VRV IV heat pump, for high ambient temperature regions Air Conditioning Technical Data

RXYTQ-UYF

RXYTQ8U7YF
RXYTQ10U7YF
RXYTQ12U7YF
RXYTQ14U7YF
RXYTQ16U7YF
RXYTQ18U7YF
RXYTQ20U7YF
RXYTQ22U7YF
RXYTQ24U7YF
RXYTQ26U7YF
RXYTQ28U7YF
RXYTQ30U7YF
RXYTQ32U7YF
RXYTQ34U7YF
RXYTQ36U7YF
RXYTQ38U7YF
RXYTQ40U7YF
RXYTQ42U7YF
RXYTQ44U7YF
RXYTQ46U7YF
RXYTQ48U7YF

FIDAR KARA

EEDEN21

Table of contents

RXYTQ-UYF

1 Features

1 - 1 RXYTQ-UYF

Daikin's solution for comfort & low energy consumption

- Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation and air handling units
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, VRV configurator, 7 segment display and full inverter compressors, 4-side heat exchanger, refrigerant cooled PCB, new DC fan motor, ...
- Customize your VRV for best seasonal efficiency & comfort with the weather dependant Variable Refrigerant Temperature function. Increased seasonal efficiency with up to 28%. No more cold draft by supply of high outblow temperatures
- Free combination of outdoor units to meet installation space or efficiency requirements
- Fits any building as also indoor installation is possible as a result of high external static pressure of up to 78.4 Pa. Indoor installation leads to less piping length, lower installation costs, increased efficiency and better visual aesthetics
- Wide piping flexibility: 30m indoor height difference, maximum piping length: 190m, total piping length: 1,000m
- The ability to control each conditioned zone individually keeps VRV system running costs to an absolute minimum
- Spread your installation cost by phased installation
- Keep your system in top condition via the Daikin Cloud Service: 24/7 monitoring for maximum efficiency, extented lifetime and immediate service support thanks to failure prediction

INVERTER
Inverter

2 Specifications

1 - 1 RXYTQ-UYF

Technical Specifications					RXYTQ8UYF	RXYTQ10UYF	RXYTQ12UYF	RXYTQ14UYF	RXYTQ16UYF
Combination A					4 x FXMQ50P7VEB	5 x FXMQ50P7VEB	6 x FXMQ50P7VEB	7 x FXMQ50P7VEB	8 x FXMQ50P7VEB
Combination B					4 x FXFSQ50ARV1	5 x FXFSQ50ARV1	6 x FXFSQ50ARV1	7 x FXFSQ50ARV1	8 x FXFSQ50ARV1
Cooling capacity	Combination A	35°C AHRI		Btu/h	76,450 (1)	95,550 (1)	114,350 (1)	136,500 (1)	153,550 (1)
		35°C AHRI		kW	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)
		46°C ISO		Btu/h	68,950 (2)	86,000 (2)	97,250 (2)	109,200 (2)	119,800 (2)
		46°C ISO		kW	20.2 (2)	25.2 (2)	28.5 (2)	32.0 (2)	35.1 (2)
		48°C AHRI		Btu/h	57,350 (3)	76,450 (3)	81,900 (3)	85,650 (3)	96,550 (3)
		48°C AHRI		kW	16.8 (3)	22.4 (3)	24.0 (3)	25.1 (3)	28.3 (3)
	Combination B	35°C ISO - Full load		Btu/h	76,450 (5)	95,550 (5)	114,350 (5)	136,500 (5)	153,550 (5)
		35°C ISO - Full load		kW	22.4 (5)	28.0 (5)	33.5 (5)	40.0 (5)	45.0 (5)
		46°C ISO - Full load		Btu/h	68,950 (4)	86,000 (4)	97,250 (4)	109,200 (4)	119,800 (4)
		46°C ISO - Full load		kW	20.2 (4)	25.2 (4)	28.5 (4)	32.0 (4)	35.1 (4)
Heating capacity	Combination A	Nom	6°CWB	Btu/h	76,450 (14)	95,550 (14)	114,350 (14)	136,500 (14)	153,550 (14)
				kW	22.4 (14)	28.0 (14)	33.5 (14)	40.0 (14)	45.0 (14)
		Max	6°CWB	Btu/h	85,350 (14)	107,500 (14)	128,000 (14)	153,550 (14)	170,650 (14)
				kW	25.0 (14)	31.5 (14)	37.5 (14)	45.0 (14)	50.0 (14)
Power input - 50Hz	Cooling	Combination A	35°C AHRI	kW	5.75 (1)	7.18 (1)	9.52 (1)	12.14 (1)	13.72 (1)
			46°C ISO	kW	6.75 (2)	8.51 (2)	9.80 (2)	11.33 (2)	12.79 (2)
			48°C AHRI	kW	5.93 (3)	7.95 (3)	8.71 (3)	9.16 (3)	10.40 (3)
		Combination B	35°C ISO - Full load - Total	kW	5.37 (5)	6.81 (5)	8.63 (5)	10.23 (5)	12.64 (5)
			46°C ISO - Full load - Total	kW	6.56 (4)	7.95 (4)	8.72 (4)	10.00 (4)	12.10 (4)
			Power input indoor units	kW	0.20 (0)	0.25 (0)	0.29 (0)	0.34 (0)	0.39 (0)
	Heating	Combination A	6°CWB - Nom.	kW	5.62 (14)	7.20 (14)	9.19 (14)	11.01 (14)	12.92 (14)
			6°CWB - Max.	kW	6.52 (14)	8.66 (14)	11.06 (14)	12.68 (14)	15.36 (14)
Power input - 60Hz	Cooling	Combination A	46°C ISO	kW	6.75 (2)	8.51 (2)	9.80 (2)	11.33 (2)	12.79 (2)
Power input	Indoor unit 50/60 Hz	Cooling/Heating		kW	0.37	0.47	0.56	0.93	1.05
EER	Combination A	35°C AHRI		Btu/h/W	13.29 (1)	13.31 (1)	12.01 (1)	11.24 (1)	11.19 (1)
		35°C AHRI		kW/kW	3.89 (1)	3.90 (1)	3.52 (1)	3.29 (1)	3.28 (1)
		46°C ISO		Btu/h/W	10.21 (2)	10.10 (2)	9.92 (2)	9.64 (2)	9.36 (2)
		46°C ISO		kW/kW	2.99 (2)	2.96 (2)	2.91 (2)	2.83 (2)	2.74 (2)
		48°C AHRI		Btu/h/W	9.67 (3)	9.62 (3)	9.40 (3)	9.35 (3)	9.28 (3)
		48°C AHRI		kW/kW	2.84 (3)	2.82 (3)	2.75 (3)	2.74 (3)	2.72 (3)
	Combination B	35°C ISO - Full load		Btu/h/W	14.23 (5)	14.02 (5)	13.24 (5)	13.34 (5)	12.15 (5)
		35°C ISO - Full load		kW/kW	4.17 (5)	4.11 (5)	3.88 (5)	3.91 (5)	3.56 (5)
		46°C ISO - Full load		Btu/h/W	10.51 (4)	10.82 (4)	11.16 (4)	10.92 (4)	9.90 (4)
		46°C ISO - Full load		kW/kW	3.08 (4)	3.17 (4)	3.27 (4)	3.20 (4)	2.90 (4)
COP at nom. capacity	Combination A	6°CWB		Btu/h/W	13.60 (14)	13.26 (14)	12.44 (14)	12.40 (14)	11.89 (14)
		6°CWB		kW/kW	3.99 (14)	3.89 (14)	3.64 (14)	3.63 (14)	3.48 (14)
COP at max. capacity	Combination A	6°CWB		Btu/h/W	13.09 (14)	12.42 (14)	11.57 (14)	12.11 (14)	11.10 (14)
		6°CWB		kW	3.84 (14)	3.64 (14)	3.39 (14)	3.55 (14)	3.25 (14)
CSPF	Combination B			Btu/h/W	5.81 (15)	6.13 (15)	6.12 (15)	5.66 (15)	5.36 (15)
Capacity range				HP	8	10	12	14	16
Maximum number of connectable indoor units					64 (6)				
Indoor index connection	Min.				100	125	150	175	200
	Nom.				200	250	300	350	400
	Max.				260	325	390	455	520
Dimensions	Unit	Height		mm	1,685				
		Width		mm	930	1,240			
		Depth		mm	765				
	Packed unit	Height		mm	1,820				
		Width		mm	995	1,305			
		Depth		mm	860				
Weight	Unit			kg	198	234		283	
	Packed unit			kg	211	251		300	
Packing	Material				Carton				
	Weight			kg	1.8	2.2			
Packing 2	Material				Wood				
	Weight			kg	11.0	14.0			
Packing 3	Material				Plastic				
	Weight			kg	0.5	0.6			

2 Specifications

1 - 1 RXYTQ-UYF

Technical Specifications					RXYTQ8UYF	RXYTQ10UYF	RXYTQ12UYF	RXYTQ14UYF	RXYTQ16UYF
Casing	Colour				Daikin White				
	Material				Painted galvanized steel plate				
Heat exchanger	Type				Cross fin coil				
Fan	Quantity				1	2			
	Air flow rate	Cooling	Nom.	m^3/min	162	223		260	
				cfm	5,721	7,875		9,182	
	External static pressure	Max.		Pa	78				
Fan motor	Quantity				1	2			
	Type				DC motor				
	Output			W	550	750			
Compressor	Quantity				1			2	
	Type				Hermetically sealed scroll compressor				
	Crankcase heater			W	33				
Operation range	Cooling	Min.		°CDB	-5.0				
		Max.		°CDB	52.0				
	Heating	Min.		°CWB	-20.0				
		Max.		°CWB	15.5				
Sound power level	Cooling	Nom.		dBA	78.0 (7)	79.2 (7)	81.0 (7)	81.6 (7)	86.0 (7)
Sound pressure level	Cooling	Nom.		dBA	57.0 (8)	59.0 (8)	61.0 (8)		64.0 (8)
Refrigerant	Type				R-410A				
	GWP				2,087.5				
	Charge			TCO2Eq	14.0	21.5	21.7	24.4	24.6
	Charge			kg	6.7	10.3	10.4	11.7	11.8
Refrigerant oil	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection				
		OD		mm	952		12.7		
	Gas	Type			Braze connection				
		OD		mm	19.1	22.2	28.6		
	Total piping length	System	Actual	m	1,000 (9)				
Defrost method					Reversed cycle				
Capacity control	Method				Inverter controlled				
Safety devices	Item	01			High pressure switch				
		02			Fan driver overload protector				
		03			Inverter overload protector				
		04			PC board fuse				
		05			Leakage current detector				

Standard accessories: Installation manual; Quantity: 1;

Standard accessories: Operation manual; Quantity: 1;

Standard accessories: Connection pipes; Quantity: 1;

Electrical Specifications					RXYTQ8UYF	RXYTQ10UYF	RXYTQ12UYF	RXYTQ14UYF	RXYTQ16UYF
Power supply	Name				YF				
	Phase				3N~				
	Frequency			Hz	50/60				
	Voltage			V	380-415/400				
Power supply intake					Both indoor and outdoor unit				
Voltage range	Min.			%	-10				
	Max.			%	10				
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	A	1 (16)				
		Combination B	Cooling	A	1 (17)				
	Starting current (MSC) - remark				See note 15				
	Minimum circuit amps (MCA)			A	16.1 (10)	22.0 (10)	24.0 (10)	27.0 (10)	31.0 (10)
	Maximum fuse amps (MFA)			A	20 (11)	25 (11)	32 (11)		40 (11)
	Full load amps (FLA)	Total		A	1.2 (12)	1.8 (12)		2.6 (12)	
Power Performance	Power factor	Combination B	35°C ISO - Full load		-				
			46°C ISO - Full load		2				
Wiring connections - 50Hz	For power supply	Quantity			5G				
	For connection with indoor	Quantity			2				
		Remark			F1,F2				
Current - 60Hz	Starting current (MSC) - remark				See note 18				
	Minimum circuit amps (MCA)			A	16.1 (10)	22.0 (10)	24.0 (10)	27.0 (10)	31.0 (10)
	Maximum fuse amps (MFA)			A	20 (11)	25 (11)	32 (11)		40 (11)
	Full load amps (FLA)	Total		A	1.2 (12)	1.8 (12)		2.6 (12)	

2 Specifications

1 - 1 RXYTQ-UYF

Electrical Specifications			RXYTQ8UYF	RXYTQ10UYF	RXYTQ12UYF	RXYTQ14UYF	RXYTQ16UYF
Wiring connections - 60Hz	For power supply	Quantity	5G				
	For connection with indoor	Quantity	2				
		Remark	F1,F2				

(1)Cooling: T1: indoor temp. 27°CDB (26,7°CDB for Kuwait), 19,0°CWB (19,4°CWB for Kuwait), outdoor tem. 35°CDB, AHRI 1230:2010, power input indoor units (duct type) included |
(2)Cooling: T3: indoor temp. 29.0°CDB, 19.0°CWB, outdoor temp. 46°CDB, ISO15042:2011, power input indoor units (duct type) included |
(3)Cooling: T2: indoor temp. 26,6°CDB, 19,4°CWB, outdoor temp. 48°CDB, AHRI 1230:2010, power input indoor units (duct type) included |
(4)Cooling: T3: indoor temp. 29.0°CDB, 19.0°CWB, outdoor temp. 46°CDB, ISO15042:2011 |
(5)Cooling: T1: indoor temp. 27.0°CDB, 19.0°CWB, outdoor temp. 35°CDB, ISO15042:2011 |
(6)Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |
(7)Sound power level is an absolute value that a sound source generates. |
(8)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(9)Refer to refrigerant pipe selection or installation manual |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)FLA means the nominal running current of the fan |
(13)Cooling: indoor temp. 27.0°CDB, 19.0°CWB, outdoor temp. 29°CDB, ISO15042:2011 |
(14)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level differrence: 0m. Power input of indoor units (duct type) included |
(15)Cooling seasonal performance factor for hot climates at T3 condition per ISO 16358-1:2013/AMD 1:2019 |
(16)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(17)RLA is based on following conditions: indoor temp. 29°CDB, 19°CWB; outdoor temp. 46°C |
(18)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
Maximum allowable voltage range variation between phases is 2%. |
Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
Sound values are measured in a semi-anechoic room. |
Soundpressure system [dBA] = 10*log[10^(A/10)+10^(B/10)+10^(C/10)] , with Unit A = A dBA, Unit B = B dBA, Unit C = C dBA |
For detailed contents of standard accessories, see installation/operation manual |
Multi combination (18~48HP) data is corresponding with the standard multi combination

Technical specifications System					RXYTQ18UYF	RXYTQ20UYF	RXYTQ22UYF	RXYTQ24UYF
System	Outdoor unit module 1				RXYTQ8U		RXYTQ10U	RXYTQ8U
	Outdoor unit module 2				RXYTQ10U	RXYTQ12U		RXYTQ16U
Combination A					9 x FXMQ50P7VEB	10 x FXMQ50P7VEB	11 x FXMQ50P7VEB	12 x FXMQ50P7VEB
Combination B					9 x FXFSQ50ARV1	10 x FXFSQ50ARV1	11 x FXFSQ50ARV1	12 x FXFSQ50ARV1
Cooling capacity	Combination A	35°C AHRI		Btu/h	171,950 (1)	190,750 (1)	209,850 (1)	230,000 (1)
		35°C AHRI		kW	50.4 (1)	55.9 (1)	61.5 (1)	67.4 (1)
		46°C ISO		Btu/h	154,900 (2)	166,150 (2)	183,250 (2)	188,700 (2)
		46°C ISO		kW	45.4 (2)	48.7 (2)	53.7 (2)	55.3 (2)
		48°C AHRI		Btu/h	133,750 (3)	139,200 (3)	158,300 (3)	153,900 (3)
		48°C AHRI		kW	39.2 (3)	40.8 (3)	46.4 (3)	45.1 (3)
	Combination B	35°C ISO - Full load		Btu/h	171,950 (5)	190,750 (5)	209,850 (5)	230,000 (5)
		35°C ISO - Full load		kW	50.4 (5)	55.9 (5)	61.5 (5)	67.4 (5)
		46°C ISO - Full load		Btu/h	154,900 (4)	166,150 (4)	183,250 (4)	188,700 (4)
		46°C ISO - Full load		kW	45.4 (4)	48.7 (4)	53.7 (4)	55.3 (4)
Heating capacity	Combination A	Nom	6°CWB	Btu/h	171,950 (14)	190,750 (14)	209,850 (14)	230,000 (14)
				kW	50.4 (14)	55.9 (14)	61.5 (14)	67.4 (14)
		Max	6°CWB	Btu/h	192,800 (14)	213,250 (14)	235,450 (14)	255,900 (14)
				kW	56.5 (14)	62.5 (14)	69.0 (14)	75.0 (14)
Power input - 50Hz	Cooling	Combination A	35°C AHRI	kW	12.93 (1)	15.27 (1)	16.70 (1)	19.47 (1)
			46°C ISO	kW	15.27 (2)	16.56 (2)	18.32 (2)	19.54 (2)
			48°C AHRI	kW	13.87 (3)	14.64 (3)	16.66 (3)	16.33 (3)
		Combination B	35°C ISO - Full load - Total	kW	12.18 (5)	14.01 (5)	15.45 (5)	18.01 (5)
			46°C ISO - Full load - Total	kW	14.51 (4)	15.27 (4)	16.67 (4)	18.66 (4)
			Power input indoor units	kW	0.44 (0)	0.49 (0)	0.54 (0)	0.59 (0)
	Heating	Combination A	6°CWB - Nom.	kW	12.82 (14)	14.81 (14)	16.40 (14)	18.54 (14)
			6°CWB - Max.	kW	15.17 (14)	17.57 (14)	19.71 (14)	21.88 (14)
Power input - 60Hz	Cooling	Combination A	46°C ISO	kW	15.73 (2)	16.56 (2)	18.78 (2)	19.54 (2)
Power input	Indoor unit 50/60 Hz	Cooling/Heating		kW	0.84	0.93	1.03	1.42
EER	Combination A	35°C AHRI		Btu/h/W	13.30 (1)	12.49 (1)	12.57 (1)	11.81 (1)
		35°C AHRI		kW/kW	3.90 (1)	3.66 (1)	3.68 (1)	3.46 (1)
		46°C ISO		Btu/h/W	10.15 (2)	10.04 (2)	10.00 (2)	9.65 (2)
		46°C ISO		kW/kW	2.97 (2)	2.94 (2)	2.93 (2)	2.83 (2)
		48°C AHRI		Btu/h/W	9.64 (3)	9.51 (3)	9.50 (3)	9.42 (3)
		48°C AHRI		kW/kW	2.83 (3)	2.79 (3)	2.78 (3)	2.76 (3)
	Combination B	35°C ISO - Full load		Btu/h/W	14.11 (5)	13.62 (5)	13.59 (5)	12.77 (5)
		35°C ISO - Full load		kW/kW	4.14 (5)	3.99 (5)	3.98 (5)	3.74 (5)
EER	Combination B	46°C ISO - Full load		Btu/h/W	10.68 (4)	10.88 (4)	10.99 (4)	10.11 (4)
		46°C ISO - Full load		kW/kW	3.13 (4)	3.19 (4)	3.22 (4)	2.96 (4)

2 Specifications

1 - 1 RXYTQ-UYF

Technical specifications System					RXYTQ18UYF	RXYTQ20UYF	RXYTQ22UYF	RXYTQ24UYF
COP at nom. capacity	Combination A	6°CWB		Btu/h/W	13.41 (14)	12.88 (14)	12.80 (14)	12.41 (14)
		6°CWB		kW/kW	3.93 (14)	3.77 (14)	3.75 (14)	3.64 (14)
COP at max. capacity	Combination A	6°CWB		Btu/h/W	12.71 (14)	12.14 (14)	11.94 (14)	11.70 (14)
		6°CWB		kW	3.72 (14)	3.56 (14)	3.50 (14)	3.43 (14)
CSPF	Combination B			Btu/h/W	5.98 (15)	5.97 (15)	6.11 (15)	5.60 (15)
Capacity range				HP	18	20	22	24
Maximum number of connectable indoor units					64 (6)			
Indoor index connection	Min.				225	250	275	300
	Nom.				450	500	550	600
	Max.				585	650	715	780
Sound power level	Cooling	Nom.		dBA	81.7 (7)	82.8 (7)	83.2 (7)	86.6 (7)
Sound pressure level	Cooling	Nom.		dBA	61.1 (8)	62.5 (8)	63.1 (8)	64.8 (8)

