

VRV IV+ heat pump, without continuous heating

Air Conditioning Technical Data

RXYQ-U



RXYQ8U7Y1B
RXYQ10U7Y1B
RXYQ12U7Y1B
RXYQ14U7Y1B
RXYQ16U7Y1B
RXYQ18U7Y1B
RXYQ20U7Y1B
RXYQ22U7Y1B
RXYQ24U7Y1B
RXYQ26U7Y1B
RXYQ28U7Y1B
RXYQ30U7Y1B
RXYQ32U7Y1B
RXYQ34U7Y1B
RXYQ36U7Y1B
RXYQ38U7Y1B
RXYQ40U7Y1B
RXYQ42U7Y1B
RXYQ44U7Y1B
RXYQ46U7Y1B
RXYQ48U7Y1B
RXYQ50U7Y1B
RXYQ52U7Y1B
RXYQ54U7Y1B

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1 Features

1 - 1 RXYQ-U

- › By choosing this product with LOOP by Daikin you support the reuse of refrigerant
- › 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
- › ESP up to 78.4 Pa allows ducting
- › 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


Replacement
technology

Variable refrigerant
temperature

2 Specifications

2 - 1 Specifications

Technical Specifications				RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U
Recommended combination				4 x FXFQ50BVEB	4 x FXFQ63BVEB	6 x FXFQ50BVEB	1 x FXFQ50BVEB + 5 x FXFQ63BVEB	4 x FXFQ63BVEB + 2 x FXFQ80BVEB
Recommended combination 2				4 x FXSQ50A2VEB	4 x FXSQ63A2VEB	6 x FXSQ50A2VEB	1 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	4 x FXSQ63A2VEB + 2 x FXSQ80A2VEB
Recommended combination 3				4 x FXMQ50P7VEB9	4 x FXMQ63P7VEB9	6 x FXMQ50P7VEB9	1 x FXMQ50P7VEB9 + 5 x FXMQ63P7VEB9	4 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9
Cooling capacity	Prated,c	kW		22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)
Heating capacity	Nom.	6°CWB	kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)	45.0 (2)
	Prated,h		kW	22.4 (2)	28.0 (2)	33.5 (2)	40.0 (2)	45.0 (2)
	Max.	6°CWB	kW	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)	50.0 (2)
COP at nom. capacity	kW/kW		KW/KW	4.15 (2)	3.69 (2)	3.47 (2)	3.74 (2)	3.59 (2)
ESEER - Automatic				7.53	7.20	6.96	6.83	6.50
ESEER - Standard				6.37	5.67	5.50	5.31	5.05
SCOP				4.3		4.1	4.0	
SCOP recommended combination 2				4.2	4.3	4.1	4.0	4.1
SCOP recommended combination 3				4.2	4.1		4.0	
SEER				7.6	6.8	6.3		6.0
SEER recommended combination 2				6.9	6.8	5.9	6.3	5.9
SEER recommended combination 3				7.5	6.8	6.2		5.8
ηs,c	%			302.4	267.6	247.8	250.7	236.5
ηs,c recommended combination 2	%			273.6	270.5	233.5	250.0	234.2
ηs,c recommended combination 3	%			295.2	267.1	246.3	246.7	230.4
ηs,h	%			167.9	168.2	161.4	155.4	157.8
ηs,h recommended combination 2	%			165.4	170.6	161.3	157.2	159.5
ηs,h recommended combination 3	%			165.6	162.0	160.6	155.7	156.8
Space cooling	A Condition	EERd		3.0	2.3	2.4	2.6	2.1
	(35°C - 27/19)	Pdc	kW	22.4	28.0	33.5	40.0	45.0
	B Condition	EERd		5.2	4.7	4.3	4.1	3.9
	(30°C - 27/19)	Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition	EERd		9.5	8.3	7.7	7.8	7.7
	(25°C - 27/19)	Pdc	kW	10.6	13.3	15.9	18.9	21.3
	D Condition	EERd		18.8	17.0	13.9	14.3	14.2
	(20°C - 27/19)	Pdc	kW	8.0	9.3	9.4	8.4	9.5
	A Condition	EERd		2.6	2.4		2.6	2.1
	(35°C - 27/19)	Pdc	kW	22.4	28.0	33.5	40.0	45.0
Space cooling recommended combination 2	B Condition	EERd		4.9	4.7	4.0	4.1	3.8
	(30°C - 27/19)	Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition	EERd		8.8	8.5	7.1	7.9	7.6
	(25°C - 27/19)	Pdc	kW	10.6	13.3	15.9	18.9	21.3
	D Condition	EERd		15.1	17.2	13.1	14.0	
Space cooling recommended combination 2	(20°C - 27/19)	Pdc	kW	8.8	9.3	9.1	8.4	9.5
	A Condition	EERd		3.0	2.3	2.4	2.6	2.1
Space cooling recommended combination 3	(35°C - 27/19)	Pdc	kW	22.4	28.0	33.5	40.0	45.0
	B Condition	EERd		5.1	4.7	4.2	4.0	3.7
	(30°C - 27/19)	Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition	EERd		9.6	8.4	7.7		7.4
	(25°C - 27/19)	Pdc	kW	10.6	13.3	15.9	19.0	21.3
	D Condition	EERd		16.0	16.9	13.7	14.0	14.1
	(20°C - 27/19)	Pdc	kW	9.1	9.3	9.4	8.4	9.5
	TBivalent	COPd (declared COP)		2.5	2.4	2.0	2.3	2.2
		Pdh (declared heating cap)	kW	13.7	16.0	18.4	20.6	23.2
		Tbiv (bivalent temperature)	°C	-10				
Space heating (Average climate)	TOL	Tol (temperature operating limit)	°C	-10				
	A Condition	COPd (declared COP)		2.7	2.6	2.4	2.6	
	(-7°C)	Pdh (declared heating cap)	kW	12.1	14.2	16.3	18.2	20.5
	B Condition	COPd (declared COP)		3.9		3.5		
	(2°C)	Pdh (declared heating cap)	kW	7.4	8.6	9.9	11.1	12.5
	C Condition	COPd (declared COP)		6.3	6.4	6.1		6.3
	(7°C)	Pdh (declared heating cap)	kW	5.0	5.5	6.4	7.1	8.0
	D Condition	COPd (declared COP)		7.9	8.2	7.9	8.5	8.6
	(12°C)	Pdh (declared heating cap)	kW	5.9		6.3	4.9	

