

VRV IV+ heat pump, without continuous heating Air Conditioning Technical Data RXYQ-U5

RXYQ8U5Y1B
RXYQ10U5Y1B
RXYQ12U5Y1B
RXYQ14U5Y1B
RXYQ16U5Y1B
RXYQ18U5Y1B
RXYQ20U5Y1B
RXYQ22U5Y1B
RXYQ24U5Y1B
RXYQ26U5Y1B
RXYQ28U5Y1B
RXYQ30U5Y1B
RXYQ32U5Y1B
RXYQ34U5Y1B
RXYQ36U5Y1B
RXYQ38U5Y1B
RXYQ40U5Y1B
RXYQ42U5Y1B
RXYQ44U5Y1B
RXYQ46U5Y1B
RXYQ48U5Y1B
RXYQ50U5Y1B
RXYQ52U5Y1B
RXYQ54U5Y1B



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1 Features

1 - 1 RXYQ-U5

Daikin's solution for comfort & low energy consumption

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



Inverter

2 Specifications

2 - 1 Specifications

Technical Specifications				RXYQ8U5	RXYQ10U5	RXYQ12U5	RXYQ14U5
Recommended combination				4 x FXFQ50AVEB	4 x FXFQ63AVEB	6 x FXFQ50AVEB	1 x FXFQ50AVEB + 5 x FXFQ63AVEB
Recommended combination 2				4 x FXSQ50A2VEB	4 x FXSQ63A2VEB	6 x FXSQ50A2VEB	1 x FXSQ50A2VEB + 5 x FXSQ63A2VEB
Recommended combination 3				4 x FXMQ50P7VEB	4 x FXMQ63P7VEB	6 x FXMQ50P7VEB	1 x FXMQ50P7VEB + 5 x FXMQ63P7VEB
Cooling capacity	Prated,c		kW	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)
Heating capacity	Nom.	6°CWB	kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)
	Prated,h		kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)
	Max.	6°CWB	kW	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	5.40 (2)	7.58 (2)	9.65 (2)
COP at nom.	6°CWB		kW/kW	4.15 (2)	3.69 (2)	3.47 (2)	3.74 (2)
ESEER - Automatic				7.53	7.20	6.96	6.83
ESEER - Standard				6.37	5.67	5.50	5.31
SCOP				4.3		4.1	4.0
SCOP recommended combination 2				4.2	4.3	4.1	4.0
SCOP recommended combination 3				4.2		4.1	4.0
SEER				7.6	6.8	6.3	
SEER recommended combination 2				6.9	6.8	5.9	6.3
SEER recommended combination 3				7.5	6.8	6.2	
ηs,c			%	302.4	267.6	247.8	250.7
ηs,h			%	167.9	168.2	161.4	155.4
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	3.0	2.3	2.4	2.6
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	22.4	28.0	33.5	40.0
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	5.2	4.7	4.3	4.1
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	16.5	20.6	24.7	29.5
	E Condi- tion (15°C - 27/19)	EERd Pdc	kW	9.5	8.3	7.7	7.8
Space cooling recommended combination 2	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	10.6	13.3	15.9	18.9
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	18.8	17.0	13.9	14.3
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	8.0	9.3	9.4	8.4
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	2.6	2.4		2.6
	E Condi- tion (15°C - 27/19)	EERd Pdc	kW	22.4	28.0	33.5	40.0
Space cooling recommended combination 3	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	4.9	4.7	4.0	4.1
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	16.5	20.6	24.7	29.5
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	8.8	8.5	7.1	7.9
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	10.6	13.3	15.9	18.9
	E Condi- tion (15°C - 27/19)	EERd Pdc	kW	15.1	17.2	13.1	14.0
Space cooling recommended combination 3	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	8.8	9.3	9.1	8.4
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	3.0	2.3	2.4	2.6
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	22.4	28.0	33.5	40.0
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	5.1	4.7	4.2	4.0
	E Condi- tion (15°C - 27/19)	EERd Pdc	kW	16.5	20.6	24.7	29.5
Space cooling recommended combination 3	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	9.6	8.4	7.7	19.0
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	10.6	13.3	15.9	19.0
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	16.0	16.9	13.7	14.0
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	9.1	9.3	9.4	8.4
	E Condi- tion (15°C - 27/19)	EERd Pdc	kW				

2 Specifications

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Technical Specifications				RXYQ8U5	RXYQ10U5	RXYQ12U5	RXYQ14U5						
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.5		2.4		2.0		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tbiv (bivalent temperature) °C		-10									
	TOL	COPd (declared COP)		2.5		2.4		2.0		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tol (temperature operating limit) °C		-10									
	A Con- dition (-7°C)	COPd (declared COP)		2.7		2.6		2.4		2.6			
		Pdh (declared heating cap) kW		12.1		14.2		16.3		18.2			
	B Condi- tion (2°C)	COPd (declared COP)		3.9								3.5	
		Pdh (declared heating cap) kW		7.4		8.6		9.9		11.1			
	C Condi- tion (7°C)	COPd (declared COP)		6.3		6.4		6.1					
		Pdh (declared heating cap) kW		5.0		5.5		6.4		7.1			
	D Con- dition (12°C)	COPd (declared COP)		7.9		8.2		7.9		8.5			
		Pdh (declared heating cap) kW		5.9		6.3		4.9					
Space heating (Average climate) recommended combination 2	A Con- dition (-7°C)	COPd (declared COP)		2.7				2.4		2.6			
		Pdh (declared heating cap) kW		12.1		14.2		16.3		18.2			
	B Condi- tion (2°C)	COPd (declared COP)		3.9		4.0		3.9		3.5			
		Pdh (declared heating cap) kW		7.4		8.6		9.9		11.1			
	C Condi- tion (7°C)	COPd (declared COP)		6.3		6.5		6.1					
		Pdh (declared heating cap) kW		5.0		5.5		6.4		7.1			
	D Con- dition (12°C)	COPd (declared COP)		7.8		8.3		7.9		8.6			
		Pdh (declared heating cap) kW		5.9		6.0		6.4		4.9			
	TBivalent	COPd (declared COP)		2.4				1.9		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tbiv (bivalent temperature) °C		-10									
	TOL	COPd (declared COP)		2.4				1.9		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tol (temperature operating limit) °C		-10									
Space heating (Average climate) recommended combination 3	A Con- dition (-7°C)	COPd (declared COP)		2.7		2.6		2.4		2.6			
		Pdh (declared heating cap) kW		12.1		14.2		16.3		18.2			
Space heating (Average climate) recommended combination 3	B Condi- tion (2°C)	COPd (declared COP)		3.9		3.7		3.9		3.5			
		Pdh (declared heating cap) kW		7.4		8.6		9.9		11.1			
	C Condi- tion (7°C)	COPd (declared COP)		6.2		6.4		6.0		6.1			
		Pdh (declared heating cap) kW		4.9		5.5		6.4		7.1			
	D Con- dition (12°C)	COPd (declared COP)		7.8		8.1		7.8		8.5			
		Pdh (declared heating cap) kW		5.8		5.9		6.2		4.9			
	TBivalent	COPd (declared COP)		2.5		2.4		2.0		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tbiv (bivalent temperature) °C		-10									
	TOL	COPd (declared COP)		2.5		2.4		2.0		2.3			
		Pdh (declared heating cap) kW		13.7		16.0		18.4		20.6			
		Tol (temperature operating limit) °C		-10									
	Capacity range		HP		8		10		12		14		
	PED	Category		Category II									
Most critical part		Name		Accumulator									
		Ps*V Bar*I		325						415			
Maximum number of connectable indoor units				64 (3)									
Indoor index connection	Min.		100.0		125.0		150.0		175.0				
	Max.		260.0		325.0		390.0		455.0				
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		201								281		
	Packed unit kg		219								302		
Packing	Material		Carton										
	Weight kg		4.7						5.7				
Packing 2	Material		Wood										
	Weight kg		12.1						14.7				

2 Specifications

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Technical Specifications					RXYQ8U5	RXYQ10U5	RXYQ12U5	RXYQ14U5
Packing 3	Material				Plastic			
	Weight		kg		0.5			0.7
Casing	Colour				Ivory white			
	Material				Painted galvanized steel plate			
Heat exchanger	Type				Cross fin coil			
	Indoor side				Air			
Heat exchanger	Outdoor side				Air			
	Air flow rate	Cooling	Rated	m ³ /h	9,720	10,500	11,100	13,380
		Heating	Rated	m ³ /h	9,720	10,500	11,100	13,380
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)
	Heating	Prated,h		dBA	79.6 (4)	80.9 (4)	83.5 (4)	83.1 (4)
Sound pressure level	Cooling	Nom.		dBA	57.0 (5)		61.0 (5)	60.0 (5)
Refrigerant	Type				R-410A			
	GWP				2,087.5			
	Charge			kg	5.9	6.0	6.3	10.3
Refrigerant oil	Type				Synthetic (ether) oil FVC68D			
Piping connections	Liquid	Type			Braze connection			
		OD		mm	9.52			12.7
	Gas	Type			Braze connection			
		OD		mm	19.1	22.2		28.6
	Total piping length	System	Actual	m	1,000 (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	Crank-case	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.052			0.077
	Off mode	Cooling	POFF	kW	0.041			0.074
		Heating	POFF	kW	0.052			0.077
	Standby mode	Cooling	PSB	kW	0.041			0.074
		Heating	PSB	kW	0.052			0.077
Power consumption in other than active mode	Thermo-stat-off mode	Cooling	PTO	kW	0.005			0.010
		Heating	PTO	kW	0.056			0.097
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			

Technical Specifications					RXYQ16U5	RXYQ18U5	RXYQ20U5
Recommended combination					4 x FXFQ63AVEB + 2 x FXFQ80AVEB	3 x FXFQ50AVEB + 5 x FXFQ63AVEB	2 x FXFQ50AVEB + 6 x FXFQ63AVEB
Recommended combination 2					4 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	3 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	2 x FXSQ50A2VEB + 6 x FXSQ63A2VEB
Recommended combination 3					4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	3 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	2 x FXMQ50P7VEB + 6 x FXMQ63P7VEB
Cooling capacity	Prated,c			kW	45.0 (1)	50.4 (1)	52.0 (1)
Heating capacity	Nom.	6°CWB		kW	45.0 (2)	50.4 (2)	56.0 (2)
	Prated,h			kW	45.0 (2)	50.4 (2)	56.0 (2)
	Max.	6°CWB		kW	50.0 (2)	56.5 (2)	63.0 (2)

2 Specifications

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Technical Specifications					RXYQ16U5	RXYQ18U5	RXYQ20U5
Power input - 50Hz Heating	Nom.	6°CWB	kW		12.54 (2)	14.22 (2)	17.47 (2)
COP at nom. capacity	6°CWB		kW/kW		3.59 (2)	3.54 (2)	3.20 (2)
ESEER - Automatic					6.50	6.38	5.67
ESEER - Standard					5.05	4.97	4.42
SCOP					4.0	4.2	4.0
SCOP recommended combination 2					4.1	4.2	4.0
SCOP recommended combination 3					4.0	4.1	3.9
SEER					6.0		5.9
SEER recommended combination 2					5.9	6.0	5.9
SEER recommended combination 3					5.8	6.0	5.9
ηs,c			%		236.5	238.3	233.7
ηs,h			%		157.8	163.1	156.6
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc	kW		2.1	1.9	
					45.0	50.4	52.0
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW		3.9	3.8	3.7
					33.2	37.1	38.3
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW		7.7	7.5	7.3
Space cooling recommended combination 2					21.3	23.9	24.6
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW		14.2	18.3	
					9.5	11.5	
	A Condi- tion (35°C - 27/19)	EERd Pdc	kW		2.1	1.9	
					45.0	50.4	52.0
Space cooling recommended combination 3	B Condi- tion (30°C - 27/19)	EERd Pdc	kW		3.8	3.7	3.6
					33.2	37.1	38.3
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW		7.6	7.5	7.3
					21.3	23.9	24.6
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW		14.0	18.1	18.9
Space heating (Average climate)					9.5	11.4	10.9
	A Condi- tion (35°C - 27/19)	EERd Pdc	kW		2.1	1.9	
					45.0	50.4	52.0
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW		3.7		3.6
					33.2	37.1	38.3
Space heating (Average climate)	C Condi- tion (25°C - 27/19)	EERd Pdc	kW		7.4	7.6	7.3
					21.3	23.9	24.6
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW		14.1	18.3	
					9.5	11.6	
	TBivalent	COPd (declared COP)			2.2	1.9	1.8
Space heating (Average climate)		Pdh (declared heating cap)	kW		23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C		-10		
	TOL	COPd (declared COP)			2.2	1.9	1.8
		Pdh (declared heating cap)	kW		23.2	27.9	31.0
		Tol (temperature operating limit)	°C		-10		
Space heating (Average climate)	A Con- dition (-7°C)	COPd (declared COP)			2.6	2.4	2.1
		Pdh (declared heating cap)	kW		20.5	24.7	27.4
	B Condi- tion (2°C)	COPd (declared COP)			3.5	3.7	3.6
		Pdh (declared heating cap)	kW		12.5	15.0	16.7
	C Condi- tion (7°C)	COPd (declared COP)			6.3	6.7	6.5
Space heating (Average climate)		Pdh (declared heating cap)	kW		8.0	9.7	10.7
	D Con- dition (12°C)	COPd (declared COP)			8.6	9.0	9.1
		Pdh (declared heating cap)	kW		4.9	7.1	

2 Specifications

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Technical Specifications					RXYQ16U5		RXYQ18U5		RXYQ20U5		
Space heating (Average climate) recommended combination 2	A Con- dition (-7°C)	COPd (declared COP)			2.6		2.4		2.2		
		Pdh (declared heating cap) kW			20.5		24.7		27.4		
	B Condi- tion (2°C)	COPd (declared COP)			3.5		3.8		3.7		
		Pdh (declared heating cap) kW			12.2		15.0		16.7		
	C Condi- tion (7°C)	COPd (declared COP)			6.3		6.8		6.5		
		Pdh (declared heating cap) kW			8.0		9.7		10.7		
	D Con- dition (12°C)	COPd (declared COP)			8.7		9.1		9.2		
		Pdh (declared heating cap) kW			5.0		7.2				
	TBivalent	COPd (declared COP)			2.2		1.9		1.8		
		Pdh (declared heating cap) kW			23.2		27.9		31.0		
Tbiv (bivalent temperature) °C					-10						
TOL	COPd (declared COP)			2.2		1.9		1.8			
	Pdh (declared heating cap) kW			23.2		27.9		31.0			
	Tol (temperature operating limit) °C					-10					
Space heating (Average climate) recommended combination 3	A Con- dition (-7°C)	COPd (declared COP)			2.6		2.4		2.1		
		Pdh (declared heating cap) kW			20.5		24.7		27.4		
Space heating (Average climate) recommended combination 3	B Condi- tion (2°C)	COPd (declared COP)			3.5		3.7		3.6		
		Pdh (declared heating cap) kW			12.5		15.0		16.7		
	C Condi- tion (7°C)	COPd (declared COP)			6.2		6.5		6.3		
		Pdh (declared heating cap) kW			8.0		9.7		10.7		
	D Con- dition (12°C)	COPd (declared COP)			8.6		8.7				
		Pdh (declared heating cap) kW			4.9		6.9				
	TBivalent	COPd (declared COP)			2.2		1.9		1.8		
		Pdh (declared heating cap) kW			23.2		27.9		31.0		
		Tbiv (bivalent temperature) °C					-10				
	TOL	COPd (declared COP)			2.2		1.9		1.8		
Pdh (declared heating cap) kW			23.2		27.9		31.0				
Tol (temperature operating limit) °C					-10						
Capacity range				HP		16		18		20	
PED	Category				Category II						
	Most critical part				Accumulator						
						415		493			
Maximum number of connectable indoor units					64 (3)						
Indoor index connection	Min.				200.0		225.0		250.0		
	Max.				520.0		585.0		650.0		
Dimensions	Unit	Height			mm		1,685				
		Width			mm		1,240				
		Depth			mm		765				
	Packed unit	Height			mm		1,820				
		Width			mm		1,305				
		Depth			mm		860				
Weight	Unit			kg		281		314			
	Packed unit			kg		302		335			
Packing	Material				Carton						
	Weight				kg		5.7				
Packing 2	Material				Wood						
	Weight				kg		14.7				
Packing 3	Material				Plastic						
	Weight				kg		0.7				
Casing	Colour				Ivory white						
	Material				Painted galvanized steel plate						
Heat exchanger	Type				Cross fin coil						
	Indoor side				Air						
Heat exchanger	Outdoor side				Air						
	Air flow rate	Cooling	Rated	m³/h	15,600		15,060		15,660		
		Heating	Rated	m³/h	15,600		15,060		15,660		
Fan	Quantity				2						
	External static pressure	Max.			Pa		78				
Fan motor	Quantity				2						
	Type				DC motor						
	Output				W		750				

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Technical Specifications					RXYQ16U5		RXYQ18U5		RXYQ20U5	
Compressor	Quantity				2					
	Type				Hermetically sealed scroll compressor					
Operation range	Crankcase heater		W		33					
			Min.	°CDB	-5.0					
	Heating		°CDB		43.0					
			Min.	°CWB	-20.0					
Sound power level	Cooling		Nom.		85.6 (4)	83.8 (4)		87.9 (4)		
			Prated,h		86.5 (4)	85.3 (4)		89.8 (4)		
Sound pressure level	Cooling	Nom.		dBA	63.0 (5)	62.0 (5)		65.0 (5)		
Refrigerant	Type				R-410A					
	GWP				2,087.5					
	Charge		kg		11.3	11.7		11.8		
Refrigerant oil	Type				Synthetic (ether) oil FVC68D					
Piping connections	Liquid	Type				Braze connection				
		OD	mm			12.7	15.9			
	Gas	Type				Braze connection				
		OD	mm			28.6				
	Total piping length	System	Actual	m		1,000 (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	Crank-case heater mode	Cooling	PCK	kW		0.000				
		Heating	PCK	kW		0.077	0.089			
	Off mode	Cooling	POFF	kW		0.074	0.075			
		Heating	POFF	kW		0.077	0.089			
	Standby mode	Cooling	PSB	kW		0.074	0.075			
		Heating	PSB	kW		0.077	0.089			
	Power consumption in other than active mode	Thermo-stat-off mode	Cooling	PTO	kW		0.010			
Heating			PTO	kW		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;

Electrical Specifications				RXYQ8U5	RXYQ10U5	RXYQ12U5	RXYQ14U5
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)

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Electrical Specifications			RXYQ8U5	RXYQ10U5	RXYQ12U5	RXYQ14U5
Current - 50Hz	Nominal running current (RLA)	Combina- Cooling tion A Combina- Cooling tion B	-			
	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)
	Minimum circuit amps (MCA)	A	16.1 (10)	22.0 (10)	24.0 (10)	27.0 (10)
	Maximum fuse amps (MFA)	A	20 (11)	25 (11)	32 (11)	
	Full load amps (FLA)	Total A	1.2 (12)	1.3 (12)	1.5 (12)	1.8 (12)
Power Performance	Power factor	Combina- 35°C ISO - Full load tion B 46°C ISO - Full load	-			
	Wiring connections - 50Hz	For power supply	5G			
	For connection with indoor	Quantity Remark	2 F1,F2			

Electrical Specifications			RXYQ16U5	RXYQ18U5	RXYQ20U5
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	18.0 (7)	20.8 (7)	26.9 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- Cooling tion A Combina- Cooling tion B	-		
	Starting current (MSC) - remark		See note 8		
	Zmax List		No requirements		
	Minimum Ssc value	kVa	7,547 (9)	8,805 (9)	9,812 (9)
	Minimum circuit amps (MCA)	A	31.0 (10)	35.0 (10)	39.0 (10)
	Maximum fuse amps (MFA)	A	40 (11)		50 (11)
	Full load amps (FLA)	Total A	2.6 (12)		
Power Performance	Power factor	Combina- 35°C ISO - Full load tion B 46°C ISO - Full load	-		
	Wiring connections - 50Hz	For power supply	5G		
	For connection with indoor	Quantity Remark	2 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)n 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 with 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 functionality (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

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Technical specifications System				RXYQ22U5	RXYQ24U5	RXYQ26U5	RXYQ28U5	RXYQ30U5
System		Outdoor unit module 1		RXYQ10U	RXYQ8U	RXYQ12U		
		Outdoor unit module 2		RXYQ12U	RXYQ16U	RXYQ14U	RXYQ16U	RXYQ18U
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
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
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
Cooling capacity	Prated,c		kW	61.5 (1)	67.4 (1)	73.5 (1)	78.5 (1)	83.9 (1)
Heating capacity	Nom.	6°CWB	kW	61.5 (2)	67.4 (2)	73.5 (2)	78.5 (2)	83.9 (2)
	Prated,h		kW	61.5 (2)	67.4 (2)	73.5 (2)	78.5 (2)	83.9 (2)
	Max.	6°CWB	kW	69.0 (2)	75.0 (2)	82.5 (2)	87.5 (2)	94.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	17.23 (2)	17.94 (2)	20.33 (2)	22.19 (2)
COP at nom.	6°CWB		kW/kW	3.57 (2)	3.76 (2)	3.61 (2)	3.54 (2)	3.51 (2)
ESEER - Automatic				7.07	6.81	6.89	6.69	6.60
ESEER - Standard				5.58	5.42	5.39	5.23	5.17
SCOP				4.4	4.3	4.2		4.3
SCOP recommended combination 2				4.4	4.3	4.2		4.3
SCOP recommended combination 3				4.3	4.2			4.3
SEER				6.9	6.8	6.7	6.5	
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
ηs,c			%	274.5	269.9	264.2	257.8	256.8
ηs,h			%	171.2	167.0	164.6	166.0	169.8
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	2.6	2.5	2.6	2.3	2.1
				61.5	67.4	73.5	78.5	83.9
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	4.8	4.6		4.4	4.3
				45.3	49.7	54.2	57.8	61.8
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	8.5	8.6	8.2	8.1	8.2
			29.1	31.9	34.8	37.2	39.7	
Space cooling recommended combination 2	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	16.0	15.2	14.2	14.3	16.8
				18.8	15.8	16.2	16.5	21.0
	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	2.6	2.4	2.6	2.3	2.1
				61.5	67.4	73.5	78.5	83.9
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	4.6	4.5	4.4	4.3	4.2
			45.3	49.7	54.1	57.8	61.8	
Space cooling recommended combination 3	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	8.2	8.4	7.9	7.8	7.9
				29.1	31.9	34.8	37.2	39.7
	D Condi- tion (20°C - 27/19)	EERd Pdc	kW	15.6	14.7	13.6	13.8	16.1
	D Condi- tion (20°C - 27/19)	Pdc	kW	18.4	15.4	15.7	16.5	20.5
Space cooling recommended combination 3	A Condi- tion (35°C - 27/19)	EERd Pdc	kW	2.5		2.3		2.1
				61.5	67.4	73.5	78.5	83.9
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW	4.8	4.5		4.3	
				45.3	49.7	54.2	57.8	61.8
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW	8.5	8.4	8.1	8.0	8.2
			29.1	31.9	34.8	37.2	39.7	
D Condi- tion (20°C - 27/19)	EERd Pdc	kW	15.8	15.2	14.0	14.1	16.6	
			18.8	15.7	16.0	16.6	21.0	