Technical specifications System					RXYTQ26UYF	RXYTQ28UYF	RXYTQ30UYF	RXYTQ32UYF
System	Outdoor unit module 1				RXYTQ12U		RXYTQ14U	RXYTQ16U
	Outdoor unit module 2				RXYTQ14U	RXYTQ16U		
Combination A					13 x FXMQ50P7VEB	14 x FXMQ50P7VEB	15 x FXMQ50P7VEB	16 x FXMQ50P7VEB
Combination B					13 x FXFSQ50ARV1	14 x FXFSQ50ARV1	15 x FXFSQ50ARV1	16 x FXFSQ50ARV1
Cooling capacity	Combination A	35°C AHRI		Btu/h	250,800 (1)	267,850 (1)	290,050 (1)	307,100 (1)
		35°C AHRI		kW	73.5 (1)	78.5 (1)	85.0 (1)	90.0 (1)
		46°C ISO		Btu/h	206,450 (2)	217,000 (2)	228,950 (2)	239,550 (2)
		46°C ISO		kW	60.5 (2)	63.6 (2)	67.1 (2)	70.2 (2)
		48°C AHRI		Btu/h	167,550 (3)	178,450 (3)	182,200 (3)	193,150 (3)
		48°C AHRI		kW	49.1 (3)	52.3 (3)	53.4 (3)	56.6 (3)
	Combination B	35°C ISO - Full load		Btu/h	250,800 (5)	267,850 (5)	290,050 (5)	307,100 (5)
		35°C ISO - Full load		kW	73.5 (5)	78.5 (5)	85.0 (5)	90.0 (5)
		46°C ISO - Full load		Btu/h	206,450 (4)	217,000 (4)	228,950 (4)	239,550 (4)
		46°C ISO - Full load		kW	60.5 (4)	63.6 (4)	67.1 (4)	70.2 (4)
Heating capacity	Combination A	Nom	6°CWB	Btu/h	250,800 (14)	267,850 (14)	290,050 (14)	307,100 (14)
				kW	73.5 (14)	78.5 (14)	85.0 (14)	90.0 (14)
		Max	6°CWB	Btu/h	281,500 (14)	298,550 (14)	324,150 (14)	341,200 (14)
				kW	82.5 (14)	87.5 (14)	95.0 (14)	100.0 (14)
Power input - 50Hz	Cooling	Combination A	35°C AHRI	kW	21.66 (1)	23.24 (1)	25.86 (1)	27.44 (1)
			46°C ISO	kW	21.13 (2)	22.60 (2)	24.12 (2)	25.59 (2)
			48°C AHRI	kW	17.88 (3)	19.12 (3)	19.57 (3)	20.81 (3)
		Combination B	35°C ISO - Full load - Total	kW	18.86 (5)	21.27 (5)	22.87 (5)	25.28 (5)
			46°C ISO - Full load - Total	kW	18.72 (4)	20.82 (4)	22.10 (4)	24.21 (4)
			Power input indoor units	kW	0.64 (0)	0.68 (0)	0.73 (0)	0.78 (0)
	Heating	Combination A	6°CWB - Nom.	kW	20.20 (14)	22.11 (14)	23.92 (14)	25.84 (14)
			6°CWB - Max.	kW	23.74 (14)	26.42 (14)	28.05 (14)	30.73 (14)
Power input - 60Hz	Cooling	Combination A	46°C ISO	kW	21.13 (2)	22.60 (2)	24.12 (2)	25.59 (2)
Power input	Indoor unit 50/60 Hz	Cooling/Heating		kW	1.49	1.61	1.98	2.10
EER	Combination A	35°C AHRI		Btu/h/W	11.58 (1)	11.53 (1)	11.22 (1)	11.19 (1)
		35°C AHRI		kW/kW	3.39 (1)	3.38 (1)	3.29 (1)	3.28 (1)
		46°C ISO		Btu/h/W	9.77 (2)	9.60 (2)	9.49 (2)	9.36 (2)
		46°C ISO		kW/kW	2.86 (2)	2.81 (2)	2.78 (2)	2.74 (2)
		48°C AHRI		Btu/h/W	9.37 (3)	9.33 (3)	9.31 (3)	9.28 (3)
		48°C AHRI		kW/kW	2.75 (3)	2.74 (3)	2.73 (3)	2.72 (3)
	Combination B	35°C ISO - Full load		Btu/h/W	13.29 (5)	12.59 (5)	12.68 (5)	12.15 (5)
		35°C ISO - Full load		kW/kW	3.90 (5)	3.69 (5)	3.72 (5)	3.56 (5)
EER	Combination B	46°C ISO - Full load		Btu/h/W	11.03 (4)	10.42 (4)	10.36 (4)	9.90 (4)
		46°C ISO - Full load		kW/kW	3.23 (4)	3.05 (4)	3.04 (4)	2.90 (4)
COP at nom. capacity	Combination A	6°CWB		Btu/h/W	12.42 (14)	12.11 (14)	12.12 (14)	11.89 (14)
		6°CWB		kW/kW	3.64 (14)	3.55 (14)		3.48 (14)
COP at max. capacity	Combination A	6°CWB		Btu/h/W	11.86 (14)	11.30 (14)	11.56 (14)	11.10 (14)
		6°CWB		kW	3.48 (14)	3.31 (14)	3.39 (14)	3.25 (14)
CSPF	Combination B			Btu/h/W	5.92 (15)	5.76 (15)	5.51 (15)	5.36 (15)

2 Specifications

1 - 1 RXYTQ-UYF

Technical specifications System					RXYTQ26UYF	RXYTQ28UYF	RXYTQ30UYF	RXYTQ32UYF
Capacity range				HP	26	28	30	32
Maximum number of connectable indoor units					64 (6)			
Indoor index connection	Min.				325	350	375	400
	Nom.				650	700	750	800
	Max.				845	910	975	1,040
Sound power level	Cooling	Nom.		dBA	84.3 (7)	87.2 (7)	87.3 (7)	89.0 (7)
Sound pressure level	Cooling	Nom.		dBA	64.0 (8)	65.8 (8)		67.0 (8)

Technical specifications System					RXYTQ34UYF	RXYTQ36UYF	RXYTQ38UYF	RXYTQ40UYF
System	Outdoor unit module 1				RXYTQ8U			RXYTQ10U
	Outdoor unit module 2				RXYTQ10U	RXYTQ12U	RXYTQ14U	
	Outdoor unit module 3				RXYTQ16U			
Combination A					17 x FXMQ50P7VEB	18 x FXMQ50P7VEB	19 x FXMQ50P7VEB	20 x FXMQ50P7VEB
Combination B					17 x FXFSQ50ARV1	18 x FXFSQ50ARV1	19 x FXFSQ50ARV1	20 x FXFSQ50ARV1
Cooling capacity	Combination A	35°C AHRI		Btu/h	325,500 (1)	344,300 (1)	366,450 (1)	385,550 (1)
		35°C AHRI		kW	95.4 (1)	100.9 (1)	107.4 (1)	113.0 (1)
		46°C ISO		Btu/h	274,700 (2)	285,950 (2)	297,900 (2)	314,950 (2)
		46°C ISO		kW	80.5 (2)	83.8 (2)	87.3 (2)	92.3 (2)
		48°C AHRI		Btu/h	230,300 (3)	235,800 (3)	239,550 (3)	258,650 (3)
		48°C AHRI		kW	67.5 (3)	69.1 (3)	70.2 (3)	75.8 (3)
	Combination B	35°C ISO - Full load		Btu/h	325,500 (5)	344,300 (5)	366,450 (5)	385,550 (5)
		35°C ISO - Full load		kW	95.4 (5)	100.9 (5)	107.4 (5)	113.0 (5)
		46°C ISO - Full load		Btu/h	274,700 (4)	285,950 (4)	297,900 (4)	314,950 (4)
		46°C ISO - Full load		kW	80.5 (4)	83.8 (4)	87.3 (4)	92.3 (4)
Heating capacity	Combination A	Nom	6°CWB	Btu/h	325,500 (14)	344,300 (14)	366,450 (14)	385,550 (14)
				kW	95.4 (14)	100.9 (14)	107.4 (14)	113.0 (14)
		Max	6°CWB	Btu/h	363,400 (14)	383,850 (14)	409,450 (14)	431,600 (14)
				kW	106.5 (14)	112.5 (14)	120.0 (14)	126.5 (14)
Power input - 50Hz	Cooling	Combination A	35°C AHRI	kW	26.65 (1)	28.99 (1)	31.61 (1)	33.04 (1)
			46°C ISO	kW	28.06 (2)	29.35 (2)	30.87 (2)	32.63 (2)
			48°C AHRI	kW	24.28 (3)	25.05 (3)	25.49 (3)	27.51 (3)
		Combination B	35°C ISO - Full load - Total	kW	24.82 (5)	26.65 (5)	28.24 (5)	29.68 (5)
			46°C ISO - Full load - Total	kW	26.61 (4)	27.38 (4)	28.66 (4)	30.05 (4)
			Power input indoor units	kW	0.83 (0)	0.88 (0)	0.93 (0)	0.98 (0)
	Heating	Combination A	6°CWB - Nom.	kW	25.74 (14)	27.73 (14)	29.54 (14)	31.13 (14)
			6°CWB - Max.	kW	30.54 (14)	32.94 (14)	34.56 (14)	36.70 (14)
Power input - 60Hz	Cooling	Combination A	46°C ISO	kW	28.52 (2)	29.35 (2)	30.87 (2)	33.09 (2)
Power input	Indoor unit 50/60 Hz	Cooling/Heating		kW	1.89	1.98	2.35	2.45
EER	Combination A	35°C AHRI		Btu/h/W	12.21 (1)	11.88 (1)	11.59 (1)	11.67 (1)
		35°C AHRI		kW/kW	3.58 (1)	3.48 (1)	3.40 (1)	3.42 (1)
		46°C ISO		Btu/h/W	9.79 (2)	9.74 (2)	9.65 (2)	
		46°C ISO		kW/kW	2.87 (2)	2.86 (2)	2.83 (2)	
		48°C AHRI		Btu/h/W	9.49 (3)	9.41 (3)	9.40 (3)	
		48°C AHRI		kW/kW	2.78 (3)	2.76 (3)	2.75 (3)	2.76 (3)
	Combination B	35°C ISO - Full load		Btu/h/W	13.11 (5)	12.92 (5)	12.98 (5)	12.99 (5)
EER	Combination B	35°C ISO - Full load		kW/kW	3.84 (5)	3.79 (5)	3.80 (5)	3.81 (5)
		46°C ISO - Full load		Btu/h/W	10.32 (4)	10.44 (4)	10.39 (4)	10.48 (4)
		46°C ISO - Full load		kW/kW	3.03 (4)	3.06 (4)	3.05 (4)	3.07 (4)
COP at nom. capacity	Combination A	6°CWB		Btu/h/W	12.65 (14)	12.42 (14)	12.40 (14)	12.39 (14)
		6°CWB		kW/kW	3.71 (14)	3.64 (14)		3.63 (14)
COP at max. capacity	Combination A	6°CWB		Btu/h/W	11.90 (14)	11.65 (14)	11.85 (14)	11.76 (14)
		6°CWB		kW	3.49 (14)	3.42 (14)	3.47 (14)	3.45 (14)
CSPF	Combination B			Btu/h/W	5.76 (15)	5.78 (15)	5.63 (15)	5.72 (15)
Capacity range				HP	34	36	38	40
Maximum number of connectable indoor units					64 (6)			
Indoor index connection	Min.				425	450	475	500
	Nom.				850	900	950	1,000
	Max.				1,105	1,170	1,235	1,300
Sound power level	Cooling	Nom.		dBA	87.4 (7)	87.7 (7)	87.8 (7)	88.0 (7)

2 Specifications

1 - 1 RXYTQ-UYF

Technical specifications System					RXYTQ34UYF	RXYTQ36UYF	RXYTQ38UYF	RXYTQ40UYF
Sound pressure level	Cooling	Nom.		dBA	65.8 (8)	66.3 (8)		66.6 (8)

Technical specifications System					RXYTQ42UYF	RXYTQ44UYF	RXYTQ46UYF	RXYTQ48UYF
System	Outdoor unit module 1				RXYTQ10U	RXYTQ12U	RXYTQ14U	RXYTQ16U
	Outdoor unit module 2				RXYTQ16U			
	Outdoor unit module 3				RXYTQ16U			
Combination A					21 x FXMQ50P7VEB	22 x FXMQ50P7VEB	23 x FXMQ50P7VEB	24 x FXMQ50P7VEB
Combination B					21 x FXFSQ50ARV1	22 x FXFSQ50ARV1	23 x FXFSQ50ARV1	24 x FXFSQ50ARV1
Cooling capacity	Combination A	35°C AHRI		Btu/h	402,650 (1)	421,400 (1)	443,600 (1)	460,650 (1)
		35°C AHRI		kW	118.0 (1)	123.5 (1)	130.0 (1)	135.0 (1)
		46°C ISO		Btu/h	325,500 (2)	336,800 (2)	348,700 (2)	359,300 (2)
		46°C ISO		kW	95.4 (2)	98.7 (2)	102.2 (2)	105.3 (2)
		48°C AHRI		Btu/h	269,550 (3)	275,000 (3)	278,750 (3)	289,700 (3)
		48°C AHRI		kW	79.0 (3)	80.6 (3)	81.7 (3)	84.9 (3)
	Combination B	35°C ISO - Full load		Btu/h	402,650 (5)	421,400 (5)	443,600 (5)	460,650 (5)
		35°C ISO - Full load		kW	118.0 (5)	123.5 (5)	130.0 (5)	135.0 (5)
		46°C ISO - Full load		Btu/h	325,500 (4)	336,800 (4)	348,700 (4)	359,300 (4)
		46°C ISO - Full load		kW	95.4 (4)	98.7 (4)	102.2 (4)	105.3 (4)
Heating capacity	Combination A	Nom	6°CWB	Btu/h	402,650 (14)	421,400 (14)	443,600 (14)	460,650 (14)
				kW	118.0 (14)	123.5 (14)	130.0 (14)	135.0 (14)
		Max	6°CWB	Btu/h	448,700 (14)	469,200 (14)	494,750 (14)	511,850 (14)
				kW	131.5 (14)	137.5 (14)	145.0 (14)	150.0 (14)
Power input - 50Hz	Cooling	Combination A	35°C AHRI	kW	34.62 (1)	36.96 (1)	39.58 (1)	41.16 (1)
			46°C ISO	kW	34.10 (2)	35.39 (2)	36.91 (2)	38.38 (2)
			48°C AHRI	kW	28.76 (3)	29.52 (3)	29.97 (3)	31.21 (3)
		Combination B	35°C ISO - Full load - Total	kW	32.09 (5)	33.91 (5)	35.51 (5)	37.92 (5)
			46°C ISO - Full load - Total	kW	32.16 (4)	32.92 (4)	34.21 (4)	36.31 (4)
			Power input indoor units	kW	1.03 (0)	1.08 (0)	1.13 (0)	1.17 (0)
	Heating	Combination A	6°CWB - Nom.	kW	33.04 (14)	35.03 (14)	36.84 (14)	38.75 (14)
			6°CWB - Max.	kW	39.38 (14)	41.79 (14)	43.41 (14)	46.09 (14)
Power input - 60Hz	Cooling	Combination A	46°C ISO	kW	34.56 (2)	35.39 (2)	36.91 (2)	38.38 (2)
Power input	Indoor unit 50/60 Hz	Cooling/Heating		kW	2.57	2.66	3.03	3.15
EER	Combination A	35°C AHRI		Btu/h/W	11.63 (1)	11.40 (1)	11.21 (1)	11.19 (1)
		35°C AHRI		kW/kW	3.41 (1)	3.34 (1)	3.28 (1)	
		46°C ISO		Btu/h/W	9.55 (2)	9.52 (2)	9.45 (2)	9.36 (2)
		46°C ISO		kW/kW	2.80 (2)	2.79 (2)	2.77 (2)	2.74 (2)
		48°C AHRI		Btu/h/W	9.37 (3)	9.32 (3)	9.30 (3)	9.28 (3)
		48°C AHRI		kW/kW	2.75 (3)	2.73 (3)		2.72 (3)
	Combination B	35°C ISO - Full load		Btu/h/W	12.55 (5)	12.43 (5)	12.49 (5)	12.15 (5)
EER	Combination B	35°C ISO - Full load		kW/kW	3.68 (5)	3.64 (5)	3.66 (5)	3.56 (5)
		46°C ISO - Full load		Btu/h/W	10.12 (4)	10.23 (4)	10.19 (4)	9.90 (4)
		46°C ISO - Full load		kW/kW	2.97 (4)	3.00 (4)	2.99 (4)	2.90 (4)
COP at nom. capacity	Combination A	6°CWB		Btu/h/W	12.19 (14)	12.03 (14)	12.04 (14)	11.89 (14)
		6°CWB		kW/kW	3.57 (14)	3.53 (14)		3.48 (14)
COP at max. capacity	Combination A	6°CWB		Btu/h/W	11.39 (14)	11.23 (14)	11.40 (14)	11.10 (14)
		6°CWB		kW	3.34 (14)	3.29 (14)	3.34 (14)	3.25 (14)
CSPF	Combination B			Btu/h/W	5.62 (15)	5.64 (15)	5.46 (15)	5.36 (15)
Capacity range				HP	42	44	46	48
Maximum number of connectable indoor units					64 (6)			
Indoor index connection	Min.				525	550	575	600
	Nom.				1,050	1,100	1,150	1,200
	Max.				1,365	1,430	1,495	1,560
Sound power level	Cooling	Nom.		dBA	89.4 (7)	89.6 (7)	89.7 (7)	90.8 (7)
Sound pressure level	Cooling	Nom.		dBA	67.6 (8)	68.0 (8)		68.8 (8)

2 Specifications

1 - 1 RXYTQ-UYF

Electrical specifications System					RXYTQ18UYF	RXYTQ20UYF	RXYTQ22UYF	RXYTQ24UYF
Power supply	Name				YF			
	Phase				3N~			
	Frequency			Hz	50/60			
	Voltage			V	380-415/400			
Power supply intake					Both indoor and outdoor unit			
Voltage range	Min.			%	-10			
	Max.			%	10			
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	A	1 (16)			
		Combination B	Cooling	A	1 (17)			
	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	38.1 (10)	40.1 (10)	46.0 (10)	47.1 (10)
	Maximum fuse amps (MFA)			A	40 (11)	50 (11)	63 (11)	
Power Performance	Power factor	Combination B	35°C ISO - Full load		-			
			46°C ISO - Full load		2			
Wiring connections - 50Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			
Current - 60Hz	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	38.1 (10)	40.1 (10)	46.0 (10)	47.1 (10)
	Maximum fuse amps (MFA)			A	40 (11)	50 (11)	63 (11)	
Wiring connections - 60Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			

Electrical specifications System					RXYTQ26UYF	RXYTQ28UYF	RXYTQ30UYF	RXYTQ32UYF
Power supply	Name				YF			
	Phase				3N~			
	Frequency			Hz	50/60			
	Voltage			V	380-415/400			
Power supply intake					Both indoor and outdoor unit			
Voltage range	Min.			%	-10			
	Max.			%	10			
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	A	1 (16)			
		Combination B	Cooling	A	1 (17)			
	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	51.0 (10)	55.0 (10)	58.0 (10)	62.0 (10)
	Maximum fuse amps (MFA)			A	63 (11)		80 (11)	
Power Performance	Power factor	Combination B	35°C ISO - Full load		-			
			46°C ISO - Full load		2			
Wiring connections - 50Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			
Current - 60Hz	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	51.0 (10)	55.0 (10)	58.0 (10)	62.0 (10)
	Maximum fuse amps (MFA)			A	63 (11)		80 (11)	
Wiring connections - 60Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			

Electrical specifications System					RXYTQ34UYF	RXYTQ36UYF	RXYTQ38UYF	RXYTQ40UYF
Power supply	Name				YF			
	Phase				3N~			
	Frequency			Hz	50/60			
	Voltage			V	380-415/400			
Power supply intake					Both indoor and outdoor unit			
Voltage range	Min.			%	-10			
	Max.			%	10			
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	A	1 (16)			
		Combination B	Cooling	A	1 (17)			
	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	69.1 (10)	71.1 (10)	74.1 (10)	80.0 (10)
	Maximum fuse amps (MFA)			A	80 (11)		100 (11)	
Power Performance	Power factor	Combination B	35°C ISO - Full load		-			
			46°C ISO - Full load		2			
Wiring connections - 50Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			

2 Specifications

1 - 1 RXYTQ-UYF

Electrical specifications System					RXYTQ34UYF	RXYTQ36UYF	RXYTQ38UYF	RXYTQ40UYF
Current - 60Hz	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	69.1 (10)	71.1 (10)	74.1 (10)	80.0 (10)
	Maximum fuse amps (MFA)			A	80 (11)		100 (11)	
Wiring connections - 60Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			

Electrical specifications System					RXYTQ42UYF	RXYTQ44UYF	RXYTQ46UYF	RXYTQ48UYF
Power supply	Name				YF			
	Phase				3N~			
	Frequency			Hz	50/60			
	Voltage			V	380-415/400			
Power supply intake					Both indoor and outdoor unit			
Voltage range	Min.			%	-10			
	Max.			%	10			
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	A	1 (16)			
		Combination B	Cooling	A	1 (17)			
	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	84.0 (10)	86.0 (10)	89.0 (10)	93.0 (10)
	Maximum fuse amps (MFA)			A	100 (11)			125 (11)
Power Performance	Power factor	Combination B	35°C ISO - Full load		-			
			46°C ISO - Full load		2			
Wiring connections - 50Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			
Current - 60Hz	Starting current (MSC) - remark				See note 18			
	Minimum circuit amps (MCA)			A	84.0 (10)	86.0 (10)	89.0 (10)	93.0 (10)
	Maximum fuse amps (MFA)			A	100 (11)			125 (11)
Wiring connections - 60Hz	For power supply	Quantity			5G			
	For connection with indoor	Quantity			2			
		Remark			F1,F2			

3 Features and advantages

3 - 1 Features and Advantages

Cooling Seasonal Performance Factor

Nominal Efficiency vs. Seasonal Efficiency in line with real life performance

Cooling Seasonal Performance Factor

Currently, the energy efficiency of cooling devices is measured in artificial and standardized conditions. For air conditioners, this is done at a constant temperature of 46 °C or 35 °C and at full cooling capacity. This results in T1 & T3 energy efficiency (EER), which is representing only two points to conclude on Energy performance.