2 Specifications

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Technical Specifications					RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)			2.7		2.4	2.6		
		Pdh (declared heating cap)	kW	12.1	14.2		16.3	18.2	20.5	
	B Condition (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	12.2	
	C Condition (7°C)	COPd (declared COP)			6.3	6.5	6.1		6.3	
		Pdh (declared heating cap)	kW	5.0	5.5		6.4	7.1	8.0	
	D Condition (12°C)	COPd (declared COP)			7.8	8.3	7.9	8.6	8.7	
		Pdh (declared heating cap)	kW	5.9	6.0		6.4	4.9	5.0	
	TBivalent	COPd (declared COP)			2.4		1.9	2.3	2.2	
		Pdh (declared heating cap)	kW	13.7	16.0		18.4	20.6	23.2	
		Tbiv (bivalent temperature)	°C	-10						
	TOL	COPd (declared COP)			2.4		1.9	2.3	2.2	
	Pdh (declared heating cap)	kW	13.7	16.0		18.4	20.6	23.2		
	Tol (temperature operating limit)	°C	-10							
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.7	2.6	2.4	2.6		
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	Pdh (declared heating cap)	kW	12.1	14.2		16.3	18.2	20.5	
	B Condition (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	12.5	
	C Condition (7°C)	COPd (declared COP)			6.2	6.4	6.0	6.1	6.2	
		Pdh (declared heating cap)	kW	4.9	5.5		6.4	7.1	8.0	
	D Condition (12°C)	COPd (declared COP)			7.8	8.1	7.8	8.5	8.6	
		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	2.2	
		Pdh (declared heating cap)	kW	13.7	16.0		18.4	20.6	23.2	
		Tbiv (bivalent temperature)	°C	-10						
	TOL	COPd (declared COP)			2.5	2.4	2.0	2.3	2.2	
		Pdh (declared heating cap)	kW	13.7	16.0		18.4	20.6	23.2	
	Tol (temperature operating limit)	°C	-10							
Capacity range			HP	8	10	12	14	16		
PED	Category				Category II					
	Most critical part	Name			Accumulator					
		P _s *V	Bar*l	325				415		
Maximum number of connectable indoor units					64 (3)					
Indoor index connection	Min.				100.0	125.0	150.0	175.0	200.0	
	Max.				260.0	325.0	390.0	455.0	520.0	
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		194			275			
	Packed unit	kg		205			292			
Packing	Material	Carton								
	Weight	kg		1.8			2.2			
Packing 2	Material	Wood								
	Weight	kg		8.9			14.0			
Packing 3	Material	Plastic								
	Weight	kg		0.5			0.6			
Casing	Colour	Daikin White								
	Material	Painted galvanized steel plate								
Heat exchanger	Type	Cross fin coil								
Heat exchanger	Indoor side	Air								
	Outdoor side	Air								
	Air flow rate	Cooling Heating	Rated Rated	m³/h m³/h	9,720 9,720	10,500 10,500	11,100 11,100	13,380 13,380	15,600 15,600	
Fan	Quantity				1			2		
	External static pressure	Max.	Pa		78					
Fan motor	Quantity				1			2		
	Type	DC Motor								
Compressor	Output	W		550			750			
	Quantity				1			2		
	Type	Hermetically sealed scroll compressor								
Operation range	Cooling	Min.	°CDB		-5.0					
		Max.	°CDB		43.0					
	Heating	Min.	°CWB		-20.0					
		Max.	°CWB		15.5					

