

DAIKIN

R410A

TECHNICAL MANUAL

**Split Unit Air Conditioner
Wall Mounted J Series**

FTN-J, FTYN-J series

— Cooling only & Heatpump [50Hz] —



For internal reference only

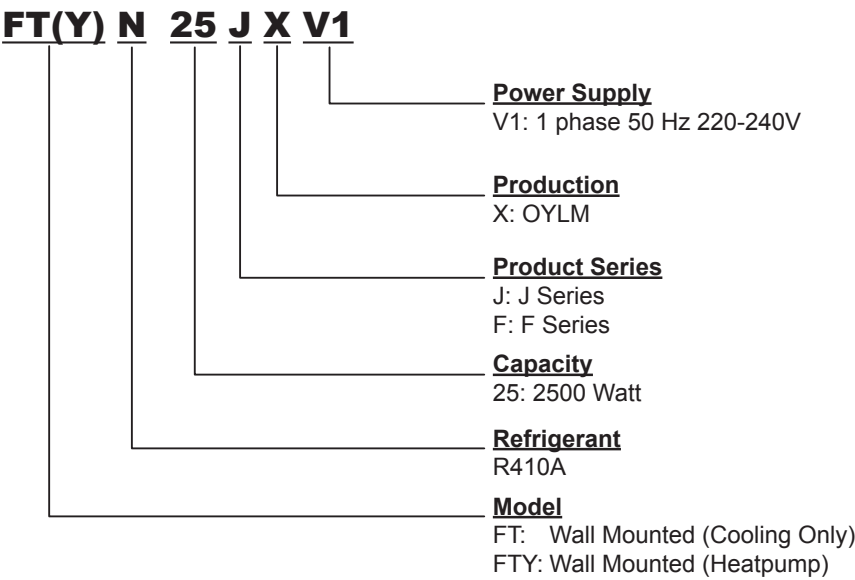


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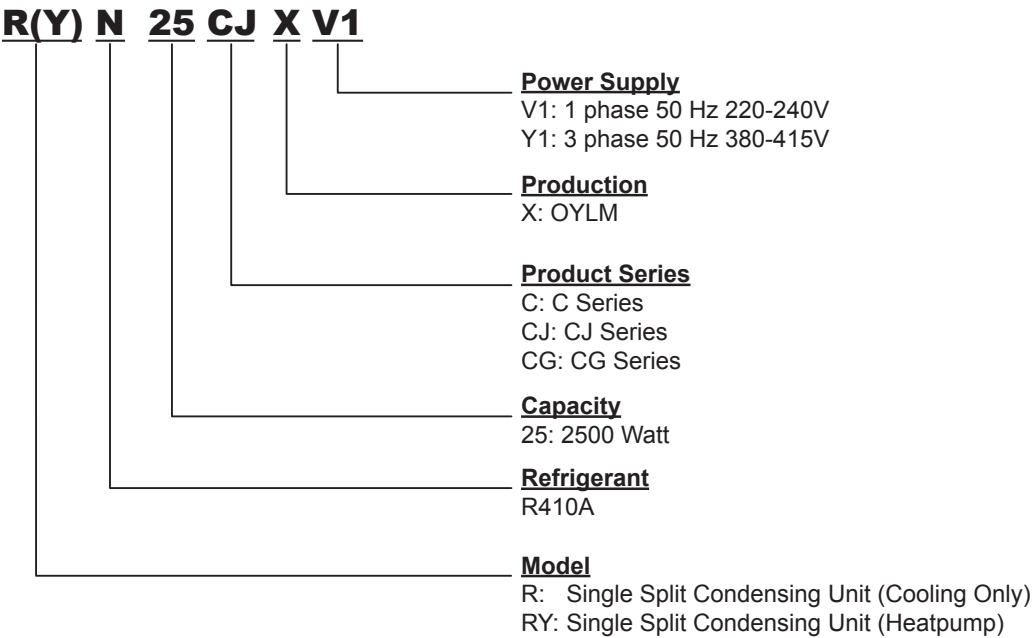
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Nomenclature

Indoor



Outdoor



Product Line-Up

Indoor Unit FT(Y)N

Nomenclature		Classification							
		Handset		PCB		Air Purification		Grille	Others
		BRC52A51	BRC52A61	L2	LGSN	Saranet Filter	Negative Ionizer	A	Auto Restart Orifice Kit
COOLING	FTN25JXV1	X			X	X		X	X
	FTN35JXV1	X			X	X		X	X
	FTN50JXV1	X			X	X		X	X
	FTN60JXV1	X			X	X		X	X
	FTN80FXV1	X		X			X		X
HEATPUMP	FTYN25JXV1		X		X	X		X	X
	FTYN35JXV1		X		X	X		X	X
	FTYN50JXV1		X		X	X		X	X
	FTYN60JXV1		X		X	X		X	X
	FTYN80FXV1		X	X			X		

Outdoor Unit
R(Y)N / RR / RQ

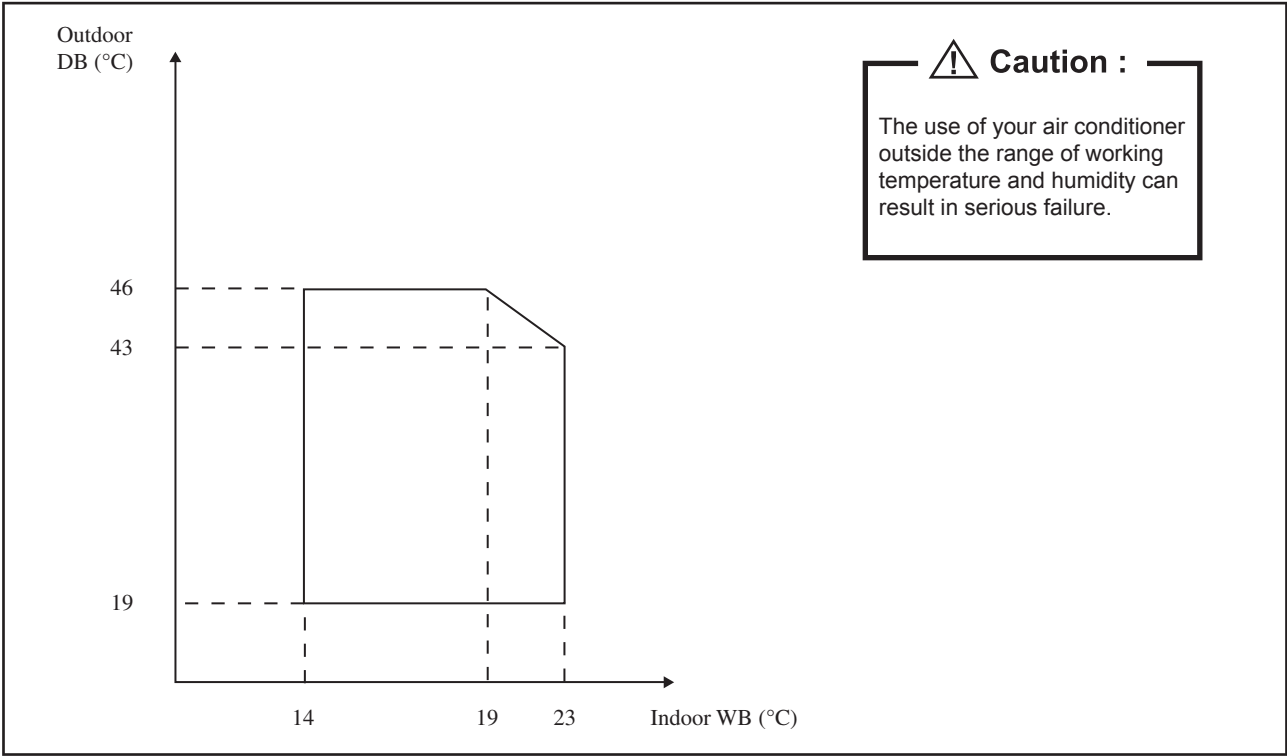
Nomenclature		Classification											
		Refrigerant Control		Fin			Safety Devices				Compressor		Others
COOLING	RN25CJXV1	X			X							X	
	RN35CJXV1	X			X							X	
	RN50CJXV1	X			X							X	
	RN50CJXY1	X			X		X			X		X	
	RN60CJXV1	X			X							X	
	RN60CJXY1	X			X		X			X		X	
	RR71CJXV1	X			X							X	
	RR71CJXY1	X			X		X			X		X	
HEATPUMP	RYN20CJXV1	X			X							X	X
	RYN25CJXV1	X			X							X	X
	RYN35CJXV1	X			X							X	X
	RYN50CJXV1	X			X							X	X
	RYN50CJXY1	X			X		X			X		X	X
	RYN60CJXV1	X			X							X	X
	RYN60CJXY1	X			X		X			X		X	X
	RQ71CJXV1	X			X							X	X
	RQ71CJXY1	X			X		X			X		X	X

Application Information

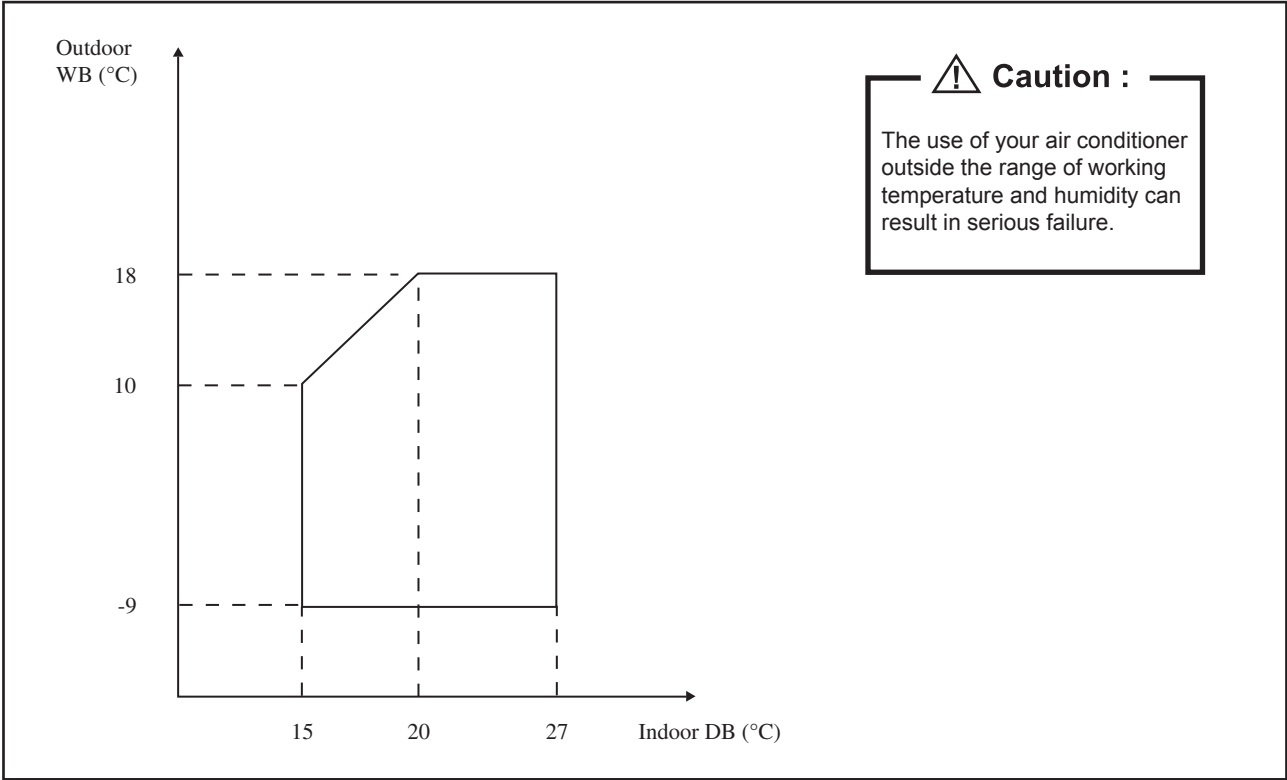
Operating Range

Ensure the operating temperature is in allowable range.

Cooling

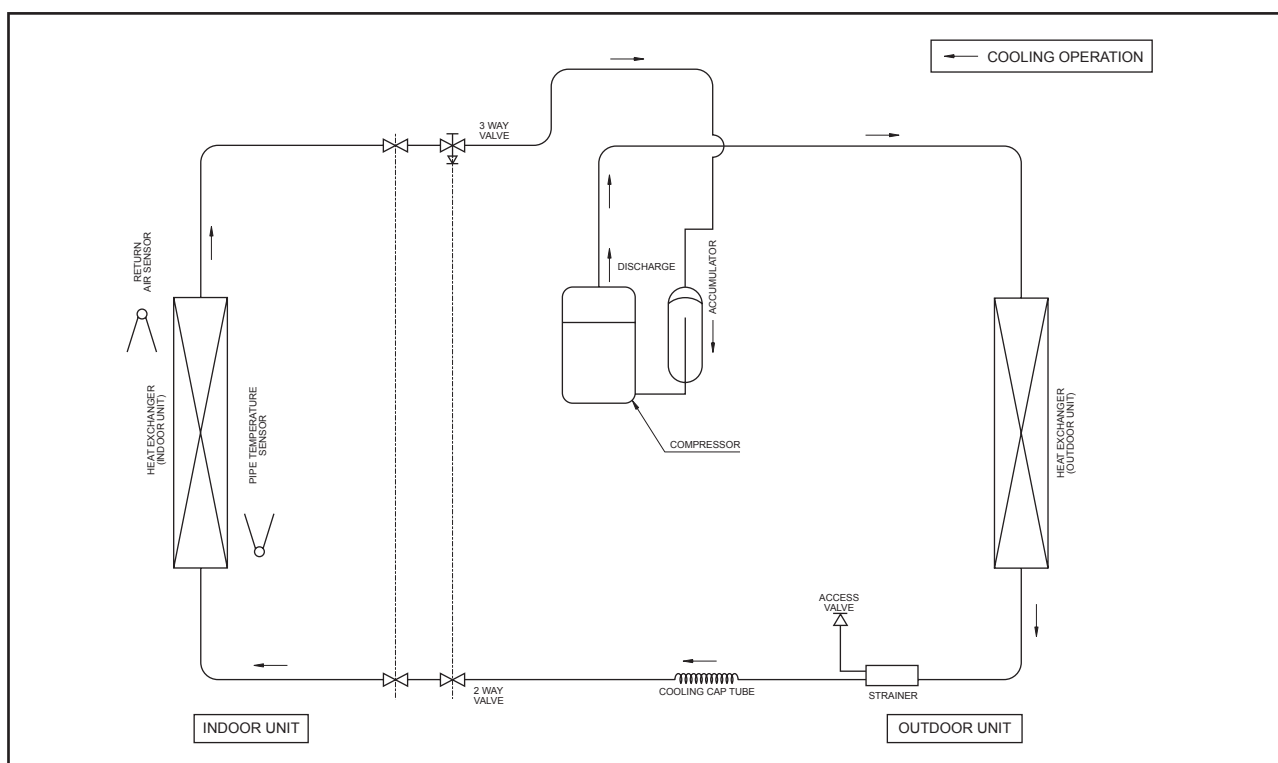


Heating

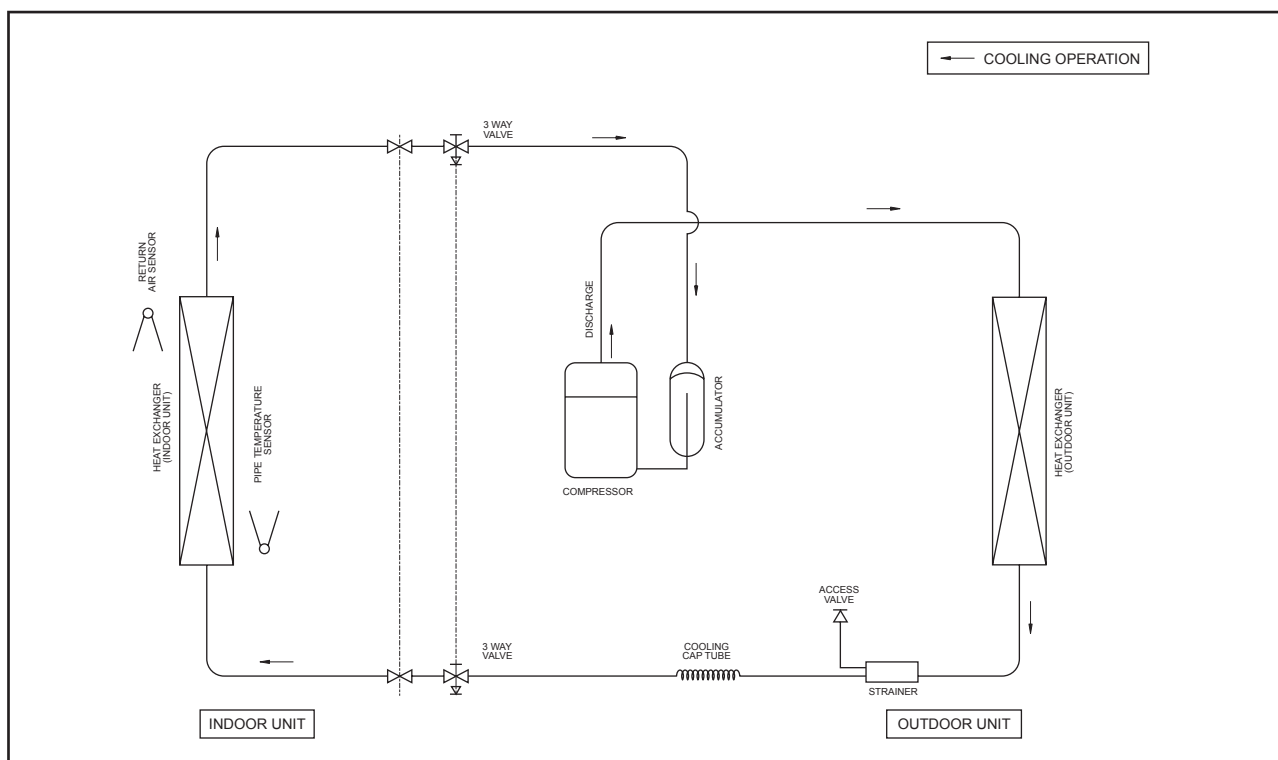


Refrigerant Circuit Diagrams

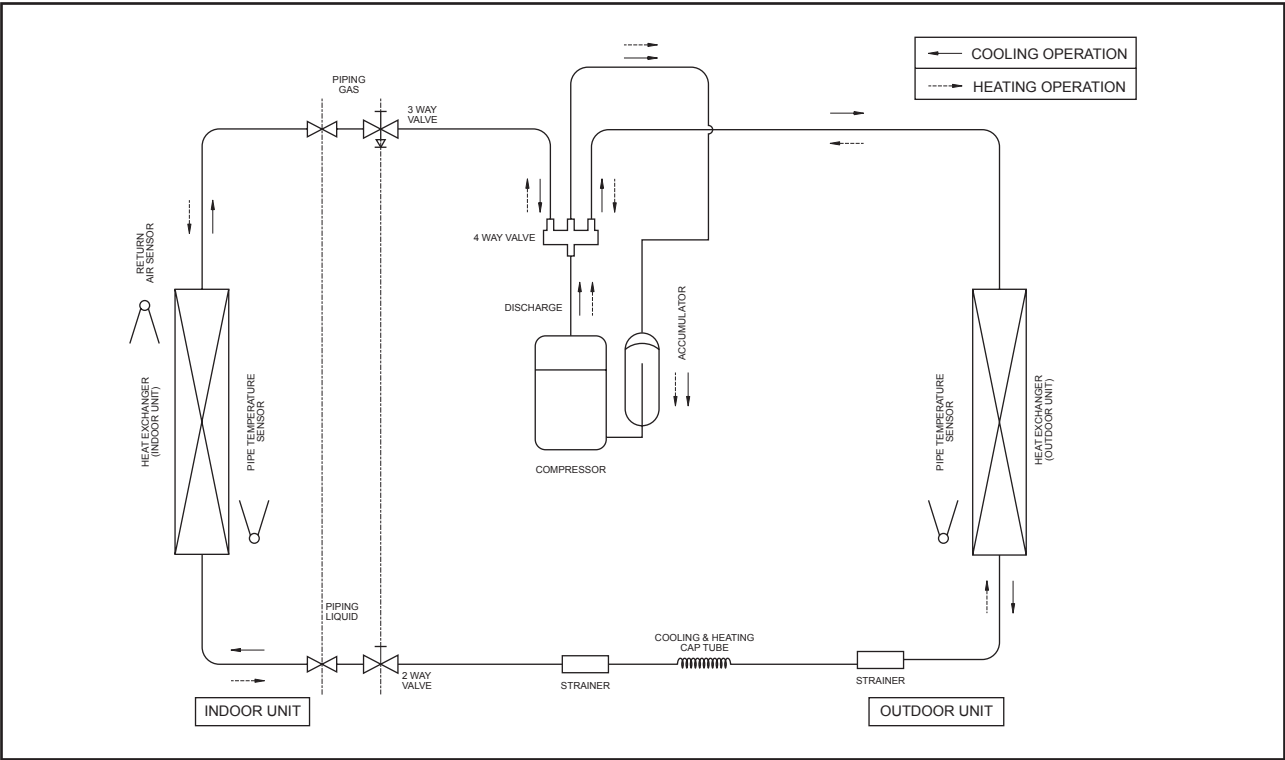
Model: FTN25JXV1 – RN25CJXV1 / FTN35JXV1 – RN35CJXV1 / FTN50JXV1 – RN50CJXV1 / FTN60JXV1 – RN60CJXV1



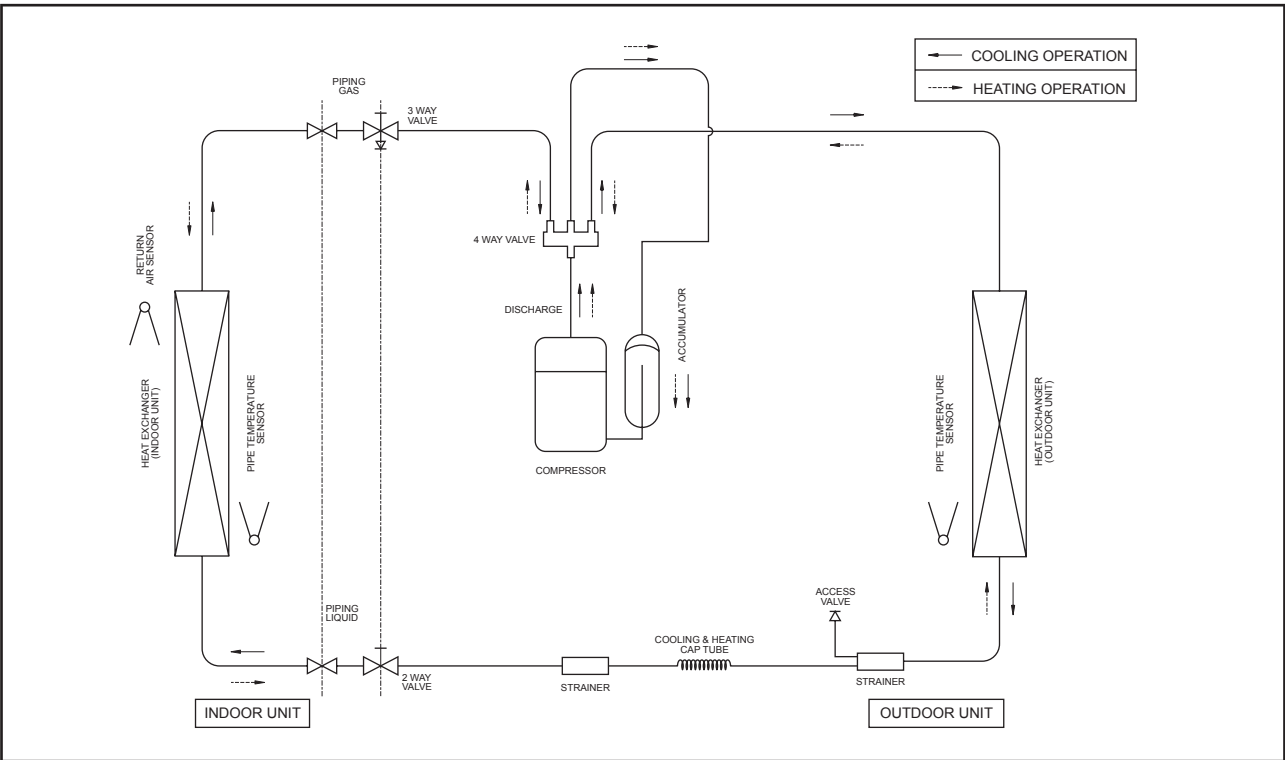
Model: FTN80FXV1 – RR71CXV1 / FTN80FXV1 – RR71CXY1