In other markets, like in the US and Europe, seasonal performance is measured with IPLV, SEER or ESEER calculations based on real-life conditions. However, these calculation methods have not been adopted for high Ambient or hot climates. In order to correct this situation, a more realistic calculation method called Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$ has been developed by the ISO Refrigeration and Air-Conditioning Subcommittee (SC6) for the testing and rating of air conditioners and heat pumps. This is the standard ISO 16358 -1 Amendment 1 issued in 2019 for the hot T3 climate zones.

3 Features and advantages

3 - 1 Features and Advantages

The implementation of the Seasonal Efficiency calculation reflects more realistic energy efficiency value through the entire cooling season at hot climate conditions compared to currently used EER value.

The calculation follows the below considerations:

- Use of a high ambient climate weather bin for cooling instead of one nominal temperature
- Considering operation at partial capacity instead of full capacity.

The adoption of the $CSPF_{T3}$ calculation method will result in a better estimation of the equipment's real-life performance over a year.

What is $CSPF_{T3}$?

(Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$) is the testing and rating of air conditioners as per the ISO 16358 -1 Amendment 1 issued in 2019 for T3 hot climate zones and takes into consideration the bin hours reflecting high ambient conditions. Regulatory bodies like ESMA and SASO are seriously considering the adoption of this as a standard in the region.

How is $CSPF_{T3}$ expressed?

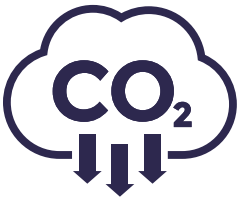
- It is expressed as the $CSPF_{T3}$ value (**Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$**)
- It is defined as the ratio of the total annual amount of heat that the equipment can remove from the indoor air when operating for cooling in active mode to the total annual amount of energy consumed by the equipment during the same period.

$$CSPF_{T3} = \frac{\text{Cooling Seasonal Total Load @ T3 ISO weather bin}}{\text{Cooling Seasonal Energy Consumption @ T3 ISO weather bin}}$$

Benefits of $CSPF_{T3}$

The implementation of seasonal efficiency will provide end users with a fair comparison of different equipment based on realistic year-round efficiency which will lead to:

Reduced energy consumption



Reduced CO2 emission

Reduced electricity bills

3 Features and advantages

3 - 1 Features and Advantages

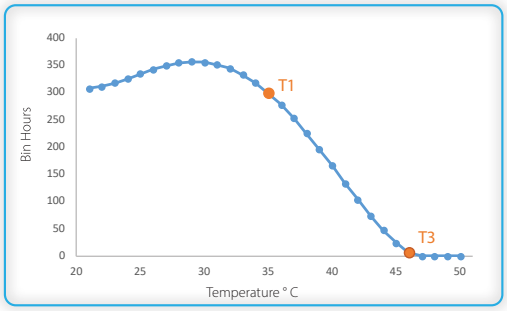
Pioneering in innovation and environmental responsibility

For Daikin, seasonal efficiency brings together two core ambitions: pushing for innovation and reducing the environmental footprint of our products. Being the first in the industry to design equipment based on optimal seasonal efficiency values, Daikin is once again pioneering high-performance cooling products that lower the impact on the environment and on your wallet.

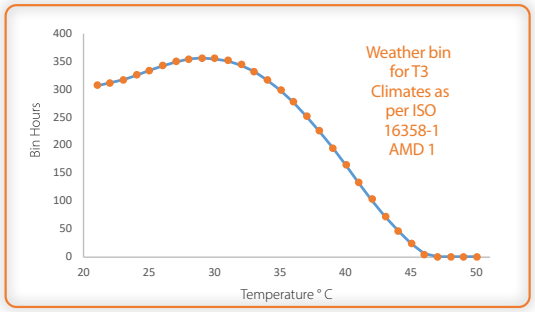
Benefits of Seasonal Efficiency vs. Nominal Efficiency

Energy Efficiency Ratio → **Cooling Seasonal Performance Factor**

TEMPERATURE



Energy Efficiency Ratio rating is based on one outdoor Ambient Temperature condition (T1 or T3)



Cooling Seasonal Performance Factor is based on the Hot Climate Weather bin as per ISO 16358-1 AMD1

EFFICIENCY

$$EER_{@T1\ or\ T3} = \frac{\text{Cooling Capacity}_{@T1\ or\ T3}}{\text{Power Input}_{@T1\ or\ T3}}$$

$$CSPF_{T3} = \frac{\text{Cooling Seasonal Total Load}_{@T3\ ISO\ Weather\ bin}}{\text{Cooling Seasonal Energy Consumption}_{@T3\ ISO\ Weather\ bin}}$$

Nominal efficiency gives an indication on how efficient an air conditioner operates at nominal conditions. 100% capacity performance is used to measure EER

$CSPF_{T3}$ gives an indication on how efficient an air conditioner operates over an entire cooling season. Variable or seasonal performance close to real life is used and not 100% capacity performance.

For example, 10 HP Daikin VRV IV+Unit (RXYTQ10U7YF) can be evaluated using below mentioned efficiencies:

T3 EER : 10.1 (Btu/h)/W 2.96 W/W

$CSPF_{T3}$: 20.9 (Btu/h)/W 6.13 W/W

When the new ISO standard for hot climate was published, Daikin has resolutely chosen for early implementation of this new legislation and started testing all products for seasonal efficiency. This commitment to pioneering the implementation of seasonal efficiency is a practice we observe every day.
Today, Daikin leads the way towards more efficient and cost-effective comfort solutions. All Daikin products - residential, commercial, as well as industrial - are seasonal-efficient, reducing energy and costs the smart way.

4 Options

4 - 1 Options

RXYTQ-UYF

VRV4
Middle East
Option list

Nr.	Item	RXYTQ8U	RXYTQ10-12U	RXYTQ14-16U	RXYTQ18~48U
I.	Refnet header	KHRQ22M29H			
		-	KHRQ22M64H		
		-	-	-	KHRQ22M75H
II.	Refnet joint	KHRQ22M20T			
		KHRQ22M29T9			
		-	KHRQ22M64T		
		-	-	-	KHRQ22M75T
III.	Outdoor multi-connection kit (2)	-	-	-	BHFQ22P1007
IV.	Outdoor multi-connection kit (2)	-	-	-	BHFQ22P1517

Nr.	Item	8HP	10HP	12HP	14HP	16HP
1a.	Cool/heat selector (switch)	KRC19-26A				
1b.	Cool/heat selector (PCB)	BRP2A81				
1c.	Cool/heat selector (fixing box)	KJB111A*				
2.	VRV configurator	EKPCCAB				
3.	Demand PCB (5)	DTA104A61/62*				
4.	Demand PCB mounting plate	-	KKSB26B1*			

Notes
1. All options are kits
2. Only for multi units
3. To operate the cool/heat selector function, options 1a and 1b are both required.
4. To mount option 1a, option 1c is required.
5. To install the demand PCB on the large casing type, the demand PCB mounting plate is required.

Medium casing type VRV4 Middle East heat pump: modules 8HP
Large casing type VRV4 Middle East heat pump: modules 10~16HP

3D119361

5 Combination table

5 - 1 Combination Table

RXYTQ-UYF

Unit combination restrictions: ·VRV4· outdoor units (all models) + ·15·-class indoor units

Units in scope: ·FXZQ15A· and ·FXAQ15A·.

1. In case the system contains these indoor units and the total connection ratio (·CR·) ≤ ·100·%: no special restrictions.
   Follow the restrictions that apply to regular ·VRV DX· indoor units.

2. In case the system contains these indoor units and the total connection ratio (·CR·) > ·100·%: special restrictions apply.
   A. When the connection ratio (·CR1·) of the sum of all ·FXZQ15A· and/or ·FXAQ15A· units in the system ≤ ·70·%, and ALL other ·VRV DX· indoor units have an individual capacity class > ·50·: no special restrictions.

   B. When the connection ratio (·CR1·) of the sum of all ·FXZQ15A· and/or ·FXAQ15A· units in the system ≤ ·70·%, and NOT ALL other ·VRV DX· indoor units have an individual capacity class > ·50·: the restrictions below apply.

   ° 100% < CR ≤ 105% -> ·CR1· of the sum of all ·FXZQ15A· and/or ·FXAQ15A· indoor units in the system must be ≤ ·70·%.
   ° 105% < CR ≤ 110% -> ·CR1· of the sum of all ·FXZQ15A· and/or ·FXAQ15A· indoor units in the system must be ≤ ·60·%.
   ° 110% < CR ≤ 115% -> ·CR1· of the sum of all ·FXZQ15A· and/or ·FXAQ15A· indoor units in the system must be ≤ ·40·%.
   ° 115% < CR ≤ 120% -> ·CR1· of the sum of all ·FXZQ15A· and/or ·FXAQ15A· indoor units in the system must be ≤ ·25·%.
   ° 120% < CR ≤ 125% -> ·CR1· of the sum of all ·FXZQ15A· and/or ·FXAQ15A· indoor units in the system must be ≤ ·10·%.
   ° 125% < CR ≤ 130% -> ·FXZQ15A· and ·FXAQ15A· cannot be used.

Remark

Only the ·15·-class indoor units explicitly mentioned on this page are in scope. Other indoor units follow the rules that apply to regular ·VRV DX· indoor units.

3D104665A

RXYTQ-UYF

VRV4
Middle East
Indoor unit combination restrictions

Indoor unit combination pattern	·VRV* DX· indoor unit	Air handling unit (AHU) (3)
·VRV* DX· indoor unit	O	O_2
Air handling unit (AHU) (3)	O	O_1

O: Allowed
X: Not allowed

Notes

1. O_1
- *Combination of ·AHU· only + control box ·EKEQFA· (the combination with ·VRV DX· indoor units is not allowed; maximum ·48·HP for ·3x400· class ·EKEXV· kit)*
  → ·X·-control is possible (up to ·3x· [·EKEXV+EKEQFA*· boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
  → ·Y·-control is possible (up to ·3x· [·EKEXV+EKEQFA*· boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
  → ·W·-control is possible (up to ·3x· [·EKEXV+EKEQFA*· boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.

- *Combination of ·AHU· only + control box ·EKEQMA· (not combined with ·VRV DX· indoor units)*
  → Z-control is possible (the allowed number of [·EKEXV + EKEQMA· boxes] is determined by the connection ratio (·90-110%·) and the capacity of the outdoor unit.

2. O_2
- Combination of ·AHU· and ·VRV DX· indoor units
  → Z-control is possible (·EKEQMA*· boxes are allowed, but with a limited connection ratio).

3. (3) The following units are considered AHUs:
  → ·EKEXV + EKEQ(MA/FA) + AHU· coil
  → ·FXMQ_MF· units

Information
- ·VKM· units are considered to be regular ·VRV DX· indoor units.

3D096860A

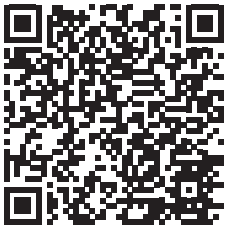
6 Capacity tables

6 - 1 Capacity Table Legend

In order to fulfill more your requirements on quick access of data in the format you require, we have developed a tool to consult capacity tables.

Below you can find the link to the capacity table database and an overview of all the tools we have to help you select the correct product:

- **Capacity table database:** lets you find back and export quickly the capacity information you are looking for based upon unit model, refrigerant temperature and connection ratio.
- You can access the capacity table viewer here:
  https://my.daikin.eu/content/denv/en_US/home/applications/software-finder/capacity-table-viewer.html



- An overview of **all software tools** that we offer can be found here:
  https://my.daikin.eu/denv/en_US/home/applications/software-finder.html

6 Capacity tables

6 - 2 Integrated Heating Capacity Correction Factor

RXYTQ-UYF

Integrated heating capacity coefficient

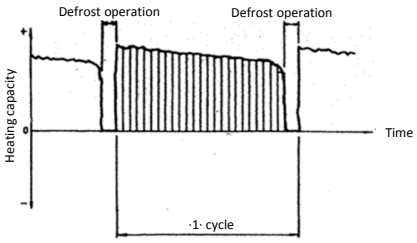
The heating capacity tables do not take into account the capacity reduction in case of frost accumulation or defrost operation.
The capacity values that take these factors into account, or in other words, the integrated heating capacity values, can be calculated as follows:

Formula **A = B * C**

A= Integrated heating capacity
B= Capacity characteristics value
C= Integrated correction factor for frost accumulation (see table)

Inlet air temperature of heat exchanger

[°CDB/°CWB]	-7/-7,6	-5/-5,6	-3/-3,7	0/-0,7	3/2,2	5/4,1	7/6
Integrated correction factor for frost accumulation ·(C)·							
8HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00
10HP	0,95	0,93	0,87	0,79	0,80	0,88	1,00
12HP	0,95	0,92	0,87	0,75	0,76	0,85	1,00
14HP	0,95	0,92	0,86	0,72	0,73	0,84	1,00
16HP	0,95	0,92	0,86	0,72	0,72	0,83	1,00



Only free multi-outdoor-unit combinations are possible. Respect the following calculation rules:
The total integrated heating capacity of a multi-outdoor-unit system = the sum of the integrated heating capacity of each module separately.

Notes
1. The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).
2. When there is an accumulation of snow against the outdoor unit heat exchanger, there will always be a temporary reduction in capacity depending on the outdoor temperature (°C DB), relative humidity (RH) and the amount of frosting which occurs.

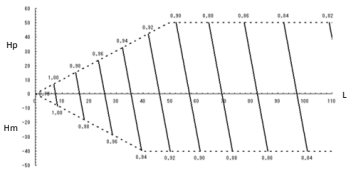
3D097510

6 Capacity tables

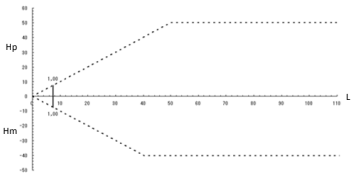
6 - 3 Capacity Correction Factor

RXYTQ8UYF

Correction ratio for cooling capacity



Correction ratio for heating capacity



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
8HP	9,5	12,7	19,1	22,2

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

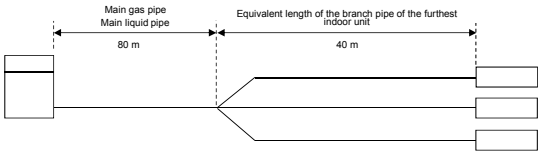
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
8HP	1	0,5	1	0,5

5. Example



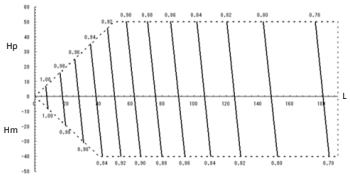
Overall equivalent length
- Cooling mode = 80 m x 0,5 + 40 m = 80 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

Capacity correction ratio (height difference = 0)
- Cooling mode = 0,86
- Heating mode = 1,0

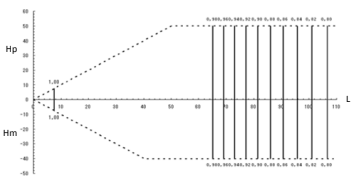
3D119351

RXYTQ10UYF

Correction ratio for cooling capacity



Correction ratio for heating capacity



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
10HP	9,5	12,7	22,2	25,4

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

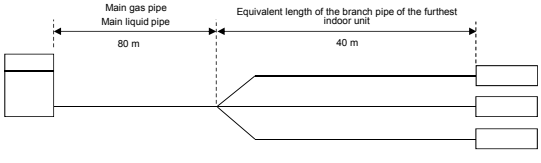
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
10HP	1	0,5	1	0,5

5. Example



Overall equivalent length
- Cooling mode = 80 m x 0,5 + 40 m = 80 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

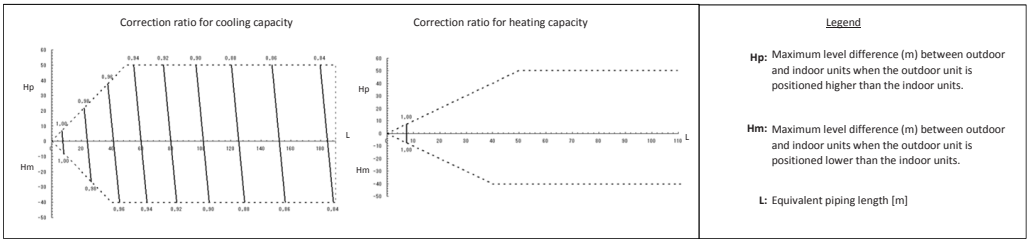
Capacity correction ratio (height difference = 0)
- Cooling mode = 0,87
- Heating mode = 0,90

3D119351

6 Capacity tables

6 - 3 Capacity Correction Factor

RXYTQ12UYF
RXYTQ14UYF
RXYTQ24UYF
RXYTQ36UYF



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
12HP	12,7	15,9	28,6	28,6
14HP	12,7	15,9	28,6	28,6
24HP	15,9	19,1	34,9	34,9
36HP	19,1	22,2	41,3	41,3

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

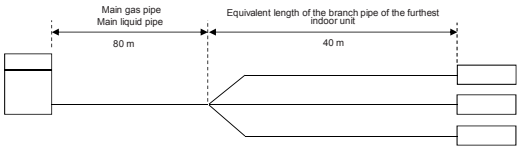
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
12/14/24/36HP	1	/	1	0,5

5. Example

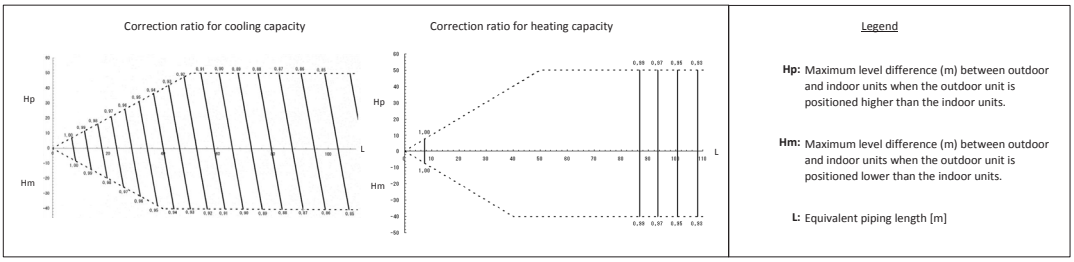


Overall equivalent length
- Cooling mode = 80 m x 1,0 + 40 m = 120 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

Capacity correction ratio (height difference = 0)
- Cooling mode = 0,89
- Heating mode = 1,0

3D119351

RXYTQ16UYF



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
16HP	12,7	15,9	28,6	31,8

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

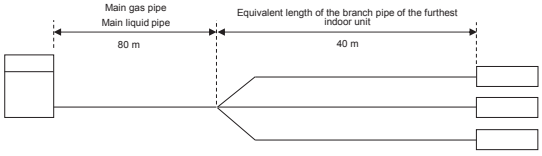
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
16HP	1	0,5	1	0,5

5. Example



Overall equivalent length
- Cooling mode = 80 m x 0,5 + 40 m = 80 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

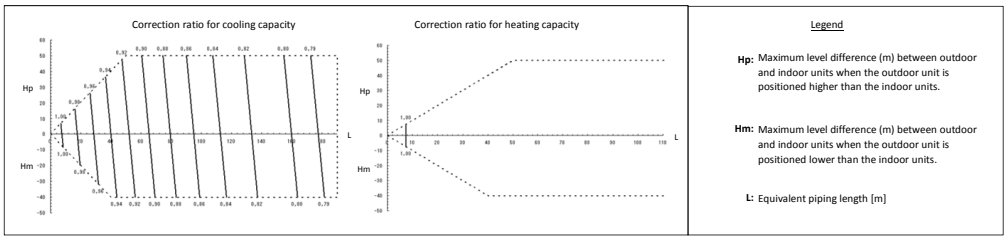
Capacity correction ratio (height difference = 0)
- Cooling mode = 0,88
- Heating mode = 0,99

3D119351

6 Capacity tables

6 - 3 Capacity Correction Factor

RXYTQ18UYF
RXYTQ26-30UYF
RXYTQ38UYF
RXYTQ44UYF



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
18HP	15,9	19,1	28,6	31,8
26-30HP	19,1	22,2	34,9	38,1
38-44HP	19,1	22,2	41,3	41,3

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

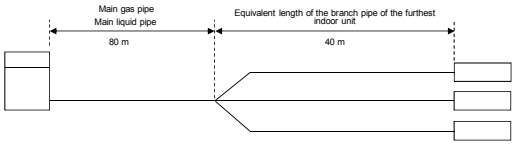
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
18/26-30/38-44HP	1	0,5	1	0,5

5. Example RXYTQ38-44T

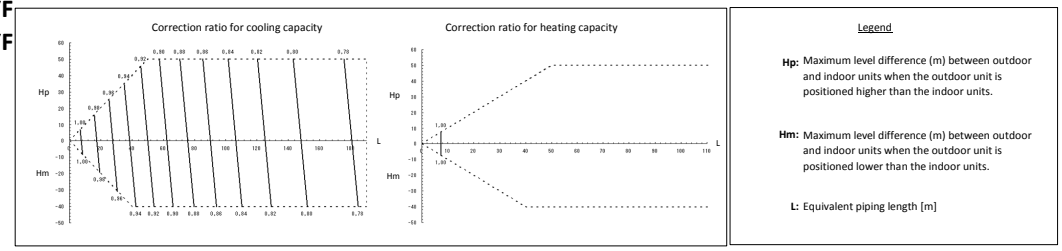


Overall equivalent length
- Cooling mode = 80 m x 1,0 + 40 m = 120 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

Capacity correction ratio (height difference = 0)
- Cooling mode = 0,83
- Heating mode = 1,0

3D119351

RXYTQ20UYF
RXYTQ32UYF
RXYTQ34UYF



Legend

Hp: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned higher than the indoor units.

