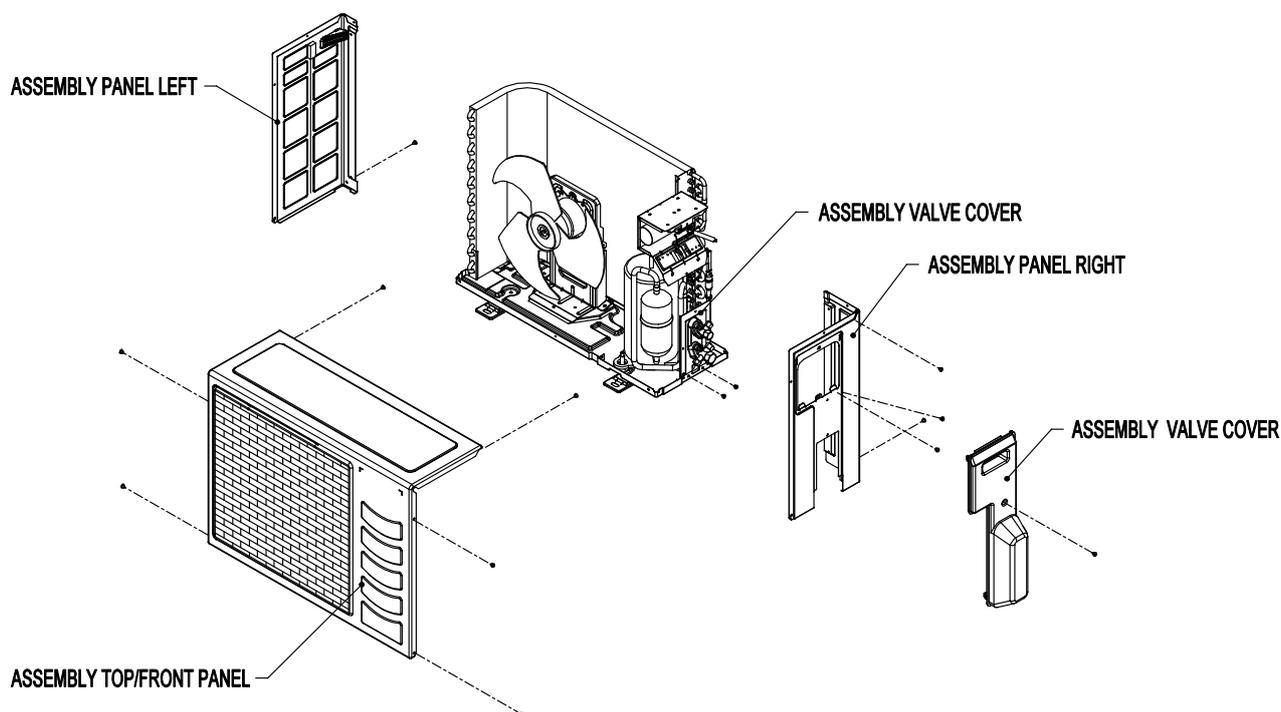
Pre Start Up Maintenance

(After Extended Shutdown)

- Inspect thoroughly and clean indoor and outdoor units.
- Clean or replace air filters.
- Clean condensates drain line.
- Clean clogged indoor and outdoor coils.
- Check fan imbalance before operation.
- Tighten all wiring connections and panels.
- Check for refrigerant leakage.

Outdoor Models

The design of the RK/RXN outdoor series allows servicing to be carried out easily. The removal of the top, front and side panels makes almost every part accessible.



Under normal circumstances, these outdoor units only require a check and cleaning of air intake coil surface once every 3 months. However, if a unit is installed in areas subjected to much oil mist and dust, the coils must be regularly cleaned by qualified Air Conditioner Service Technicians to ensure sufficient heat exchange and proper operation. Otherwise, the systems life span may be shortened.



Caution

- Do not charge **OXYGEN, ACETYLENE OR OTHER FLAMMABLE** and poisonous gases into the unit when performing a leakage test or an airtight test. These gases could cause severe explosion and damage if exposed to high temperature and pressure.
- It is recommended that only nitrogen or refrigerant be charged when performing the leakage or airtight test.