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Technical specifications System					RXYQ22U5	RXYQ24U5	RXYQ26U5	RXYQ28U5	RXYQ30U5
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.3	2.5	2.3	2.2	2.1
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3
		Tbiv (bivalent temperature) °C			-10				
	TOL	COPd (declared COP)			2.3	2.5	2.3	2.2	2.1
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3
		Tol (temperature operating limit) °C			-10				
	A Con- dition (-7°C)	COPd (declared COP)			2.6	2.8	2.6		
		Pdh (declared heating cap) kW			30.4	32.6	34.5	36.8	41.0
	B Condi- tion (2°C)	COPd (declared COP)			4.0	3.7	3.8		
		Pdh (declared heating cap) kW			18.5	19.9	21.0	22.4	24.9
Space heating (Average climate) recommended combination 2	C Condi- tion (7°C)	COPd (declared COP)			6.3		6.1	6.2	6.5
		Pdh (declared heating cap) kW			11.9	13.0	13.5	14.4	16.0
	D Con- dition (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
	A Con- dition (-7°C)	COPd (declared COP)			2.6	2.7	2.6		
		Pdh (declared heating cap) kW			30.4	32.6	34.5	36.8	41.0
		Tbiv (bivalent temperature) °C			-10				
	B Condi- tion (2°C)	COPd (declared COP)			4.1	3.7	3.8		
		Pdh (declared heating cap) kW			18.5	19.9	21.0	22.4	24.9
		COPd (declared COP)			6.3		6.1	6.3	6.6
Space heating (Average climate) recommended combination 3	C Condi- tion (7°C)	Pdh (declared heating cap) kW			11.9	13.1		14.4	16.0
		COPd (declared COP)			8.4	9.0	8.9	9.1	
	D Con- dition (12°C)	Pdh (declared heating cap) kW			6.0	5.7	6.0	6.4	7.2
		COPd (declared COP)			2.2	2.4	2.2		
	TBivalent	Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3
		Tbiv (bivalent temperature) °C			-10				
		COPd (declared COP)			2.2	2.4	2.2		
	TOL	Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3
		Tol (temperature operating limit) °C			-10				
		COPd (declared COP)			2.3	2.4	2.2		
Capacity range	PED	Category			Category II				
		Maximum number of connectable indoor units			64 (3)				
		Indoor index connection			275.0	300.0	325.0	350.0	375.0
	Max.			715.0	780.0	845.0	910.0	975.0	
	Heat exchanger	Indoor side			Air				
		Outdoor side			Air				
		Air flow rate	Cooling	Rated	m³/h	21,600	25,320	24,480	26,700
	Sound power level	Heating	Rated,h	dBA	84.8 (4)	86.3 (4)	85.3 (4)	87.6 (4)	86.6 (4)
		Prated,h	dBA	85.4 (4)	87.3 (4)	86.3 (4)	88.3 (4)	87.5 (4)	
	Sound pressure level	Cooling	Nom.	dBA	62.5 (5)	64.0 (5)	63.5 (5)	65.1 (5)	64.5 (5)
Refrigerant	Type	R-410A							
	GWP	2,087.5							
Refrigerant oil	Type	Synthetic (ether) oil FVC68D							

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Technical specifications System					RXYQ22U5	RXYQ24U5	RXYQ26U5	RXYQ28U5	RXYQ30U5
Piping connections	Liquid	Type				Braze connection			
		OD	mm			15.9		19.1	
	Gas	Type				Braze connection			
		OD	mm			28.6	34.9		
	Total piping length	System	Actual	m		1,000 (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	Crank-case heater mode	Cooling	PCK	kW	0.000				
Power consumption in other than active mode	Crank-case heater mode	Heating	PCK	kW	0.103	0.129			0.141
	Off mode	Cooling	POFF	kW	0.081	0.115			0.116
		Heating	POFF	kW	0.103	0.129			0.141
	Standby mode	Cooling	PSB	kW	0.081	0.115			0.116
		Heating	PSB	kW	0.103	0.129			0.141
	Thermo-stat-off mode	Cooling	PTO	kW	0.009	0.014			
		Heating	PTO	kW	0.113	0.154			0.155
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				

Technical specifications System					RXYQ32U5	RXYQ34U5	RXYQ36U5	RXYQ38U5	RXYQ40U5
System	Outdoor unit module 1				RXYQ16U			RXYQ8U	RXYQ10U
	Outdoor unit module 2				RXYQ16U	RXYQ18U	RXYQ20U	RXYQ10U	RXYQ12U
	Outdoor unit module 3				-			RXYQ20U	RXYQ18U
Recommended combination					8 x FXFQ63AVEB + 4 x FXFQ80AVEB	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
Recommended combination 2					8 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	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
Recommended combination 3					8 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	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
Cooling capacity	Prated,c			kW	90.0 (1)	95.4 (1)	97.0 (1)	102.4 (1)	111.9 (1)
Heating capacity	Nom.	6°CWB		kW	90.0 (2)	95.4 (2)	101.0 (2)	106.4 (2)	111.9 (2)
	Prated,h			kW	90.0 (2)	95.4 (2)	101.0 (2)	106.4 (2)	111.9 (2)
	Max.	6°CWB		kW	100.0 (2)	106.5 (2)	113.0 (2)	119.5 (2)	125.5 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	25.08 (2)	26.76 (2)	30.02 (2)	30.45 (2)	31.45 (2)
COP at nom. capacity	6°CWB			kW/kW	3.59 (2)	3.56 (2)	3.36 (2)	3.49 (2)	3.56 (2)
ESEER - Automatic					6.50	6.44	6.02	6.36	6.74
ESEER - Standard					5.05	5.01	4.68	5.03	5.29
SCOP					4.2		4.1	4.3	
SCOP recommended combination 2					4.2	4.3	4.2	4.3	4.4
SCOP recommended combination 3					4.1	4.2	4.1	4.2	4.3
SEER					6.4		6.3	6.9	6.7
SEER recommended combination 2					6.3			6.8	6.6
SEER recommended combination 3					6.2	6.3		6.9	6.7
ηs,c				%	251.7	253.3	250.8	272.4	263.5
ηs,h				%	163.1	166.2	162.4	167.5	170.0
Space cooling	A Condi- tion (35°C Pdc - 27/19)	EERd		kW	2.3	2.1		2.4	2.2
				kW	90.0	95.4	97.0	102.4	111.9
	B Condi- tion (30°C Pdc - 27/19)	EERd		kW	4.3	4.2	4.1	4.5	
				kW	66.3	70.3	71.5	75.5	82.5
	C Condi- tion (25°C Pdc - 27/19)	EERd		kW	8.1		7.9	8.5	8.3
				kW	42.6	45.2	45.9	48.5	53.0
D Condi- tion (20°C Pdc - 27/19)	EERd		kW	14.3	16.8	16.7	17.9	16.0	
			kW	19.0	20.1	20.4	21.6	23.6	

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Technical specifications System			RXYQ32U5	RXYQ34U5	RXYQ36U5	RXYQ38U5	RXYQ40U5
Space cooling recommended combination 2	A Condi- tion (35°C Pdc - 27/19)	EERd kW	2.2 90.0	2.1 95.4 97.0		2.3 102.4	2.2 111.9
	B Condi- tion (30°C Pdc - 27/19)	EERd kW	4.2 66.3 70.3		4.1 71.5	4.5 75.4	4.4 82.4
	C Condi- tion (25°C Pdc - 27/19)	EERd kW	8.0 42.6	8.1 45.2	7.9 45.9	8.4 48.5	8.1 53.0
	D Condi- tion (20°C Pdc - 27/19)	EERd kW	14.0 18.9	16.5 20.1 20.4		17.8 21.6	15.9 23.6
	A Condi- tion (35°C Pdc - 27/19)	EERd kW	2.2 90.0	2.1 95.4 97.0		2.4 102.4	2.2 111.9
Space cooling recommended combination 3	B Condi- tion (30°C Pdc - 27/19)	EERd kW	4.1 66.3 70.3		4.0 71.5	4.5 75.5	4.4 82.5
	C Condi- tion (25°C Pdc - 27/19)	EERd kW	7.8 42.6	8.0 45.2	7.8 45.9	8.5 48.5	8.4 53.0
	D Condi- tion (20°C Pdc - 27/19)	EERd kW	13.8 19.0	16.6 20.1	16.5 20.4	17.9 21.6	16.1 23.6
	TBivalent COPd (declared COP)		2.4	2.2	2.1	2.2	
	Pdh (declared heating cap) kW		46.4	51.1	54.2	60.7	62.3
Space heating (Average climate)	Tbiv (bivalent temperature) °C		-10				
	TOL COPd (declared COP)		2.4	2.2	2.1	2.2	
	Pdh (declared heating cap) kW		46.4	51.1	54.2	60.7	62.3
	Tol (temperature operating limit) °C		-10				
	A Condi- tion (-7°C)	COPd (declared COP)	2.7 41.0	2.6 45.2	2.5 47.9		2.6 55.1
	B Condi- tion (2°C)	COPd (declared COP)	3.6 25.0	3.7 27.5		3.9 32.7	4.0 33.5
	C Condi- tion (7°C)	COPd (declared COP)	6.3 16.1	6.5 17.7	6.4 18.8	6.5 21.3	
	D Con- dition (12°C)	COPd (declared COP)	9.0 7.1	8.8 7.9	8.6 8.3	8.7 13.1	
	A Condi- tion (-7°C)	COPd (declared COP)	2.7 41.0	2.6 45.2	2.5 47.9		2.6 55.1
	B Condi- tion (2°C)	COPd (declared COP)	3.6 25.0	3.8 27.5	3.7 29.2	3.9 32.7	4.0 33.5
Space heating (Average climate) recommended combination 2	C Condi- tion (7°C)	COPd (declared COP)	6.3 16.1	6.6 17.7	6.5 18.8		6.5 21.3
	D Con- dition (12°C)	COPd (declared COP)	9.1 7.1	8.9 7.9	8.8 8.3		8.8 13.2
	TBivalent COPd (declared COP)		2.4	2.2		2.3	2.2
	Pdh (declared heating cap) kW		46.4	51.1	54.2	60.7	62.3
	Tbiv (bivalent temperature) °C		-10				
	TOL COPd (declared COP)		2.4	2.2		2.3	2.2
	Pdh (declared heating cap) kW		46.4	51.1	54.2	60.7	62.3
	TOL Tol (temperature operating limit) °C		-10				
	A Condi- tion (-7°C)	COPd (declared COP)	2.7 41.0	2.6 45.2	2.5 47.9		2.6 55.1
	B Condi- tion (2°C)	COPd (declared COP)	3.6 25.0	3.8 27.5	3.7 29.2	3.9 32.7	4.0 33.5
Space heating (Average climate) recommended combination 2	C Condi- tion (7°C)	COPd (declared COP)	6.3 16.1	6.6 17.7	6.5 18.8		6.5 21.3
	D Con- dition (12°C)	COPd (declared COP)	9.1 7.1	8.9 7.9	8.8 8.3		8.8 13.2
	TBivalent COPd (declared COP)		2.4	2.2		2.3	2.2
	Pdh (declared heating cap) kW		46.4	51.1	54.2	60.7	62.3
	Tbiv (bivalent temperature) °C		-10				

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Technical specifications System					RXYQ32U5	RXYQ34U5	RXYQ36U5	RXYQ38U5	RXYQ40U5
Space heating (Average climate) recommended combination 3	A Con- dition (-7°C)	COPd (declared COP)			2.7	2.6	2.4	2.5	2.6
		Pd _h (declared heating cap) kW			41.0	45.2	47.9	53.7	55.1
	B Condi- tion (2°C)	COPd (declared COP)			3.6	3.7	3.6	3.8	3.9
		Pd _h (declared heating cap) kW			25.0	27.5	29.2	32.7	33.5
	C Condi- tion (7°C)	COPd (declared COP)			6.3	6.4	6.3		6.4
		Pd _h (declared heating cap) kW			16.1	17.7	18.8	21.2	21.6
	D Con- dition (12°C)	COPd (declared COP)			9.0	8.9	8.3	8.5	8.4
		Pd _h (declared heating cap) kW			7.1	7.9	8.3	12.9	12.8
	TBivalent	COPd (declared COP)			2.4	2.2	2.1	2.2	
		Pd _h (declared heating cap) kW			46.4	51.1	54.2	60.7	62.3
		Tbiv (bivalent temperature) °C			-10				
TOL	COPd (declared COP)			2.4	2.2	2.1	2.2		
	Pd _h (declared heating cap) kW			46.4	51.1	54.2	60.7	62.3	
	Tol (temperature operating limit)			-10					
Capacity range				HP	32	34	36	38	40
PED	Category				Category II				
Maximum number of connectable indoor units					64 (3)				
Indoor index connection	Min.				400.0	425.0	450.0	475.0	500.0
	Max.				1,040.0	1,105.0	1,170.0	1,235.0	1,300.0
Heat exchanger	Indoor side				Air				
	Outdoor side				Air				
	Air flow rate	Cooling	Rated	m³/h	31,200	30,660	31,260	35,880	36,660
		Heating	Rated	m³/h	31,200	30,660	31,260	35,880	36,660
Sound power level	Cooling	Nom.			dBA	88.6 (4)	87.8 (4)	89.9 (4)	88.8 (4)
	Heating	Prated,h			dBA	89.5 (4)	88.9 (4)	91.5 (4)	90.7 (4)
Sound pressure level	Cooling	Nom.			dBA	66.0 (5)	65.5 (5)	67.1 (5)	66.2 (5)
Refrigerant	Type				R-410A				
	GWP				2,087.5				
Refrigerant oil	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection				
			OD		19.1				
	Gas	Type			Braze connection				
			OD		34.9		41.3		
	Total piping length	System	Actual	m	1,000 (6)				
Indication if the heater is equipped with a supplementary heater					no				
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0				
Power consump- tion in other than active mode	Crank- case heater mode	Cooling	PCK	kW	0.000				
		Heating	PCK	kW	0.154	0.166		0.192	
	Off mode	Cooling	POFF	kW	0.149	0.150		0.157	
		Heating	POFF	kW	0.154	0.166		0.192	
	Standby mode	Cooling	PSB	kW	0.149	0.150		0.157	
		Heating	PSB	kW	0.154	0.166		0.192	
	Thermo- stat-off mode	Cooling	PTO	kW	0.019				
	Heating	PTO	kW	0.195	0.196		0.211		
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				

Technical specifications System				RXYQ42U5	RXYQ44U5	RXYQ46U5	RXYQ48U5	RXYQ50U5
System	Outdoor unit module 1			RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U	
	Outdoor unit module 2			RXYQ16U				
	Outdoor unit module 3			RXYQ16U				RXYQ18U
Recommended combination				12 x FXFQ63AVEB + 4 x FXFQ80AVEB	6 x FXFQ50AVEB + 8 x FXFQ63AVEB + 4 x FXFQ80AVEB	1 x FXFQ50AVEB + 13 x FXFQ63AVEB + 4 x FXFQ80AVEB	12 x FXFQ63AVEB + 6 x FXFQ80AVEB	3 x FXFQ50AVEB + 13 x FXFQ63AVEB + 4 x FXFQ80AVEB
Recommended combination 2				12 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	6 x FXSQ50A2VEB + 8 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	1 x FXSQ50A2VEB + 13 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	12 x FXSQ63A2VEB + 6 x FXSQ80A2VEB	3 x FXSQ50A2VEB + 13 x FXSQ63A2VEB + 4 x FXSQ80A2VEB
Recommended combination 3				12 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	6 x FXMQ50P7VEB + 8 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	1 x FXMQ50P7VEB + 13 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	12 x FXMQ63P7VEB + 6 x FXMQ80P7VEB	3 x FXMQ50P7VEB + 13 x FXMQ63P7VEB + 4 x FXMQ80P7VEB
Cooling capacity	Prated,c		kW	118.0 (1)	123.5 (1)	130.0 (1)	135.0 (1)	140.4 (1)

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Technical specifications System				RXYQ42U5	RXYQ44U5	RXYQ46U5	RXYQ48U5	RXYQ50U5
Heating capacity	Nom.	6°CWB	kW	118.0 (2)	123.5 (2)	130.0 (2)	135.0 (2)	140.4 (2)
	Prated,h		kW	118.0 (2)	123.5 (2)	130.0 (2)	135.0 (2)	140.4 (2)
	Max.	6°CWB	kW	131.5 (2)	137.5 (2)	145.0 (2)	150.0 (2)	156.5 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	32.66 (2)	34.73 (2)	35.77 (2)	37.62 (2)
COP at nom.	6°CWB		kW/kW	3.61 (2)	3.56 (2)	3.63 (2)	3.59 (2)	3.57 (2)
capacity								
ESEER - Automatic				6.65	6.62	6.60	6.50	6.46
ESEER - Standard				5.19	5.17	5.13	5.05	5.02
SCOP				4.2			4.1	4.2
SCOP recommended combination 2				4.3			4.2	
SCOP recommended combination 3				4.2			4.1	4.2
SEER				6.6	6.5		6.4	
SEER recommended combination 2				6.6	6.3	6.4		6.3
SEER recommended combination 3				6.5		6.3	6.2	6.3
ηs,c			%	261.2	255.9	254.9	251.7	252.8
ηs,h			%	165.5	164.5	162.0	162.8	165.2
Space cooling	A Condi- tion (35°C Pdc - 27/19)	EERd	kW	118.0	123.5	130.0	135.0	140.4
	B Condi- tion (30°C Pdc - 27/19)	EERd	kW	86.9	91.0	95.8	99.5	103.4
	C Condi- tion (25°C Pdc - 27/19)	EERd	kW	8.2	55.9	58.5	61.6	64.0
	D Condi- tion (20°C Pdc - 27/19)	EERd	kW	15.4	14.4	14.3	28.4	15.9
				24.8	26.0	27.4		29.6
Space cooling recommended combination 2	A Condi- tion (35°C Pdc - 27/19)	EERd	kW	118.0	123.5	130.0	135.0	140.4
	B Condi- tion (30°C Pdc - 27/19)	EERd	kW	86.9	91.0	95.8	99.5	103.5
	C Condi- tion (25°C Pdc - 27/19)	EERd	kW	8.2	55.9	58.5	61.6	63.9
	D Condi- tion (20°C Pdc - 27/19)	EERd	kW	15.3	14.2	14.0	28.4	15.6
Space cooling recommended combination 3	A Condi- tion (35°C Pdc - 27/19)	EERd	kW	118.0	123.5	130.0	135.0	140.4
	B Condi- tion (30°C Pdc - 27/19)	EERd	kW	87.0	91.0	95.8	99.5	103.5
	C Condi- tion (25°C Pdc - 27/19)	EERd	kW	8.0	55.9	58.5	61.6	63.9
	D Condi- tion (20°C Pdc - 27/19)	EERd	kW	15.2	14.2	13.9	13.8	15.6
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.4	2.3		2.4	2.3
		Pdh (declared heating cap)	kW	62.4	64.8	67.0	69.6	74.3
		Tbiv (bivalent temperature)	°C			-10		
	TOL	COPd (declared COP)		2.4	2.3		2.4	2.3
		Pdh (declared heating cap)	kW	62.4	64.8	67.0	69.6	74.3
		Tol (temperature operating limit)	°C			-10		
	A Con- dition (-7°C)	COPd (declared COP)				2.7		
		Pdh (declared heating cap)	kW	55.2	57.3	59.3	61.6	65.7
	B Condi- tion (2°C)	COPd (declared COP)			3.7		3.6	3.7
		Pdh (declared heating cap)	kW	33.6	34.9	36.1	37.5	40.0
	C Condi- tion (7°C)	COPd (declared COP)			6.3		6.2	6.5
		Pdh (declared heating cap)	kW	21.6	22.4	23.2	24.1	25.7
	D Con- dition (12°C)	COPd (declared COP)			8.6		8.7	8.9
		Pdh (declared heating cap)	kW	9.9	10.0	10.3	10.7	12.0

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Technical specifications System					RXYQ42U5	RXYQ44U5	RXYQ46U5	RXYQ48U5	RXYQ50U5
Space heating (Average climate) recommended combination 2	A Con- dition (-7°C)	COPd (declared COP)			2.7				
		Pdh (declared heating cap) kW			55.2	57.3	59.3	61.6	65.7
	B Condi- tion (2°C)	COPd (declared COP)			3.7		3.6		3.7
		Pdh (declared heating cap) kW			33.6	34.9	36.1	37.5	40.0
	C Condi- tion (7°C)	COPd (declared COP)			6.4		6.3		6.5
		Pdh (declared heating cap) kW			21.6	22.4	22.8	24.1	25.7
	D Con- dition (12°C)	COPd (declared COP)			8.7		8.8		9.0
		Pdh (declared heating cap) kW			10.0		10.3		12.2
	TBivalent	COPd (declared COP)			2.4		2.3		2.3
		Pdh (declared heating cap) kW			62.4	64.8	67.0	69.6	74.3
		Tbiv (bivalent temperature) °C			-10				
TOL	COPd (declared COP)			2.4		2.3		2.3	
	Pdh (declared heating cap) kW			62.4	64.8	67.0	69.6	74.3	
Space heating (Average climate) recommended combination 2	TOL	Tol (temperature operating limit) °C			-10				
Space heating (Average climate) recommended combination 3	A Con- dition (-7°C)	COPd (declared COP)			2.7		2.6		2.6
		Pdh (declared heating cap) kW			55.2	57.3	59.3	61.6	65.7
	B Condi- tion (2°C)	COPd (declared COP)			3.7		3.6		
		Pdh (declared heating cap) kW			33.6	34.9	36.1	37.5	40.0
	C Condi- tion (7°C)	COPd (declared COP)			6.3		6.2		6.4
		Pdh (declared heating cap) kW			21.6	22.4	23.2	24.1	25.7
	D Con- dition (12°C)	COPd (declared COP)			8.6		8.7		8.7
		Pdh (declared heating cap) kW			9.9	10.0	10.3	10.7	11.8
	TBivalent	COPd (declared COP)			2.4		2.3		2.2
		Pdh (declared heating cap) kW			62.4	64.8	67.0	69.6	74.3
		Tbiv (bivalent temperature) °C			-10				
TOL	COPd (declared COP)			2.4		2.3		2.2	
	Pdh (declared heating cap) kW			62.4	64.8	67.0	69.6	74.3	
	Tol (temperature operating limit) °C			-10					
Capacity range				HP	42	44	46	48	50
PED	Category				Category II				
Maximum number of connectable indoor units					64 (3)				
Indoor index connection	Min.				525.0	550.0	575.0	600.0	625.0
	Max.				1,365.0	1,430.0	1,495.0	1,560.0	1,625.0
Heat exchanger	Indoor side				Air				
	Outdoor side				Air				
	Air flow rate	Cooling	Rated	m³/h	41,700	42,300	44,580	46,800	46,260
Sound power level	Heating	Rated	m³/h	41,700	42,300	44,580	46,800	46,260	
	Cooling	Nom.	dB(A)	89.1 (4)	89.8 (4)	89.3 (4)	90.4 (4)	89.8 (4)	
Sound pressure level	Heating	Prated,h	dB(A)	90.1 (4)	90.5 (4)	90.4 (4)	91.3 (4)	90.9 (4)	
	Cooling	Nom.	dB(A)	66.5 (5)	67.2 (5)	67.0 (5)	67.8 (5)	67.5 (5)	
Refrigerant	Type				R-410A				
Refrigerant oil	GWP				2,087.5				
	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection				
		OD			19.1				
	Gas	Type			Braze connection				
		OD			41.3				
	Total piping length	System	Actual	m	1,000 (6)				
Indication if the heater is equipped with a supplementary heater					no				
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0				
Power consump- tion in other than active mode	Crank- case heater mode	Cooling	PCK	kW	0.000				
		Heating	PCK	kW	0.206		0.231		0.243
	Off mode	Cooling	POFF	kW	0.190		0.223		0.224
		Heating	POFF	kW	0.206		0.231		0.243
	Standby mode	Cooling	PSB	kW	0.190		0.223		0.224
		Heating	PSB	kW	0.206		0.231		0.243
	Thermo- stat-off mode	Cooling	PTO	kW	0.024		0.029		
		Heating	PTO	kW	0.251		0.292		0.293