2 Specifications

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Technical Specifications					RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U
Sound power level	Cooling	Nom.		dBA	78.0 (4)	79.1 (4)	83.4 (4)	80.9 (4)	85.6 (4)
	Heating	Prated,h		dBA	79.6 (4)	80.9 (4)	83.5 (4)	83.1 (4)	86.5 (4)
Sound pressure level	Cooling	Nom.		dBA	57.0 (5)		61.0 (5)	60.0 (5)	63.0 (5)
Refrigerant	Type				R-410A				
	GWP				2,087.5				
	Charge			kg	5.9	6.0	6.3	10.3	11.3
	Charge			tCO2Eq	12.3	12.5	13.2	21.5	23.6
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	Crankcase heater mode	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					RXYQ18U		RXYQ20U	
Recommended combination					3 x FXFQ50BVEB + 5 x FXFQ63BVEB		2 x FXFQ50BVEB + 6 x FXFQ63BVEB	
Recommended combination 2					3 x FXSQ50A2VEB + 5 x FXSQ63A2VEB		2 x FXSQ50A2VEB + 6 x FXSQ63A2VEB	
Recommended combination 3					3 x FXMQ50P7VEB9 + 5 x FXMQ63P7VEB9		2 x FXMQ50P7VEB9 + 6 x FXMQ63P7VEB9	
Cooling capacity	Prated,c		kW		50.4 (1)		52.0 (1)	
Heating capacity	Nom.	6°CWB	kW		50.4 (2)		56.0 (2)	
	Prated,h		kW		50.4 (2)		56.0 (2)	
	Max.	6°CWB	kW		56.5 (2)		63.0 (2)	
COP at nom. capacity	kW/kW		KW/KW		3.54 (2)		3.20 (2)	
ESEER - Automatic					6.38		5.67	
ESEER - Standard					4.97		4.42	
SCOP					4.2		4.0	
SCOP recommended combination 2					4.2		4.0	
SCOP recommended combination 3					4.1		3.9	
SEER					6.0		5.9	
SEER recommended combination 2					6.0		5.9	
SEER recommended combination 3					6.0		5.9	
η _{s,c}					238.3		233.7	
η _{s,c} recommended combination 2					236.8		233.9	
η _{s,c} recommended combination 3					238.2		233.1	
η _{s,h}					163.1		156.6	
η _{s,h} recommended combination 2					164.8		158.2	
η _{s,h} recommended combination 3					159.6		153.4	
Space cooling	A Condition	EERd			1.9			
		(35°C - 27/19) Pdc	kW		50.4		52.0	
	B Condition	EERd			3.8		3.7	
		(30°C - 27/19) Pdc	kW		37.1		38.3	
	C Condition	EERd			7.5		7.3	
		(25°C - 27/19) Pdc	kW		23.9		24.6	
	D Condition	EERd			18.3			
		(20°C - 27/19) Pdc	kW		11.5			

2 Specifications

2 - 1 Specifications

Technical Specifications				RXYQ18U	RXYQ20U
Space cooling recommended combination 2	A Condition	EERd		1.9	
	(35°C - 27/19)	Pdc	kW	50.4	52.0
	B Condition	EERd		3.7	3.6
	(30°C - 27/19)	Pdc	kW	37.1	38.3
Space cooling recommended combination 2	C Condition	EERd		7.5	7.3
	(25°C - 27/19)	Pdc	kW	23.9	24.6
	D Condition	EERd		18.1	18.9
	(20°C - 27/19)	Pdc	kW	11.4	10.9
Space cooling recommended combination 3	A Condition	EERd		1.9	
	(35°C - 27/19)	Pdc	kW	50.4	52.0
	B Condition	EERd		3.7	3.6
	(30°C - 27/19)	Pdc	kW	37.1	38.3
Space cooling recommended combination 3	C Condition	EERd		7.6	7.3
	(25°C - 27/19)	Pdc	kW	23.9	24.6
	D Condition	EERd		18.3	
	(20°C - 27/19)	Pdc	kW	11.6	
Space heating (Average climate)	TBivalent	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10	
	TOL	Tol (temperature operating limit)	°C	-10	
	A Condition	COPd (declared COP)		2.4	2.1
	(-7°C)	Pdh (declared heating cap)	kW	24.7	27.4
	B Condition	COPd (declared COP)		3.7	3.6
	(2°C)	Pdh (declared heating cap)	kW	15.0	16.7
	C Condition	COPd (declared COP)		6.7	6.5
	(7°C)	Pdh (declared heating cap)	kW	9.7	10.7
	D Condition	COPd (declared COP)		9.0	9.1
	(12°C)	Pdh (declared heating cap)	kW	7.1	
	A Condition	COPd (declared COP)		2.4	2.2
	(-7°C)	Pdh (declared heating cap)	kW	24.7	27.4
	B Condition	COPd (declared COP)		3.8	3.7
	(2°C)	Pdh (declared heating cap)	kW	15.0	16.7
Space heating (Average climate) recommended combination 2	C Condition	COPd (declared COP)		6.8	6.5
	(7°C)	Pdh (declared heating cap)	kW	9.7	10.7
	D Condition	COPd (declared COP)		9.1	9.2
	(12°C)	Pdh (declared heating cap)	kW	7.2	
	TBivalent	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10	
	TOL	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tol (temperature operating limit)	°C	-10	
	A Condition	COPd (declared COP)		2.4	2.1
	(-7°C)	Pdh (declared heating cap)	kW	24.7	27.4
	B Condition	COPd (declared COP)		3.7	3.6
	(2°C)	Pdh (declared heating cap)	kW	15.0	16.7
	C Condition	COPd (declared COP)		6.5	6.3
	(7°C)	Pdh (declared heating cap)	kW	9.7	10.7
Space heating (Average climate) recommended combination 3	D Condition	COPd (declared COP)		8.7	
	(12°C)	Pdh (declared heating cap)	kW	6.9	
	TBivalent	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tbiv (bivalent temperature)	°C	-10	
	TOL	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tol (temperature operating limit)	°C	-10	
	A Condition	COPd (declared COP)		2.4	2.1
	(-7°C)	Pdh (declared heating cap)	kW	24.7	27.4
	B Condition	COPd (declared COP)		3.7	3.6
	(2°C)	Pdh (declared heating cap)	kW	15.0	16.7
	C Condition	COPd (declared COP)		6.5	6.3
	(7°C)	Pdh (declared heating cap)	kW	9.7	10.7
	D Condition	COPd (declared COP)		8.7	
	(12°C)	Pdh (declared heating cap)	kW	6.9	
Capacity range	Unit	Height	mm	1,685	
		Width	mm	1,240	
		Depth	mm	765	
	Packed unit	Height	mm	1,820	
Dimensions		Width	mm	1,305	
		Depth	mm	860	
Capacity range				18	20
PED				Category II	
				Accumulator	
				493	
Maximum number of connectable indoor units				64 (3)	
Indoor index connection				225.0	250.0
				585.0	650.0
Dimensions				1,685	
				1,240	
				765	
				1,820	
				1,305	
				860	

