Replacement VRV Air Conditioning Technical Data

RXYQQ-U

RXYQQ8U7Y1B
RXYQQ10U7Y1B
RXYQQ12U7Y1B
RXYQQ14U7Y1B
RXYQQ16U7Y1B
RXYQQ18U7Y1B
RXYQQ20U7Y1B
RXYQQ22U7Y1B
RXYQQ24U7Y1B
RXYQQ26U7Y1B
RXYQQ28U7Y1B
RXYQQ30U7Y1B
RXYQQ32U7Y1B
RXYQQ34U7Y1B
RXYQQ36U7Y1B
RXYQQ38U7Y1B
RXYQQ40U7Y1B
RXYQQ42U7Y1B

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1 Features

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- By choosing this product with LOOP by Daikin you support the reuse of refrigerant
- Cost effective and fast replacement as only the outdoor and indoor unit needs to be replaced, meaning almost no work has to be carried out inside the building
- Efficiency gains of more than 70% can be realized, by virtue of technological developments in heat pump technology and the more efficient R-410A refrigerant
- Less intrusive and time consuming installation compared to installing a new system, as the refrigerant piping can be maintained
- Unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and allows safe replacement of competitor replacement
- Automatic cleaning of refrigerant piping ensures a clean piping network, even when a compressor breakdown has occurred
- Accurate temperature control, fresh air provision, air handling units and Biddle air curtains all integrated in a single system requiring only one single point of contact
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- 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
- Possibility to add indoor units and increase capacity without changing the refrigerant piping
- Possibility to spread the various stages of replacement thanks to the modular design of the VRV system
- 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

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Technical Specifications					RXYQQ8U	RXYQQ10U	RXYQQ12U	RXYQQ14U	RXYQQ16U	RXYQQ18U	RXYQQ20U
Recommended combination					4 x FXFQ50AVEB	4 x FXFQ63AVEB	6 x FXFQ50AVEB	1 x FXFQ50AVEB + 5 x FXFQ63AVEB	4 x FXFQ63AVEB + 2 x FXFQ80AVEB	3 x FXFQ50AVEB + 5 x FXFQ63AVEB	2 x FXFQ50AVEB + 6 x FXFQ63AVEB
Recommended combination 2					4 x FXSQ50A2VEB	4 x FXSQ63A2VEB	6 x FXSQ50A2VEB	1 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	4 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	3 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	2 x FXSQ50A2VEB + 6 x FXSQ63A2VEB
Recommended combination 3					4 x FXMQ50P7VEB	4 x FXMQ63P7VEB	6 x FXMQ50P7VEB	1 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	3 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	2 x FXMQ50P7VEB + 6 x FXMQ63P7VEB
Cooling capacity	Prated,c			kW	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)	50.4 (1)	52.0 (1)
Heating capacity	Nom.	6°CWB		kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)	45.0 (2)	50.4 (2)	56.0 (2)
	Prated,h			kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)	45.0 (2)	50.4 (2)	56.0 (2)
	Max.	6°CWB		kW	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)	50.0 (2)	56.5 (2)	63.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	5.40 (2)	7.58 (2)	9.65 (2)	10.69 (2)	12.54 (2)	14.22 (2)	17.47 (2)
COP at nom. capacity	6°CWB			kW/kW	4.15 (2)	3.69 (2)	3.47 (2)	3.74 (2)	3.59 (2)	3.54 (2)	3.20 (2)
ESEER - Automatic					7.53	7.20	6.96	6.83	6.50	6.38	5.67
ESEER - Standard					6.37	5.67	5.50	5.31	5.05	4.97	4.42
SCOP					4.3		4.1	4.0		4.2	4.0
SCOP recommended combination 2					4.2	4.3	4.1	4.0	4.1	4.2	4.0
SCOP recommended combination 3					4.2	4.1		4.0		4.1	3.9
SEER					7.6	6.8	6.3		6.0		5.9
SEER recommended combination 2					6.9	6.8	5.9	6.3	5.9	6.0	5.9
SEER recommended combination 3					7.5	6.8	6.2		5.8	6.0	5.9
ηs,c				%	302.4	267.6	247.8	250.7	236.5	238.3	233.7
ηs,c recommended combination 2					273.6	270.5	233.5	250.0	234.2	236.8	233.9
ηs,c recommended combination 3					295.2	267.1	246.3	246.7	230.4	238.2	233.1
ηs,h				%	167.9	168.2	161.4	155.4	157.8	163.1	156.6
ηs,h recommended combination 2					165.4	170.6	161.3	157.2	159.5	164.8	158.2
ηs,h recommended combination 3					165.6	162.0	160.6	155.7	156.8	159.6	153.4
Space cooling	A Condition (35°C - 27/19)	EERd			3.0	2.3	2.4	2.6	2.1	1.9	
		Pdc		kW	22.4	28.0	33.5	40.0	45.0	50.4	52.0
	B Condition (30°C - 27/19)	EERd			5.2	4.7	4.3	4.1	3.9	3.8	3.7
		Pdc		kW	16.5	20.6	24.7	29.5	33.2	37.1	38.3
	C Condition (25°C - 27/19)	EERd			9.5	8.3	7.7	7.8	7.7	7.5	7.3
		Pdc		kW	10.6	13.3	15.9	18.9	21.3	23.9	24.6
	D Condition (20°C - 27/19)	EERd			18.8	17.0	13.9	14.3	14.2	18.3	
		Pdc		kW	8.0	9.3	9.4	8.4	9.5	11.5	
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			2.6	2.4		2.6	2.1	1.9	
		Pdc		kW	22.4	28.0	33.5	40.0	45.0	50.4	52.0
	B Condition (30°C - 27/19)	EERd			4.9	4.7	4.0	4.1	3.8	3.7	3.6
		Pdc		kW	16.5	20.6	24.7	29.5	33.2	37.1	38.3
	C Condition (25°C - 27/19)	EERd			8.8	8.5	7.1	7.9	7.6	7.5	7.3
Space cooling recommended combination 2	C Condition (25°C - 27/19)	Pdc		kW	10.6	13.3	15.9	18.9	21.3	23.9	24.6
	D Condition (20°C - 27/19)	EERd			15.1	17.2	13.1	14.0		18.1	18.9
		Pdc		kW	8.8	9.3	9.1	8.4	9.5	11.4	10.9
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd			3.0	2.3	2.4	2.6	2.1	1.9	
		Pdc		kW	22.4	28.0	33.5	40.0	45.0	50.4	52.0
	B Condition (30°C - 27/19)	EERd			5.1	4.7	4.2	4.0	3.7		3.6
		Pdc		kW	16.5	20.6	24.7	29.5	33.2	37.1	38.3
	C Condition (25°C - 27/19)	EERd			9.6	8.4	7.7		7.4	7.6	7.3
		Pdc		kW	10.6	13.3	15.9	19.0	21.3	23.9	24.6
	D Condition (20°C - 27/19)	EERd			16.0	16.9	13.7	14.0	14.1	18.3	
		Pdc		kW	9.1	9.3	9.4	8.4	9.5	11.6	

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Technical Specifications				RXYQQ8U	RXYQQ10U	RXYQQ12U	RXYQQ14U	RXYQQ16U	RXYQQ18U	RXYQQ20U
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.5	2.4	2.0	2.3	2.2	1.9	1.8
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10						
	TOL	COPd (declared COP)		2.5	2.4	2.0	2.3	2.2	1.9	1.8
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tol (temperature operating limit)	°C	-10						
	A Condition (-7°C)	COPd (declared COP)		2.7	2.6	2.4	2.6		2.4	2.1
		Pdh (declared heating cap)	kW	12.1	14.2	16.3	18.2	20.5	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		3.9			3.5		3.7	3.6
		Pdh (declared heating cap)	kW	7.4	8.6	9.9	11.1	12.5	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		6.3	6.4	6.1		6.3	6.7	6.5
		Pdh (declared heating cap)	kW	5.0	5.5	6.4	7.1	8.0	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		7.9	8.2	7.9	8.5	8.6	9.0	9.1
		Pdh (declared heating cap)	kW	5.9		6.3	4.9		7.1	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)		2.7		2.4	2.6		2.4	2.2
		Pdh (declared heating cap)	kW	12.1	14.2	16.3	18.2	20.5	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		3.9	4.0	3.9	3.5		3.8	3.7
		Pdh (declared heating cap)	kW	7.4	8.6	9.9	11.1	12.2	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		6.3	6.5	6.1		6.3	6.8	6.5
		Pdh (declared heating cap)	kW	5.0	5.5	6.4	7.1	8.0	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		7.8	8.3	7.9	8.6	8.7	9.1	9.2
		Pdh (declared heating cap)	kW	5.9	6.0	6.4	4.9	5.0	7.2	
	TBivalent	COPd (declared COP)		2.4		1.9	2.3	2.2	1.9	1.8
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10						
	TOL	COPd (declared COP)		2.4		1.9	2.3	2.2	1.9	1.8
Space heating (Average climate) recommended combination 2	TOL	Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tol (temperature operating limit)	°C	-10						
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)		2.7	2.6	2.4	2.6		2.4	2.1
		Pdh (declared heating cap)	kW	12.1	14.2	16.3	18.2	20.5	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		3.9	3.7	3.9	3.5		3.7	3.6
		Pdh (declared heating cap)	kW	7.4	8.6	9.9	11.1	12.5	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		6.2	6.4	6.0	6.1	6.2	6.5	6.3
		Pdh (declared heating cap)	kW	4.9	5.5	6.4	7.1	8.0	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		7.8	8.1	7.8	8.5	8.6	8.7	
		Pdh (declared heating cap)	kW	5.8	5.9	6.2	4.9		6.9	
	TBivalent	COPd (declared COP)		2.5	2.4	2.0	2.3	2.2	1.9	1.8
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10						
	TOL	COPd (declared COP)		2.5	2.4	2.0	2.3	2.2	1.9	1.8
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tol (temperature operating limit)	°C	-10						
Capacity range			HP	8	10	12	14	16	18	20
PED	Category			Category II						
	Most critical part	Name		Accumulator						
		Ps*V	Bar*l	325			415		493	
Maximum number of connectable indoor units				64 (3)						
Indoor index connection	Min.			100.0	125.0	150.0	175.0	200.0	225.0	250.0
	Max.			260.0	325.0	390.0	455.0	520.0	585.0	650.0
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			275		308	
	Packed unit		kg	211			291		324	
Packing	Material			Carton						
	Weight		kg	1.8			2.2			
Packing 2	Material			Wood						
	Weight		kg	11.0			14.0			

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Technical Specifications					RXYQQ8U	RXYQQ10U	RXYQQ12U	RXYQQ14U	RXYQQ16U	RXYQQ18U	RXYQQ20U
Packing 3	Material				Plastic						
	Weight			kg	0.5			0.6			
Casing	Colour				Daikin White						
	Material				Painted galvanized steel plate						
Heat exchanger	Type				Cross fin coil						
	Indoor side				Air						
	Outdoor side				Air						
	Air flow rate	Cooling	Rated	m^3/h	9,720	10,500	11,100	13,380	15,600	15,060	15,660
		Heating	Rated	m^3/h	9,720	10,500	11,100	13,380	15,600	15,060	15,660
Fan	Quantity				1			2			
	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	43.0						
	Heating	Min.		°CWB	-20.0						
		Max.		°CWB	15.5						
Sound power level	Cooling	Nom.		dBA	78.0 (4)	79.1 (4)	83.4 (4)	80.9 (4)	85.6 (4)	83.8 (4)	87.9 (4)
	Heating	Prated,h		dBA	79.6 (4)	80.9 (4)	83.5 (4)	83.1 (4)	86.5 (4)	85.3 (4)	89.8 (4)
Sound pressure level	Cooling	Nom.		dBA	57.0 (5)		61.0 (5)	60.0 (5)	63.0 (5)	62.0 (5)	65.0 (5)
Refrigerant	Type				R-410A						
	GWP				2,087.5						
	Charge			TCO2Eq	12.3	12.5	13.2	21.5	23.6	24.4	24.6
	Charge			kg	5.9	6.0	6.3	10.3	11.3	11.7	11.8
Refrigerant oil	Type				Synthetic (ether) oil FVC68D						
Piping connections	Liquid	Type			Braze connection						
		OD		mm	10		13			16	
	Gas	Type			Braze connection						
		OD		mm	19.1	22.2	28.6				
	Total piping length	System	Actual	m	300 (6)						
Defrost method					Reversed cycle						
Capacity control	Method				Inverter controlled						
Indication if the heater is equipped with a supplementary heater					no						
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0						
Power consumption in other than active mode	Crankcase heater mode	Cooling	PCK	kW	0.000						
Power consumption in other than active mode	Crankcase heater mode	Heating	PCK	kW	0.052			0.077		0.089	
	Off mode	Cooling	POFF	kW	0.041			0.074		0.075	
		Heating	POFF	kW	0.052			0.077		0.089	
	Standby mode	Cooling	PSB	kW	0.041			0.074		0.075	
		Heating	PSB	kW	0.052			0.077		0.089	
	Thermostat-off mode	Cooling	PTO	kW	0.005			0.010			
		Heating	PTO	kW	0.056			0.097		0.098	
Cooling	Cdc (Degradation cooling)				0.25						
Heating	Cdh (Degradation heating)				0.25						
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;

2 Specifications

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2

Electrical Specifications				RXYQQ8U	RXYQQ10U	RXYQQ12U	RXYQQ14U	RXYQQ16U	RXYQQ18U	RXYQQ20U
Power supply	Name			Y1						
	Phase			3N~						
	Frequency		Hz	50						
	Voltage		V	380-415						
Power supply intake				Both indoor and outdoor unit						
Voltage range	Min.		%	-10						
	Max.		%	10						
Current	Nominal running current (RLA)	Cooling	A	7.2 (7)	10.2 (7)	12.7 (7)	15.4 (7)	18.0 (7)	20.8 (7)	26.9 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	-						
		Combination B	Cooling	-						
	Starting current (MSC) - remark			See note 8						
	Zmax	List		No requirements						
	Minimum Ssc value		kVa	4,050 (9)	5,535 (9)	6,038 (9)	6,793 (9)	7,547 (9)	8,805 (9)	9,812 (9)
	Minimum circuit amps (MCA)		A	16.1 (10)	22.0 (10)	24.0 (10)	27.0 (10)	31.0 (10)	35.0 (10)	39.0 (10)
	Maximum fuse amps (MFA)		A	20 (11)	25 (11)	32 (11)		40 (11)		50 (11)
	Full load amps (FLA)	Total	A	1.2 (12)	1.3 (12)	1.5 (12)	1.8 (12)	2.6 (12)		
Power Performance	Power factor	Combination B	35°C ISO - Full load	-						
			46°C ISO - Full load	-						
Wiring connections - 50Hz	For power supply	Quantity		5G						
	For connection with indoor	Quantity		2						
		Remark		F1,F2						

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m |
(2)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m |
(3)Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% <= CR <= 130%) |
(4)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(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)Maximum allowable voltage range variation between phases is 2%. |
(14)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(15)The AUTOMATIC ESEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation funcitonality (variable refrigerant temperature) |
(16)The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality |
(17)Sound values are measured in a semi-anechoic room. |
(18)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 |
(19)EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase |
(20)Ssc: Short-circuit power |
(21)For detailed contents of standard accessories, see installation/operation manual |
(22)Multi combination (22~54HP) data is corresponding with the standard multi combination

Technical specifications System			RXYQQ22U	RXYQQ24U	RXYQQ26U	RXYQQ28U	RXYQQ30U	RXYQQ32U
System	Outdoor unit module 1		RXYQQ10U	RXYQQ8U	RXYQQ12U			RXYQQ16U
	Outdoor unit module 2		RXYQQ12U	RXYQQ16U	RXYQQ14U	RXYQQ16U	RXYQQ18U	RXYQQ16U
Recommended combination			6 x FXFQ50AVEB + 4 x FXFQ63AVEB	4 x FXFQ50AVEB + 4 x FXFQ63AVEB + 2 x FXFQ80AVEB	7 x FXFQ50AVEB + 5 x FXFQ63AVEB	6 x FXFQ50AVEB + 4 x FXFQ63AVEB + 2 x FXFQ80AVEB	9 x FXFQ50AVEB + 5 x FXFQ63AVEB	8 x FXFQ63AVEB + 4 x FXFQ80AVEB
Recommended combination 2			6 x FXSQ50A2VEB + 4 x FXSQ63A2VEB	4 x FXSQ50A2VEB + 4 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	7 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	6 x FXSQ50A2VEB + 4 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	9 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	8 x FXSQ63A2VEB + 4 x FXSQ80A2VEB
Recommended combination 3			6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB	4 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	7 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	9 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	8 x FXMQ63P7VEB + 4 x FXMQ80P7VEB
Cooling capacity	Prated,c	kW	61.5 (1)	67.4 (1)	73.5 (1)	78.5 (1)	83.9 (1)	90.0 (1)

2 Specifications

1 - 1 RXYQQ-U

Technical specifications System					RXYQQ22U	RXYQQ24U	RXYQQ26U	RXYQQ28U	RXYQQ30U	RXYQQ32U
Heating capacity	Nom.	6°CWB		kW	61.5 (2)	67.4 (2)	73.5 (2)	78.5 (2)	83.9 (2)	90.0 (2)
	Prated,h			kW	61.5 (2)	67.4 (2)	73.5 (2)	78.5 (2)	83.9 (2)	90.0 (2)
	Max.	6°CWB		kW	69.0 (2)	75.0 (2)	82.5 (2)	87.5 (2)	94.0 (2)	100.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	17.23 (2)	17.94 (2)	20.33 (2)	22.19 (2)	23.87 (2)	25.08 (2)
COP at nom. capacity	6°CWB			kW/kW	3.57 (2)	3.76 (2)	3.61 (2)	3.54 (2)	3.51 (2)	3.59 (2)
ESEER - Automatic					7.07	6.81	6.89	6.69	6.60	6.50
ESEER - Standard					5.58	5.42	5.39	5.23	5.17	5.05
SCOP					4.4	4.3	4.2		4.3	4.2
SCOP recommended combination 2					4.4	4.3	4.2		4.3	4.2
SCOP recommended combination 3					4.3	4.2			4.3	4.1
SEER					6.9	6.8	6.7	6.5		6.4
SEER recommended combination 2					6.7	6.6	6.5	6.3		
SEER recommended combination 3					6.9	6.7	6.6	6.4	6.5	6.2
ηs,c				%	274.5	269.9	264.2	257.8	256.8	251.7
ηs,c recommended combination 2					266.5	262.6	256.1	249.3	249.8	248.3
ηs,c recommended combination 3					273.3	265.3	261.1	253.1	256.1	244.2
ηs,h				%	171.2	167.0	164.6	166.0	169.8	163.1
ηs,h recommended combination 2					172.3	167.1	165.4	166.8	170.6	164.6
ηs,h recommended combination 3					170.2	165.5	164.5	165.0	167.0	161.9
Space cooling	A Condition (35°C - 27/19)	EERd			2.6	2.5	2.6	2.3	2.1	2.3
		Pdc		kW	61.5	67.4	73.5	78.5	83.9	90.0
	B Condition (30°C - 27/19)	EERd			4.8	4.6		4.4	4.3	
		Pdc		kW	45.3	49.7	54.2	57.8	61.8	66.3
	C Condition (25°C - 27/19)	EERd			8.5	8.6	8.2	8.1	8.2	8.1
		Pdc		kW	29.1	31.9	34.8	37.2	39.7	42.6
	D Condition (20°C - 27/19)	EERd			16.0	15.2	14.2	14.3	16.8	14.3
		Pdc		kW	18.8	15.8	16.2	16.5	21.0	19.0
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			2.6	2.4	2.6	2.3	2.1	2.2
		Pdc		kW	61.5	67.4	73.5	78.5	83.9	90.0
	B Condition (30°C - 27/19)	EERd			4.6	4.5	4.4	4.3	4.2	
Space cooling recommended combination 2	B Condition (30°C - 27/19)	Pdc		kW	45.3	49.7	54.1	57.8	61.8	66.3
	C Condition (25°C - 27/19)	EERd			8.2	8.4	7.9	7.8	7.9	8.0
		Pdc		kW	29.1	31.9	34.8	37.2	39.7	42.6
	D Condition (20°C - 27/19)	EERd			15.6	14.7	13.6	13.8	16.1	14.0
		Pdc		kW	18.4	15.4	15.7	16.5	20.5	18.9
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd			2.5			2.3	2.1	2.2
		Pdc		kW	61.5	67.4	73.5	78.5	83.9	90.0
	B Condition (30°C - 27/19)	EERd			4.8	4.5		4.3		4.1
		Pdc		kW	45.3	49.7	54.2	57.8	61.8	66.3
	C Condition (25°C - 27/19)	EERd			8.5	8.4	8.1	8.0	8.2	7.8
		Pdc		kW	29.1	31.9	34.8	37.2	39.7	42.6
	D Condition (20°C - 27/19)	EERd			15.8	15.2	14.0	14.1	16.6	13.8
		Pdc		kW	18.8	15.7	16.0	16.6	21.0	19.0