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Technical specifications System					RXYQ42U5	RXYQ44U5	RXYQ46U5	RXYQ48U5	RXYQ50U5
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				
Technical specifications System					RXYQ52U5			RXYQ54U5	
System	Outdoor unit module 1				RXYQ16U			RXYQ18U	
	Outdoor unit module 2							RXYQ18U	
	Outdoor unit module 3							RXYQ18U	
Recommended combination					6 x FXFQ50AVEB + 14 x FXFQ63AVEB + 2 x FXFQ80AVEB			9 x FXFQ50AVEB + 15 x FXFQ63AVEB	
Recommended combination 2					6 x FXSQ50A2VEB + 14 x FXSQ63A2VEB + 2 x FXSQ80A2VEB			9 x FXSQ50A2VEB + 15 x FXSQ63A2VEB	
Recommended combination 3					6 x FXMQ50P7VEB + 14 x FXMQ63P7VEB + 2 x FXMQ80P7VEB			9 x FXMQ50P7VEB + 15 x FXMQ63P7VEB	
Cooling capacity	Prated,c			kW	145.8 (1)			151.2 (1)	
Heating capacity	Nom.	6°CWB		kW	145.8 (2)			151.2 (2)	
	Prated,h			kW	145.8 (2)			151.2 (2)	
	Max.	6°CWB		kW	163.0 (2)			169.5 (2)	
Power input - 50Hz	Heating	Nom.	6°CWB	kW	40.98 (2)			42.66 (2)	
COP at nom. capacity	6°CWB			kW/kW	3.56 (2)			3.54 (2)	
ESEER - Automatic					6.42			6.38	
ESEER - Standard					4.99			4.97	
SCOP					4.3				
SCOP recommended combination 2					4.3				
SCOP recommended combination 3					4.2				
SEER					6.4				
SEER recommended combination 2					6.4				
SEER recommended combination 3					6.4				
ηs,c				%	253.7			254.1	
ηs,h				%	167.2			169.4	
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc		kW	2.0			1.9	
					145.8			151.2	
	B Condi- tion (30°C - 27/19)	EERd Pdc		kW	4.2			4.1	
					107.4			111.4	
	C Condi- tion (25°C - 27/19)	EERd Pdc		kW	69.1			8.1	
					71.6				
Space cooling recommended combination 2	D Condi- tion (20°C - 27/19)	EERd Pdc		kW	17.6			19.1	
					30.7			34.4	
	A Condi- tion (35°C - 27/19)	EERd Pdc		kW	2.0			1.9	
					145.8			151.2	
	B Condi- tion (30°C - 27/19)	EERd Pdc		kW	4.1			4.1	
					107.4			111.4	
Space cooling recommended combination 3	C Condi- tion (25°C - 27/19)	EERd Pdc		kW	69.0			8.1	
					71.6				
	D Condi- tion (20°C - 27/19)	EERd Pdc		kW	17.4			18.9	
					30.7			34.1	
	A Condi- tion (35°C - 27/19)	EERd Pdc		kW	2.0			1.9	
					145.8			151.2	
Space cooling recommended combination 3	B Condi- tion (30°C - 27/19)	EERd Pdc		kW	4.1			4.1	
					107.4			111.4	
	C Condi- tion (25°C - 27/19)	EERd Pdc		kW	8.0			8.2	
					69.1			71.6	
	D Condi- tion (20°C - 27/19)	EERd Pdc		kW	17.5			19.1	
					30.7			34.7	

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Technical specifications System					RXYQ52U5		RXYQ54U5	
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.2		2.1	
		Pdh (declared heating cap) kW			79.0		83.7	
		Tbiv (bivalent temperature) °C					-10	
	TOL	COPd (declared COP)			2.2		2.1	
		Pdh (declared heating cap) kW			79.0		83.7	
		Tol (temperature operating limit) °C					-10	
	A Con- dition (-7°C)	COPd (declared COP)					2.6	
		Pdh (declared heating cap) kW			69.9		74.0	
	B Condi- tion (2°C)	COPd (declared COP)			3.8		3.9	
		Pdh (declared heating cap) kW			42.5		45.1	
C Condi- tion (7°C)	COPd (declared COP)			6.6		6.8		
	Pdh (declared heating cap) kW			27.4		29.0		
D Con- dition (12°C)	COPd (declared COP)					9.0		
	Pdh (declared heating cap) kW					14.2		
Space heating (Average climate) recommended combination 2	A Con- dition (-7°C)	COPd (declared COP)					2.6	
		Pdh (declared heating cap) kW			69.9		74.0	
	B Condi- tion (2°C)	COPd (declared COP)			3.8		3.9	
		Pdh (declared heating cap) kW			42.6		45.1	
	C Condi- tion (7°C)	COPd (declared COP)			6.7		6.8	
		Pdh (declared heating cap) kW			27.4		29.0	
	D Con- dition (12°C)	COPd (declared COP)					9.1	
		Pdh (declared heating cap) kW					14.4	
	TBivalent	COPd (declared COP)			2.2		2.1	
		Pdh (declared heating cap) kW			79.0		83.7	
Tbiv (bivalent temperature) °C					-10			
TOL	COPd (declared COP)			2.2		2.1		
	Pdh (declared heating cap) kW			79.0		83.7		
Space heating (Average climate) recommended combination 2	TOL	Tol (temperature operating limit) °C					-10	
Space heating (Average climate) recommended combination 3	A Con- dition (-7°C)	COPd (declared COP)			2.6		2.5	
		Pdh (declared heating cap) kW			69.9		74.0	
	B Condi- tion (2°C)	COPd (declared COP)			3.7		3.8	
		Pdh (declared heating cap) kW			42.5		45.1	
	C Condi- tion (7°C)	COPd (declared COP)			6.4		6.5	
		Pdh (declared heating cap) kW			27.3		29.0	
	D Con- dition (12°C)	COPd (declared COP)					8.7	
		Pdh (declared heating cap) kW					13.7	
	TBivalent	COPd (declared COP)			2.2		2.1	
		Pdh (declared heating cap) kW			79.0		83.7	
Tbiv (bivalent temperature) °C					-10			
TOL	COPd (declared COP)			2.2		2.1		
	Pdh (declared heating cap) kW			79.0		83.7		
	Tol (temperature operating limit) °C					-10		
Capacity range		HP			52		54	
PED	Category				Category II			
Maximum number of connectable indoor units					64 (3)			
Indoor index connection	Min.				650.0		675.0	
	Max.				1,690.0		1,755.0	
Heat exchanger	Indoor side				Air			
	Outdoor side				Air			
	Air flow rate	Cooling	Rated	m³/h	45,720		45,180	
Sound power level	Heating	Prated,h		dBA	45,720		45,180	
	Cooling	Nom.		dBA	89.3 (4)		88.6 (4)	
Sound pressure level	Cooling	Nom.		dBA	90.5 (4)		90.1 (4)	
	Cooling	Nom.		dBA	67.1 (5)		66.8 (5)	
Refrigerant	Type				R-410A			
	GWP				2,087.5			
Refrigerant oil	Type				Synthetic (ether) oil FVC68D			

2 Specifications

2 - 1 Specifications

Technical specifications System					RXYQ52U5		RXYQ54U5	
Piping connections	Liquid	Type			Braze connection			
		OD mm			19.1			
	Gas	Type			Braze connection			
		OD mm			41.3			
Total piping length	System	Actual	m	1,000 (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	Crank-case heater mode	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.255		0.267	
	Off mode	Cooling	POFF	kW	0.225		0.226	
		Heating	POFF	kW	0.255		0.267	
	Standby mode	Cooling	PSB	kW	0.225		0.226	
		Heating	PSB	kW	0.255		0.267	
	Thermo-stat-off mode	Cooling	PTO	kW	0.029			
		Heating	PTO	kW	0.294			
Cooling	Cdc (Degradation cooling)				0.25			
Heating	Cdh (Degradation heating)				0.25			

Electrical specifications System				RXYQ22U5	RXYQ24U5	RXYQ26U5	RXYQ28U5	RXYQ30U5
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)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-				
	Nominal running current (RLA)	Combina- tion 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)
	Minimum circuit amps (MCA)		A	46.0 (10)		51.0 (10)	55.0 (10)	59.0 (10)
	Maximum fuse amps (MFA)		A	63 (11)				80 (11)
	Power Performance	Power factor	Combina- tion 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				

Electrical specifications System				RXYQ32U5	RXYQ34U5	RXYQ36U5	RXYQ38U5	RXYQ40U5
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	36.0 (7)	38.8 (7)	44.9 (7)	44.3 (7)	43.7 (7)

2 Specifications

2 - 1 Specifications

2

Electrical specifications System				RXYQ32U5	RXYQ34U5	RXYQ36U5	RXYQ38U5	RXYQ40U5
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-				
		Combina- tion B	Cooling	-				
	Starting current (MSC) - remark			See note 8				
	Zmax	List		No requirements				
	Minimum Ssc value		kVa	15,094 (9)	16,352 (9)	17,359 (9)	19,397 (9)	20,378 (9)
	Minimum circuit amps (MCA)		A	62.0 (10)	66.0 (10)	70.0 (10)	76.0 (10)	81.0 (10)
	Maximum fuse amps (MFA)		A	80 (11)			100 (11)	
Power Performance	Power factor	Combina- tion 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				

Electrical specifications System				RXYQ42U5	RXYQ44U5	RXYQ46U5	RXYQ48U5	RXYQ50U5
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		46.2 (7)	48.7 (7)	51.4 (7)	54.0 (7)	56.8 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-				
	Nominal running current (RLA)	Combina- tion B	Cooling	-				
	Starting current (MSC) - remark			See note 8				
	Zmax	List			No requirements			
	Minimum Ssc value kVa			20,629 (9)	21,132 (9)	21,887 (9)	22,641 (9)	23,899 (9)
	Minimum circuit amps (MCA) A			84.0 (10)	86.0 (10)	89.0 (10)	93.0 (10)	97.0 (10)
	Maximum fuse amps (MFA) A			100 (11)			125 (11)	
Power Performance	Power factor	Combina- tion B	35°C ISO - Full load	-				
			46°C ISO - Full load	-				
Wiring connections - 50Hz	For power supply	Quantity		5G				
	For connection with indoor	Quantity Remark		2 F1,F2				

Electrical specifications System				RXYQ52U5		RXYQ54U5	
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	59.6 (7)		62.4 (7)	
Current - 50Hz	Nominal running current (RLA)	Combina- Cooling tion A		-			
		Combina- Cooling tion B		-			
	Starting current (MSC) - remark			See note 8			
	Zmax List			No requirements			
	Minimum Ssc value		kVa	25,157 (9)		26,415 (9)	
	Minimum circuit amps (MCA)		A	101.0 (10)		105.0 (10)	
	Maximum fuse amps (MFA)		A	125 (11)			
	Power Performance	Power factor	Combina- 35°C ISO - Full load tion B 46°C ISO - Full load		-		

2 Specifications

2 - 1 Specifications

Electrical specifications System			RXYQ52U5	RXYQ54U5
Wiring connections - 50Hz	For power supply	Quantity	5G	
	For connection with indoor	Quantity	2	
		Remark	F1,F2	

3 Options

3 - 1 Options

RXYQ-U5

RYYQ-U5

RYMQ-U5

3

No	Item	RXYQ8U5	RXYQ10-12U5	RXYQ14-18U5	RXYQ20U5	RYYQ22~54U5		
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-.	---			KKS26B1*		

Notes

- All options are kits
- Only for multi units
- To mount option -1a-, option -1c- is required.
- 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

RXYTQ8-16U5YF

RYMQ8-20U5

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

Units in scope: FXZQ15A and FXAQ15A.

- In case the system contains these indoor units and the total connection ratio (CR) $\leq 100\%$: no special restrictions. Follow the restrictions that apply to regular VRV DX indoor units.
- In case the system contains these indoor units and the total connection ratio (CR) $> 100\%$: special restrictions apply.
 - When the connection ratio (CR1) of the sum of all FXZQ15A and/or FXAQ15A units in the system $\leq 70\%$, and ALL other VRV DX indoor units have an individual capacity class > 50 : no special restrictions.
 - When the connection ratio (CR1) of the sum of all FXZQ15A and/or FXAQ15A units in the system $\leq 70\%$, and NOT ALL other VRV DX indoor units have an individual capacity class > 50 : the restrictions below apply.
 - $100\% < CR \leq 105\% \rightarrow$ CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be $\leq 70\%$.
 - $105\% < CR \leq 110\% \rightarrow$ CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be $\leq 60\%$.
 - $110\% < CR \leq 115\% \rightarrow$ CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be $\leq 40\%$.
 - $115\% < CR \leq 120\% \rightarrow$ CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be $\leq 25\%$.
 - $120\% < CR \leq 125\% \rightarrow$ CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be $\leq 10\%$.
 - $125\% < CR \leq 130\% \rightarrow$ FXZQ15A and FXAQ15A cannot be used

REMARK

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

3D104665

RXYQ-U5

RYYQ-U5

RYMQ-U5

Heat pump VRV4
Multi-unit standard combinations table

		1HP	1.5HP	2HP	2.5HP	3HP	3.5HP	4HP
Heat pump	RXYQ8* / RYQ8* / RXYQ8*	1						
	RXYQ10* / RYQ10* / RXYQ10*		1					
	RXYQ12* / RYQ12* / RXYQ12*			1				
	RXYQ14* / RYQ14* / RXYQ14*				1			
	RXYQ16* / RYQ16* / RXYQ16*					1		
	RXYQ18* / RYQ18* / RXYQ18*						1	
	RXYQ20* / RYQ20* / RXYQ20*							1
	RXYQ22* / RYQ22* / RXYQ22*		1	1				
Multi-combination with 2 outdoor units	RXYQ24* / RYQ24* / RXYQ24*	1				1		
	RXYQ26* / RYQ26* / RXYQ26*			1	1			
	RXYQ28* / RYQ28* / RXYQ28*				1	1		
	RXYQ30* / RYQ30* / RXYQ30*						1	
	RXYQ32* / RYQ32* / RXYQ32*							2
	RXYQ34* / RYQ34* / RXYQ34*						1	1
	RXYQ36* / RYQ36* / RXYQ36*							1
	RXYQ38* / RYQ38* / RXYQ38*	1	1					1
Multi-combination with 3 outdoor units	RXYQ40* / RYQ40* / RXYQ40*		1	1				1
	RXYQ42* / RYQ42* / RXYQ42*			1			2	
	RXYQ44* / RYQ44* / RXYQ44*				1		2	
	RXYQ46* / RYQ46* / RXYQ46*					1	2	
	RXYQ48* / RYQ48* / RXYQ48*						3	
	RXYQ50* / RYQ50* / RXYQ50*							2
	RXYQ52* / RYQ52* / RXYQ52*							1
	RXYQ54* / RYQ54* / RXYQ54*							3

Remark

RYQ8~20 = Single continuous heating

RYQ22~54 Multi continuous heating

RXYQ8~20 = Single non-continuous heating

RXYQ22~54 Multi non-continuous heating

RXYQ8~20 Single non-continuous heating replacement (VRV4-Q)

RXYQ22~4 Multi non-continuous heating replacement (VRV4-Q)

1) For single unit installation RYQ* 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. RYMQ36*+RYMQ16*+RYMQ20*).

→ RYMQ* units can only be used in multi-outdoor-unit combinations and cannot be used as standalone units.

4) RYQ8~20 units cannot be used in multi-outdoor-unit combinations.

5) RYQ8~20 "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 RXYQ8~20 modules (e.g. RXYQ36*+RXYQ16*+RXYQ20*).

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

4 Combination table

4 - 1 Combination Table

RXYQ-U5
RYYQ-U5
RYMQ-U5

VRV4
Heat pump
Indoor unit combination restrictions
(1/2)

Indoor unit combination pattern	VRV* DX indoor unit	RA DX indoor unit	Hydrobox unit	Air handling unit (AHU) ⁽³⁾
VRV* DX indoor unit	O	O	O	O
RA DX indoor unit	O	O	X	X
Hydrobox unit	O	X	O ₁	X
Air handling unit ⁽³⁾	O	X	X	O ₂

O: Allowed
X: Not allowed

Notes

- VRV* DX indoor unit
 - When combining VRV DX indoor units with other types of indoor units, respect the following combination patterns:
 - Example
Allowed : [VRV DX indoor unit + Hydrobox unit] or [VRV DX indoor unit + RA DX indoor unit] or [VRV DX indoor unit + AHU]
Not allowed : [VRV DX indoor unit + (RA DX indoor unit & (Hydrobox unit or AHU))] or [VRV DX indoor unit + (Hydrobox unit & (RA DX indoor unit or AHU))]
- O₁
 - Only connect Hydrobox units to a VRV IV Heat Pump in combination with a VRV DX indoor unit.
 - Refer to the connection ratio restrictions (3D079540 & 3D117169).
 - Connection with only Hydrobox units: refer to the Daikin Altherma solutions.
 - Only connect Hydrobox units of the HXY* series.
 - HXHD* series Hydrobox units are not allowed.
- O₂
 - Combination of AHU only + control box EKEQFA (the combination with VRV DX indoor units is not allowed; maximum 54HP for 400 + 2x500 class EKEQV kit)
 - X-control is possible (up to 3x [EKEQV+EKEQFA* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
 - Y-control is possible (up to 3x [EKEQV+EKEQFA* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
 - W-control is possible (up to 3x [EKEQV+EKEQFA* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
 - Combination of AHU only + control box EKEQMA (not combined with VRV DX indoor units)
 - Z-control is possible (the allowed number of [EKEQV + EKEQMA boxes] is determined by the connection ratio (90-110%) and the capacity of the outdoor unit.
- Combination of AHU and VRV DX indoor units
 - Z-control is possible (EKEQMA* boxes are allowed, but with a limited connection ratio).
- The combination of AHU with Hydrobox units or RA DX indoor units is not allowed.
- (3) The following units are considered AHUs:
 - EKEQV + EKEQ(MA/FA) + AHU coil
 - Biddle air curtain
 - FXMQ_MF units

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

3D079543F

RXYQ-U5
RYYQ-U5
RYMQ-U5

VRV4
Heat pump
Indoor unit combination restrictions
(2/2)

Combination table	RYYQ*	RYYQ*	RXYQ*	RXYQ*
	Single continuous heating	Multi continuous heating	Single non-continuous heating	Multi non-continuous heating
VRV* DX indoor unit	O	O	O	O
RA DX indoor unit	O	X	O	X
Hydrobox unit	O	O ₁	O	O ₁
Air handling unit (AHU) ⁽²⁾	O	O	O	O

O: Allowed
X: Not allowed

Notes

- O₁
 - Available upon request through the SPN procedure.
- (2) The following units are considered AHUs:
 - EKEQV + EKEQ(MA/FA) + AHU coil
 - Biddle air curtain
 - FXMQ_MF units

3D079543F

4 Combination table

4 - 1 Combination Table

RXYQ-U5

RYYQ-U5

RVMQ-U5 Compatibility list: ·VRV4· heat pump - ·RA DX· indoor unit

Wall mounted type	Emura	FTXJ20A
		FTXJ25A
		FTXJ35A
		FTXJ42A
		FTXJ50A
	Stylish	FTXA20
		FTXA25
		FTXA35
		FTXA42
		FTXA50
	FTXM	FTXM20R
		FTXM25R
		FTXM35R
		FTXM42R
		FTXM50R
		FTXM60R
		FTXM71R
Ceiling/wall mounted	Flex	FLXS25B
		FLXS35B
		FLXS50B
		FLXS60B
Floor standing type	FVXM	FVXM25F
		FVXM35F
		FVXM50F
		FVXM25A
		FVXM35A
		FVXM50A
		CVXM20A
	Nexura	FVXG25K
		FVXG35K
		FVXG50K

Remark

The limitations on the use of ·RA DX· indoor units with the ·VRV4· Heat Pump are subject to the rules set out in drawings ·3D079543· and ·3D079540·.

If you want to connect ·RA·/·SA· ·DX· cassette, ceiling-mounted, or duct indoor units, use their ·VRV DX· indoor unit equivalents instead.

3D082373H

5 Capacity tables

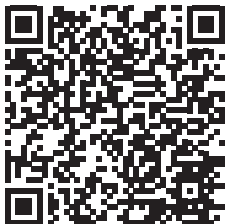
5 - 1 Capacity Table Legend

5

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

RXYQ-U5
RYYQ-U5
RYMQ-U5

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

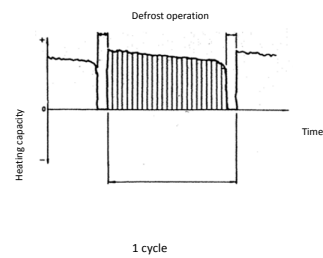
(°C DB/°C WB)	17/7,6 or less	-3/5,6	-3/3,7	0/-0,7	3/2,2	5/4,1	7/6
Integrated correction factor for frost accumulation C							
8HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00
10HP	0,95	0,93	0,87	0,79	0,80	0,88	1,00
12HP	0,95	0,92	0,87	0,75	0,76	0,85	1,00
14HP	0,95	0,92	0,86	0,72	0,73	0,84	1,00
16HP	0,95	0,92	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

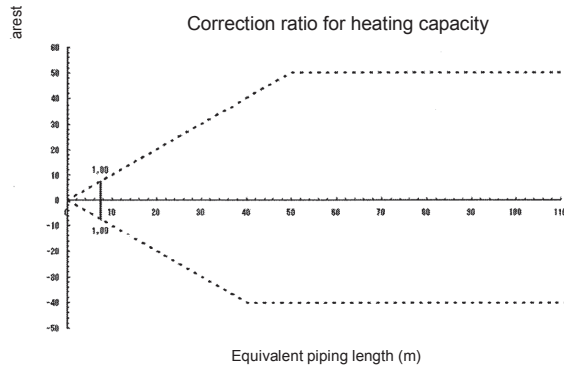
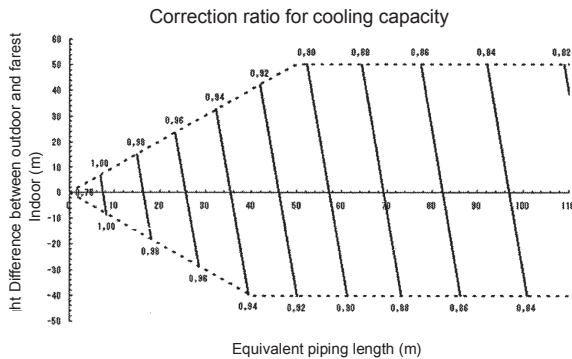
5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ8U5

RYMQ8U5

5



NOTES

- 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 in the above figures.

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

- 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%.

$$\begin{array}{|c|} \hline \text{Maximum capacity of outdoor units} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Correction ratio of piping to furthest indoor} \\ \hline \end{array}$$

Condition: Indoor connection ratio exceeds 100%.

$$\begin{array}{|c|} \hline \text{Maximum capacity of outdoor units} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Capacity of outdoor units from capacity table at installed connection ratio} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Correction ratio of piping to furthest indoor} \\ \hline \end{array}$$

- 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

- 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
8HP	19.1	9.5

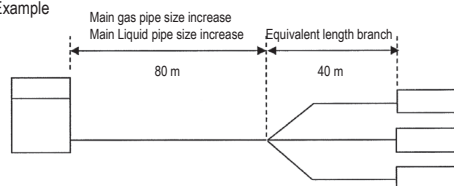
- Equivalent length used in the above figures is based upon the following equivalent length

$$\begin{array}{|c|} \hline \text{Equivalent piping length} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Equivalent length of main pipe} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Correction factor} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Equivalent length of branch pipes} \\ \hline \end{array}$$

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 rate 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

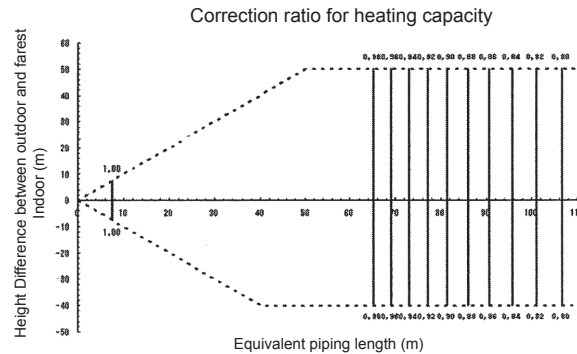
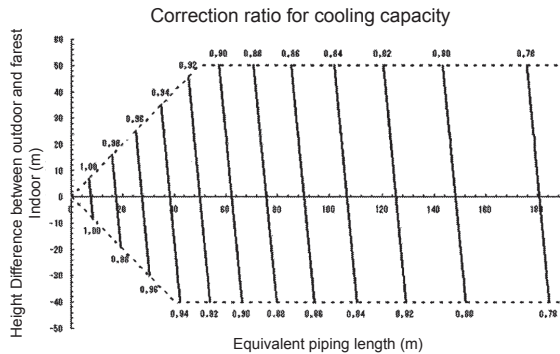
3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ10U5

RYMQ10U5



NOTES

- 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 in the above figures.

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

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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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).