2 Specifications

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Technical Specifications					RXYQ18U	RXYQ20U
Weight	Unit		kg		309	
	Packed unit		kg		326	
Packing	Material				Carton	
	Weight		kg		2.2	
Packing 2	Material				Wood	
	Weight		kg		14.0	
Packing 3	Material				Plastic	
	Weight		kg		0.6	
Casing	Colour				Daikin White	
	Material				Painted galvanized steel plate	
Heat exchanger	Type				Cross fin coil	
Heat exchanger	Indoor side				Air	
	Outdoor side				Air	
	Air flow rate	Cooling	Rated	m ³ /h	15,060	15,660
		Heating	Rated	m ³ /h	15,060	15,660
Fan	Quantity				2	
	External static pressure	Max.		Pa	78	
Fan motor	Quantity				2	
	Type				DC Motor	
	Output			W	750	
Compressor	Quantity				2	
	Type				Hermetically sealed scroll compressor	
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	83.8 (4)	87.9 (4)
	Heating	Prated,h		dBA	85.3 (4)	89.8 (4)
Sound pressure level	Cooling	Nom.		dBA	62.0 (5)	65.0 (5)
Refrigerant	Type				R-410A	
	GWP				2,087.5	
	Charge			kg	11.7	11.8
	Charge			tCO ₂ Eq	24.4	24.6
Refrigerant oil	Type				Synthetic (ether) oil FVC68D	
Piping connections	Liquid	Type			Braze connection	
		OD		mm	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	Crankcase heater mode	Cooling	PCK	kW	0.000	
		Heating	PCK	kW	0.089	
	Off mode	Cooling	POFF	kW	0.075	
		Heating	POFF	kW	0.089	
Power consumption in other than active mode	Standby mode	Cooling	PSB	kW	0.075	
	Standby mode	Heating	PSB	kW	0.089	
	Thermo-stat-off mode	Cooling	PTO	kW	0.010	
		Heating	PTO	kW	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;

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Electrical Specifications				RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U	
Power supply	Name			Y1					
	Phase			3N~					
	Frequency			50					
	Voltage			380-415					
Power supply intake				Both indoor and outdoor unit					
Voltage range	Min.			-10					
	Max.			10					
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-					
		Combina- tion B	Cooling	-					
	Starting current (MSC) - remark			See note 7					
	Zmax List			No requirements					
	Minimum Ssc value			kVA	4,050 (8)	5,535 (8)	6,038 (8)	6,793 (8)	7,547 (8)
	Minimum circuit amps (MCA)			A	16.1 (9)	22.0 (9)	24.0 (9)	27.0 (9)	31.0 (9)
	Maximum fuse amps (MFA)			A	20 (10)	25 (10)	32 (10)		40 (10)
	Full load amps (FLA)			A	1.2 (11)	1.3 (11)	1.5 (11)	1.8 (11)	2.6 (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 connec- tion with indoor	Quantity		2					
		Remark		F1,F2					

Electrical Specifications				RXYQ18U		RXYQ20U	
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 - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling			-	
		Combina- tion B	Cooling			-	
	Starting current (MSC) - remark					See note 7	
	Zmax	List				No requirements	
	Minimum Ssc value		kVA	8,805 (8)		9,812 (8)	
	Minimum circuit amps (MCA)		A	35.0 (9)		39.0 (9)	
	Maximum fuse amps (MFA)		A	40 (10)		50 (10)	
	Full load amps (FLA)	Total	A			2.6 (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	

- (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)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
- (8)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with Ssc ≥ minimum Ssc value |
- (9)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
- (10)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
- (11)FLA means the nominal running current of the fan |
- (12)Maximum allowable voltage range variation between phases is 2%. |
- (13)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
- (14)The AUTOMATIC ESEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature) |
- (15)The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality |
- (16)Sound values are measured in a semi-anechoic room. |
- (17)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 |
- (18)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 |
- (19)Ssc: Short-circuit power |
- (20)For detailed contents of standard accessories, see installation/operation manual |
- (21)Multi combination (22~54HP) data is corresponding with the standard multi combination