2 Specifications

1 - 1 RXYQQ-U

Technical specifications System				RXYQQ22U	RXYQQ24U	RXYQQ26U	RXYQQ28U	RXYQQ30U	RXYQQ32U
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.3	2.5	2.3	2.2	2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
		Tbiv (bivalent temperature)	°C	-10					
	TOL	COPd (declared COP)		2.3	2.5	2.3	2.2	2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
		Tol (temperature operating limit)	°C	-10					
	A Condition (-7°C)	COPd (declared COP)		2.6	2.8		2.6		2.7
		Pdh (declared heating cap)	kW	30.4	32.6	34.5	36.8	41.0	
	B Condition (2°C)	COPd (declared COP)		4.0	3.7	3.8		3.9	3.6
		Pdh (declared heating cap)	kW	18.5	19.9	21.0	22.4	24.9	25.0
	C Condition (7°C)	COPd (declared COP)		6.3		6.1	6.2	6.5	6.3
		Pdh (declared heating cap)	kW	11.9	13.0	13.5	14.4	16.0	16.1
	D Condition (12°C)	COPd (declared COP)		8.2	8.9	8.8		9.0	
		Pdh (declared heating cap)	kW	6.0	5.7	6.0	6.4	7.1	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)		2.6	2.7		2.6		2.7
		Pdh (declared heating cap)	kW	30.4	32.6	34.5	36.8	41.0	
	B Condition (2°C)	COPd (declared COP)		4.1	3.7	3.8		3.9	3.6
		Pdh (declared heating cap)	kW	18.5	19.9	21.0	22.4	24.9	25.0
	C Condition (7°C)	COPd (declared COP)		6.3		6.1	6.3	6.6	6.3
		Pdh (declared heating cap)	kW	11.9	13.1		14.4	16.0	16.1
	D Condition (12°C)	COPd (declared COP)		8.4	9.0	8.9		9.1	
		Pdh (declared heating cap)	kW	6.0	5.7	6.0	6.4	7.2	7.1
	TBivalent	COPd (declared COP)		2.2	2.4	2.2		2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
Space heating (Average climate) recommended combination 2	TBivalent	Tbiv (bivalent temperature)	°C	-10					
	TOL	COPd (declared COP)		2.2	2.4	2.2		2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
		Tol (temperature operating limit)	°C	-10					
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)		2.6	2.7	2.6		2.5	2.7
		Pdh (declared heating cap)	kW	30.4	32.6	34.5	36.8	41.0	
	B Condition (2°C)	COPd (declared COP)		4.0	3.7	3.8		3.9	3.6
		Pdh (declared heating cap)	kW	18.5	19.9	21.0	22.4	24.9	25.0
	C Condition (7°C)	COPd (declared COP)		6.2	6.3	6.1	6.2	6.3	
		Pdh (declared heating cap)	kW	11.9	12.9	13.5	14.4	16.0	16.1
	D Condition (12°C)	COPd (declared COP)		8.2	8.9	8.8	9.0	8.6	9.0
		Pdh (declared heating cap)	kW	6.0	5.7	6.0	6.4	7.1	
	TBivalent	COPd (declared COP)		2.3	2.4	2.2		2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
		Tbiv (bivalent temperature)	°C	-10					
	TOL	COPd (declared COP)		2.3	2.4	2.2		2.1	2.4
		Pdh (declared heating cap)	kW	34.4	36.9	39.0	41.6	46.3	46.4
		Tol (temperature operating limit)	°C	-10					
Capacity range			HP	22	24	26	28	30	32
PED	Category			Category II					
Maximum number of connectable indoor units				64 (3)					
Indoor index connection	Min.			275.0	300.0	325.0	350.0	375.0	400.0
	Max.			715.0	780.0	845.0	910.0	975.0	1,040.0
Heat exchanger	Indoor side			Air					
	Outdoor side			Air					
	Air flow rate	Cooling Rated	m^3/h	21,600	25,320	24,480	26,700	26,160	31,200
		Heating Rated	m^3/h	21,600	25,320	24,480	26,700	26,160	31,200
Sound power level	Cooling	Nom.	dBA	84.8 (4)	86.3 (4)	85.3 (4)	87.6 (4)	86.6 (4)	88.6 (4)
	Heating	Prated,h	dBA	85.4 (4)	87.3 (4)	86.3 (4)	88.3 (4)	87.5 (4)	89.5 (4)
Sound pressure level	Cooling	Nom.	dBA	62.5 (5)	64.0 (5)	63.5 (5)	65.1 (5)	64.5 (5)	66.0 (5)
Refrigerant	Type			R-410A					
	GWP			2,087.5					
Refrigerant oil	Type			Synthetic (ether) oil FVC68D					
Piping connections	Liquid	Type		Braze connection					
		OD	mm	16		19			
	Gas	Type		Braze connection					
		OD	mm	28.6	34.9				

2 Specifications

1 - 1 RXYQQ-U

Technical specifications System					RXYQQ22U	RXYQQ24U	RXYQQ26U	RXYQQ28U	RXYQQ30U	RXYQQ32U
Piping connections	Total piping length	System	Actual	m	300 (6)					
Indication if the heater is equipped with a supplementary heater					no					
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0					
Power consumption in other than active mode	Crankcase heater mode	Cooling	PCK	kW	0.000					
		Heating	PCK	kW	0.103	0.129			0.141	0.154
	Off mode	Cooling	POFF	kW	0.081	0.115			0.116	0.149
		Heating	POFF	kW	0.103	0.129			0.141	0.154
	Standby mode	Cooling	PSB	kW	0.081	0.115			0.116	0.149
		Heating	PSB	kW	0.103	0.129			0.141	0.154
	Thermostat-off mode	Cooling	PTO	kW	0.009	0.014				0.019
		Heating	PTO	kW	0.113	0.154			0.155	0.195
Cooling	Cdc (Degradation cooling)				0.25					
Heating	Cdh (Degradation heating)				0.25					

Technical specifications System					RXYQQ34U	RXYQQ36U	RXYQQ38U	RXYQQ40U	RXYQQ42U
System	Outdoor unit module 1				RXYQQ16U		RXYQQ8U	RXYQQ10U	
	Outdoor unit module 2				RXYQQ18U	RXYQQ20U	RXYQQ10U	RXYQQ12U	RXYQQ16U
	Outdoor unit module 3				-		RXYQQ20U	RXYQQ18U	RXYQQ16U
Recommended combination					3 x FXFQ50AVEB + 9 x FXFQ63AVEB + 2 x FXFQ80AVEB	2 x FXFQ50AVEB + 10 x FXFQ63AVEB + 2 x FXFQ80AVEB	6 x FXFQ50AVEB + 10 x FXFQ63AVEB	9 x FXFQ50AVEB + 9 x FXFQ63AVEB	12 x FXFQ63AVEB + 4 x FXFQ80AVEB
Recommended combination 2					3 x FXSQ50A2VEB + 9 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	2 x FXSQ50A2VEB + 10 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	6 x FXSQ50A2VEB + 10 x FXSQ63A2VEB	9 x FXSQ50A2VEB + 9 x FXSQ63A2VEB	12 x FXSQ63A2VEB + 4 x FXSQ80A2VEB
Recommended combination 3					3 x FXMQ50P7VEB + 9 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	2 x FXMQ50P7VEB + 10 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	6 x FXMQ50P7VEB + 10 x FXMQ63P7VEB	9 x FXMQ50P7VEB + 9 x FXMQ63P7VEB	12 x FXMQ63P7VEB + 4 x FXMQ80P7VEB
Cooling capacity	Prated,c			kW	95.4 (1)	97.0 (1)	102.4 (1)	111.9 (1)	118.0 (1)
Heating capacity	Nom.	6°CWB		kW	95.4 (2)	101.0 (2)	106.4 (2)	111.9 (2)	118.0 (2)
	Prated,h			kW	95.4 (2)	101.0 (2)	106.4 (2)	111.9 (2)	118.0 (2)
	Max.	6°CWB		kW	106.5 (2)	113.0 (2)	119.5 (2)	125.5 (2)	131.5 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	26.76 (2)	30.02 (2)	30.45 (2)	31.45 (2)	32.66 (2)
COP at nom. capacity	6°CWB			kW/kW	3.56 (2)	3.36 (2)	3.49 (2)	3.56 (2)	3.61 (2)
ESEER - Automatic					6.44	6.02	6.36	6.74	6.65
ESEER - Standard					5.01	4.68	5.03	5.29	5.19
SCOP					4.2	4.1	4.3		4.2
SCOP recommended combination 2					4.3	4.2	4.3	4.4	4.3
SCOP recommended combination 3					4.2	4.1	4.2	4.3	4.2
SEER					6.4	6.3	6.9	6.7	6.6
SEER recommended combination 2					6.3		6.8	6.6	
SEER recommended combination 3					6.3		6.9	6.7	6.5
ηs,c				%	253.3	250.8	272.4	263.5	261.2
ηs,c recommended combination 2					250.9	248.7	269.2	259.2	259.3
ηs,c recommended combination 3					249.8	247.2	272.2	263.2	255.4
ηs,h				%	166.2	162.4	167.5	170.0	165.5
ηs,h recommended combination 2					167.7	164.1	168.4	171.3	167.3
ηs,h recommended combination 3					164.2	159.9	164.8	167.8	164.4
Space cooling	A Condition (35°C - 27/19)	EERd			2.1		2.4	2.2	2.3
		Pdc		kW	95.4	97.0	102.4	111.9	118.0
	B Condition (30°C - 27/19)	EERd			4.2	4.1	4.5		4.4
		Pdc		kW	70.3	71.5	75.5	82.5	86.9
	C Condition (25°C - 27/19)	EERd			8.1	7.9	8.5	8.3	8.2
		Pdc		kW	45.2	45.9	48.5	53.0	55.9
	D Condition (20°C - 27/19)	EERd			16.8	16.7	17.9	16.0	15.4
		Pdc		kW	20.1	20.4	21.6	23.6	24.8
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			2.1		2.3	2.2	2.3
		Pdc		kW	95.4	97.0	102.4	111.9	118.0

2 Specifications

1 - 1 RXYQQ-U

Technical specifications System				RXYQQ34U	RXYQQ36U	RXYQQ38U	RXYQQ40U	RXYQQ42U
Space cooling recommended combination 2	B Condition (30°C - 27/19)	EERd		4.2	4.1	4.5	4.4	
		Pdc	kW	70.3	71.5	75.4	82.4	86.9
	C Condition (25°C - 27/19)	EERd		8.1	7.9	8.4	8.1	8.2
		Pdc	kW	45.2	45.9	48.5	53.0	55.9
	D Condition (20°C - 27/19)	EERd		16.5		17.8	15.9	15.3
		Pdc	kW	20.1	20.4	21.6	23.6	24.8
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd		2.1		2.4	2.2	2.3
		Pdc	kW	95.4	97.0	102.4	111.9	118.0
	B Condition (30°C - 27/19)	EERd		4.1	4.0	4.5	4.4	4.3
		Pdc	kW	70.3	71.5	75.5	82.5	87.0
	C Condition (25°C - 27/19)	EERd		8.0	7.8	8.5	8.4	8.0
		Pdc	kW	45.2	45.9	48.5	53.0	55.9
	D Condition (20°C - 27/19)	EERd		16.6	16.5	17.9	16.1	15.2
		Pdc	kW	20.1	20.4	21.6	23.6	24.8
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.2	2.1	2.2		2.4
		Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tbiv (bivalent temperature)	°C	-10				
	TOL	COPd (declared COP)		2.2	2.1	2.2		2.4
		Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tol (temperature operating limit)	°C	-10				
	A Condition (-7°C)	COPd (declared COP)		2.6	2.5		2.6	2.7
		Pdh (declared heating cap)	kW	45.2	47.9	53.7	55.1	55.2
	B Condition (2°C)	COPd (declared COP)		3.7		3.9	4.0	3.7
		Pdh (declared heating cap)	kW	27.5	29.2	32.7	33.5	33.6
	C Condition (7°C)	COPd (declared COP)		6.5	6.4	6.5		6.3
		Pdh (declared heating cap)	kW	17.7	18.8	21.3	21.6	
	D Condition (12°C)	COPd (declared COP)		8.8	8.6	8.7		8.6
		Pdh (declared heating cap)	kW	7.9	8.3	13.1		9.9
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)		2.6	2.5		2.6	2.7
		Pdh (declared heating cap)	kW	45.2	47.9	53.7	55.1	55.2
	B Condition (2°C)	COPd (declared COP)		3.8	3.7	3.9	4.0	3.7
		Pdh (declared heating cap)	kW	27.5	29.2	32.7	33.5	33.6
	C Condition (7°C)	COPd (declared COP)		6.6		6.5		6.4
		Pdh (declared heating cap)	kW	17.7	18.8	21.3	21.6	
	D Condition (12°C)	COPd (declared COP)		8.9		8.8		8.7
		Pdh (declared heating cap)	kW	7.9	8.3	13.2		10.0
	TBivalent	COPd (declared COP)		2.2		2.3	2.2	2.4
Space heating (Average climate) recommended combination 2	TBivalent	Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tbiv (bivalent temperature)	°C	-10				
	TOL	COPd (declared COP)		2.2		2.3	2.2	2.4
		Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tol (temperature operating limit)	°C	-10				
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)		2.6	2.4	2.5	2.6	2.7
		Pdh (declared heating cap)	kW	45.2	47.9	53.7	55.1	55.2
	B Condition (2°C)	COPd (declared COP)		3.7	3.6	3.8	3.9	3.7
		Pdh (declared heating cap)	kW	27.5	29.2	32.7	33.5	33.6
	C Condition (7°C)	COPd (declared COP)		6.4	6.3		6.4	6.3
		Pdh (declared heating cap)	kW	17.7	18.8	21.2	21.6	
	D Condition (12°C)	COPd (declared COP)		8.9	8.3	8.5	8.4	8.6
		Pdh (declared heating cap)	kW	7.9	8.3	12.9	12.8	9.9
	TBivalent	COPd (declared COP)		2.2	2.1	2.2		2.4
		Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tbiv (bivalent temperature)	°C	-10				
	TOL	COPd (declared COP)		2.2	2.1	2.2		2.4
		Pdh (declared heating cap)	kW	51.1	54.2	60.7	62.3	62.4
		Tol (temperature operating limit)	°C	-10				
Capacity range			HP	34	36	38	40	42

2 Specifications

1 - 1 RXYQQ-U

Technical specifications System					RXYQQ34U	RXYQQ36U	RXYQQ38U	RXYQQ40U	RXYQQ42U
PED	Category				Category II				
Maximum number of connectable indoor units					64 (3)				
Indoor index connection	Min.				425.0	450.0	475.0	500.0	525.0
	Max.				1,105.0	1,170.0	1,235.0	1,300.0	1,365.0
Heat exchanger	Indoor side				Air				
	Outdoor side				Air				
	Air flow rate	Cooling	Rated	m^3/h	30,660	31,260	35,880	36,660	41,700
		Heating	Rated	m^3/h	30,660	31,260	35,880	36,660	41,700
Sound power level	Cooling	Nom.		dBA	87.8 (4)	89.9 (4)	88.8 (4)	87.3 (4)	89.1 (4)
	Heating	Prated,h		dBA	88.9 (4)	91.5 (4)	90.7 (4)	88.4 (4)	90.1 (4)
Sound pressure level	Cooling	Nom.		dBA	65.5 (5)	67.1 (5)	66.2 (5)	65.2 (5)	66.5 (5)
Refrigerant	Type				R-410A				
	GWP				2,087.5				
Refrigerant oil	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection				
		OD		mm	19				
	Gas	Type			Braze connection				
Piping connections	Gas	OD		mm	34.9	41.3			
	Total piping length	System	Actual	m	300 (6)				
Indication if the heater is equipped with a supplementary heater					no				
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0				
Power consumption in other than active mode	Crankcase heater mode	Cooling	PCK	kW	0.000				
		Heating	PCK	kW	0.166		0.192		0.206
	Off mode	Cooling	POFF	kW	0.150		0.157		0.190
		Heating	POFF	kW	0.166		0.192		0.206
	Standby mode	Cooling	PSB	kW	0.150		0.157		0.190
		Heating	PSB	kW	0.166		0.192		0.206
	Thermostat-off mode	Cooling	PTO	kW	0.019				0.024
		Heating	PTO	kW	0.196		0.211		0.251
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				

Electrical specifications System					RXYQQ22U	RXYQQ24U	RXYQQ26U	RXYQQ28U	RXYQQ30U	RXYQQ32U
Power supply	Name				Y1					
	Phase				3N~					
	Frequency			Hz	50					
	Voltage			V	380-415					
Power supply intake					Both indoor and outdoor unit					
Voltage range	Min.			%	-10					
	Max.			%	10					
Current	Nominal running current (RLA)	Cooling		A	22.9 (7)	25.2 (7)	28.1 (7)	30.7 (7)	33.5 (7)	36.0 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling		-					
		Combination B	Cooling		-					
	Starting current (MSC) - remark				See note 8					
	Zmax	List			No requirements					
	Minimum Ssc value			kVa	11,573 (9)	11,597 (9)	12,831 (9)	13,585 (9)	14,843 (9)	15,094 (9)
	Minimum circuit amps (MCA)			A	46.0 (10)		51.0 (10)	55.0 (10)	59.0 (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		-					
Wiring connections - 50Hz	For power supply	Quantity			5G					
	For connection with indoor	Quantity			2					
		Remark			F1,F2					

2 Specifications

1 - 1 RXYQQ-U

Electrical specifications System				RXYQQ34U	RXYQQ36U	RXYQQ38U	RXYQQ40U	RXYQQ42U
Power supply	Name			Y1				
	Phase			3N~				
	Frequency		Hz	50				
	Voltage		V	380-415				
Power supply intake				Both indoor and outdoor unit				
Voltage range	Min.		%	-10				
	Max.		%	10				
Current	Nominal running current (RLA)	Cooling	A	38.8 (7)	44.9 (7)	44.3 (7)	43.7 (7)	46.2 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	-				
		Combination B	Cooling	-				
	Starting current (MSC) - remark			See note 8				
	Zmax	List		No requirements				
	Minimum Ssc value		kVa	16,352 (9)	17,359 (9)	19,397 (9)	20,378 (9)	20,629 (9)
	Minimum circuit amps (MCA)		A	66.0 (10)	70.0 (10)	76.0 (10)	81.0 (10)	84.0 (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	-				
Wiring connections - 50Hz	For power supply	Quantity		5G				
	For connection with indoor	Quantity		2				
		Remark		F1,F2				

3 Options

3 - 1 Options

RXYQ-U
RYYQ-U
RYMQ-U
RXYQQ-U

No	Item		RXYQ8U RYYQ8U RXYQQ8U	RXYQ10-12U RYYQ10-12U RXYQQ10-12U	RXYQ14-18U RYYQ14-18U RXYQQ14-18U	RXYQ20U RYYQ20U RXYQQ20U	RYYQ22~54U RXYQ22~54U RXYQQ22~42U
I.	Refnet header		KHRQ22M29H				
			KHRQ22M64H				
			---	---	---	KHRQ22M75H	
II.	Refnet joint		KHRQ22M20T				
			KHRQ22M29T9				
			KHRQ22M64T				
			---	---	---	KHRQ22M75T	
III.	Outdoor multi-connection kit	See note ·2·.	---	---	---	---	BHFQ22P1007
IV.	Outdoor multi-connection kit	See note ·2·.	---	---	---	---	BHFQ22P1517

No	Item		8HP	10HP	12HP	14HP	16HP	18HP	20HP
1a	Cool/heat selector (switch)	See note ·3·.	KRC19-26A						
1b	Cool/heat selector (PCB)		BRP2A81						
1c	Cool/heat selector (fixing box)		KJB111A						
2	VRV configurator		EKPCCAB*						
3	Heater tape kit PCB		EKBPH012T7A			EKBPH020T7A			
4	Demand PCB	See	DTA104A61/62*						
5	Demand PCB mounting plate	See note ·4·.	---			KKSB26B1*			

Notes

1 All options are kits
2 Only for multi units
3 To mount option ·1a·, option ·1c· is required.
4 To install the demand PCB on the large casing type, the demand PCB mounting plate is required.