Troubleshooting

Indicator Lights

IR Signal Receiver

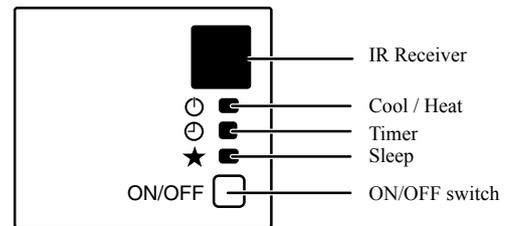
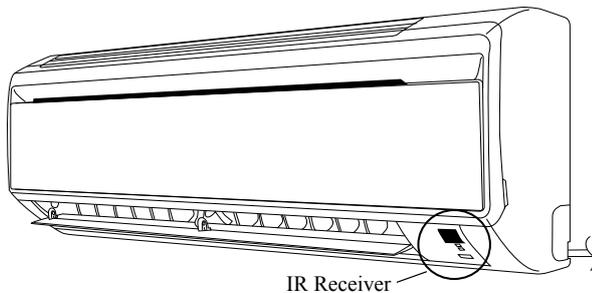
When an infrared remote control operating signal has been transmitted, the signal receiver on the indoor unit will respond as below to confirm acceptance of the signal transmission.

ON to OFF	1 Long Beep
OFF to ON Pump down/Cool force on	2 Short Beeps
Others	1 Short Beep

Cooling Unit / Heatpump Unit

The table below shows the LED indicator lights for the air conditioner unit under normal operation and fault conditions. The LED lights are located at the middle of the air conditioner unit.

The heatpump units are equipped with an “auto” mode sensor whereby it will provide reasonable room temperature by switching automatically to either “cool” or “heat” mode according to the temperature set by the user.



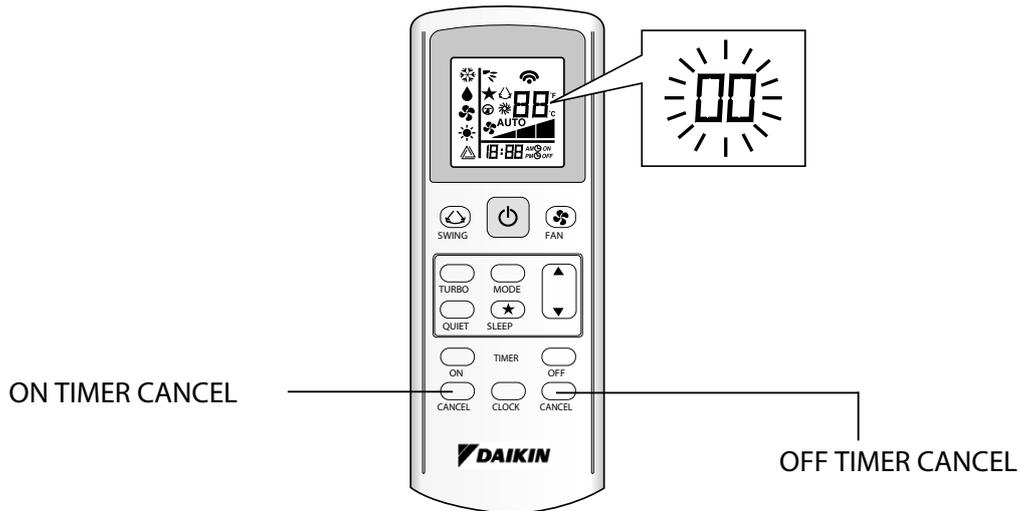
LED Lights Diagnostic Table

 SLEEP (RED)	 COOL/HEAT (GREEN/RED)	 TIMER (ORANGE)	Operation / Fault Indication
	○ Green		Cooling mode
	○ Red		Heating mode
	○ Red		Auto mode in heating operation
	○ Green		Auto mode in cooling operation
	○	○	Time Off (when unit is on)
○	○		Sleep mode on
	○ Green		Fan mode on
	○ Green		Dry mode on
	● Red		Defrost operation
	● Green		Error indication

○ ON

● Blinking

Error Code Diagnosis by GS01



Diagnosis Step

1. Hold down ON TIMER CANCEL button or OFF TIMER CANCEL button for 5 seconds, a “ ” indication flashes on the temperature display section.
2. Press TIMER CANCEL repeatedly until indoor buzzer produces a long beep. This indicates the error code, refers to Error Codes table and is displayed on the temperature display section.
3. A short beep or two consecutive beeps indicate non-corresponding error codes.
4. To cancel the error code display, hold down ON TIMER CANCEL button or OFF TIMER CANCEL button for 5 seconds. Alternatively, the code display will cancel itself if the button is not pressed for 1 minute.

Error Code Diagnosis by Unit Last State Memory

1. Remove battery from remote controller.
2. Replace battery again into remote controller.
3. Press Mode & ON/OFF buttons together.
4. Press Mode button to 5:00.
5. Press ON/OFF once.
6. Repeat the fault diagnosis steps by wireless handset GS01.