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Technical specifications System				RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U		
System	Outdoor unit module 1			RXYQ10U	RXYQ8U		RXYQ12U			
	Outdoor unit module 2			RXYQ12U	RXYQ16U	RXYQ14U	RXYQ16U	RXYQ18U		
Recommended combination				6 x FXFQ50BVEB + 4 x FXFQ63BVEB	4 x FXFQ50BVEB + 4 x FXFQ63BVEB + 2 x FXFQ80BVEB	7 x FXFQ50BVEB + 5 x FXFQ63BVEB	6 x FXFQ50BVEB + 4 x FXFQ63BVEB + 2 x FXFQ80BVEB	9 x FXFQ50BVEB + 5 x FXFQ63BVEB		
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 FXMQ50P7VEB9 + 4 x FXMQ63P7VEB9	4 x FXMQ50P7VEB9 + 4 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9	7 x FXMQ50P7VEB9 + 5 x FXMQ63P7VEB9	6 x FXMQ50P7VEB9 + 4 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9	9 x FXMQ50P7VEB9 + 5 x FXMQ63P7VEB9		
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)		
COP at nom. capacity	kW/kW		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				4.3		
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,c recommended combination 2			%	266.5	262.6	256.1	249.3	249.8		
ηs,c recommended combination 3			%	273.3	265.3	261.1	253.1	256.1		
ηs,h			%	171.2	167.0	164.6	166.0	169.8		
ηs,h recommended combination 2			%	172.3	167.1	165.4	166.8	170.6		
ηs,h recommended combination 3			%	170.2	165.5	164.5	165.0	167.0		
Space cooling	A Condition	EERd		2.6	2.5	2.6	2.3	2.1		
	(35°C - 27/19)	Pdc	kW	61.5	67.4	73.5	78.5	83.9		
	B Condition	EERd		4.8	4.6		4.4	4.3		
	(30°C - 27/19)	Pdc	kW	45.3	49.7	54.2	57.8	61.8		
	C Condition	EERd		8.5	8.6	8.2	8.1	8.2		
	(25°C - 27/19)	Pdc	kW	29.1	31.9	34.8	37.2	39.7		
	D Condition	EERd		16.0	15.2	14.2	14.3	16.8		
	(20°C - 27/19)	Pdc	kW	18.8	15.8	16.2	16.5	21.0		
Space cooling recommended combination 2	A Condition	EERd		2.6	2.4	2.6	2.3	2.1		
	(35°C - 27/19)	Pdc	kW	61.5	67.4	73.5	78.5	83.9		
	B Condition	EERd		4.6	4.5	4.4	4.3	4.2		
	(30°C - 27/19)	Pdc	kW	45.3	49.7	54.1	57.8	61.8		
Space cooling recommended combination 2	C Condition	EERd		8.2	8.4	7.9	7.8	7.9		
	(25°C - 27/19)	Pdc	kW	29.1	31.9	34.8	37.2	39.7		
	D Condition	EERd		15.6	14.7	13.6	13.8	16.1		
	(20°C - 27/19)	Pdc	kW	18.4	15.4	15.7	16.5	20.5		
Space cooling recommended combination 3	A Condition	EERd		2.5			2.3	2.1		
	(35°C - 27/19)	Pdc	kW	61.5	67.4	73.5	78.5	83.9		
	B Condition	EERd		4.8	4.5		4.3			
	(30°C - 27/19)	Pdc	kW	45.3	49.7	54.2	57.8	61.8		
	C Condition	EERd		8.5	8.4	8.1	8.0	8.2		
	(25°C - 27/19)	Pdc	kW	29.1	31.9	34.8	37.2	39.7		
	D Condition	EERd		15.8	15.2	14.0	14.1	16.6		
	(20°C - 27/19)	Pdc	kW	18.8	15.7	16.0	16.6	21.0		
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	Tol (temperature operating limit)		°C	-10					
		A Condition	COPd (declared COP)		2.6	2.8	2.6			
		(-7°C)	Pdh (declared heating cap)	kW	30.4	32.6	34.5	36.8	41.0	
	B Condition	COPd (declared COP)		4.0	3.7	3.8				
		(2°C)	Pdh (declared heating cap)	kW	18.5	19.9	21.0	22.4	24.9	
	C Condition	COPd (declared COP)		6.3		6.1	6.2	6.5		
		(7°C)	Pdh (declared heating cap)	kW	11.9	13.0	13.5	14.4	16.0	
	D Condition	COPd (declared COP)		8.2	8.9	8.8	9.0			
		(12°C)	Pdh (declared heating cap)	kW	6.0	5.7	6.0	6.4	7.1	