Medium casing type ·VRV4· heat pump: modules ·8~12·HP
Large casing type ·VRV4· heat pump: modules ·14~20·HP

3D120006B

4 Combination table

4 - 1 Combination Table

RXYQQ-U

VRV4-Q Heat Pump Indoor unit combination Restrictions

Indoor unit combination pattern	VRV* DX indoor	AHU
VRV* DX indoor	O	X
AHU	X	O

O: Allowed
X: Not allowed

Remarks
1) VRV* DX indoor
The non-R410A VRV DX indoor units that can be connected are mentioned in 3D085036

2) AHU
Connection of air handling unit through EKEQ* and EKEXV* kit to outdoor unit
Pair combination only

3D084966

RXYQQ-U

VRV4-Q Heat Pump non-R410A DX indoor unit compatibility list

Type of indoor unit	Unified models	R22 models
Conceiled Ceiling	FXYBP*K7V19	FXYB*K*
	FXYSP*KA7V19	FXYS*K*
	FXYMP*KV19	FXYM*K*
Ceiling Mounted - 2way blow	FXYCP*K7V19	FXYC*K*
Ceiling Mounted - 4way blow	FXYFP*KB7V19	FXYF*K*
Ceiling Mounted - corner cassette	FXYKP*KV19	FXYK*K*
Ceiling Suspended	FXYHP*KVE9	FXYH*K*
Floor Standing	FXYL(M)P*KV19	FXYL(M)*K*
Wall Mounted	FXYAP*KV19	FXYA*K*

Remark
Restrictions towards indoor unit connection:
(1) Only possible to use VRV4-Q if all the indoor units are corresponding to one of the following model groups:
- All R410A DX models
- All Unified models : refer to the limited table above. For some models special setting is required. Please contact your dealer for more information.
- All R22 DX models only models → connection only allowed upon SPN request

(2) If the indoor units are non-R410A models, a special setting on the outdoor unit is required (explained in the installation manual)
(3) Combination of
- Unified models with R410A models is not allowed
- Unified models with R22 models is not allowed
- R410A models with R22 models is not allowed

(4) Replacement of non-R410A AHU systems is possible, only if below requirements are met:
- in case of an existing ERX* system
- if AHU coil and field piping can cope with a design pressure of 33bar
- replacement of control box (EKEQ*) and expansion valve kit (EKEXV*) to R410A type is done
- AHU-installation in pair (1 outdoor to 1 AHU) is used

(5) Limitations on use of DX indoor units with VRV4 -Q Heat Pump is subject to rules mentioned in 3D084965 and 3D084966.

3D085036

4 Combination table

4 - 1 Combination Table

RXYQQ-U
RXYQ-U
RYYQ-U
RYMQ-U

Heat pump VRV4
Multi-unit standard combinations table

		8HP	10HP	12HP	14HP	16HP	18HP	20HP
Heat pump	RXYQ8* / RYYQ8* / RXYQQ8*	1						
	RXYQ10* / RYYQ10* / RXYQQ10*		1					
	RXYQ12* / RYYQ12* / RXYQQ12*			1				
	RXYQ14* / RYYQ14* / RXYQQ14*				1			
	RXYQ16* / RYYQ16* / RXYQQ16*					1		
	RXYQ18* / RYYQ18* / RXYQQ18*						1	
	RXYQ20* / RYYQ20* / RXYQQ20*							1
Multi-combination with 2 outdoor units	RXYQ22* / RYYQ22* / RXYQQ22*		1	1				
	RXYQ24* / RYYQ24* / RXYQQ24*	1				1		
	RXYQ26* / RYYQ26* / RXYQQ26*			1	1			
	RXYQ28* / RYYQ28* / RXYQQ28*			1		1		
	RXYQ30* / RYYQ30* / RXYQQ30*			1			1	
	RXYQ32* / RYYQ32* / RXYQQ32*					2		
	RXYQ34* / RYYQ34* / RXYQQ34*					1	1	
	RXYQ36* / RYYQ36* / RXYQQ36*					1		1
Multi-combination with 3 outdoor units	RXYQ38* / RYYQ38* / RXYQQ38*	1	1					1
	RXYQ40* / RYYQ40* / RXYQQ40*		1	1			1	
	RXYQ42* / RYYQ42* / RXYQQ42*		1			2		
	RXYQ44* / RYYQ44*			1		2		
	RXYQ46* / RYYQ46*				1	2		
	RXYQ48* / RYYQ48*					3		
	RXYQ50* / RYYQ50*					2	1	
	RXYQ52* / RYYQ52*					1	2	
	RXYQ54* / RYYQ54*						3	

Remark
RYYQ8~20 = Single continuous heating
RYYQ22~54 Multi continuous heating
RXYQ8~20 = Single non-continuous heating
RXYQ22~54 Multi non-continuous heating
RXYQQ8~20 Single non-continuous heating replacement (VRV4-Q)
RXYQQ22~4 Multi non-continuous heating replacement (VRV4-Q)

1) For single unit installation RYYQ* units (continuous heating) and RXYQ* units (non-continuous heating)
2) "Non-continuous heating" multi-outdoor-unit combinations consist of RXYQ8~20 units (e.g. RXYQ36*=RXYQ16*+RXYQ20*).
3) "Continuous heating" multi-outdoor-unit combinations consist of RYMQ8~20 units (e.g. RYYQ36*=RYMQ16*+RYMQ20*).
→ RYMQ* units can only be used in multi-outdoor-unit combinations and cannot be used as standalone units.
4) RYYQ8~20* units cannot be used in multi-outdoor-unit combinations.
5) RYYQ8~20 "Continuous heating" multi-outdoor-unit combinations cannot contain RXYQ* units.
6) RXYQ8~20 "Non-continuous heating" multi-outdoor-unit combinations cannot contain RYMQ* units.
7) Multi "non-continuous heating" replacement models only consist of RXYQQ8-20 modules (e.g. RXYQQ36*=RXYQQ16*+RXYQQ20*).
8) Replacement units cannot be combined with other units.
9) T-series outdoor units and U-series outdoor units cannot share the same refrigerant circuit. When combining these units, make sure they are part of separate refrigerant circuits.

3D120060

REMQ5U
REYQ8-20U
RXYQQ8-20U
RXYTQ8-16UYF
RYYQ8-20U
RYMQ8-20U

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 andFXAQ15A 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.

3D104665

5 Capacity tables

5 - 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

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQQ-U
RXYQ-U
RYYQ-U
RYMQ-U

VRV4
Heat pump
Integrated heating capacity coefficient

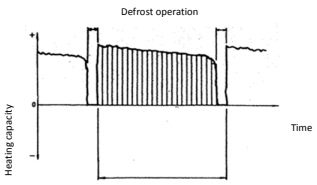
The heating capacity tables do not take into account the capacity reduction in case of frost accumulation or defrost operation.
The capacity values that take these factors into account, or in other words, the integrated heating capacity values, can be calculated as follows:

Formula

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

Inlet air temperature of heat exchanger

[°CDB/°CWB]	-7/-7,6 or less	-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
18HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00
20HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00
22HP	0,95	0,92	0,87	0,77	0,78	0,86	1,00
24HP	0,95	0,92	0,87	0,75	0,76	0,85	1,00
26HP	0,95	0,92	0,86	0,73	0,74	0,84	1,00
28HP	0,95	0,92	0,86	0,73	0,74	0,84	1,00
30HP	0,95	0,93	0,87	0,80	0,81	0,88	1,00
32HP	0,95	0,92	0,86	0,71	0,72	0,83	1,00
34HP	0,95	0,92	0,87	0,78	0,79	0,87	1,00
36HP	0,95	0,92	0,87	0,78	0,79	0,87	1,00
38HP	0,95	0,93	0,88	0,83	0,84	0,89	1,00
40HP	0,95	0,93	0,87	0,80	0,81	0,88	1,00
42HP	0,95	0,92	0,86	0,73	0,74	0,84	1,00
44HP	0,95	0,92	0,86	0,72	0,73	0,84	1,00
46HP	0,95	0,92	0,86	0,72	0,72	0,83	1,00
48HP	0,95	0,92	0,86	0,71	0,72	0,83	1,00
50HP	0,95	0,92	0,87	0,76	0,77	0,86	1,00
52HP	0,95	0,93	0,87	0,80	0,81	0,88	1,00
54HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00



Notes

The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).

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.

The multi-combination data 22~54HP corresponds with the standard multi-combination of drawing 3D079534.

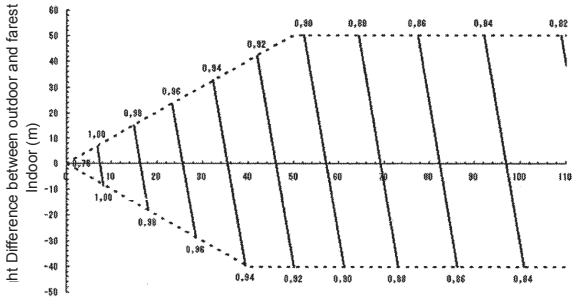
3D079898A

5 Capacity tables

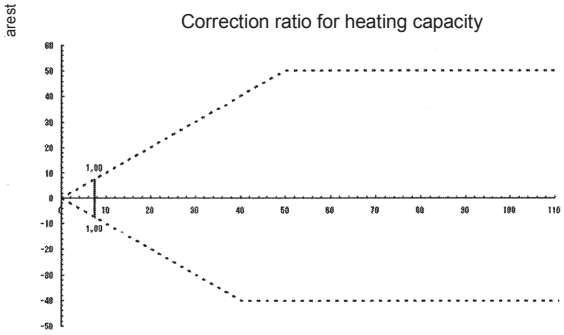
5 - 2 Capacity Correction Factor

RXYQQ8U
RXYQ8U
RYYQ8U
RYMQ8U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.

2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.

3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
8HP	22.2	12.7

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for deicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
8HP	19.1	9.5

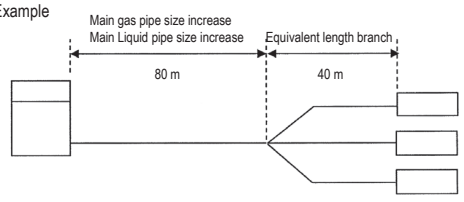
6. Equivalent length used in the above figures is based upon the following equivalent length

Equivalent piping length	=	
Equivalent length of main pipe	x	Correction factor
+		
Equivalent length of branch pipes		

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rete of change in cooling capacity when height difference = 0 is thus approximately 0.86
   heating capacity when height difference = 0 is thus approximately 1.0

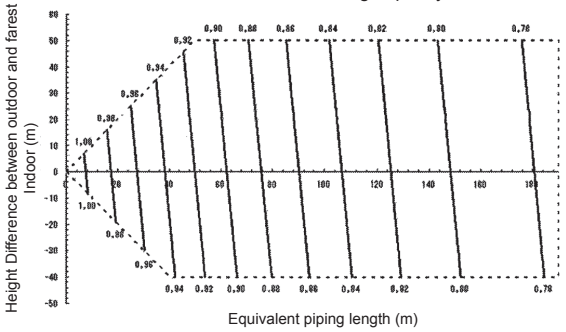
3D079897A

5 Capacity tables

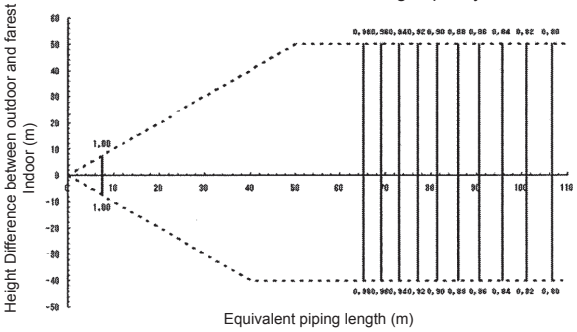
5 - 2 Capacity Correction Factor

RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.

2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.

3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
RXYQ10P	25.4*	12.7

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
10 HP	22.2	9.5

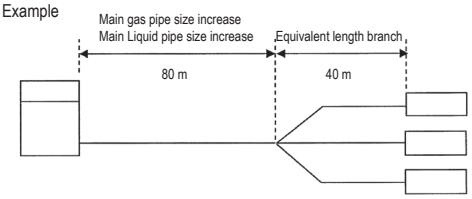
6. Equivalent length used in the above figures is based upon the following equivalent length

Equivalent piping length	=	
Equivalent length of main pipe	x	Correction factor
+		
Equivalent length of branch pipes		

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rete of change in cooling capacity when height difference = 0 is thus approximately 0.87
   heating capacity when height difference = 0 is thus approximately 0.90

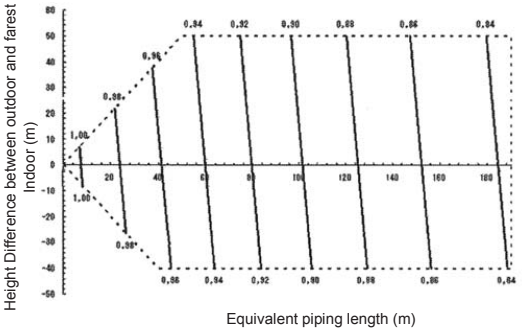
3D079897A

5 Capacity tables

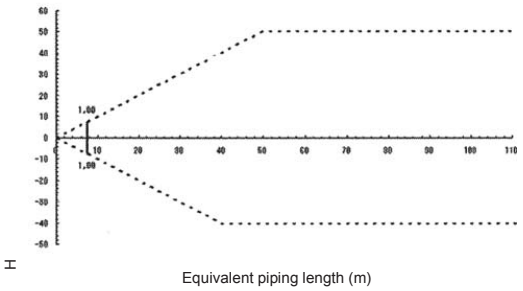
5 - 2 Capacity Correction Factor

RXYQQ12,14,16,24,36U
RXYQ12,14,24,36U
RYYQ12,14,24,36U
RYMQ12,14U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
12 HP	28.6	15.9
14 HP	28.6	15.9
24 HP	34.9	19.1
36 HP	41.3	22.2

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
12 HP	28.6	12.7
14 HP	28.6	12.7
24 HP	34.9	15.9
36 HP	41.3	19.1

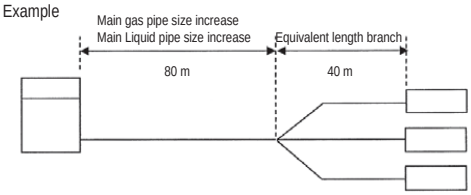
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	
Heating (liquid pipe)	1,0	0,5

   Example



   In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.89
   heating capacity when height difference = 0 is thus approximately 1.0

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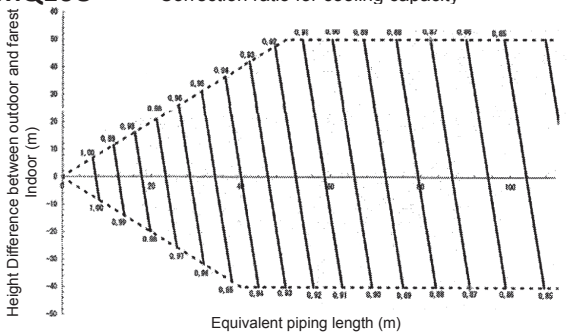
5 Capacity tables

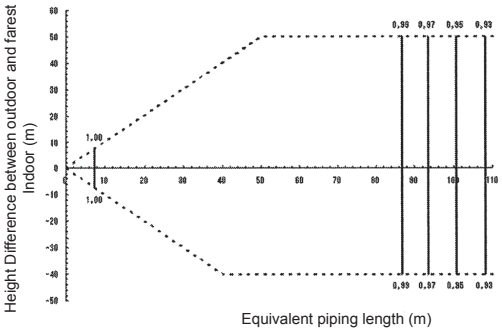
5 - 2 Capacity Correction Factor

RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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
4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
16 HP	31.8*	15.9

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
16 HP	28.6	12.7

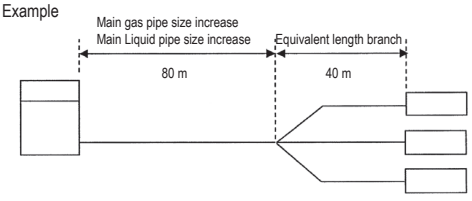
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