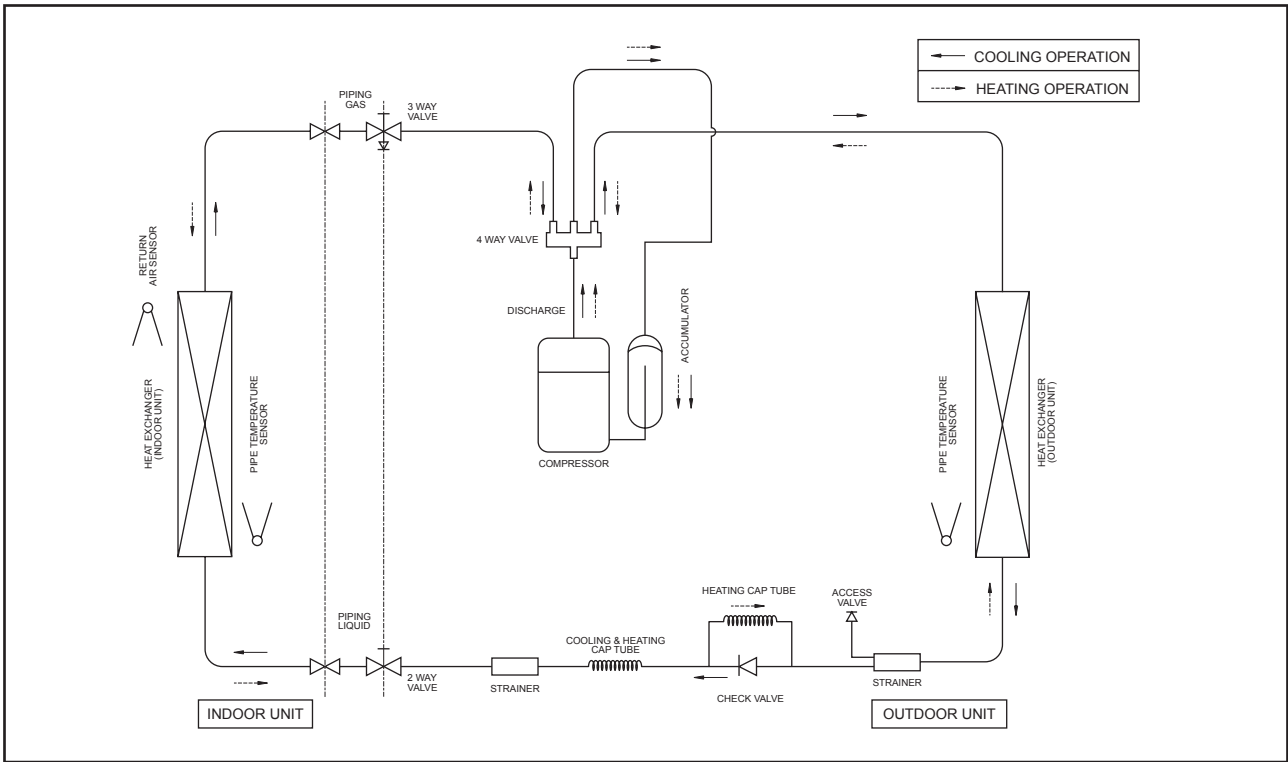
Model: FTYN20JXV1 – RYN20CGXV1



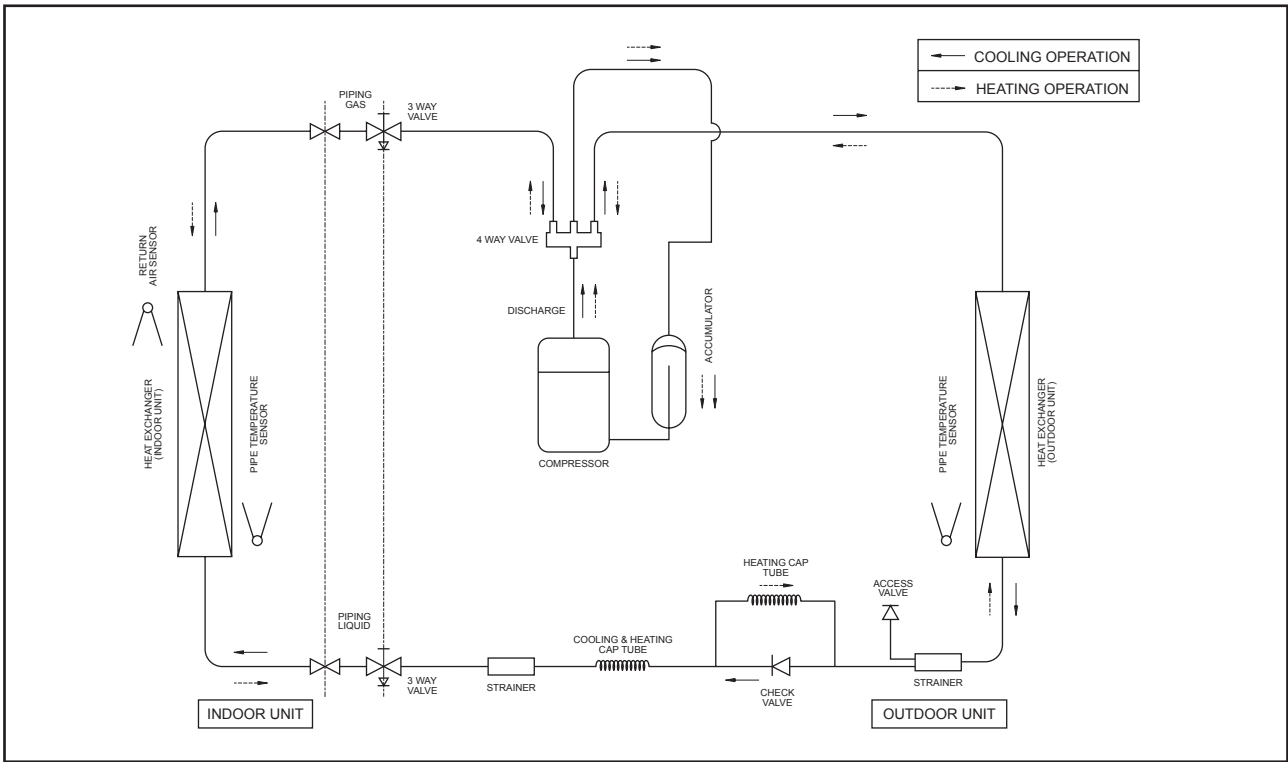
Model: FTYN25JXV1 – RYN25CJXV1



Model: FTYN35JXV1 – RYN35CJXV1 / FTYN50JXV1 – RYN50CJXV1 / FTYN60JXV1 – RYN60CJXV1



Model: FTYN80FXV1 – RQ71CXV1 / FTYN80FXV1 – RQ71CXY1

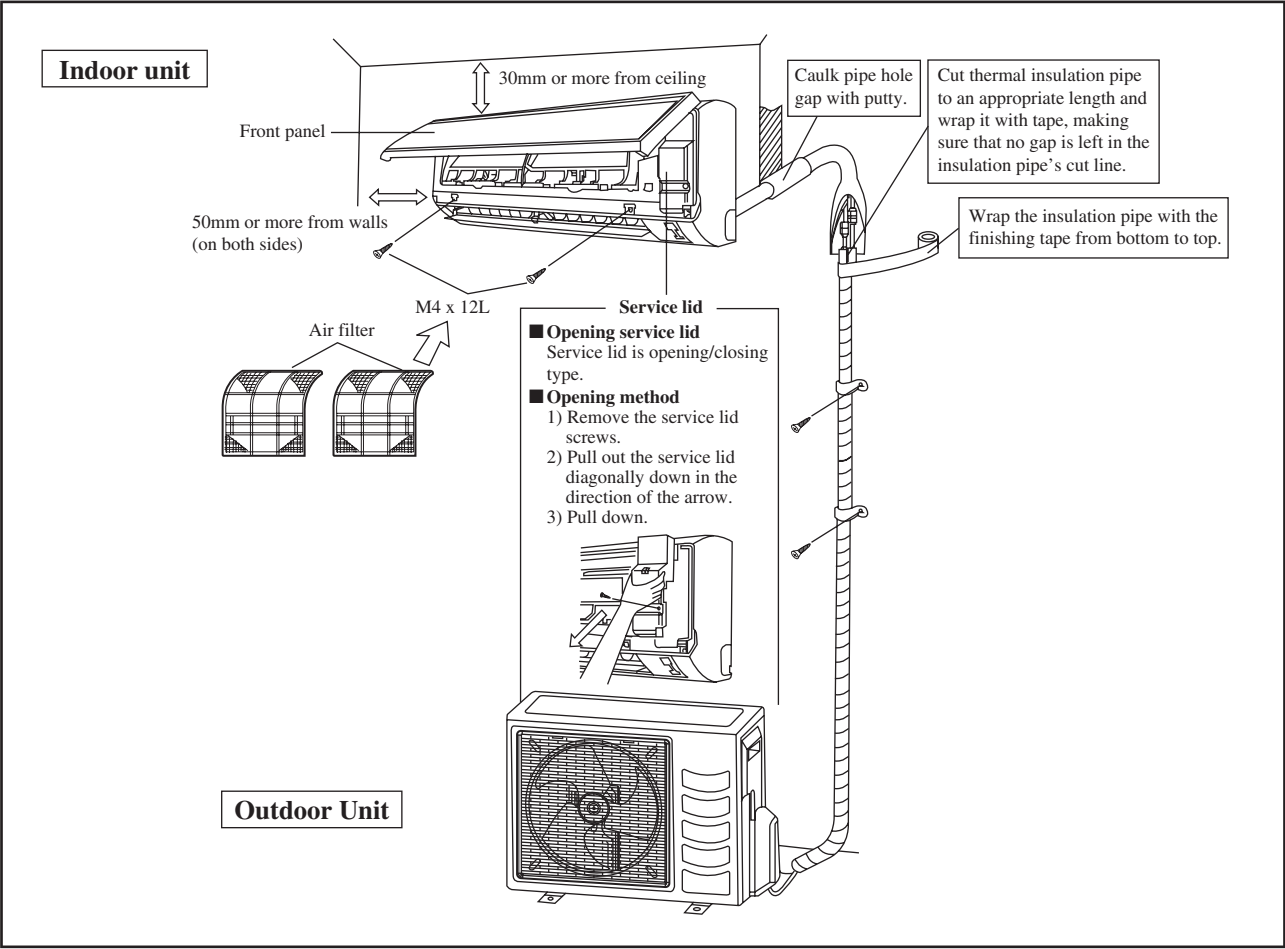


Installation Guideline

 Caution

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

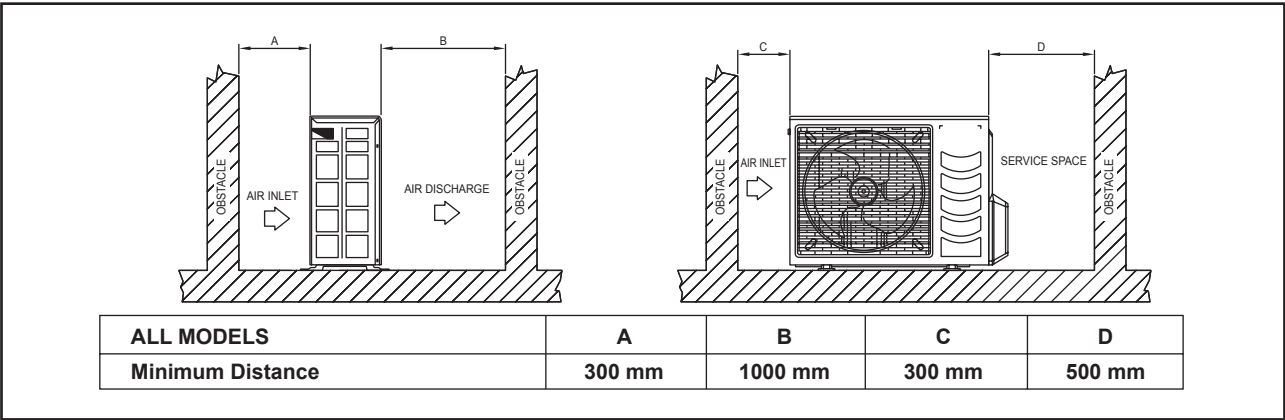
Installation Diagram



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.



Cable Size

Model	Unit	FTN25JXV1	FTN35JXV1	FTN50JXV1
		RN25CJXV1	RN35CJXV1	RN50CJXV1
Power supply cable size	mm ²	1.5	1.5	2.5
Number of wire		3	3	3
Interconnection cable size	mm ²	1.5	1.5	2.5
Number of wire		3	3	3
Recommended fuse	A	15	15	20

Model	Unit	FTN60JXV1	FTN80FXV1	
		RN60CJXV1	RR71CXV1	RR71CXY1
Power supply cable size	mm ²	2.5	2.5	1.5
Number of wire		3	3	5
Interconnection cable size	mm ²	2.5	2.5	1.5
Number of wire		3	3	4
Recommended fuse	A	20	20	15

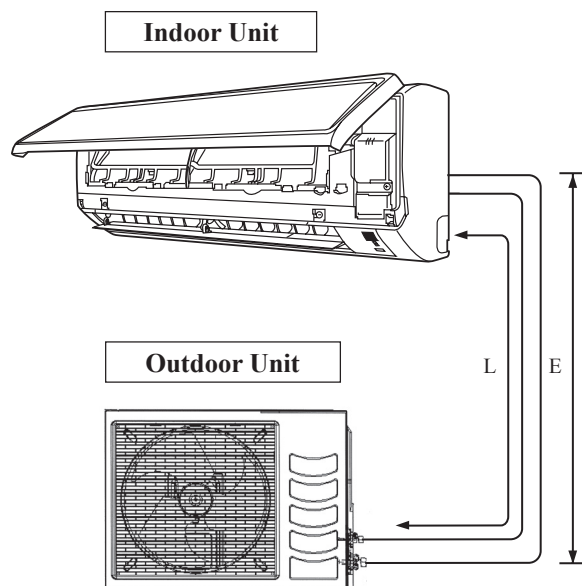
Model	Unit	FTYN20JXV1	FTYN25JXV1	FTYN35JXV1
		RYN20CGXV1	RYN25CJXV1	RYN35CJXV1
Power supply cable size	mm ²	1.5	1.5	1.5
Number of wire		3	3	3
Interconnection cable size	mm ²	1.5	1.5	1.5
Number of wire		5	3	3
Recommended fuse	A	15	15	15

Model	Unit	FTYN50JXV1	FTYN60JXV1	FTYN80FXV1	
		RYN50CJXV1	RYN60CJXV1	RQ71CXV1	RQ71CXY1
Power supply cable size	mm ²	2.5	2.5	2.5	2
Number of wire		3	3	3	5
Interconnection cable size	mm ²	2.5	2.5	2.5	1.5
Number of wire		5	5	3	6
Recommended fuse	A	20	20	20	15

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:



Cooling Only Model

Model	Indoor	FTN25JXV1	FTN35JXV1	FTN50JXV1	FTN60JXV1	FTN80FXV1	
	Outdoor	RN25CJXV1	RN35CJXV1	RN50CJXV1	RN60CJXV1	RR71CXV1	RR71CXY1
Min.Allowable Length (L), m		3					
Max.Allowable Length (L), m		12	12	20	20	15	15
Max.Allowable Elevation (E), m		5	5	15	15	8	8
Gas Pipe Size, mm/(in)		9.52 / (3/8")	12.70 / (1/2")	12.70 / (1/2")	15.88 / (5/8")	15.88 / (5/8")	15.88 / (5/8")
Liquid Pipe Size, mm/(in)		6.35 / (1/4")	6.35 / (1/4")	6.35 / (1/4")	6.35 / (1/4")	9.52 / (3/8")	9.52 / (3/8")

Heatpump Model

Model	Indoor	FTYN20JXV1	FTYN25JXV1	FTYN35JXV1	FTYN50JXV1	FTYN60JXV1	FTYN80FXV1	
	Outdoor	RYN20CGXV1	RYN25CJXV1	RYN35CJXV1	RYN50CJXV1	RYN60CJXV1	RQ71CXV1	RQ71CXY1
Min.Allowable Length (L), m		3						
Max.Allowable Length (L), m		12	12	12	20	20	15	15
Max.Allowable Elevation (E), m		5	5	5	15	15	8	8
Gas Pipe Size, mm/(in)		9.52 / (3/8")	9.52 / (3/8")	12.70 / (1/2")	12.70 / (1/2")	15.88 / (5/8")	15.88 / (5/8")	15.88 / (5/8")
Liquid Pipe Size, mm/(in)		6.35 / (1/4")	6.35 / (1/4")	6.35 / (1/4")	6.35 / (1/4")	6.35 / (1/4")	9.52 / (3/8")	9.52 / (3/8")

Additional Charge

- The refrigerant gas is charged in the outdoor unit and, if the piping length is 7.6m, additional charge of the refrigerant after vacuuming is not necessary.
- When the piping length is more than 7.6m, additional refrigerant charge (g) per additional 1m length as tabulated:

R410A – Cooling Only

Model	Indoor	FTN25JXV1	FTN35JXV1	FTN50JXV1	FTN60JXV1	FTN80FXV1	
	Outdoor	RN25CJXV1	RN35CJXV1	RN50CJXV1	RN60CJXV1	RR71CXV1	RR71CXY1
Add. Charge, g/m		9	9	19	16	23	23

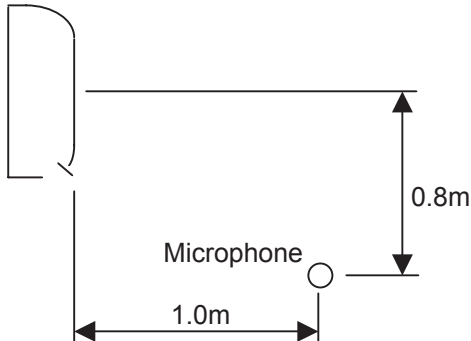
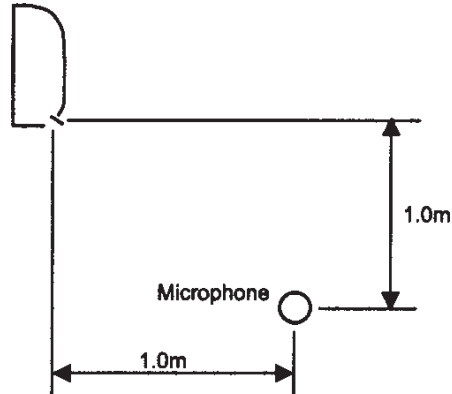
R410A – Heatpump

Model	Indoor	FTYN20JXV1	FTYN25JXV1	FTYN35JXV1	FTYN50JXV1	FTYN60JXV1	FTYN80FXV1	
	Outdoor	RYN20CGXV1	RYN25CJXV1	RYN35CJXV1	RYN50CJXV1	RYN60CJXV1	RQ71CXV1	RQ71CXY1
Add. Charge, g/m		20	16	16	19	16	41	41

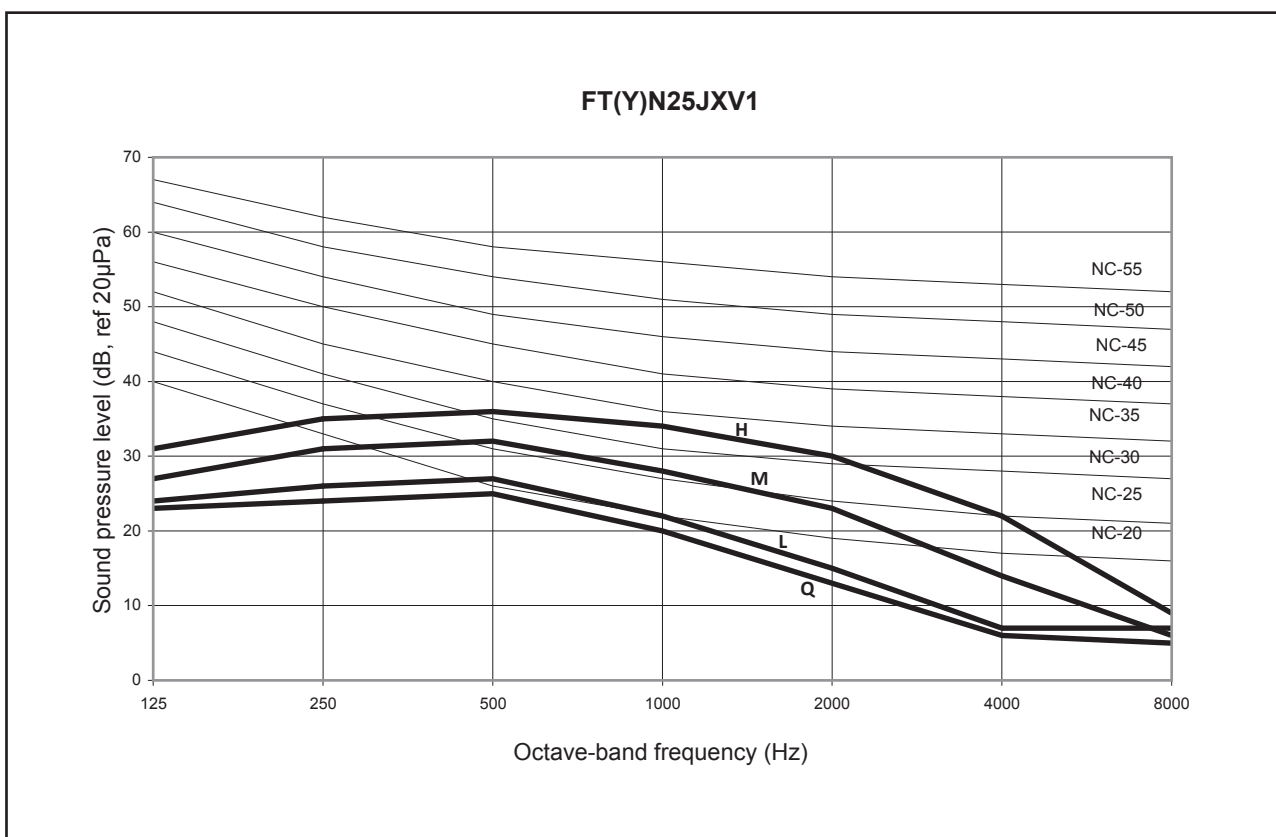
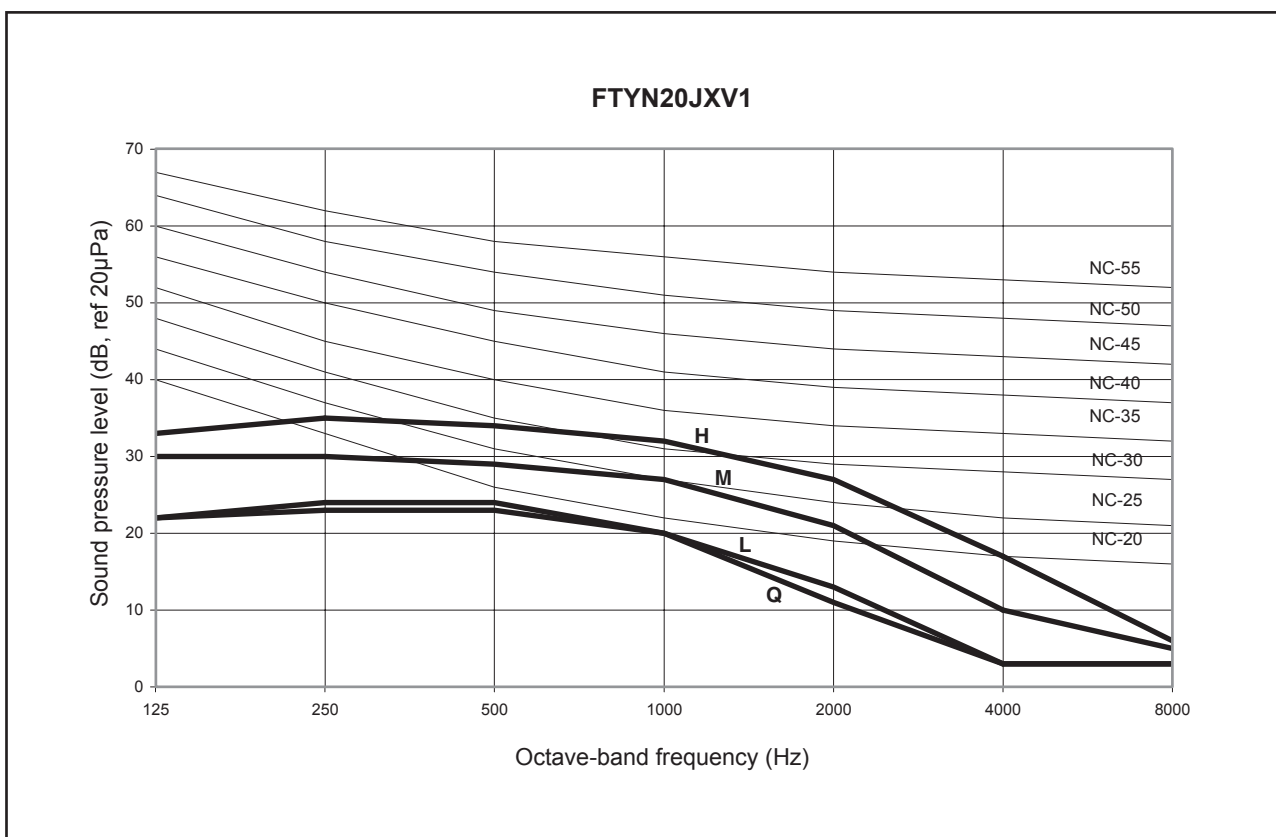
Sound Data

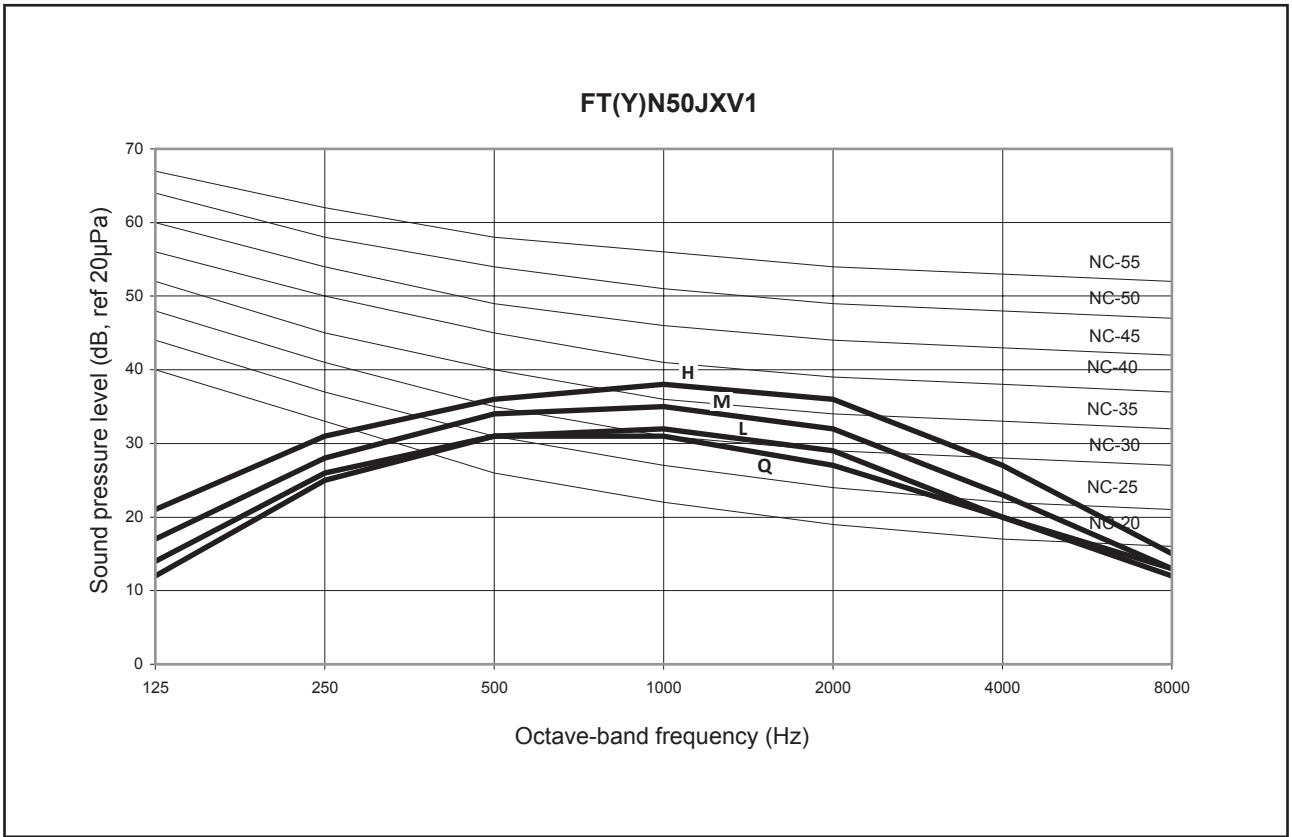
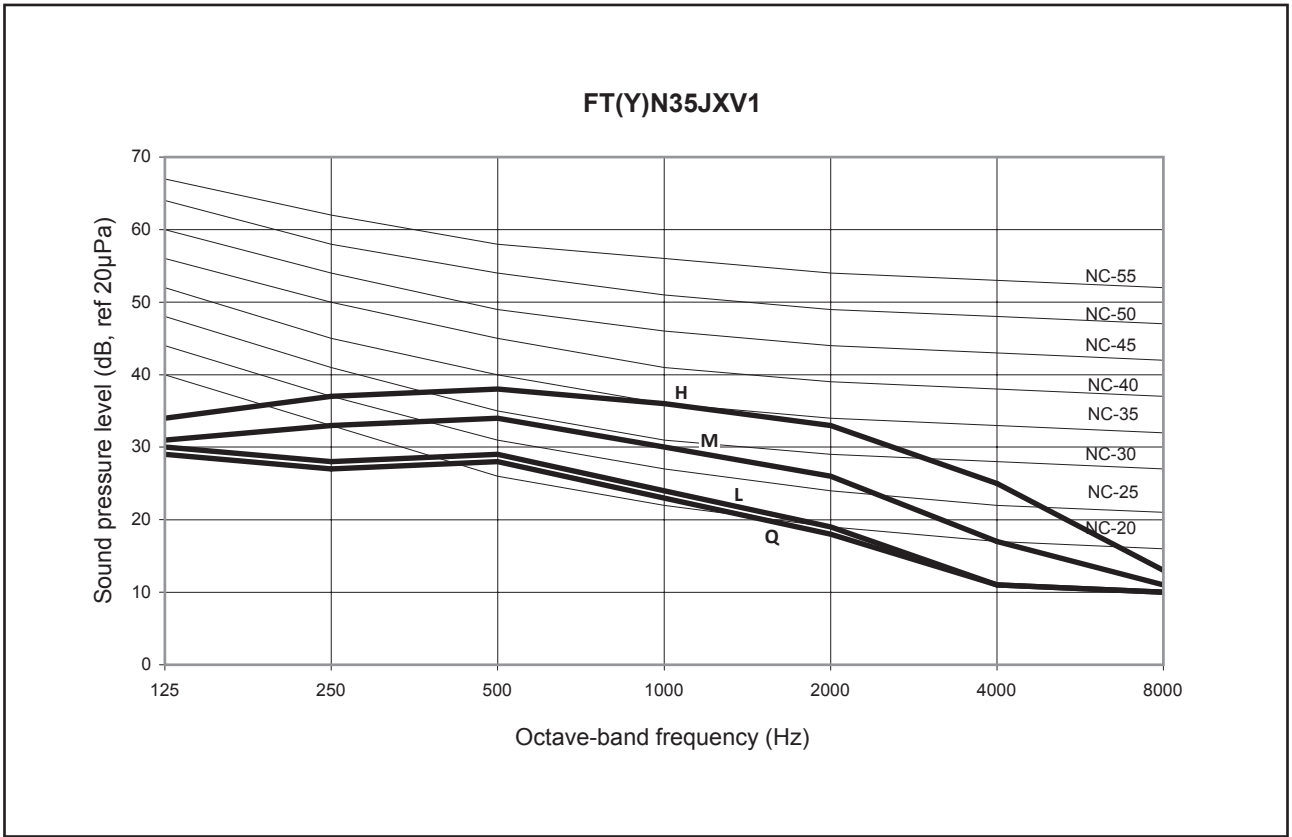
Sound Pressure Level

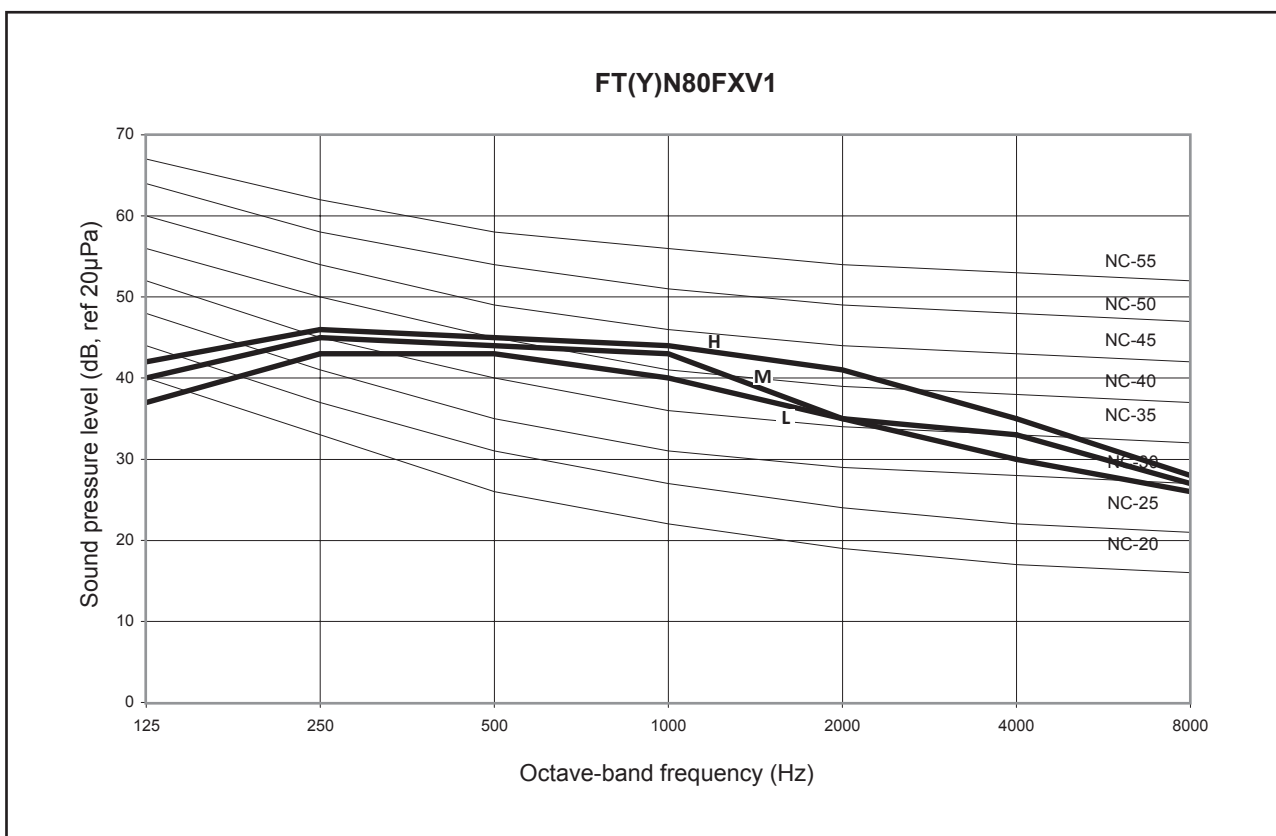
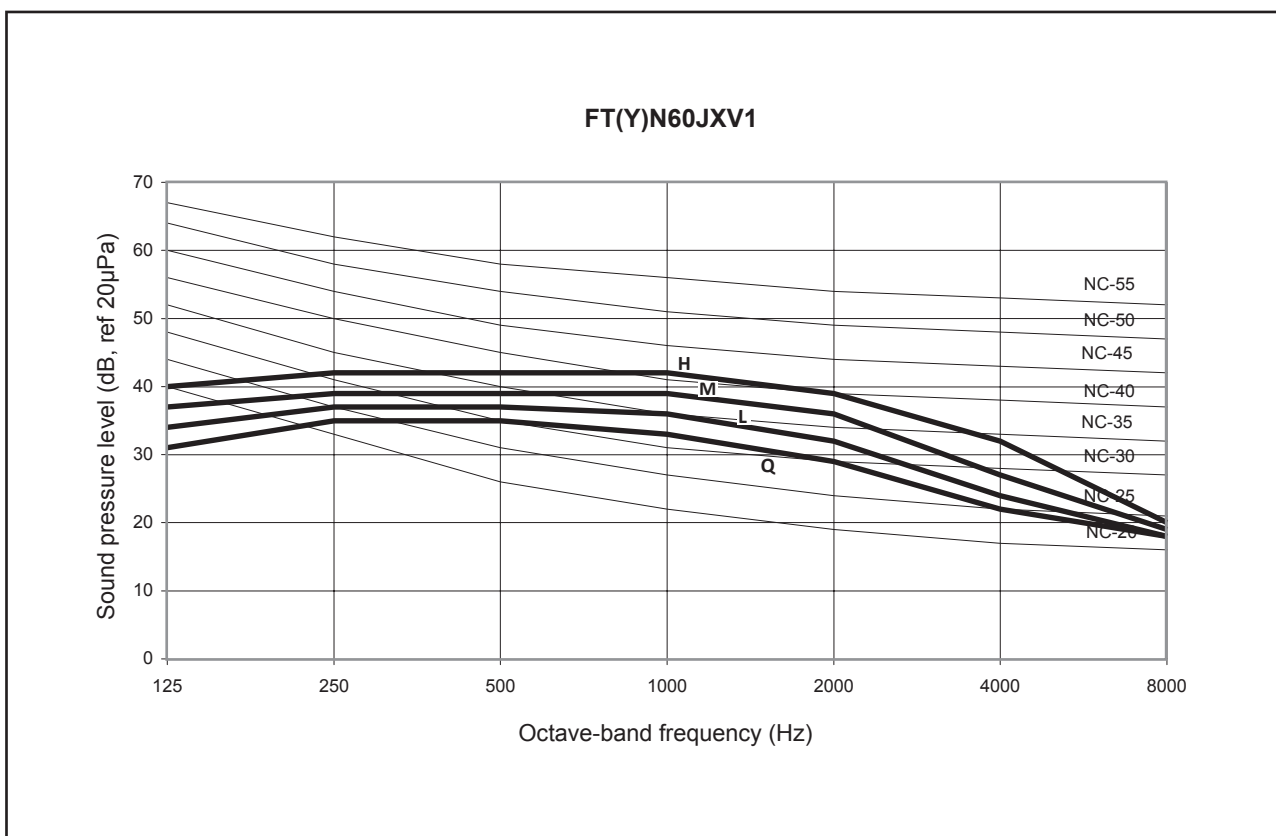
Model	Speed	1/1 Octave Sound Pressure (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTYN20JXV1	High	33	35	34	32	27	17	6	36	31
	Med	30	30	29	27	21	10	5	31	25
	Low	22	24	24	20	13	3	3	25	-
	Quiet	22	23	23	20	11	3	3	24	-
FT(Y)N25JXV1	High	31	35	36	34	30	22	9	38	33
	Med	27	31	32	28	23	14	6	33	25
	Low	24	26	27	22	15	7	7	27	21
	Quiet	23	24	25	20	13	6	5	25	-
FT(Y)N35JXV1	High	34	37	38	36	33	25	13	40	35
	Med	31	33	34	30	26	17	11	35	29
	Low	30	28	29	24	19	11	10	29	23
	Quiet	29	27	28	23	18	11	10	28	22
FT(Y)N50JXV1	High	21	31	36	38	36	27	15	42	37
	Med	17	28	34	35	32	23	13	39	34
	Low	14	26	31	32	29	20	12	36	32
	Quiet	12	25	31	31	27	20	13	34	30
FT(Y)N60JXV1	High	40	42	42	42	39	32	20	46	43
	Med	37	39	39	39	36	27	19	43	39
	Low	34	37	37	36	32	24	18	40	37
	Quiet	31	35	35	33	29	22	18	37	33
FT(Y)N80FXV1	High	42	46	45	44	41	35	28	49	43
	Med	40	45	44	43	35	33	27	47	42
	Quiet	37	43	43	40	35	30	26	45	39