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Technical specifications System					RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U
Space heating (Average climate) recommended combination 2	A Condition (-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
	B Condition (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
	C Condition (7°C)	COPd (declared COP)			6.3		6.1	6.3	6.6
		Pdh (declared heating cap)	kW		11.9	13.1		14.4	16.0
	D Condition (12°C)	COPd (declared COP)			8.4	9.0	8.9	9.1	
		Pdh (declared heating cap)	kW		6.0	5.7	6.0	6.4	7.2
	TBivalent	COPd (declared COP)			2.2	2.4	2.2		
		Pdh (declared heating cap)	kW		34.4	36.9	39.0	41.6	46.3
		Tbiv (bivalent temperature)	°C	-10					
TOL	COPd (declared COP)			2.2	2.4	2.2			
	Pdh (declared heating cap)	kW		34.4	36.9	39.0	41.6	46.3	
Space heating (Average climate) recommended combination 2	TOL	Tol (temperature operating limit) °C			-10				
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.6	2.7	2.6		
		Pdh (declared heating cap)	kW		30.4	32.6	34.5	36.8	41.0
	B Condition (2°C)	COPd (declared COP)			4.0	3.7	3.8		
		Pdh (declared heating cap)	kW		18.5	19.9	21.0	22.4	24.9
	C Condition (7°C)	COPd (declared COP)			6.2	6.3	6.1	6.2	6.3
		Pdh (declared heating cap)	kW		11.9	12.9	13.5	14.4	16.0
	D Condition (12°C)	COPd (declared COP)			8.2	8.9	8.8	9.0	8.6
		Pdh (declared heating cap)	kW		6.0	5.7	6.0	6.4	7.1
	TBivalent	COPd (declared COP)			2.3	2.4	2.2		
		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	2.4	2.2			
	Pdh (declared heating cap)	kW		34.4	36.9	39.0	41.6	46.3	
		Tol (temperature operating limit) °C			-10				
Capacity range	HP				22	24	26	28	30
PED	Category				Category II				
Maximum number of connectable indoor units					64 (3)				
Indoor index connection	Min.					300.0	325.0	350.0	375.0
	Max.				275.0	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	26,160
		Heating	Rated	m³/h	21,600	25,320	24,480	26,700	26,160
Sound power level	Cooling	Nom.		dBA	84.8 (4)	86.3 (4)	85.3 (4)	87.6 (4)	86.6 (4)
	Heating	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				
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	Crankcase heater mode	Cooling	PCK	kW	0.000				
		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				RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U
System	Outdoor unit module 1			RXYQ16U				
	Outdoor unit module 2			RXYQ16U	RXYQ18U	RXYQ20U	RXYQ10U	RXYQ12U
	Outdoor unit module 3			-			RXYQ20U	RXYQ18U

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Technical specifications System			RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U
Recommended combination			8 x FXFQ63BVEB + 4 x FXFQ80BVEB	3 x FXFQ50BVEB + 9 x FXFQ63BVEB + 2 x FXFQ80BVEB	2 x FXFQ50BVEB + 10 x FXFQ63BVEB + 2 x FXFQ80BVEB	6 x FXFQ50BVEB + 10 x FXFQ63BVEB	9 x FXFQ50BVEB + 9 x FXFQ63BVEB
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 FXMQ63P7VEB9 + 4 x FXMQ80P7VEB9	3 x FXMQ50P7VEB9 + 9 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9	2 x FXMQ50P7VEB9 + 10 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9	6 x FXMQ50P7VEB9 + 10 x FXMQ63P7VEB9	9 x FXMQ50P7VEB9 + 9 x FXMQ63P7VEB9
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)
COP at nom. capacity	kW/kW	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,c recommended combination 2	%		248.3	250.9	248.7	269.2	259.2
ηs,c recommended combination 3	%		244.2	249.8	247.2	272.2	263.2
ηs,h	%		163.1	166.2	162.4	167.5	170.0
ηs,h recommended combination 2	%		164.6	167.7	164.1	168.4	171.3
ηs,h recommended combination 3	%		161.9	164.2	159.9	164.8	167.8
Space cooling	A Condition EERd		2.3	2.1		2.4	2.2
	(35°C - 27/19) Pdc	kW	90.0	95.4	97.0	102.4	111.9
	B Condition EERd		4.3	4.2	4.1	4.5	
	(30°C - 27/19) Pdc	kW	66.3	70.3	71.5	75.5	82.5
	C Condition EERd		8.1		7.9	8.5	8.3
	(25°C - 27/19) Pdc	kW	42.6	45.2	45.9	48.5	53.0
	D Condition EERd		14.3	16.8	16.7	17.9	16.0
	(20°C - 27/19) Pdc	kW	19.0	20.1	20.4	21.6	23.6
	A Condition EERd		2.2	2.1		2.3	2.2
	(35°C - 27/19) Pdc	kW	90.0	95.4	97.0	102.4	111.9
Space cooling recommended combination 2	B Condition EERd		4.2		4.1	4.5	4.4
	(30°C - 27/19)						
	B Condition Pdc	kW	66.3	70.3	71.5	75.4	82.4
	(30°C - 27/19)						
	C Condition EERd		8.0	8.1	7.9	8.4	8.1
Space cooling recommended combination 2	(25°C - 27/19) Pdc	kW	42.6	45.2	45.9	48.5	53.0
	D Condition EERd		14.0	16.5		17.8	15.9
	(20°C - 27/19) Pdc	kW	18.9	20.1	20.4	21.6	23.6
	A Condition EERd		2.2	2.1		2.4	2.2
	(35°C - 27/19) Pdc	kW	90.0	95.4	97.0	102.4	111.9
Space cooling recommended combination 3	B Condition EERd		4.1		4.0	4.5	4.4
	(30°C - 27/19) Pdc	kW	66.3	70.3	71.5	75.5	82.5
	C Condition EERd		7.8	8.0	7.8	8.5	8.4
	(25°C - 27/19) Pdc	kW	42.6	45.2	45.9	48.5	53.0
	D Condition EERd		13.8	16.6	16.5	17.9	16.1
	(20°C - 27/19) Pdc	kW	19.0	20.1	20.4	21.6	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
	Tbiv (bivalent temperature)	°C	-10				
	TOL Tol (temperature operating limit)	°C	-10				
Space heating (Average climate)	A Condition COPd (declared COP)		2.7	2.6	2.5		2.6
	(-7°C) Pdh (declared heating cap)	kW	41.0	45.2	47.9	53.7	55.1
	B Condition COPd (declared COP)		3.6	3.7		3.9	4.0
	(2°C) Pdh (declared heating cap)	kW	25.0	27.5	29.2	32.7	33.5
	C Condition COPd (declared COP)		6.3	6.5	6.4	6.5	
	(7°C) Pdh (declared heating cap)	kW	16.1	17.7	18.8	21.3	21.6
	D Condition COPd (declared COP)		9.0	8.8	8.6	8.7	
	(12°C) Pdh (declared heating cap)	kW	7.1	7.9	8.3	13.1	