Hm: Maximum level difference (m) between outdoor and indoor units when the outdoor unit is positioned lower than the indoor units.

L: Equivalent piping length [m]

Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
20HP	15,9	19,1	28,6	31,8
32/34HP	19,1	22,2	34,9	38,1

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

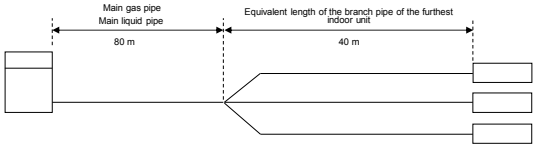
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
20/32/34HP	1	0,5	1	0,5

5. Example RXYTQ38-44T



Overall equivalent length
- Cooling mode = 80 m x 0,5 + 40 m = 80 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

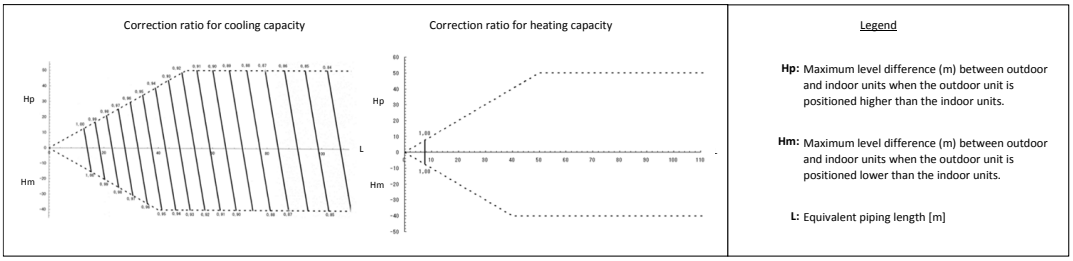
Capacity correction ratio (height difference = 0)
- Cooling mode = 0,88
- Heating mode = 1,0

3D119351

6 Capacity tables

6 - 3 Capacity Correction Factor

RXYTQ22UYF



Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.
Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
22HP	15,9	19,1	28,6	31,8

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

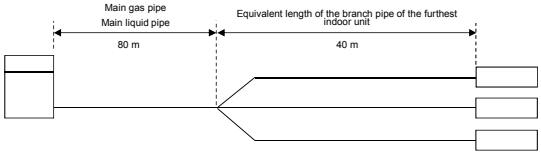
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
22HP	1	0,5	1	0,5

5. Example

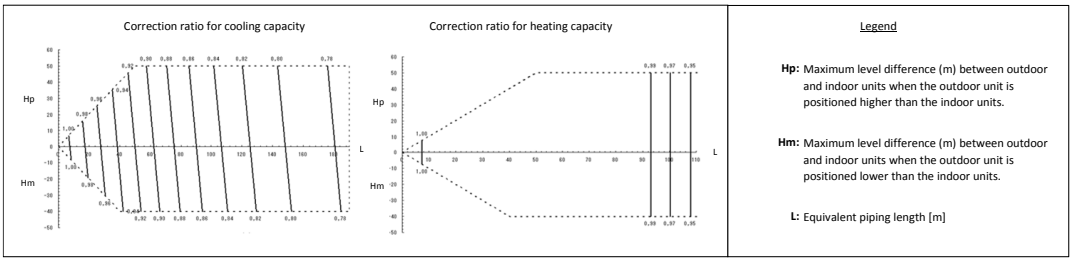


Overall equivalent length
- Cooling mode = 80 m x 0,5 + 40 m = 80 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

Capacity correction ratio (height difference = 0)
- Cooling mode = 0,88
- Heating mode = 1,0

3D119351

RXYTQ46UYF



Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.
Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
46HP	19,1	22,2	41,3	41,3

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

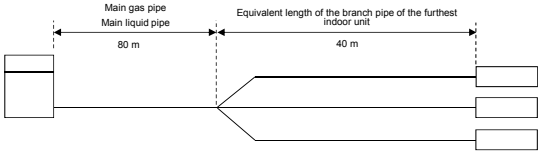
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
46HP	1	/	1	0,5

5. Example



Overall equivalent length
- Cooling mode = 80 m x 1,0 + 40 m = 120 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

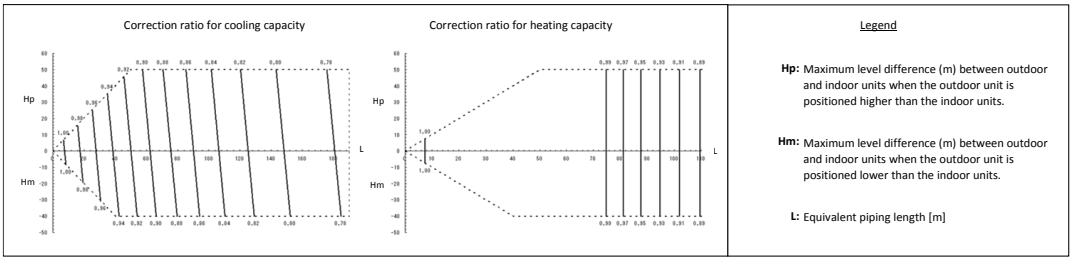
Capacity correction ratio (height difference = 0)
- Cooling mode = 0,83
- Heating mode = 1,0

3D119351

6 Capacity tables

6 - 3 Capacity Correction Factor

RXYTQ48UYF



Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.
   Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown it the above figures.

2. Method of calculating the capacity of the outdoor units.
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.	X	Correction ratio of piping to furthest indoor unit

Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.	X	Correction ratio of piping to furthest indoor unit

3. Main liquid and gas pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
48HP	19,1	22,2	41,3	41,3

For the allowed system setups and the rules for when to increase the main liquid and gas piping diameter, refer to the installation manual.

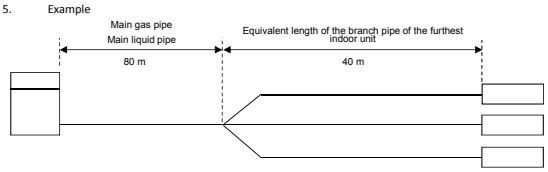
4. Overall equivalent length

Overall equivalent length	=	Equivalent length of the main pipe	X	Correction factor	+	Equivalent length of the branch pipes

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
48HP	1	/	1	0,5

5. Example



Overall equivalent length
- Cooling mode = 80 m x 1,0 + 40 m = 120 m
- Heating mode = 80 m x 0,5 + 40 m = 80 m

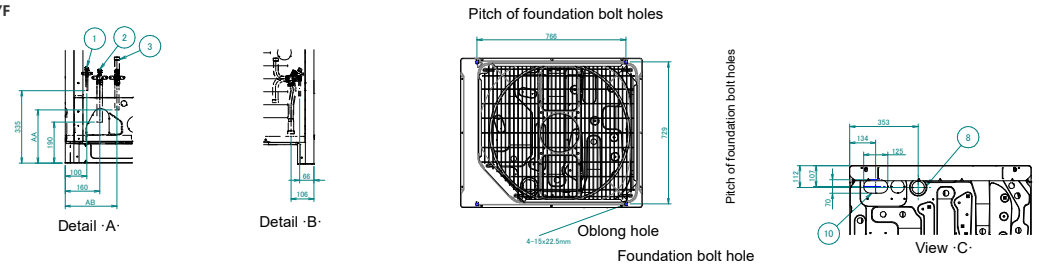
Capacity correction ratio (height difference = 0)
- Cooling mode = 0,83
- Heating mode = 0,97

3D119351

7 Dimensional drawings

7 - 1 Dimensional Drawings

RXYTQ8UYF



Model	AA	AB
RYYQ8-12U, RXYQ8-12U, RXYQQ8-12U, RXYTQ8U	–	–
REMQ5U, RYMQ8-12U, REYQ8-12U	246	240

Notes

1. Detail ·A· and detail ·B· indicate the dimensions after fixing the attached piping.
2. Items ·4 - 10·: Knockout hole.
3. Gas pipe

RYYQ8U, RYMQ8U, RXYQ8U, RXYQQ8U, RXYTQ8U : Ø ·19.1· brazing connection
RYYQ10U, RYMQ10U, RXYQ10U, RXYQQ10U : Ø ·22.2· brazing connection
REMQ5U, REYQ8-12U : Ø ·25.4· brazing connection
RYYQ12U, RYMQ12U, RXYQ12U, RXYQQ12U : Ø ·28.6· brazing connection

Liquid pipe

RYYQ8-10U, RYMQ8-10U, RXYQ8-10U, RXYQQ8-10U, REMQ5U, REYQ8-12U, RXYTQ8U : Ø ·9.5· brazing connection

RYYQ12U, RYMQ12U, RXYQ12U, RXYQQ12U : Ø ·12.7· brazing connection

Equalising pipe

RYMQ8-10U : Ø ·19.1· brazing connection
RYMQ12U : Ø ·22.2· brazing connection

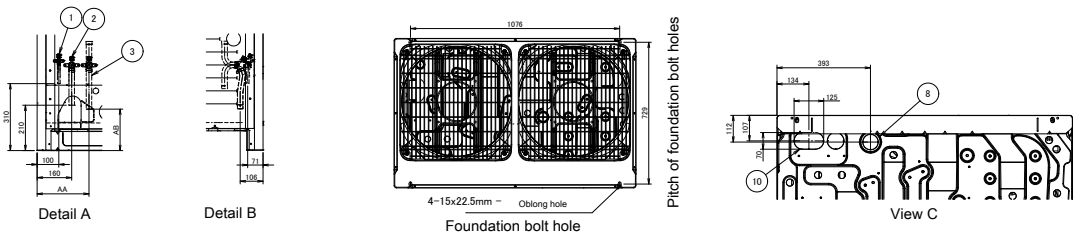
High pressure/low pressure gas pipe

REMQ5U, REYQ8-12U : Ø ·19.1· brazing connection

No.	Part name	Remark
11	Grounding terminal	
10	Pipe routing hole (bottom)	
9	Pipe routing hole (front)	Inside of the switch box (·M8·)
8	Power cord routing hole (bottom)	Ø65
7	Power cord routing hole (front)	Ø27
6	Power cord routing hole (front)	Ø65
5	Power cord routing hole (front)	Ø80
4	Power cord routing hole (side)	Ø65
3	Equalising pipe connection port High pressure/low pressure gas pipe	See note ·3·. See note ·3·.
2	Gas pipe connection port	See note ·3·.
1	Liquid pipe connection port	Remark

2D119001

RXYTQ10-16UYF



Model	AA	AB
RXYQ14-20U, RYYQ14-20U, RXYQQ14-20U, RXYTQ10-16U	–	–
RYMQ14-16U, REYQ14-20U	240	155
RYMQ18-20U	240	192

Notes

1. Detail A and detail B indicate the dimensions after fixing the attached piping. 1.
2. Items 4 - 10: Knockout hole.
3. Gas pipe

RXYTQ10U, REYQ14-20U : Ø 22.2 brazing connection
RYYQ14-20U, RYMQ14-20U RXYQ14-20U, RXYQQ14-20U, RXYTQ12-16U Liquid pipe : Ø 25.4 brazing connection
RXYTQ10U : Ø 28.6 brazing connection
RYYQ14-16U, RYMQ14-16U, RXYQ14-16U, RXYQQ14-16U, REYQ14-20U, RXYTQ12-16U : Ø 9.5 brazing connection
RYYQ18-20U, RYMQ18-20U, RXYQ18-20U, RXYQQ18-20U Equalising pipe : Ø 12.7 brazing connection
RYMQ14-16U : Ø 15.9 brazing connection
RYMQ18-20U : Ø 22.2 brazing connection
High pressure/low pressure gas pipe : Ø 28.6 brazing connection
REYQ14-20U : Ø 22.2 brazing connection

No.	Part name	Remark
11	Grounding terminal	
10	Pipe routing hole (bottom)	
9	Pipe routing hole (front)	Inside of the switch box (M8)
8	Power cord routing hole (bottom)	Ø65
7	Power cord routing hole (front)	Ø27
6	Power cord routing hole (front)	Ø65
5	Power cord routing hole (front)	Ø80
4	Power cord routing hole (side)	Ø65
3	Equalising pipe connection port High pressure/low pressure gas pipe	See note 3.
2	Gas pipe connection port	See note 3.
1	Liquid pipe connection port	See note 3.

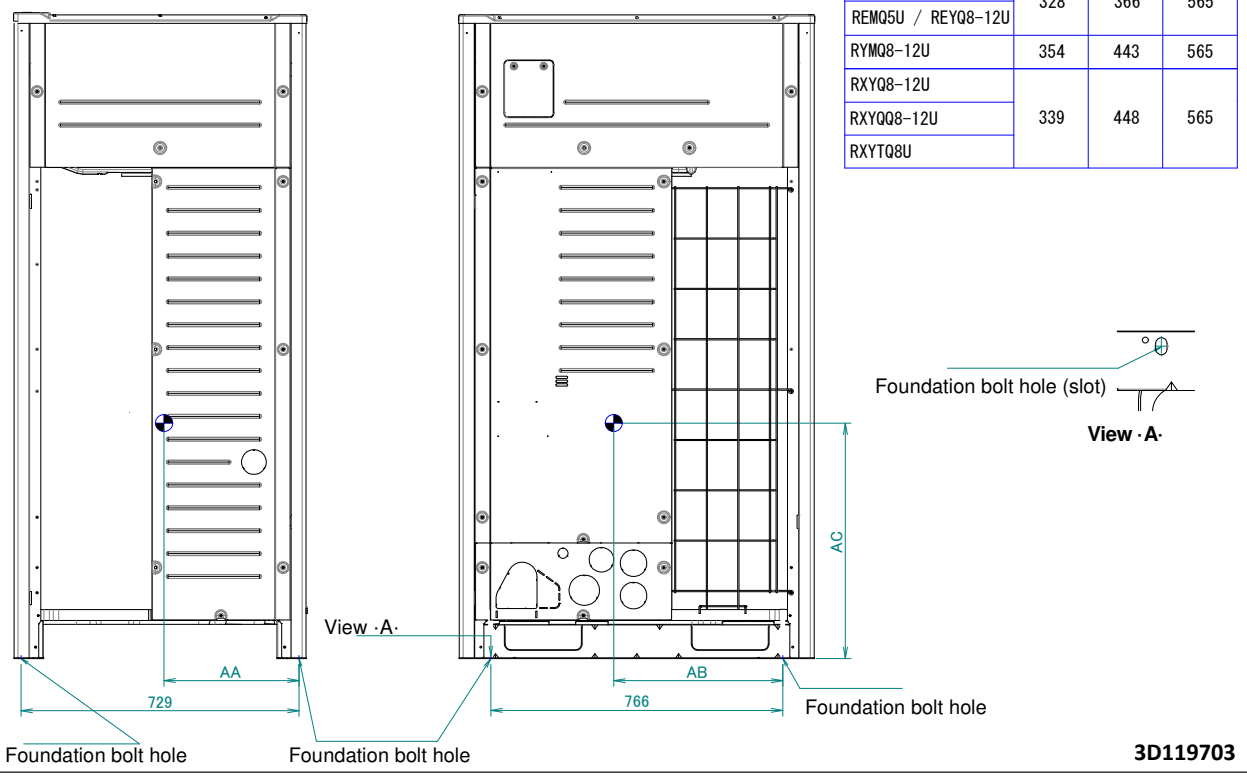
2D119091

8 Centre of gravity

8 - 1 Centre of Gravity

RXYTQ8UYF

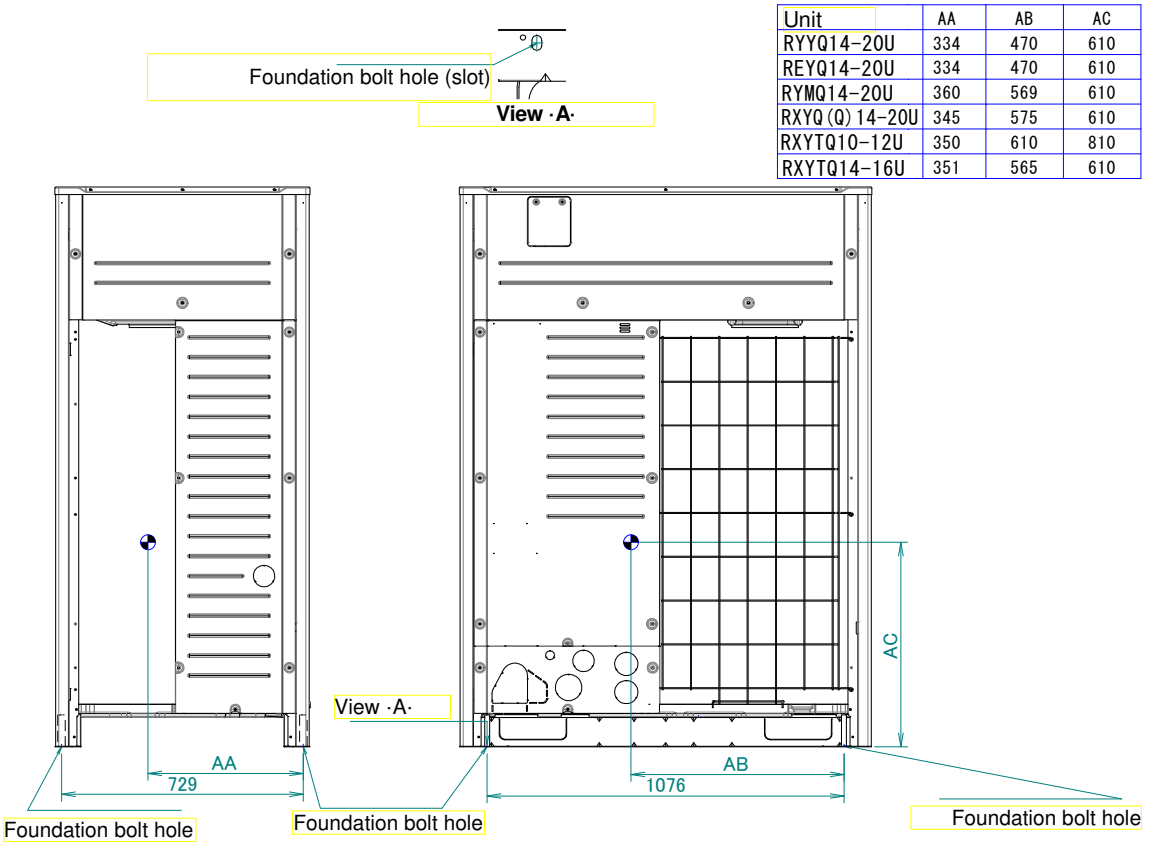
Unit	AA	AB	AC
RYYQ8-12U REMQ5U / REYQ8-12U	328	366	565
RYMQ8-12U	354	443	565
RXYQ8-12U RXYQQ8-12U RXYTQ8U	339	448	565



3D119703

RXYTQ10-16UYF

Unit	AA	AB	AC
RYYQ14-20U	334	470	610
REYQ14-20U	334	470	610
RYMQ14-20U	360	569	610
RXYQ(Q)14-20U	345	575	610
RXYTQ10-12U	350	610	810
RXYTQ14-16U	351	565	610