Model	Measuring Location
FTYN20JXV1 FT(Y)N25JXV1 FT(Y)N35JXV1 FT(Y)N50JXV1 FT(Y)N60JXV1	 Standard : JIS C 9612
FT(Y)N80FXV1	 Standard : JIS B 8615

NC Curve







Engineering & Physical Data

Engineering Data - R410A MODEL (Cooling Only)

MODEL		INDOOR UNIT		FTN25JXV1		FTN35JXV1		FTN50JXV1		FTN60JXV1					
		OUTDOOR UNIT		RN25CJXV1		RN35CJXV1		RN50CJXV1		RN60CJXV1					
NOMINAL COOLING CAPACITY				Btu/h		9040		10750		17900		20500			
				W		2650		3150		5250		6010			
NOMINAL TOTAL INPUT POWER (COOLING)				W		825		1094		1635		1870			
NOMINAL RUNNING CURRENT (COOLING)				A		3.70		5.10		7.19		8.26			
EER				W/W		3.21		2.88		3.21		3.21			
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP TUBE											
REFRIGERANT CHARGE				kg		0.80		0.85		1.45		1.65			
POWER SOURCE				V/Ph/Hz		220-240 / 1 / 50									
REFRIGERANT TYPE				R410A											
INDOOR UNIT	CONTROL		AIR DISCHARGE OPERATION		AUTOMATIC LOUVER (UP & DOWN)										
	AIR FLOW		TURBO		I/s / CFM		169 / 358		176 / 372		269 / 570		303 / 641		
			HIGH		I/s / CFM		161 / 342		168 / 355		253 / 536		290 / 614		
			MEDIUM		I/s / CFM		133 / 282		140 / 298		226 / 478		253 / 537		
			LOW		I/s / CFM		106 / 225		114 / 242		200 / 424		224 / 474		
			QUIET		I/s / CFM		99 / 209		106 / 225		177 / 375		197 / 418		
	SOUND PRESSURE LEVEL (T/H/M/L/Q)				dBA		39 / 38 / 33 / 27 / 25		41 / 40 / 35 / 29 / 28		44 / 42 / 39 / 36 / 34		48 / 46 / 43 / 40 / 37		
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm		288 X 800 X 206		288 X 800 X 206		310 X 1065 X 224		310 X 1065 X 224		
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm		344 X 874 X 274		344 X 874 X 274		370 X 1121 X 285		370 X 1121 X 285		
	UNIT WEIGHT				kg		9				14				
	CONDENSATE DRAIN SIZE				mm		19.05								
	FAN		TYPE		CROSS FLOW FAN										
			DRIVE		I PHASE SCR										
	FAN MOTOR		TYPE		INDUCTION										
			INDEX OF PROTECTION (IP)		20										
			INSULATION GRADE		E										
			RATED INPUT POWER		W		37		42		57		72		
			RATED RUNNING CURRENT		A		0.19		0.21		0.27		0.34		
			MOTOR OUTPUT		W		18		18		26		30		
			POLES		4										
	COIL		TUBE		MATERIAL		COPPER								
					DIAMETER		mm		7.00						
			FIN		MATERIAL		ALUMINIUM								
			FACE AREA		m²		0.18		0.18		0.29		0.29		
		ROW		2											
AIR QUALITY		FILTER		TYPE		SARANET									
				QUANTITY		pc		2							
CASING				COLOUR		WHITE									
OUTDOOR UNIT	AIR FLOW				I/s / CFM		396 / 840		457 / 969		598 / 1268		788 / 1670		
	SOUND PRESSURE LEVEL				dBA		46		49		52		52		
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm		540 X 700 X 250		540 X 700 x 250		651 X 855 X 328		753 X 855 X 328		
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm		596 X 803 X 323		596 X 803 x 323		693 X 990 X 415		793 X 990 X 415		
	UNIT WEIGHT				kg		29		31		47		50		
	PIPE CONNECTION		TYPE		FLARE VALVE										
			SIZE				6.35		6.35		6.35		6.35		
			GAS		mm		9.52		12.70		12.70		15.88		
	FAN		TYPE		PROPELER										
			DRIVE		DIRECT										
	FAN MOTOR		TYPE		INDUCTION										
			INDEX OF PROTECTION (IP)				22		44		23		23		
			INSULATION GRADE				B		B		F		F		
			RATED INPUT POWER		W		52		59		81		123		
			RATED RUNNING CURRENT		A		0.23		0.26		0.36		0.53		
			MOTOR OUTPUT		W		21		30		32		60		
			POLES		6										
	COMPRESSOR		TYPE		ROTARY										
			OIL TYPE				FV50S		FV50S		FV50S		FV50S		
			OIL AMOUNT		cm³		350		350		670		670		
			RATED INPUT POWER		W		736		993		1497		1675		
			RATED RUNNING CURRENT		A		3.28		4.63		6.56		7.39		
			LOCKED ROTOR AMP.		A		17.2		22.0		32.0		32.3		
COIL		TUBE		MATERIAL		COPPER									
				DIAMETER		mm		7.00		9.52		7.00		7.00	
		FIN		MATERIAL		ALUMINIUM									
				FACE AREA		m²		0.35		0.36		0.50		0.61	
		ROW				1		1		2		2			
CASING				COLOUR		LIGHT GREY									

ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

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

Engineering Data - R410A MODEL (Cooling Only)

MODEL		INDOOR UNIT		FTN80FXV1				
		OUTDOOR UNIT		RR71CXV1	RR71CXY1			
NOMINAL COOLING CAPACITY				Btu/h	26000	26000		
				W	7620	7620		
NOMINAL TOTAL INPUT POWER (COOLING)				W	2560	2631		
NOMINAL RUNNING CURRENT (COOLING)				A	12.20	4.60		
EER				W/W	2.98	2.90		
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP TUBE				
REFRIGERANT CHARGE				kg	1.80	1.80		
POWER SOURCE				V/Ph/Hz	220-240 / 1 / 50	380-415 / 3 / 50		
REFRIGERANT TYPE				R410A				
INDOOR UNIT	CONTROL	AIR DISCHARGE OPERATION		AUTOMATIC LOUVER (UP & DOWN)				
	AIR FLOW	HIGH		I/s / CFM	316 / 670			
		MEDIUM		I/s / CFM	297 / 630			
		LOW		I/s / CFM	236 / 500			
	SOUND PRESSURE LEVEL (H/M/L)		dB(A)	49 / 47 / 45				
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH		mm	360 X 1200 X 200			
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH		mm	430 X 1267 X 271			
	UNIT WEIGHT		kg	17				
	CONDENSATE DRAIN SIZE		mm	20				
	FAN	TYPE		CROSS FLOW FAN				
		DRIVE		DIRECT				
	FAN MOTOR	TYPE		INDUCTION				
		INDEX OF PROTECTION (IP)		20				
		INSULATION GRADE		B				
		RATED INPUT POWER		W	61			
		RATED RUNNING CURRENT		A	0.27			
		MOTOR OUTPUT		W	40			
	COIL	POLES		4				
		TUBE	MATERIAL		COPPER			
			DIAMETER		mm	9.52		
		FIN	MATERIAL		ALUMINIUM			
			FACE AREA		m²	0.29		
	ROW		2					
	AIR QUALITY	FILTER	TYPE		SARANET			
					3 X 3			
	CASING				COLOUR	LIGHT GREY		
	OUTDOOR UNIT	AIR FLOW		I/s / CFM	684 / 1450	684 / 1450		
SOUND PRESSURE LEVEL		dB(A)	58	58				
UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm	753 x 855 x 328	753 x 855 x 328		
PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm	810 X 990 x 415	810 X 990 x 415		
UNIT WEIGHT		kg	57	57				
PIPE CONNECTION		TYPE		FLARE VALVE				
		SIZE	LIQUID	mm	9.52	9.52		
			GAS	mm	15.88	15.88		
FAN		TYPE		PROPELLER				
		DRIVE		DIRECT				
FAN MOTOR		TYPE		INDUCTION				
		INDEX OF PROTECTION (IP)		23	23			
		INSULATION GRADE		F	F			
		RATED INPUT POWER		W	124	124		
		RATED RUNNING CURRENT		A	0.79	0.79		
		MOTOR OUTPUT		W	75	75		
COMPRESSOR		POLES		6				
		TYPE		ROTARY				
		OIL TYPE		RB68A or FREOL ALPHA68M				
		OIL AMOUNT	cm³	1242	1242			
		RATED INPUT POWER	W	2370	2565			
		RATED RUNNING CURRENT	A	11.4	4.50			
COIL		LOCKED ROTOR AMP.		A	65	26		
		TUBE	MATERIAL		COPPER			
			DIAMETER		mm	7.00	7.00	
		FIN	MATERIAL		ALUMINIUM			
FACE AREA			m²	0.62	0.62			
ROW			2					
CASING			COLOUR	LIGHT GREY				

ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

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

Engineering Data - R410A MODEL (Heatpump)

MODEL		INDOOR UNIT		FTYN20JXV1		FTYN25JXV1		FTYN35JXV1		FTYN50JXV1				
		OUTDOOR UNIT		RYN20CGXV1		RYN25CJXV1		RYN35CJXV1		RYN50CJXV1				
NOMINAL COOLING CAPACITY				Btu/h	7300	9040		10750		17900				
				W	2140	2650		3150		5250				
NOMINAL HEATING CAPACITY				Btu/h	7000	9550		11530		18000				
				W	2060	2800		3380		5280				
NOMINAL TOTAL INPUT POWER (COOLING)				W	705	825		1094		1635				
NOMINAL TOTAL INPUT POWER (HEATING)				W	560	775		988		1490				
NOMINAL RUNNING CURRENT (COOLING)				A	3.16	3.70		5.10		7.19				
NOMINAL RUNNING CURRENT (HEATING)				A	2.54	3.47		4.70		6.53				
EER				W/W	3.04	3.21		2.88		3.21				
COP				W/W	3.68	3.61		3.42		3.54				
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP TUBE										
REFRIGERANT CHARGE				kg	0.65	0.80		0.85		1.45				
POWER SOURCE				V/Ph/Hz	220-240 / 1 / 50									
REFRIGERANT TYPE				R410A										
INDOOR UNIT	CONTROL		AIR DISCHARGE OPERATION		AUTOMATIC LOUVER (UP & DOWN) WIRELESS OR WIRED REMOTE CONTROL									
	AIR FLOW	TURBO		l/s / CFM	130 / 275	169 / 358		176 / 372		269 / 570				
		HIGH		l/s / CFM	124 / 262	161 / 342		168 / 355		253 / 536				
		MEDIUM		l/s / CFM	107 / 227	133 / 282		140 / 298		226 / 478				
		LOW		l/s / CFM	92 / 195	106 / 225		114 / 242		200 / 424				
		QUIET		l/s / CFM	86 / 182	99 / 209		106 / 225		177 / 375				
	SOUND PRESSURE LEVEL (T/H/M/L/Q)			dBA	37 / 36 / 31 / 25 / 24	39 / 38 / 33 / 27 / 25		41 / 40 / 35 / 29 / 28		44 / 42 / 39 / 36 / 34				
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm	288 X 800 X 206	288 X 800 X 206		288 X 800 X 206		310 X 1065 X 224			
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm	350 X 874 X 285	344 X 874 X 274		344 X 874 X 274		370 X 1121 X 285			
	UNIT WEIGHT			kg	9	9		9		14				
	CONDENSATE DRAIN SIZE			mm	19.05									
	FAN	TYPE		CROSS FLOW FAN										
		DRIVE		DIRECT										
	FAN MOTOR	TYPE		I PHASE SCR										
		INDEX OF PROTECTION (IP)		20										
		INSULATION GRADE		E										
		RATED INPUT POWER (COOLING)		W	26	37		42		57				
		RATED INPUT POWER (HEATING)		W	28									
		RATED RUNNING CURRENT		A	0.19	0.19		0.21		0.27				
		MOTOR OUTPUT		W	18	18		18		26				
	COIL	POLES		4										
		TUBE	MATERIAL		COPPER									
			DIAMETER		mm	7.00								
			MATERIAL		ALUMINIUM									
	FIN	FACE AREA		m²	0.13	0.18		0.18		0.29				
		ROW												
	AIR QUALITY	FILTER	TYPE		SARANET									
			QUANTITY		pc	2								
	CASING			COLOUR	WHITE									
OUTDOOR UNIT	AIR FLOW			l/s / CFM	297 / 630	396 / 840		457 / 969		618 / 1310				
	SOUND PRESSURE LEVEL			dBA	44	46		49		52				
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm	494 X 600 X 245	540 X 700 X 250		540 X 700 X 250		651 X 855 X 328			
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm	535 X 721 X 331	596 X 803 X 323		596 X 803 X 323		693 X 990 X 415			
	UNIT WEIGHT			kg	24	29		31		47				
	PIPE CONNECTION	SIZE	TYPE		FLARE VALVE									
			LIQUID		mm	6.35	6.35		6.35		6.35			
			GAS		mm	9.52	9.52		12.70		12.70			
	FAN	TYPE		PROPELLER										
		DRIVE		DIRECT										
	FAN MOTOR	TYPE		INDUCTION										
		INDEX OF PROTECTION (IP)			23	22		44		23				
		INSULATION GRADE			B	B		B		F				
		RATED INPUT POWER		W	37	52		59		105				
		RATED RUNNING CURRENT		A	0.16	0.23		0.26		0.46				
		MOTOR OUTPUT		W	20	21		30		43				
		POLES		6										
	COMPRESSOR	TYPE		ROTARY										
		OIL TYPE			RB68A / Freol Alpha68M	FV50S		FV50S		FV50S				
		OIL AMOUNT		cm³	300	350		350		670				
		RATED INPUT POWER (COOLING)		W	642	736		993		1473				
		RATED INPUT POWER (HEATING)		W	495	686		887		1328				
		RATED RUNNING CURRENT (COOLING)		A	2.81	3.28		4.63		6.47				
		RATED RUNNING CURRENT (HEATING)		A	2.19	3.05		4.23		5.81				
		LOCKED ROTOR AMP.		A	12.4	17.2		22.0		32.0				
	COIL	TUBE	MATERIAL		COPPER									
			DIAMETER		mm	7.00	7.00		9.52		7.00			
		FIN	MATERIAL		ALUMINIUM									
			FACE AREA		m²	0.29	0.35		0.36		0.50			
	CASING			COLOUR	1	1		1		2				
					LIGHT GREY									

ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

COOLING	HEATING
INDOOR: 27°C DB / 19°C WB	INDOOR: 20°C DB
OUTDOOR: 35°C DB / 24°C WB	OUTDOOR: 7°C DB / 6°C WB

Engineering Data - R410A MODEL (Heatpump)

MODEL		INDOOR UNIT		FTYN60JXV1		FTYN80FXV1			
		OUTDOOR UNIT		RYN60CJXV1		RQ71CXV1		RQ71CXY1	
NOMINAL COOLING CAPACITY				Btu/h	20500	26000	26000		
				W	6010	7620	7620		
NOMINAL HEATING CAPACITY				Btu/h	21000	26000	26000		
				W	6150	7620	7620		
NOMINAL TOTAL INPUT POWER (COOLING)				W	1870	2560	2631		
NOMINAL TOTAL INPUT POWER (HEATING)				W	1800	2442	2294		
NOMINAL RUNNING CURRENT (COOLING)				A	8.26	12.2	4.60		
NOMINAL RUNNING CURRENT (HEATING)				A	7.99	11.6	4.20		
EER				W/W	3.21	2.98	2.90		
COP				W/W	3.42	3.12	3.32		
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP TUBE					
REFRIGERANT CHARGE				kg	1.65	1.80	2.15		
POWER SOURCE				V/Ph/Hz	220-240 / 1 / 50	220-240 / 1 / 50	380-415 / 3 / 50		
REFRIGERANT TYPE				R410A					
INDOOR UNIT	CONTROL		AIR DISCHARGE OPERATION		AUTOMATIC LOUVER (UP & DOWN)				
					WIRELESS OR WIRED REMOTE CONTROL				
	AIR FLOW	TURBO		l/s / CFM	303 / 641	-			
		HIGH		l/s / CFM	290 / 614	316 / 670			
		MEDIUM		l/s / CFM	253 / 537	297 / 630			
		LOW		l/s / CFM	224 / 474	236 / 500			
		QUIET		l/s / CFM	197 / 418	-			
	SOUND PRESSURE LEVEL (T/H/M/L/Q)			dBA	48 / 46 / 43 / 40 / 37	49 / 47 / 45			
	UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm	310 X 1065 X 224	360 X 1200 X 200		
	PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm	370 X 1121 X 285	430 X 1267 X 271		
	UNIT WEIGHT			kg	14	17			
	CONDENSATE DRAIN SIZE			mm	19.05	20			
	FAN	TYPE		CROSS FLOW FAN					
		DRIVE		DIRECT					
	FAN MOTOR	TYPE				I PHASE SCR	INDUCTION		
		INDEX OF PROTECTION (IP)				20	20		
		INSULATION GRADE				E	B		
		RATED INPUT POWER		W	72	61			
		RATED RUNNING CURRENT		A	0.34	0.27			
		MOTOR OUTPUT		W	30	40			
		POLES				4	4		
	COIL	TUBE	MATERIAL		COPPER				
			DIAMETER		mm	7.00	9.52		
		FIN	MATERIAL		ALUMINIUM				
			FACE AREA		m²	0.29	0.29		
	AIR QUALITY	FILTER	TYPE		SARANET				
			QUANTITY		pc	2	3 X 3		
			CASING		COLOUR	WHITE	LIGHT GREY		
	AIR FLOW				l/s / CFM	684 / 1450	684 / 1450	684 / 1450	
SOUND PRESSURE LEVEL				dBA	52	58	58		
UNIT DIMENSION		HEIGHT X WIDTH X DEPTH		mm	753 X 855 X 328	753 X 855 X 328	753 X 855 X 328		
PACKING DIMENSION		HEIGHT X WIDTH X DEPTH		mm	793 X 990 X 415	810 X 990 x 415	810 X 990 x 415		
UNIT WEIGHT				kg	50	57	57		
OUTDOOR UNIT	PIPE CONNECTION	TYPE		FLARE VALVE					
		SIZE	LIQUID	mm	6.35	9.52	9.52		
			GAS	mm	15.88	15.88	15.88		
	FAN	TYPE		PROPPLEPER					
		DRIVE		DIRECT					
	FAN MOTOR	TYPE		INDUCTION					
		INDEX OF PROTECTION (IP)				23	23	23	
		INSULATION GRADE				F	F	F	
		RATED INPUT POWER		W	123	124	124		
		RATED RUNNING CURRENT		A	0.54	0.79	0.79		
		MOTOR OUTPUT		W	60	75	75		
		POLES				6			
	COMPRESSOR	TYPE		ROTARY					
		OIL TYPE				FV50S	RB68A or FREOL ALPHA68M		
		OIL AMOUNT		cm³	670	1242	1242		
		RATED INPUT POWER (COOLING)		W	1675	2375	2446		
		RATED INPUT POWER (HEATING)		W	1605	2257	2104		
		RATED RUNNING CURRENT (COOLING)		A	7.39	11.1	3.92		
		RATED RUNNING CURRENT (HEATING)		A	7.12	10.5	3.41		
		LOCKED ROTOR AMP.		A	32.3	65	26		
	COIL	TUBE	MATERIAL		COPPER				
			DIAMETER		mm	7.00			
		FIN	MATERIAL		ALUMINIUM				
			FACE AREA		m²	0.61	0.62	0.62	
	CASING				COLOUR	LIGHT GREY			

ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).

COOLING		HEATING	
INDOOR: 27°C DB / 19°C WB		INDOOR: 20°C DB	
OUTDOOR: 35°C DB / 24°C WB		OUTDOOR: 7°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.

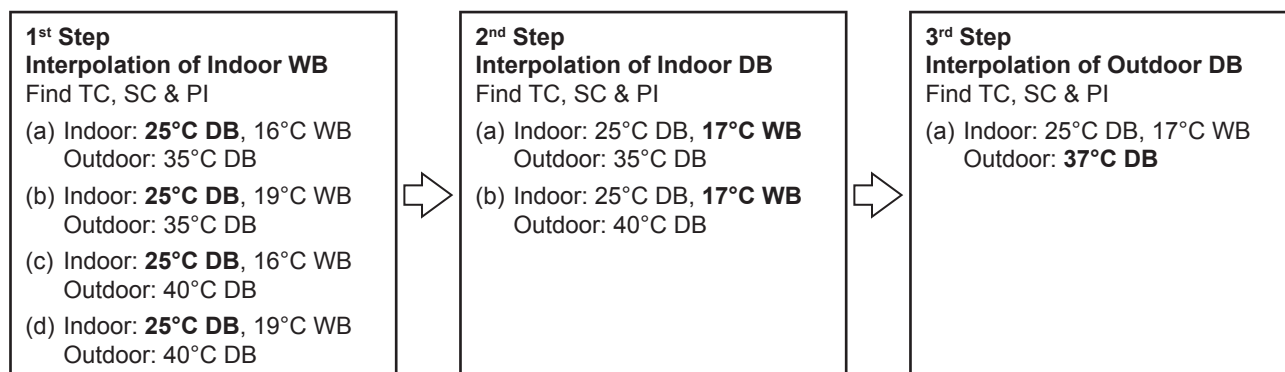
Example:

Model: FTN25JXV1 – RN25CJXV1
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		3.20	3.20	1.27
	25	-----	x ₁	y ₁	z ₁
	27		3.30	3.30	1.27

By Interpolation Method

$$\Rightarrow \frac{25^\circ\text{C} - 24^\circ\text{C}}{27^\circ\text{C} - 24^\circ\text{C}} = \frac{x_1 - 3.20\text{kW}}{3.30\text{kW} - 3.20\text{kW}}$$

$$\Rightarrow x_1 = 3.23\text{kW}$$

Similarly,

$$y_1 = 3.23\text{kW}$$

$$z_1 = 1.27\text{kW}$$

(b) Indoor Condition: 25°C DB, 16°C WB
Outdoor Condition: 35°C DB

EWB	EDB	Outdoor temperature				
		35°C				
			TC	SC	PI	
			↓	↓	↓	
19	24		3.51	2.57	1.29	
	25	-----	x ₂	y ₂	z ₂	
	27		3.52	2.99	1.29	

By Interpolation Method

$$\Rightarrow \frac{25^{\circ}\text{C} - 24^{\circ}\text{C}}{27^{\circ}\text{C} - 24^{\circ}\text{C}} = \frac{x_2 - 3.51\text{kW}}{3.52\text{kW} - 3.51\text{kW}}$$

$$\Rightarrow x_2 = 3.51\text{kW}$$

Similarly,

$$y_2 = 2.71\text{kW}$$

$$z_2 = 1.29\text{kW}$$

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

$$(c) \ x_3 = 2.98 \text{ kW}; y_3 = 2.98 \text{ kW}; z_3 = 1.38 \text{ kW}$$

$$(d) \ x_4 = 3.22 \text{ W}; y_4 = 2.53 \text{ kW}; z_4 = 1.40 \text{ kW}$$

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		3.23	3.23	1.27	
17		-----	x ₅	y ₅	z ₅	
19			3.51	2.71	1.29	

By Interpolation Method

$$\Rightarrow \frac{17^{\circ}\text{C} - 16^{\circ}\text{C}}{19^{\circ}\text{C} - 16^{\circ}\text{C}} = \frac{x_5 - 3.23\text{kW}}{3.51\text{kW} - 3.23\text{kW}}$$

$$\Rightarrow x_5 = 3.32\text{kW}$$

Similarly,

$$y_5 = 3.06\text{kW}$$

$$z_5 = 1.28\text{kW}$$

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

$$(c) \ x_6 = 3.06 \text{ kW}; y_6 = 2.83 \text{ kW}; z_6 = 1.39 \text{ kW}$$

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	-----	3.32	3.06	1.28	x	y	z	3.06	2.83	1.39

By Interpolation Method

$$\Rightarrow \frac{37^{\circ}\text{C} - 35^{\circ}\text{C}}{40^{\circ}\text{C} - 35^{\circ}\text{C}} = \frac{x - 3.32\text{kW}}{3.06\text{kW} - 3.32\text{kW}}$$

$$\Rightarrow x = 3.22\text{kW}$$

Similarly,

$$y = 2.97\text{kW}$$

$$z = 1.35\text{kW}$$

Performance Tables

R410A Cooling Only

Model: FTN25JXV1 - RN25CJXV1

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
225	16°C	21°C	2.50	1.93	0.63	2.41	1.88	0.68	2.32	1.83	0.73	2.23	1.78	0.80	2.04	1.65	0.86	1.89	1.56	0.95
		24°C	2.50	2.31	0.63	2.41	2.26	0.68	2.32	2.21	0.73	2.23	2.15	0.80	2.05	2.01	0.86	1.90	1.90	0.95
		27°C	2.52	2.52	0.63	2.44	2.44	0.68	2.35	2.35	0.74	2.26	2.26	0.80	2.09	2.09	0.87	1.94	1.94	0.96
		30°C	2.60	2.60	0.63	2.52	2.52	0.68	2.45	2.45	0.74	2.37	2.37	0.80	2.20	2.20	0.87	2.05	2.05	0.97
	19°C	24°C	2.76	1.80	0.64	2.66	1.76	0.69	2.56	1.71	0.75	2.46	1.66	0.81	2.26	1.55	0.88	2.09	1.46	0.97
		27°C	2.76	2.06	0.64	2.66	2.02	0.69	2.56	1.97	0.75	2.46	1.92	0.81	2.26	1.80	0.88	2.09	1.70	0.97
		30°C	2.76	2.55	0.64	2.67	2.49	0.69	2.57	2.44	0.75	2.47	2.38	0.81	2.28	2.22	0.88	2.11	2.10	0.97
		33°C	2.79	2.79	0.64	2.70	2.70	0.69	2.62	2.62	0.75	2.53	2.53	0.81	2.34	2.34	0.88	2.19	2.19	0.98
	22°C	27°C	3.03	1.77	0.65	2.93	1.72	0.70	2.82	1.68	0.76	2.71	1.63	0.83	2.49	1.52	0.90	2.31	1.43	0.99
		30°C	3.03	2.15	0.65	2.93	2.11	0.70	2.82	2.06	0.76	2.71	2.01	0.83	2.49	1.88	0.90	2.31	1.78	0.99
		33°C	3.03	2.51	0.65	2.93	2.46	0.70	2.82	2.42	0.76	2.71	2.37	0.83	2.50	2.22	0.90	2.31	2.11	0.99
		36°C	3.04	2.85	0.65	2.94	2.79	0.70	2.84	2.73	0.76	2.74	2.67	0.83	2.52	2.51	0.90	2.35	2.35	0.99
282	16°C	21°C	2.60	2.02	0.63	2.51	1.96	0.68	2.41	1.91	0.74	2.31	1.86	0.80	2.12	1.73	0.87	1.96	1.63	0.96
		24°C	2.61	2.45	0.63	2.51	2.39	0.68	2.42	2.33	0.74	2.32	2.27	0.80	2.13	2.12	0.87	1.97	1.97	0.96
		27°C	2.64	2.64	0.63	2.55	2.55	0.69	2.46	2.46	0.74	2.37	2.37	0.81	2.19	2.19	0.88	2.04	2.04	0.97
		30°C	2.75	2.75	0.64	2.67	2.67	0.69	2.59	2.59	0.75	2.50	2.50	0.81	2.32	2.32	0.88	2.17	2.17	0.98
	19°C	24°C	2.86	1.91	0.64	2.76	1.86	0.70	2.66	1.81	0.75	2.55	1.76	0.82	2.34	1.64	0.89	2.16	1.55	0.98
		27°C	2.87	2.20	0.64	2.77	2.15	0.70	2.66	2.10	0.75	2.56	2.05	0.82	2.35	1.92	0.89	2.17	1.81	0.98
		30°C	2.88	2.71	0.64	2.78	2.65	0.70	2.68	2.59	0.76	2.58	2.53	0.82	2.38	2.36	0.89	2.20	2.20	0.98
		33°C	2.93	2.93	0.65	2.84	2.84	0.70	2.75	2.75	0.76	2.66	2.66	0.82	2.46	2.46	0.90	2.30	2.30	0.99
	22°C	27°C	3.15	1.87	0.65	3.04	1.82	0.71	2.92	1.78	0.77	2.81	1.73	0.83	2.58	1.61	0.90	2.39	1.52	1.00
		30°C	3.15	2.29	0.65	3.04	2.24	0.71	2.93	2.19	0.77	2.81	2.14	0.83	2.58	2.01	0.90	2.39	1.90	1.00
		33°C	3.16	2.68	0.66	3.05	2.63	0.71	2.93	2.58	0.77	2.82	2.52	0.83	2.59	2.37	0.91	2.40	2.25	1.00
		36°C	3.18	3.03	0.66	3.07	2.98	0.71	2.97	2.92	0.77	2.86	2.85	0.84	2.64	2.64	0.91	2.46	2.46	1.00
342	16°C	21°C	2.70	2.10	0.64	2.60	2.05	0.69	2.50	2.00	0.75	2.39	1.94	0.81	2.20	1.81	0.88	2.02	1.70	0.97
		24°C	2.71	2.56	0.64	2.61	2.50	0.69	2.51	2.43	0.75	2.41	2.37	0.81	2.22	2.21	0.88	2.05	2.05	0.97
		27°C	2.75	2.75	0.64	2.66	2.66	0.69	2.57	2.57	0.75	2.48	2.48	0.81	2.29	2.29	0.88	2.14	2.14	0.98
		30°C	2.89	2.89	0.65	2.81	2.81	0.70	2.72	2.72	0.76	2.63	2.63	0.82	2.44	2.44	0.90	2.28	2.28	0.99
	19°C	24°C	2.97	2.02	0.65	2.86	1.97	0.70	2.75	1.92	0.76	2.64	1.87	0.82	2.42	1.74	0.89	2.24	1.64	0.98
		27°C	2.98	2.33	0.65	2.87	2.28	0.70	2.76	2.23	0.76	2.65	2.17	0.83	2.43	2.03	0.89	2.25	1.92	0.99
		30°C	3.00	2.87	0.65	2.89	2.81	0.70	2.79	2.75	0.76	2.68	2.68	0.83	2.47	2.47	0.90	2.29	2.29	0.99
		33°C	3.07	3.07	0.65	2.98	2.98	0.71	2.88	2.88	0.77	2.79	2.79	0.83	2.58	2.58	0.91	2.42	2.42	1.00
	22°C	27°C	3.26	1.97	0.66	3.14	1.93	0.72	3.02	1.88	0.78	2.90	1.83	0.84	2.66	1.71	0.91	2.46	1.61	1.00
		30°C	3.26	2.43	0.66	3.15	2.39	0.72	3.03	2.34	0.78	2.91	2.28	0.84	2.67	2.14	0.91	2.47	2.03	1.00
		33°C	3.27	2.85	0.66	3.16	2.80	0.72	3.04	2.74	0.78	2.93	2.68	0.84	2.69	2.51	0.91	2.49	2.39	1.01
		36°C	3.30	3.22	0.66	3.20	3.16	0.72	3.09	3.09	0.78	2.98	2.98	0.85	2.75	2.75	0.92	2.57	2.57	1.01