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Technical specifications System					RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)			2.7	2.6	2.5		2.6
		Pdh (declared heating cap) kW			41.0	45.2	47.9	53.7	55.1
	B Condition (2°C)	COPd (declared COP)			3.6	3.8	3.7	3.9	4.0
		Pdh (declared heating cap) kW			25.0	27.5	29.2	32.7	33.5
	C Condition (7°C)	COPd (declared COP)			6.3	6.6	6.5		
		Pdh (declared heating cap) kW			16.1	17.7	18.8	21.3	21.6
	D Condition (12°C)	COPd (declared COP)			9.1	8.9	8.8		
		Pdh (declared heating cap) kW			7.1	7.9	8.3	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 (temperature operating limit) °C			-10					
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)			2.7	2.6	2.4	2.5	2.6
		Pdh (declared heating cap) kW			41.0	45.2	47.9	53.7	55.1
	B Condition (2°C)	COPd (declared COP)			3.6	3.7	3.6	3.8	3.9
		Pdh (declared heating cap) kW			25.0	27.5	29.2	32.7	33.5
	C Condition (7°C)	COPd (declared COP)			6.3	6.4	6.3		6.4
		Pdh (declared heating cap) kW			16.1	17.7	18.8	21.2	21.6
	D Condition (12°C)	COPd (declared COP)			9.0	8.9	8.3	8.5	8.4
		Pdh (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	
		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	2.1	2.2		
	Pdh (declared heating cap) kW			46.4	51.1	54.2	60.7	62.3	
	Tol (temperature operating limit) °C			-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
Sound power level	Cooling	Nom.	m³/h		31,200	30,660	31,260	35,880	36,660
	Heating	Prated,h	dBA		88.6 (4)	87.8 (4)	89.9 (4)	88.8 (4)	87.3 (4)
Sound pressure level	Cooling	Nom.	dBA		89.5 (4)	88.9 (4)	91.5 (4)	90.7 (4)	88.4 (4)
Refrigerant	Cooling	Nom.	dBA		66.0 (5)	65.5 (5)	67.1 (5)	66.2 (5)	65.2 (5)
	Type	R-410A							
Refrigerant	GWP	2,087.5							
Refrigerant oil	Type	Synthetic (ether) oil FVC68D							
Piping connections	Liquid	Type	Braze connection						
		OD	mm	19.1					
	Gas	Type	Braze connection						
		OD	mm	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 consumption in other than active mode	Crankcase 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		RXYQ42U	RXYQ44U	RXYQ46U	RXYQ48U	RXYQ50U
System	Outdoor unit module 1	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U	
	Outdoor unit module 2	RXYQ16U				
	Outdoor unit module 3	RXYQ16U				RXYQ18U
Recommended combination		12 x FXFQ63BVEB + 4 x FXFQ80BVEB	6 x FXFQ50BVEB + 8 x FXFQ63BVEB + 4 x FXFQ80BVEB	1 x FXFQ50BVEB + 13 x FXFQ63BVEB + 4 x FXFQ80BVEB	12 x FXFQ63BVEB + 6 x FXFQ80BVEB	3 x FXFQ50BVEB + 13 x FXFQ63BVEB + 4 x FXFQ80BVEB