   In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 0.99

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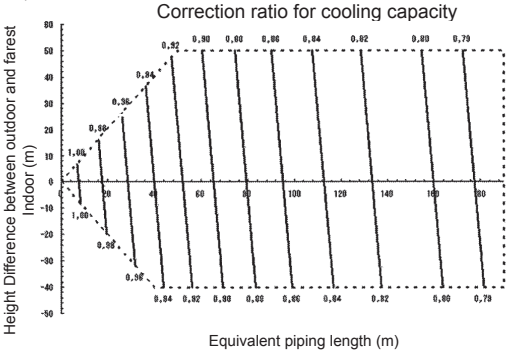
5 Capacity tables

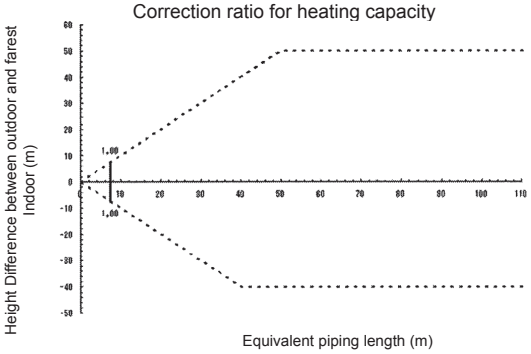
5 - 2 Capacity Correction Factor

RXYQQ18,26,28,30,38,40,42,44U
RXYQ18,26,28,30,38,40,42,44U
RYYQ18,26,28,30,38,40,42,44U
RYMQ18U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
18 HP	31.8*	19.1
26~30 HP	38.1*	22.2
38~44 HP	41.3	22.2

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
18 HP	28.6	15.9
26~30 HP	34.9	19.1
38~44 HP	41.3	19.1

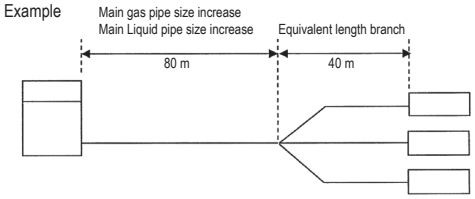
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

Example



In the above case (for RXYQ38-44) (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m

The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83
heating capacity when height difference = 0 is thus approximately 1.0

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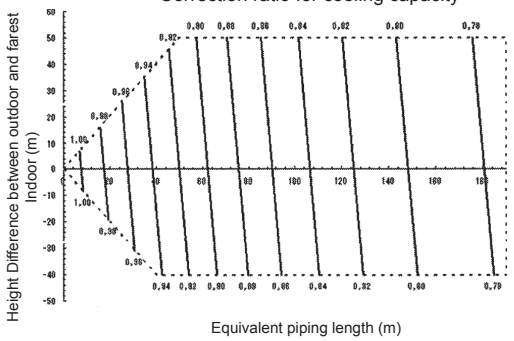
5 Capacity tables

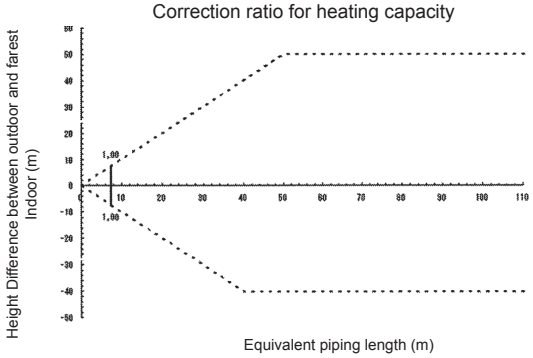
5 - 2 Capacity Correction Factor

RXYQQ20,32,34U
RXYQ20,32,34U
RYYQ20,32,34U
RYMQ20,32,34U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

1. These figures illustrate the correction ratio for piping length in capacity 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, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
20 HP	31.8*	19.1
32/34 HP	38.1*	22.2

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
20 HP	28.6	15.9
32/34 HP	34.9	19.1

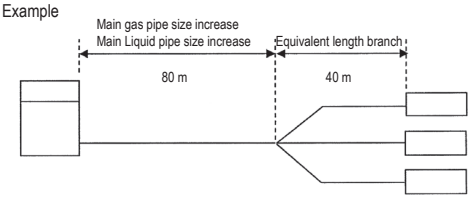
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 1.0

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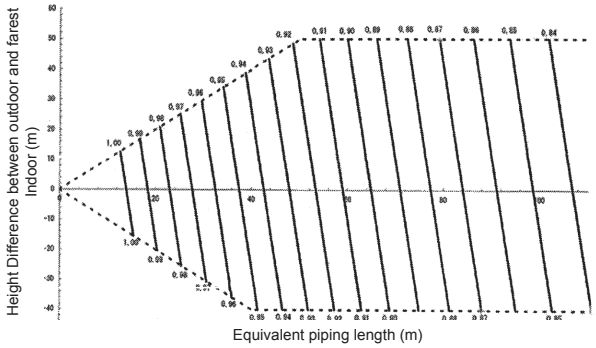
5 Capacity tables

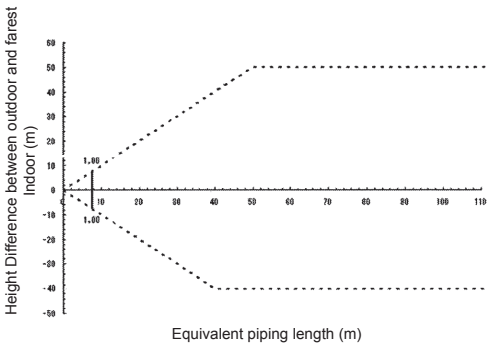
5 - 2 Capacity Correction Factor

RXYQQ22U
RXYQ22U
RYYQ22U
RYMQ22U

Correction ratio for cooling capacity



Correction ratio for heating capacity



NOTES

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3. 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 smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 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

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
22 HP	31.8*	19.1

   * If not available on site, do not increase, if not increased, no correction factor should be applied to the equivalent length (see note 6).

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
22 HP	28.6	15.9

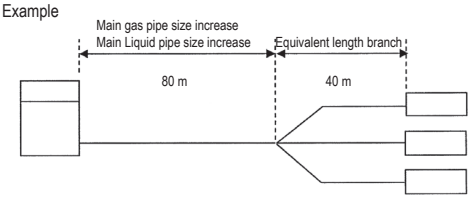
6. Equivalent length used in the above figures is based upon the following equivalent length

   Overal equivalent length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example

   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 1.0

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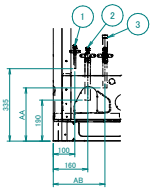
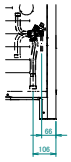
6 Dimensional drawings

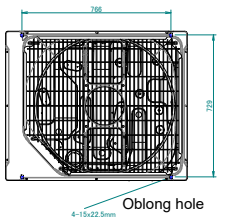
6 - 1 Dimensional Drawings

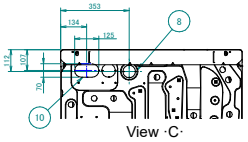
REMQ5U
REYQ8-12U
RXYQQ8-12U
RXYQ8-12U
RYMQ8-12U
RXYTQ8-UYF
RYYQ8-12U

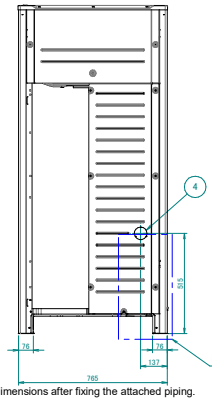


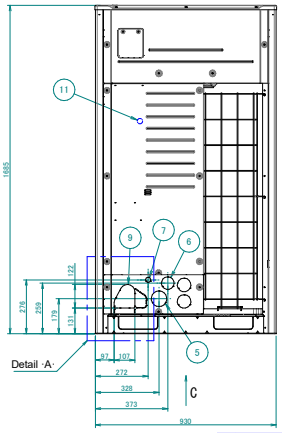


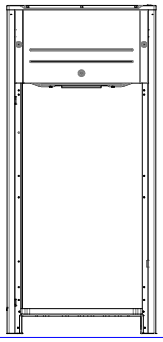
Pitch of foundation bolt holes











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

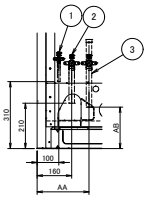
REMQ5U, REYQ8-12U	: Ø ·19.1· brazing connection

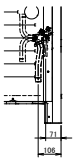
Model	AA	AB
RYYQ8-12U, RXYQ8-12U, RXYQQ8-12U, RXYTQ8U	–	–
REMQ5U, RYMQ8-12U, REYQ8-12U	246	240

No.	Part name	
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

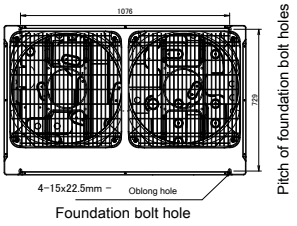
2D119001

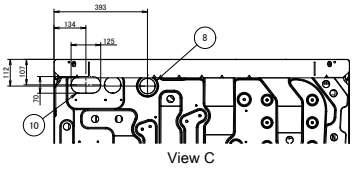
REYQ14-20U
RXYQQ14-20U
RXYQ14-20U
RXYTQ10-16U
RYYQ14-20U
RYMQ14-20U

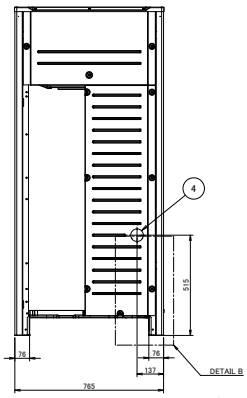


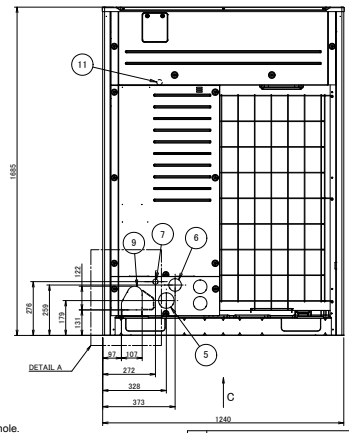


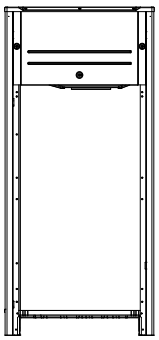
Pitch of foundation bolt holes











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

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

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.

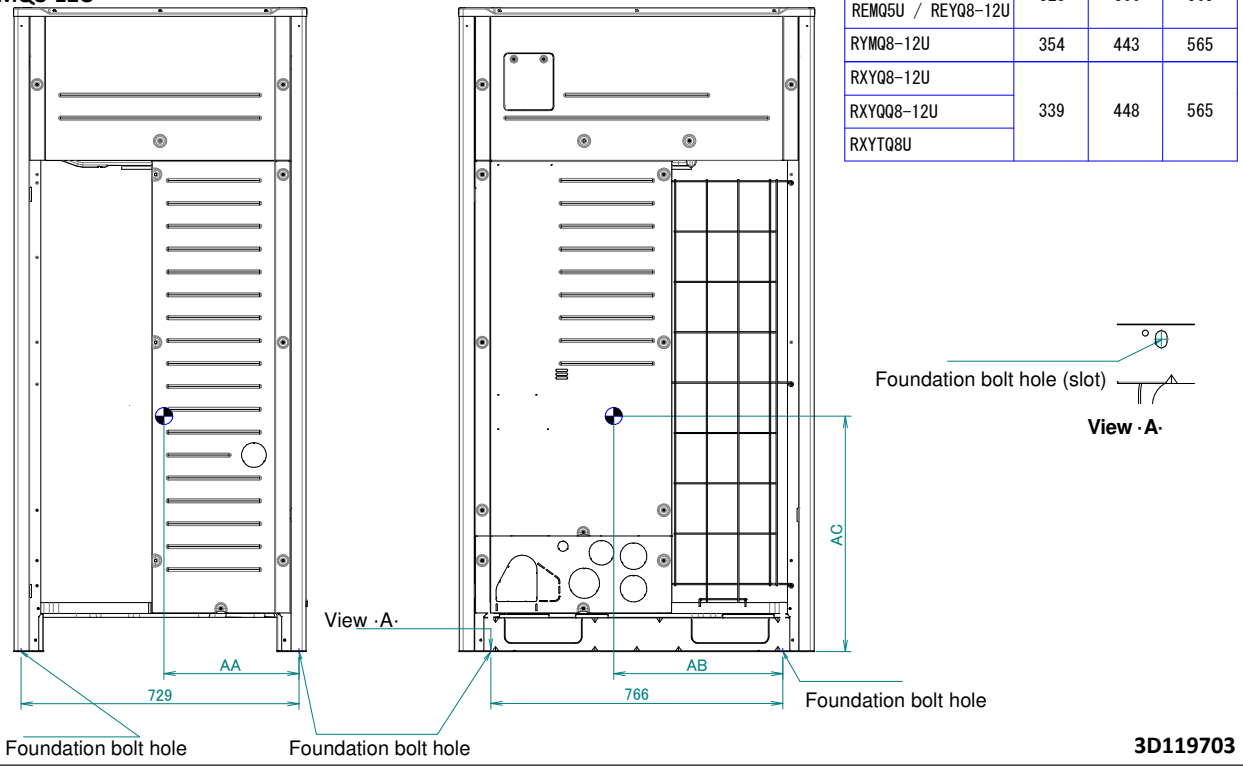
2D119091

7 Centre of gravity

7 - 1 Centre of Gravity

RXYQQ8-12U
RXYQ8-12U
RXYTQ8U
RYYQ8-12U
RYMQ8-12U

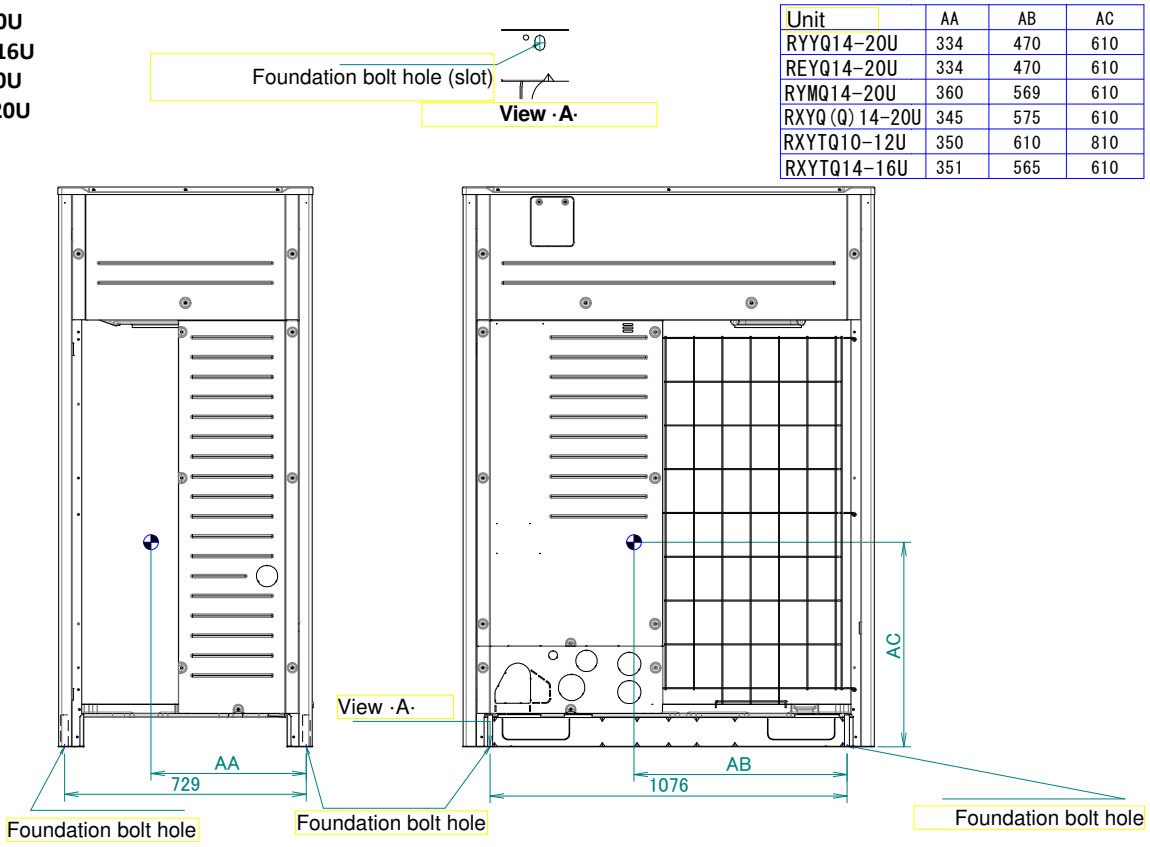
Unit	AA	AB	AC
RYYQ8-12U REMQ5U / REYQ8-12U	328	366	565
RYMQ8-12U	354	443	565
RXYQ8-12U RXYQQ8-12U RXYTQ8U	339	448	565