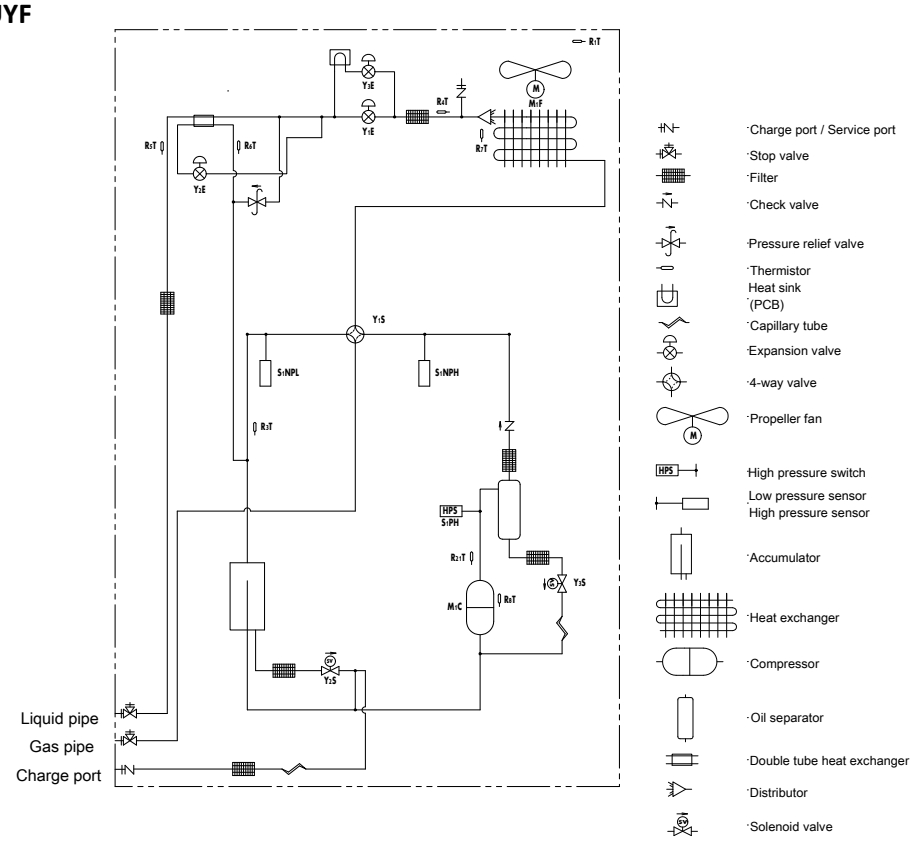


3D119704

9 Piping diagrams

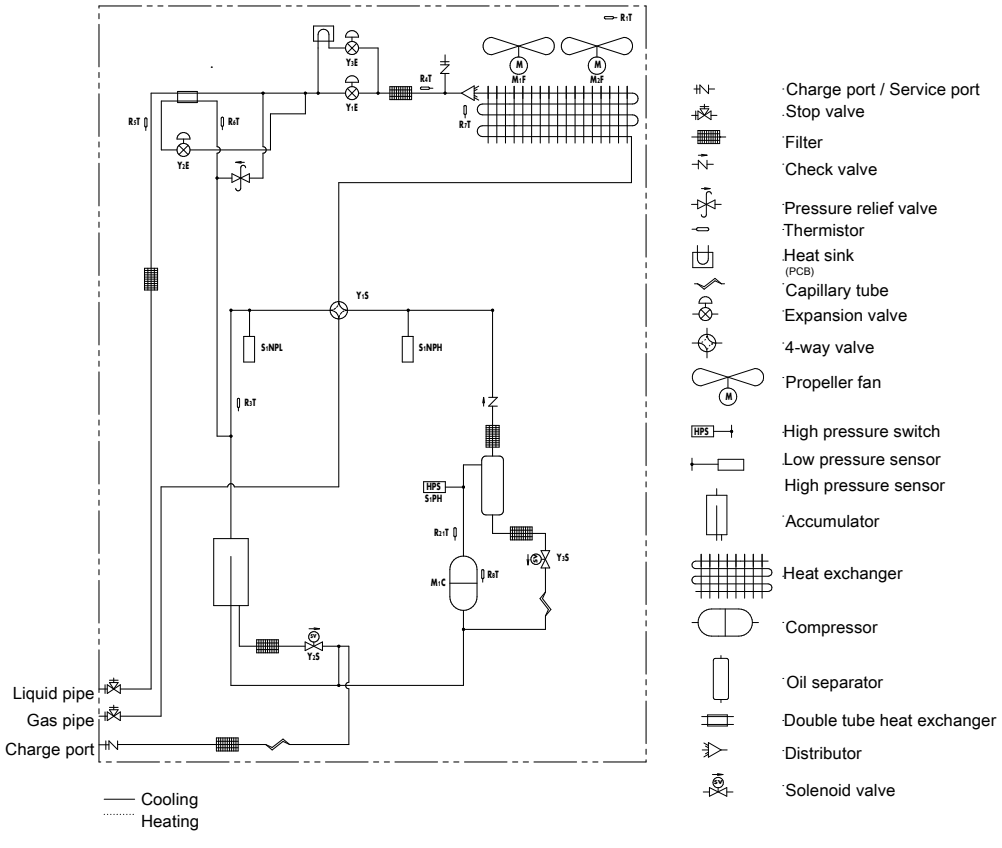
9 - 1 Piping Diagrams

RXYTQ8UYF



3D118179

RXYTQ10-12UYF

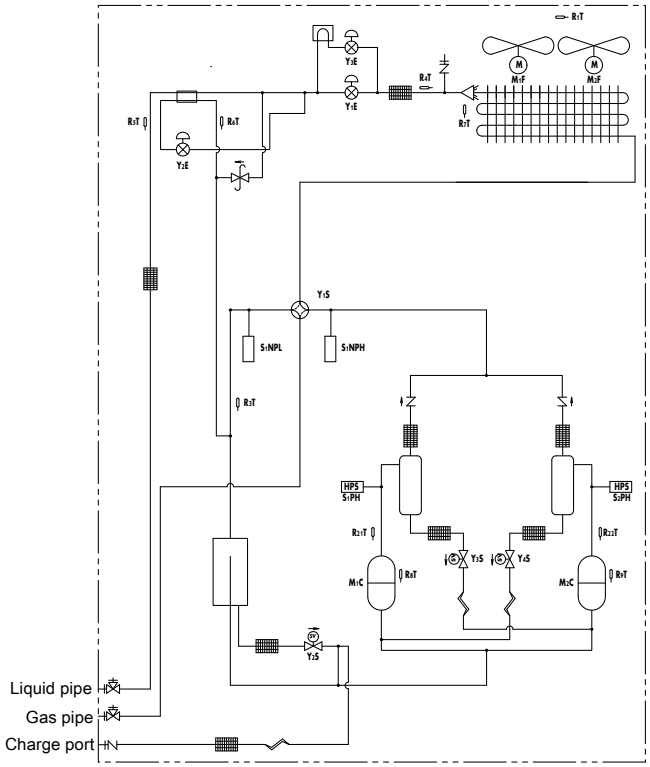


3D119341

9 Piping diagrams

9 - 1 Piping Diagrams

RXYTQ14-16UYF



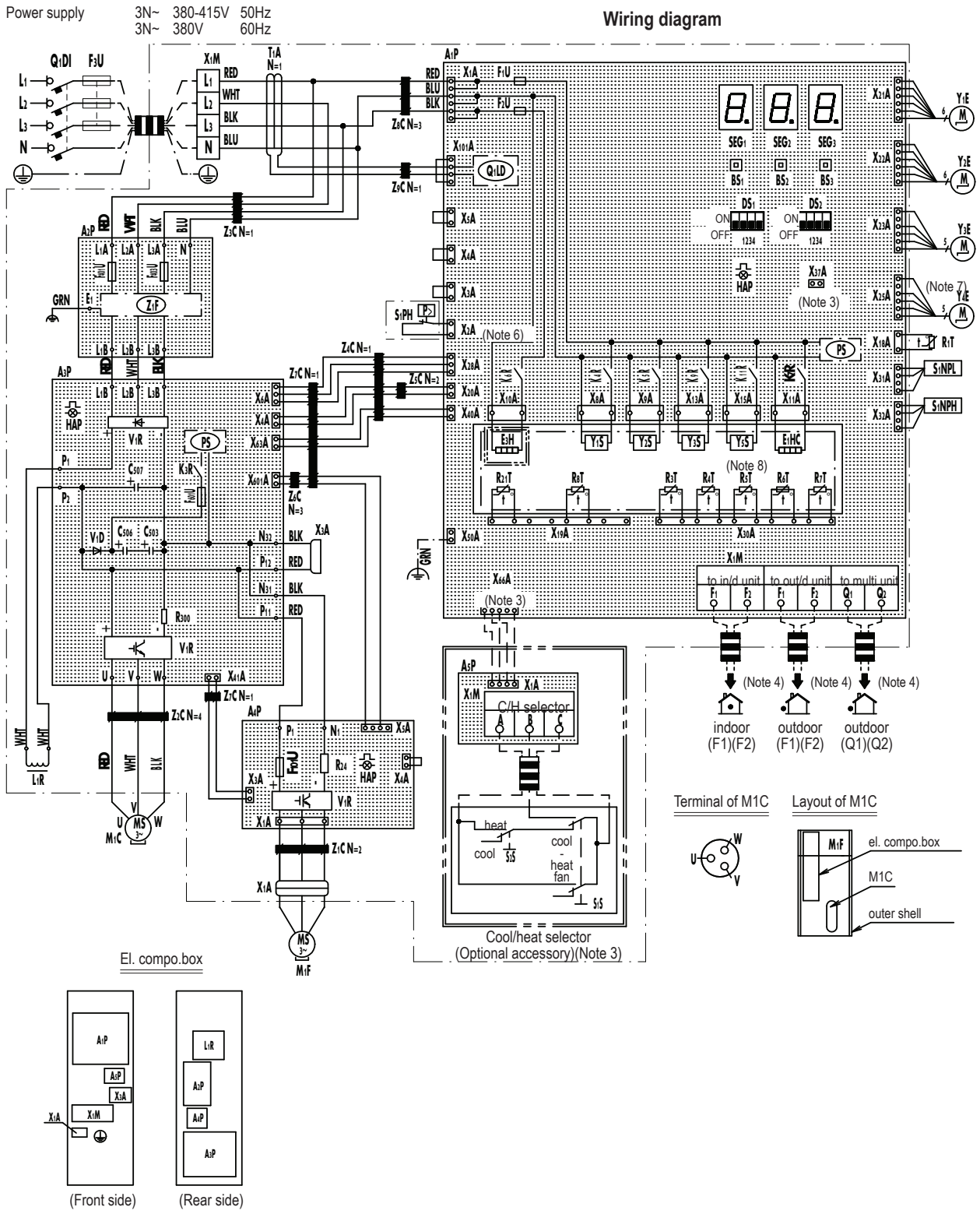
- Charge port / Service port
- Stop valve
- Filter
- Check valve
- Pressure relief valve
- Thermistor
- Heat sink (PCB)
- Capillary tube
- Expansion valve
- 4-way valve
- Propeller fan
- High pressure switch
- Low pressure sensor
- High pressure sensor
- Accumulator
- Heat exchanger
- Compressor
- Oil separator
- Double tube heat exchanger
- Distributor
- Solenoid valve

3D118180

10 Wiring diagrams

10 - 1 Wiring Diagrams - Three Phase

RXYTQ8UYF

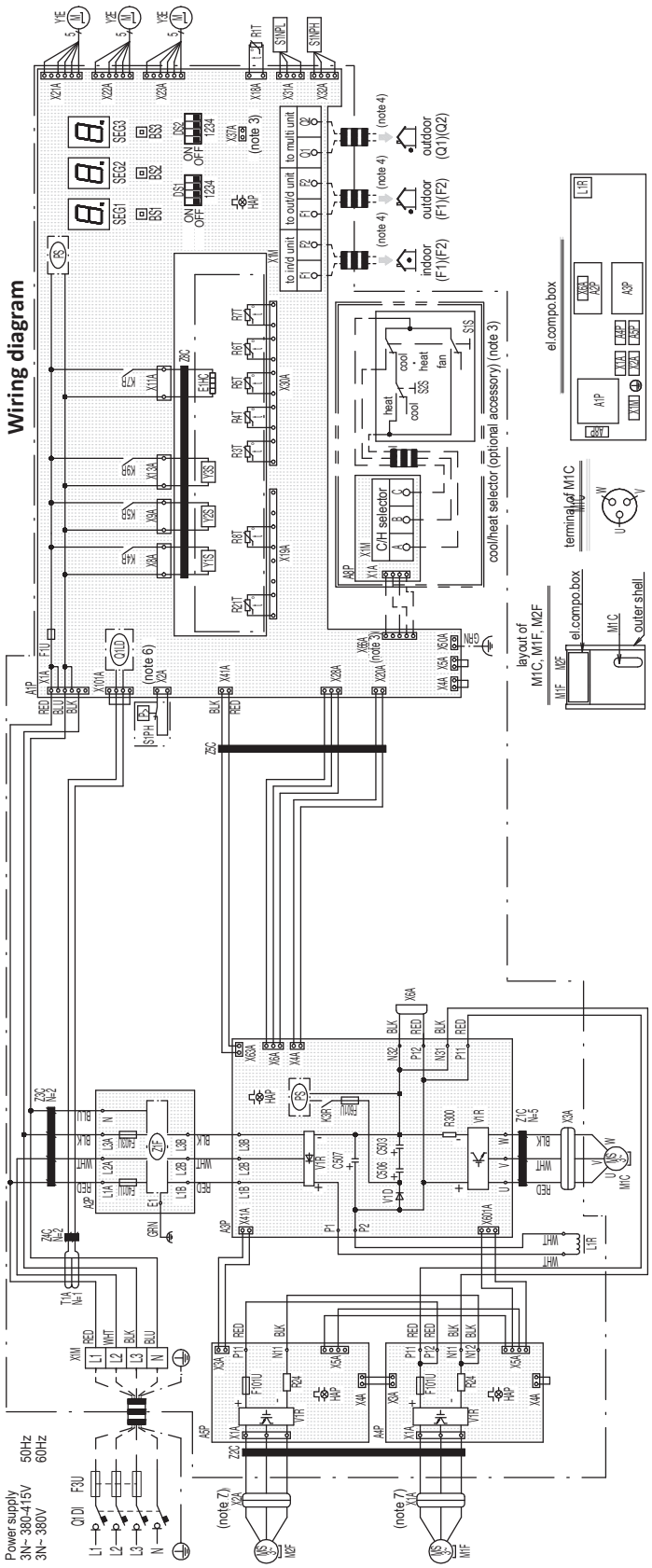


2D117534

10 Wiring diagrams

10 - 1 Wiring Diagrams - Three Phase

RXYTQ10-12UYF



A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
A3P	Printed circuit board (inv)
A4P,A5P	Printed circuit board (fan)
A8P	Printed circuit board (abc i/p)(option)
BS1~3 (A1P)	Push button switch (mode,set,return)
C503,C506,C507 (A3P)	Capacitor
DS1,DS2 (A1P)	Dip switch
E1HC	Crankcase heater
F1U (A1P)	Fuse (T,3,15A,250V)
F3U	Field fuse
F101U (A4P,A5P)	Fuse
F401U,F403U (A2P)	Fuse
F601U (A3P)	Fuse
HAP (A1P,A3P,A4P,A5P)	Pilotlamp (service monitor-green)
K3R (A3P)	Magnetic relay
K4R (A1P)	Magnetic relay (Y1S)
K5R (A1P)	Magnetic relay (Y2S)
K7R (A1P)	Magnetic relay (E1HC)
K9R (A1P)	Magnetic relay (Y3S)
L1R	Reactor
M1C	Motor (compressor)
M1F,M2F	Motor (fan)
PS (A1P,A3P)	Switching power supply
Q1DI	Field earth leakage breaker
Q1LD (A1P)	Field earth current detector
R24 (A4P,A5P)	Resistor (current sensor)
R300 (A3P)	Resistor (current sensor)
R1T	Thermistor (air)
R3T	Thermistor (accumulator)
R4T	Thermistor (heat exc. Liq. Pipe)
R5T	Thermistor (subcool liq. Pipe)
R6T	Thermistor (heat exc. Gas pipe)
R7T	Thermistor (heat exc. Deicer)
R8T	Thermistor (M1C body)
R21T	Thermistor (M1C discharge)
S1NPH	Pressure sensor (high)
S1NPL	Pressure sensor (low)
S1PH	Pressure switch (discharge)
SEG1~SEG3 (A1P)	7-Segment display
T1A	Current sensor
V1D (A3P)	Diode
V1R (A3P,A4P,A5P)	Power module
X*A	Connector
X1M	Terminal block
X1M (A1P)	Terminal block (control)
X1M (A8P)	Terminal block (power supply)
Y1E	Electronic expansion valve (main)
Y2E	Electronic expansion valve (injection)
Y3E	Electronic expansion valve (refrigerant jacket)
Y1S	Solenoid valve (main)
Y2S	Solenoid valve (accumulator oil return)
Y3S	Solenoid valve (oil1)
Z*C	Noise filter (ferrite core)
Z*F (A2P)	Noise filter (with surge absorber)
Connector for optional accessories	
X37A	Connector (power adapter)
X66A	Connector (remote switching cool/heat selector)

NOTES

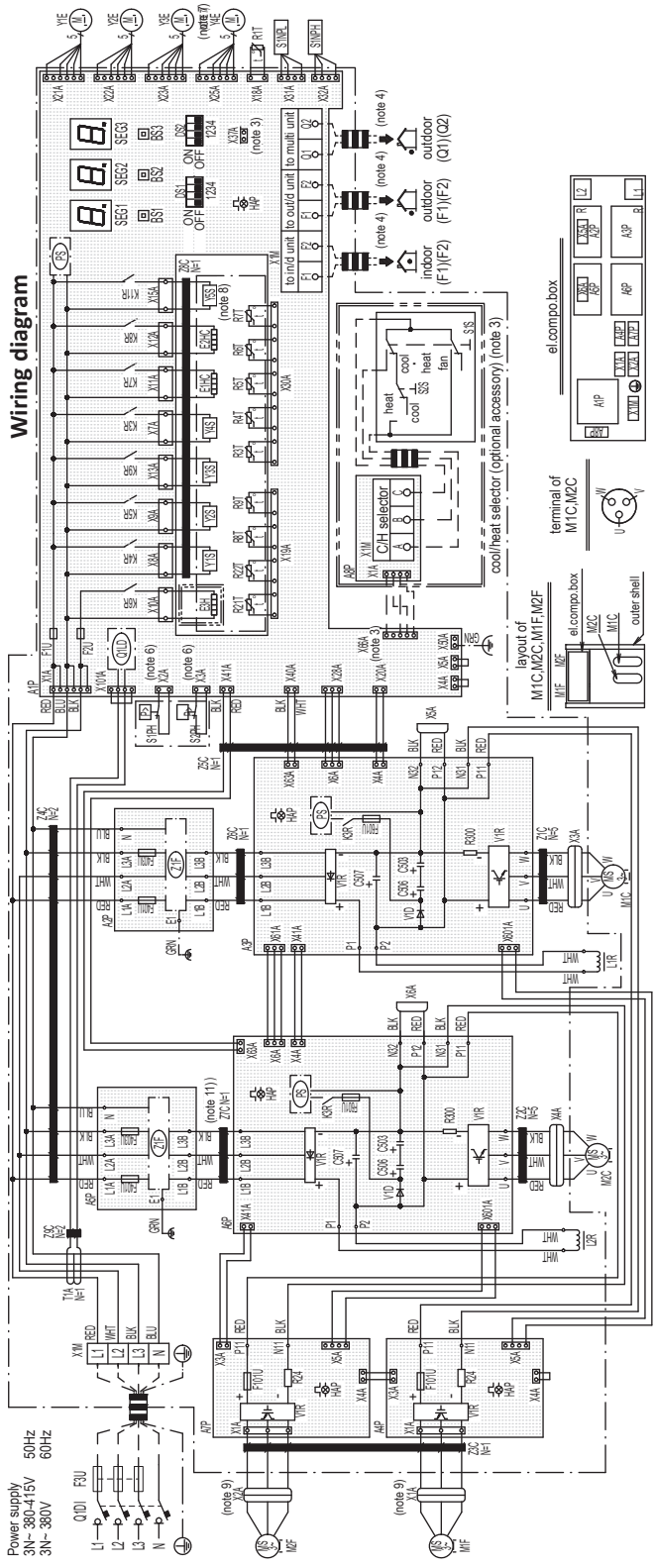
1. This wiring diagram applies only to the outdoor unit.
2. ⊏▮▮⊐: Field wiring, ⊏⊐⊏⊐: terminal block, ⊏o o⊐: connector, -○- :terminal, ⊕: protective earth (screw), ⏚: functional earth, ——: earth wiring, — — —: field supply, ▭: PCB, ⊏ ⊐: switch box, ⊏▭⊐ : option
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to “service precaution” label on el. Compo. Box cover.
6. When operating, don’t shortcircuit the protection devices (S1PH)
7. Connector x1a (m1f) is red, connector x2a (m2f) is white.
8. Colors: BLK: black, RED: red, BLU: blue, WHT: white, GRN: green.