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 net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

Model: FTN35JXV1 - RN35CJXV1

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
242	16°C	21°C	2.97	2.18	0.83	2.86	2.13	0.90	2.76	2.07	0.97	2.65	2.01	1.06	2.43	1.87	1.15	2.24	1.76	1.26
		24°C	2.97	2.62	0.83	2.87	2.56	0.90	2.76	2.50	0.97	2.65	2.43	1.06	2.44	2.27	1.15	2.25	2.15	1.26
		27°C	3.00	2.97	0.83	2.90	2.90	0.90	2.80	2.80	0.98	2.69	2.69	1.06	2.48	2.48	1.15	2.31	2.31	1.27
		30°C	3.09	3.09	0.84	3.00	3.00	0.91	2.91	2.91	0.98	2.82	2.82	1.07	2.61	2.61	1.16	2.44	2.44	1.28
	19°C	24°C	3.28	2.04	0.84	3.16	1.99	0.91	3.04	1.94	0.99	2.92	1.88	1.07	2.69	1.75	1.17	2.48	1.65	1.28
		27°C	3.28	2.33	0.84	3.16	2.28	0.91	3.05	2.23	0.99	2.93	2.17	1.07	2.69	2.03	1.17	2.49	1.93	1.28
		30°C	3.28	2.88	0.84	3.17	2.82	0.91	3.06	2.76	0.99	2.94	2.69	1.08	2.71	2.52	1.17	2.51	2.38	1.29
		33°C	3.32	3.32	0.85	3.21	3.21	0.92	3.11	3.11	0.99	3.00	3.00	1.08	2.78	2.78	1.17	2.60	2.60	1.29
	22°C	27°C	3.60	2.00	0.86	3.48	1.95	0.93	3.35	1.90	1.01	3.22	1.85	1.10	2.96	1.72	1.19	2.74	1.62	1.31
		30°C	3.60	2.43	0.86	3.48	2.38	0.93	3.35	2.33	1.01	3.22	2.27	1.10	2.96	2.13	1.19	2.74	2.02	1.31
		33°C	3.61	2.84	0.86	3.48	2.79	0.93	3.35	2.73	1.01	3.22	2.68	1.10	2.97	2.51	1.19	2.75	2.39	1.31
		36°C	3.62	3.22	0.86	3.50	3.16	0.93	3.38	3.09	1.01	3.25	3.02	1.10	3.00	2.83	1.19	2.79	2.69	1.31
298	16°C	21°C	3.09	2.28	0.84	2.98	2.22	0.91	2.87	2.16	0.98	2.75	2.10	1.06	2.52	1.96	1.16	2.33	1.84	1.27
		24°C	3.10	2.77	0.84	2.99	2.70	0.91	2.88	2.64	0.98	2.76	2.57	1.07	2.54	2.40	1.16	2.34	2.26	1.27
		27°C	3.14	3.14	0.84	3.03	3.03	0.91	2.93	2.93	0.99	2.82	2.82	1.07	2.61	2.61	1.16	2.43	2.43	1.28
		30°C	3.27	3.27	0.85	3.17	3.17	0.92	3.08	3.08	0.99	2.98	2.98	1.08	2.76	2.76	1.17	2.58	2.58	1.30
	19°C	24°C	3.40	2.16	0.85	3.28	2.10	0.92	3.16	2.05	1.00	3.03	1.99	1.08	2.79	1.86	1.18	2.57	1.75	1.30
		27°C	3.41	2.48	0.85	3.29	2.43	0.92	3.17	2.37	1.00	3.04	2.32	1.08	2.79	2.17	1.18	2.58	2.05	1.30
		30°C	3.43	3.06	0.85	3.31	3.00	0.92	3.19	2.93	1.00	3.07	2.86	1.09	2.82	2.67	1.18	2.62	2.53	1.30
		33°C	3.48	3.48	0.86	3.38	3.38	0.93	3.27	3.27	1.01	3.16	3.16	1.09	2.93	2.93	1.19	2.74	2.74	1.31
	22°C	27°C	3.74	2.11	0.87	3.61	2.06	0.94	3.47	2.01	1.02	3.34	1.96	1.11	3.07	1.82	1.20	2.84	1.72	1.32
		30°C	3.75	2.59	0.87	3.61	2.54	0.94	3.48	2.48	1.02	3.34	2.42	1.11	3.07	2.27	1.20	2.84	2.15	1.32
		33°C	3.75	3.04	0.87	3.62	2.98	0.94	3.49	2.92	1.02	3.35	2.85	1.11	3.08	2.68	1.20	2.86	2.54	1.32
		36°C	3.77	3.43	0.87	3.65	3.37	0.94	3.53	3.30	1.02	3.40	3.22	1.11	3.13	3.01	1.20	2.92	2.84	1.33
355	16°C	21°C	3.20	2.38	0.85	3.09	2.32	0.91	2.97	2.26	0.99	2.85	2.19	1.07	2.61	2.04	1.16	2.41	1.92	1.28
		24°C	3.22	2.89	0.85	3.10	2.82	0.92	2.99	2.75	0.99	2.87	2.68	1.08	2.63	2.50	1.17	2.43	2.36	1.29
		27°C	3.27	3.27	0.85	3.17	3.17	0.92	3.06	3.06	1.00	2.95	2.95	1.08	2.73	2.73	1.17	2.54	2.54	1.29
		30°C	3.44	3.44	0.86	3.34	3.34	0.93	3.23	3.23	1.01	3.13	3.13	1.09	2.90	2.90	1.19	2.70	2.70	1.31
	19°C	24°C	3.53	2.28	0.86	3.40	2.22	0.93	3.27	2.17	1.01	3.14	2.11	1.09	2.88	1.97	1.19	2.66	1.85	1.31
		27°C	3.54	2.64	0.86	3.41	2.58	0.93	3.28	2.52	1.01	3.15	2.46	1.09	2.89	2.30	1.19	2.67	2.17	1.31
		30°C	3.57	3.25	0.86	3.44	3.18	0.93	3.32	3.10	1.01	3.19	3.03	1.10	2.94	2.83	1.19	2.73	2.66	1.31
		33°C	3.64	3.64	0.87	3.54	3.54	0.94	3.43	3.43	1.02	3.32	3.32	1.11	3.07	3.07	1.20	2.87	2.87	1.33
	22°C	27°C	3.87	2.23	0.88	3.73	2.18	0.95	3.59	2.13	1.03	3.45	2.07	1.11	3.17	1.93	1.21	2.93	1.83	1.33
		30°C	3.88	2.75	0.88	3.74	2.70	0.95	3.60	2.64	1.03	3.46	2.58	1.12	3.17	2.42	1.21	2.94	2.29	1.33
		33°C	3.89	3.22	0.88	3.76	3.17	0.95	3.62	3.10	1.03	3.48	3.03	1.12	3.20	2.84	1.21	2.96	2.70	1.33
		36°C	3.93	3.64	0.88	3.80	3.57	0.95	3.67	3.50	1.03	3.54	3.41	1.12	3.27	3.18	1.22	3.05	2.99	1.34

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 net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

Model: FTN50JXV1 - RN50CJXV1

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
424	16°C	21°C	4.95	3.55	1.24	4.78	3.46	1.34	4.60	3.36	1.46	4.41	3.27	1.58	4.05	3.04	1.71	3.74	2.86	1.89
		24°C	4.96	4.25	1.24	4.78	4.15	1.34	4.60	4.06	1.46	4.42	3.96	1.58	4.06	3.69	1.71	3.76	3.49	1.89
		27°C	5.00	4.82	1.24	4.83	4.71	1.35	4.66	4.60	1.46	4.48	4.48	1.58	4.14	4.14	1.72	3.85	3.85	1.89
		30°C	5.15	5.15	1.25	5.00	5.00	1.35	4.85	4.85	1.47	4.69	4.69	1.59	4.35	4.35	1.73	4.07	4.07	1.91
	19°C	24°C	5.46	3.31	1.26	5.27	3.23	1.37	5.08	3.14	1.48	4.87	3.06	1.61	4.48	2.85	1.74	4.14	2.68	1.92
		27°C	5.46	3.79	1.26	5.27	3.71	1.37	5.08	3.62	1.48	4.88	3.53	1.61	4.48	3.31	1.74	4.15	3.13	1.92
		30°C	5.47	4.68	1.26	5.28	4.58	1.37	5.10	4.48	1.48	4.90	4.37	1.61	4.52	4.09	1.74	4.19	3.87	1.92
		33°C	5.54	5.54	1.27	5.36	5.36	1.37	5.18	5.18	1.49	5.01	5.01	1.61	4.63	4.63	1.75	4.33	4.33	1.94
	22°C	27°C	6.01	3.24	1.28	5.80	3.17	1.39	5.59	3.09	1.51	5.37	3.00	1.64	4.94	2.80	1.78	4.57	2.64	1.96
		30°C	6.01	3.95	1.28	5.80	3.87	1.39	5.59	3.78	1.51	5.37	3.69	1.64	4.94	3.46	1.78	4.57	3.28	1.96
		33°C	6.01	4.62	1.29	5.80	4.53	1.39	5.59	4.44	1.51	5.37	4.35	1.64	4.95	4.08	1.78	4.58	3.88	1.96
		36°C	6.03	5.24	1.29	5.83	5.13	1.39	5.63	5.02	1.51	5.43	4.91	1.64	5.00	4.61	1.78	4.65	4.37	1.96
478	16°C	21°C	5.15	3.70	1.25	4.96	3.61	1.36	4.78	3.51	1.47	4.58	3.41	1.59	4.20	3.18	1.73	3.88	2.99	1.90
		24°C	5.17	4.49	1.25	4.98	4.39	1.36	4.79	4.28	1.47	4.60	4.18	1.59	4.23	3.90	1.73	3.91	3.68	1.90
		27°C	5.23	5.10	1.26	5.05	4.98	1.36	4.88	4.86	1.47	4.70	4.70	1.60	4.34	4.34	1.74	4.05	4.05	1.92
		30°C	5.45	5.45	1.27	5.29	5.29	1.37	5.13	5.13	1.49	4.96	4.96	1.61	4.60	4.60	1.75	4.30	4.30	1.94
	19°C	24°C	5.67	3.50	1.27	5.47	3.41	1.38	5.27	3.32	1.49	5.06	3.23	1.62	4.64	3.01	1.76	4.29	2.84	1.94
		27°C	5.68	4.03	1.27	5.48	3.94	1.38	5.28	3.86	1.49	5.06	3.76	1.62	4.65	3.52	1.76	4.30	3.33	1.94
		30°C	5.71	4.98	1.28	5.51	4.87	1.38	5.32	4.76	1.50	5.11	4.64	1.62	4.71	4.34	1.76	4.37	4.10	1.94
		33°C	5.81	5.81	1.28	5.63	5.63	1.39	5.45	5.45	1.50	5.27	5.27	1.63	4.88	4.88	1.77	4.56	4.56	1.96
	22°C	27°C	6.23	3.43	1.30	6.02	3.35	1.41	5.79	3.26	1.52	5.56	3.18	1.65	5.11	2.96	1.79	4.73	2.79	1.97
		30°C	6.24	4.21	1.30	6.02	4.12	1.41	5.80	4.03	1.52	5.57	3.93	1.65	5.12	3.68	1.79	4.73	3.50	1.97
		33°C	6.25	4.93	1.30	6.04	4.84	1.41	5.81	4.74	1.53	5.59	4.64	1.65	5.14	4.35	1.79	4.76	4.13	1.98
		36°C	6.29	5.57	1.30	6.09	5.47	1.41	5.88	5.35	1.53	5.66	5.23	1.66	5.22	4.89	1.80	4.87	4.62	1.99
536	16°C	21°C	5.34	3.86	1.26	5.15	3.76	1.37	4.95	3.67	1.48	4.74	3.56	1.60	4.35	3.32	1.74	4.01	3.12	1.92
		24°C	5.37	4.69	1.27	5.17	4.58	1.37	4.98	4.47	1.48	4.78	4.35	1.61	4.39	4.06	1.74	4.05	3.83	1.92
		27°C	5.46	5.38	1.27	5.28	5.24	1.37	5.10	5.09	1.49	4.92	4.92	1.61	4.54	4.54	1.75	4.23	4.23	1.94
		30°C	5.73	5.73	1.28	5.56	5.56	1.39	5.39	5.39	1.50	5.21	5.21	1.63	4.83	4.83	1.77	4.51	4.51	1.96
	19°C	24°C	5.88	3.70	1.28	5.67	3.61	1.39	5.45	3.52	1.51	5.23	3.43	1.63	4.80	3.19	1.77	4.43	3.01	1.95
		27°C	5.90	4.29	1.29	5.68	4.19	1.39	5.47	4.09	1.51	5.25	3.99	1.64	4.82	3.73	1.77	4.46	3.53	1.95
		30°C	5.94	5.27	1.29	5.73	5.16	1.39	5.53	5.04	1.51	5.32	4.92	1.64	4.90	4.59	1.78	4.54	4.33	1.96
		33°C	6.07	6.07	1.29	5.90	5.90	1.40	5.71	5.71	1.52	5.53	5.53	1.65	5.12	5.12	1.80	4.79	4.79	1.98
	22°C	27°C	6.45	3.62	1.31	6.22	3.54	1.42	5.99	3.46	1.54	5.75	3.36	1.67	5.28	3.14	1.81	4.88	2.96	1.99
		30°C	6.46	4.47	1.31	6.23	4.38	1.42	6.00	4.29	1.54	5.76	4.19	1.67	5.29	3.92	1.81	4.89	3.72	1.99
		33°C	6.49	5.24	1.31	6.26	5.14	1.42	6.03	5.04	1.54	5.79	4.93	1.67	5.33	4.62	1.81	4.94	4.38	2.00
		36°C	6.54	5.91	1.31	6.34	5.80	1.42	6.12	5.68	1.54	5.90	5.54	1.68	5.45	5.16	1.82	5.09	4.86	2.01

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 net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

Model: FTN60JXV1 - RN60CJXV1

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
474	16°C	21°C	5.67	3.96	1.42	5.47	3.85	1.54	5.26	3.75	1.66	5.05	3.64	1.80	4.64	3.39	1.96	4.28	3.19	2.16
		24°C	5.67	4.74	1.42	5.47	4.63	1.54	5.27	4.52	1.66	5.06	4.41	1.81	4.65	4.12	1.96	4.30	3.89	2.16
		27°C	5.72	5.37	1.42	5.53	5.25	1.54	5.33	5.13	1.67	5.13	4.99	1.81	4.74	4.65	1.96	4.41	4.36	2.17
		30°C	5.90	5.90	1.43	5.73	5.73	1.55	5.55	5.55	1.68	5.37	5.37	1.82	4.98	4.98	1.98	4.66	4.66	2.19
	19°C	24°C	6.25	3.69	1.44	6.03	3.60	1.56	5.81	3.50	1.69	5.58	3.41	1.84	5.13	3.17	1.99	4.74	2.99	2.20
		27°C	6.26	4.23	1.44	6.03	4.13	1.56	5.81	4.04	1.69	5.58	3.94	1.84	5.13	3.68	1.99	4.75	3.49	2.20
		30°C	6.26	5.22	1.44	6.05	5.10	1.56	5.83	4.99	1.69	5.61	4.87	1.84	5.17	4.56	1.99	4.79	4.31	2.20
		33°C	6.34	6.34	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.73	5.73	1.85	5.30	5.30	2.00	4.96	4.96	2.21
	22°C	27°C	6.88	3.62	1.47	6.64	3.53	1.59	6.40	3.44	1.73	6.15	3.34	1.87	5.65	3.12	2.03	5.23	2.94	2.24
		30°C	6.88	4.41	1.47	6.64	4.31	1.59	6.40	4.21	1.73	6.15	4.11	1.87	5.65	3.85	2.03	5.23	3.65	2.24
		33°C	6.88	5.15	1.47	6.64	5.05	1.59	6.40	4.95	1.73	6.15	4.85	1.87	5.66	4.55	2.03	5.25	4.32	2.24
		36°C	6.91	5.83	1.47	6.68	5.72	1.59	6.45	5.60	1.73	6.21	5.48	1.88	5.73	5.13	2.04	5.33	4.87	2.24
537	16°C	21°C	5.90	4.13	1.43	5.68	4.02	1.55	5.47	3.91	1.68	5.24	3.80	1.82	4.81	3.54	1.97	4.44	3.33	2.18
		24°C	5.91	5.01	1.43	5.70	4.89	1.55	5.49	4.77	1.68	5.27	4.65	1.82	4.84	4.34	1.98	4.47	4.10	2.18
		27°C	5.98	5.69	1.44	5.78	5.56	1.56	5.58	5.41	1.69	5.38	5.25	1.83	4.97	4.88	1.99	4.63	4.56	2.19
		30°C	6.23	6.23	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.68	5.68	1.85	5.26	5.26	2.01	4.92	4.92	2.21
	19°C	24°C	6.50	3.90	1.46	6.26	3.81	1.58	6.03	3.71	1.71	5.79	3.60	1.85	5.31	3.36	2.01	4.91	3.17	2.21
		27°C	6.51	4.50	1.46	6.27	4.40	1.58	6.04	4.30	1.71	5.80	4.19	1.85	5.33	3.92	2.01	4.92	3.71	2.22
		30°C	6.54	5.55	1.46	6.31	5.43	1.58	6.08	5.30	1.71	5.85	5.17	1.86	5.39	4.84	2.01	5.00	4.57	2.22
		33°C	6.65	6.65	1.46	6.44	6.44	1.59	6.24	6.24	1.72	6.03	6.03	1.87	5.59	5.59	2.03	5.22	5.22	2.24
	22°C	27°C	7.14	3.82	1.48	6.89	3.73	1.61	6.63	3.64	1.74	6.37	3.54	1.89	5.85	3.30	2.05	5.41	3.11	2.26
		30°C	7.15	4.69	1.48	6.89	4.59	1.61	6.64	4.49	1.74	6.37	4.39	1.89	5.86	4.11	2.05	5.42	3.90	2.26
		33°C	7.16	5.49	1.48	6.91	5.39	1.61	6.66	5.28	1.74	6.39	5.17	1.89	5.88	4.85	2.05	5.45	4.60	2.26
		36°C	7.20	6.21	1.49	6.97	6.09	1.61	6.73	5.97	1.75	6.48	5.83	1.90	5.98	5.45	2.06	5.58	5.15	2.27
614	16°C	21°C	6.11	4.31	1.45	5.89	4.20	1.56	5.66	4.09	1.69	5.43	3.97	1.83	4.98	3.70	1.99	4.59	3.48	2.19
		24°C	6.15	5.23	1.45	5.92	5.11	1.57	5.70	4.98	1.70	5.47	4.85	1.84	5.02	4.53	1.99	4.64	4.27	2.20
		27°C	6.25	5.99	1.45	6.04	5.84	1.57	5.84	5.68	1.70	5.63	5.50	1.85	5.20	5.10	2.01	4.85	4.76	2.21
		30°C	6.56	6.56	1.46	6.37	6.37	1.59	6.17	6.17	1.72	5.97	5.97	1.87	5.53	5.53	2.03	5.16	5.16	2.24
	19°C	24°C	6.73	4.13	1.47	6.49	4.03	1.59	6.24	3.92	1.72	5.99	3.82	1.87	5.49	3.56	2.03	5.07	3.36	2.23
		27°C	6.75	4.78	1.47	6.51	4.67	1.59	6.26	4.56	1.72	6.01	4.45	1.87	5.52	4.16	2.03	5.10	3.93	2.23
		30°C	6.81	5.88	1.47	6.56	5.75	1.59	6.33	5.62	1.73	6.09	5.48	1.87	5.60	5.12	2.03	5.20	4.82	2.24
		33°C	6.95	6.95	1.48	6.75	6.75	1.60	6.54	6.54	1.74	6.33	6.33	1.89	5.86	5.86	2.05	5.48	5.48	2.27
	22°C	27°C	7.38	4.04	1.50	7.12	3.95	1.62	6.85	3.85	1.76	6.58	3.75	1.91	6.04	3.50	2.07	5.58	3.30	2.28
		30°C	7.40	4.98	1.50	7.14	4.89	1.62	6.87	4.78	1.76	6.59	4.67	1.91	6.06	4.37	2.07	5.60	4.15	2.28
		33°C	7.43	5.84	1.50	7.17	5.73	1.62	6.91	5.61	1.76	6.63	5.49	1.91	6.10	5.15	2.07	5.65	4.88	2.28
		36°C	7.49	6.59	1.50	7.26	6.47	1.63	7.01	6.33	1.77	6.75	6.17	1.92	6.24	5.76	2.08	5.82	5.42	2.30

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 net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

Model: FTN80FXV1 - RR71CXV1

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
500	16°C	21°C	7.18	4.68	1.95	6.93	4.55	2.10	6.67	4.43	2.28	6.40	4.30	2.47	5.88	4.01	2.68	5.43	3.77	2.95
		24°C	7.19	5.60	1.95	6.94	5.47	2.10	6.68	5.34	2.28	6.41	5.21	2.47	5.89	4.87	2.68	5.45	4.59	2.96
		27°C	7.25	6.35	1.95	7.01	6.21	2.11	6.76	6.06	2.28	6.51	5.90	2.48	6.01	5.49	2.69	5.59	5.16	2.97
		30°C	7.47	7.47	1.96	7.26	7.26	2.12	7.04	7.04	2.30	6.81	6.81	2.50	6.32	6.32	2.71	5.91	5.91	3.00
	19°C	24°C	7.92	4.37	1.98	7.65	4.26	2.14	7.37	4.14	2.32	7.07	4.03	2.51	6.50	3.75	2.73	6.01	3.53	3.01
		27°C	7.93	5.00	1.98	7.65	4.88	2.14	7.37	4.77	2.32	7.08	4.66	2.51	6.51	4.35	2.73	6.02	4.13	3.01
		30°C	7.94	6.16	1.98	7.67	6.03	2.14	7.40	5.90	2.32	7.12	5.76	2.52	6.55	5.38	2.73	6.08	5.10	3.01
		33°C	8.04	8.04	1.98	7.77	7.77	2.15	7.52	7.52	2.33	7.27	7.27	2.53	6.72	6.72	2.74	6.29	6.29	3.03
	22°C	27°C	8.72	4.27	2.01	8.42	4.17	2.18	8.11	4.07	2.36	7.79	3.95	2.56	7.17	3.68	2.78	6.63	3.47	3.06
		30°C	8.72	5.21	2.01	8.42	5.10	2.18	8.11	4.98	2.36	7.79	4.86	2.56	7.17	4.55	2.78	6.64	4.32	3.06
		33°C	8.73	6.08	2.01	8.42	5.97	2.18	8.12	5.85	2.36	7.80	5.73	2.56	7.18	5.38	2.78	6.65	5.11	3.07
		36°C	8.75	6.90	2.01	8.47	6.76	2.18	8.17	6.62	2.37	7.87	6.47	2.57	7.26	6.07	2.79	6.75	5.76	3.07
630	16°C	21°C	7.48	4.88	1.96	7.21	4.75	2.12	6.93	4.63	2.30	6.65	4.50	2.49	6.10	4.19	2.70	5.63	3.94	2.98
		24°C	7.50	5.92	1.96	7.23	5.78	2.12	6.96	5.64	2.30	6.68	5.50	2.49	6.13	5.13	2.71	5.67	4.85	2.98
		27°C	7.59	6.73	1.97	7.33	6.57	2.13	7.08	6.40	2.31	6.83	6.21	2.50	6.30	5.77	2.72	5.87	5.39	3.00
		30°C	7.91	7.91	1.98	7.68	7.68	2.15	7.44	7.44	2.33	7.20	7.20	2.53	6.67	6.67	2.75	6.24	6.24	3.03
	19°C	24°C	8.24	4.62	1.99	7.94	4.50	2.16	7.65	4.38	2.34	7.34	4.26	2.54	6.74	3.97	2.75	6.23	3.74	3.03
		27°C	8.25	5.32	2.00	7.96	5.20	2.16	7.66	5.08	2.34	7.35	4.96	2.54	6.75	4.64	2.75	6.24	4.39	3.03
		30°C	8.29	6.56	2.00	8.00	6.42	2.16	7.72	6.27	2.34	7.42	6.12	2.54	6.83	5.72	2.76	6.34	5.41	3.04
		33°C	8.43	8.43	2.00	8.17	8.17	2.17	7.91	7.91	2.36	7.65	7.65	2.56	7.08	7.08	2.78	6.62	6.62	3.07
	22°C	27°C	9.05	4.52	2.03	8.73	4.41	2.20	8.41	4.30	2.39	8.07	4.18	2.59	7.42	3.90	2.81	6.86	3.68	3.09
		30°C	9.06	5.54	2.03	8.74	5.43	2.20	8.42	5.31	2.39	8.08	5.19	2.59	7.43	4.86	2.81	6.87	4.61	3.09
		33°C	9.08	6.50	2.03	8.76	6.37	2.20	8.44	6.24	2.39	8.11	6.11	2.59	7.46	5.73	2.81	6.91	5.44	3.10
		36°C	9.13	7.35	2.04	8.84	7.21	2.21	8.53	7.06	2.39	8.22	6.89	2.60	7.58	6.45	2.82	7.07	6.08	3.11
670	16°C	21°C	7.75	5.09	1.98	7.47	4.96	2.14	7.18	4.83	2.32	6.88	4.69	2.51	6.31	4.37	2.72	5.82	4.11	3.00
		24°C	7.79	6.18	1.98	7.51	6.04	2.14	7.23	5.89	2.32	6.94	5.74	2.52	6.37	5.35	2.73	5.88	5.05	3.01
		27°C	7.92	7.09	1.99	7.66	6.90	2.15	7.40	6.71	2.33	7.14	6.50	2.53	6.59	6.02	2.75	6.14	5.62	3.03
		30°C	8.31	8.31	2.00	8.07	8.07	2.17	7.82	7.82	2.35	7.57	7.57	2.56	7.01	7.01	2.78	6.54	6.54	3.07
	19°C	24°C	8.53	4.88	2.01	8.22	4.76	2.18	7.91	4.64	2.36	7.59	4.51	2.56	6.96	4.21	2.77	6.43	3.97	3.06
		27°C	8.56	5.65	2.01	8.25	5.52	2.18	7.94	5.39	2.36	7.62	5.26	2.56	7.00	4.92	2.78	6.47	4.65	3.06
		30°C	8.63	6.95	2.02	8.32	6.80	2.18	8.02	6.64	2.37	7.72	6.48	2.57	7.11	6.05	2.78	6.60	5.70	3.07
		33°C	8.82	8.82	2.03	8.56	8.56	2.20	8.29	8.29	2.38	8.02	8.02	2.59	7.43	7.43	2.81	6.95	6.95	3.10
	22°C	27°C	9.36	4.78	2.05	9.03	4.67	2.22	8.69	4.55	2.41	8.34	4.43	2.61	7.66	4.14	2.83	7.08	3.91	3.11
		30°C	9.38	5.89	2.05	9.05	5.78	2.22	8.71	5.65	2.41	8.36	5.52	2.61	7.68	5.17	2.83	7.10	4.90	3.12
		33°C	9.41	6.90	2.05	9.09	6.78	2.22	8.75	6.64	2.41	8.41	6.49	2.61	7.74	6.08	2.84	7.17	5.77	3.12
		36°C	9.50	7.79	2.06	9.20	7.65	2.23	8.88	7.48	2.42	8.56	7.30	2.63	7.91	6.81	2.85	7.38	6.41	3.14

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 net capacities.
2. ■■■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