3D119703

RXYQQ14-20U
RXYQ14-20U
RXYTQ10-16U
RYYQ14-20U
RYMQ14-20U

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

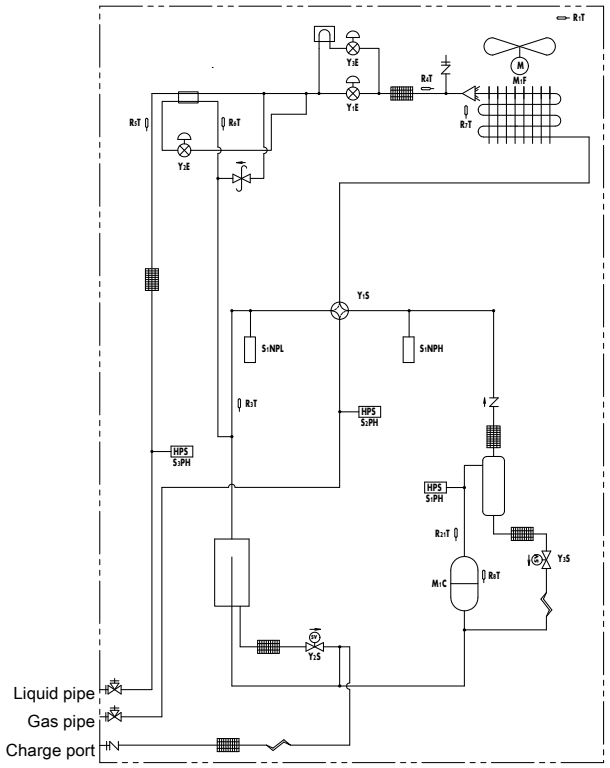


3D119704

8 Piping diagrams

8 - 1 Piping Diagrams

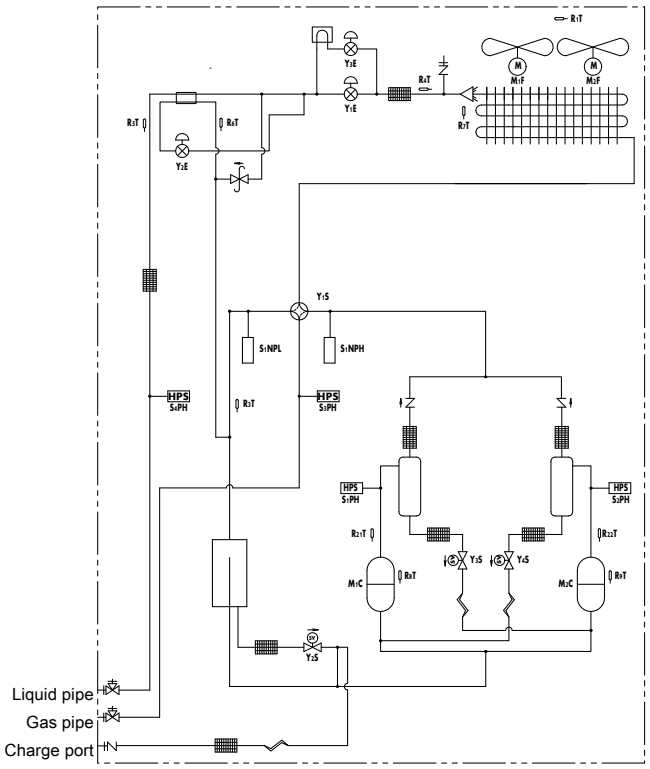
RXYQQ8-12U



- 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

3D118181

RXYQQ14-20U



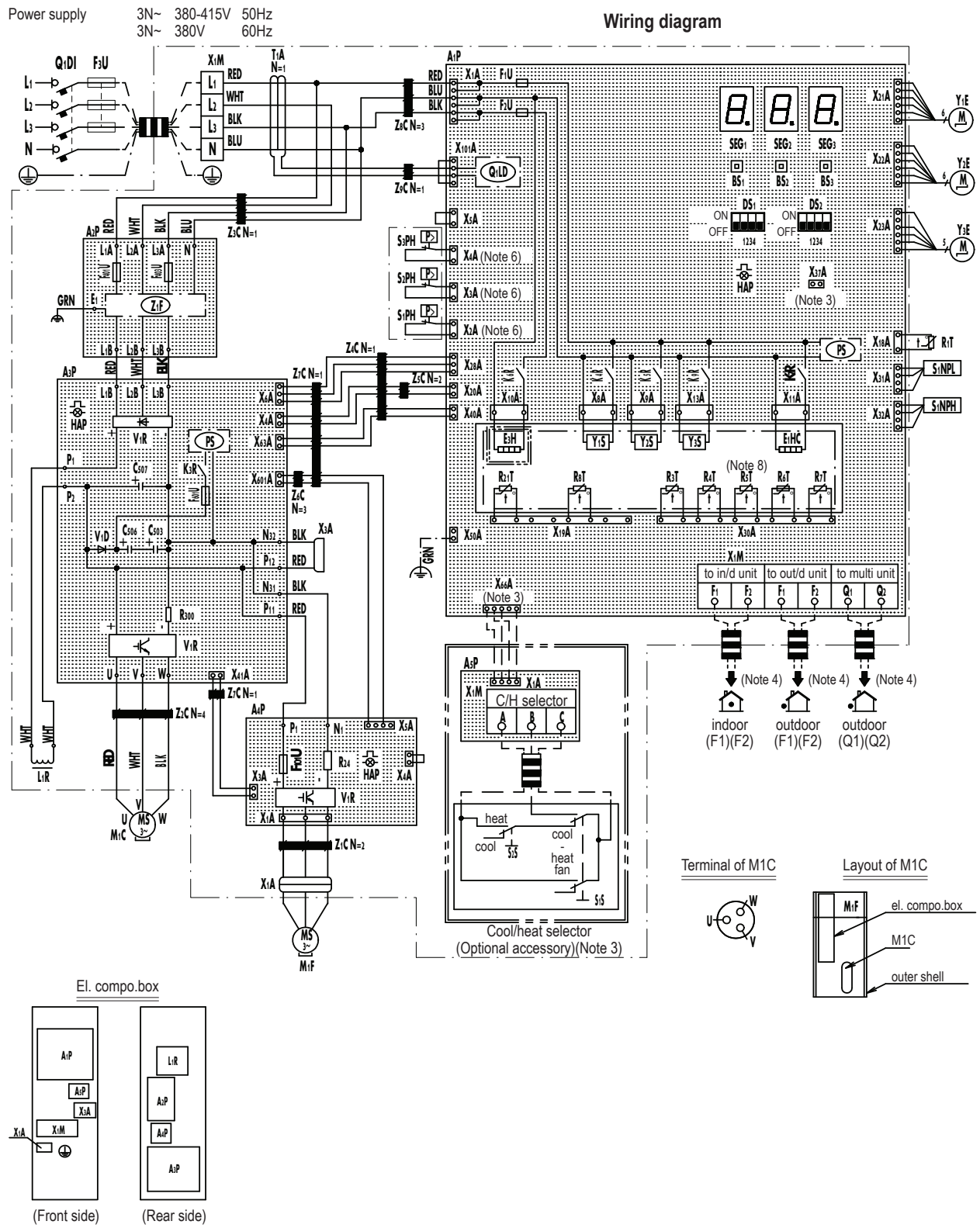
- Charge port / Service port
- Stop valve
- Filter
- Check valve
- Pressure relief valve
- Heat sink
- Thermistor (PCB)
- Capillary tube
- Expansion valve
- 4-way valve
- Propeller fan
- High pressure switch
- Low pressure sensor
- High pressure sensor
- Accumulator
- Heat exchanger
- Compressor
- Oil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

3D118182

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ8-12U



2D117535

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ8-12U

A1P	Printed Circuit Board (Main)
A2P	Printed Circuit Board (Noise Filter)
A3P	Printed Circuit Board (Inv)
A4P	Printed Circuit Board (Fan)
A5P	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
E3H	Drainpan Heater (Option)
F1U,F2U (A1P)	Fuse (T,3,15A,250V)
F3U	Field Fuse
F101U (A4P)	Fuse
F401U,F403U (A2P)	Fuse
F601U (A3P)	Fuse
HAP (A1P,A3P, A4P)	Pilotlamp (Service Monitor-Green)
K3R (A3P)	Magnetic Relay
K4R (A1P)	Magnetic Relay (Y1S)
K5R (A1P)	Magnetic Relay (Y2S)
K6R (A1P)	Magnetic Relay (E3H)
K7R (A1P)	Magnetic Relay (E1HC)
K9R (A1P)	Magnetic Relay (Y3S)
L1R	Reactor
M1C	Motor (Compressor)
M1F	Motor (Fan)
PS (A1P,A3P)	Switching Power Supply
Q1DI	Field Earth Leakage Breaker
Q1LD (A1P)	Field Earth Current Detector
R24 (A4P)	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 (Disch)
S2PH	Pressure Switch (Gas)
S3PH	Pressure Switch (Liquid)
SEG1~SEG3 (A1P)	7-Segment Display
T1A	Current Sensor
V1D (A3P)	Diode
V1R (A3P,A4P)	Power Module
X*A	Connector
X1M (A1P)	Terminal Block (Control)
X1M (A5P)	Terminal Block (Power Supply)(Option)
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	
X10A	Connector (Drainpan Heater)
X37A	Connector (Power Adapter)
X66A	Connector (Remote Switching Cool/Heat Selector)

NOTES

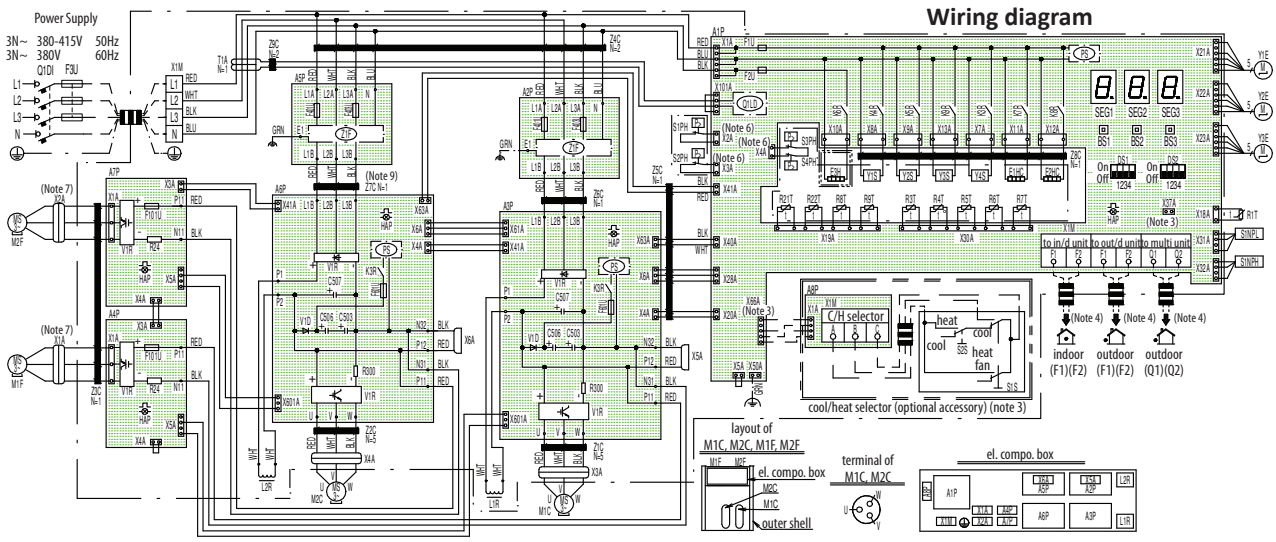
1. This wiring diagram applies only to the outdoor unit.
2. :field wiring, : terminal block, : connector, : terminal, : protective earth (screw), : functional earth, : earth wiring, : field supply, : PCB, : switch box, : option
3. When using the optional adapter, refer to the installation manual of the 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,S3PH).
7. Colors: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

2D117535

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ14-20U



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
E1HC, E2HC	Crankcase heater
E3H	Drainpan heater (option)
F1U, F2U (A1P)	Fuse (T, 3.15A, 250V)
F3U	Field fuse
F101U (A4P, A7P)	Fuse
F101U, 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)
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)
S3PH	Pressure switch (gas)
S4PH	Pressure switch (liquid)
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)
Y1S	Solenoid valve (main)
Y2S	Solenoid valve (accumulator oil return)
Y3S	Solenoid valve (oil1)
Y4S	Solenoid valve (oil2)
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, ⊏o o⊐: connector, -○-: connection, ⏚: protective earth (screw), ⏚: noiseless earth, ——⏚——: earth wiring, — — —: field supply, ▭: PCB, ⊏ ⊐: switch box, ⊏ ⊐: options
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, S3PH, S4PH)
7. Connector X1A (M1F) is red, connector X2A (M2F) is white.
8. Colors: BLK: black, RED: red, BLU: blue, WHT: white, GRN: green.
9. Only for 14,16 class.

2D117537C

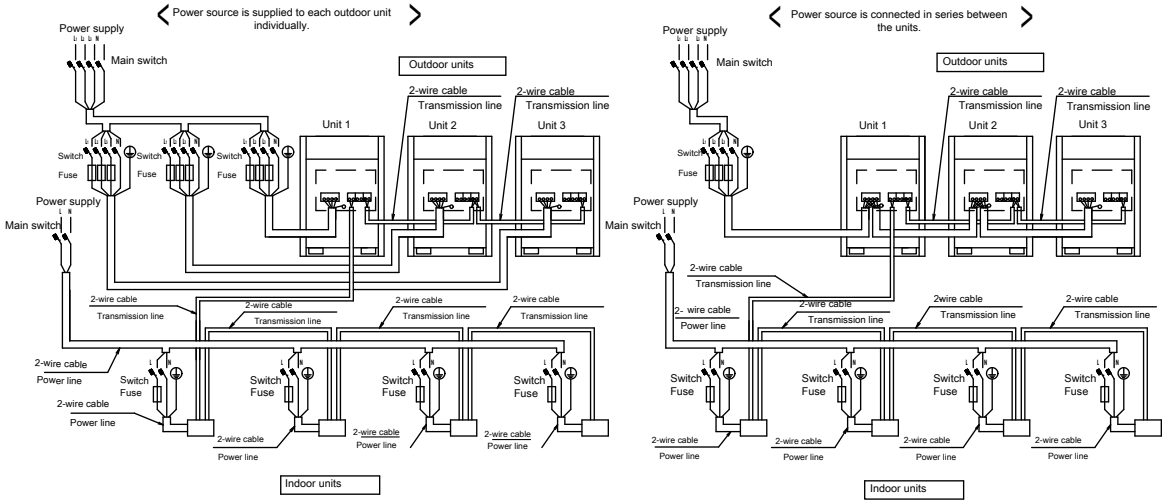
10 External connection diagrams

10 - 1 External Connection Diagrams

RXYQQ8-20U
RXYQ8-20U
RXYTQ8-16UYF
RYYQ8-20U
RYMQ8-20U

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.

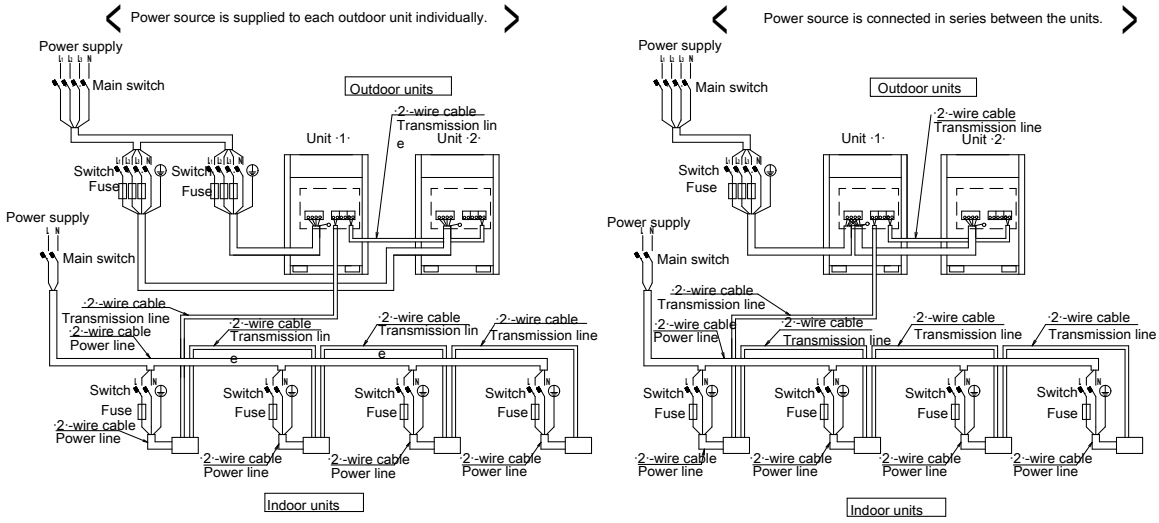


3D119200

RXYQQ8-20U
RXYQ8-20U
RXYTQ8-16U
RYYQ8-20U
RYMQ8-26U

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.

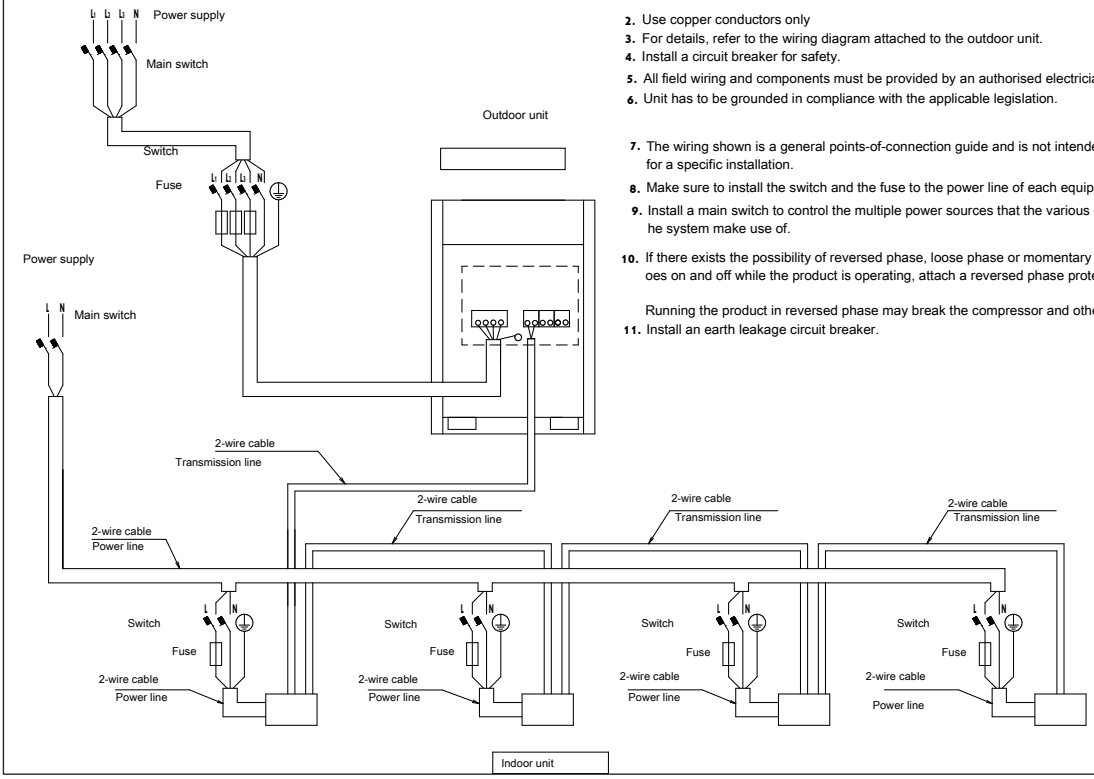


3D119316

10 External connection diagrams

10 - 1 External Connection Diagrams

RXYQQ8-20U
RXYQ8-20U
RYYQ8-20U
RYMQ8-20U
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.

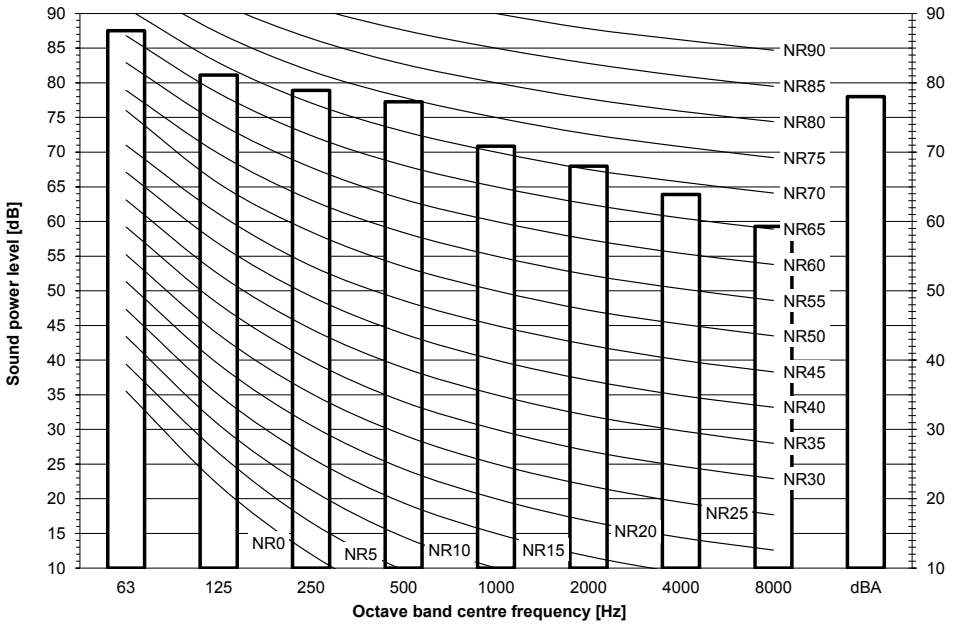
    Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.