- 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

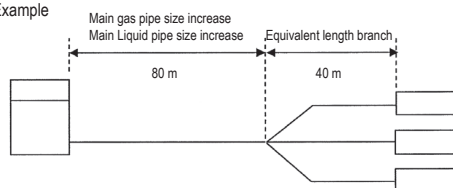
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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

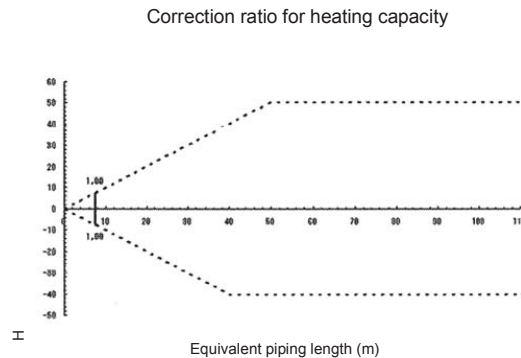
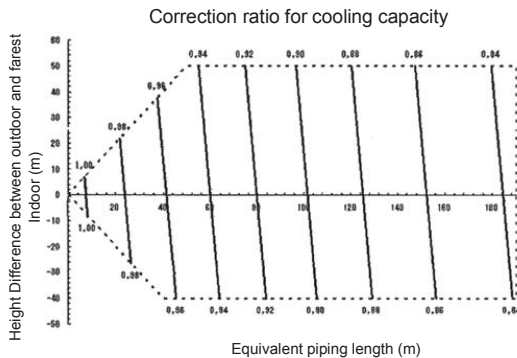
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.87
heating capacity when height difference = 0 is thus approximately 0.90

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ12,14,24,36U5
RYYQ24,36U5
RYMQ12,14U5



NOTES

- 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 in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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

- 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

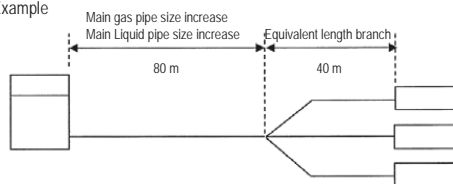
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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	0.89
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

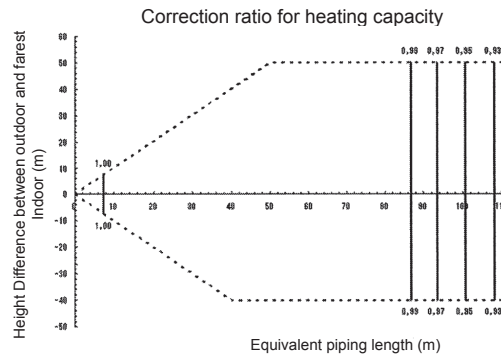
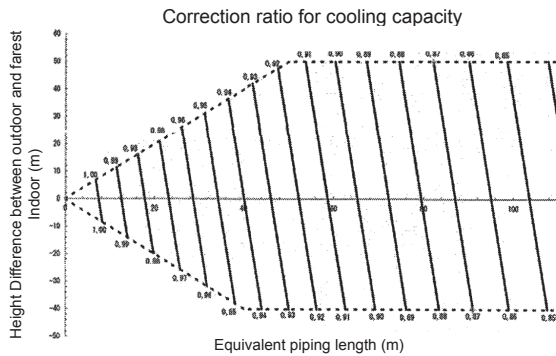
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.89
heating capacity when height difference = 0 is thus approximately 1.0

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ16U5 RYMQ16U5



NOTES

- 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 in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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).

- 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

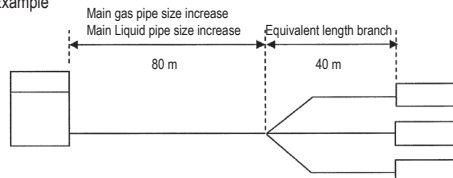
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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



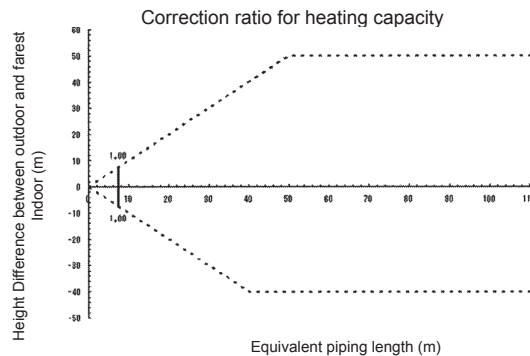
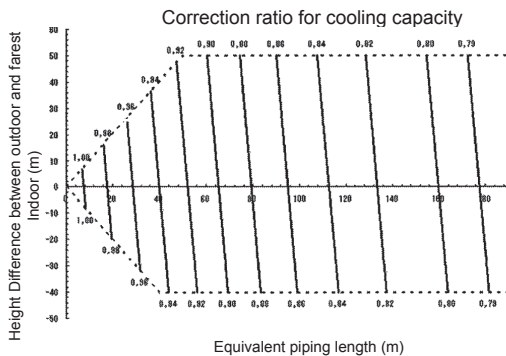
In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 80 m
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
heating capacity when height difference = 0 is thus approximately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

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ18,26,28,30,38,40,42,44U5
RYYQ26,28,30,38,40,42,44U5
RYMQ18U5



NOTES

- 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 in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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).

- 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

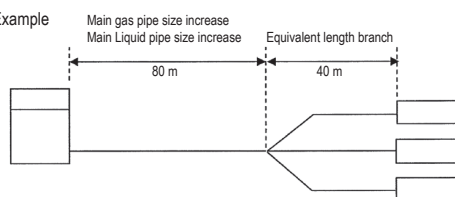
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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

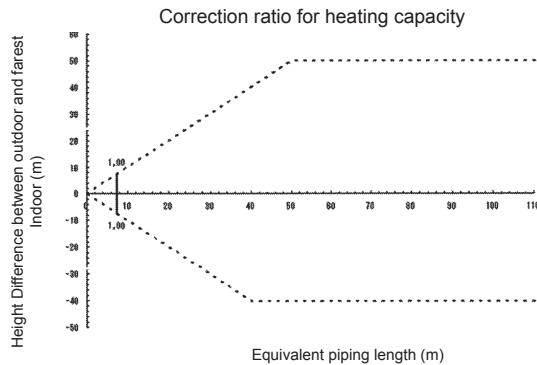
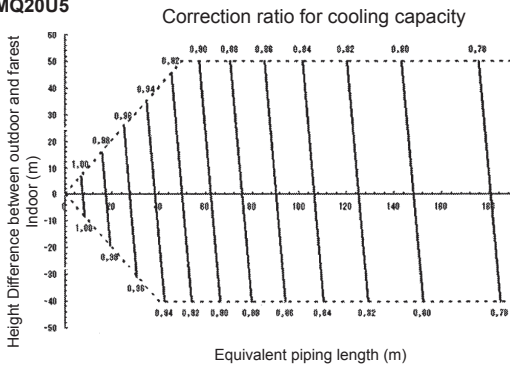
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83 heating capacity when height difference = 0 is thus approximately 1.0

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ20,32,34U5
RYYQ32,34U5
RYMQ20U5



NOTES

- 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 in the above figures.

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

- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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).

- 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

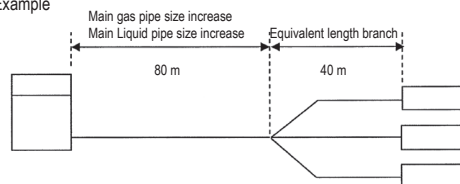
- Equivalent length used in the above figures is based upon the following equivalent length

$$\begin{aligned} \text{Equivalent piping length} &= \\ \text{Equivalent length of main pipe} &\times \text{Correction factor} \\ + \\ \text{Equivalent length of branch pipes} \end{aligned}$$

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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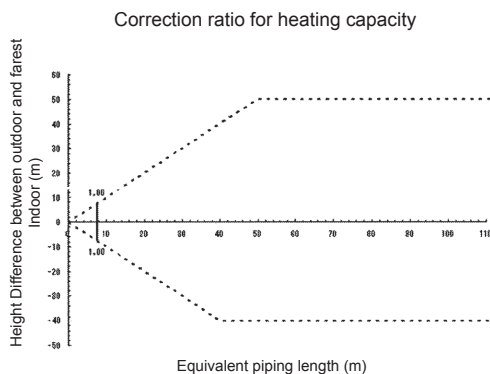
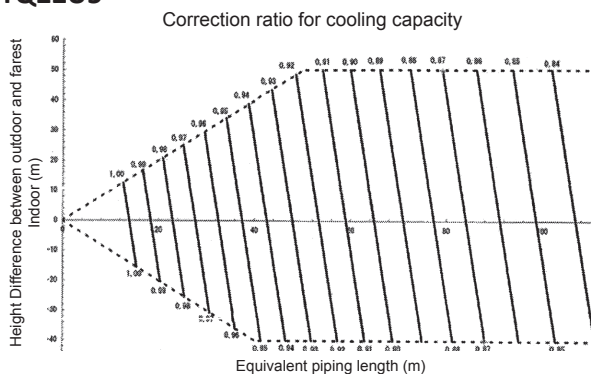
5 Capacity tables

5 - 2 Capacity Correction Factor

5

RXYQ22U5

RYYQ22U5



NOTES

- 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 in the above figures.

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

- 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%.

$$\begin{aligned} \text{Maximum capacity of outdoor units} &= \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \\ &\times \text{Correction ratio of piping to furthest indoor} \end{aligned}$$

Condition: Indoor connection ratio exceeds 100%.

$$\begin{aligned} \text{Maximum capacity of outdoor units} &= \text{Capacity of outdoor units from capacity table at installed connection ratio} \\ &\times \text{Correction ratio of piping to furthest indoor} \end{aligned}$$

- 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).

- 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

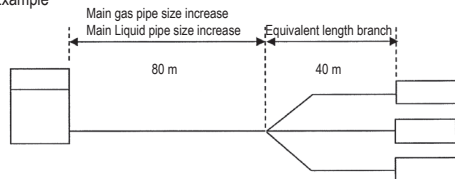
- Equivalent length used in the above figures is based upon the following equivalent length

$$\begin{aligned} \text{Overall equivalent length} &= \\ \text{Equivalent length of main pipe} &\times \text{Correction factor} \\ + \\ \text{Equivalent length of branch pipes} \end{aligned}$$

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

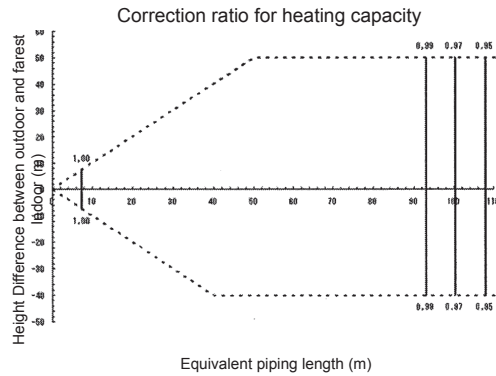
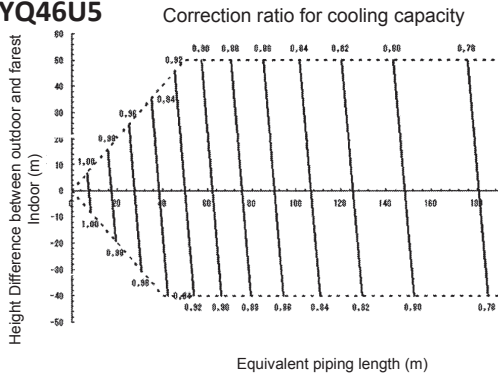
3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ46U5

RYYQ46U5



NOTES

- 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 in the above figures.

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

- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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
46 HP	41.3	22.2

- 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
46 HP	41.3	19.1

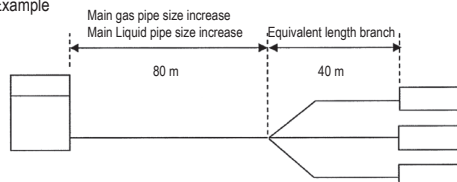
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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	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 0.83
heating capacity when height difference = 0 is thus approximately 1.0

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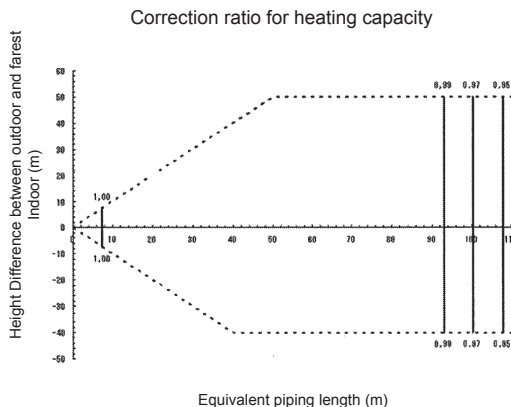
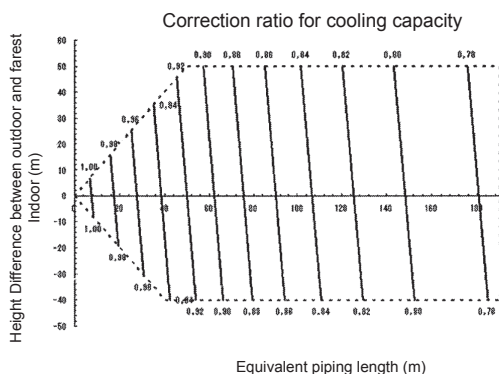
5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ48U5

RYYQ48U5

5



NOTES

- 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 in the above figures.

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

- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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
48 HP	41.3	22.2

- 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
48 HP	41.3	19.1

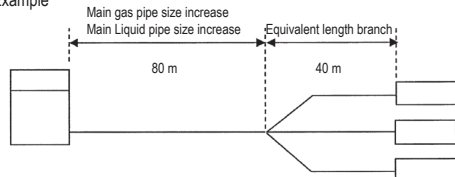
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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 0.83
heating capacity when height difference = 0 is thus approximately 0.97

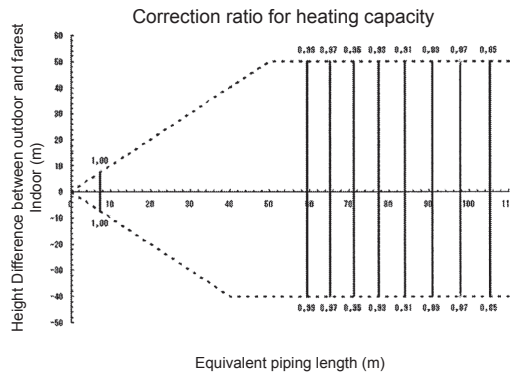
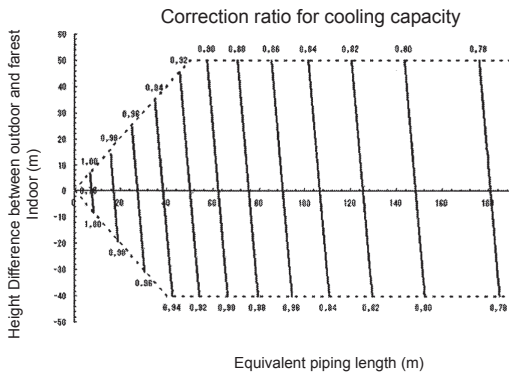
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5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ50U5

RYYQ50U5



NOTES

- 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 in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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
50 HP	41.3	22.2

- 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
50 HP	41.3	19.1

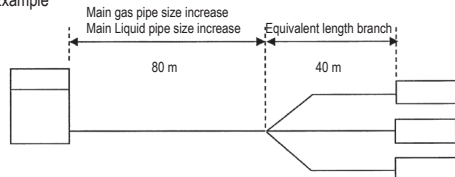
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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 = $80 \text{ m} \times 1.0 + 40 \text{ m} = 120 \text{ m}$
(Heating) Overall equivalent length = $80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$
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 0.92

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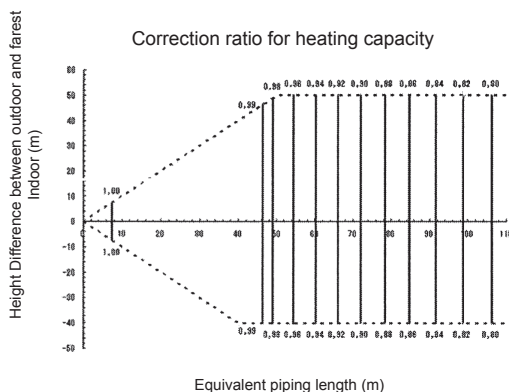
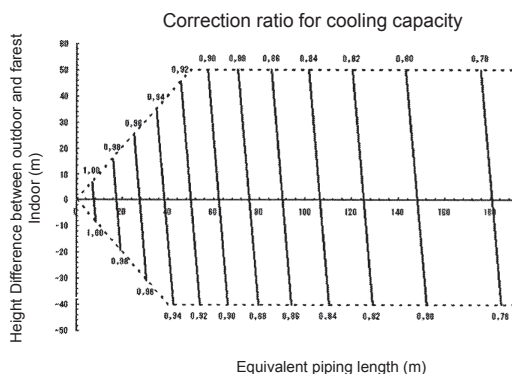
5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ52U5

RYYQ52U5

5



NOTES

- 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 in the above figures.

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

- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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
52 HP	41.3	22.2

- 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
52 HP	41.3	19.1

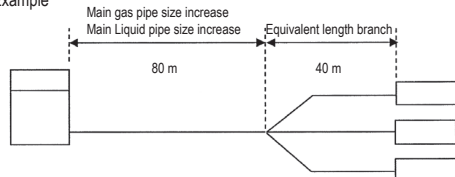
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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 = $80 \text{ m} \times 1.0 + 40 \text{ m} = 120 \text{ m}$
(Heating) Overall equivalent length = $80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$

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 0.88

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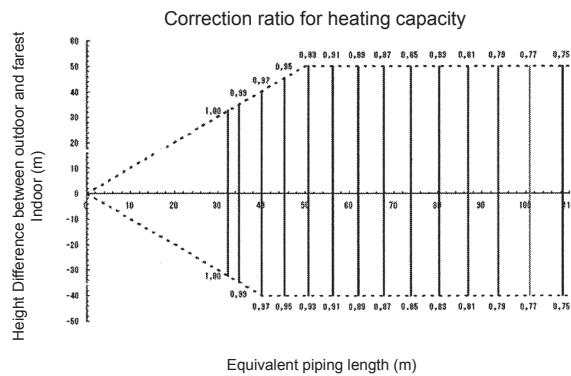
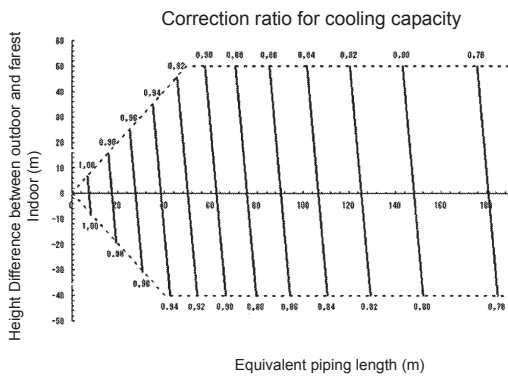
5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQ54U5

RYYQ54U5

5



NOTES

- 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 in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- 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%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at the 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

Condition: Indoor connection ratio exceeds 100%.

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor}$$

- 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
54 HP	41.3	22.2

- 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
54 HP	41.3	19.1

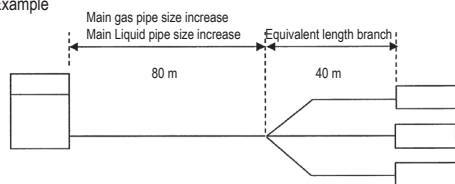
- Equivalent length used in the above figures is based upon the following equivalent length

$$\text{Equivalent piping length} = \text{Equivalent length of main pipe} \times \text{Correction factor} + \text{Equivalent length of branch pipes}$$

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 = 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 0.83

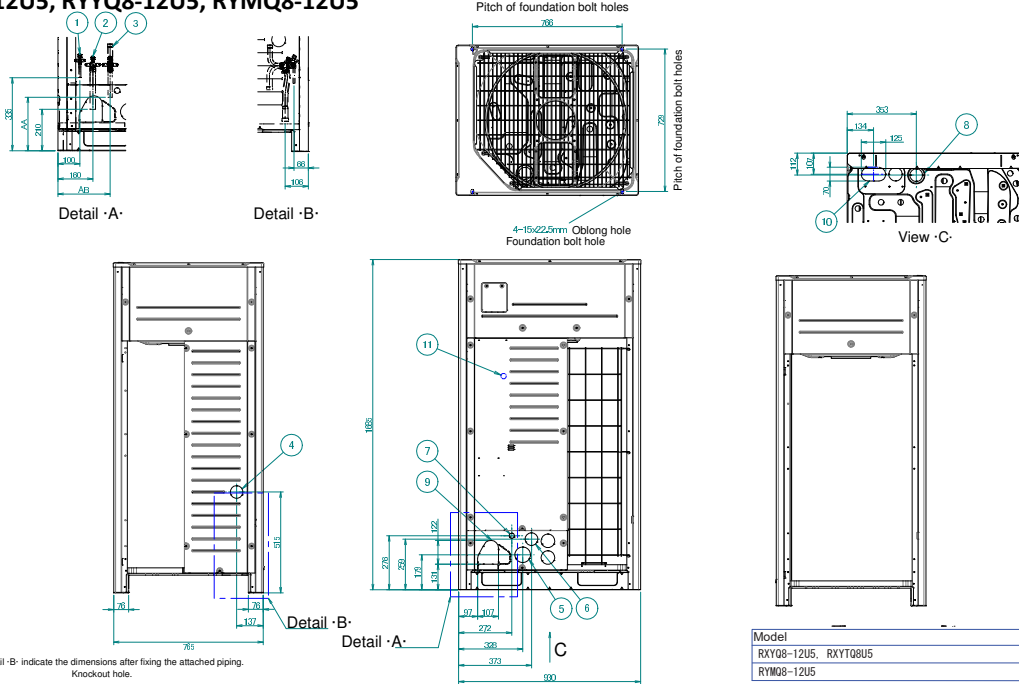
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6 Dimensional drawings

6 - 1 Dimensional Drawings

6

RXYQ8-12U5, RYYQ8-12U5, RYM8-12U5



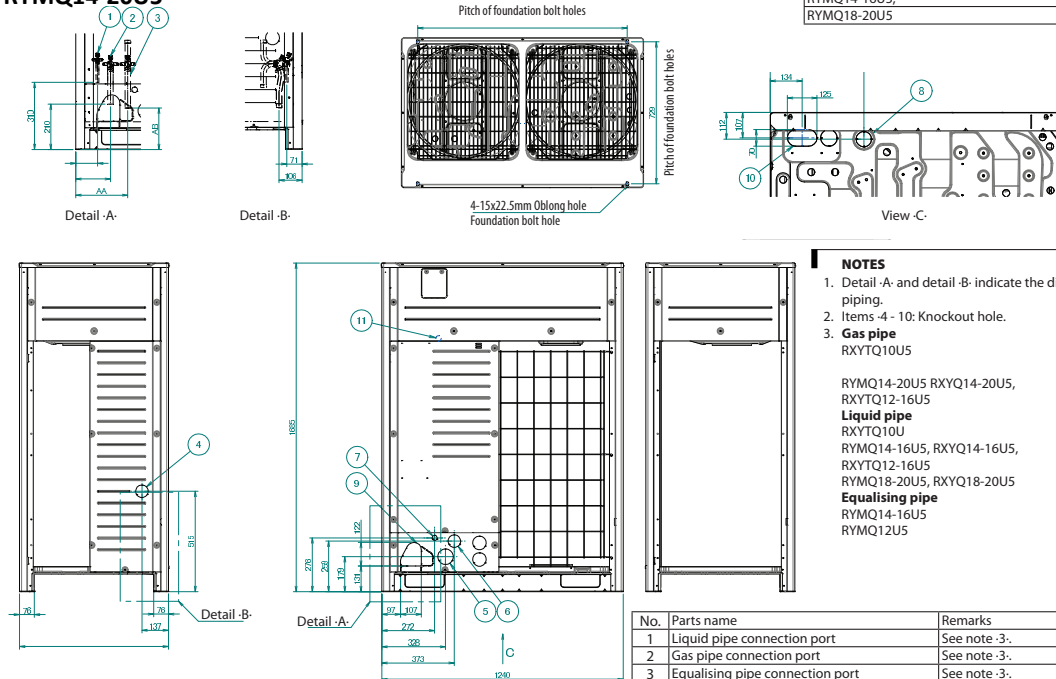
- Notes**
- Detail -A and detail -B indicate the dimensions after fixing the attached piping.
 - Items 4 - 10: Knockout hole.
 - Gas pipe**
RYYQ8U5, RYM8U5, RXYQ8U5, RXYQ8U, RXYQ8U : Ø 19.1: brazing connection
RXYQ10U5, RYM10U5, RXYQ10U5, RXYQ10U : Ø 22.2: brazing connection
REMQ5U, REMA5, REYQ8-12U, REYQ8-12A : Ø 28.4: brazing connection
RXYQ12U5, RYM12U5, RXYQ12U5, RXYQ12U : Ø 28.6: brazing connection
 - Liquid pipe**
RYYQ8-10U5, RYM8-10U5, RXYQ8-10U5, RXYQ8-10U, REMQ5U, REMA5, REYQ8-12U, REYQ8-12A, RXYQ8U RXYQ12U5, RYM12U5, RXYQ12U5, RXYQ12U : Ø 9.5: brazing connection
REYQ8-12U, REYQ8-12A, RXYQ8U RXYQ12U5, RYM12U5, RXYQ12U5, RXYQ12U : Ø 12.7: brazing connection
 - Equalising pipe**
RYYQ8-10U5 : Ø 19.1: brazing connection
RYYQ8-12U5 : Ø 22.2: brazing connection
REMQ5U, REMA5, REYQ8-12U, REYQ8-12A : Ø 19.1: brazing connection