Model: FTN80FXV1 - RR71CXY1

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
500	16°C	21°C	7.18	4.68	2.00	6.93	4.55	2.16	6.67	4.43	2.34	6.40	4.30	2.54	5.88	4.01	2.75	5.43	3.77	3.04
		24°C	7.19	5.60	2.00	6.94	5.47	2.16	6.68	5.34	2.34	6.41	5.21	2.54	5.89	4.87	2.76	5.45	4.59	3.04
		27°C	7.25	6.35	2.00	7.01	6.21	2.17	6.76	6.06	2.35	6.51	5.90	2.55	6.01	5.49	2.76	5.59	5.16	3.05
		30°C	7.47	7.47	2.01	7.26	7.26	2.18	7.04	7.04	2.36	6.81	6.81	2.57	6.32	6.32	2.79	5.91	5.91	3.08
	19°C	24°C	7.92	4.37	2.03	7.65	4.26	2.20	7.37	4.14	2.38	7.07	4.03	2.58	6.50	3.75	2.80	6.01	3.53	3.09
		27°C	7.93	5.00	2.03	7.65	4.88	2.20	7.37	4.77	2.38	7.08	4.66	2.58	6.51	4.35	2.80	6.02	4.13	3.09
		30°C	7.94	6.16	2.03	7.67	6.03	2.20	7.40	5.90	2.38	7.12	5.76	2.59	6.55	5.38	2.81	6.08	5.10	3.09
		33°C	8.04	8.04	2.04	7.77	7.77	2.21	7.52	7.52	2.39	7.27	7.27	2.60	6.72	6.72	2.82	6.29	6.29	3.11
	22°C	27°C	8.72	4.27	2.07	8.42	4.17	2.24	8.11	4.07	2.43	7.79	3.95	2.63	7.17	3.68	2.86	6.63	3.47	3.15
		30°C	8.72	5.21	2.07	8.42	5.10	2.24	8.11	4.98	2.43	7.79	4.86	2.63	7.17	4.55	2.86	6.64	4.32	3.15
		33°C	8.73	6.08	2.07	8.42	5.97	2.24	8.12	5.85	2.43	7.80	5.73	2.63	7.18	5.38	2.86	6.65	5.11	3.15
		36°C	8.75	6.90	2.07	8.47	6.76	2.24	8.17	6.62	2.43	7.87	6.47	2.64	7.26	6.07	2.86	6.75	5.76	3.16
630	16°C	21°C	7.48	4.88	2.02	7.21	4.75	2.18	6.93	4.63	2.36	6.65	4.50	2.56	6.10	4.19	2.78	5.63	3.94	3.06
		24°C	7.50	5.92	2.02	7.23	5.78	2.18	6.96	5.64	2.36	6.68	5.50	2.56	6.13	5.13	2.78	5.67	4.85	3.07
		27°C	7.59	6.73	2.02	7.33	6.57	2.19	7.08	6.40	2.37	6.83	6.21	2.57	6.30	5.77	2.79	5.87	5.39	3.08
		30°C	7.91	7.91	2.04	7.68	7.68	2.21	7.44	7.44	2.39	7.20	7.20	2.60	6.67	6.67	2.82	6.24	6.24	3.12
	19°C	24°C	8.24	4.62	2.05	7.94	4.50	2.22	7.65	4.38	2.40	7.34	4.26	2.61	6.74	3.97	2.83	6.23	3.74	3.12
		27°C	8.25	5.32	2.05	7.96	5.20	2.22	7.66	5.08	2.40	7.35	4.96	2.61	6.75	4.64	2.83	6.24	4.39	3.12
		30°C	8.29	6.56	2.05	8.00	6.42	2.22	7.72	6.27	2.41	7.42	6.12	2.61	6.83	5.72	2.83	6.34	5.41	3.13
		33°C	8.43	8.43	2.06	8.17	8.17	2.23	7.91	7.91	2.42	7.65	7.65	2.63	7.08	7.08	2.86	6.62	6.62	3.15
	22°C	27°C	9.05	4.52	2.09	8.73	4.41	2.26	8.41	4.30	2.45	8.07	4.18	2.66	7.42	3.90	2.88	6.86	3.68	3.18
		30°C	9.06	5.54	2.09	8.74	5.43	2.26	8.42	5.31	2.45	8.08	5.19	2.66	7.43	4.86	2.88	6.87	4.61	3.18
		33°C	9.08	6.50	2.09	8.76	6.37	2.26	8.44	6.24	2.45	8.11	6.11	2.66	7.46	5.73	2.89	6.91	5.44	3.18
		36°C	9.13	7.35	2.09	8.84	7.21	2.27	8.53	7.06	2.46	8.22	6.89	2.67	7.58	6.45	2.90	7.07	6.08	3.20
670	16°C	21°C	7.75	5.09	2.03	7.47	4.96	2.20	7.18	4.83	2.38	6.88	4.69	2.58	6.31	4.37	2.80	5.82	4.11	3.09
		24°C	7.79	6.18	2.04	7.51	6.04	2.20	7.23	5.89	2.38	6.94	5.74	2.59	6.37	5.35	2.80	5.88	5.05	3.09
		27°C	7.92	7.09	2.04	7.66	6.90	2.21	7.40	6.71	2.39	7.14	6.50	2.60	6.59	6.02	2.82	6.14	5.62	3.11
		30°C	8.31	8.31	2.06	8.07	8.07	2.23	7.82	7.82	2.42	7.57	7.57	2.63	7.01	7.01	2.85	6.54	6.54	3.15
	19°C	24°C	8.53	4.88	2.07	8.22	4.76	2.24	7.91	4.64	2.42	7.59	4.51	2.63	6.96	4.21	2.85	6.43	3.97	3.14
		27°C	8.56	5.65	2.07	8.25	5.52	2.24	7.94	5.39	2.43	7.62	5.26	2.63	7.00	4.92	2.85	6.47	4.65	3.14
		30°C	8.63	6.95	2.07	8.32	6.80	2.24	8.02	6.64	2.43	7.72	6.48	2.64	7.11	6.05	2.86	6.60	5.70	3.16
		33°C	8.82	8.82	2.08	8.56	8.56	2.26	8.29	8.29	2.45	8.02	8.02	2.66	7.43	7.43	2.89	6.95	6.95	3.19
	22°C	27°C	9.36	4.78	2.11	9.03	4.67	2.28	8.69	4.55	2.47	8.34	4.43	2.68	7.66	4.14	2.91	7.08	3.91	3.20
		30°C	9.38	5.89	2.11	9.05	5.78	2.28	8.71	5.65	2.47	8.36	5.52	2.68	7.68	5.17	2.91	7.10	4.90	3.20
		33°C	9.41	6.90	2.11	9.09	6.78	2.29	8.75	6.64	2.48	8.41	6.49	2.69	7.74	6.08	2.91	7.17	5.77	3.21
		36°C	9.50	7.79	2.11	9.20	7.65	2.29	8.88	7.48	2.49	8.56	7.30	2.70	7.91	6.81	2.93	7.38	6.41	3.23

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 net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB without pressure trip.

R410A Heatpump

Model: FTYN20JXV1 - RYN20CGXV1

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
195	16°C	21°C	2.02	1.54	0.54	1.95	1.50	0.58	1.87	1.46	0.63	1.80	1.42	0.68	1.65	1.32	0.74	1.52	1.24	0.81
		24°C	2.02	1.85	0.54	1.95	1.80	0.58	1.88	1.76	0.63	1.80	1.72	0.68	1.66	1.60	0.74	1.53	1.51	0.81
		27°C	2.04	2.04	0.54	1.97	1.97	0.58	1.90	1.90	0.63	1.83	1.83	0.68	1.69	1.69	0.74	1.57	1.57	0.82
		30°C	2.10	2.10	0.54	2.04	2.04	0.58	1.98	1.98	0.63	1.91	1.91	0.69	1.77	1.77	0.75	1.66	1.66	0.82
	19°C	24°C	2.23	1.44	0.54	2.15	1.40	0.59	2.07	1.37	0.64	1.99	1.33	0.69	1.83	1.24	0.75	1.69	1.16	0.83
		27°C	2.23	1.65	0.54	2.15	1.61	0.59	2.07	1.57	0.64	1.99	1.53	0.69	1.83	1.44	0.75	1.69	1.36	0.83
		30°C	2.23	2.03	0.54	2.15	1.99	0.59	2.08	1.94	0.64	2.00	1.90	0.69	1.84	1.77	0.75	1.71	1.68	0.83
		33°C	2.26	2.26	0.55	2.18	2.18	0.59	2.11	2.11	0.64	2.04	2.04	0.70	1.89	1.89	0.76	1.77	1.77	0.83
	22°C	27°C	2.45	1.41	0.55	2.36	1.37	0.60	2.28	1.34	0.65	2.19	1.30	0.71	2.01	1.21	0.77	1.86	1.14	0.84
		30°C	2.45	1.72	0.55	2.36	1.68	0.60	2.28	1.64	0.65	2.19	1.60	0.71	2.01	1.50	0.77	1.86	1.42	0.84
		33°C	2.45	2.00	0.55	2.37	1.97	0.60	2.28	1.93	0.65	2.19	1.89	0.71	2.02	1.77	0.77	1.87	1.68	0.84
		36°C	2.46	2.27	0.55	2.38	2.23	0.60	2.29	2.18	0.65	2.21	2.13	0.71	2.04	2.00	0.77	1.90	1.90	0.85
227	16°C	21°C	2.10	1.61	0.54	2.02	1.57	0.58	1.95	1.52	0.63	1.87	1.48	0.69	1.71	1.38	0.74	1.58	1.30	0.82
		24°C	2.11	1.95	0.54	2.03	1.91	0.58	1.95	1.86	0.63	1.88	1.81	0.69	1.72	1.69	0.75	1.59	1.59	0.82
		27°C	2.13	2.13	0.54	2.06	2.06	0.59	1.99	1.99	0.64	1.92	1.92	0.69	1.77	1.77	0.75	1.65	1.65	0.83
		30°C	2.22	2.22	0.55	2.16	2.16	0.59	2.09	2.09	0.64	2.02	2.02	0.70	1.87	1.87	0.76	1.75	1.75	0.83
	19°C	24°C	2.31	1.52	0.55	2.23	1.48	0.59	2.15	1.44	0.64	2.06	1.40	0.70	1.89	1.31	0.76	1.75	1.23	0.83
		27°C	2.32	1.75	0.55	2.23	1.71	0.59	2.15	1.67	0.64	2.06	1.63	0.70	1.90	1.53	0.76	1.75	1.45	0.84
		30°C	2.33	2.16	0.55	2.25	2.11	0.60	2.17	2.07	0.65	2.08	2.02	0.70	1.92	1.89	0.76	1.78	1.78	0.84
		33°C	2.37	2.37	0.55	2.29	2.29	0.60	2.22	2.22	0.65	2.15	2.15	0.70	1.99	1.99	0.77	1.86	1.86	0.84
	22°C	27°C	2.54	1.49	0.56	2.45	1.45	0.61	2.36	1.42	0.66	2.27	1.38	0.71	2.08	1.29	0.77	1.93	1.21	0.85
		30°C	2.54	1.83	0.56	2.45	1.79	0.61	2.36	1.75	0.66	2.27	1.71	0.71	2.09	1.60	0.77	1.93	1.52	0.85
		33°C	2.55	2.14	0.56	2.46	2.10	0.61	2.37	2.06	0.66	2.28	2.01	0.71	2.09	1.89	0.77	1.94	1.79	0.85
		36°C	2.56	2.42	0.56	2.48	2.37	0.61	2.40	2.33	0.66	2.31	2.27	0.72	2.13	2.13	0.78	1.99	1.99	0.86
262	16°C	21°C	2.18	1.68	0.54	2.10	1.63	0.59	2.02	1.59	0.64	1.93	1.55	0.69	1.77	1.44	0.75	1.63	1.36	0.83
		24°C	2.19	2.04	0.55	2.11	1.99	0.59	2.03	1.94	0.64	1.95	1.89	0.69	1.79	1.76	0.75	1.65	1.65	0.83
		27°C	2.22	2.22	0.55	2.15	2.15	0.59	2.08	2.08	0.64	2.00	2.00	0.70	1.85	1.85	0.76	1.73	1.73	0.83
		30°C	2.34	2.34	0.55	2.27	2.27	0.60	2.20	2.20	0.65	2.12	2.12	0.70	1.97	1.97	0.76	1.84	1.84	0.84
	19°C	24°C	2.40	1.61	0.55	2.31	1.57	0.60	2.22	1.53	0.65	2.13	1.49	0.70	1.96	1.39	0.76	1.81	1.31	0.84
		27°C	2.40	1.86	0.55	2.32	1.82	0.60	2.23	1.78	0.65	2.14	1.73	0.71	1.96	1.62	0.76	1.82	1.53	0.84
		30°C	2.42	2.29	0.56	2.34	2.24	0.60	2.25	2.19	0.65	2.17	2.13	0.71	2.00	1.99	0.77	1.85	1.85	0.85
		33°C	2.48	2.48	0.56	2.40	2.40	0.60	2.33	2.33	0.66	2.25	2.25	0.71	2.09	2.09	0.77	1.95	1.95	0.85
	22°C	27°C	2.63	1.57	0.56	2.54	1.54	0.61	2.44	1.50	0.66	2.34	1.46	0.72	2.15	1.36	0.78	1.99	1.29	0.86
		30°C	2.63	1.94	0.56	2.54	1.90	0.61	2.45	1.86	0.66	2.35	1.82	0.72	2.16	1.70	0.78	1.99	1.62	0.86
		33°C	2.64	2.27	0.57	2.55	2.23	0.61	2.46	2.19	0.66	2.36	2.14	0.72	2.17	2.01	0.78	2.01	1.90	0.86
		36°C	2.67	2.57	0.57	2.58	2.52	0.61	2.49	2.47	0.67	2.40	2.40	0.72	2.22	2.22	0.78	2.07	2.07	0.87

Model: FTYN20JXV1 - RYN20CGXV1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	1.240	1.240	1.404	1.404	1.458	1.458	2.058	2.058	2.385	2.385	2.548	2.548	2.712	2.712
17°C	1.208	1.208	1.276	1.276	1.423	1.423	2.055	2.055	2.338	2.338	2.499	2.499	2.660	2.660
19°C	1.175	1.175	1.148	1.148	1.388	1.388	2.053	2.053	2.290	2.290	2.450	2.450	2.609	2.609
21°C	1.143	1.143	1.100	1.100	1.352	1.352	2.016	2.016	2.243	2.243	2.400	2.400	2.557	2.557
23°C	1.110	1.110	1.132	1.132	1.317	1.317	1.944	1.944	2.196	2.196	2.351	2.351	2.506	2.506
25°C	1.078	1.078	1.164	1.164	1.282	1.282	1.872	1.872	2.149	2.149	2.302	2.302	2.455	2.455
27°C	1.045	1.045	1.196	1.196	1.246	1.246	1.800	1.800	2.101	2.101	2.252	2.252	2.403	2.403
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.

2. ■ shows nominal capacities.

3. Direct interpolation is permissible. Do not extrapolate.

4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN25JXV1 - RYN25CJXY1

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
225	16°C	21°C	2.50	1.93	0.63	2.41	1.88	0.68	2.32	1.83	0.73	2.23	1.78	0.80	2.04	1.65	0.86	1.89	1.56	0.95
		24°C	2.50	2.31	0.63	2.41	2.26	0.68	2.32	2.21	0.73	2.23	2.15	0.80	2.05	2.01	0.86	1.90	1.90	0.95
		27°C	2.52	2.52	0.63	2.44	2.44	0.68	2.35	2.35	0.74	2.26	2.26	0.80	2.09	2.09	0.87	1.94	1.94	0.96
		30°C	2.60	2.60	0.63	2.52	2.52	0.68	2.45	2.45	0.74	2.37	2.37	0.80	2.20	2.20	0.87	2.05	2.05	0.97
	19°C	24°C	2.76	1.80	0.64	2.66	1.76	0.69	2.56	1.71	0.75	2.46	1.66	0.81	2.26	1.55	0.88	2.09	1.46	0.97
		27°C	2.76	2.06	0.64	2.66	2.02	0.69	2.56	1.97	0.75	2.46	1.92	0.81	2.26	1.80	0.88	2.09	1.70	0.97
		30°C	2.76	2.55	0.64	2.67	2.49	0.69	2.57	2.44	0.75	2.47	2.38	0.81	2.28	2.22	0.88	2.11	2.10	0.97
		33°C	2.79	2.79	0.64	2.70	2.70	0.69	2.62	2.62	0.75	2.53	2.53	0.81	2.34	2.34	0.88	2.19	2.19	0.98
	22°C	27°C	3.03	1.77	0.65	2.93	1.72	0.70	2.82	1.68	0.76	2.71	1.63	0.83	2.49	1.52	0.90	2.31	1.43	0.99
		30°C	3.03	2.15	0.65	2.93	2.11	0.70	2.82	2.06	0.76	2.71	2.01	0.83	2.49	1.88	0.90	2.31	1.78	0.99
		33°C	3.03	2.51	0.65	2.93	2.46	0.70	2.82	2.42	0.76	2.71	2.37	0.83	2.50	2.22	0.90	2.31	2.11	0.99
		36°C	3.04	2.85	0.65	2.94	2.79	0.70	2.84	2.73	0.76	2.74	2.67	0.83	2.52	2.51	0.90	2.35	2.35	0.99
282	16°C	21°C	2.60	2.02	0.63	2.51	1.96	0.68	2.41	1.91	0.74	2.31	1.86	0.80	2.12	1.73	0.87	1.96	1.63	0.96
		24°C	2.61	2.45	0.63	2.51	2.39	0.68	2.42	2.33	0.74	2.32	2.27	0.80	2.13	2.12	0.87	1.97	1.97	0.96
		27°C	2.64	2.64	0.63	2.55	2.55	0.69	2.46	2.46	0.74	2.37	2.37	0.81	2.19	2.19	0.88	2.04	2.04	0.97
		30°C	2.75	2.75	0.64	2.67	2.67	0.69	2.59	2.59	0.75	2.50	2.50	0.81	2.32	2.32	0.88	2.17	2.17	0.98
	19°C	24°C	2.86	1.91	0.64	2.76	1.86	0.70	2.66	1.81	0.75	2.55	1.76	0.82	2.34	1.64	0.89	2.16	1.55	0.98
		27°C	2.87	2.20	0.64	2.77	2.15	0.70	2.66	2.10	0.75	2.56	2.05	0.82	2.35	1.92	0.89	2.17	1.81	0.98
		30°C	2.88	2.71	0.64	2.78	2.65	0.70	2.68	2.59	0.76	2.58	2.53	0.82	2.38	2.36	0.89	2.20	2.20	0.98
		33°C	2.93	2.93	0.65	2.84	2.84	0.70	2.75	2.75	0.76	2.66	2.66	0.82	2.46	2.46	0.90	2.30	2.30	0.99
	22°C	27°C	3.15	1.87	0.65	3.04	1.82	0.71	2.92	1.78	0.77	2.81	1.73	0.83	2.58	1.61	0.90	2.39	1.52	1.00
		30°C	3.15	2.29	0.65	3.04	2.24	0.71	2.93	2.19	0.77	2.81	2.14	0.83	2.58	2.01	0.90	2.39	1.90	1.00
		33°C	3.16	2.68	0.66	3.05	2.63	0.71	2.93	2.58	0.77	2.82	2.52	0.83	2.59	2.37	0.91	2.40	2.25	1.00
		36°C	3.18	3.03	0.66	3.07	2.98	0.71	2.97	2.92	0.77	2.86	2.85	0.84	2.64	2.64	0.91	2.46	2.46	1.00
342	16°C	21°C	2.70	2.10	0.64	2.60	2.05	0.69	2.50	2.00	0.75	2.39	1.94	0.81	2.20	1.81	0.88	2.02	1.70	0.97
		24°C	2.71	2.56	0.64	2.61	2.50	0.69	2.51	2.43	0.75	2.41	2.37	0.81	2.22	2.21	0.88	2.05	2.05	0.97
		27°C	2.75	2.75	0.64	2.66	2.66	0.69	2.57	2.57	0.75	2.48	2.48	0.81	2.29	2.29	0.88	2.14	2.14	0.98
		30°C	2.89	2.89	0.65	2.81	2.81	0.70	2.72	2.72	0.76	2.63	2.63	0.82	2.44	2.44	0.90	2.28	2.28	0.99
	19°C	24°C	2.97	2.02	0.65	2.86	1.97	0.70	2.75	1.92	0.76	2.64	1.87	0.82	2.42	1.74	0.89	2.24	1.64	0.98
		27°C	2.98	2.33	0.65	2.87	2.28	0.70	2.76	2.23	0.76	2.65	2.17	0.83	2.43	2.03	0.89	2.25	1.92	0.99
		30°C	3.00	2.87	0.65	2.89	2.81	0.70	2.79	2.75	0.76	2.68	2.68	0.83	2.47	2.47	0.90	2.29	2.29	0.99
		33°C	3.07	3.07	0.65	2.98	2.98	0.71	2.88	2.88	0.77	2.79	2.79	0.83	2.58	2.58	0.91	2.42	2.42	1.00
	22°C	27°C	3.26	1.97	0.66	3.14	1.93	0.72	3.02	1.88	0.78	2.90	1.83	0.84	2.66	1.71	0.91	2.46	1.61	1.00
		30°C	3.26	2.43	0.66	3.15	2.39	0.72	3.03	2.34	0.78	2.91	2.28	0.84	2.67	2.14	0.91	2.47	2.03	1.00
		33°C	3.27	2.85	0.66	3.16	2.80	0.72	3.04	2.74	0.78	2.93	2.68	0.84	2.69	2.51	0.91	2.49	2.39	1.01
		36°C	3.30	3.22	0.66	3.20	3.16	0.72	3.09	3.09	0.78	2.98	2.98	0.85	2.75	2.75	0.92	2.57	2.57	1.01

Model: FTYN25JXV1 - RYN25CJXY1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	1.692	1.692	1.915	1.915	1.989	1.989	2.807	2.807	3.253	3.253	3.476	3.476	3.700	3.700
17°C	1.648	1.648	1.850	1.850	1.944	1.944	2.804	2.804	3.201	3.201	3.423	3.423	3.645	3.645
19°C	1.603	1.603	1.785	1.785	1.898	1.898	2.801	2.801	3.149	3.149	3.370	3.370	3.591	3.591
21°C	1.559	1.559	1.737	1.737	1.852	1.852	2.757	2.757	3.097	3.097	3.317	3.317	3.536	3.536
23°C	1.515	1.515	1.705	1.705	1.806	1.806	2.674	2.674	3.045	3.045	3.263	3.263	3.482	3.482
25°C	1.470	1.470	1.674	1.674	1.760	1.760	2.591	2.591	2.993	2.993	3.210	3.210	3.428	3.428
27°C	1.426	1.426	1.642	1.642	1.714	1.714	2.508	2.508	2.941	2.941	3.157	3.157	3.373	3.373
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.

2. ■ shows nominal capacities.

3. Direct interpolation is permissible. Do not extrapolate.

4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN35JXV1 - RYN35CJXV1

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
242	16°C	21°C	2.97	2.18	0.83	2.86	2.13	0.90	2.76	2.07	0.97	2.65	2.01	1.06	2.43	1.87	1.15	2.24	1.76	1.26
		24°C	2.97	2.62	0.83	2.87	2.56	0.90	2.76	2.50	0.97	2.65	2.43	1.06	2.44	2.27	1.15	2.25	2.15	1.26
		27°C	3.00	2.97	0.83	2.90	2.90	0.90	2.80	2.80	0.98	2.69	2.69	1.06	2.48	2.48	1.15	2.31	2.31	1.27
		30°C	3.09	3.09	0.84	3.00	3.00	0.91	2.91	2.91	0.98	2.82	2.82	1.07	2.61	2.61	1.16	2.44	2.44	1.28
	19°C	24°C	3.28	2.04	0.84	3.16	1.99	0.91	3.04	1.94	0.99	2.92	1.88	1.07	2.69	1.75	1.17	2.48	1.65	1.28
		27°C	3.28	2.33	0.84	3.16	2.28	0.91	3.05	2.23	0.99	2.93	2.17	1.07	2.69	2.03	1.17	2.49	1.93	1.28
		30°C	3.28	2.88	0.84	3.17	2.82	0.91	3.06	2.76	0.99	2.94	2.69	1.08	2.71	2.52	1.17	2.51	2.38	1.29
		33°C	3.32	3.32	0.85	3.21	3.21	0.92	3.11	3.11	0.99	3.00	3.00	1.08	2.78	2.78	1.17	2.60	2.60	1.29
	22°C	27°C	3.60	2.00	0.86	3.48	1.95	0.93	3.35	1.90	1.01	3.22	1.85	1.10	2.96	1.72	1.19	2.74	1.62	1.31
		30°C	3.60	2.43	0.86	3.48	2.38	0.93	3.35	2.33	1.01	3.22	2.27	1.10	2.96	2.13	1.19	2.74	2.02	1.31
		33°C	3.61	2.84	0.86	3.48	2.79	0.93	3.35	2.73	1.01	3.22	2.68	1.10	2.97	2.51	1.19	2.75	2.39	1.31
		36°C	3.62	3.22	0.86	3.50	3.16	0.93	3.38	3.09	1.01	3.25	3.02	1.10	3.00	2.83	1.19	2.79	2.69	1.31
298	16°C	21°C	3.09	2.28	0.84	2.98	2.22	0.91	2.87	2.16	0.98	2.75	2.10	1.06	2.52	1.96	1.16	2.33	1.84	1.27
		24°C	3.10	2.77	0.84	2.99	2.70	0.91	2.88	2.64	0.98	2.76	2.57	1.07	2.54	2.40	1.16	2.34	2.26	1.27
		27°C	3.14	3.14	0.84	3.03	3.03	0.91	2.93	2.93	0.99	2.82	2.82	1.07	2.61	2.61	1.16	2.43	2.43	1.28
		30°C	3.27	3.27	0.85	3.17	3.17	0.92	3.08	3.08	0.99	2.98	2.98	1.08	2.76	2.76	1.17	2.58	2.58	1.30
	19°C	24°C	3.40	2.16	0.85	3.28	2.10	0.92	3.16	2.05	1.00	3.03	1.99	1.08	2.79	1.86	1.18	2.57	1.75	1.30
		27°C	3.41	2.48	0.85	3.29	2.43	0.92	3.17	2.37	1.00	3.04	2.32	1.08	2.79	2.17	1.18	2.58	2.05	1.30
		30°C	3.43	3.06	0.85	3.31	3.00	0.92	3.19	2.93	1.00	3.07	2.86	1.09	2.82	2.67	1.18	2.62	2.53	1.30
		33°C	3.48	3.48	0.86	3.38	3.38	0.93	3.27	3.27	1.01	3.16	3.16	1.09	2.93	2.93	1.19	2.74	2.74	1.31
	22°C	27°C	3.74	2.11	0.87	3.61	2.06	0.94	3.47	2.01	1.02	3.34	1.96	1.11	3.07	1.82	1.20	2.84	1.72	1.32
		30°C	3.75	2.59	0.87	3.61	2.54	0.94	3.48	2.48	1.02	3.34	2.42	1.11	3.07	2.27	1.20	2.84	2.15	1.32
		33°C	3.75	3.04	0.87	3.62	2.98	0.94	3.49	2.92	1.02	3.35	2.85	1.11	3.08	2.68	1.20	2.86	2.54	1.32
		36°C	3.77	3.43	0.87	3.65	3.37	0.94	3.53	3.30	1.02	3.40	3.22	1.11	3.13	3.01	1.20	2.92	2.84	1.33
355	16°C	21°C	3.20	2.38	0.85	3.09	2.32	0.91	2.97	2.26	0.99	2.85	2.19	1.07	2.61	2.04	1.16	2.41	1.92	1.28
		24°C	3.22	2.89	0.85	3.10	2.82	0.92	2.99	2.75	0.99	2.87	2.68	1.08	2.63	2.50	1.17	2.43	2.36	1.29
		27°C	3.27	3.27	0.85	3.17	3.17	0.92	3.06	3.06	1.00	2.95	2.95	1.08	2.73	2.73	1.17	2.54	2.54	1.29
		30°C	3.44	3.44	0.86	3.34	3.34	0.93	3.23	3.23	1.01	3.13	3.13	1.09	2.90	2.90	1.19	2.70	2.70	1.31
	19°C	24°C	3.53	2.28	0.86	3.40	2.22	0.93	3.27	2.17	1.01	3.14	2.11	1.09	2.88	1.97	1.19	2.66	1.85	1.31
		27°C	3.54	2.64	0.86	3.41	2.58	0.93	3.28	2.52	1.01	3.15	2.46	1.09	2.89	2.30	1.19	2.67	2.17	1.31
		30°C	3.57	3.25	0.86	3.44	3.18	0.93	3.32	3.10	1.01	3.19	3.03	1.10	2.94	2.83	1.19	2.73	2.66	1.31
		33°C	3.64	3.64	0.87	3.54	3.54	0.94	3.43	3.43	1.02	3.32	3.32	1.11	3.07	3.07	1.20	2.87	2.87	1.33
	22°C	27°C	3.87	2.23	0.88	3.73	2.18	0.95	3.59	2.13	1.03	3.45	2.07	1.11	3.17	1.93	1.21	2.93	1.83	1.33
		30°C	3.88	2.75	0.88	3.74	2.70	0.95	3.60	2.64	1.03	3.46	2.58	1.12	3.17	2.42	1.21	2.94	2.29	1.33
		33°C	3.89	3.22	0.88	3.76	3.17	0.95	3.62	3.10	1.03	3.48	3.03	1.12	3.20	2.84	1.21	2.96	2.70	1.33
		36°C	3.93	3.64	0.88	3.80	3.57	0.95	3.67	3.50	1.03	3.54	3.41	1.12	3.27	3.18	1.22	3.05	2.99	1.34

Model: FTYN35JXV1 - RYN35CJXV1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	2.043	2.043	2.312	2.312	2.402	2.402	3.389	3.389	3.928	3.928	4.197	4.197	4.467	4.467
17°C	1.989	1.989	2.255	2.255	2.347	2.347	3.385	3.385	3.869	3.869	4.137	4.137	4.406	4.406
19°C	1.936	1.936	2.197	2.197	2.293	2.293	3.381	3.381	3.810	3.810	4.078	4.078	4.345	4.345
21°C	1.882	1.882	2.143	2.143	2.238	2.238	3.331	3.331	3.751	3.751	4.018	4.018	4.285	4.285
23°C	1.829	1.829	2.091	2.091	2.184	2.184	3.236	3.236	3.692	3.692	3.958	3.958	4.224	4.224
25°C	1.775	1.775	2.038	2.038	2.129	2.129	3.140	3.140	3.633	3.633	3.898	3.898	4.164	4.164
27°C	1.722	1.722	1.986	1.986	2.074	2.074	3.045	3.045	3.574	3.574	3.839	3.839	4.103	4.103
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN50JXV1 - RYN50CJXV1