3D119317

11 Sound data

11 - 1 Sound Power Spectrum

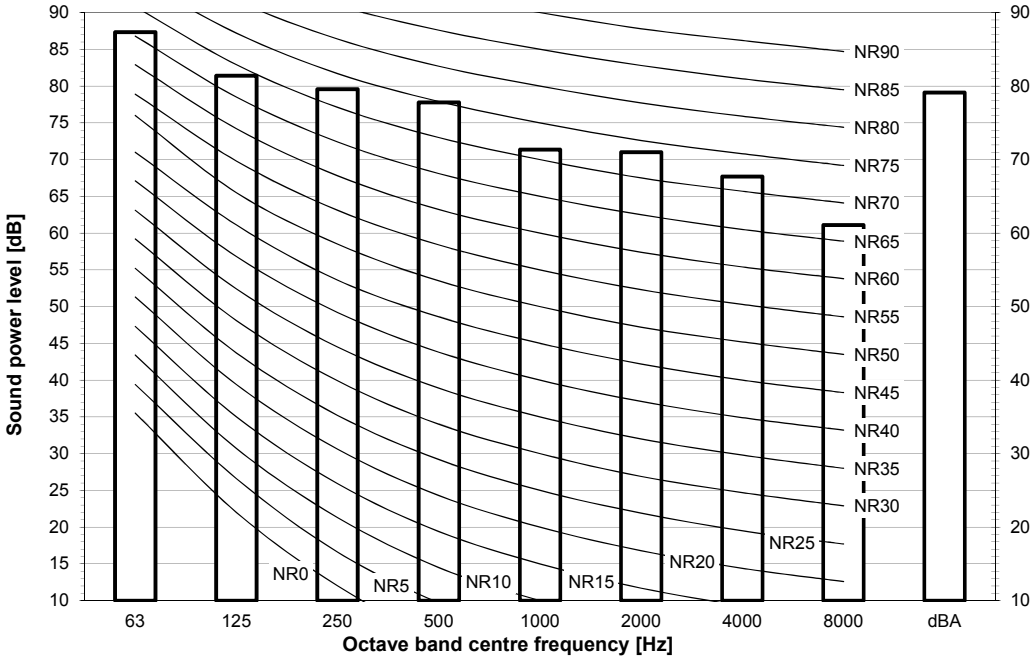
REMQ5U
REYQ8U
RXYQQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U



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

REYQ10U
RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



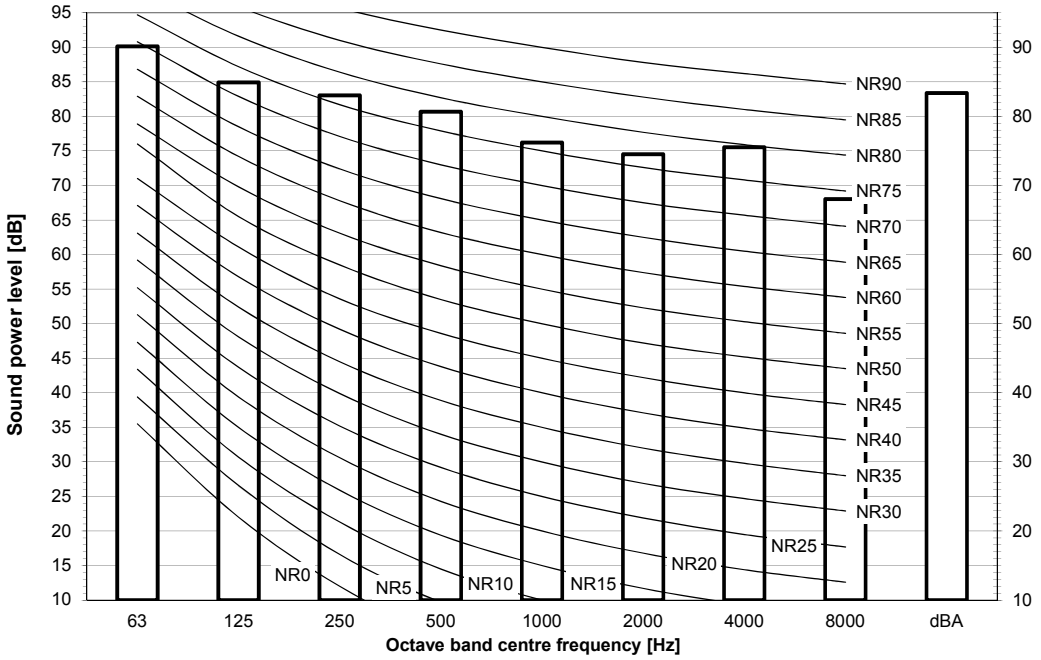
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119529

11 Sound data

11 - 1 Sound Power Spectrum

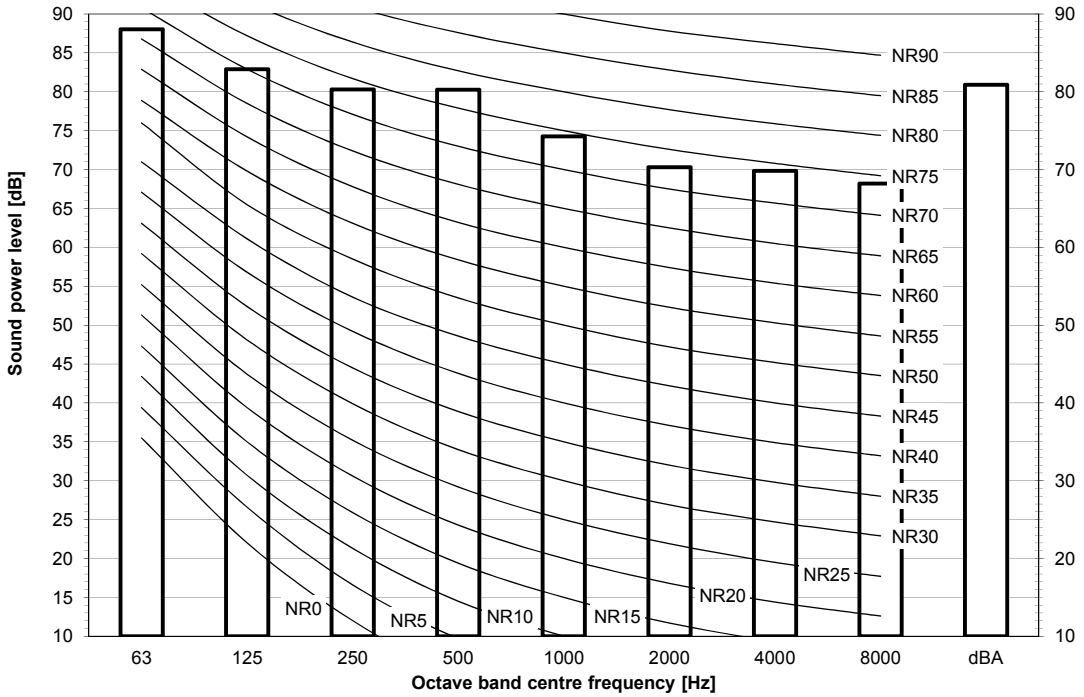
REYQ12U
RXYQQ12U
RXYQ12U
RYYQ12U
RYMQ12U



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

3D119530

REYQ14U
RXYQQ14U
RXYQ14U
RYYQ14U
RYMQ14U



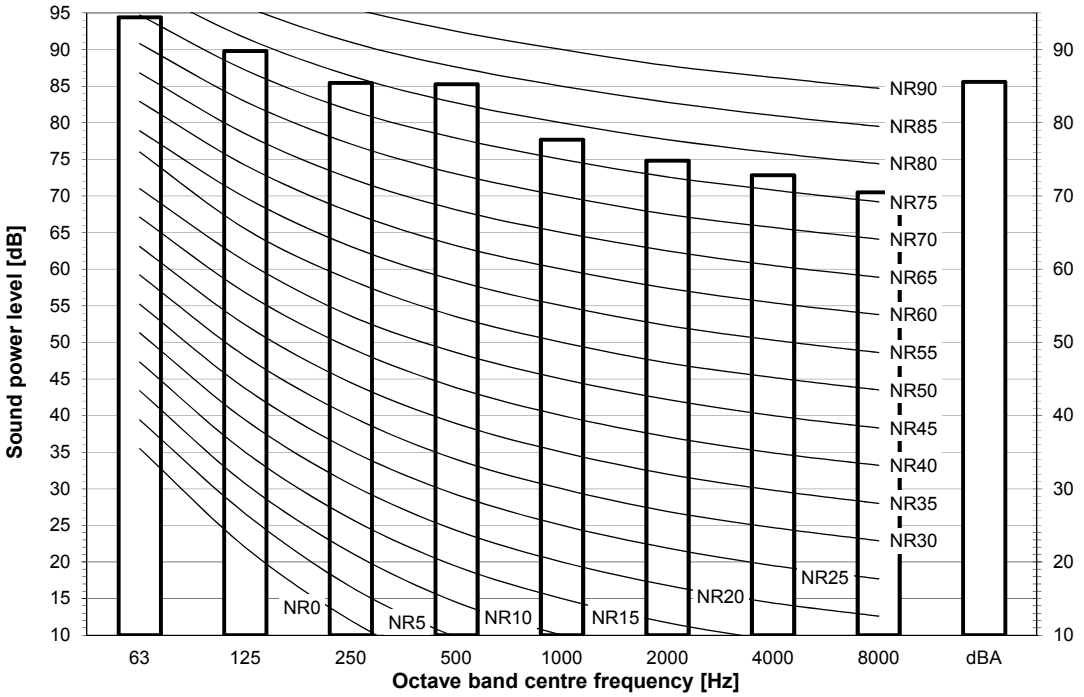
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119531

11 Sound data

11 - 1 Sound Power Spectrum

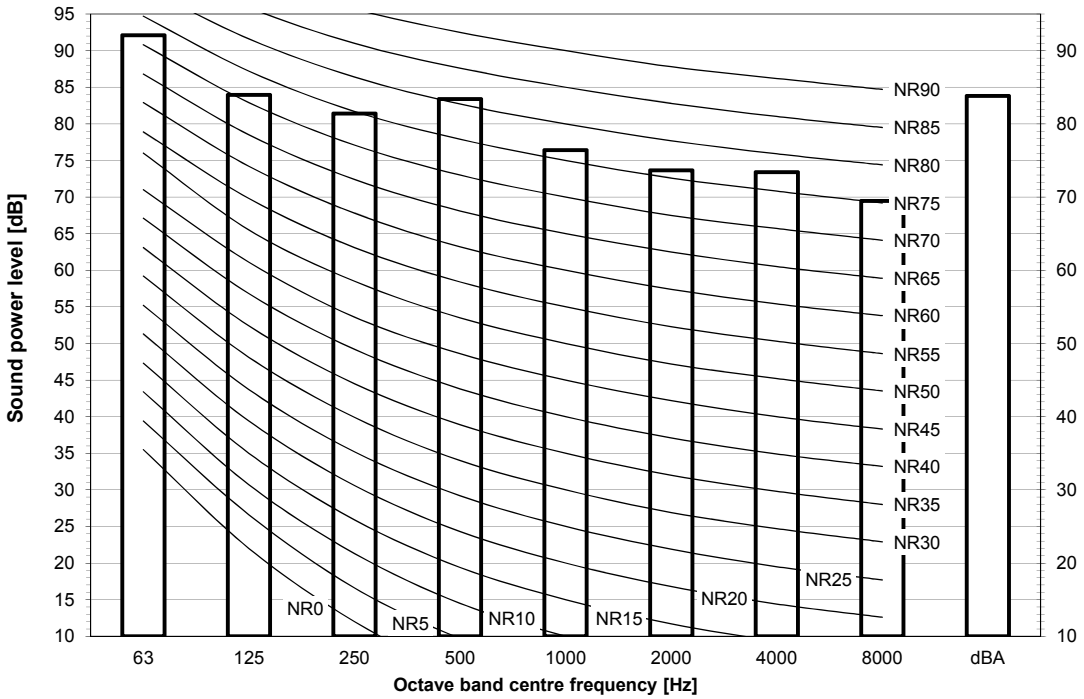
REYQ16U
RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U



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

3D119532

REYQ18U
RXYQQ18U
RXYQ18U
RYYQ18U
RYMQ18U



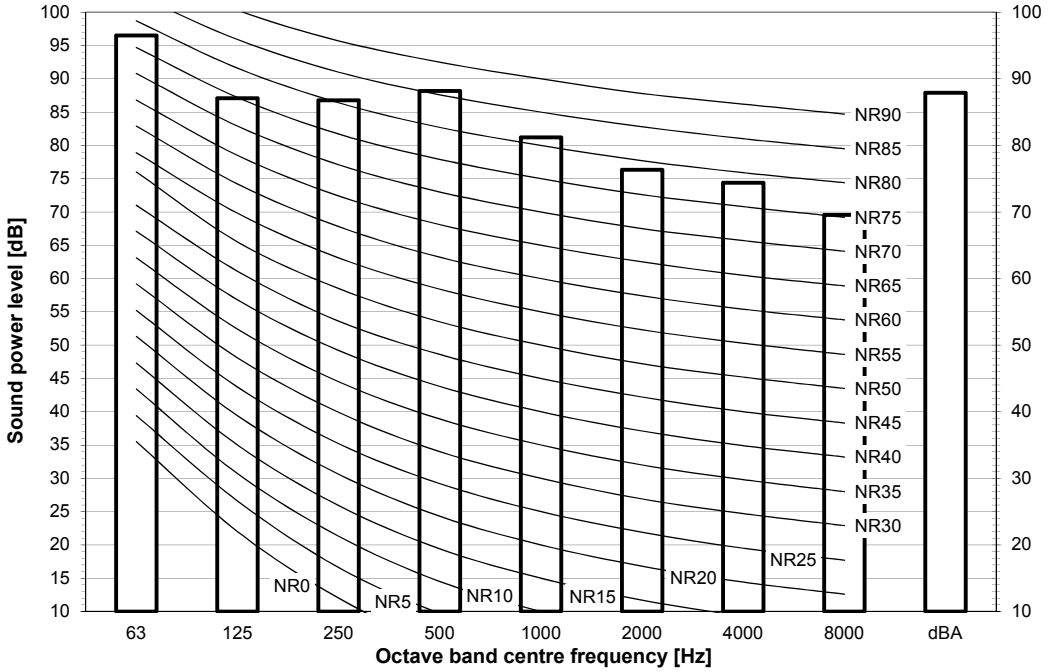
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119533

11 Sound data

11 - 1 Sound Power Spectrum

REYQ20U
RXYQQ20U
RXYQ20U
RYYQ20U
RYMQ20U



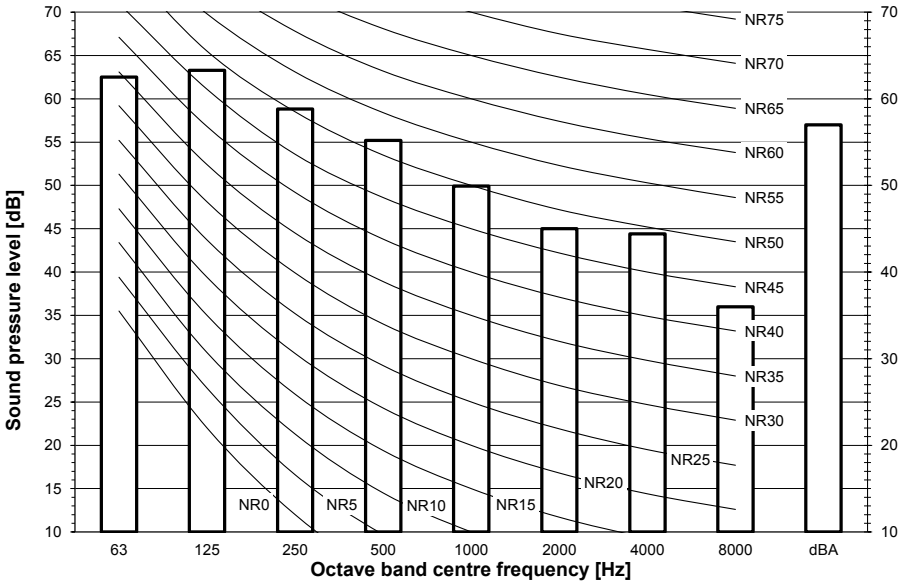
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6µW/m²
Measured according to ISO 3744