2D120654A

10 Wiring diagrams

10 - 1 Wiring Diagrams - Three Phase

RXYTQ14-16UYF



A1P	Printed circuit board (main)
A2P, A5P	Printed circuit board (noise filter)
A3P, A6P	Printed circuit board (inv)
A4P, A7P	Printed circuit board (fan)
A8P	Printed circuit board (ABC I/P)
BS1~3 (A1P)	Push button switch (mode, set, return)
C503, C506, C507 (A3P, A6P)	Capacitor
DS1, DS2 (A1P)	Dip switch S1PH,
E1HC, E2HC	Crankcase heater
E3H	Drainpan heater (option)
F1U, F2U (A1P)	Fuse (T, 3, 15A, 250V)
F3U	Field fuse
F101U (A4P, A7P)	Fuse
F401U, F403U (A2P, A5P)	Fuse
F601U (A3P, A6P)	Fuse
HAP (A1P, A3P, A4P, A6P, A7P)	Pilotlamp (service monitor-green)
K3R (A3P, A6P)	Magnetic relay
K3R (A1P)	Magnetic relay (Y4S)
K4R (A1P)	Magnetic relay (Y1S)
K5R (A1P)	Magnetic relay (Y2S)
K6R (A1P)	Magnetic relay (E3H)
K7R (A1P)	Magnetic relay (E1HC)
K8R (A1P)	Magnetic relay (E2HC)
K9R (A1P)	Magnetic relay (Y3S)
K11R (A1P)	Magnetic relay (Y5S)
L1R, L2R	Reactor
M1C, M2C	Motor (compressor)
M1F, M2F	Motor (fan)
PS (A1P, A3P, A6P)	Switching power supply
Q1DI	Field earth leakage breaker
Q1LD (A1P)	Field earth current detector
R24 (A4P, A7P)	Resistor (current sensor)
R300 (A3P, A6P)	Resistor (current sensor)
R1T	Thermistor (air)
R3T	Thermistor (accumulator)
R4T	Thermistor (heat exc, liq, pipe)
R5T	Thermistor (subcool, liq, pipe)
R6T	Thermistor (heat exc, gas pipe)
R7T	Thermistor (heat exc, deicer)
R8T, R9T	Thermistor (M1C, M2C body)
R21T, R22T	Thermistor (M1C, M2C discharge)
S1NPH	Pressure sensor (high)
S1NPL	Pressure sensor (low)
S1PH, S2PH	Pressure switch (disch)
SEG1~SEG3 (A1P)	7-segment display
T1A	Current sensor
V1D (A3P, A6P)	Diode
V1R (A3P, A4P, A6P, A7P)	Power module
X*A	Connector
X1M (A1P)	Terminal block (control)
X1M (A8P)	Terminal block (power supply)
Y1E	Electronic expansion valve (main)
Y2E	Electronic expansion valve (injection)
Y3E	Electronic expansion valve (refrigerant jacket)
Y4E	Electronic expansion valve (storage vessel (note 7)
Y1S	Solenoid valve (main)
Y2S	Solenoid valve (accumulator oil return)
Y3S	Solenoid valve (oil1)
Y4S	Solenoid valve (oil2)
Y5S	Solenoid valve (sub) (note 8)
Z*C	Noise filter (ferrite core)
Z*F (A2P, A5P)	Noise filter (with surge absorber)
Connector for optional accessories	
X10A	Connector (drainpan heater)
X37A	Connector (power adapter)
X66A	Connector (remote switching)
	Cool/heat selector)

NOTES

1. This wiring diagram applies only to the outdoor unit.
2. ::▮▮▮:: Field wiring, □□□□: terminal block, ⊡⊡: connector, -○- :terminal, ⏚: protective earth (screw), ⏚: functional earth, ——·——: earth wiring, — — —: field supply, □: pcb, □: switch box, ▭: option
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to "service precaution" label on el. Compo. Box cover.
6. When operating, don't shortcircuit the protection devices (S1PH,S2PH)
7. Only for RYYQ model.
8. Only for RYYQ/RYMQ model.
9. Connector X1A (M1F) is red, connector X2A (M2F) is white.
10. Colors: BLK:black, RED:red, BLU:blue, WHT:white, GRN:green.
11. Only for 14,16 class

2D117536C

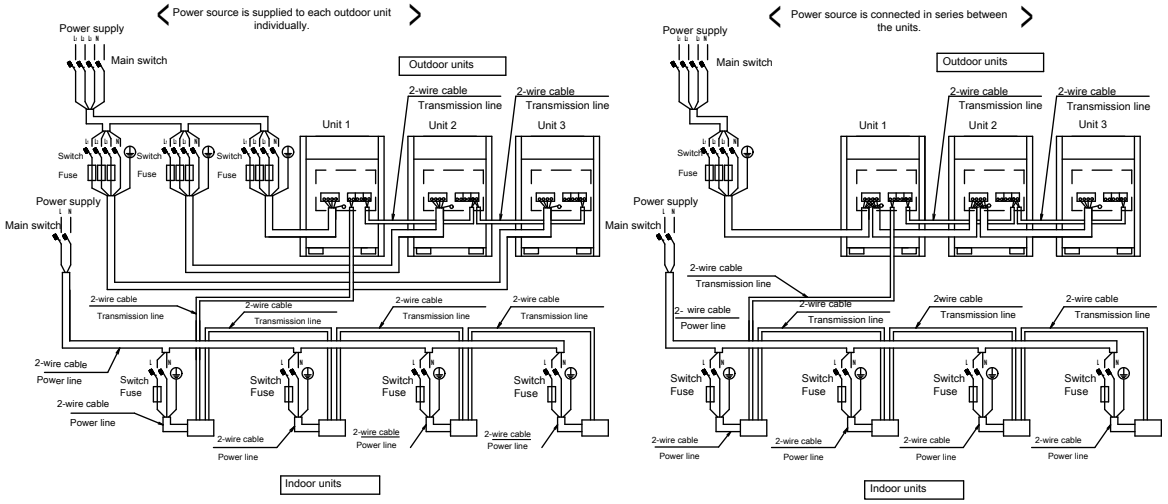
11 External connection diagrams

11 - 1 External Connection Diagrams

RXYTQ8-16UYF

Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For details, refer to the wiring diagram attached to the outdoor unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each equipement.
9. Install a main switch to control the multiple power sources that the various components of the system make use of.
10. The capacity of UNIT1 must be larger than that of UNIT2 when the power source is connected in series between the units.
    The capacity of UNIT 2 must be larger than that of UNIT3 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
    Running the product in reversed phase may break the compressor and other parts.
12. Install an earth leakage circuit breaker.

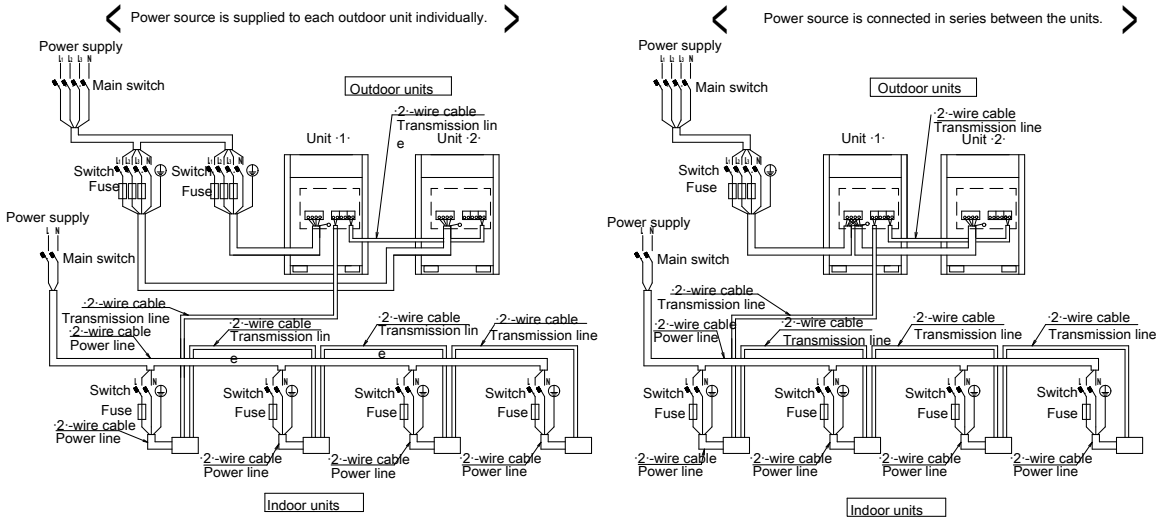


3D119200

RXYTQ8-16UYF

Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For details, refer to the wiring diagram attached to the outdoor unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each equipement.
9. Install a main switch to control the multiple power sources that the various components of the system make use of.
10. The capacity of UNIT1 must be larger than that of UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
    Running the product in reversed phase may break the compressor and other parts.
12. Install an earth leakage circuit breaker.

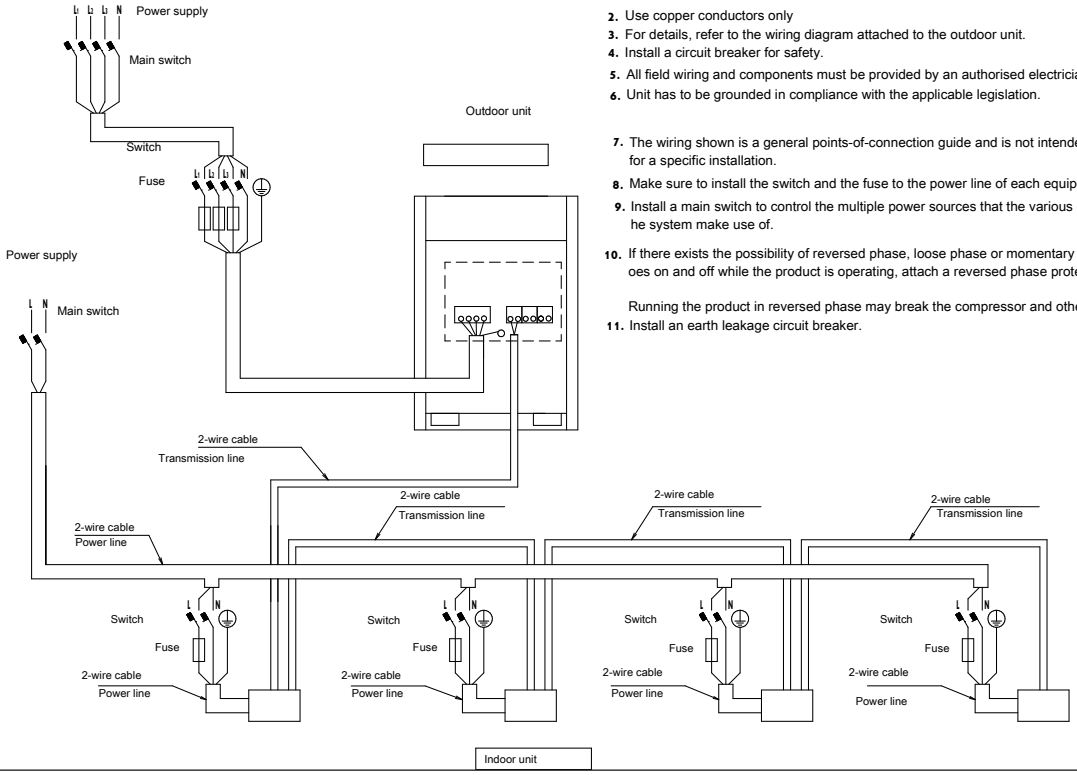


3D119316

11 External connection diagrams

11 - 1 External Connection Diagrams

RXYTQ8-16UYF



Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable le gislation.
2. Use copper conductors only
3. For details, refer to the wiring diagram attached to the outdoor unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each equipement.
9. Install a main switch to control the multiple power sources that the various components of t he system make use of.
10. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if the power g oes on and off while the product is operating, attach a reversed phase protection circuit locally.

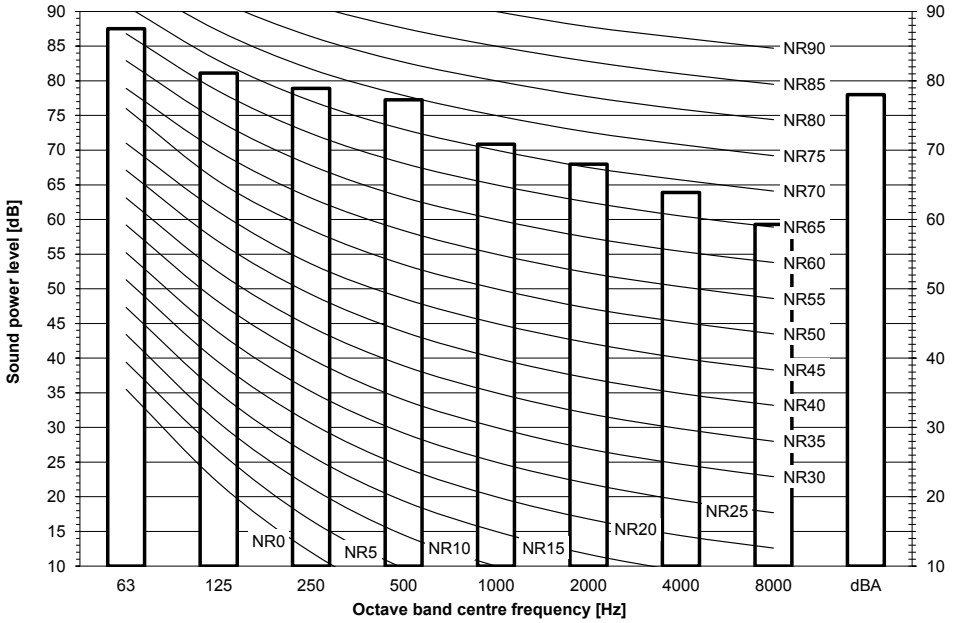
    Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.

3D119317

12 Sound data

12 - 1 Sound Power Spectrum

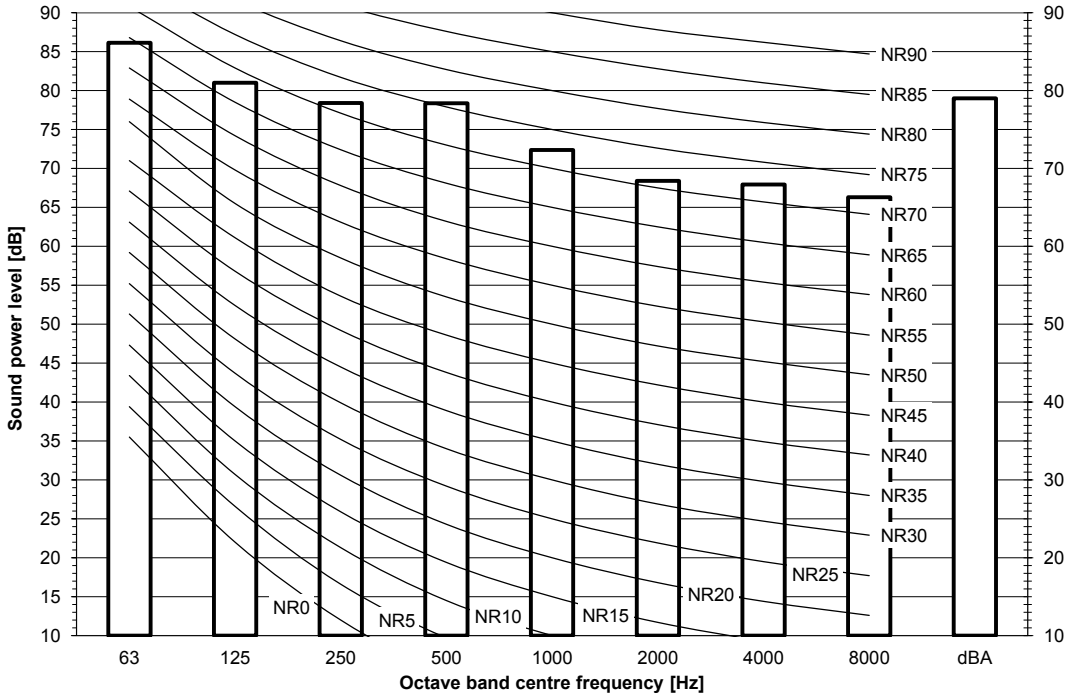
RXYTQ8UYF



Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119528

RXYTQ10UYF



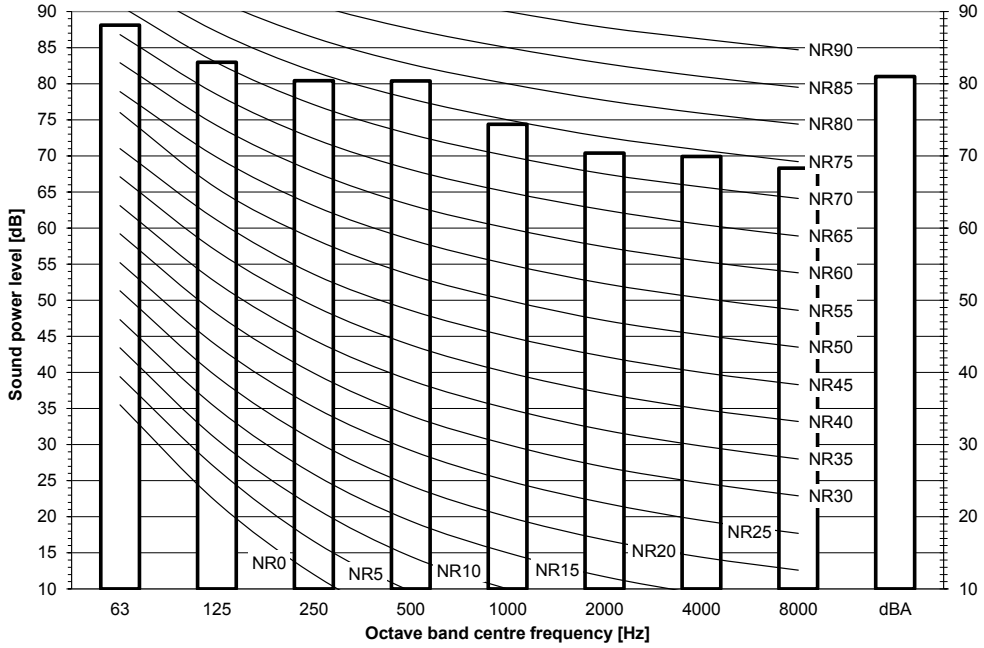
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = ·10E-6µW/m²·
Measured according to ISO 3744

3D119342

12 Sound data

12 - 1 Sound Power Spectrum

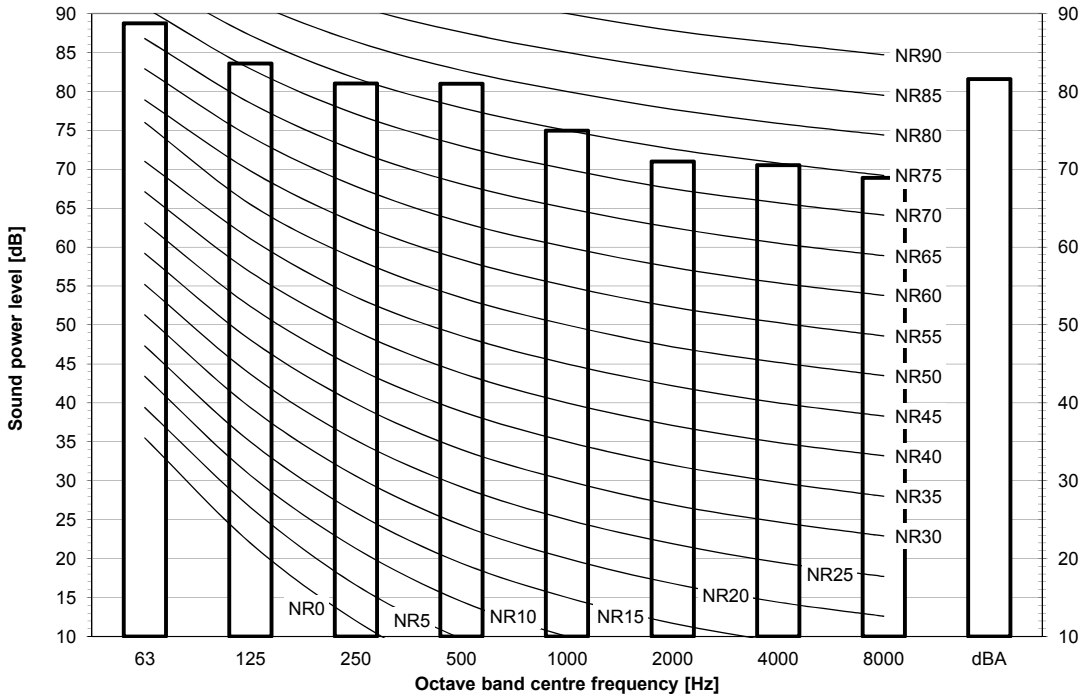
RXYTQ12UYF



Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = ·10E-6µW/m²·
Measured according to ISO 3744

3D119343

RXYTQ14YUF



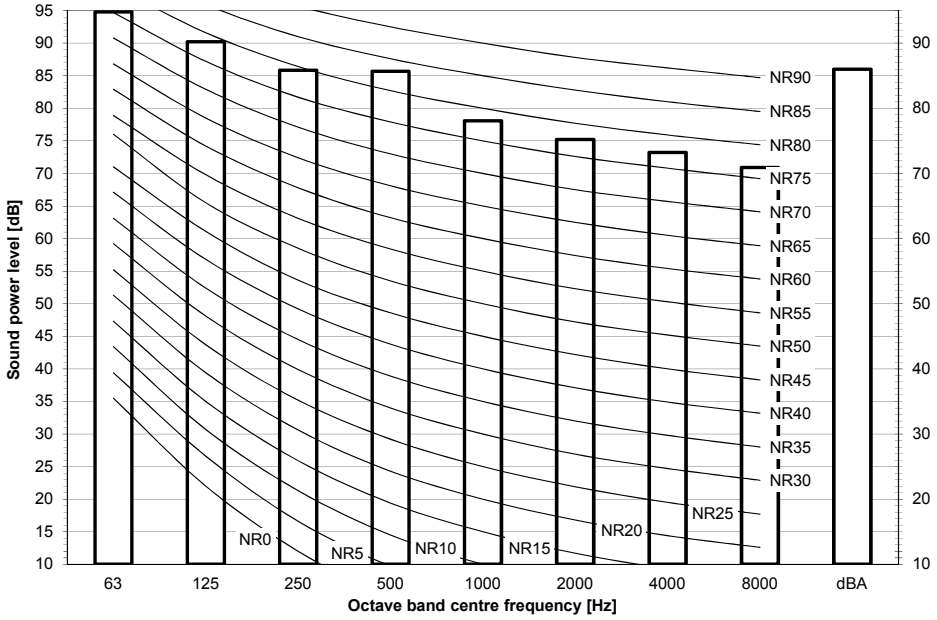
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119366

12 Sound data

12 - 1 Sound Power Spectrum

RXYTQ16UYF



Notes

dBA = A-weighted sound power level (A scale according to IEC).