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
424	16°C	21°C	4.95	3.55	1.24	4.78	3.46	1.34	4.60	3.36	1.46	4.41	3.27	1.58	4.05	3.04	1.71	3.74	2.86	1.89
		24°C	4.96	4.25	1.24	4.78	4.15	1.34	4.60	4.06	1.46	4.42	3.96	1.58	4.06	3.69	1.71	3.76	3.49	1.89
		27°C	5.00	4.82	1.24	4.83	4.71	1.35	4.66	4.60	1.46	4.48	4.48	1.58	4.14	4.14	1.72	3.85	3.85	1.89
		30°C	5.15	5.15	1.25	5.00	5.00	1.35	4.85	4.85	1.47	4.69	4.69	1.59	4.35	4.35	1.73	4.07	4.07	1.91
	19°C	24°C	5.46	3.31	1.26	5.27	3.23	1.37	5.08	3.14	1.48	4.87	3.06	1.61	4.48	2.85	1.74	4.14	2.68	1.92
		27°C	5.46	3.79	1.26	5.27	3.71	1.37	5.08	3.62	1.48	4.88	3.53	1.61	4.48	3.31	1.74	4.15	3.13	1.92
		30°C	5.47	4.68	1.26	5.28	4.58	1.37	5.10	4.48	1.48	4.90	4.37	1.61	4.52	4.09	1.74	4.19	3.87	1.92
		33°C	5.54	5.54	1.27	5.36	5.36	1.37	5.18	5.18	1.49	5.01	5.01	1.61	4.63	4.63	1.75	4.33	4.33	1.94
	22°C	27°C	6.01	3.24	1.28	5.80	3.17	1.39	5.59	3.09	1.51	5.37	3.00	1.64	4.94	2.80	1.78	4.57	2.64	1.96
		30°C	6.01	3.95	1.28	5.80	3.87	1.39	5.59	3.78	1.51	5.37	3.69	1.64	4.94	3.46	1.78	4.57	3.28	1.96
		33°C	6.01	4.62	1.29	5.80	4.53	1.39	5.59	4.44	1.51	5.37	4.35	1.64	4.95	4.08	1.78	4.58	3.88	1.96
		36°C	6.03	5.24	1.29	5.83	5.13	1.39	5.63	5.02	1.51	5.43	4.91	1.64	5.00	4.61	1.78	4.65	4.37	1.96
478	16°C	21°C	5.15	3.70	1.25	4.96	3.61	1.36	4.78	3.51	1.47	4.58	3.41	1.59	4.20	3.18	1.73	3.88	2.99	1.90
		24°C	5.17	4.49	1.25	4.98	4.39	1.36	4.79	4.28	1.47	4.60	4.18	1.59	4.23	3.90	1.73	3.91	3.68	1.90
		27°C	5.23	5.10	1.26	5.05	4.98	1.36	4.88	4.86	1.47	4.70	4.70	1.60	4.34	4.34	1.74	4.05	4.05	1.92
		30°C	5.45	5.45	1.27	5.29	5.29	1.37	5.13	5.13	1.49	4.96	4.96	1.61	4.60	4.60	1.75	4.30	4.30	1.94
	19°C	24°C	5.67	3.50	1.27	5.47	3.41	1.38	5.27	3.32	1.49	5.06	3.23	1.62	4.64	3.01	1.76	4.29	2.84	1.94
		27°C	5.68	4.03	1.27	5.48	3.94	1.38	5.28	3.86	1.49	5.06	3.76	1.62	4.65	3.52	1.76	4.30	3.33	1.94
		30°C	5.71	4.98	1.28	5.51	4.87	1.38	5.32	4.76	1.50	5.11	4.64	1.62	4.71	4.34	1.76	4.37	4.10	1.94
		33°C	5.81	5.81	1.28	5.63	5.63	1.39	5.45	5.45	1.50	5.27	5.27	1.63	4.88	4.88	1.77	4.56	4.56	1.96
	22°C	27°C	6.23	3.43	1.30	6.02	3.35	1.41	5.79	3.26	1.52	5.56	3.18	1.65	5.11	2.96	1.79	4.73	2.79	1.97
		30°C	6.24	4.21	1.30	6.02	4.12	1.41	5.80	4.03	1.52	5.57	3.93	1.65	5.12	3.68	1.79	4.73	3.50	1.97
		33°C	6.25	4.93	1.30	6.04	4.84	1.41	5.81	4.74	1.53	5.59	4.64	1.65	5.14	4.35	1.79	4.76	4.13	1.98
		36°C	6.29	5.57	1.30	6.09	5.47	1.41	5.88	5.35	1.53	5.66	5.23	1.66	5.22	4.89	1.80	4.87	4.62	1.99
536	16°C	21°C	5.34	3.86	1.26	5.15	3.76	1.37	4.95	3.67	1.48	4.74	3.56	1.60	4.35	3.32	1.74	4.01	3.12	1.92
		24°C	5.37	4.69	1.27	5.17	4.58	1.37	4.98	4.47	1.48	4.78	4.35	1.61	4.39	4.06	1.74	4.05	3.83	1.92
		27°C	5.46	5.38	1.27	5.28	5.24	1.37	5.10	5.09	1.49	4.92	4.92	1.61	4.54	4.54	1.75	4.23	4.23	1.94
		30°C	5.73	5.73	1.28	5.56	5.56	1.39	5.39	5.39	1.50	5.21	5.21	1.63	4.83	4.83	1.77	4.51	4.51	1.96
	19°C	24°C	5.88	3.70	1.28	5.67	3.61	1.39	5.45	3.52	1.51	5.23	3.43	1.63	4.80	3.19	1.77	4.43	3.01	1.95
		27°C	5.90	4.29	1.29	5.68	4.19	1.39	5.47	4.09	1.51	5.25	3.99	1.64	4.82	3.73	1.77	4.46	3.53	1.95
		30°C	5.94	5.27	1.29	5.73	5.16	1.39	5.53	5.04	1.51	5.32	4.92	1.64	4.90	4.59	1.78	4.54	4.33	1.96
		33°C	6.07	6.07	1.29	5.90	5.90	1.40	5.71	5.71	1.52	5.53	5.53	1.65	5.12	5.12	1.80	4.79	4.79	1.98
	22°C	27°C	6.45	3.62	1.31	6.22	3.54	1.42	5.99	3.46	1.54	5.75	3.36	1.67	5.28	3.14	1.81	4.88	2.96	1.99
		30°C	6.46	4.47	1.31	6.23	4.38	1.42	6.00	4.29	1.54	5.76	4.19	1.67	5.29	3.92	1.81	4.89	3.72	1.99
		33°C	6.49	5.24	1.31	6.26	5.14	1.42	6.03	5.04	1.54	5.79	4.93	1.67	5.33	4.62	1.81	4.94	4.38	2.00
		36°C	6.54	5.91	1.31	6.34	5.80	1.42	6.12	5.68	1.54	5.90	5.54	1.68	5.45	5.16	1.82	5.09	4.86	2.01

Model: FTYN50JXV1 - RYN50CJXV1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	3.189	3.189	3.610	3.610	3.750	3.750	5.291	5.291	6.132	6.132	6.553	6.553	6.973	6.973
17°C	3.106	3.106	3.291	3.291	3.664	3.664	5.285	5.285	6.038	6.038	6.457	6.457	6.876	6.876
19°C	3.022	3.022	2.973	2.973	3.578	3.578	5.279	5.279	5.944	5.944	6.361	6.361	6.778	6.778
21°C	2.938	2.938	2.854	2.854	3.493	3.493	5.200	5.200	5.849	5.849	6.265	6.265	6.681	6.681
23°C	2.855	2.855	2.936	2.936	3.407	3.407	5.048	5.048	5.755	5.755	6.169	6.169	6.584	6.584
25°C	2.771	2.771	3.017	3.017	3.322	3.322	4.896	4.896	5.661	5.661	6.074	6.074	6.487	6.487
27°C	2.688	2.688	3.099	3.099	3.236	3.236	4.744	4.744	5.567	5.567	5.978	5.978	6.389	6.389
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.

2. ■ shows nominal capacities.

3. Direct interpolation is permissible. Do not extrapolate.

4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN60JXV1 - RYN60CJXV1

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
474	16°C	21°C	5.67	3.96	1.42	5.47	3.85	1.54	5.26	3.75	1.66	5.05	3.64	1.80	4.64	3.39	1.96	4.28	3.19	2.16
		24°C	5.67	4.74	1.42	5.47	4.63	1.54	5.27	4.52	1.66	5.06	4.41	1.81	4.65	4.12	1.96	4.30	3.89	2.16
		27°C	5.72	5.37	1.42	5.53	5.25	1.54	5.33	5.13	1.67	5.13	4.99	1.81	4.74	4.65	1.96	4.41	4.36	2.17
		30°C	5.90	5.90	1.43	5.73	5.73	1.55	5.55	5.55	1.68	5.37	5.37	1.82	4.98	4.98	1.98	4.66	4.66	2.19
	19°C	24°C	6.25	3.69	1.44	6.03	3.60	1.56	5.81	3.50	1.69	5.58	3.41	1.84	5.13	3.17	1.99	4.74	2.99	2.20
		27°C	6.26	4.23	1.44	6.03	4.13	1.56	5.81	4.04	1.69	5.58	3.94	1.84	5.13	3.68	1.99	4.75	3.49	2.20
		30°C	6.26	5.22	1.44	6.05	5.10	1.56	5.83	4.99	1.69	5.61	4.87	1.84	5.17	4.56	1.99	4.79	4.31	2.20
		33°C	6.34	6.34	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.73	5.73	1.85	5.30	5.30	2.00	4.96	4.96	2.21
	22°C	27°C	6.88	3.62	1.47	6.64	3.53	1.59	6.40	3.44	1.73	6.15	3.34	1.87	5.65	3.12	2.03	5.23	2.94	2.24
		30°C	6.88	4.41	1.47	6.64	4.31	1.59	6.40	4.21	1.73	6.15	4.11	1.87	5.65	3.85	2.03	5.23	3.65	2.24
		33°C	6.88	5.15	1.47	6.64	5.05	1.59	6.40	4.95	1.73	6.15	4.85	1.87	5.66	4.55	2.03	5.25	4.32	2.24
		36°C	6.91	5.83	1.47	6.68	5.72	1.59	6.45	5.60	1.73	6.21	5.48	1.88	5.73	5.13	2.04	5.33	4.87	2.24
537	16°C	21°C	5.90	4.13	1.43	5.68	4.02	1.55	5.47	3.91	1.68	5.24	3.80	1.82	4.81	3.54	1.97	4.44	3.33	2.18
		24°C	5.91	5.01	1.43	5.70	4.89	1.55	5.49	4.77	1.68	5.27	4.65	1.82	4.84	4.34	1.98	4.47	4.10	2.18
		27°C	5.98	5.69	1.44	5.78	5.56	1.56	5.58	5.41	1.69	5.38	5.25	1.83	4.97	4.88	1.99	4.63	4.56	2.19
		30°C	6.23	6.23	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.68	5.68	1.85	5.26	5.26	2.01	4.92	4.92	2.21
	19°C	24°C	6.50	3.90	1.46	6.26	3.81	1.58	6.03	3.71	1.71	5.79	3.60	1.85	5.31	3.36	2.01	4.91	3.17	2.21
		27°C	6.51	4.50	1.46	6.27	4.40	1.58	6.04	4.30	1.71	5.80	4.19	1.85	5.33	3.92	2.01	4.92	3.71	2.22
		30°C	6.54	5.55	1.46	6.31	5.43	1.58	6.08	5.30	1.71	5.85	5.17	1.86	5.39	4.84	2.01	5.00	4.57	2.22
		33°C	6.65	6.65	1.46	6.44	6.44	1.59	6.24	6.24	1.72	6.03	6.03	1.87	5.59	5.59	2.03	5.22	5.22	2.24
	22°C	27°C	7.14	3.82	1.48	6.89	3.73	1.61	6.63	3.64	1.74	6.37	3.54	1.89	5.85	3.30	2.05	5.41	3.11	2.26
		30°C	7.15	4.69	1.48	6.89	4.59	1.61	6.64	4.49	1.74	6.37	4.39	1.89	5.86	4.11	2.05	5.42	3.90	2.26
		33°C	7.16	5.49	1.48	6.91	5.39	1.61	6.66	5.28	1.74	6.39	5.17	1.89	5.88	4.85	2.05	5.45	4.60	2.26
		36°C	7.20	6.21	1.49	6.97	6.09	1.61	6.73	5.97	1.75	6.48	5.83	1.90	5.98	5.45	2.06	5.58	5.15	2.27
614	16°C	21°C	6.11	4.31	1.45	5.89	4.20	1.56	5.66	4.09	1.69	5.43	3.97	1.83	4.98	3.70	1.99	4.59	3.48	2.19
		24°C	6.15	5.23	1.45	5.92	5.11	1.57	5.70	4.98	1.70	5.47	4.85	1.84	5.02	4.53	1.99	4.64	4.27	2.20
		27°C	6.25	5.99	1.45	6.04	5.84	1.57	5.84	5.68	1.70	5.63	5.50	1.85	5.20	5.10	2.01	4.85	4.76	2.21
		30°C	6.56	6.56	1.46	6.37	6.37	1.59	6.17	6.17	1.72	5.97	5.97	1.87	5.53	5.53	2.03	5.16	5.16	2.24
	19°C	24°C	6.73	4.13	1.47	6.49	4.03	1.59	6.24	3.92	1.72	5.99	3.82	1.87	5.49	3.56	2.03	5.07	3.36	2.23
		27°C	6.75	4.78	1.47	6.51	4.67	1.59	6.26	4.56	1.72	6.01	4.45	1.87	5.52	4.16	2.03	5.10	3.93	2.23
		30°C	6.81	5.88	1.47	6.56	5.75	1.59	6.33	5.62	1.73	6.09	5.48	1.87	5.60	5.12	2.03	5.20	4.82	2.24
		33°C	6.95	6.95	1.48	6.75	6.75	1.60	6.54	6.54	1.74	6.33	6.33	1.89	5.86	5.86	2.05	5.48	5.48	2.27
	22°C	27°C	7.38	4.04	1.50	7.12	3.95	1.62	6.85	3.85	1.76	6.58	3.75	1.91	6.04	3.50	2.07	5.58	3.30	2.28
		30°C	7.40	4.98	1.50	7.14	4.89	1.62	6.87	4.78	1.76	6.59	4.67	1.91	6.06	4.37	2.07	5.60	4.15	2.28
		33°C	7.43	5.84	1.50	7.17	5.73	1.62	6.91	5.61	1.76	6.63	5.49	1.91	6.10	5.15	2.07	5.65	4.88	2.28
		36°C	7.49	6.59	1.50	7.26	6.47	1.63	7.01	6.33	1.77	6.75	6.17	1.92	6.24	5.76	2.08	5.82	5.42	2.30

Model: FTYN60JXV1 - RYN60CJXV1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	3.721	3.721	4.211	4.211	4.375	4.375	6.173	6.173	7.154	7.154	7.645	7.645	8.135	8.135
17°C	3.623	3.623	3.734	3.734	4.282	4.282	6.166	6.166	7.081	7.081	7.575	7.575	8.069	8.069
19°C	3.526	3.526	3.257	3.257	4.189	4.189	6.158	6.158	7.008	7.008	7.505	7.505	8.003	8.003
21°C	3.428	3.428	3.108	3.108	4.096	4.096	6.089	6.089	6.934	6.934	7.435	7.435	7.936	7.936
23°C	3.331	3.331	3.288	3.288	4.003	4.003	5.956	5.956	6.861	6.861	7.366	7.366	7.870	7.870
25°C	3.233	3.233	3.467	3.467	3.910	3.910	5.824	5.824	6.788	6.788	7.296	7.296	7.804	7.804
27°C	3.135	3.135	3.647	3.647	3.817	3.817	5.692	5.692	6.715	6.715	7.226	7.226	7.737	7.737
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.

2. ■ shows nominal capacities.

3. Direct interpolation is permissible. Do not extrapolate.

4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN80FXV1 - RQ71CXV1

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
500	16°C	21°C	7.18	4.68	1.95	6.93	4.55	2.10	6.67	4.43	2.28	6.40	4.30	2.47	5.88	4.01	2.68	5.43	3.77	2.95
		24°C	7.19	5.60	1.95	6.94	5.47	2.10	6.68	5.34	2.28	6.41	5.21	2.47	5.89	4.87	2.68	5.45	4.59	2.96
		27°C	7.25	6.35	1.95	7.01	6.21	2.11	6.76	6.06	2.28	6.51	5.90	2.48	6.01	5.49	2.69	5.59	5.16	2.97
		30°C	7.47	7.47	1.96	7.26	7.26	2.12	7.04	7.04	2.30	6.81	6.81	2.50	6.32	6.32	2.71	5.91	5.91	3.00
	19°C	24°C	7.92	4.37	1.98	7.65	4.26	2.14	7.37	4.14	2.32	7.07	4.03	2.51	6.50	3.75	2.73	6.01	3.53	3.01
		27°C	7.93	5.00	1.98	7.65	4.88	2.14	7.37	4.77	2.32	7.08	4.66	2.51	6.51	4.35	2.73	6.02	4.13	3.01
		30°C	7.94	6.16	1.98	7.67	6.03	2.14	7.40	5.90	2.32	7.12	5.76	2.52	6.55	5.38	2.73	6.08	5.10	3.01
		33°C	8.04	8.04	1.98	7.77	7.77	2.15	7.52	7.52	2.33	7.27	7.27	2.53	6.72	6.72	2.74	6.29	6.29	3.03
	22°C	27°C	8.72	4.27	2.01	8.42	4.17	2.18	8.11	4.07	2.36	7.79	3.95	2.56	7.17	3.68	2.78	6.63	3.47	3.06
		30°C	8.72	5.21	2.01	8.42	5.10	2.18	8.11	4.98	2.36	7.79	4.86	2.56	7.17	4.55	2.78	6.64	4.32	3.06
		33°C	8.73	6.08	2.01	8.42	5.97	2.18	8.12	5.85	2.36	7.80	5.73	2.56	7.18	5.38	2.78	6.65	5.11	3.07
		36°C	8.75	6.90	2.01	8.47	6.76	2.18	8.17	6.62	2.37	7.87	6.47	2.57	7.26	6.07	2.79	6.75	5.76	3.07
630	16°C	21°C	7.48	4.88	1.96	7.21	4.75	2.12	6.93	4.63	2.30	6.65	4.50	2.49	6.10	4.19	2.70	5.63	3.94	2.98
		24°C	7.50	5.92	1.96	7.23	5.78	2.12	6.96	5.64	2.30	6.68	5.50	2.49	6.13	5.13	2.71	5.67	4.85	2.98
		27°C	7.59	6.73	1.97	7.33	6.57	2.13	7.08	6.40	2.31	6.83	6.21	2.50	6.30	5.77	2.72	5.87	5.39	3.00
		30°C	7.91	7.91	1.98	7.68	7.68	2.15	7.44	7.44	2.33	7.20	7.20	2.53	6.67	6.67	2.75	6.24	6.24	3.03
	19°C	24°C	8.24	4.62	1.99	7.94	4.50	2.16	7.65	4.38	2.34	7.34	4.26	2.54	6.74	3.97	2.75	6.23	3.74	3.03
		27°C	8.25	5.32	2.00	7.96	5.20	2.16	7.66	5.08	2.34	7.35	4.96	2.54	6.75	4.64	2.75	6.24	4.39	3.03
		30°C	8.29	6.56	2.00	8.00	6.42	2.16	7.72	6.27	2.34	7.42	6.12	2.54	6.83	5.72	2.76	6.34	5.41	3.04
		33°C	8.43	8.43	2.00	8.17	8.17	2.17	7.91	7.91	2.36	7.65	7.65	2.56	7.08	7.08	2.78	6.62	6.62	3.07
	22°C	27°C	9.05	4.52	2.03	8.73	4.41	2.20	8.41	4.30	2.39	8.07	4.18	2.59	7.42	3.90	2.81	6.86	3.68	3.09
		30°C	9.06	5.54	2.03	8.74	5.43	2.20	8.42	5.31	2.39	8.08	5.19	2.59	7.43	4.86	2.81	6.87	4.61	3.09
		33°C	9.08	6.50	2.03	8.76	6.37	2.20	8.44	6.24	2.39	8.11	6.11	2.59	7.46	5.73	2.81	6.91	5.44	3.10
		36°C	9.13	7.35	2.04	8.84	7.21	2.21	8.53	7.06	2.39	8.22	6.89	2.60	7.58	6.45	2.82	7.07	6.08	3.11
670	16°C	21°C	7.75	5.09	1.98	7.47	4.96	2.14	7.18	4.83	2.32	6.88	4.69	2.51	6.31	4.37	2.72	5.82	4.11	3.00
		24°C	7.79	6.18	1.98	7.51	6.04	2.14	7.23	5.89	2.32	6.94	5.74	2.52	6.37	5.35	2.73	5.88	5.05	3.01
		27°C	7.92	7.09	1.99	7.66	6.90	2.15	7.40	6.71	2.33	7.14	6.50	2.53	6.59	6.02	2.75	6.14	5.62	3.03
		30°C	8.31	8.31	2.00	8.07	8.07	2.17	7.82	7.82	2.35	7.57	7.57	2.56	7.01	7.01	2.78	6.54	6.54	3.07
	19°C	24°C	8.53	4.88	2.01	8.22	4.76	2.18	7.91	4.64	2.36	7.59	4.51	2.56	6.96	4.21	2.77	6.43	3.97	3.06
		27°C	8.56	5.65	2.01	8.25	5.52	2.18	7.94	5.39	2.36	7.62	5.26	2.56	7.00	4.92	2.78	6.47	4.65	3.06
		30°C	8.63	6.95	2.02	8.32	6.80	2.18	8.02	6.64	2.37	7.72	6.48	2.57	7.11	6.05	2.78	6.60	5.70	3.07
		33°C	8.82	8.82	2.03	8.56	8.56	2.20	8.29	8.29	2.38	8.02	8.02	2.59	7.43	7.43	2.81	6.95	6.95	3.10
	22°C	27°C	9.36	4.78	2.05	9.03	4.67	2.22	8.69	4.55	2.41	8.34	4.43	2.61	7.66	4.14	2.83	7.08	3.91	3.11
		30°C	9.38	5.89	2.05	9.05	5.78	2.22	8.71	5.65	2.41	8.36	5.52	2.61	7.68	5.17	2.83	7.10	4.90	3.12
		33°C	9.41	6.90	2.05	9.09	6.78	2.22	8.75	6.64	2.41	8.41	6.49	2.61	7.74	6.08	2.84	7.17	5.77	3.12
		36°C	9.50	7.79	2.06	9.20	7.65	2.23	8.88	7.48	2.42	8.56	7.30	2.63	7.91	6.81	2.85	7.38	6.41	3.14

Model: FTYN80FXV1 - RQ71CXV1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	4.607	4.607	5.214	5.214	5.416	5.416	7.643	7.643	8.858	8.858	9.465	9.465	10.072	10.072
17°C	4.486	4.486	5.121	5.121	5.289	5.289	7.634	7.634	8.703	8.703	9.305	9.305	9.908	9.908
19°C	4.365	4.365	5.029	5.029	5.162	5.162	7.625	7.625	8.548	8.548	9.146	9.146	9.743	9.743
21°C	4.244	4.244	4.908	4.908	5.035	5.035	7.499	7.499	8.393	8.393	8.986	8.986	9.579	9.579
23°C	4.124	4.124	4.759	4.759	4.907	4.907	7.257	7.257	8.239	8.239	8.827	8.827	9.414	9.414
25°C	4.003	4.003	4.609	4.609	4.780	4.780	7.015	7.015	8.084	8.084	8.667	8.667	9.250	9.250
27°C	3.882	3.882	4.460	4.460	4.653	4.653	6.773	6.773	7.929	7.929	8.507	8.507	9.086	9.086
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

Notes:

1. Ratings shown are net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

Model: FTYN80FXV1 - RQ71CXY1

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
500	16°C	21°C	7.18	4.68	2.00	6.93	4.55	2.16	6.67	4.43	2.34	6.40	4.30	2.54	5.88	4.01	2.75	5.43	3.77	3.04
		24°C	7.19	5.60	2.00	6.94	5.47	2.16	6.68	5.34	2.34	6.41	5.21	2.54	5.89	4.87	2.76	5.45	4.59	3.04
		27°C	7.25	6.35	2.00	7.01	6.21	2.17	6.76	6.06	2.35	6.51	5.90	2.55	6.01	5.49	2.76	5.59	5.16	3.05
		30°C	7.47	7.47	2.01	7.26	7.26	2.18	7.04	7.04	2.36	6.81	6.81	2.57	6.32	6.32	2.79	5.91	5.91	3.08
	19°C	24°C	7.92	4.37	2.03	7.65	4.26	2.20	7.37	4.14	2.38	7.07	4.03	2.58	6.50	3.75	2.80	6.01	3.53	3.09
		27°C	7.93	5.00	2.03	7.65	4.88	2.20	7.37	4.77	2.38	7.08	4.66	2.58	6.51	4.35	2.80	6.02	4.13	3.09
		30°C	7.94	6.16	2.03	7.67	6.03	2.20	7.40	5.90	2.38	7.12	5.76	2.59	6.55	5.38	2.81	6.08	5.10	3.09
		33°C	8.04	8.04	2.04	7.77	7.77	2.21	7.52	7.52	2.39	7.27	7.27	2.60	6.72	6.72	2.82	6.29	6.29	3.11
	22°C	27°C	8.72	4.27	2.07	8.42	4.17	2.24	8.11	4.07	2.43	7.79	3.95	2.63	7.17	3.68	2.86	6.63	3.47	3.15
		30°C	8.72	5.21	2.07	8.42	5.10	2.24	8.11	4.98	2.43	7.79	4.86	2.63	7.17	4.55	2.86	6.64	4.32	3.15
		33°C	8.73	6.08	2.07	8.42	5.97	2.24	8.12	5.85	2.43	7.80	5.73	2.63	7.18	5.38	2.86	6.65	5.11	3.15
		36°C	8.75	6.90	2.07	8.47	6.76	2.24	8.17	6.62	2.43	7.87	6.47	2.64	7.26	6.07	2.86	6.75	5.76	3.16
630	16°C	21°C	7.48	4.88	2.02	7.21	4.75	2.18	6.93	4.63	2.36	6.65	4.50	2.56	6.10	4.19	2.78	5.63	3.94	3.06
		24°C	7.50	5.92	2.02	7.23	5.78	2.18	6.96	5.64	2.36	6.68	5.50	2.56	6.13	5.13	2.78	5.67	4.85	3.07
		27°C	7.59	6.73	2.02	7.33	6.57	2.19	7.08	6.40	2.37	6.83	6.21	2.57	6.30	5.77	2.79	5.87	5.39	3.08
		30°C	7.91	7.91	2.04	7.68	7.68	2.21	7.44	7.44	2.39	7.20	7.20	2.60	6.67	6.67	2.82	6.24	6.24	3.12
	19°C	24°C	8.24	4.62	2.05	7.94	4.50	2.22	7.65	4.38	2.40	7.34	4.26	2.61	6.74	3.97	2.83	6.23	3.74	3.12
		27°C	8.25	5.32	2.05	7.96	5.20	2.22	7.66	5.08	2.40	7.35	4.96	2.61	6.75	4.64	2.83	6.24	4.39	3.12
		30°C	8.29	6.56	2.05	8.00	6.42	2.22	7.72	6.27	2.41	7.42	6.12	2.61	6.83	5.72	2.83	6.34	5.41	3.13
		33°C	8.43	8.43	2.06	8.17	8.17	2.23	7.91	7.91	2.42	7.65	7.65	2.63	7.08	7.08	2.86	6.62	6.62	3.15
	22°C	27°C	9.05	4.52	2.09	8.73	4.41	2.26	8.41	4.30	2.45	8.07	4.18	2.66	7.42	3.90	2.88	6.86	3.68	3.18
		30°C	9.06	5.54	2.09	8.74	5.43	2.26	8.42	5.31	2.45	8.08	5.19	2.66	7.43	4.86	2.88	6.87	4.61	3.18
		33°C	9.08	6.50	2.09	8.76	6.37	2.26	8.44	6.24	2.45	8.11	6.11	2.66	7.46	5.73	2.89	6.91	5.44	3.18
		36°C	9.13	7.35	2.09	8.84	7.21	2.27	8.53	7.06	2.46	8.22	6.89	2.67	7.58	6.45	2.90	7.07	6.08	3.20
670	16°C	21°C	7.75	5.09	2.03	7.47	4.96	2.20	7.18	4.83	2.38	6.88	4.69	2.58	6.31	4.37	2.80	5.82	4.11	3.09
		24°C	7.79	6.18	2.04	7.51	6.04	2.20	7.23	5.89	2.38	6.94	5.74	2.59	6.37	5.35	2.80	5.88	5.05	3.09
		27°C	7.92	7.09	2.04	7.66	6.90	2.21	7.40	6.71	2.39	7.14	6.50	2.60	6.59	6.02	2.82	6.14	5.62	3.11
		30°C	8.31	8.31	2.06	8.07	8.07	2.23	7.82	7.82	2.42	7.57	7.57	2.63	7.01	7.01	2.85	6.54	6.54	3.15
	19°C	24°C	8.53	4.88	2.07	8.22	4.76	2.24	7.91	4.64	2.42	7.59	4.51	2.63	6.96	4.21	2.85	6.43	3.97	3.14
		27°C	8.56	5.65	2.07	8.25	5.52	2.24	7.94	5.39	2.43	7.62	5.26	2.63	7.00	4.92	2.85	6.47	4.65	3.14
		30°C	8.63	6.95	2.07	8.32	6.80	2.24	8.02	6.64	2.43	7.72	6.48	2.64	7.11	6.05	2.86	6.60	5.70	3.16
		33°C	8.82	8.82	2.08	8.56	8.56	2.26	8.29	8.29	2.45	8.02	8.02	2.66	7.43	7.43	2.89	6.95	6.95	3.19
	22°C	27°C	9.36	4.78	2.11	9.03	4.67	2.28	8.69	4.55	2.47	8.34	4.43	2.68	7.66	4.14	2.91	7.08	3.91	3.20
		30°C	9.38	5.89	2.11	9.05	5.78	2.28	8.71	5.65	2.47	8.36	5.52	2.68	7.68	5.17	2.91	7.10	4.90	3.20
		33°C	9.41	6.90	2.11	9.09	6.78	2.29	8.75	6.64	2.48	8.41	6.49	2.69	7.74	6.08	2.91	7.17	5.77	3.21
		36°C	9.50	7.79	2.11	9.20	7.65	2.29	8.88	7.48	2.49	8.56	7.30	2.70	7.91	6.81	2.93	7.38	6.41	3.23

Model: FTYN80FXV1 - RQ71CXY1

Heating Mode

ID DB	Outdoor WB													
	-9°C		-6°C		-5°C		6°C		12°C		15°C		18°C	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15°C	4.607	4.607	5.214	5.214	5.416	5.416	7.643	7.643	8.858	8.858	9.465	9.465	10.072	10.072
17°C	4.486	4.486	5.121	5.121	5.289	5.289	7.634	7.634	8.703	8.703	9.305	9.305	9.908	9.908
19°C	4.365	4.365	5.029	5.029	5.162	5.162	7.625	7.625	8.548	8.548	9.146	9.146	9.743	9.743
21°C	4.244	4.244	4.908	4.908	5.035	5.035	7.499	7.499	8.393	8.393	8.986	8.986	9.579	9.579
23°C	4.124	4.124	4.759	4.759	4.907	4.907	7.257	7.257	8.239	8.239	8.827	8.827	9.414	9.414
25°C	4.003	4.003	4.609	4.609	4.780	4.780	7.015	7.015	8.084	8.084	8.667	8.667	9.250	9.250
27°C	3.882	3.882	4.460	4.460	4.653	4.653	6.773	6.773	7.929	7.929	8.507	8.507	9.086	9.086
Frost Region														

Remark:

AFR: Air flow rate (CFM)

EWB: Entering Wet Bulb Temp. (°C)

EDB: Entering Dry Bulb Temp. (°C)

TC: Total Cooling / Heating Capacity (kW)

SC: Sensible Cooling / Heating Capacity (kW)

PI: Power Input (kW)

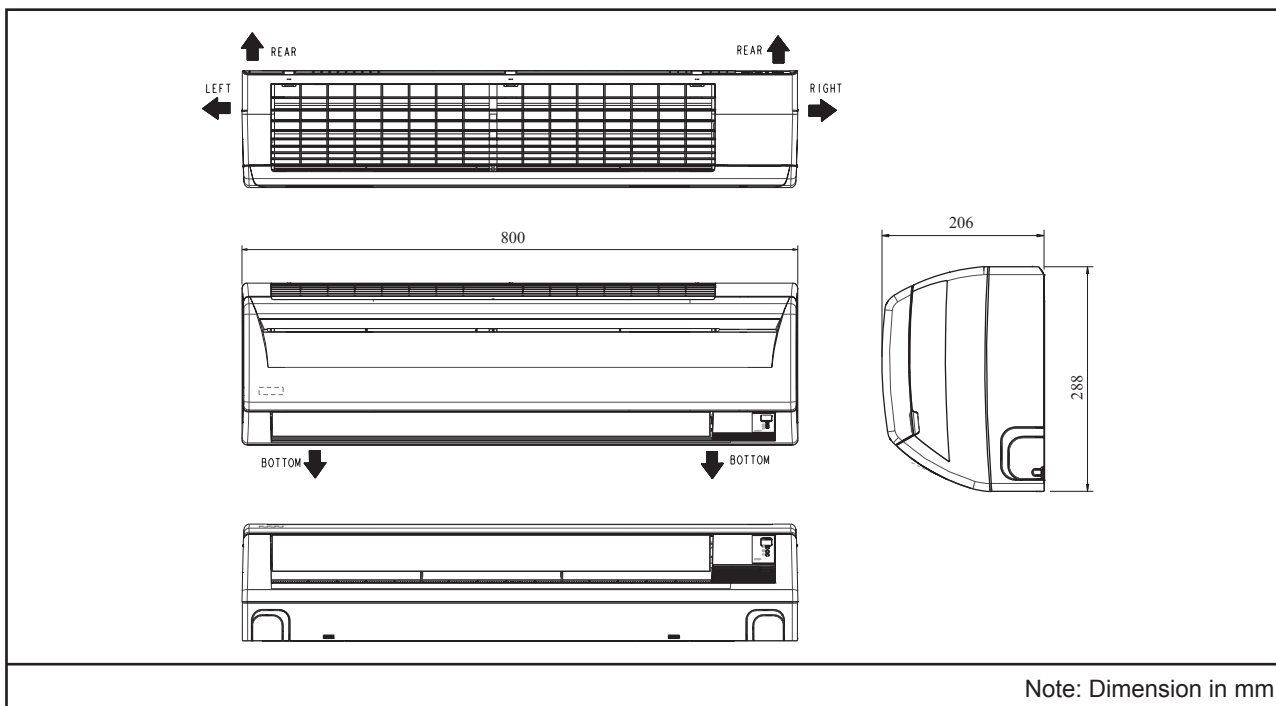
Notes:

1. Ratings shown are net capacities.
2. ■ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 19°C to 46°C DB (cooling) / -9°C to 18°C WB (heating) without pressure trip.