3D119534

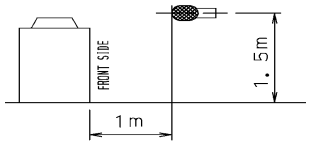
11 Sound data

11 - 2 Sound Pressure Spectrum

REMQ5U
REYQ8U
RXYQQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U

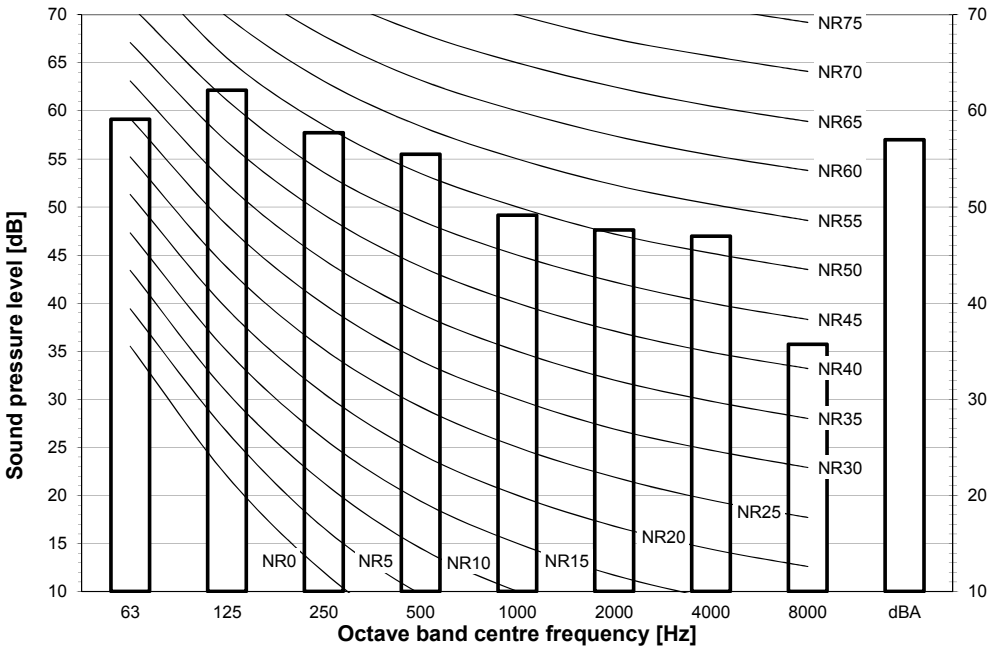


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

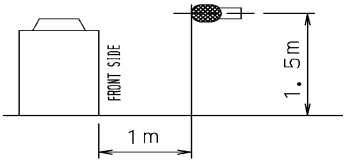


3D119521

REYQ10U
RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



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

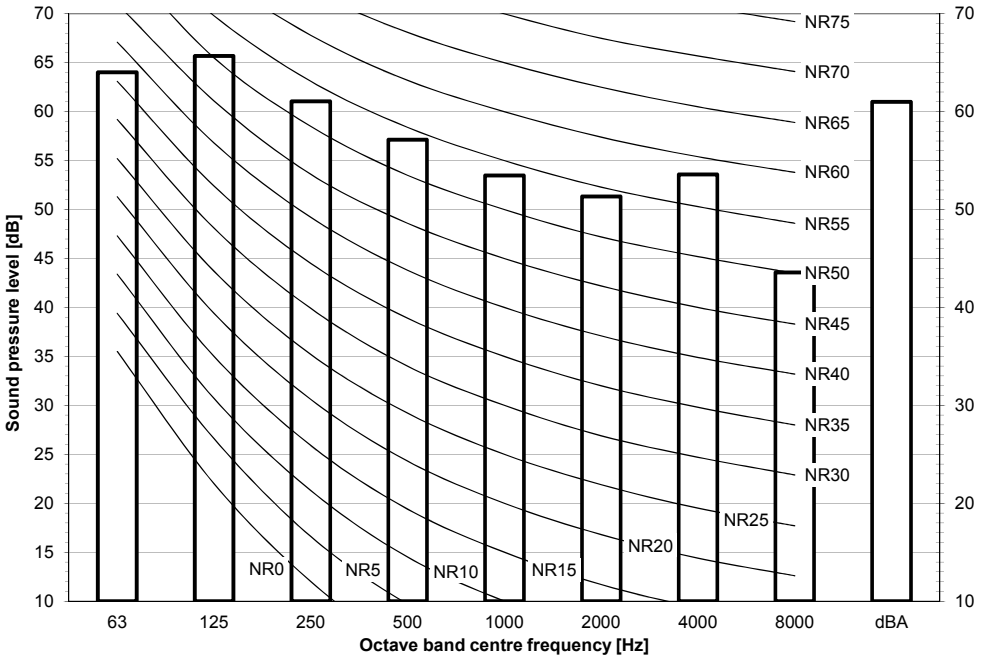


3D119522

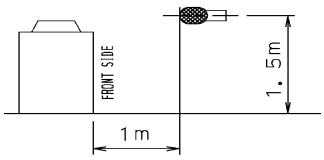
11 Sound data

11 - 2 Sound Pressure Spectrum

REYQ12U
RXYQQ12U
RXYQ12U
RYYQ12U
RYMQ12U

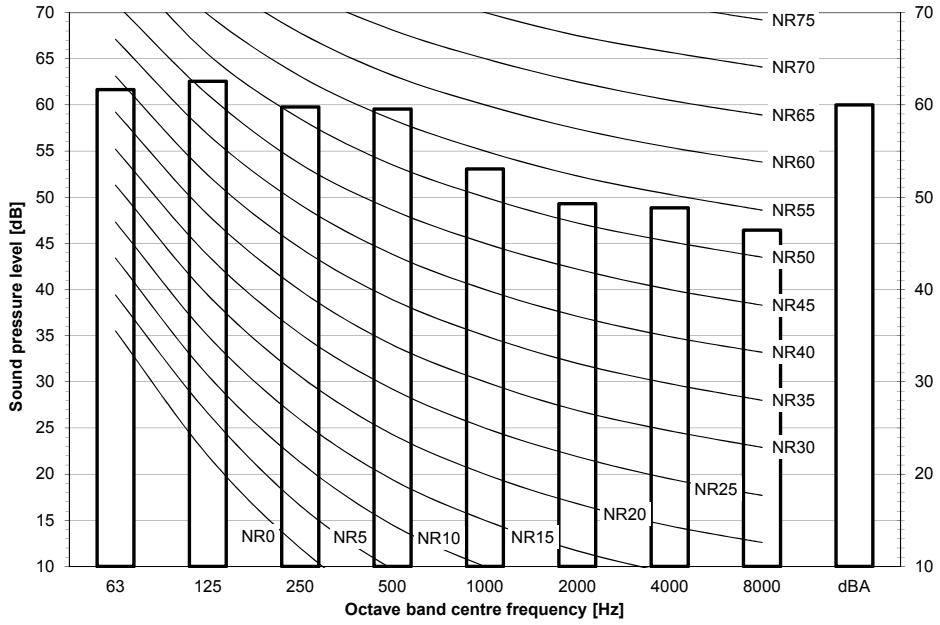


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

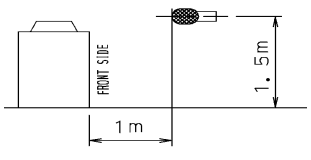


3D119523

REYQ14U
RXYQQ14U
RXYQ14U
RYYQ14U
RYMQ14U



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

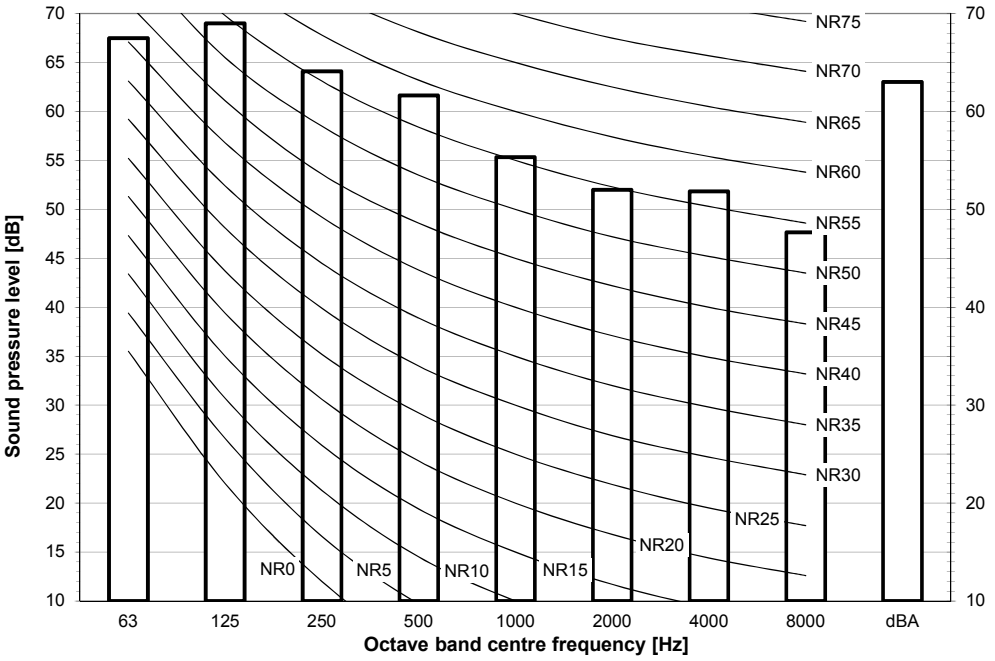


3D119524

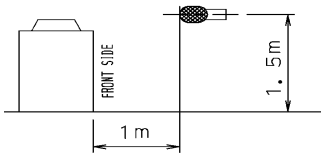
11 Sound data

11 - 2 Sound Pressure Spectrum

REYQ16U
RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U

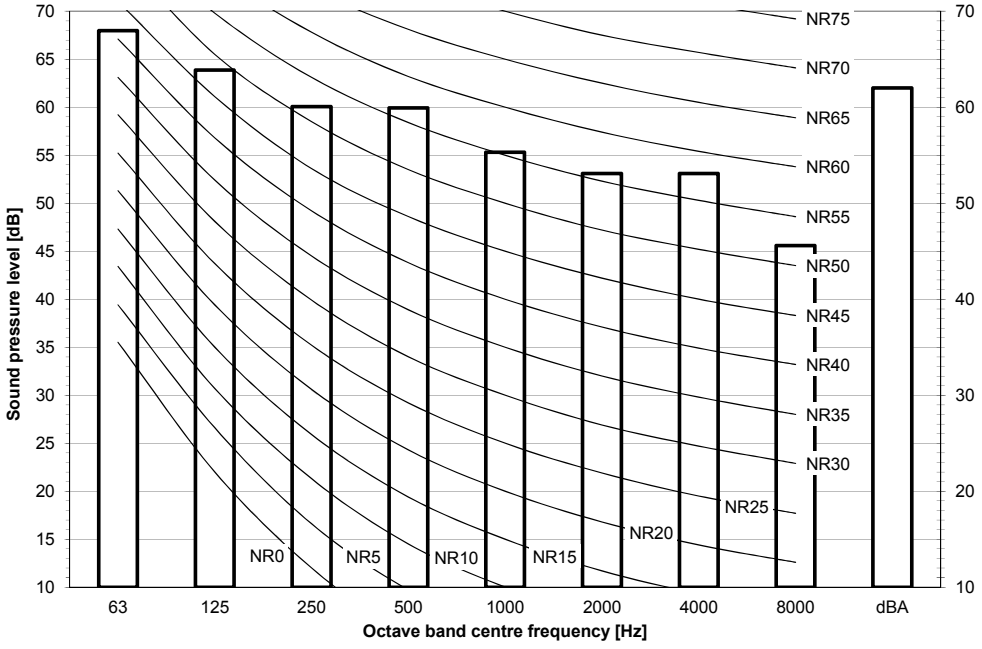


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa

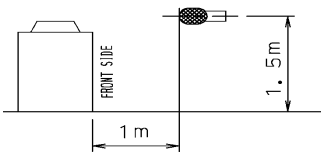


3D119525

REYQ18U
RXYQQ18U
RXYQ18U
RYYQ18U
RYMQ18U



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

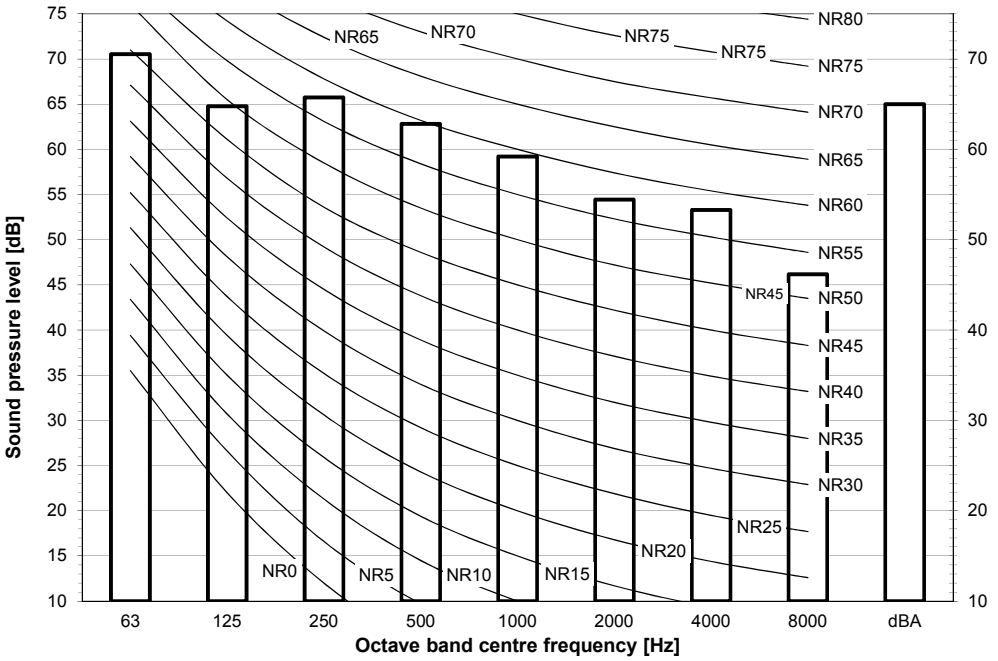


3D119526

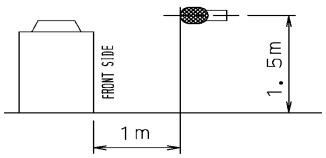
11 Sound data

11 - 2 Sound Pressure Spectrum

REYQ20U
RXYQQ20U
RXYQ20U
RYYQ20U
RYMQ20U



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

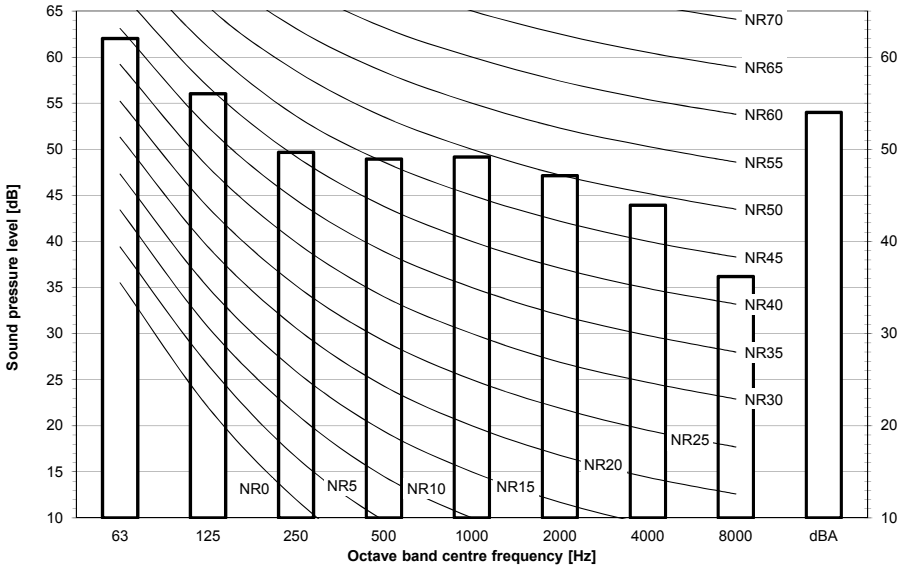


3D119527

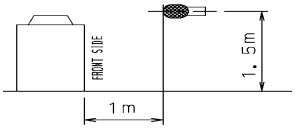
11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

REMQ5U
REYQ8-12U
RXYQQ8-12U
RXYQ8-12U
RXYTQ8UYF
RYY8-12U
RYMQ8-12U

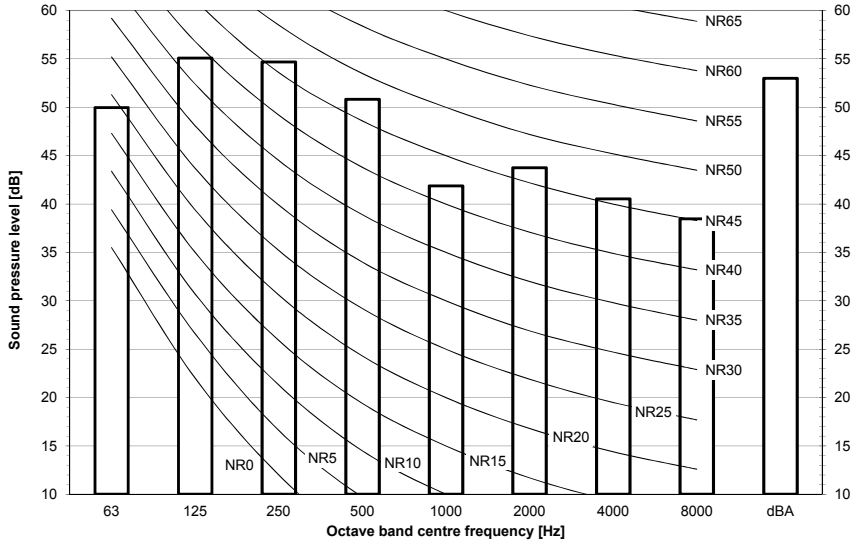


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

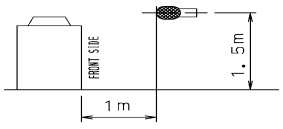


3D119535

REYQ14-16U
RXYQQ14-16U
RXYQ14-16U
RXYTQ14-16UYF
RYYQ14-16U
RYMQ14-16U



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)

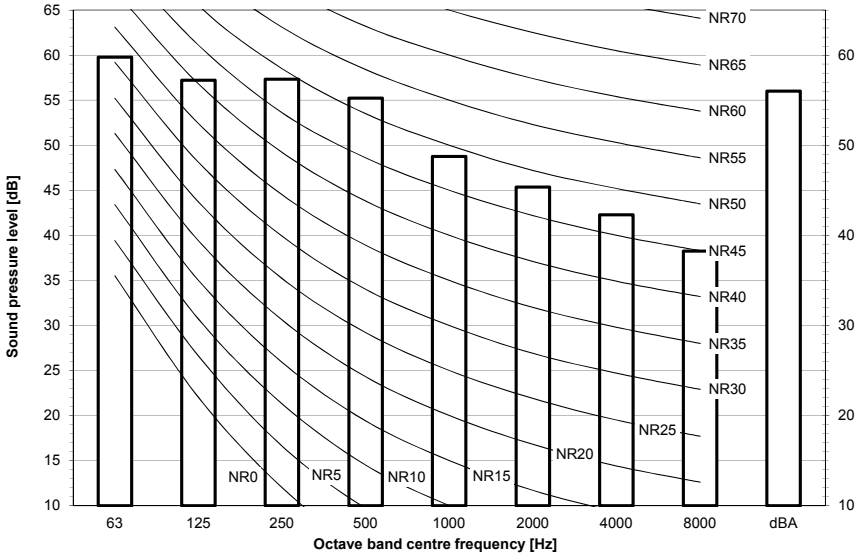


3D119538

11 Sound data

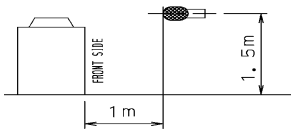
11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

REYQ18-20U
RXYQQ18-20U
RXYQ18-20U
RYYQ18-20U
RYMQ18-20U



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)

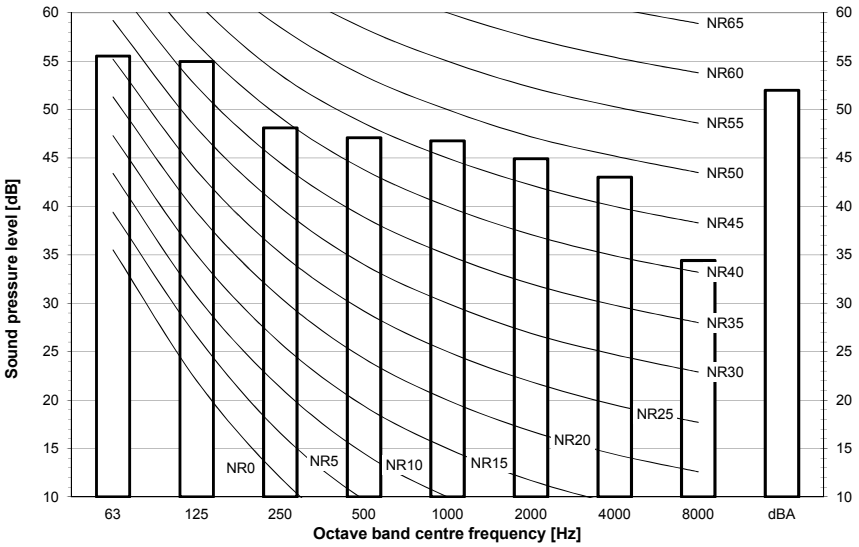


3D119541

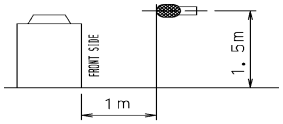
11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