Model	AA	AB
RXYQ8-12U5, RXYQ8U5	-	-
RYM8-12U5	246	240

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

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RXYQ14-20U5 RYMQ14-20U5



Model	AA	AB
RXYQ14-20U5, RYYQ14-20U5,	-	-
RYMQ14-16U5,	240	240
RYMQ18-20U5	240	192

NOTES

- Detail -A and detail -B indicate the dimensions after fixing the attached piping.
- Items 4 - 10: Knockout hole.
- Gas pipe**
RXYQ10U5 : Ø 22.2: brazing connection
RYMQ14-20U5, RXYQ14-20U5, RXYQ12-16U5 : Ø 28.6: brazing connection
RXYQ10U : Ø 9.5: brazing connection
RYMQ14-16U5, RXYQ14-16U5, RXYQ12-16U5 : Ø 12.7: brazing connection
RYMQ18-20U5, RXYQ18-20U5 : Ø 15.9: brazing connection
Equalising pipe
RYMQ14-16U5 : Ø 22.2: brazing connection
RYMQ12U5 : Ø 28.6: brazing connection

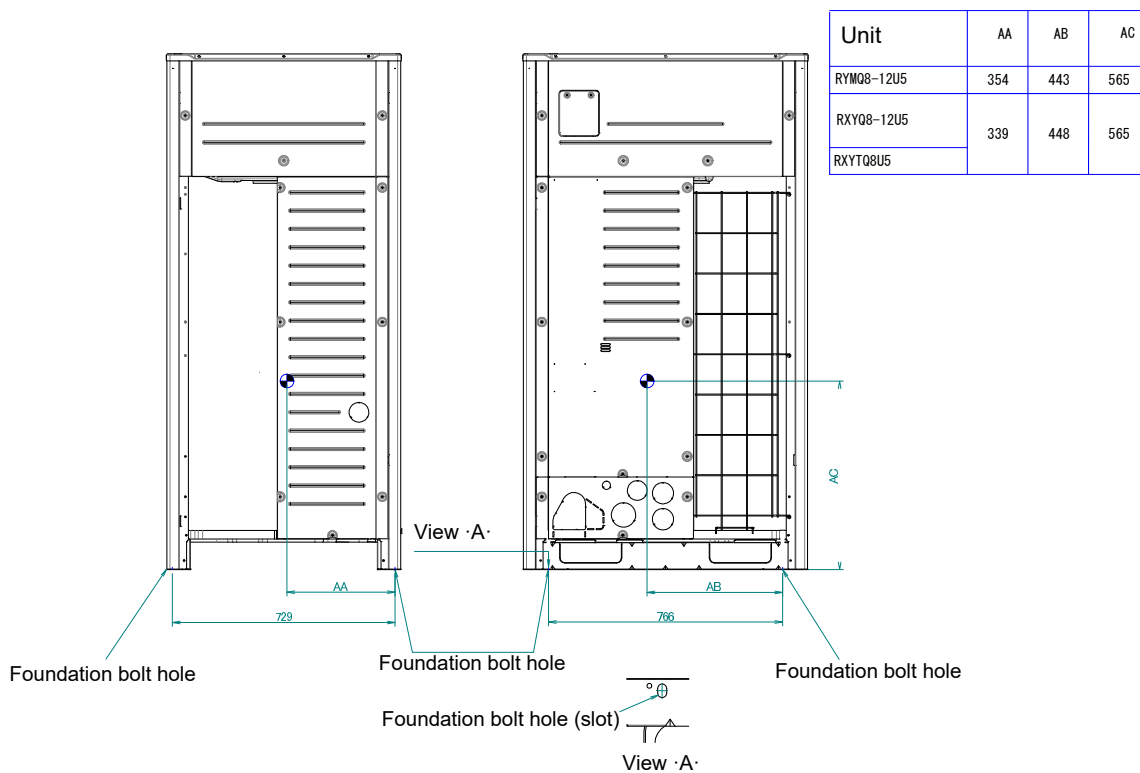
No.	Parts name	Remarks
1	Liquid pipe connection port	See note -3-
2	Gas pipe connection port	See note -3-
3	Equalising pipe connection port	See note -3-
4	High pressure/low pressure gas pipe	
5	Power cord routing hole (side)	Ø65
6	Power cord routing hole (front)	Ø80
7	Power cord routing hole (front)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

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7 Centre of gravity

7 - 1 Centre of Gravity

RXYQ8-12U5
RYMQ8-12U5



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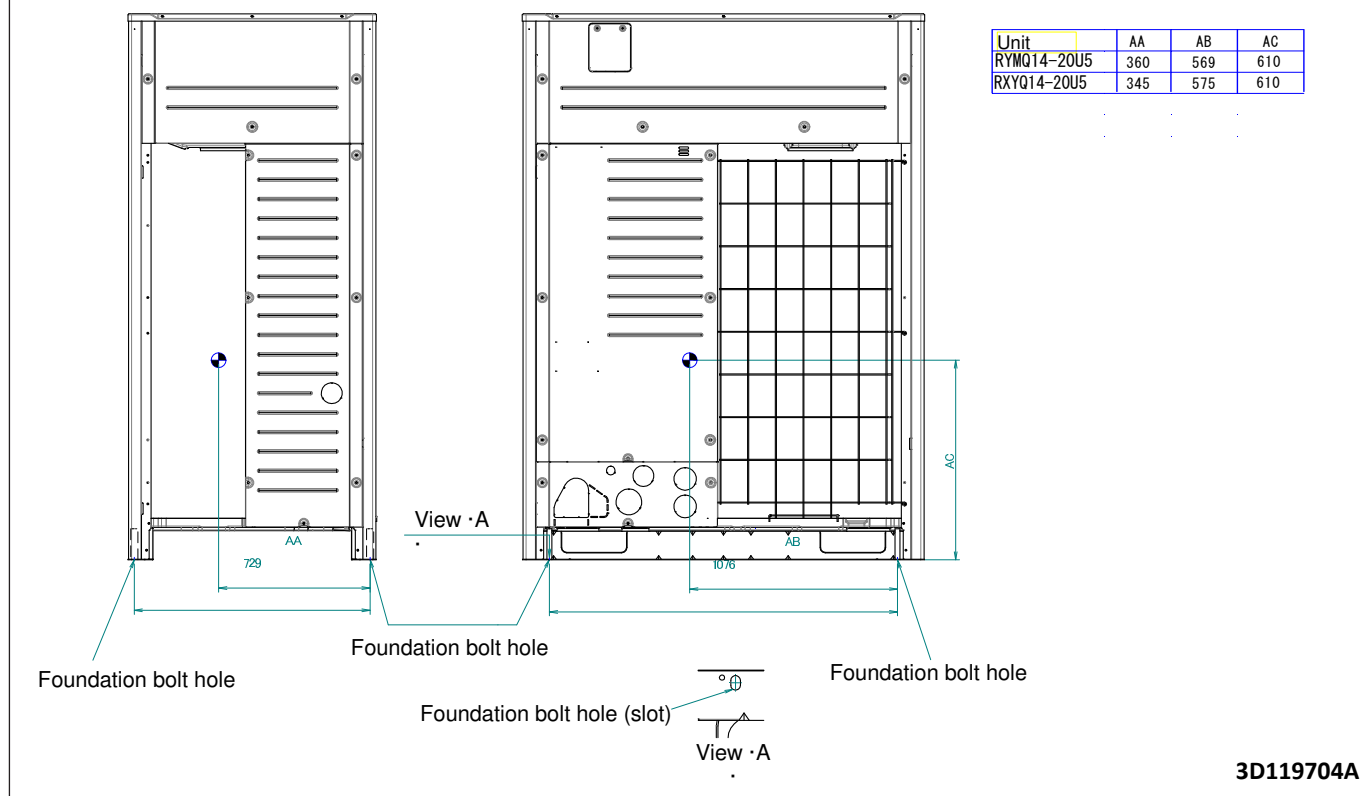
7 Centre of gravity

7 - 1 Centre of Gravity

RXYQ14-20U5

RYMQ14-20U5

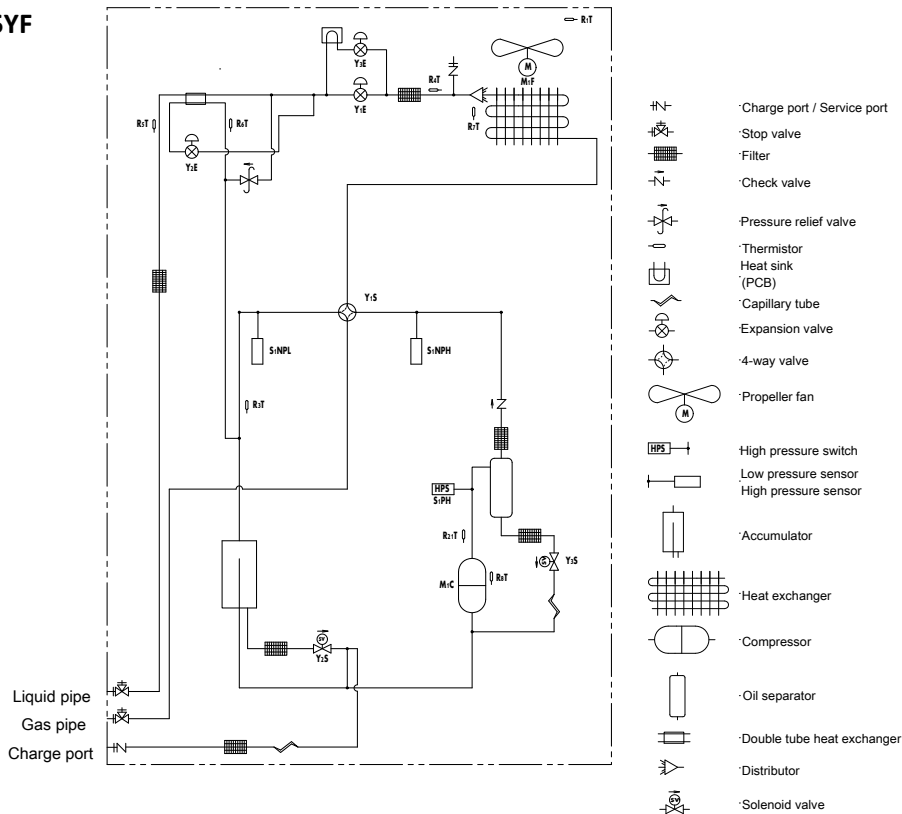
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8 Piping diagrams

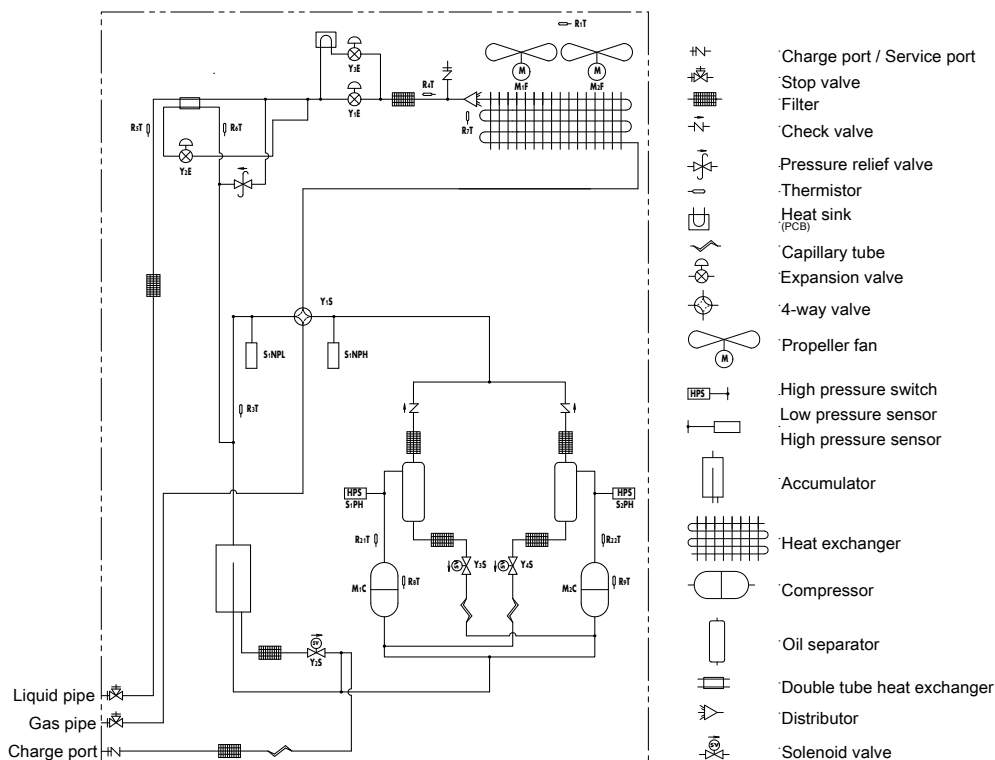
8 - 1 Piping Diagrams

RXYQ8-12U5
RXYTQ8U5YF



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RXYQ14-20U5
RXYQ14-16U5YF



3D118180

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

9

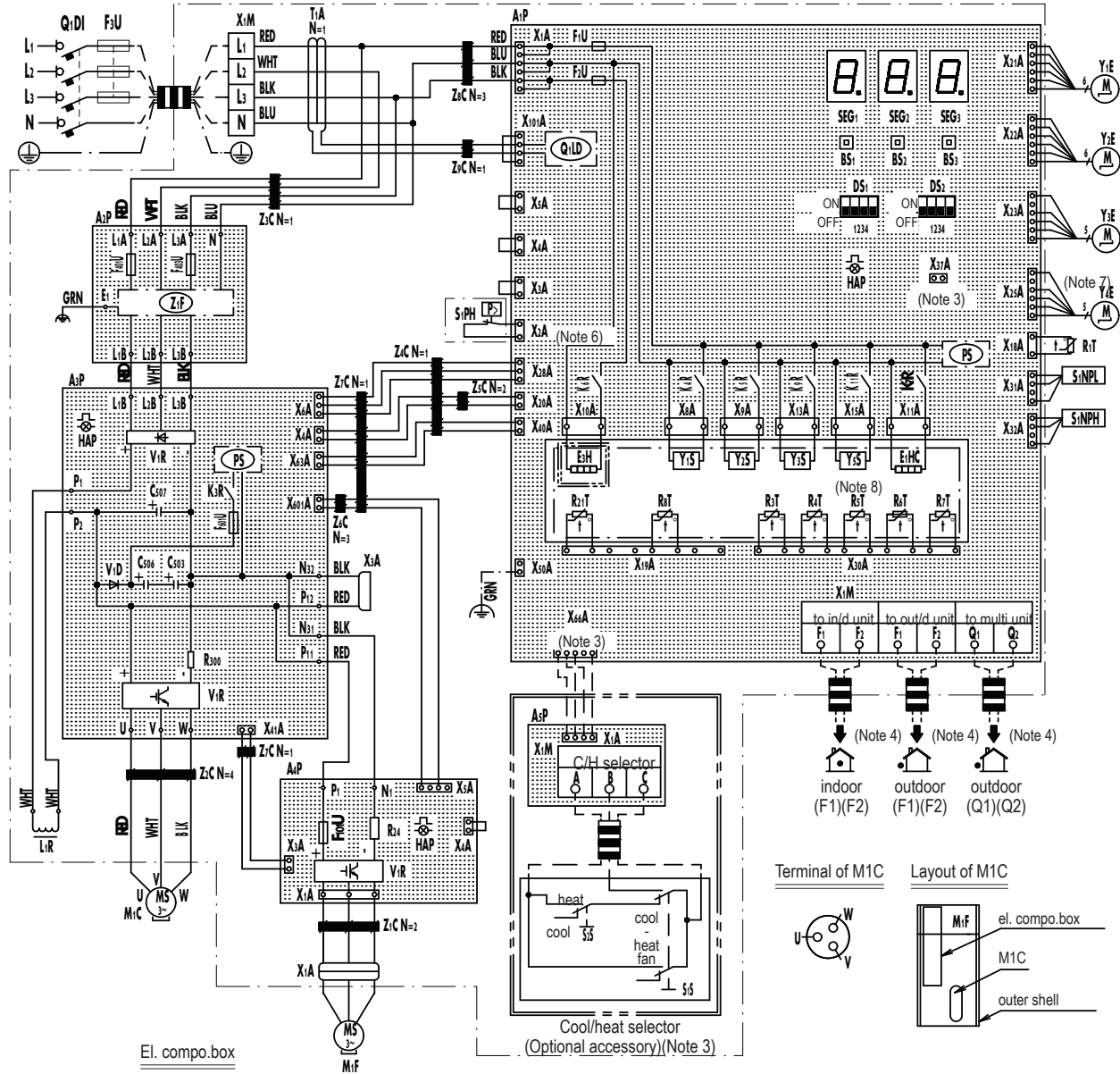
RXYQ8-12U5

RXYTQ8U5YF

RYMQ8-12U5

Power supply 3N~ 380-415V 50Hz
3N~ 380V 60Hz

Wiring diagram



9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQ8-12U5
RXYTQ8U5YF
RYMQ8-12U5

A1P	Printed Circuit Board (Main)	R3T	Thermistor (Accumulator)
A2P	Printed Circuit Board (Noise Filter)	R4T	Thermistor (Heat Exc,Liq,Pipe)
A3P	Printed Circuit Board (Inv)	R5T	Thermistor (Subcool,Liq,Pipe)
A4P	Printed Circuit Board (Fan)	R6T	Thermistor (Heat Exc,Gas Pipe)
A5P	Printed Circuit Board (ABC I/P)(Option)	R7T	Thermistor (Heat Exc,Deicer)
BS1~3 (A1P)	Push Button Switch (Mode,Set,Return)	R8T	Thermistor (M1C body)
C503,C506,C507 (A3P)	Capacitor	R21T	Thermistor (M1C discharge)
DS1,DS2 (A1P)	DIP Switch	S1NPH	Pressure Sensor (High)
E1HC	Crankcase Heater	S1NPL	Pressure Sensor (Low)
E3H	Drainpan Heater (Option)	S1PH	Pressure Switch (Disch)
F1U,F2U (A1P)	Fuse (T,3,15A,250V)	SEG1~SEG3 (A1P)	7-Segment Display
F3U	Field Fuse	T1A	Current Sensor
F101U (A4P)	Fuse	V1D (A3P)	Diode
F401U,F403U (A2P)	Fuse	V1R (A3P,A4P)	Power Module
F601U (A3P)	Fuse	X*A	Connector
HAP (A1P,A3P, A4P)	Pilotlamp (Service Monitor-Green)	X1M (A1P)	Terminal Block (Control)
K3R (A3P)	Magnetic Relay	X1M (A5P)	Terminal Block (Power Supply)(Option)
K4R (A1P)	Magnetic Relay (Y1S)	Y1E	Electronic Expansion Valve(Main)
K5R (A1P)	Magnetic Relay (Y2S)	Y2E	Electronic Expansion Valve (Injection)
K6R (A1P)	Magnetic Relay (E3H)	Y3E	Electronic Expansion Valve (Refrigerant Jacket)
K7R (A1P)	Magnetic Relay (E1HC)	Y4E	Electronic Expansion Valve (Storage Vessel)
K9R (A1P)	Magnetic Relay (Y3S)	Y1S	Solenoid Valve (Main)
K11R (A1P)	Magnetic Relay (Y5S)	Y2S	Solenoid Valve (Accumulator Oil Return)
L1R	Reactor	Y3S	Solenoid Valve (Oil1)
M1C	Motor (Compressor)	Y5S	Solenoid Valve (Sub)
M1F	Motor (Fan)	Z*C	Noise Filter (Ferrite Core)
PS (A1P,A3P)	Switching Power Supply	Z*F (A2P)	Noise Filter (With Surge Absorber)
Q1DI	Field Earth Leakage Breaker	Connector For Optional Accessories	
Q1LD (A1P)	Field Earth Current Detector	X10A	Connector (Drainpan Heater)
R24 (A4P)	Resistor (Current Sensor)	X37A	Connector (Power Adapter)
R300 (A3P)	Resistor (Current Sensor)	X66A	Connector (Remote Switching Cool/Heat Selector)
R1T	Thermistor (Air)		

NOTES

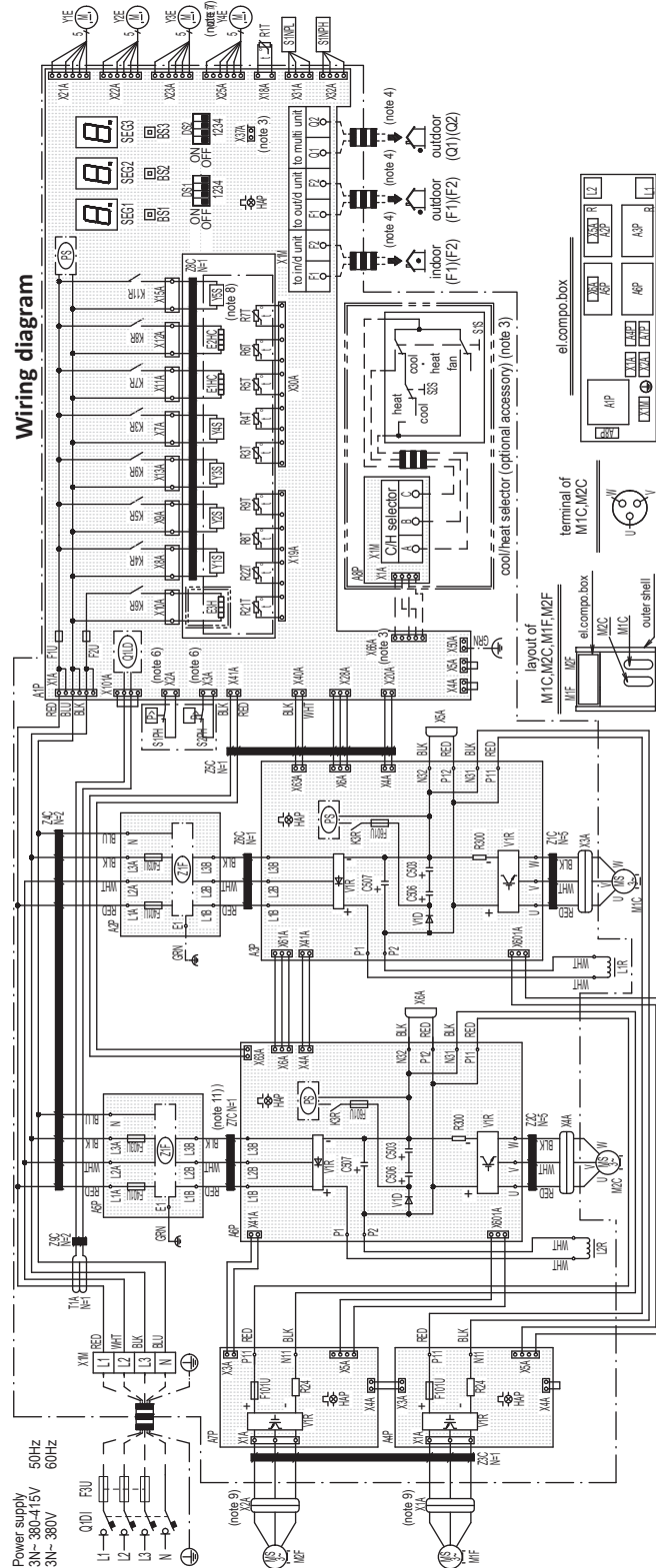
1. This wiring diagram applies only to the outdoor unit.
2. : field wiring, : terminal block, : connector, : terminal, : protective earth (screw), : functional earth, : earth wiring, : field supply, : PCB, : switch box, : option
3. When using the optional adapter, refer to the installation manual of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

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9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQ14-20U5
RYMQ14-20U5



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

NOTES

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

2D117536C

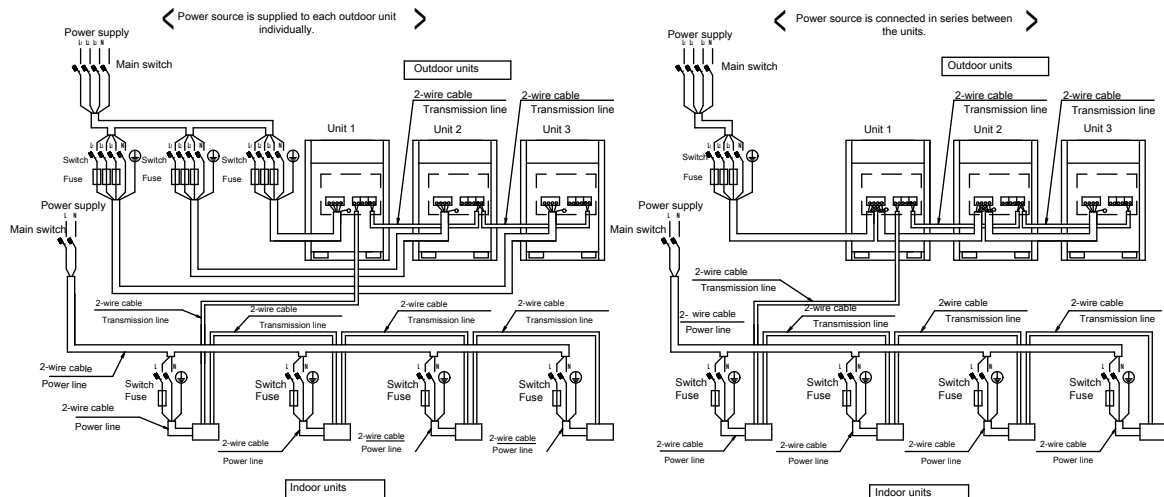
10 External connection diagrams

10 - 1 External Connection Diagrams

RXYQ8-20U5
RXYTQ8-16U5YF
RYMQ8-20U5

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 equipment.
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.