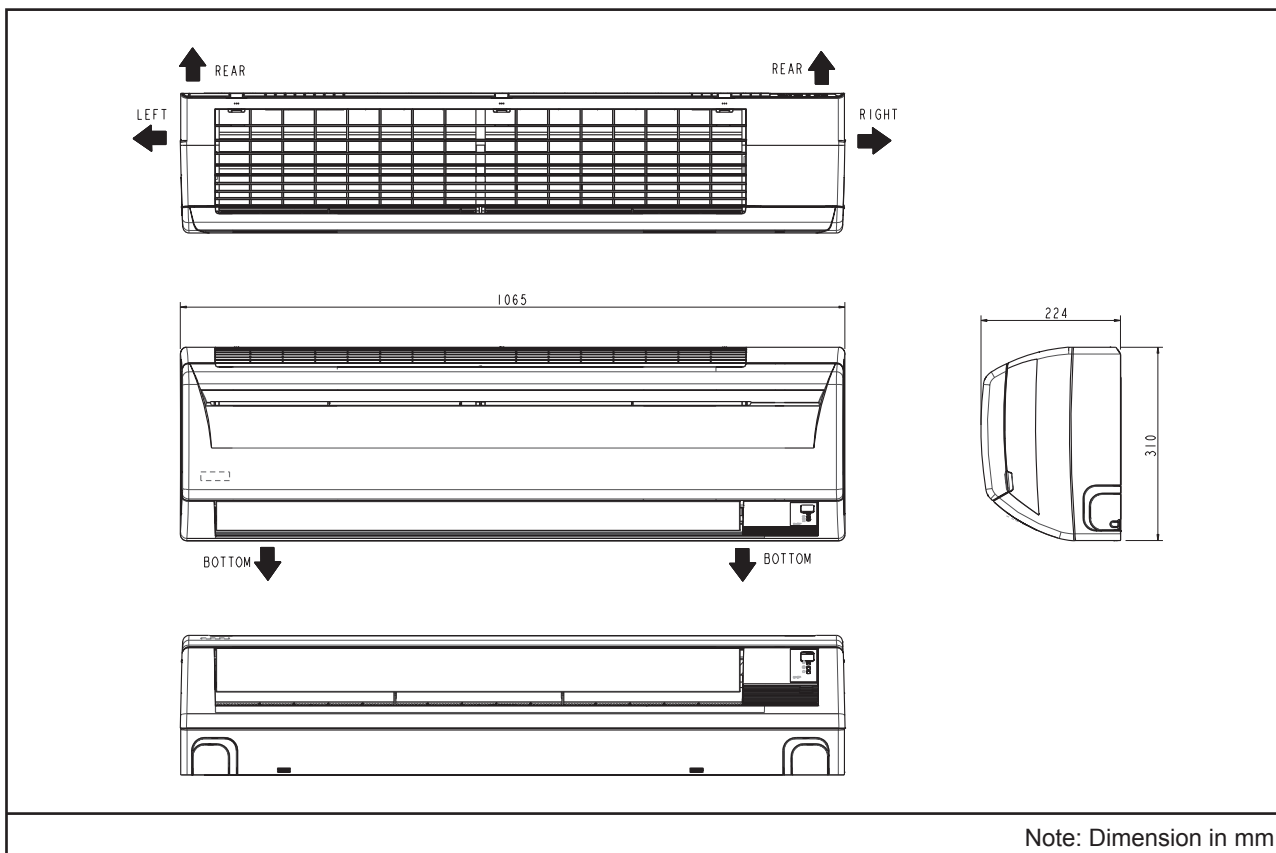
Outline & Dimension

Indoor Unit

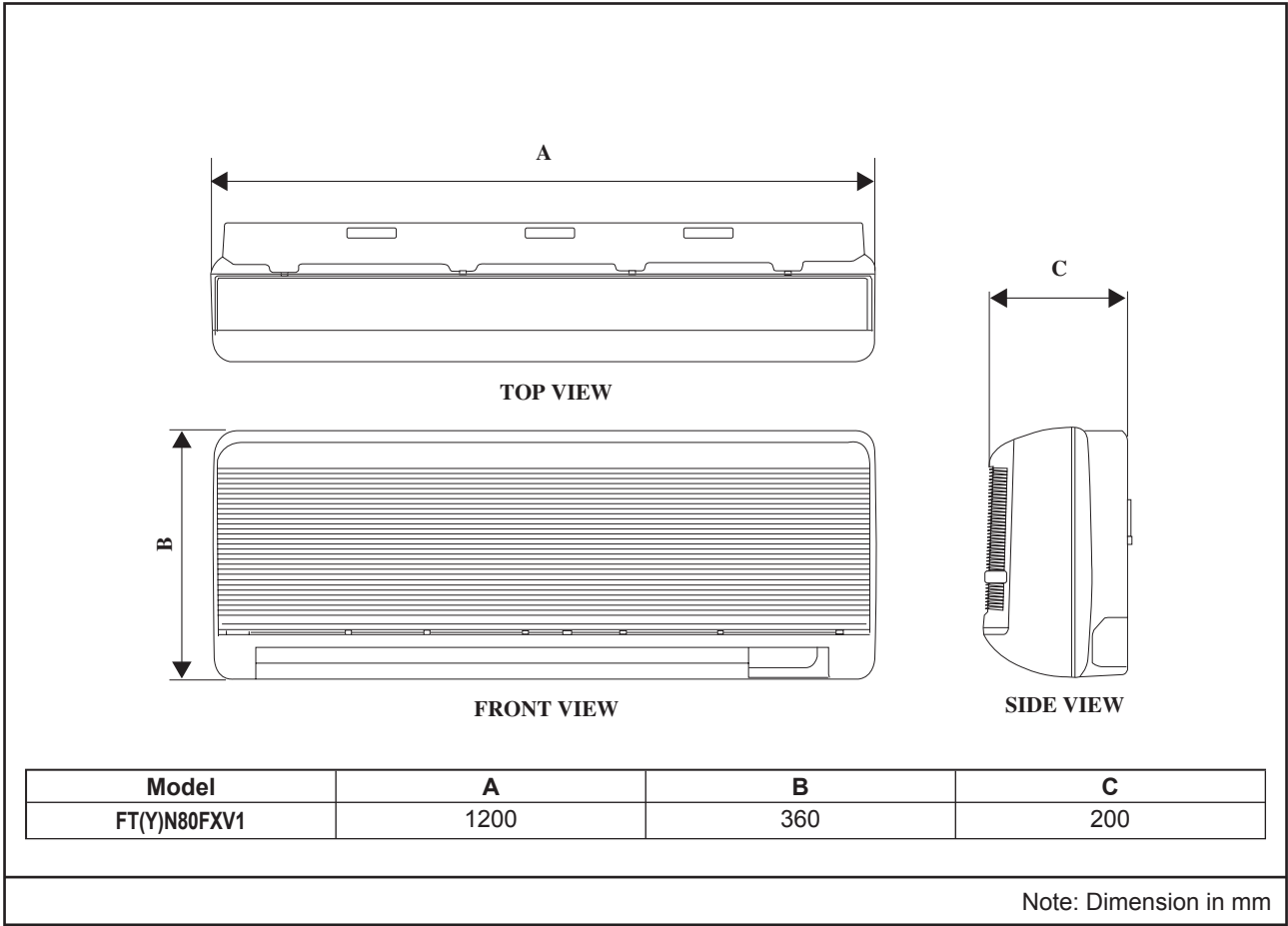
Model: FT(Y)N25/35JXV1



Model: FT(Y)N50/60JXV1

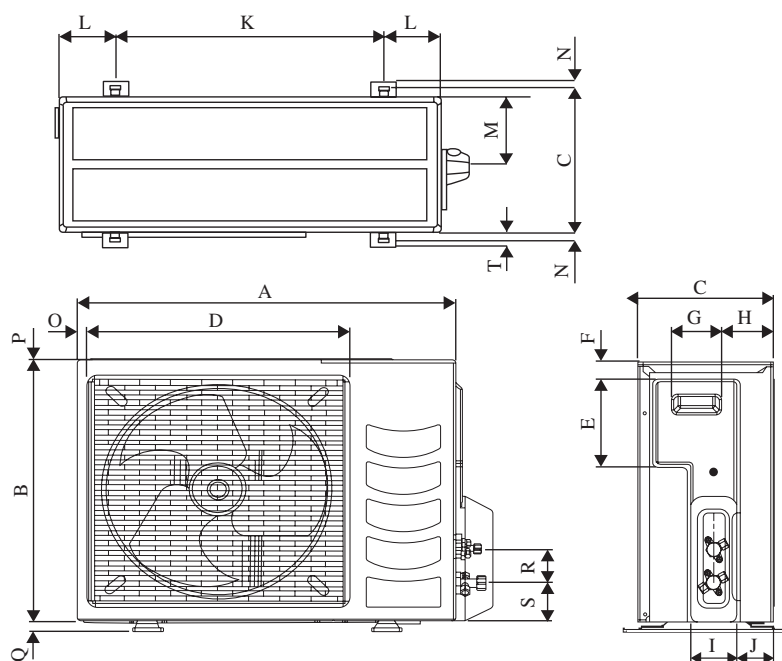


Model: FT(Y)N80FXV1



Outdoor Unit

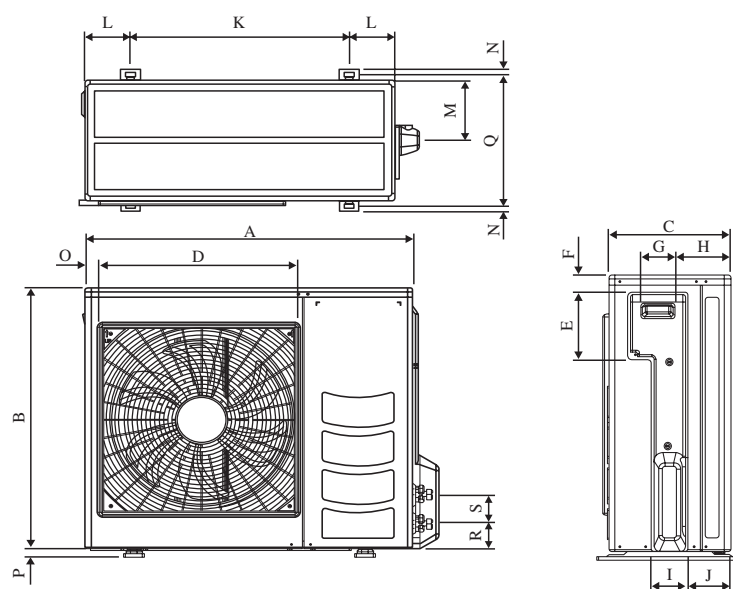
Model: R(Y)N25/35CJXV1



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
R(Y)N25/35CJXV1	700	521	250	485	175	36	95	93	86	68	441	130	111	15	18
Model	P	Q	R	S	T										
R(Y)N25/35CJXV1	3	19	65	80	30										

Note: Dimension in mm

Model: R(Y)N50/60CJXV1 / R(Y)N50/60/CJXY1 / RQ71CJXV1 / RQ71CJXY1



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
R(Y)N50/60CJXV1	855	628	328	520	179	46	93	149	101	113	603	126	164	15	34	23	362	73	75
R(Y)N50/60/CJXY1 / RQ71CJXV1 / RQ71CJXY1	855	730	328	520	179	46	93	149	101	113	603	126	164	15	34	23	362	73	75

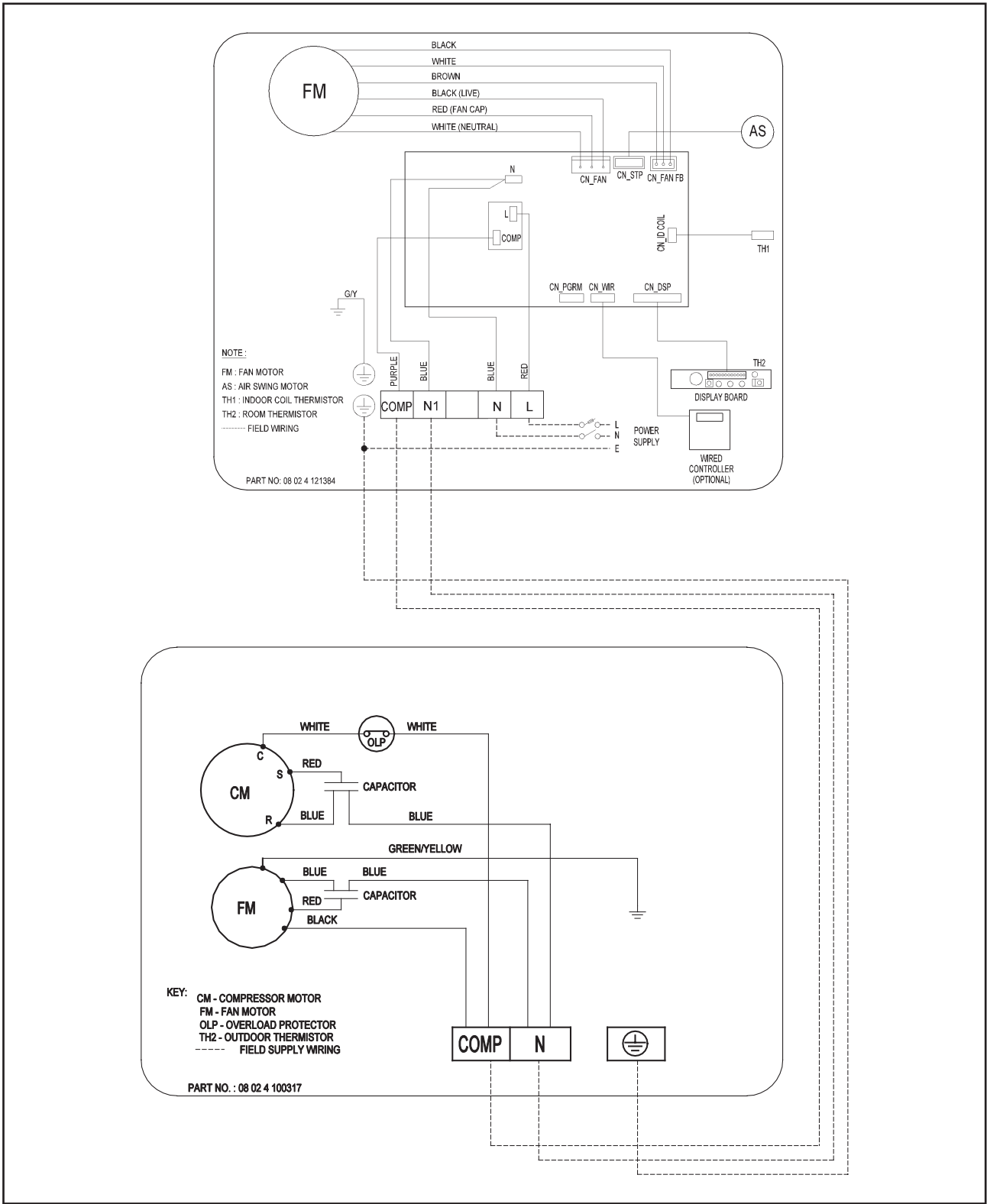
Note: Dimension in mm

Wiring Diagram

Cooling Only

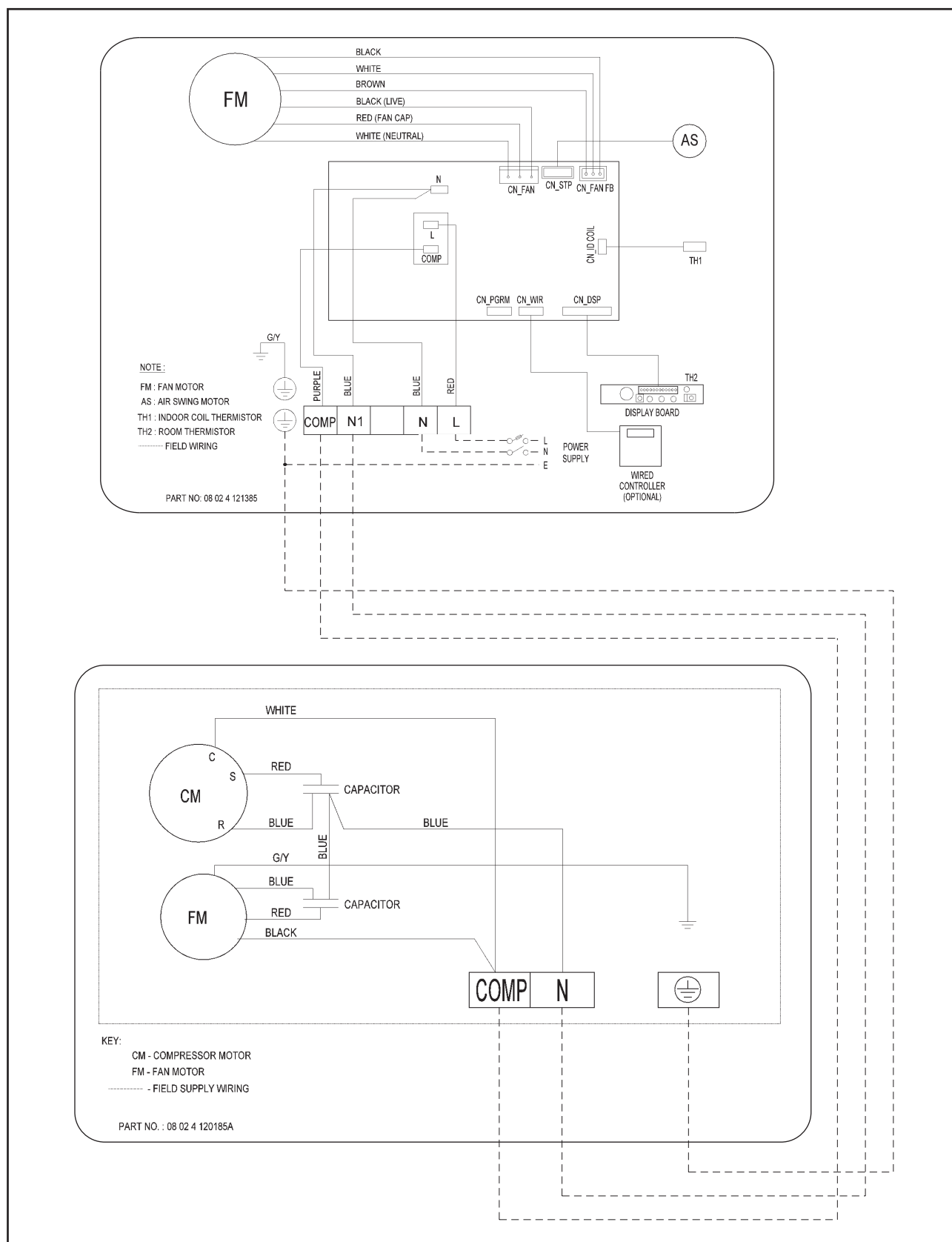
Indoor Unit
Model: FTN25/35JXV1

Outdoor Unit
Model: RN25/35CJXV1



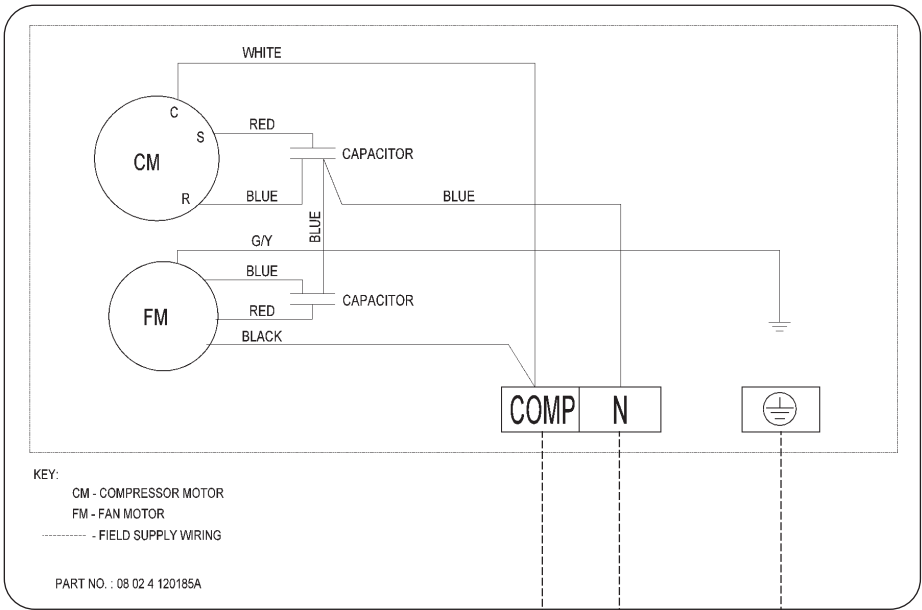
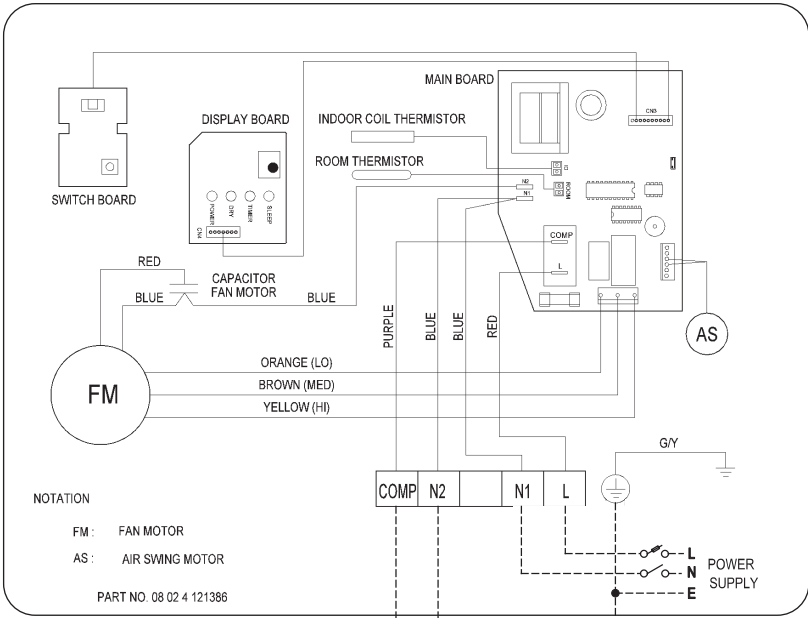
Indoor Unit
Model: FTN50/60JXV1

Outdoor Unit
Model: RN50/60CJXV1



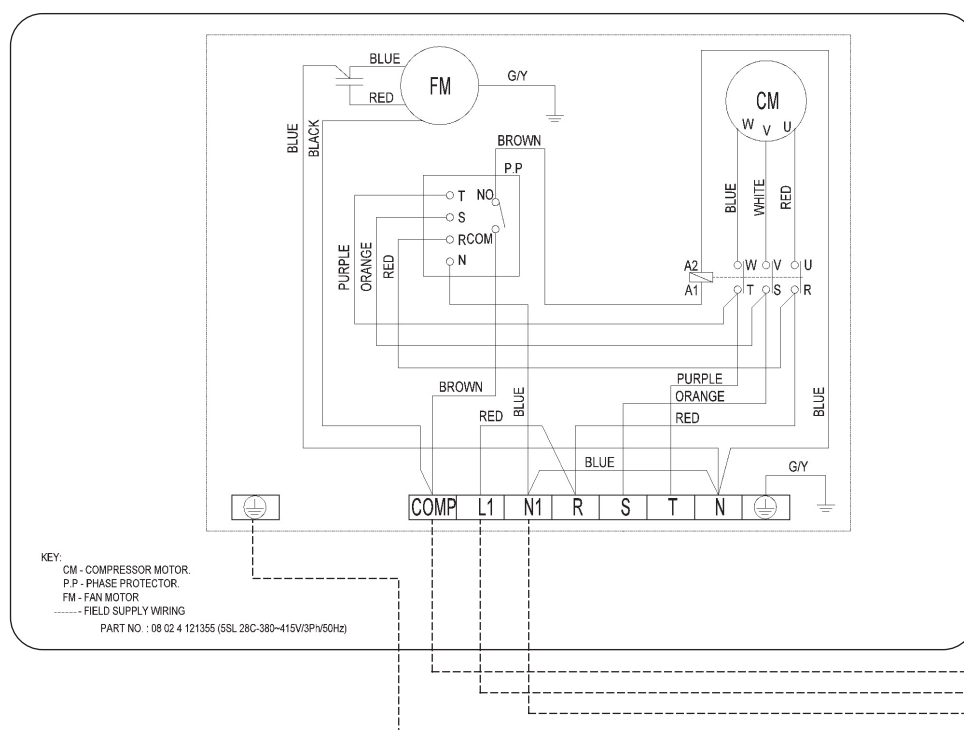
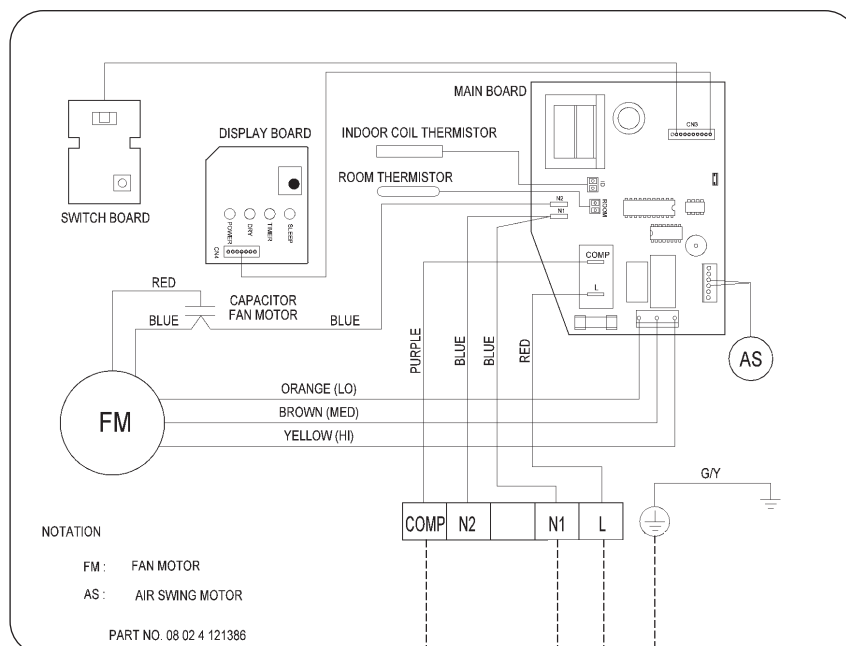
Indoor Unit
Model: FTN80FXV1