Reference acoustic intensity 0dB = ·10E-6µW/m²·

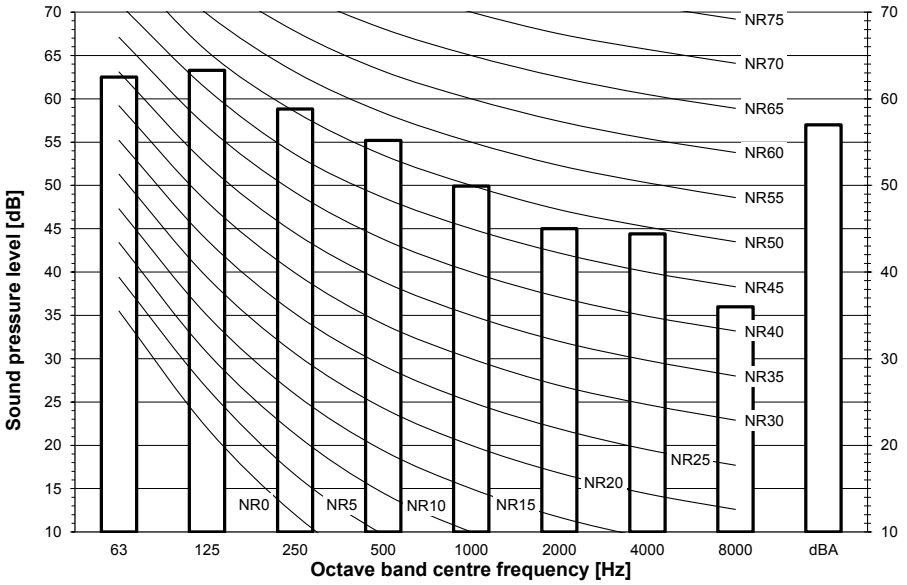
Measured according to ISO 3744

3D119368

12 Sound data

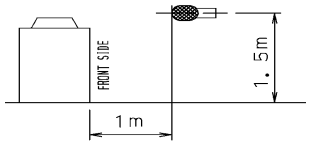
12 - 2 Sound Pressure Spectrum

RXYTQ8UYF



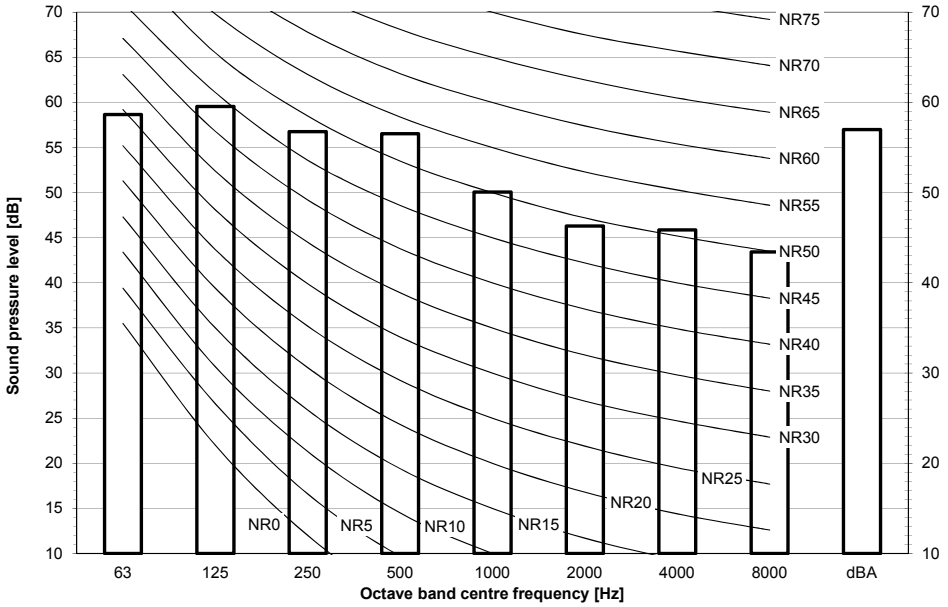
Notes

Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa



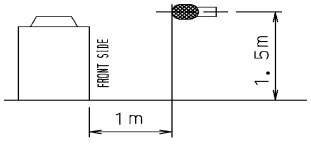
3D119521

RXYTQ10UYF



Notes

Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

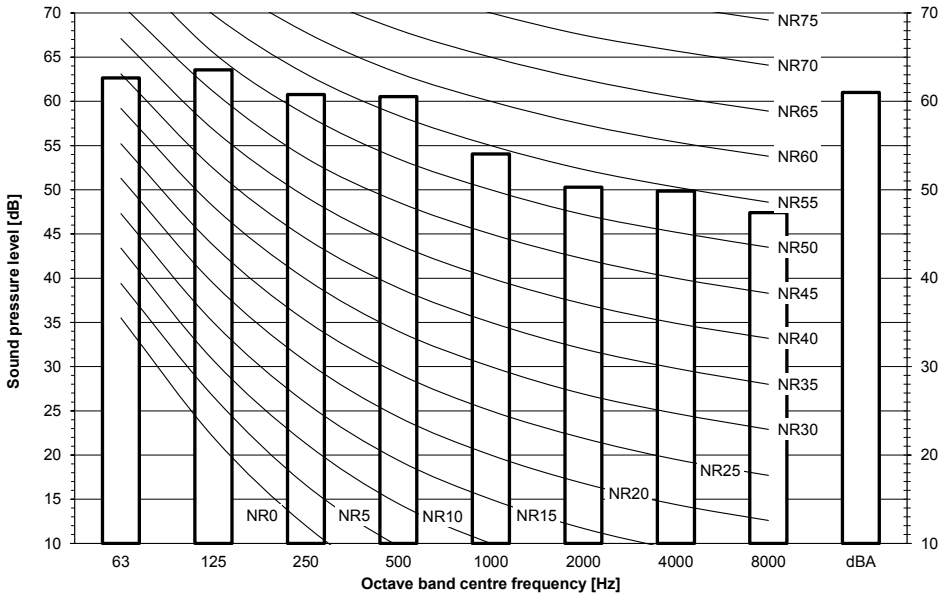


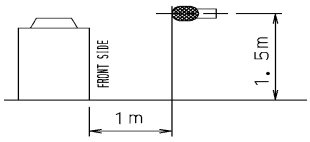
3D119344

12 Sound data

12 - 2 Sound Pressure Spectrum

RXYTQ12UYF

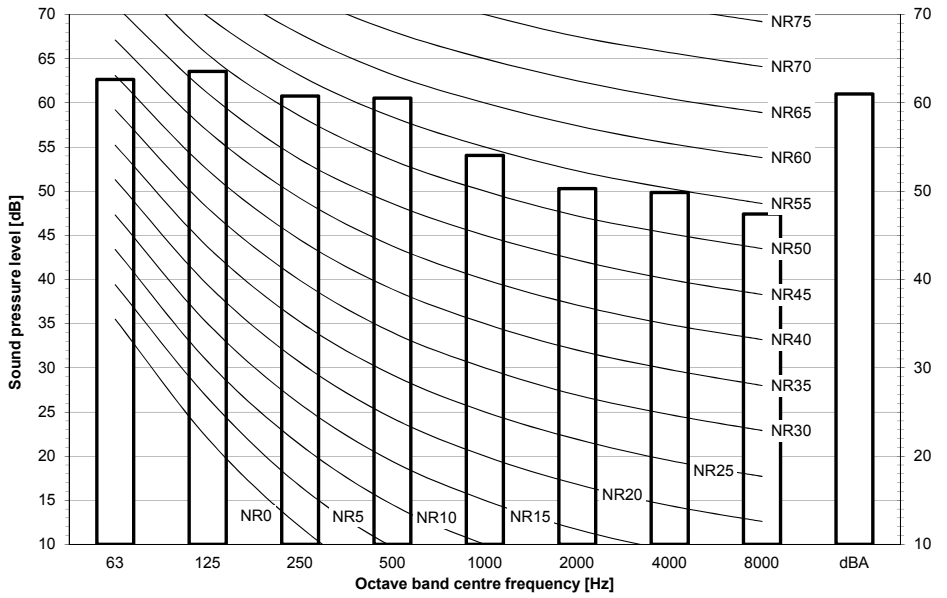


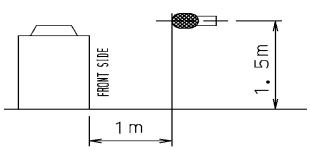


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

3D119345

RXYTQ14UYF





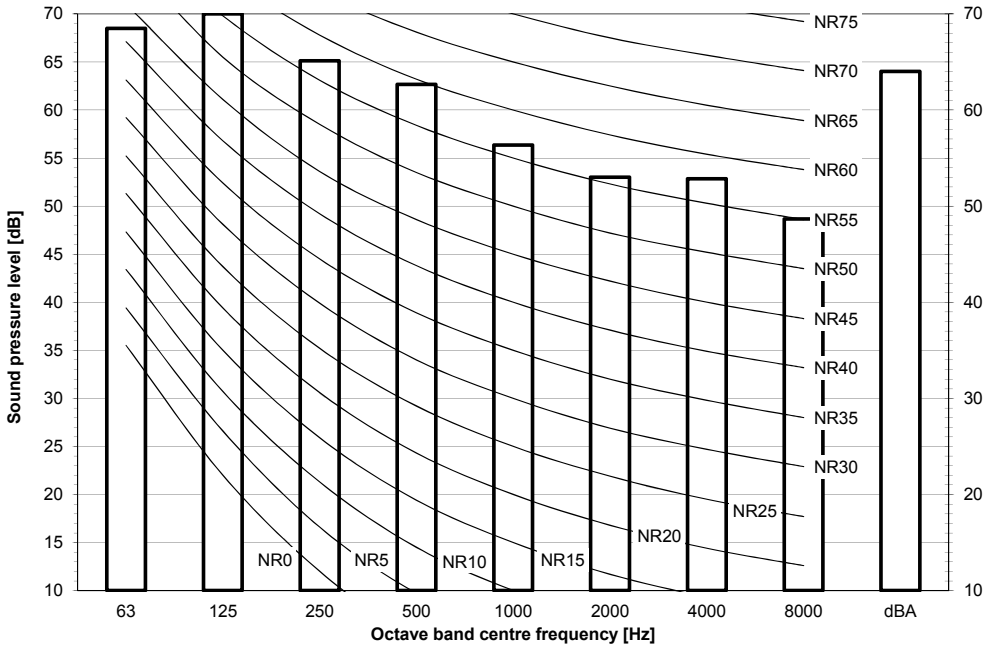
Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

3D119365

12 Sound data

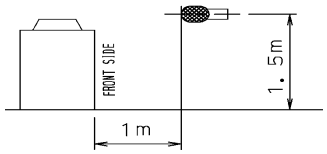
12 - 2 Sound Pressure Spectrum

RXYTQ16UYF



Notes

Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

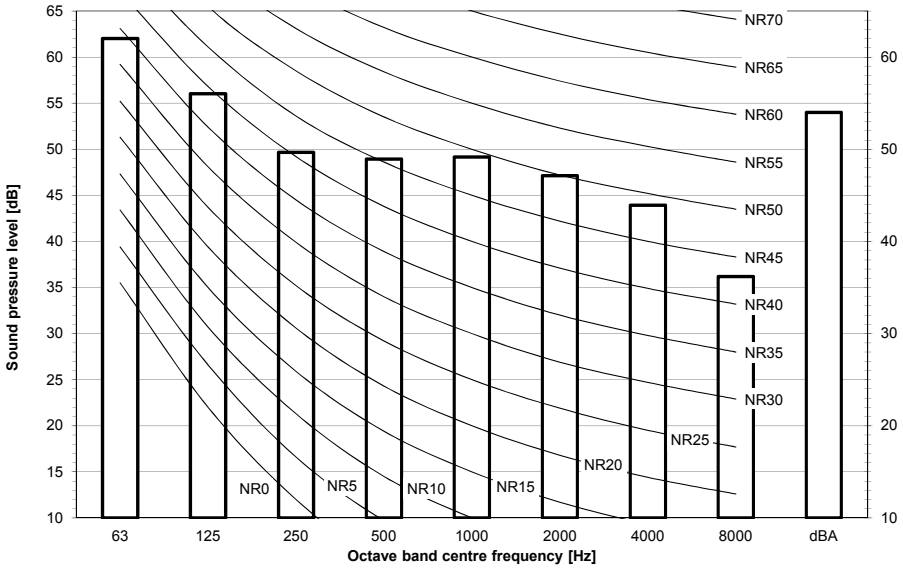


3D119367

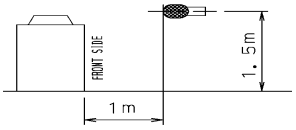
12 Sound data

12 - 3 Sound Pressure Spectrum Quiet Mode Level 1

RXYTQ8UYF

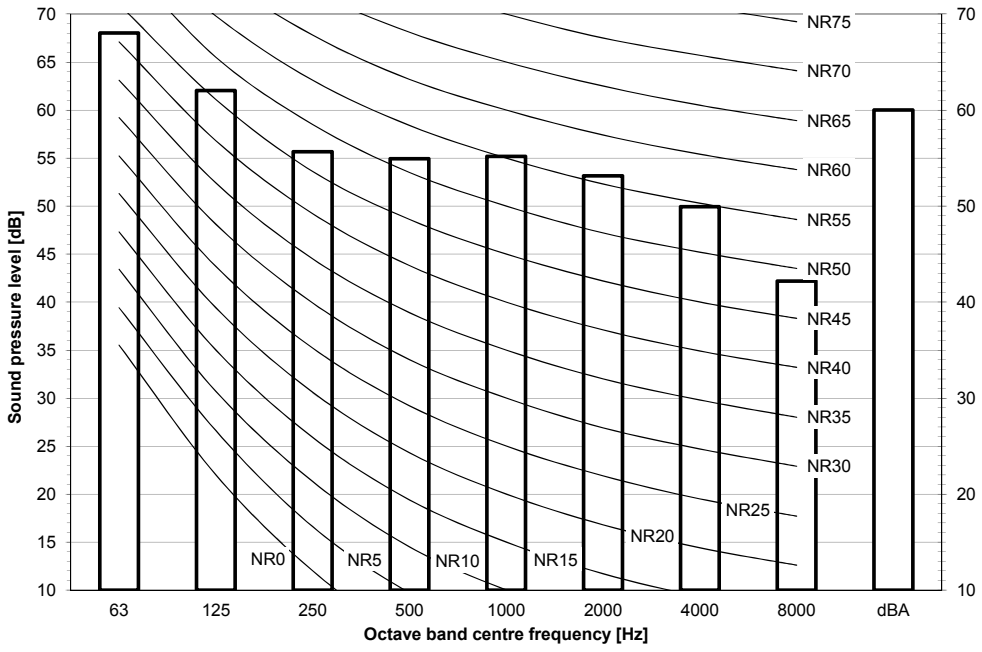


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

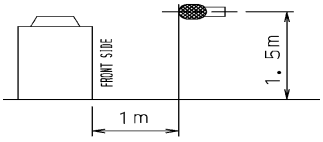


3D119535

RXYTQ10-12UYF



Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: -35-°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

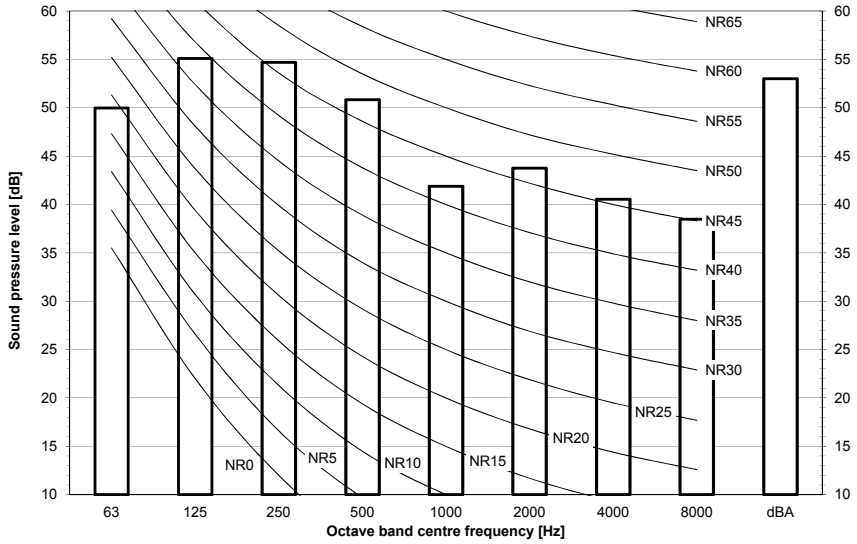


3D119346

12 Sound data

12 - 3 Sound Pressure Spectrum Quiet Mode Level 1

RXYTQ14-16UYF

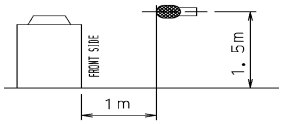


Notes

Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

Data is valid under the following conditions

Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

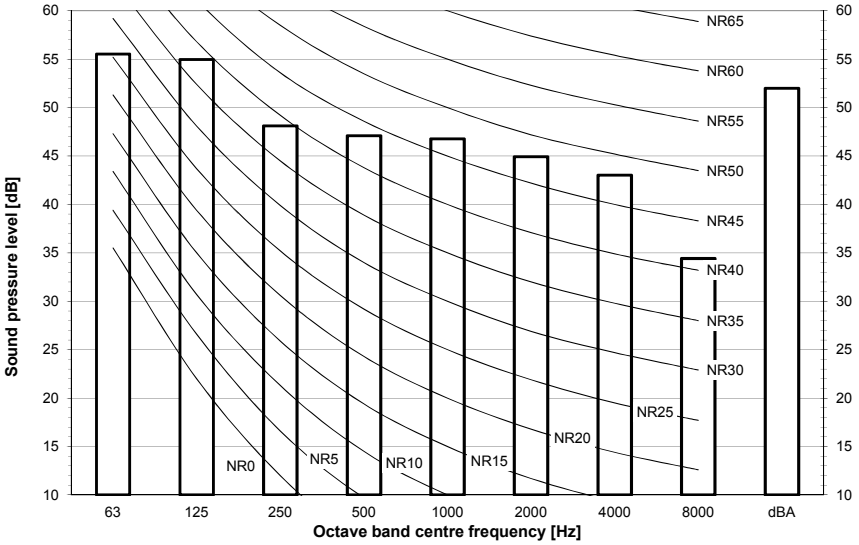


3D119538

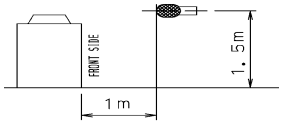
12 Sound data

12 - 4 Sound Pressure Spectrum Quiet Mode Level 2

RXYTQ8UYF

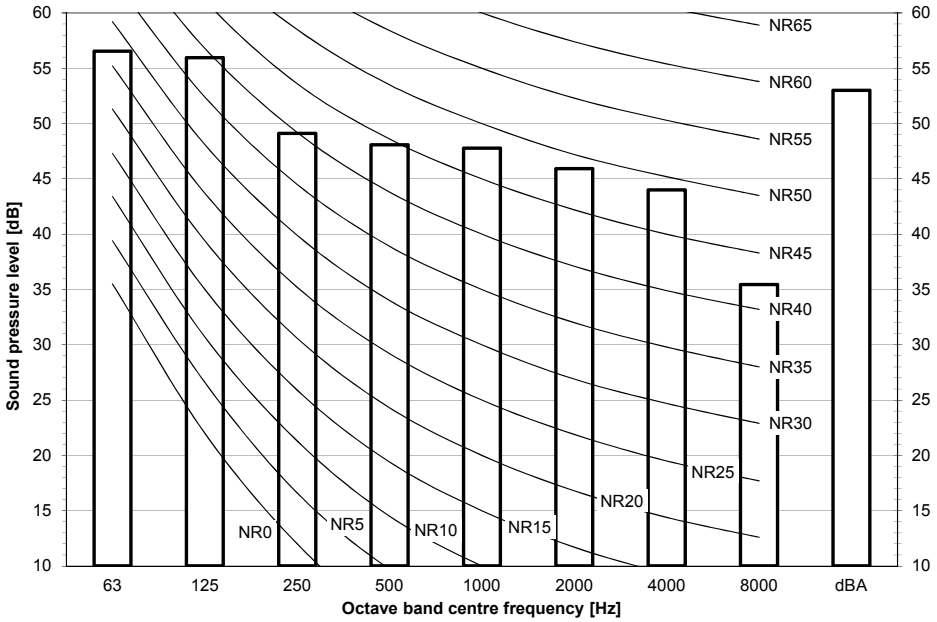


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

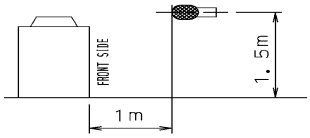


3D119536

RXYTQ10-12UYF



Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: ·35·°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