REMQ5U
REYQ8-12U
RXYQQ8-12U
RXYQ8-12U
RXYTQ8UYF
RYYQ8-12U
RYMQ8-12U

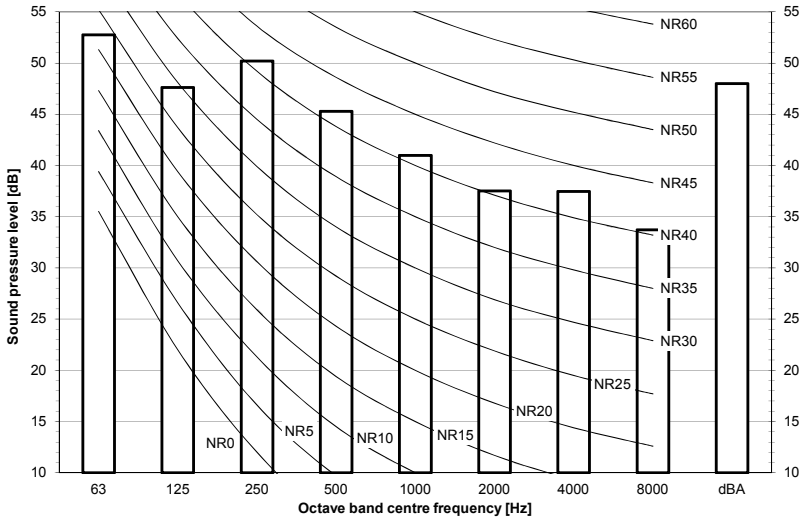


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

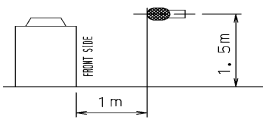


3D119536

REYQ14-16U
RXYQQ14-16U
RXYQ14-16U
RXYTQ14-16UYF
RYYQ14-16U
RYMQ14-16U



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)

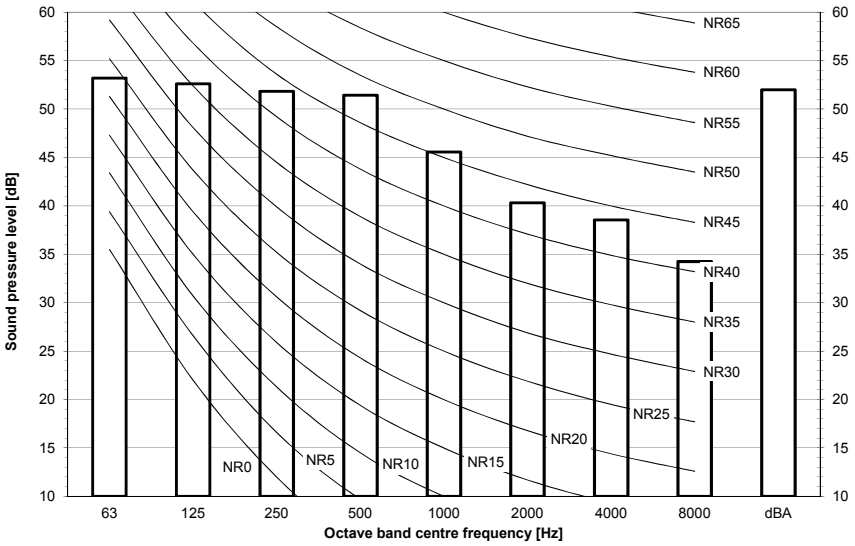


3D119539

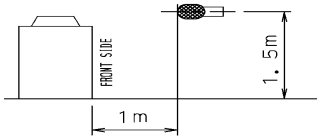
11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

REYQ18-20U
RXYQQ18-20U
RXYQ18-20U
RYYQ18-20U
RYMQ18-20U



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)

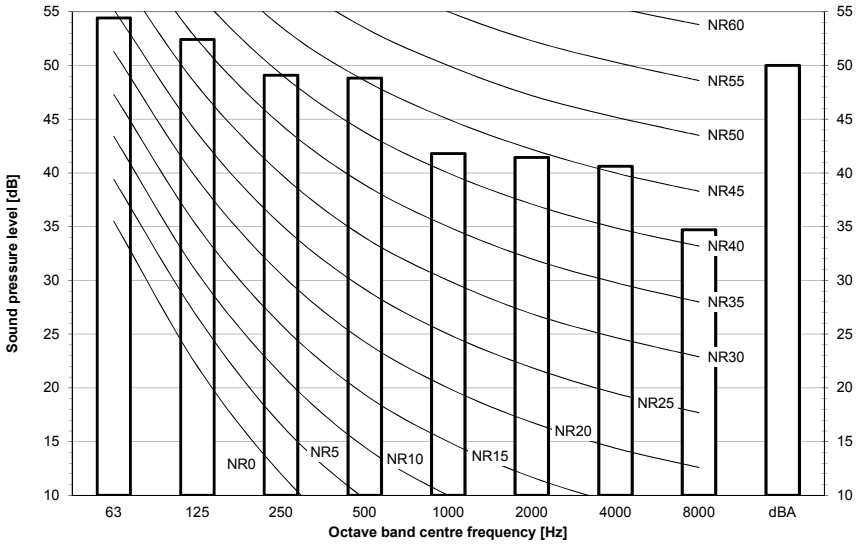


3D119542

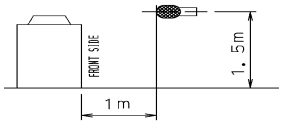
11 Sound data

11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

REMQ5U
REYQ8-12U
RXYQQ8-12U
RXYQ8-12U
RXYTQ8UYF
RYYQ8-12U
RYMQ8-12U

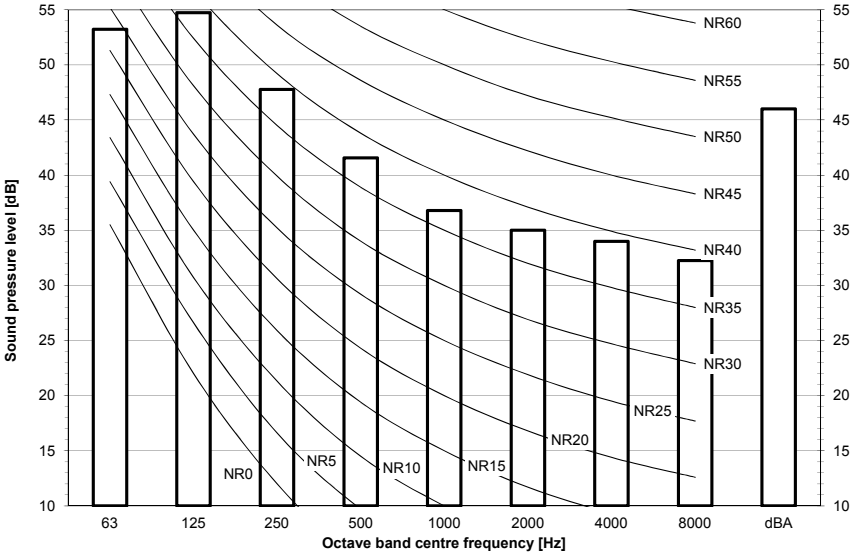


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

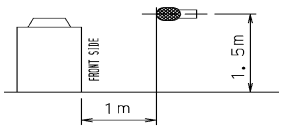


3D119537

REYQ14-16U
RXYQQ14-16U
RXYQ14U-16U
RXYTQ14-16UYF
RYYQ14-16U
RYMQ14-16U



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)

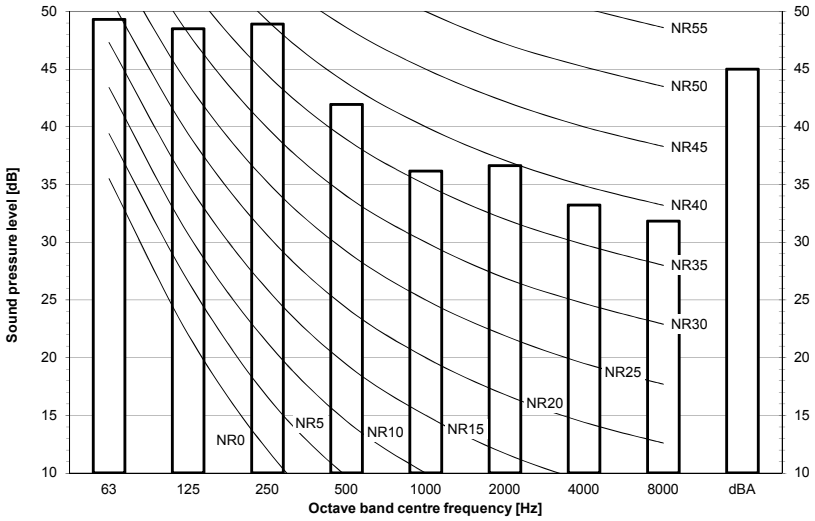


3D119540

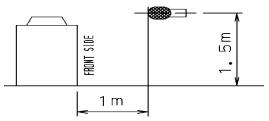
11 Sound data

11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

REYQ18-20U
RXYQQ18-20U
RXYQ18-20U
RYYQ18-20U
RYMQ18-20U



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)



3D119543

12 Installation

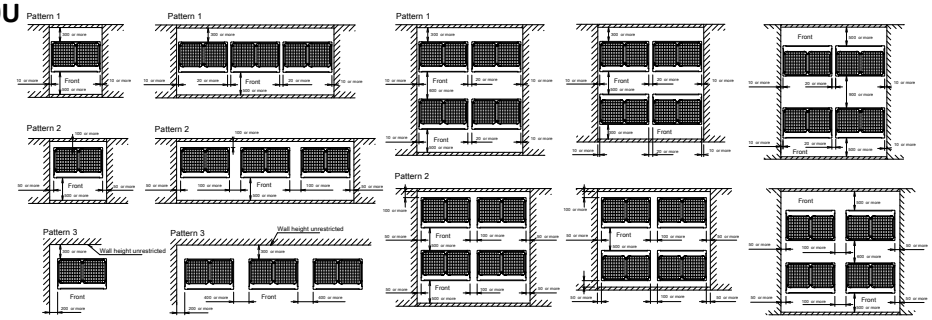
12 - 1 Installation Method

REMQ5U
REYQ8-20U
RXYQQ8-20U
RXYQ8-20U
RYYQ8-20U
RYMQ-20U

For single unit installation

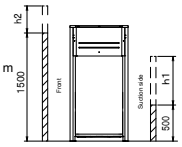
For installation in rows

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 35°C (outdoor temperature).
   When the design outdoor ambient temperature exceeds 35°C or the load exceeds maximum ability of much generation load of heat in all outdoor unit, m ake sure the suction-side space is broader than the space shown on this drawing.



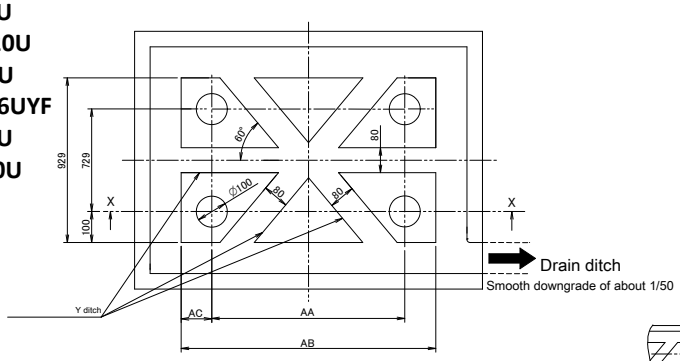
2. If the walls are higher than mentioned above, then additional service space is needed:
   - suction side: service space + h1/2
   - front side: service space + h2/2
3. When installing the units, select the pattern that best fits the available space.
   Always keep in mind to leave sufficient space 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 catered for in the above patterns, your layout should take into account of the possibility of short circuits.
4. Provide sufficient space at the front to connect refrigerant piping (comfortably).

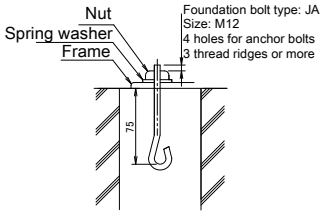
3D118467

12 Installation

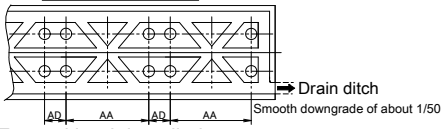
12 - 2 Fixation and Foundation of Units

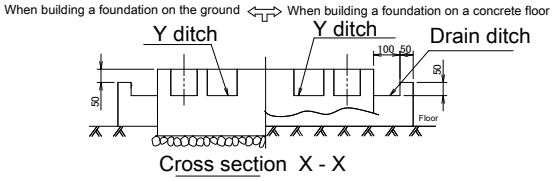
REMQ5U
REYQ8-20U
RXYQQ8-20U
RXYQ8-20U
RXYTQ8-16UYF
RYYQ8-20U
RYMQ8-20U





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

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQQ-U

VRV4-Q Heat Pump Field Piping Restrictions (1/3)

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 outdoor multi (D) Actual / (Equivalent)	Indoor to outdoor (H1) outdoor above indoor / (indoor above outdoor)	Indoor to indoor (H2)	Outdoor to outdoor (H3)	
Standard Only VRV DX indoor connected Standard multi combination		120/(150)m	FXYS*K*	10/(13)m	50/(40)m	15m	5m	300m
AHU connection	Pair	50/(55)m(2)	-	-	40/(40)m	-	-	-

NOTES

For standard multi combinations; see 3D079534

(1) Extension is possible if all below conditions are met (limitation can be extended up to 90m)
   a. The piping length between all indoor to the nearest branch kit is ≤ 40m.
   b. It is necessary to increase the pipe size of the gas and liquid piping if the pipe length between the first and the final branch kit is over 40m
      If the increased pipe size is larger than the pipe size of the main pipe, then the pipe size of the main pipe has to be increased as well
   c. When the piping size is increased (b), the piping length has to be counted as double. The total piping length has to be within limitations (see table above).
   d. The piping length difference between the nearest indoor from first branch to the outdoor unit and farthest indoor to the outdoor unit is ≤ 40m

(2) The allowable minimum length is 5 m.

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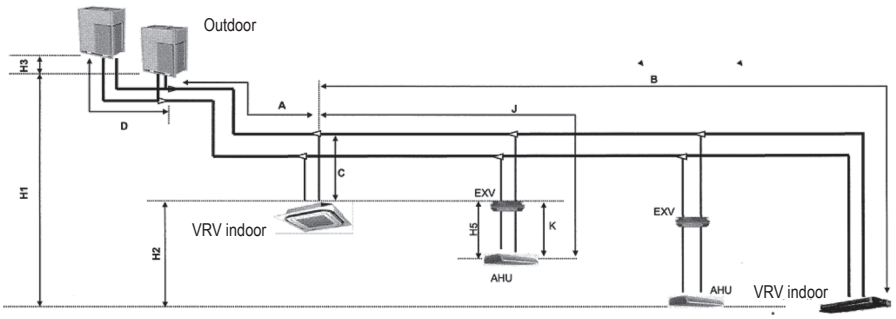
RXYQQ-U

VRV4-Q Heat Pump Field Piping Restrictions (2/3)



NOTES

1. Schematic indication: illustrations may vary from real unit outlook.
2. Displayed system is only to illustrate piping length limitations ! Combination of displayed indoor unit types is not allowed. See 3D084966 for allowed combinations.

		Allowable piping length	Max. height difference
		EXV to AHU (K)	EXV to AHU (H5)
AHU connection	Pair	≤5m	5m

3D084965(2/3)

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQQ-U

VRV4-Q Heat Pump Field Piping Restrictions (3/3)

System pattern Allowed connection ratio (CR) * Other combinations are N.A.	Total		Allowable capacity	
	capacity	Indoor unit quantity (VRV, RA, AHU, Hydrobox) (excl. BP box and EXV kits)	VRV DX indoor	AHU
Only VRV DX indoor	50~130%	Max. 64	50~130%	-
Only AHU (pair AHU)[3]	90~110%	1	-	90~110%

NOTES

1. When using AHU connection: see EKEXV kit as an indoor unit for counting the total number of indoor units
2. Restrictions by air handling unit capacity
3. Pair AHU = system with 1 AHU connected to one outdoor unit

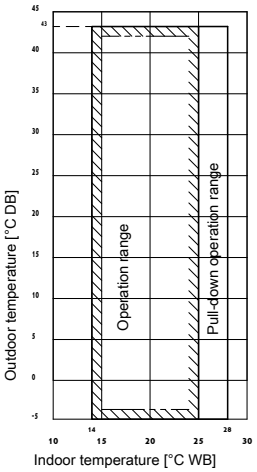
3D084965(3/3)

13 Operation range

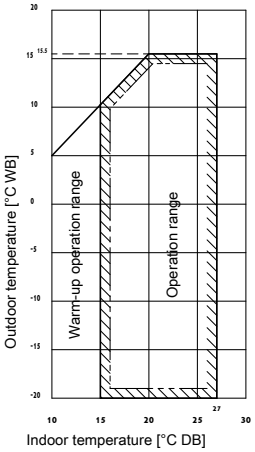
13 - 1 Operation Range

RXYQQ-U
RXYQ-U
RYYQ-U
RYMQ-U

Cooling



Heating



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.

3D118465

14 Appropriate Indoors

14 - 1 Appropriate Indoors

RXYQQ-U

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

·· HP	8	10	12	14	16	18	20
	4xFXMQ50	4xFXMQ63	6xFXMQ50	1xFXMQ50 5XFXMQ63	4XFXMQ63 2xFXMQ80	3xFXMQ50 5XFXMQ63	2xFXMQ50 6xFXMQ63

For multi outdoor units ·>16HP·, the recommended amount of indoor units is the sum of the indoor units defined for a single outdoor unit.
For details about the allowed combinations, see the engineering databook.

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

Covered by ·ENER LOT21·

FXFQ20-25-32-40-50-63-80-100-125
FXZQ15-20-25-32-40-50
FXCQ20-25-32-40-50-63-80-125
FXKQ25-32-40-63
FXDQ15-20-25-32-40-50-63
FXSQ15-20-25-32-40-50-63-80-100-125-140
FXMQ50-63-80-100-125-200-250
FXAQ15-20-25-32-40-50-63
FXHQ32-63-100
FXUQ71-100
FXNQ20-25-32-40-50-63
FXLQ20-25-32-40-50-63

Outside the scope of ·ENER LOT21·

EKEXV50-63-80-100-125-140-200-250-400-500 + EKEQM / EKEQF
VKM50-80-100
FXYBP20-25K7V19
FXYSP20-25-32-40-50-63-80-100-125KA7V19
FXYMP40-50-63-80-100-125-200-250KV1
FXYCP20-25-32-40-50-63-80-125K7V19
FXYFP20-25-32-40-50-63-80-100-125KB7V19
FXYKP25-32-40-63KV1
FXYHP32-63-100KVE9
FXYLP20-25-32-40-50-63KV19
FXYLMP20-25-32-40-50-63KV1
FXYAP20-25-32-40-50-63KV19

3D118461D

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