Outdoor Unit
Model: RR71CXV1



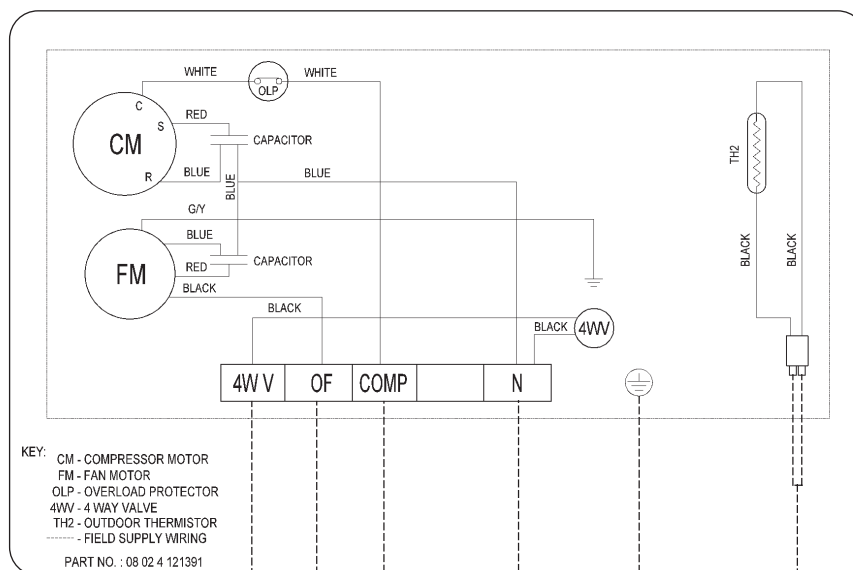
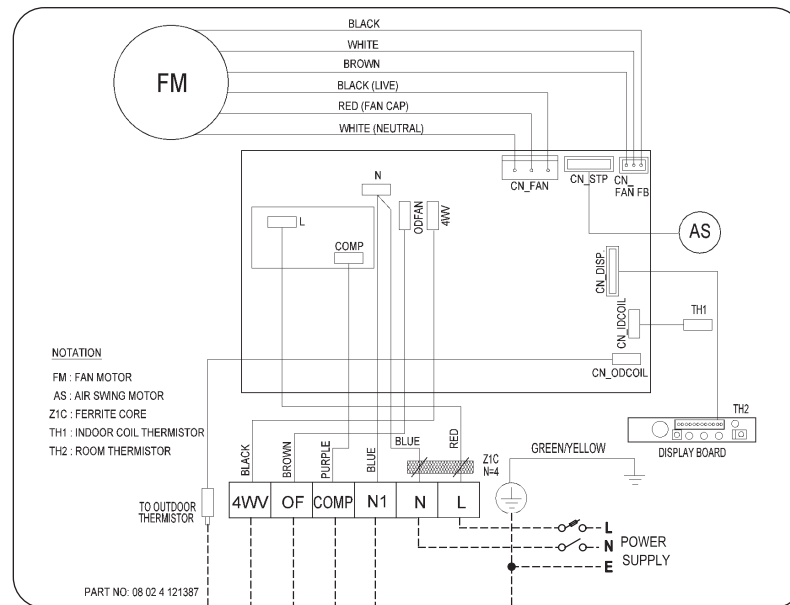
Indoor Unit
Model: FTN80FXV1

Outdoor Unit
Model: RR71CXY1



Indoor Unit
Model: FTYN20JXV1

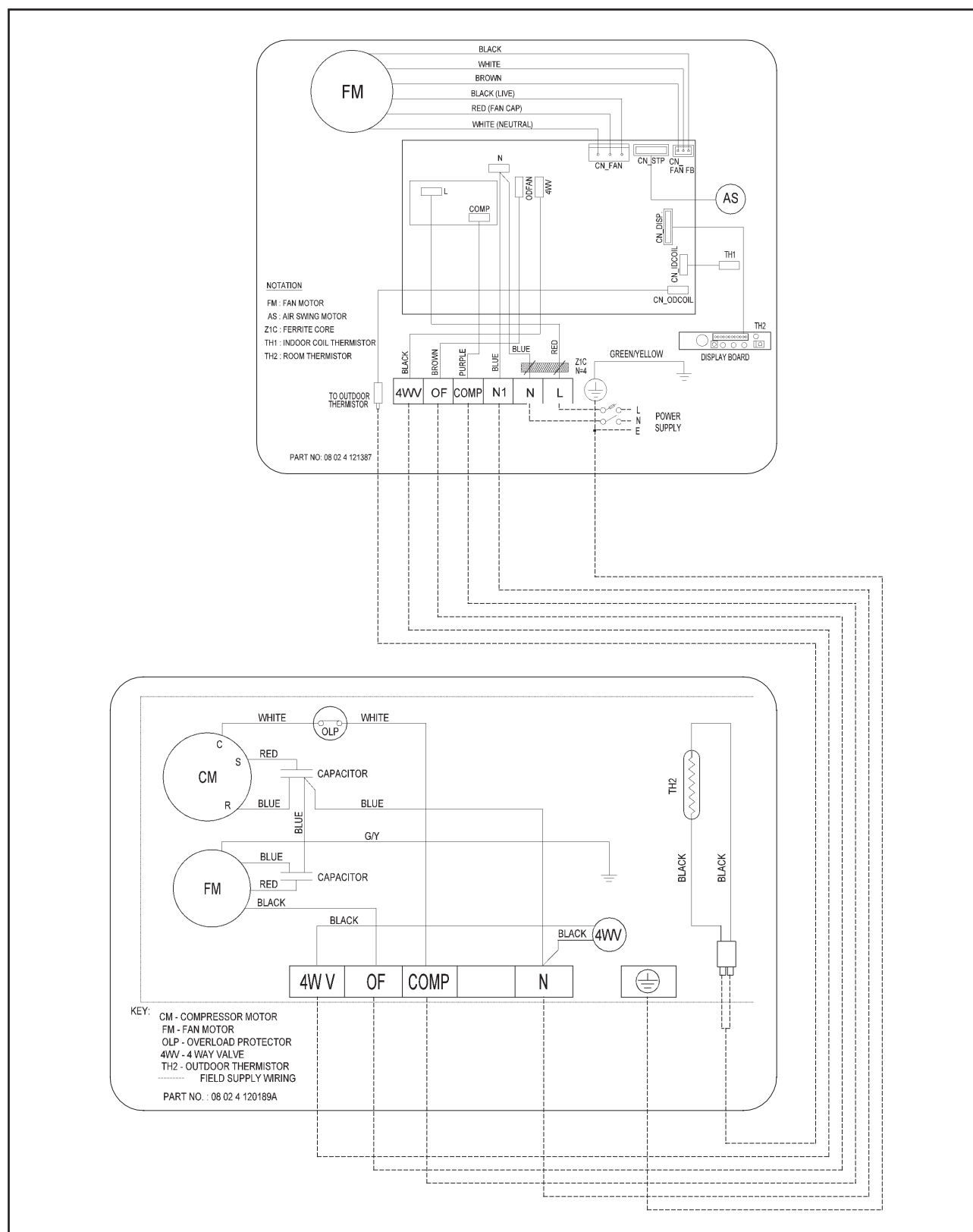
Outdoor Unit
Model: RYN20CGXV1



Heatpump

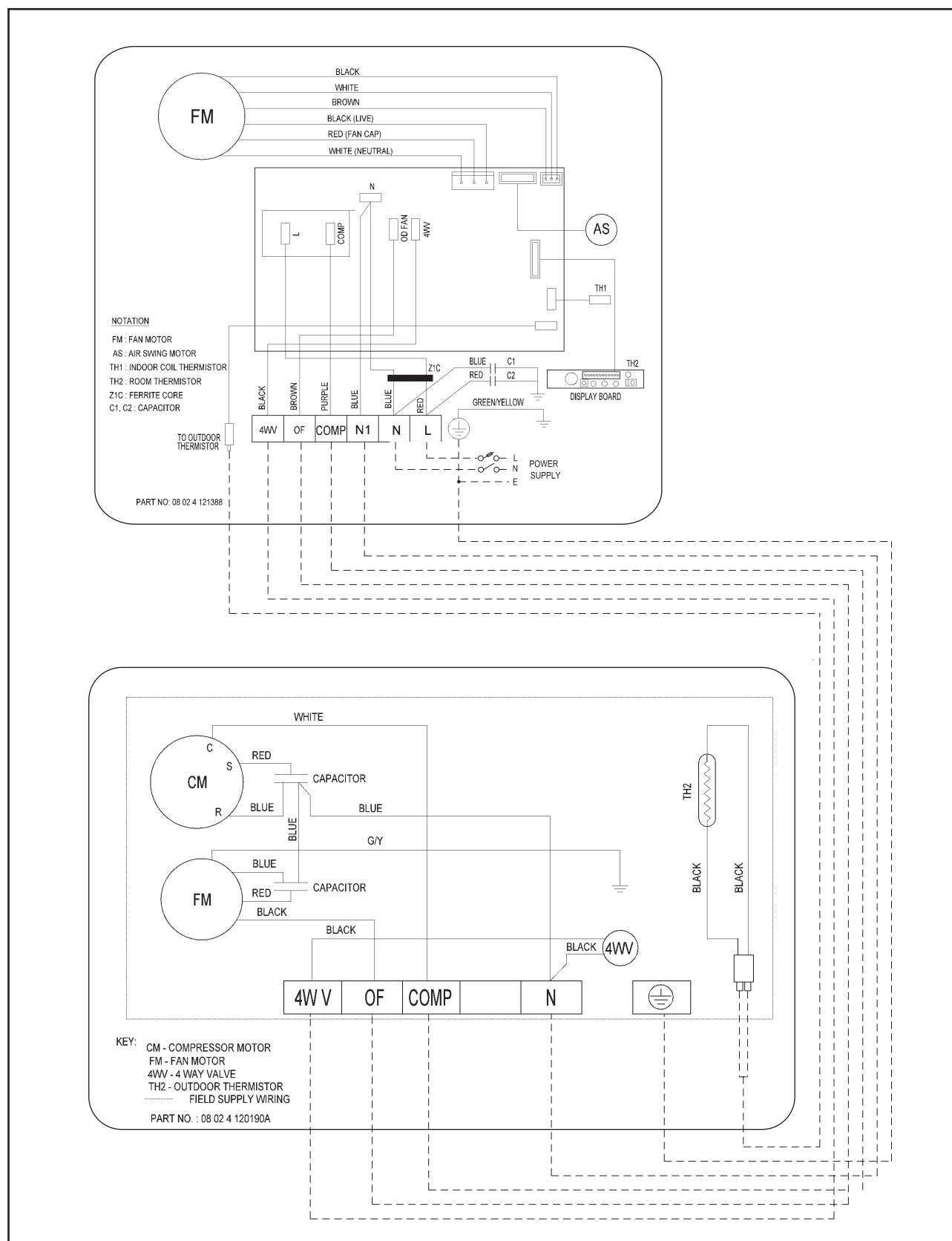
Indoor Unit
Model: FTYN25/35JXV1

Outdoor Unit
Model: RYN25/35CJXV1



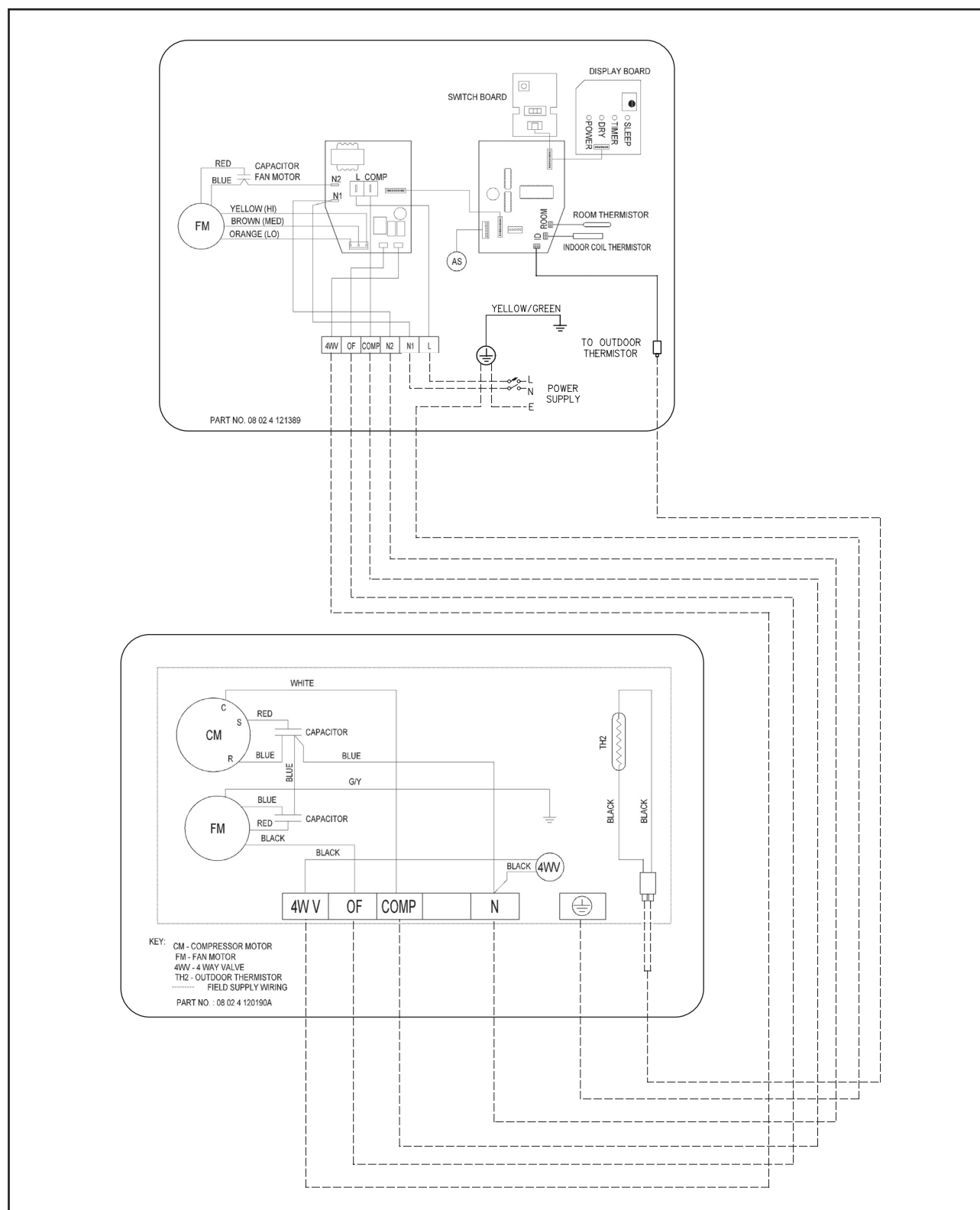
Indoor Unit
Model: FTYN50/60JXV1

Outdoor Unit
Model: RYN50/60CJXV1



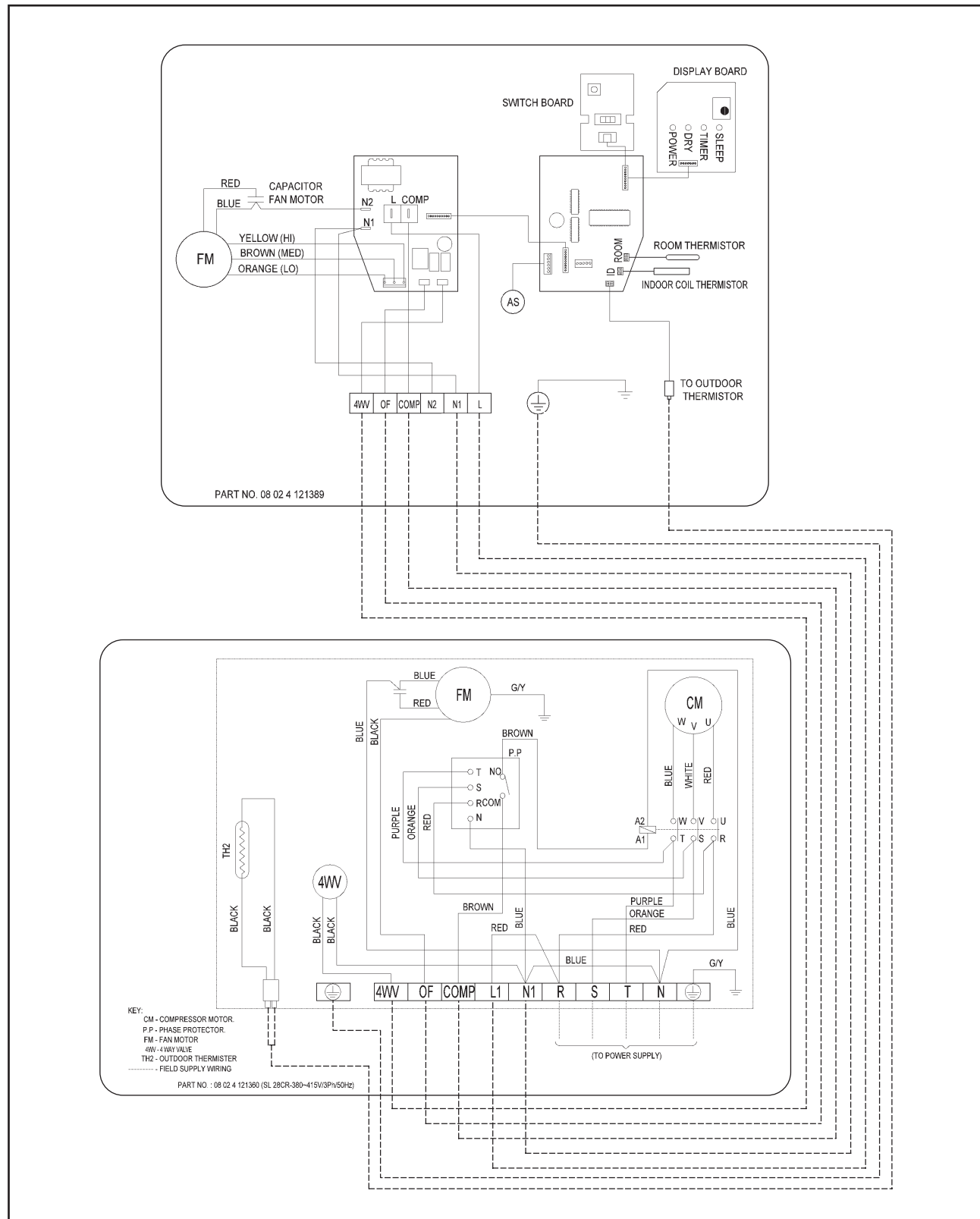
Indoor Unit
Model: FTYN80FXV1

Outdoor Unit
Model: RQ71CXV1



Indoor Unit
Model: FTYN80FXV1

Outdoor Unit
Model: RQ71CXY1



Service & Maintenance



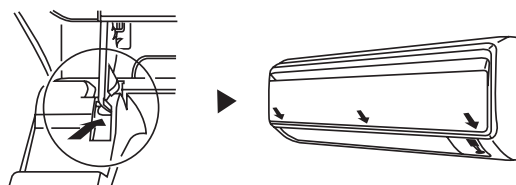
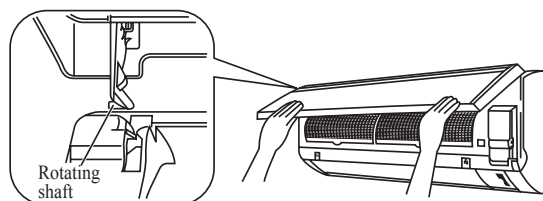
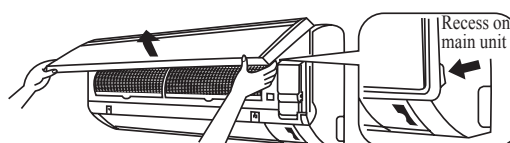
Warning

- 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)	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	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	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	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	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 no 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.

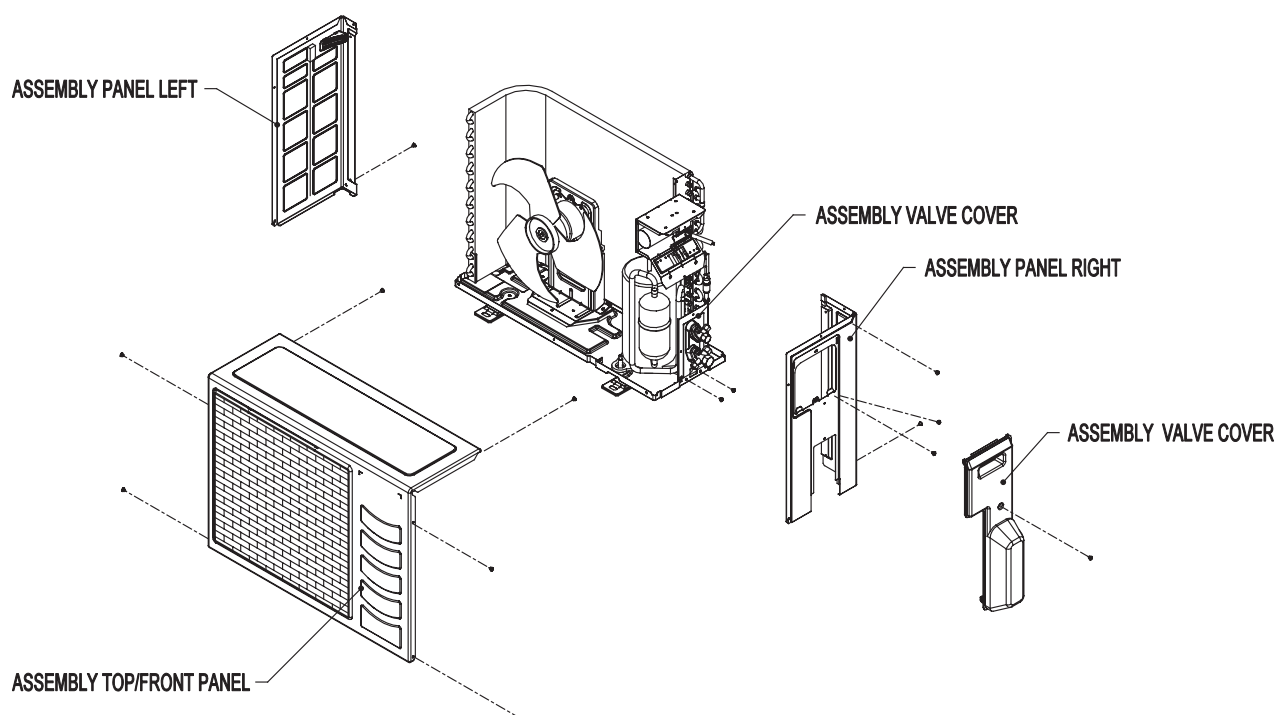
Pre Start Up Maintenance

(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 RN/RYN-C/CJ 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

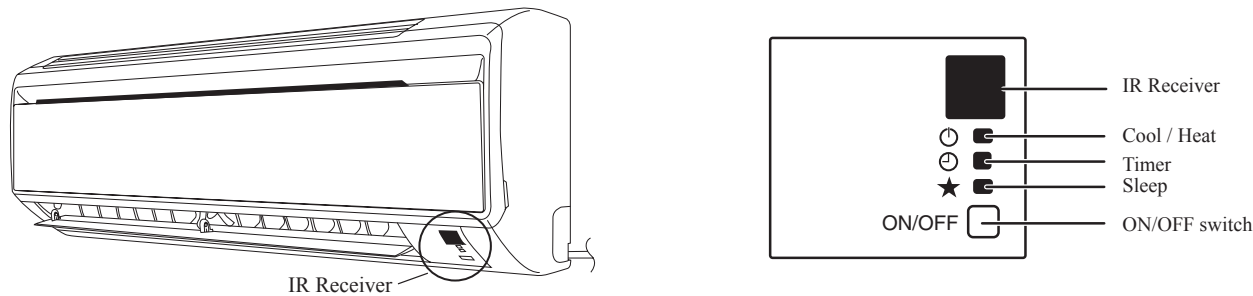
IR Signal Receiver

When an infra red 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 Beep
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 Indoor Lights: Normal Operation and Fault Conditions for Cooling / Heatpump Unit

	 COOL/HEAT (GREEN/RED)		Error Code	Normal Operation / Fault Indication	Action
○/●	○ Green		-	Cool mode	-
○/●	○ Red		-	Heat mode	-
○/●	○ Red		-	Auto mode in Heating operation	-
○/●	○ Green		-	Auto mode in Cooling operation	-
	○	○	-	Time on	-
○	○		-	Sleep mode on	-
	○		-	Fan mode on	-
	○		-	Dry mode on	-
	● 1 time		Blink E1	Room air sensor contact loose / short	Call your dealer
	● 3 times		Blink E3	Outdoor coil sensor open	Call your dealer
● continuously	● 2 times		Blink E2	Indoor coil sensor open	Call your dealer
		● 1 time	Blink E4	Compressor overload / indoor coil sensor short / outdoor coil sensor short	Call your dealer
	● Red		-	Defrost operation	-
		● 3 times	Blink E5	Gas leak	Call your dealer
		● 6 times	Blink E8	Hardware error (tact switch pin short)	Call your dealer
● continuously	● 4 times		Blink E9	No feedback from indoor fan	Call your dealer
	● 5 times		Blink EE	EEPROM error	Call your dealer

○ ON ○/● ON or OFF ● Blinking

Note:

The unit will not detect sensor missing when the compressor is ON.

LED Indicator Lights: Normal Operation and Fault Conditions for Cooling Unit FTN80F

 Power	 Dry	 Timer	 Sleep	Operation / Fault Indication	Action
○		○		Timer on	-
○			○	Sleep mode on	-
○	○			Dry mode	-
◐	○/●			Frost prevention	Clean the filter and switch to high fan
◐ 1 time				Room air sensor contact loose/short	Call your dealer
◐◐ 2 times				Indoor coil sensor contact loose/short	Call your dealer
◐◐◐ 3 times				Sensor contact problem, compressor overload protection trip or gas leak	Call your dealer

○ ON ○/● ON or OFF ◐ Blinking

LED Indicator Lights: Normal Operation and Fault Conditions for Heat Pump Unit FTYN80F

 Cool	 Dry	 Fan	 Heat	 Sleep	Normal Operation / Fault Condition	Action
○				○/●	Cooling mode	-
	○				Dry mode	-
		○			Fan mode	-
			○	○/●	Heat mode	-
◐			○	○/●	Auto mode in heating operation	-
○			◐	○/●	Auto mode in cooling operation	-
			◐		Defrost operation	-
◐					Compressor overload protection	Call your dealer
				◐	Indoor coil sensor contact loose/short	Call your dealer
	◐				Outdoor coil sensor contact loose/short	Call your dealer
		◐			Room air sensor contact loose/short	Call your dealer
◐	◐				If the system is in cool mode or heat mode (with the sleep function off), the sensor may have a contact problem, compressor overload protection trip or gas leak	

○ ON ○/● ON or OFF ◐ Blinking

Phase Sequencer

The unit with Scroll Compressor only can rotate in one direction. For this reason, a protective device (phase sequencer) is fitted to prevent incorrect wiring of the electrical phases. When the three phases are not connected correctly, the phase sequencer operates, and the unit will not start.

This device is located in the control box of the outdoor unit.

The following table shows the LED indicator light for phase sequencer under normal operation and fault conditions.

LED Description	PW (Red)	P_R (Yellow)	P_S (Yellow)	P_T (Yellow)	Actions
Normal Operation	○	●	●	●	-
Reverse Phase	◐	◐	◐	◐	Switch off the unit. Check the 3 phase wiring.
T Phase Missing	◐	●	●	◐	Switch off the unit. Check the 3 phase wiring.
S Phase Missing	◐	●	◐	●	Switch off the unit. Check the 3 phase wiring.
R Phase Missing	●	●	●	●	Switch off the unit. Check the 3 phase wiring.
S & T Phase Missing*	◐	●	◐	◐	Switch off the unit. Check the 3 phase wiring.
Overload*	◐	●	●	●	High discharge temperature. Check refrigerant system.
Sensor Missing*	◐	○	○	○	Switch off the unit. Plug in sensor.

○ ON ● OFF ◐ BLINK

Note:

1. “*” indicates additional function for PP01 phase sequencer.
2. When R phase missing, no LED or buzzer will indicate the error, but relay 71 (COMMON) and 81 (NO) will cut off.
3. The unit will check discharge sensor availability only during power up.
4. All errors can only recover through manually reset.

Error Code / Fault Condition

When a malfunction of the air conditioner unit is detected, immediately switch off the main power supply before proceeding with the following troubleshooting procedures.

The following are common fault conditions and simple troubleshooting tips. If any other fault conditions which are not listed occur, contact your nearest local dealer. DO NOT attempt to troubleshoot the unit by yourself.

No	Fault conditions	Possible causes / corrective actions
1	The air conditioner unit will not resume after power failure.	The auto restart function is not functioning. Please turn on the unit with the wireless / wired controller.
2	The compressor does not operate 3 minutes after the air conditioner unit is started.	- Protection against frequent starting. - Wait for 3 or 4 minutes for the compressor to start operating by itself.
3	The airflow is too slow or room cannot be cooled sufficiently.	- The air filter is dirty. - The doors and windows are opened. - The air suction and discharge of both indoor and outdoor units are clogged or blocked. - The regulated temperature or temperature setting is not low enough.
4	Discharge airflow has bad odor.	- Cigarettes, smoke particles, perfume and others, which might have adhered onto the coil, may cause odor. - Contact your nearest dealer.
5	Condensation on the front air grille of the indoor unit.	- This is caused by air humidity after an extended period of operation. - The set temperature is too low. Increase the temperature setting and operate the unit at high fan speed.
6	Water flowing out from the air conditioner.	Switch off the unit and contact your nearest dealer. This might be due to tilted installation.
7	Hissing airflow sound from the air conditioner unit during operation.	Liquid refrigerant flowing into the evaporator coil.
8	The wireless controller display is dim.	- The batteries are discharged. - The batteries are not correctly inserted. - The assembly is not good.
9	Compressor operates continuously.	- Dirty air filter. Clean the air filter. - Temperature setting too low (cooling). Use higher temperature setting. - Temperature setting too high (heating). Use lower temperature setting.
10	No cool air comes out during cooling cycle, or no hot air comes out during heating cycle.	- Temperature setting too high (cooling). Use lower temperature setting. - Temperature setting too low (heating). Use higher temperature setting.
11	On heating cycle, warm air does not come out.	Unit is in defrost mode. Heating operation will resume after defrost cycle ends.

Diagnostic Guidelines

By means of pressure readings:

Circuit \ Data	Pressure					Probable cause
	Too low	A little low	Normal	A little high	Too high	
High side Low side					•	- Overcharged with refrigerant. - Non-condensable gases in refrigerant circuit (e.g. air). - Obstructed air-intake / discharge. - Hot air short circuiting in outdoor unit.
High side Low side	•				•	- Poor compression /no compression (compressor defective) - Reversing valve leaking.
High side Low side	•	•				- Undercharged with refrigerant. - Refrigerant leakage. - Air filter clogged / dirty (indoor unit). - Indoor fan locked / seized. - Defective defrost control, outdoor coil freeze up (heating). - Outdoor fan locked / seized (heating).
High side Low side				•	•	- Outdoor fan blocked (cooling). - Outdoor coil dirty (cooling). - Indoor fan locked / seized (heating). - Indoor air filter clogged / dirty (heating). - Non-condensable gases in refrigerant circuit (e.g. air).
High side Low side				•	•	Air intake temperature of indoor unit too high.