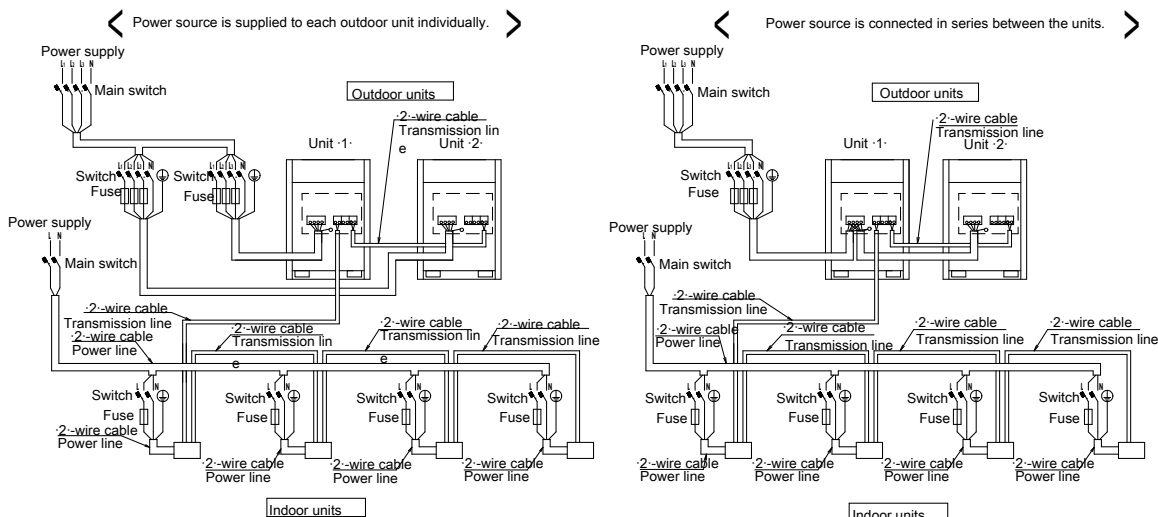


3D119200

RXYQ8-20U5
RXYTQ8-16U5YF
RYMQ8-20U5

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 equipment.
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

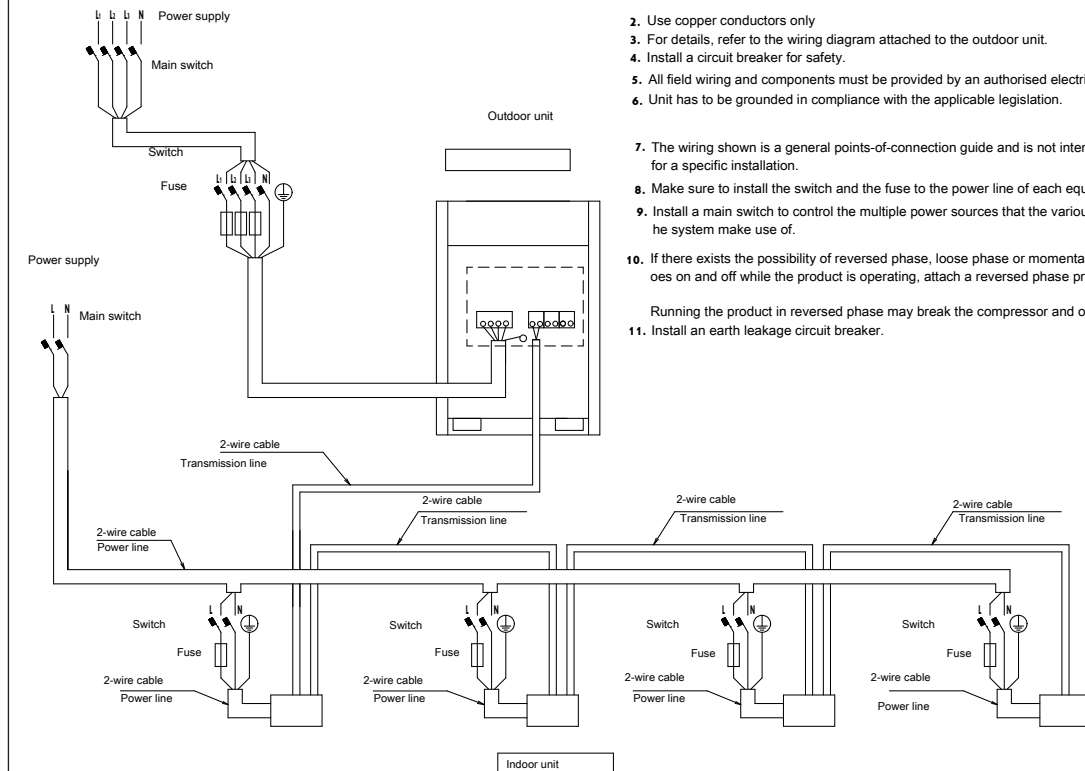
10 External connection diagrams

10 - 1 External Connection Diagrams

RXYQ8-20U5
RYMQ8-20U5
RXYTQ8-16U5YF

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 equipment.
9. Install a main switch to control the multiple power sources that the various components of the system make use of.
10. 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.
11. Running the product in reversed phase may break the compressor and other parts.
12. Install an earth leakage circuit breaker.

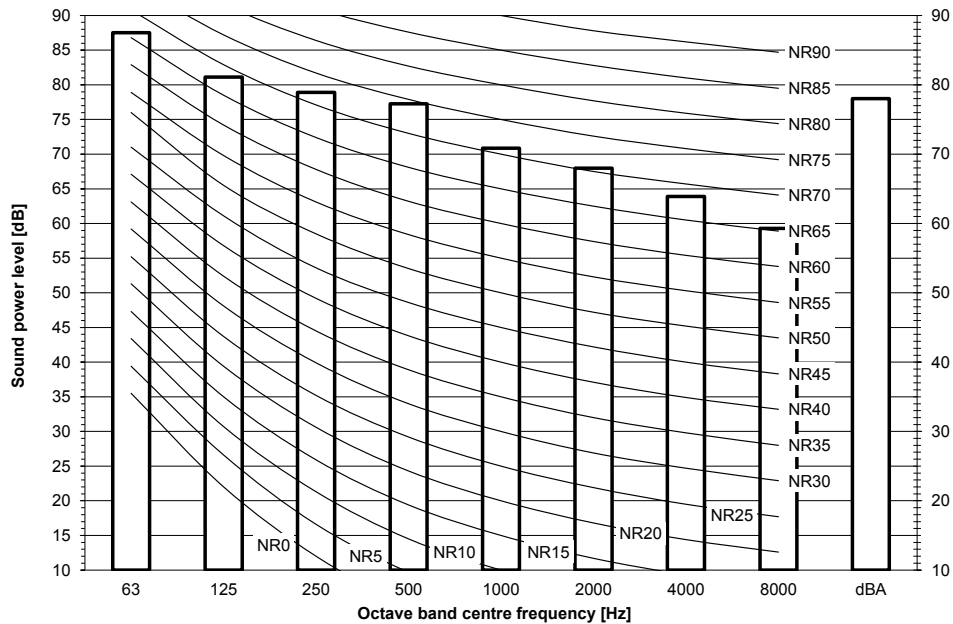


3D119317

11 Sound data

11 - 1 Sound Power Spectrum

RXYQ8U5
RXYTQ8U5YF
RYMQ8U5



Notes

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

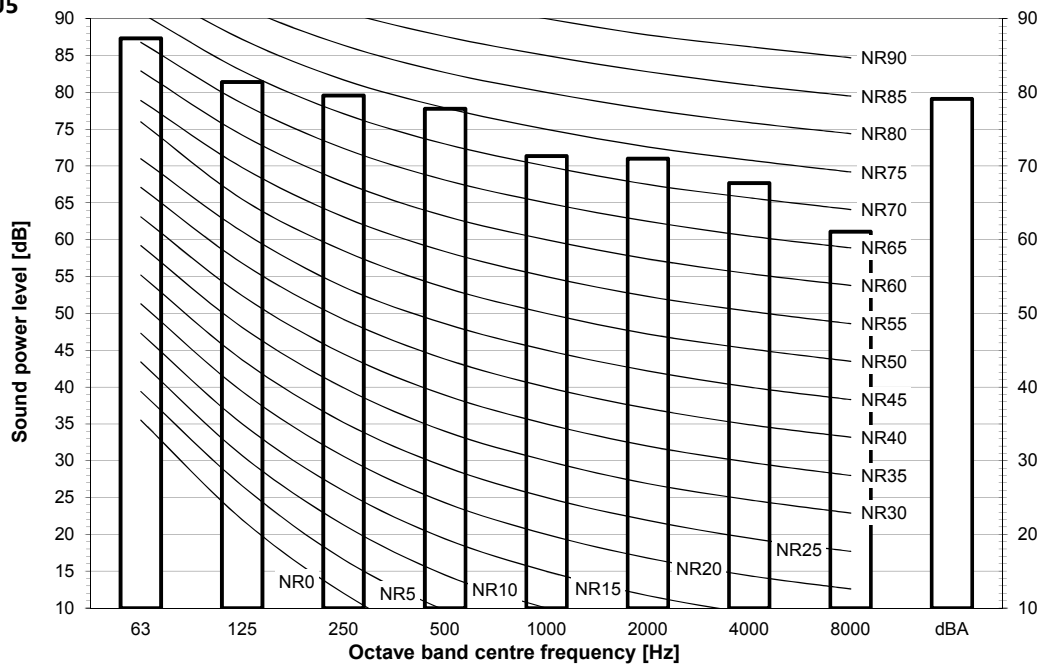
Reference acoustic intensity 0dB = $10E-6\mu W/m^2$

Measured according to ISO 3744

3D119528

RXYQ10U5

RYMQ10U5



Notes

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

Reference acoustic intensity 0dB = $10E-6\mu W/m^2$

Measured according to ISO 3744

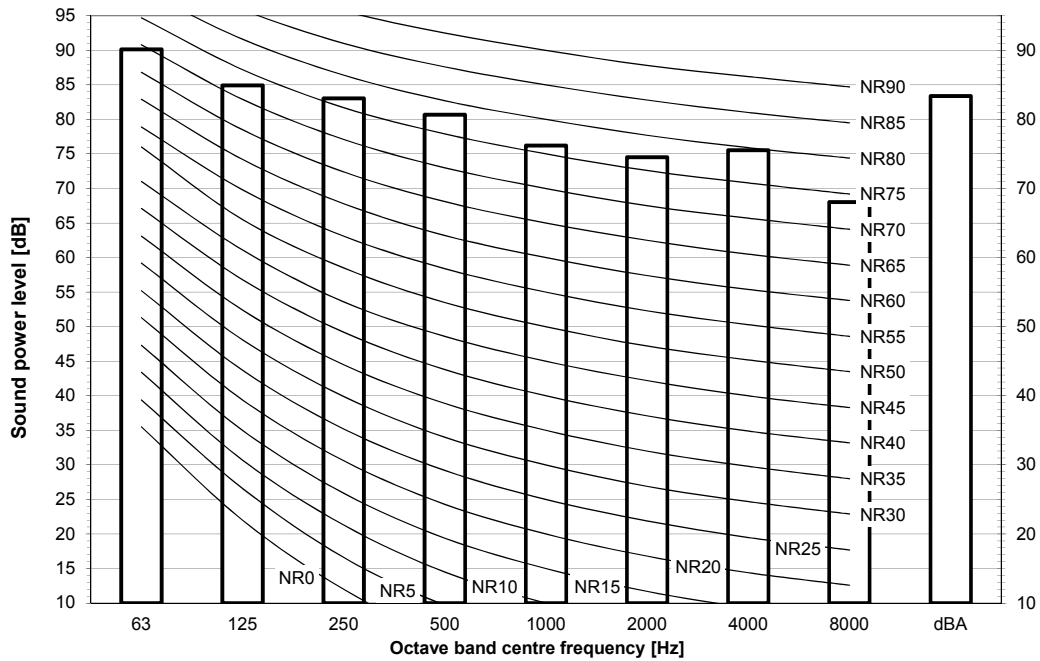
3D119529

11 Sound data

11 - 1 Sound Power Spectrum

11

RXYQ12U5
RYMQ12U5



Notes

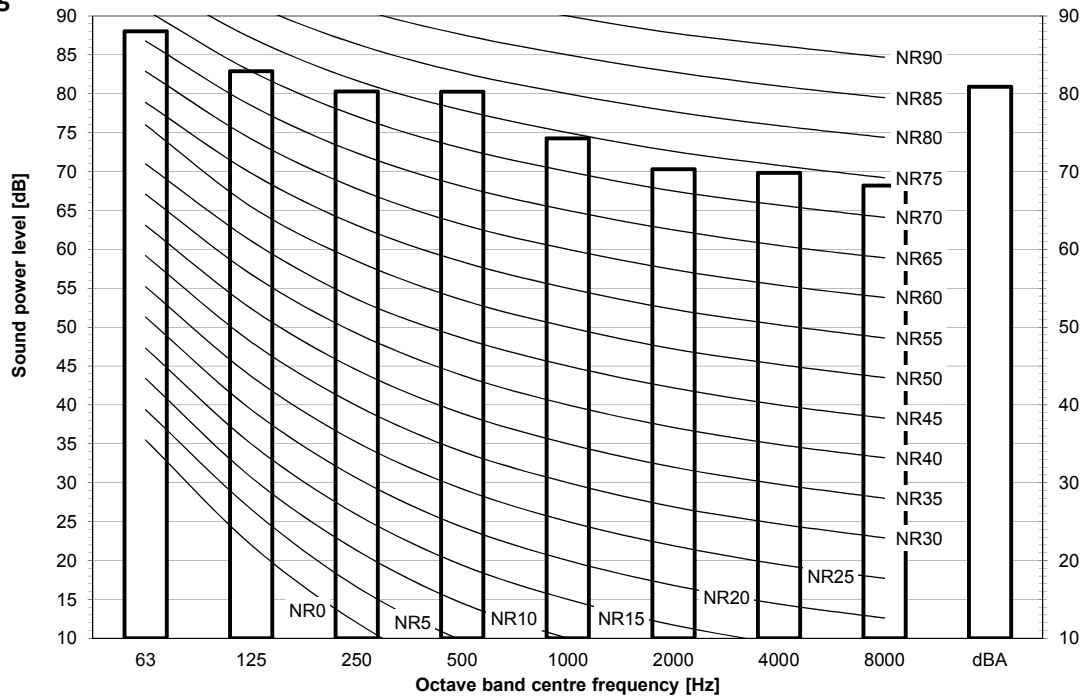
dBA = A-weighted sound power level (A scale according to IEC).

Reference acoustic intensity 0dB = $10E-6\mu W/m^2$

Measured according to ISO 3744

3D119530

RXYQ14U5
RYMQ14U5



Notes

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

Reference acoustic intensity 0dB = $10E-6\mu W/m^2$

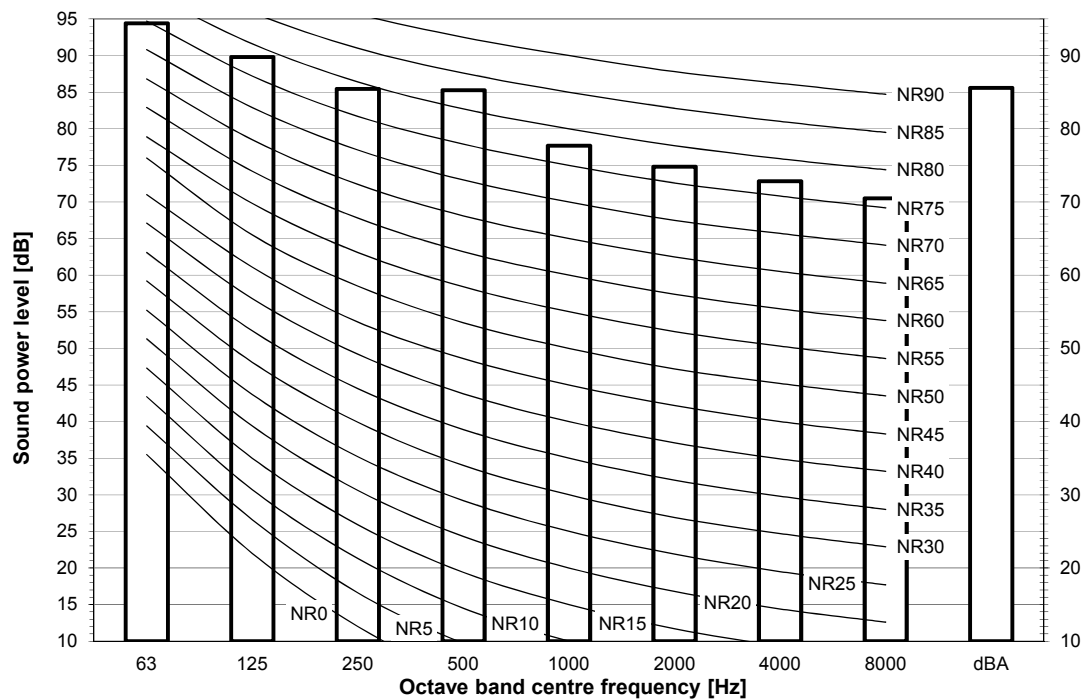
Measured according to ISO 3744

3D119531

11 Sound data

11 - 1 Sound Power Spectrum

RXYQ16U5
RYMQ16U5



Notes

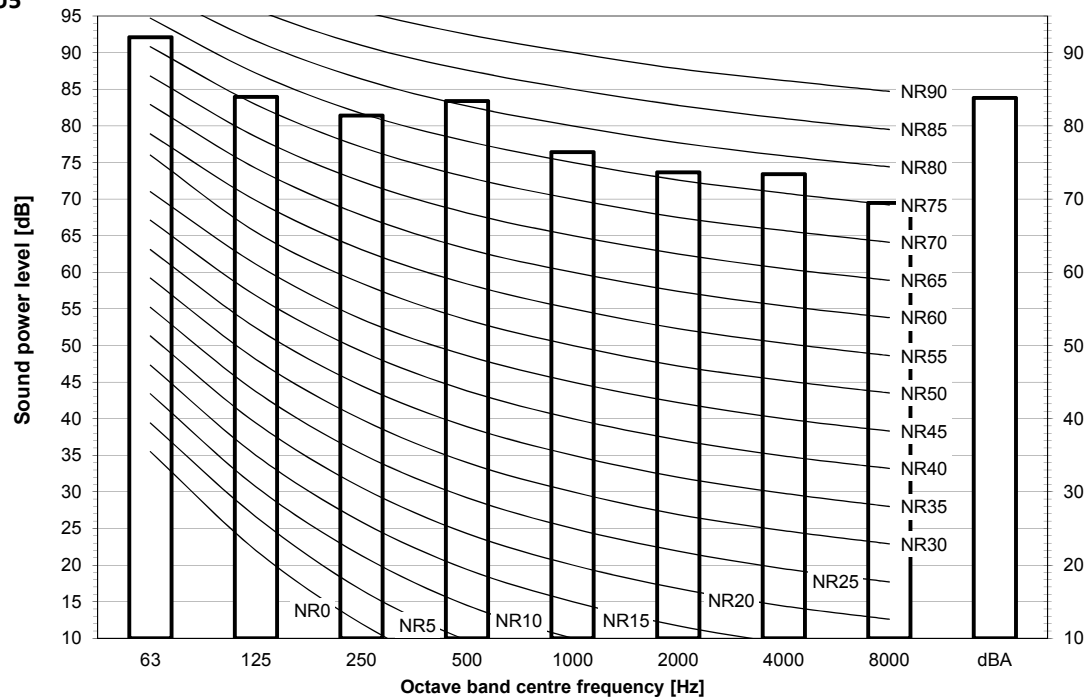
dBA = A-weighted sound power level (A scale according to IEC).