Troubleshooting Guidelines

Error Codes	Error Description	Action
0	Normal	No action.
U0	Insufficient gas	1. Check sensor connection.
		2. Check stop valve.
		3. Check for gas leak.
		4. Check the EXV.
		5. Check H8.
U2	DC voltage out of range	1. Check the supply voltage.
		2. Check the outdoor fan by rotating with hand.
		3. Restart the system.
		4. Check power supply waveform.
U4	Communication error	1. Check the indoor unit - outdoor unit connection wires.
		2. Check the voltage of the signal terminal.
		3. Check the indoor fan by rotating with hand.
		4. Check the power supply waveform.
UA	Installation error	1. Check the indoor and outdoor unit model name.
		2. Check the part code on the indoor and outdoor PCB.
A1	Indoor PCB error	1. Check connector connection.
		2. Replace indoor PCB.
A5	Antifreeze	1. Check the air passage.
		2. Check the intake air filter.
		3. Check dust accumulation on indoor coil.
		4. Check wiring and piping.
		5. Check the EXV.
		6. Check indoor coil sensor resistance value.
		7. Check refrigerant level.
		8. Check room sensor resistance value.
A6	Indoor fan motor abnormal	1. Check the indoor fan by rotating with hand.
		2. Replace indoor fan motor if not rotating smoothly.
		3. Check fan motor voltage.
		4. Replace indoor PCB if not at the rated voltage.
		5. Check fan capacitor's conductivity (AC Motor).
		6. Replace fan capacitor if there's conductivity.
C4	Indoor heat exchanger thermistor short/open	1. Check the connector connection. 2. Check the sensor resistance value.
C9	Indoor room thermistor short/open	
E1	Outdoor PCB error	1. Restart the system.
		2. Replace outdoor PCB.
		3. Check to see that the unit is grounded.
		4. Check power supply waveform.
E5	Compressor motor lock/ overload	1. Check connection on discharge pipe sensor.
		2. Check discharge pipe sensor resistance value.
		3. Check the EXV.
		4. Check the refrigerant line on blockage or shortage.

Error Codes	Error Description	Action
E6	Compressor lock/start-up error	1. Check with inverter checker.
		2. Check the EXV.
E7	Outdoor DC fan motor lock	1. Check the fan motor connection.
		2. Check if foreign matters exist around or in the fan.
E8	Ac input over current	1. Measure the input current.
		2. Check the main circuit electrolytic capacitor.
		3. Check with inverter checker.
		4. Check discharge pressure.
		5. Check the installation condition.
EA	4-way valve error	1. Check 4WV coil connection.
		2. Check the continuity of the 4WV coil and harness.
		3. Check the 4WV switching output.
		4. Check sensor connection.
		5. Check sensor resistance value.
		6. Check the refrigerant line on blockage or shortage.
F3	Discharge pipe overheat	1. Check the discharge pipe sensor.
		2. Check the EXV.
		3. Check the refrigerant line on blockage or shortage.
F6	Heat exchanger overheat	1. Check the installation space.
		2. Check the outdoor fan.
		3. Check the EXV.
		4. Check the coil sensor.
H0	Compressor sensor system abnormality	1. Check the reactor connection.
		2. Check the compressor connection.
		3. Measure the resistance value between the reactor terminals.
		4. Measure the resistance value between the compressor terminals.
H6	Position sensor abnormality	1. Check for short circuit.
		2. Check the electrolytic capacitor voltage.
		3. Check compressor harness wire.
		4. Check with inverter checker.
H8	AC current sensor error	1. Restart the system.
		2. Check capacitor voltage.
		3. Measure the rectifier input voltage.
		4. Check compressor harness wire.
		5. Check with inverter checker.
H9	Outdoor air thermistor short/open	1. Check the sensor connection.
		2. Check the sensor resistance value.
J3	Compressor discharge pipe thermistor short/open/misplaced	1. Check the sensor connection.
		2. Check the sensor resistance value.
		3. Check indoor coil sensor resistance value.

Error	Codes Error Description	Action
J6	Outdoor heat exchanger	Same as H9.
L3	Electrical box temperature rise	1. Restart the system.
		2. Check sensor resistance value.
		3. Check heat sink temperature and conditions.
		4. Check outdoor fan.
		5. Check the installation condition.
L4	Heat sink overheat	1. Restart the system.
		2. Check the silicon grease condition on heat sink.
		3. Check sensor resistance value.
		4. Check heat sink temperature and conditions.
		5. Check outdoor fan.
		6. Check the installation condition.
L5	IPM error/IGBT error	1. Check stop valve.
		2. Check with inverter checker.
		3. Check the power transistor and supply voltage.
		4. Check the compressor phase.
		5. Check the discharge pressure.
		6. Check the installation condition.
P4	Heat sink thermistor short/open	Same as H9.