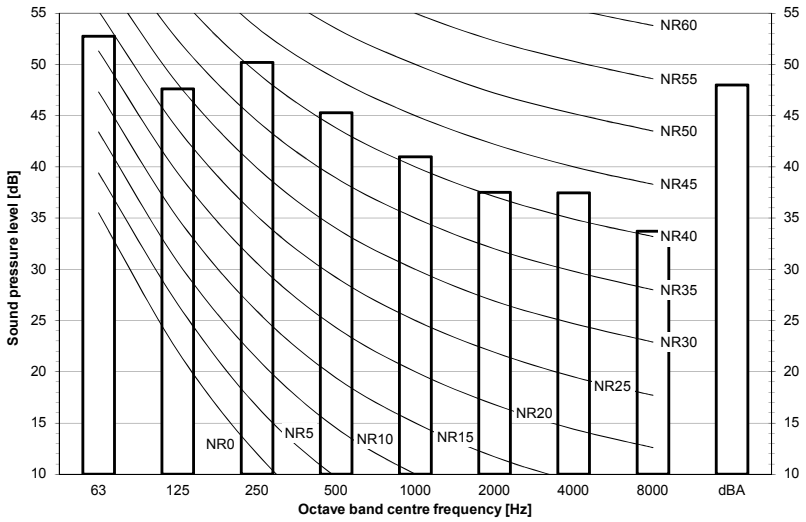


3D119347

12 Sound data

12 - 4 Sound Pressure Spectrum Quiet Mode Level 2

RXYTQ14-16UYF

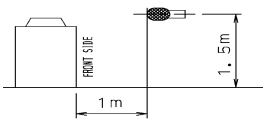


Notes

Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

Data is valid under the following conditions

Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

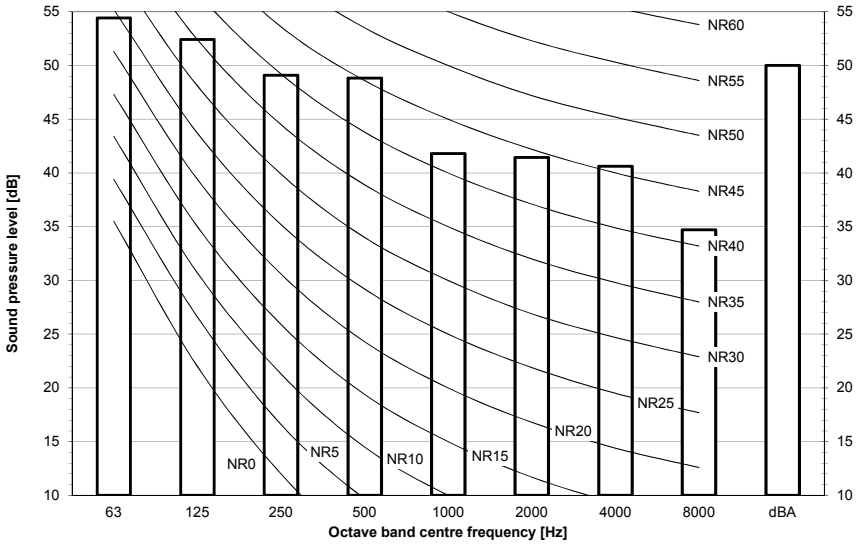


3D119539

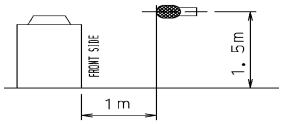
12 Sound data

12 - 5 Sound Pressure Spectrum Quiet Mode Level 3

RXYTQ8UYF

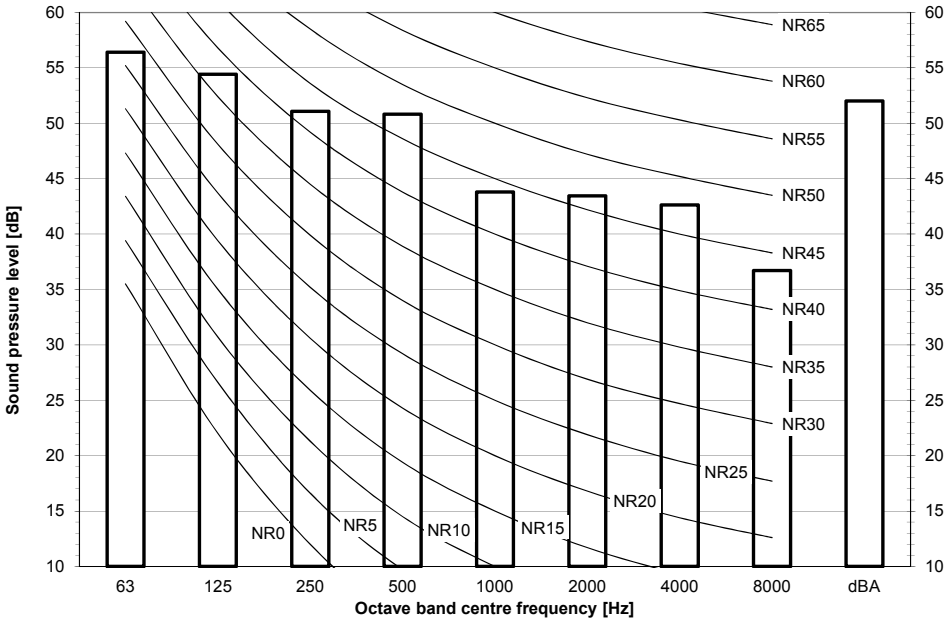


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

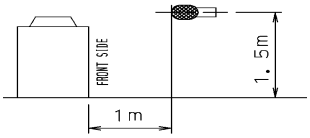


3D119537

RXYTQ10-12UYF



Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: ·35·°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

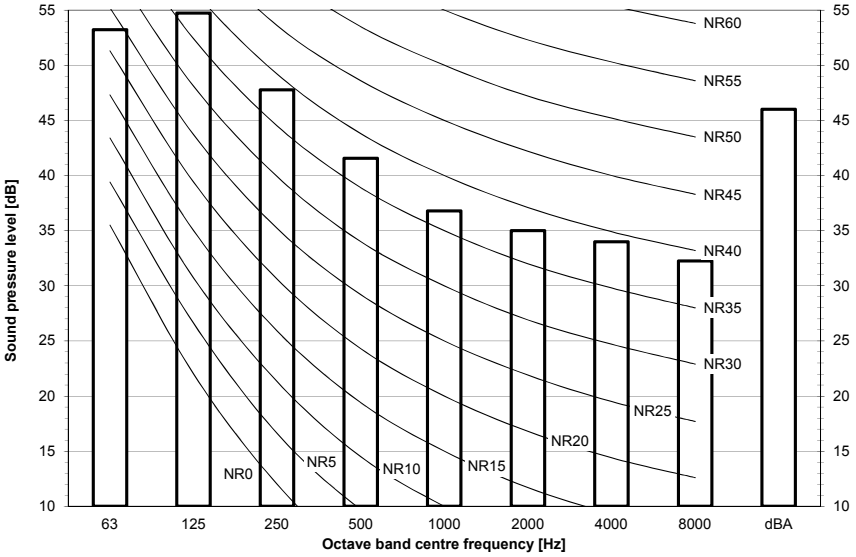


3D119348

12 Sound data

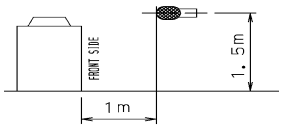
12 - 5 Sound Pressure Spectrum Quiet Mode Level 3

RXYTQ14-16UYF



Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

Data is valid under the following conditions
- Cooling operation
- Outdoor Ta: 35°C
- Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)



3D119540

13 Installation

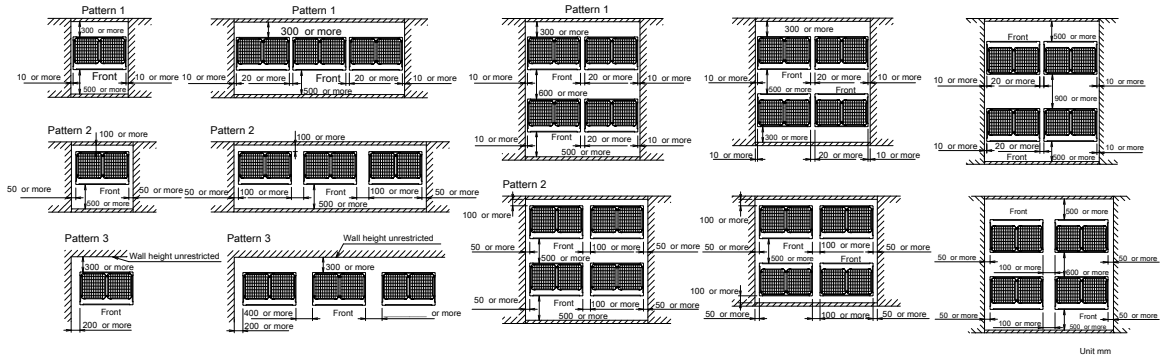
13 - 1 Installation Method

RXYTQ-UYF

For single unit installation

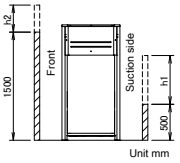
For installation in rows

For centralised group layout



Notes

1. Height of the walls in case of patterns 1 and 2:
   Front: 1500mm
   Suction side: 500mm
   Side: height unrestricted
   The installation space shown on this drawing is based on cooling operation at 46°C (outdoor temperature).
2. If the design outdoor air temperature exceeds 46°C, provide a broader suction space than shown on the drawing.
3. When installing the units, select the pattern that best fits the available space.
   Always keep in mind to leave sufficient space for a person to pass between unit and wall and for the air to circulate freely.
   If more units are to be installed than are foreseen in the above patterns, your layout should take into account the possibility of air short circuits.
4. Provide sufficient space at the front to connect refrigerant piping (comfortably).

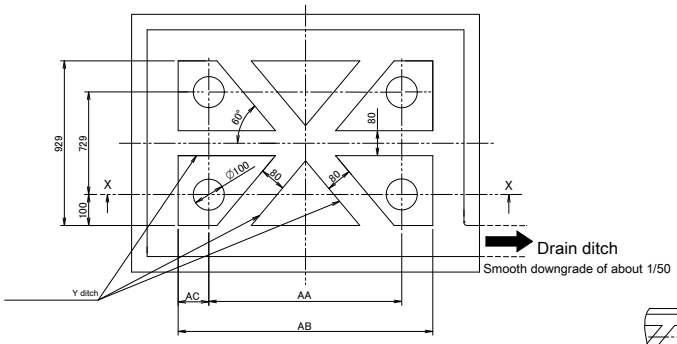


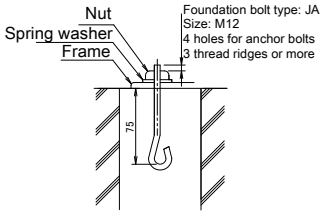
3D096862A

13 Installation

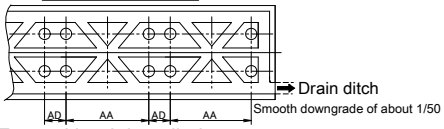
13 - 2 Fixation and Foundation of Units

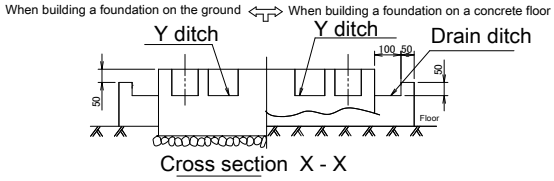
RXYTQ8-16UYF





Foundation bolt fixing method





Cross section X - X

For multi-unit installation

Model	AA	AB	AC	AD
RYYQ8-12U RYMQ8-12U RXYQ8-12U RXYQQ8-12U REMQ5T/REYQ8-12U RXYTQ8U	766	992	113	185
RYYQ14-20U RYMQ14-20U RXYQ14-20U RXYQQ14-20U REYQ14-20U RXYTQ10-16U	1076	1076		

Notes

1. Provide a drain ditch around the foundation to drain water from the installation area.
2. The surface has to be finished with mortar. The corner edges have to be chamfered.
3. Build the foundation on a concrete floor or, if not possible, make sure the foundation surface has a rough finish.
4. Use a cement/sand/gravel ratio of 1/2/4 for the concrete, and a diameter of 10 mm for the reinforcement bars (approximately, 300mm intervals).
5. When installing the equipment on a roof, make sure to check the strength of the floor and take adequate water proofing measures.

3D118459

13 Installation

13 - 3 Refrigerant Pipe Selection

RXYTQ-UYF

VRV4
Middle East
Piping restrictions ·3/3·

System pattern Allowed connection ratio (CR) Other combinations are not allowed.	Total		Connection ratio	
	Connection ratio	Maximum allowed amount of connectable indoor units (·VRV,AHU·) Excluding ·EXV· kits	VRV DX indoor unit	Air handling unit (AHU)
·VRV DX· indoor units only	50~130%	Maximum ·64·	50~130%	-
·VRV DX· indoor unit + ·AHU· Mix	50~110% (2)	Maximum ·64· (1)	50~110%	0~110%
·AHU· only (3) Pair + multi	90~110% (2)	Maximum ·64· (1)	-	90~110% (4)

Notes
1. ·EKEXV· kits are also considered indoor units.
2. Restrictions regarding the air handling unit capacity
3. Pair AHU = system with 1 air handling unit connected to one outdoor unit
   Multi AHU = system with multiple air handling units connected to one outdoor unit
4. In case of cooling-only use in the ·DAME· region, the allowed connection ratio is ·75~110·%.

About ventilation applications
I. ·FXMQ_MF· units are considered air handling units, following air handling unit limitations.
- Maximum connection ratio when combined with ·VRV DX· indoor units: ·CR ≤ 30·%.
- Maximum connection ratio when only air handling units are connected: ·CR ≤ 100·%.
For information on the operation range, refer to the documentation of the ·FXMQ_MF· unit.

II. ·Biddle· air curtains are considered air handling units, following air handling unit limitations:
For information on the operation range, refer to the documentation of the ·Biddle· unit.

III. ·EKEXV + EKEQ· units combined with an air handling unit are considered air handling units, following air handling unit limitations.
For information on the operation range, refer to the documentation of the ·EKEXV-EKEQ· unit.

IV. ·VKM· units are considered to be regular ·VRV DX· indoor units.
For information on the operation range, refer to the documentation of the ·VKM· unit.

V. Because there is no refrigerant connection with the outdoor unit (only communication F1/F2), ·VAM· units do not have connection limitations.
However, since there is communication via F1/F2, count them as regular indoor unit when calculating the maximum allowed number of connectable indoor units.

3D096859B

RXYTQ-UYF

VRV4
Middle East
Piping restrictions ·1/3·

For the reference drawing, see page ·2/3·.		Maximum piping length			Maximum height difference			Total piping length
		Longest pipe (A+[B,J]) Actual / (Equivalent)	After first branch (B,J) Actual	After first branch (for multi-outdoor) (D) Actual / (Equivalent)	Indoor-to-outdoor (H1) (2)	Indoor-to-indoor (H2)	Outdoor-to-outdoor (H3)	
Single unit		165/(190)m	40m (1)	10/(13)m	50/(40)m (2)	30m	5m	1000m
Multi-combination		135/(160)m	40m (1)	10/(13)m	50/(40)m (2)	30m	5m	500m
Air handling unit (AHU) Connection	Pair (4)	50/(55)m (3)	-	-	40/(40)m	-	-	-
	Multi (5)	165/(190)m	40m	10/(13)m	40/(40)m	15m	5m	500m
	Mix	165/(190)m	40m	10/(13)m	40/(40)m	15m	5m	500m

Notes
1. An extension to up to ·90· m is possible if all of the following conditions are met:
a. The piping length between all indoor units and the nearest branch kit is ≤ 40m.
b. It is necessary to increase the size of the gas and liquid piping.
   If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.
c. When the piping size is increased, the piping length has to be counted as double.
   The total piping length has to be within limitations.
d. The piping length difference between the nearest indoor unit to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ ·40·m.
2. An extension to up to ·90· m is possible without an additional option kit. Respect the following conditions:
-> If the outdoor units are positioned higher than the indoor units:
- Size up the liquid piping
  For more information, refer to the installation manual.
- A dedicated setting on the outdoor unit is required.
  For more information, refer to the installation manual.
-> If the outdoor units are positioned lower than the indoor units:
- 40~60m: Minimum connection ratio: ·80%·
- 60~65m: Minimum connection ratio: ·90%·
- 65~80m: Minimum connection ratio: ·100%·
- 80~90m: Minimum connection ratio: ·110%·

+
- Size up the liquid piping
  For more information, refer to the installation manual.
- A dedicated setting on the outdoor unit is required.
  For more information, refer to the installation manual.
3. The allowable minimum length is ·5· m.
4. Multiple air handling units (·AHU·)(·EKEXV· + ·EKEQ· kits).
5. Mix of air handling units (·AHU·) and ·VRV DX· indoor units.
6. If the equivalent piping length between is > ·90·m, size up the main liquid and gas piping.

3D096859B

13 Installation

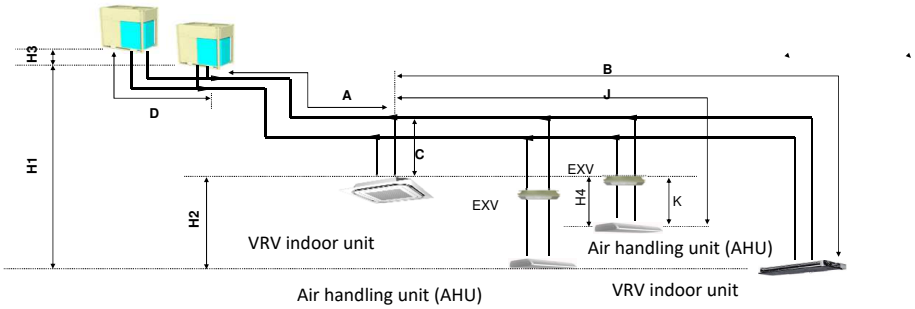
13 - 3 Refrigerant Pipe Selection

RXYTQ-UYF

VRV4

Middle East

Piping restrictions ·2/3·



Notes

1. Schematic indication
   Illustrations may differ from the actual appearance of the unit.
2. This is only to illustrate piping length limitations.
   Refer to combination table ·3D096860· for details about the allowed combinations.

		Allowed piping length ·EXV· to ·AHU· (K)	Maximum height difference ·EXV· to ·AHU· (H4)
Air handling unit (AHU) Connection	Pair (1)	≤5m	5m
	Multi (2)	≤5m	5m
	Mix	≤5m	5m

Notes

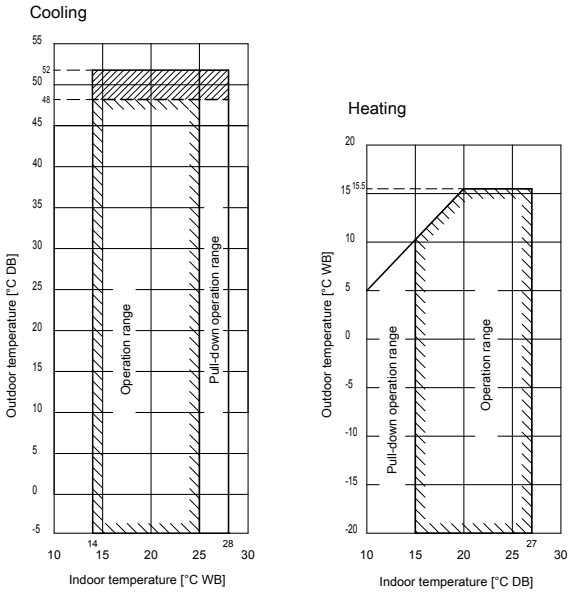
1. Multiple air handling units (·AHU·)(·EKEXV· + ·EKEQ· kits).
2. Mix of air handling units (·AHU·) and ·VRV DX· indoor units.

3D096859B

14 Operation range

14 - 1 Operation Range

RXYTQ-UYF



Notes

1. These figures assume the following operation conditions
   Indoor and outdoor units
   Equivalent piping length: 5m
   Level difference: 0m
2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
3. To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
4. Operation range is valid in case direct expansion indoor units are used.
   If other indoor units are used, refer to the documentation of the respective indoor units.
5. : Unit operation is possible, but no guaranteed capacity

3D096861

15 Appropriate Indoors

15 - 1 Appropriate Indoors

RXYTQ-UYF

Recommended indoor units for ·RXYTQ*U*· outdoor units

·*· HP	8	10	12	14	16
	4 x FXMQ50	5 x FXMQ50	6 x FXMQ50	7 x FXMQ50	8 x FXMQ50

For multi outdoor units ·>16HP·, the recommended amount of indoor units is the sum of the indoor units defined for a single outdoor unit.

Appropriate indoor units for ·RXYTQ*U*· outdoor units

Model name	Class
FXAQ-A	15-20-25-32-40-50-63
FXAQ-PVER	20-25-32-40-50-63
FXCQ-A	20-25-32-40-50-63-80-125
FXDQ-A3	15-20-25-32-40-50-63
FXFQ-B	20-25-32-40-50-63-80-100-125
FXFSQ-ARVE	25-32-40-50-63-80-100-125-140
FXHQ-A	32-63-100
FXKQ	25-32-40-63
FXLQ	20-25-32-40-50-63
FXMQ-P7	50-63-80-100-125
FXMQ-P7H	50
FXMQ-PVE	140
FXMQ-MA	200-250
FXNQ-A	20-25-32-40-50-63
FXSQ-A	15-20-25-32-40-50-63-80-100-125-140
FXUQ-A	71-100
FXZQ-A	15-20-25-32-40-50
VKM-GB	50-80-100
VKM-GBM	50-80-100
FXMQ-MF	125-200-250
EKEXV	50-63-80-100-125-140-200-250-400-500

3D128612

FIDAR KARA

Tel: +98 21 8868 3538 , +98 21 8859 6153
Web: fidarkaraco.com
No. 157, Darya Blvd., Saadat-Abad, Tehran, Iran

Daikin Europe N.V. Naamloze Vennootschap · Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Responsible Editor)

EEDEN21 12/2020