Reference acoustic intensity 0dB = $10^{-6} \mu\text{W}/\text{m}^2$

Measured according to ISO 3744

3D119532

RXYQ18U5
RYMQ18U5



Notes

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

Reference acoustic intensity 0dB = $10^{-6} \mu\text{W}/\text{m}^2$

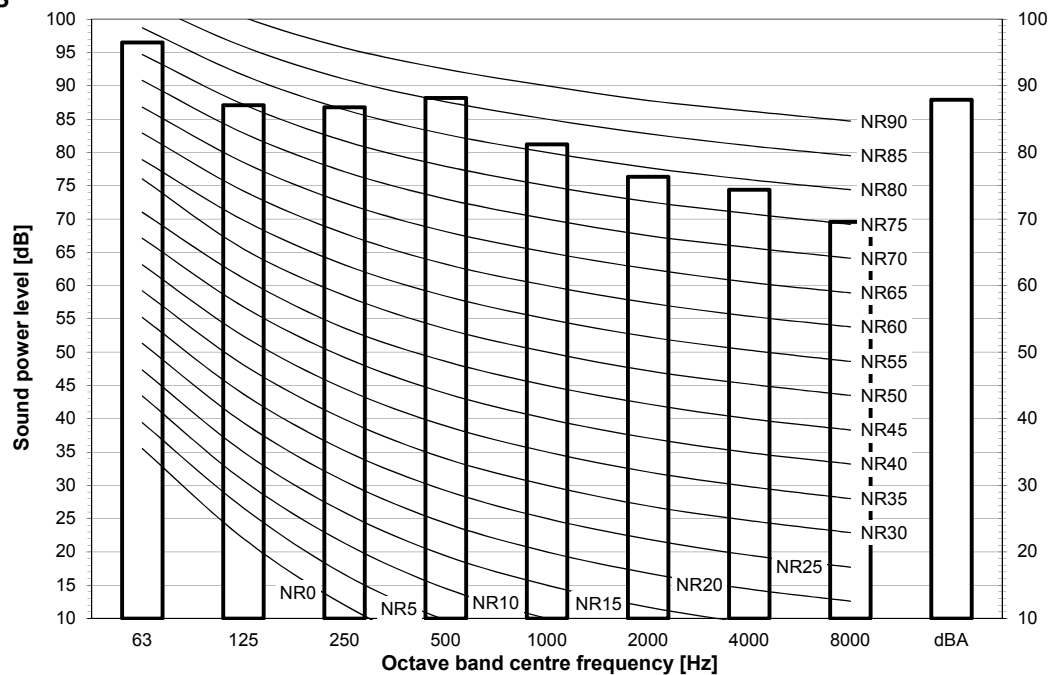
Measured according to ISO 3744

3D119533

11 Sound data

11 - 1 Sound Power Spectrum

11

RXYQ20U5
RYMQ20U5


Notes

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

Reference acoustic intensity 0dB = 10^{-6} W/m^2

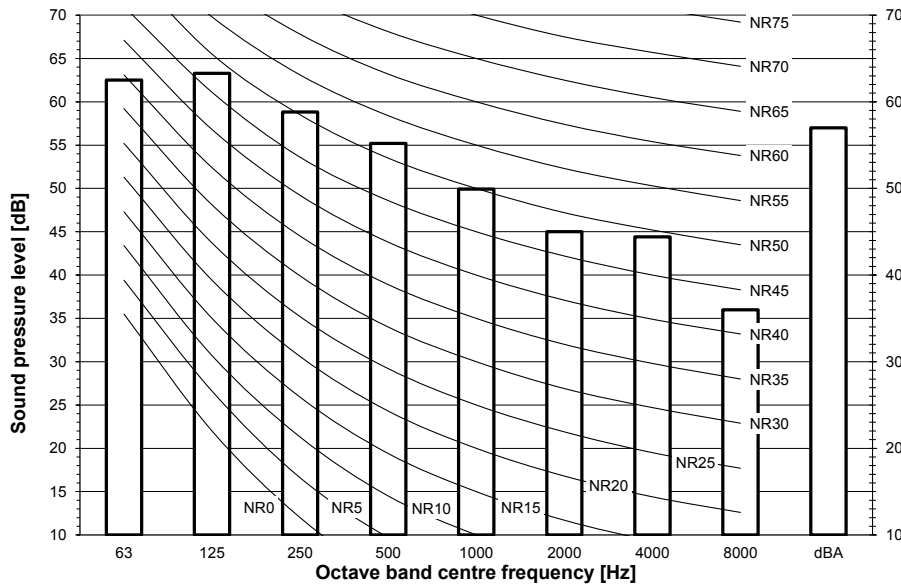
Measured according to ISO 3744

3D119534

11 Sound data

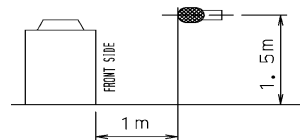
11 - 2 Sound Pressure Spectrum

RXYQ8U5
RXYTQ8U5YF
RYMQ8U5



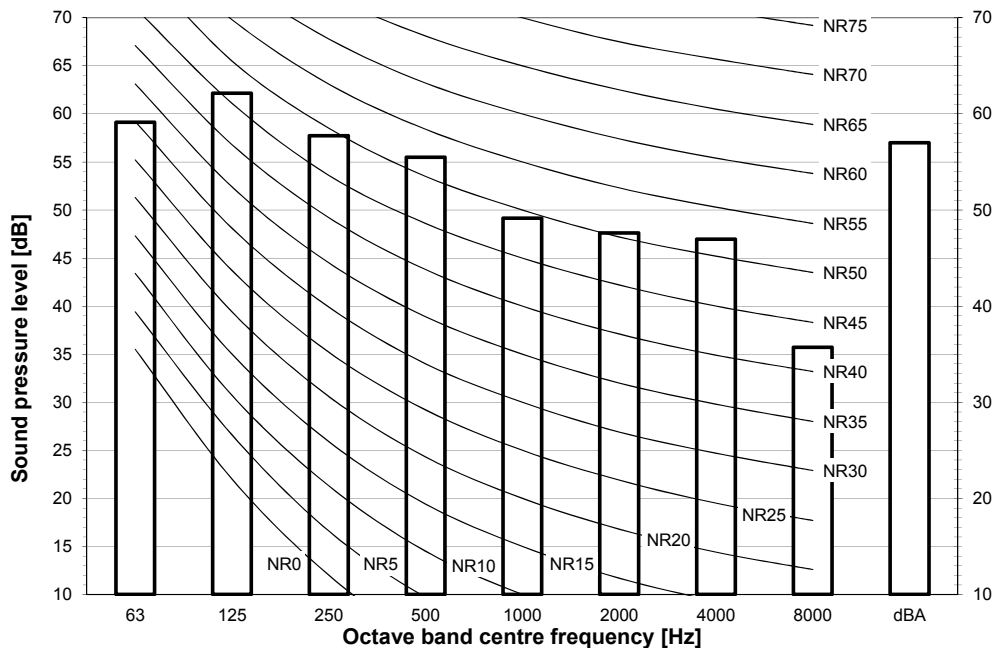
Notes

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 μ Pa



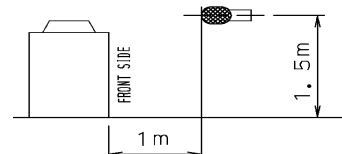
3D119521

RXYQ10U5
RYMQ10U5



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 μ Pa



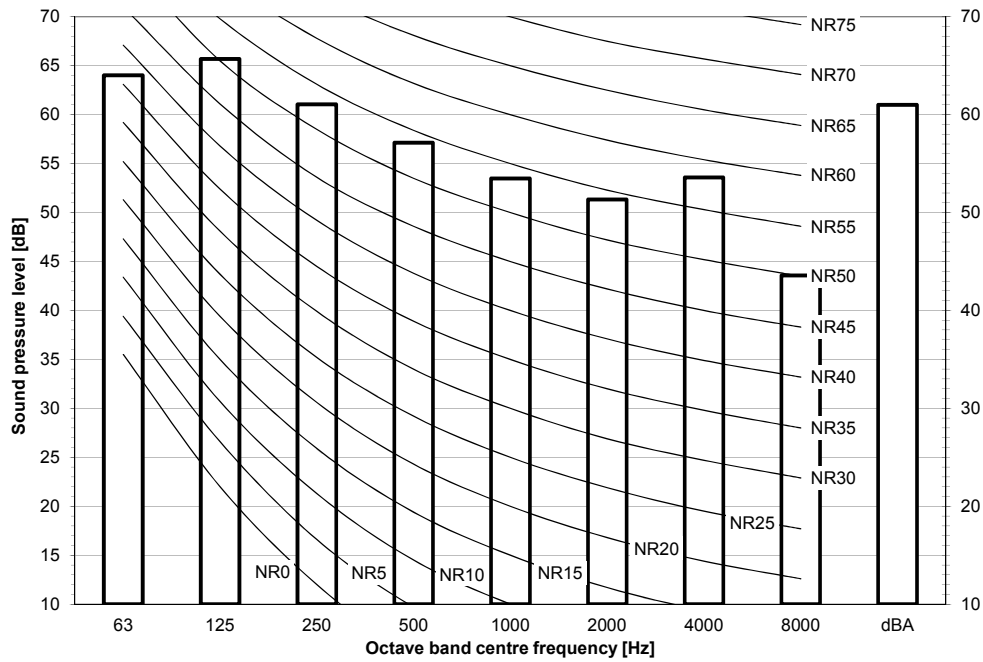
3D119522

11 Sound data

11 - 2 Sound Pressure Spectrum

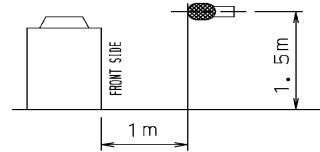
11

RXYQ12U5
RYMQ12U5



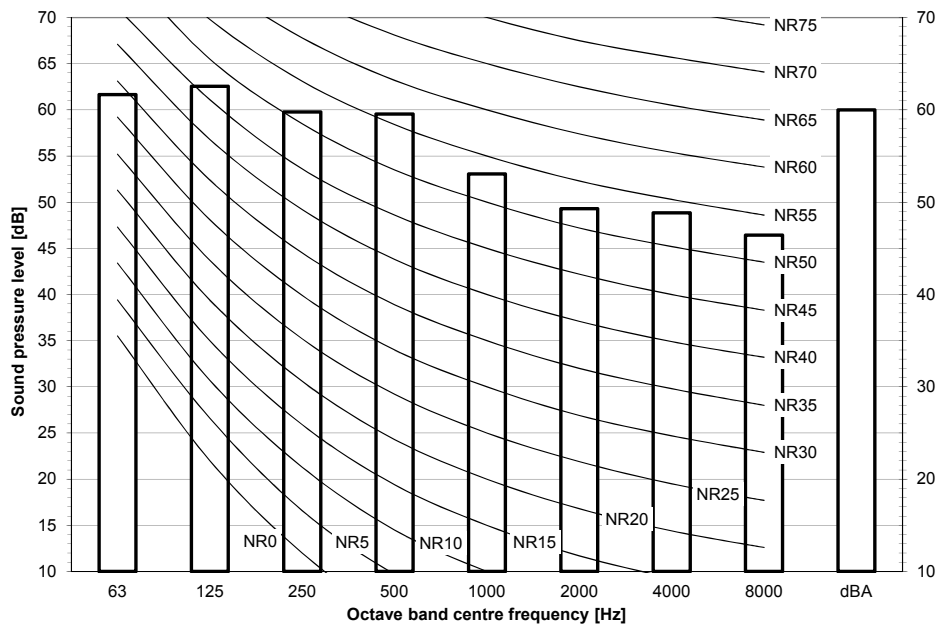
Notes

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



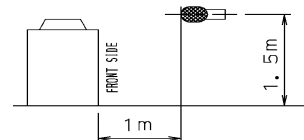
3D119523

RXYQ14U5
RYMQ14U5



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



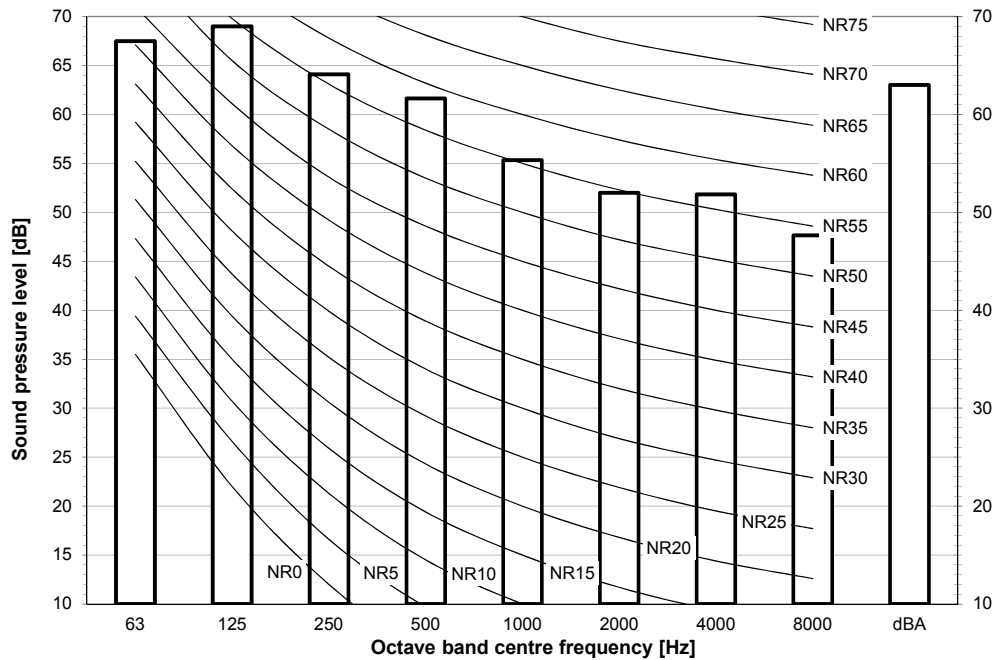
3D119524

11 Sound data

11 - 2 Sound Pressure Spectrum

RXYQ16U5

RYMQ16U5



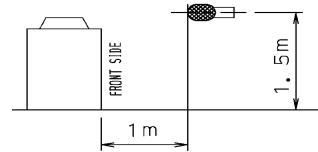
Notes

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).

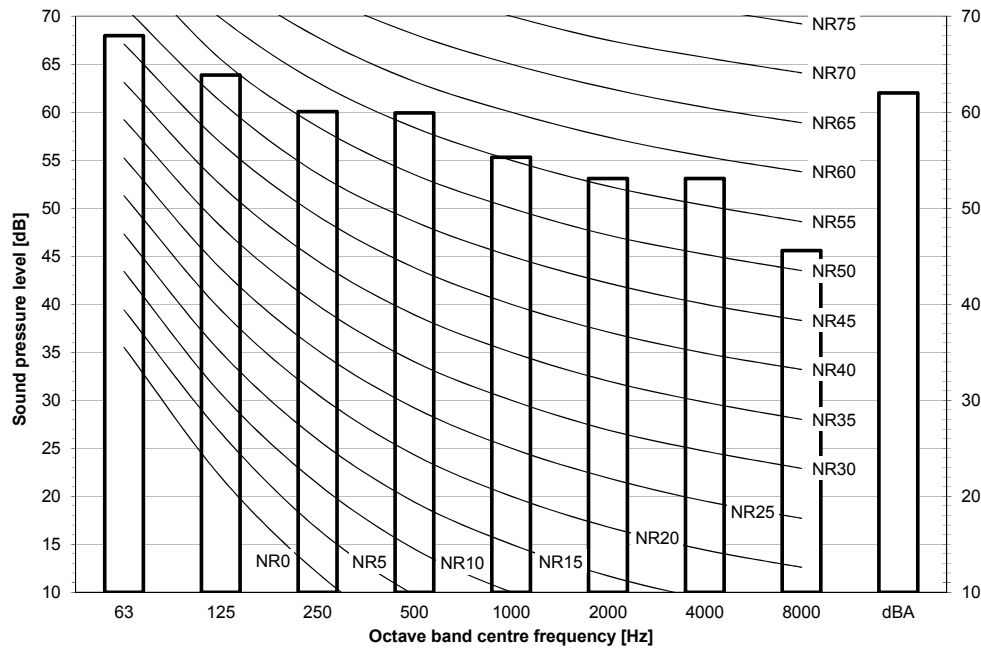
Reference acoustic pressure 0 dB = 20 μ Pa



3D119525

RXYQ18U5

RYMQ18U5



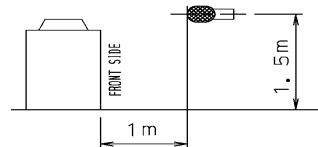
Notes

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 μ Pa

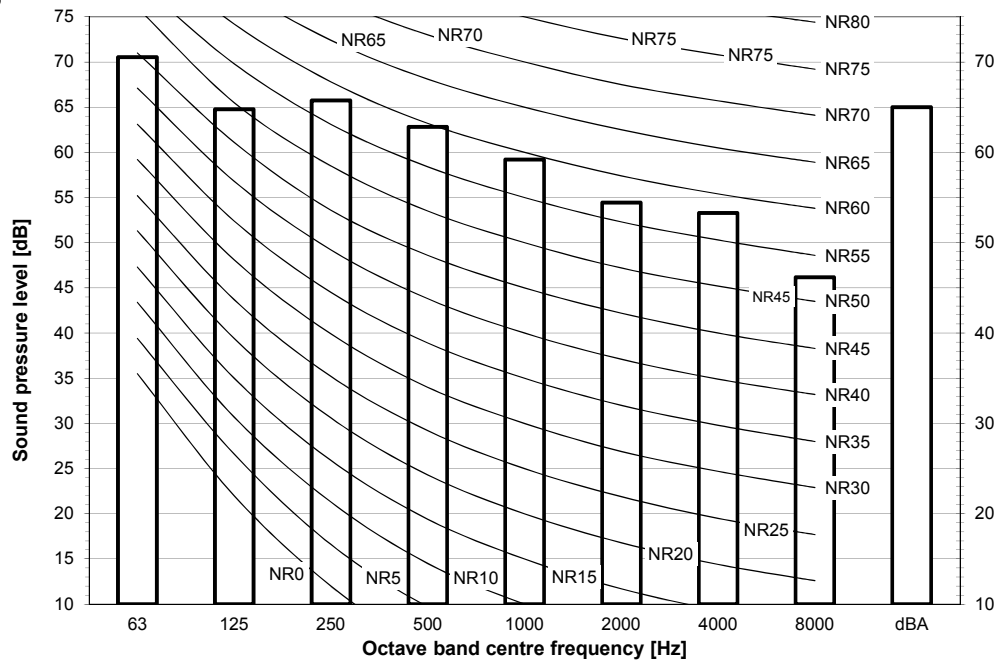


3D119526

11 Sound data

11 - 2 Sound Pressure Spectrum

RXYQ20U5
RYMQ20U5



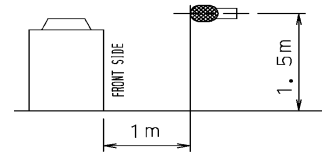
Notes

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 μ Pa

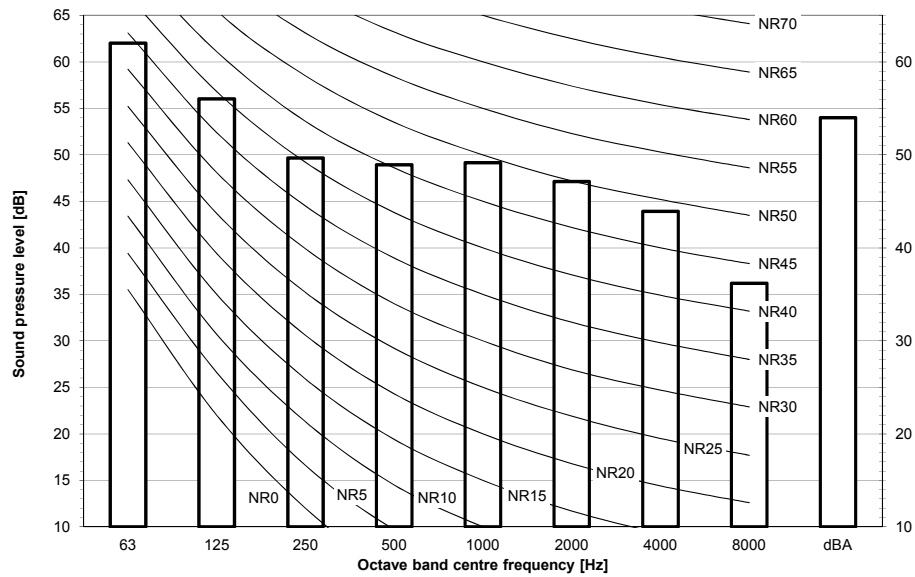


3D119527

11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

RXYQ8-12U5
RXYTQ8U5YF
RYMQ8-12U5



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).

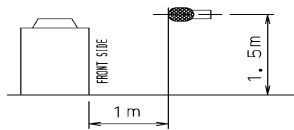
Reference acoustic pressure 0 dB = 20 μPa

Data is valid under the following conditions

Cooling operation

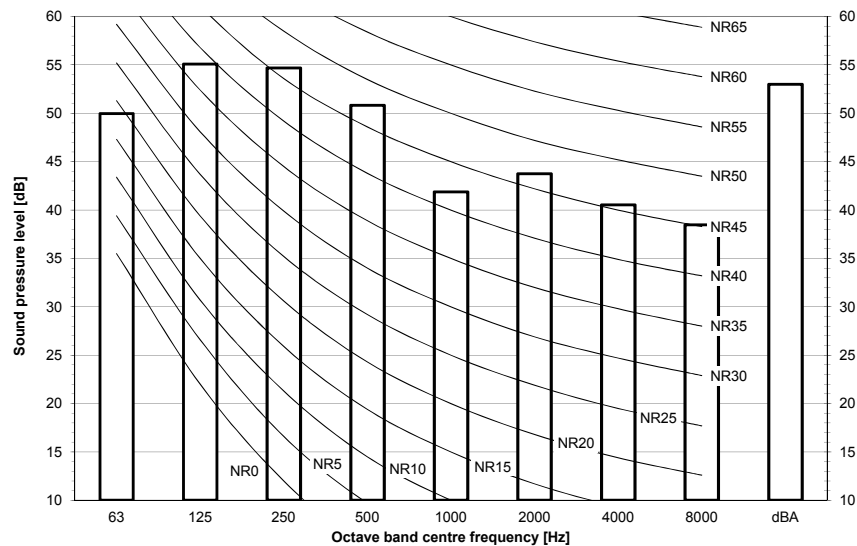
Outdoor Ta: 35°C

Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)



3D119535

RXYQ14-16U5
RXYTQ14-16U5YF
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).

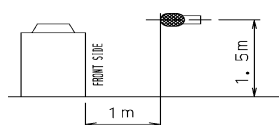
Reference acoustic pressure 0 dB = 20 μPa

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)

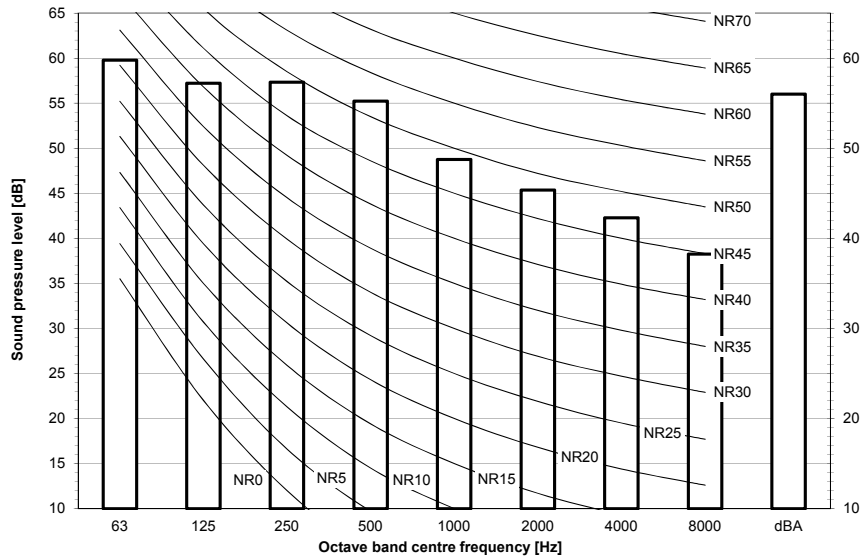


3D119538

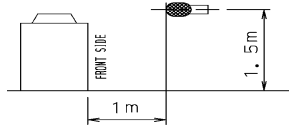
11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

RXYQ18-20U5
RYMQ18-20U5



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)

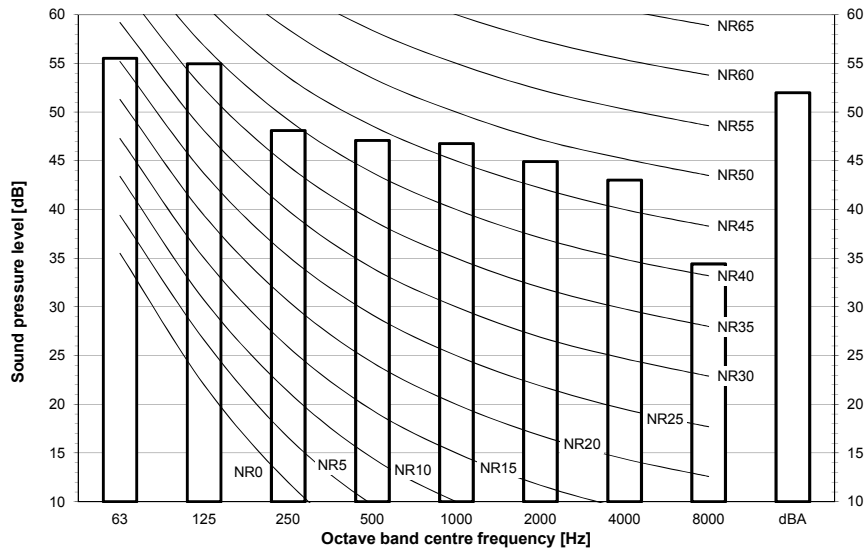


3D119541

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

RXYQ8-12U5
RXYTQ8U5YF
RYMQ8-12U5



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).

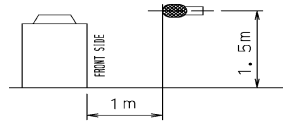
Reference acoustic pressure 0 dB = 20 μPa

Data is valid under the following conditions

Cooling operation

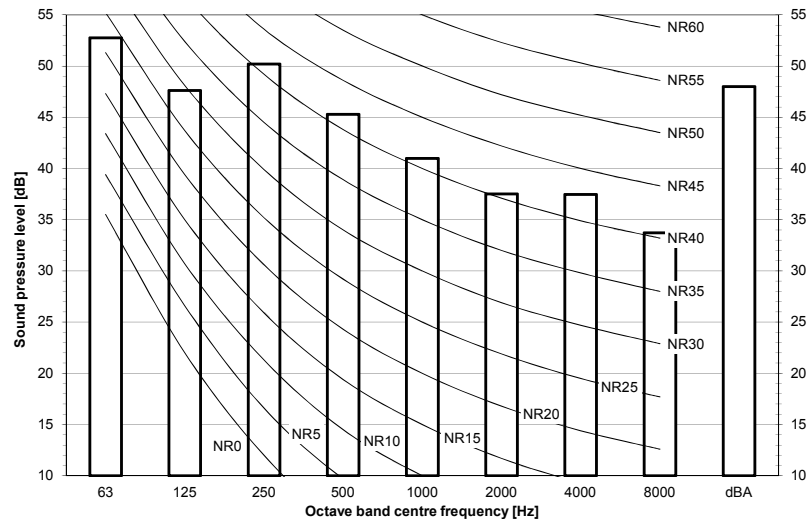
Outdoor Ta: 35°C

Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)



3D119536

RXYQ14-16U5
RXYTQ14-16U5YF
RYMQ14-16U5



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).

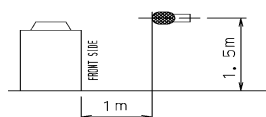
Reference acoustic pressure 0 dB = 20 μPa

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)

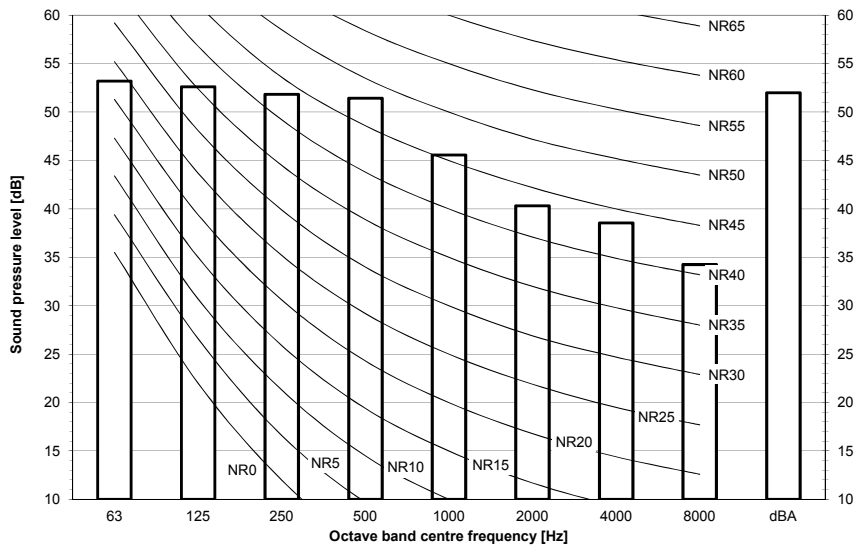


3D119539

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

RXYQ18-20U5
RYMQ18-20U5



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).

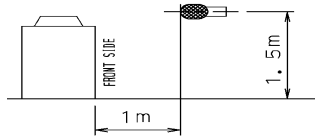
Reference acoustic pressure 0 dB = 20 μ Pa

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)

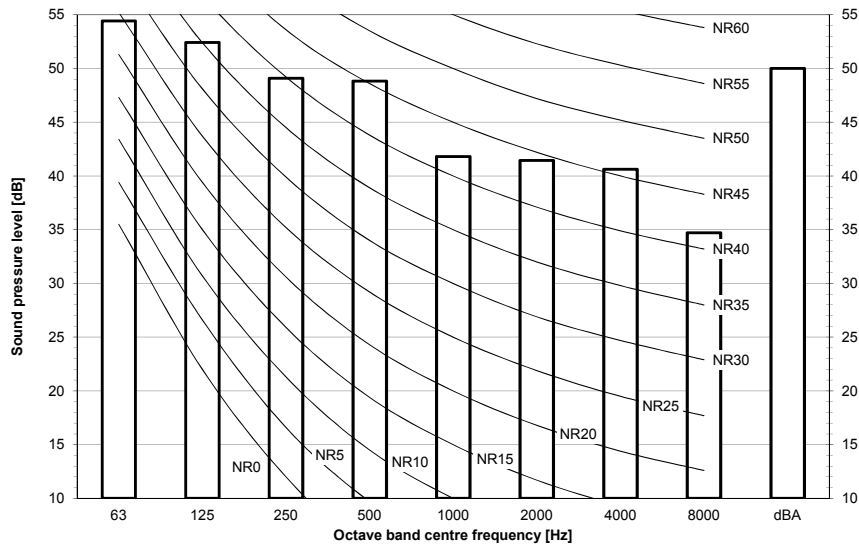


3D119542

11 Sound data

11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

RXYQ8-12U5
RXYTQ8U5YF
RYMQ8-12U5



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).

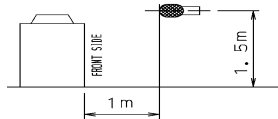
Reference acoustic pressure 0 dB = 20 μ Pa

Data is valid under the following conditions

Cooling operation

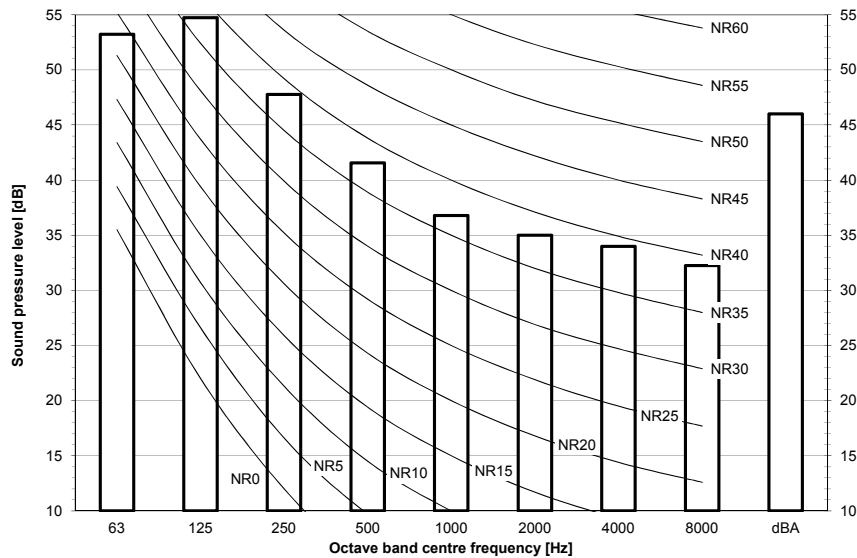
Outdoor Ta: 35°C

Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)



3D119537

RXYQ14-16U5
RXYTQ14-16U5YF
RYMQ14-16U5



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).

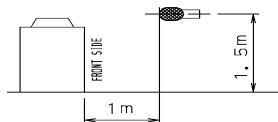
Reference acoustic pressure 0 dB = 20 μ Pa

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)



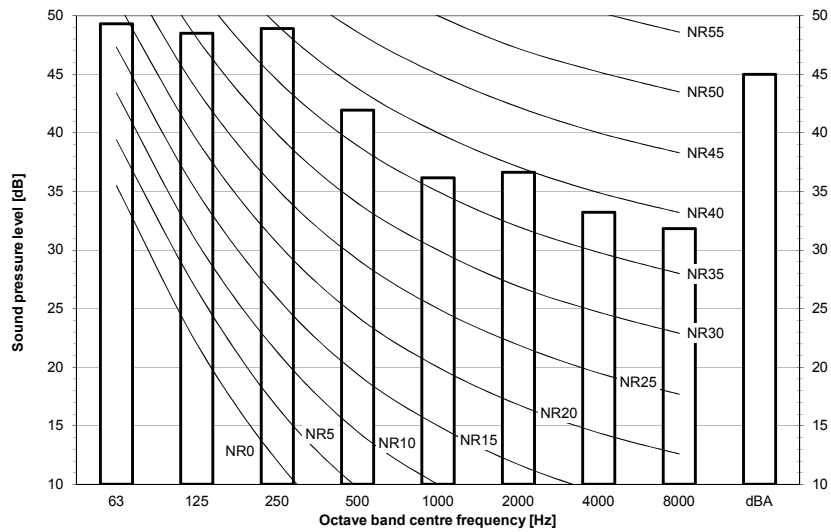
3D119540

11 Sound data

11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

11

RXYQ18-20U5
RYMQ18-20U5



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).

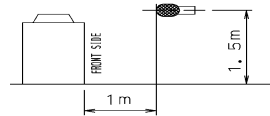
Reference acoustic pressure 0 dB = 20 μ Pa

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)



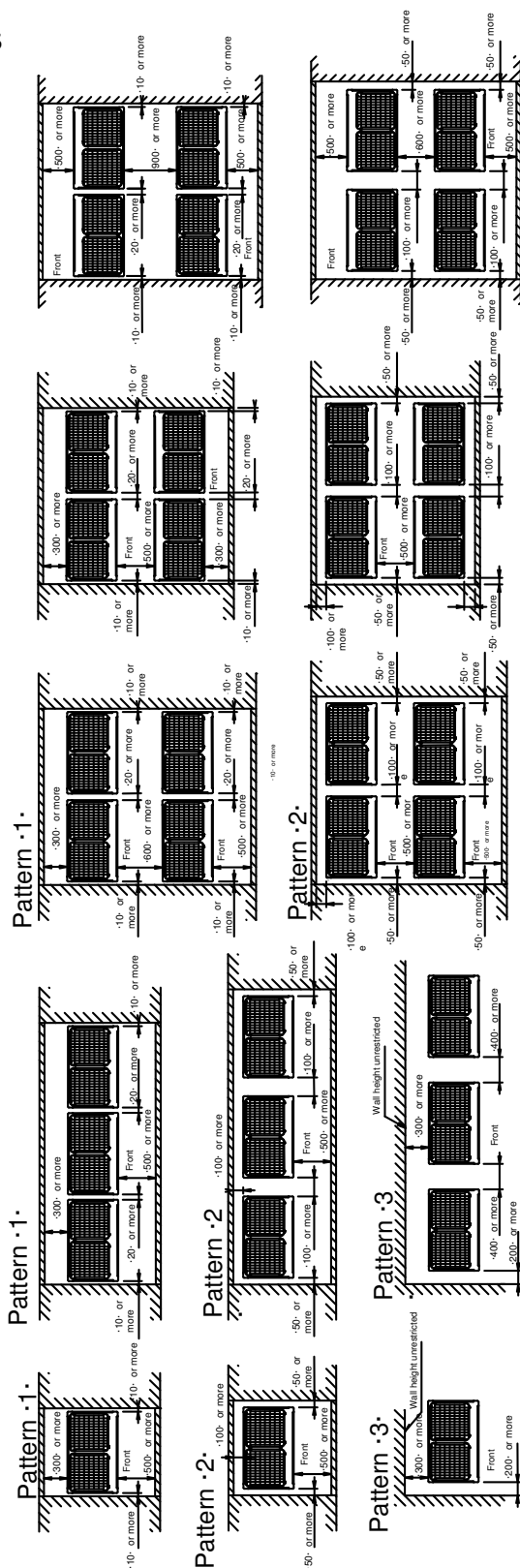
3D119543

12 Installation

12 - 1 Installation Method

RXYQ-U5
RYYQ-U5
RYMQ-U5

For single unit installation For installation in rows



Notes

1. Height of the walls in case of patterns 1 and 2:

Front: 1500 mm

Suction side: 500 mm

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, make 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

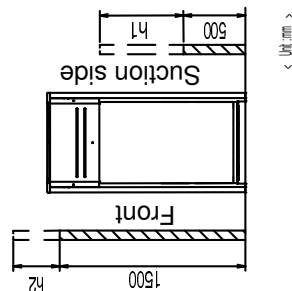
- front side: service space + h2/2

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.

Provide sufficient space at the front to connect refrigerant piping (comfortably).

4. 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.



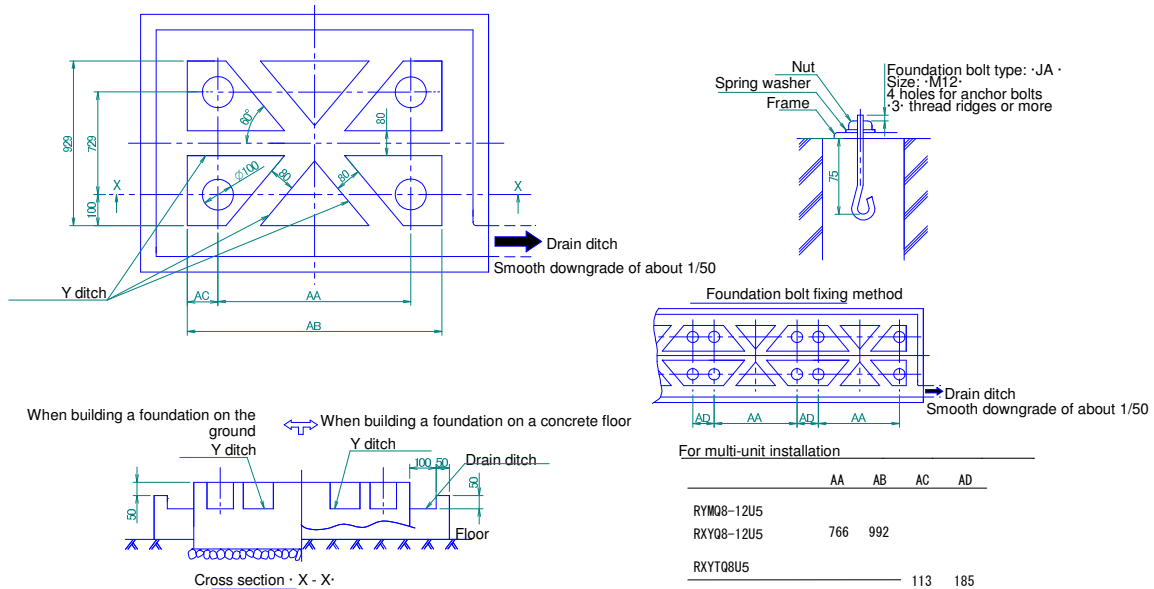
3D118467A

12 Installation

12 - 2 Fixation and Foundation of Units

RXYQ-U5
RYYQ-U5
RYMQ-U5

12



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.

3D118459A

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQ-U5
RYYQ-U5
RYMQ-U5

VRV4
Heat pump
Piping restrictions 1/3

For the reference drawing, see
page 2/3.

		Maximum piping length			Maximum height difference			Total piping length
		Longest pipe (A+[B,G,E,J]) Actual / (Equivalent)	After first branch (B,G,E,J) Actual	After first branch (for multi-outdoor) (D) Actual / (Equivalent)	Indoor-to-outdoor ⁽³⁾ (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	Outdoor-to-outdoor (H3)	
Standard								
VRV DX indoor units only		165/(190)m	40m ⁽¹⁾	10/(13)m	50/(40)m ⁽³⁾	30m	5m	1000m
Standard multi-combination								
All multi-outdoor-unit combinations except standard multi-outdoor-unit combinations		135/(160)m	40m ⁽¹⁾	10/(13)m	50/(40)m ⁽³⁾	30m	5m	500m
Hydrobox connection		135/(160)m	40m	10/(13)m	50/(40)m	15m	5m	300-500m ⁽⁵⁾
RA connection		100/(120)m	50m ⁽²⁾	-	50/(40)m	15m	-	250m
AHU connection	Pair	50/(55)m ⁽⁴⁾	-	-	40/(40)m	-	-	-
	Multi ⁽⁶⁾	165/(190)m	40m	10/13m	40/(40)m	15m	5m	1000m
	Mix ⁽⁷⁾	165/(190)m	40m	10/13m	40/(40)m	15m	5m	1000m

Remark

For standard multi-outdoor-unit combinations, see 3D079534.

(1) If all conditions below are met, the limitation can be extended up to 90 m

- a. The piping length between all indoor units and the nearest branch kit is ≤ 40m.
- b. It is necessary to increase the size of the gas and liquid piping if the pipe length between the first and the farthest indoor unit is >40m.
If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.

c. When the piping size is increased, the piping length has to be counted as double.

The total piping length has to be within limitations.

d. The piping length difference between the nearest indoor unit from the first branch to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ 40m.

(2) If the piping length between the first branch and the BP box or VRV indoor unit is more than 20m, increase the length of the gas and liquid piping between the first branch and the BP box or VRV indoor unit.

(3) An extension to up to 90 m is possible without an additional option kit. Respect the following conditions:

-> If the outdoor units are positioned higher than the indoor units:

a. Size up the liquid piping

b. A dedicated setting on the outdoor unit is required.

-> If the outdoor units are positioned lower than the indoor units:

a. 40~60m Minimum connection ratio: 80%

60~65m Minimum connection ratio: 90%

65~80m Minimum connection ratio: 100%

80~90m Minimum connection ratio: 110%

b. Size up the liquid piping

A dedicated setting on the outdoor unit is required.

(4) The allowable minimum length is 5 m.

(5) In case of multi-outdoor-unit combinations.

(6) Multiple air handling units (AHU)(EKEXV + EKEQ kits).

(7) Mix of AHU units and VRV DX indoor

(8) If the equivalent piping length between is > 90m, size up the main liquid and gas piping.

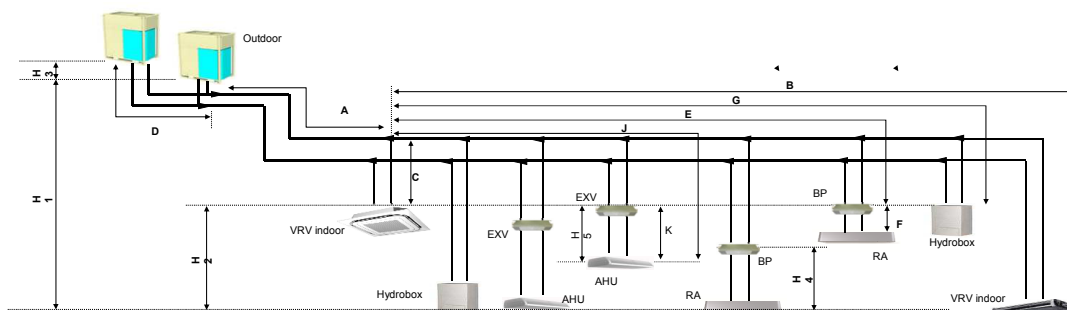
3D079540E

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQ-U5
RYYQ-U5
RYMQ-U5

VRV4
Heat pump
Piping restrictions 2/3



Remark

- (1) Schematic indication
Illustrations may differ from the actual appearance of the unit.
- (2) This is only to illustrate piping length limitations.
Combination of indoor unit types is not allowed.
Refer to combination table 3D079543 for details about the allowed combinations.

		Allowed piping length		Maximum height difference	
		BP to RA (F)	EXV to AHU (K)	BP to RA (H4)	EXV to AHU (H5)
RA connection		2~15m	-	5m	-
AHU connection	Pair	-	≤5m	-	5m
	Multi ⁽¹⁾	-	≤5m	-	5m
	Mix ⁽²⁾	-	≤5m	-	5m

Remark

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

3D079540E

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQ-U5
RYYQ-U5
RYMQ-U5

VRV4
Heat pump
Piping restrictions 3/3

System pattern Allowed connection ratio (CR) Other combinations are not allowed.	Total		Allowed capacity			
	Capacity	Indoor unit quantity (VRV, RA, AHU, Hydrobox)	VRV DX indoor unit	RA DX indoor unit	Hydrobox unit	Air handling unit (AHU)
VRV DX indoor units only	50~130%	Max.64	50~130%	-	-	-
VRV DX indoor unit + RA DX	80~130%	Max.32 ⁽¹⁾	0~130%	0~130%	-	-
RA DX indoor unit	80~130%	Max.32 ⁽¹⁾	-	80~130%	-	-
VRV DX indoor unit + LT hydrobox	50~130%	Max.32	50~130%	-	0~80%	-
VRV DX indoor unit + AHU	50~110% ⁽³⁾	Max.64 ⁽²⁾	50~110%	-	-	0~110%
AHU only Pair + multi (4)	90~110% ⁽³⁾	Max.64 ⁽²⁾	-	-	-	90~110%

Remark

- (1) There is no restriction on the number of connectable BP boxes.
- (2) For connection with AHU
EKEXV kits are also considered indoor units.
- (3) Restrictions regarding the air handling unit capacity
- (4) Pair AHU = system with 1 air handling unit connected to one outdoor unit
Multi AHU = system with multiple air handling units connected to one outdoor unit

About ventilation applications

- I. FXMQ_MF units are considered air handling units, following air handling unit limitations.
Maximum connection ratio when combined with VRV DX indoor units: <30%.
Maximum connection ratio when only air handling units are connected: <100%.
For information on the operation range, refer to the documentation of the FXMQ_MF unit.
- II. Biddle air curtains are considered air handling units, following air handling unit limitations:
For information on the operation range, refer to the documentation of the Biddle unit.
- III. [EKEXV + EKEQ] units combined with an air handling unit are considered air handling units, following air handling unit limitations.
For information on the operation range, refer to the documentation of the EKEXV-EKEQ unit.
- IV. VKM units are considered to be regular VRV DX indoor units.
For information on the operation range, refer to the documentation of the VKM unit.
- V. Because there is no refrigerant connection with the outdoor unit (only communication F1/F2), VAM units do not have connection limitations.
However, since there is communication via F1/F2, count them as regular indoor unit when calculating the maximum allowed number of connectable indoor units.

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13 Operation range

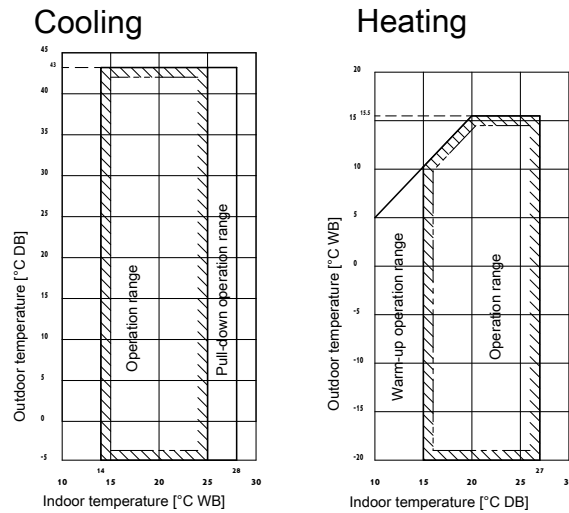
13 - 1 Operation Range

RXYQ-U5

RYYQ-U5

RYMQ-U5

13



Notes

- These figures assume the following operation conditions

Indoor and outdoor units

Equivalent piping length: 5m

Level difference: 0m

- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 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.
- Operation range is valid in case direct expansion indoor units are used.

3D118465

14 Appropriate Indoors

14 - 1 Appropriate Indoors

RXYQ-U5

RYYQ-U5

RYMQ-U5

Recommended indoor units for ·RXYQ*U* / RYYQ*U* / RYM*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 ·RXYQ*U* / RYYQ*U* / RYM*U*· outdoor units

Covered by ·ENER LOT21·

FXQ20-25-32-40-50-63-80-100-125
FXQ15-20-25-32-40-50
FXQ20-25-32-40-50-63-80-125
FXQ25-32-40-63
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

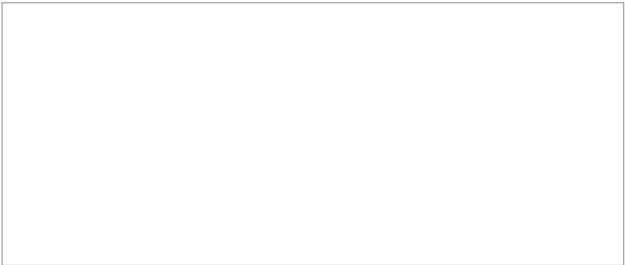
Covered by ·ENER LOT10·

FTXJ25-35-50
FTXA20-25-35-42-50
FLXS25-35-50-60
FVXM25F-35F-50F
FVXG25-35-50
FTXM20R-25R-35R-42R-50R-60R-71R
CVXM20A
FVXM25A-35A-50A

Outside the scope of ·ENER LOT21·

EKEV50-63-80-100-125-140-200-250-400-500 + EKEQM / EKEQF
HXY080-125
VKM50-80-100
CYVS100-150-200-250
CYVM100-150-200-250
CYVL100-150-200-250
EKVDX32-50-80-100 + VAMJ8

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