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Technical specifications System				RXYQ42U	RXYQ44U	RXYQ46U	RXYQ48U	RXYQ50U
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 FXMQ63P7VEB9 + 4 x FXMQ80P7VEB9	6 x FXMQ50P7VEB9 + 8 x FXMQ63P7VEB9 + 4 x FXMQ80P7VEB9	1 x FXMQ50P7VEB9 + 13 x FXMQ63P7VEB9 + 4 x FXMQ80P7VEB9	12 x FXMQ63P7VEB9 + 6 x FXMQ80P7VEB9	3 x FXMQ50P7VEB9 + 13 x FXMQ63P7VEB9 + 4 x FXMQ80P7VEB9
Cooling capacity	Prated,c	kW		118.0 (1)	123.5 (1)	130.0 (1)	135.0 (1)	140.4 (1)
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)
COP at nom. capacity	kW/kW		KW/KW	3.61 (2)	3.56 (2)	3.63 (2)	3.59 (2)	3.57 (2)
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,c recommended combination 2	%			259.3	249.2	252.2	248.3	250.0
ηs,c recommended combination 3	%			255.4	250.1	248.3	244.2	248.0
ηs,h	%			165.5	164.5	162.0	162.8	165.2
ηs,h recommended combination 2	%			167.3	165.6	163.5	164.3	166.7
ηs,h recommended combination 3	%			164.4	163.5	161.3	161.7	163.2
Space cooling	A Condition	EERd		2.3		2.4	2.3	2.1
	(35°C - 27/19)	Pdc	kW	118.0	123.5	130.0	135.0	140.4
	B Condition	EERd			4.4		4.3	4.2
	(30°C - 27/19)	Pdc	kW	86.9	91.0	95.8	99.5	103.4
	C Condition	EERd		8.2		8.1		
	(25°C - 27/19)	Pdc	kW	55.9	58.5	61.6	64.0	66.5
	D Condition	EERd		15.4	14.4	14.3		15.9
	(20°C - 27/19)	Pdc	kW	24.8	26.0	27.4	28.4	29.6
	A Condition	EERd		2.3		2.2	2.1	
	(35°C - 27/19)	Pdc	kW	118.0	123.5	130.0	135.0	140.4
Space cooling recommended combination 2	B Condition	EERd		4.4	4.3		4.2	
	(30°C - 27/19)	Pdc	kW	86.9	91.0	95.8	99.5	103.5
	C Condition	EERd		8.2	7.9	8.1	8.0	
	(25°C - 27/19)	Pdc	kW	55.9	58.5	61.6	63.9	66.5
	D Condition	EERd		15.3		14.0		15.6
	(20°C - 27/19)	Pdc	kW	24.8	26.0	27.4	28.4	29.6
	A Condition	EERd		2.3		2.2	2.1	
	(35°C - 27/19)	Pdc	kW	118.0	123.5	130.0	135.0	140.4
	B Condition	EERd		4.3		4.2	4.1	
	(30°C - 27/19)	Pdc	kW	87.0	91.0	95.8	99.5	103.5
Space cooling recommended combination 3	C Condition	EERd		8.0	7.9		7.8	7.9
	(25°C - 27/19)	Pdc	kW	55.9	58.5	61.6	63.9	66.5
	D Condition	EERd		15.2	14.2	13.9	13.8	15.6
	(20°C - 27/19)	Pdc	kW	24.8	26.0	27.4	28.4	29.6
	A Condition	EERd		2.3		2.2	2.1	
	(35°C - 27/19)	Pdc	kW	118.0	123.5	130.0	135.0	140.4
	B Condition	EERd		4.3		4.2	4.1	
	(30°C - 27/19)	Pdc	kW	87.0	91.0	95.8	99.5	103.5
	C Condition	EERd		8.0	7.9		7.8	7.9
	(25°C - 27/19)	Pdc	kW	55.9	58.5	61.6	63.9	66.5
Space heating (Average climate)	D Condition	EERd		15.2	14.2	13.9	13.8	15.6
	(20°C - 27/19)	Pdc	kW	24.8	26.0	27.4	28.4	29.6
	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	Tol (temperature operating limit)	°C			-10		
	A Condition	COPd (declared COP)				2.7		
	(-7°C)	Pdh (declared heating cap)	kW	55.2	57.3	59.3	61.6	65.7
	B Condition	COPd (declared COP)		3.7		3.6		3.7
	(2°C)	Pdh (declared heating cap)	kW	33.6	34.9	36.1	37.5	40.0
Space heating (Average climate)	C Condition	COPd (declared COP)		6.3		6.2	6.3	6.5
	(7°C)	Pdh (declared heating cap)	kW	21.6	22.4	23.2	24.1	25.7
	D Condition	COPd (declared COP)		8.6		8.7	8.8	8.9
	(12°C)	Pdh (declared heating cap)	kW	9.9	10.0	10.3	10.7	12.0

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Technical specifications System					RXYQ42U	RXYQ44U	RXYQ46U	RXYQ48U	RXYQ50U	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)			2.7					
		Pdh (declared heating cap)	kW		55.2	57.3	59.3	61.6	65.7	
	B Condition (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 Condition (7°C)	COPd (declared COP)			6.4		6.3			
		Pdh (declared heating cap)	kW		21.6	22.4	22.8	24.1	25.7	
	D Condition (12°C)	COPd (declared COP)			8.7		8.8		9.0	
		Pdh (declared heating cap)	kW		10.0		10.3	10.7	12.2	
	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	
Space heating (Average climate) recommended combination 2	TOL	Pdh (declared heating cap)	kW		62.4	64.8	67.0	69.6	74.3	
		Tol (temperature operating limit)	°C		-10					
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.7	2.6	2.7		2.6	
		Pdh (declared heating cap)	kW		55.2	57.3	59.3	61.6	65.7	
	B Condition (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 Condition (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 Condition (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	2.4		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	2.4		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	
		Heating	Rated	m³/h	41,700	42,300	44,580	46,800	46,260	
Sound power level	Cooling	Nom.		dBA	89.1 (4)	89.8 (4)	89.3 (4)	90.4 (4)	89.8 (4)	
	Heating	Prated,h		dBA	90.1 (4)	90.5 (4)	90.4 (4)	91.3 (4)	90.9 (4)	
Sound pressure level	Cooling	Nom.		dBA	66.5 (5)	67.2 (5)	67.0 (5)	67.8 (5)	67.5 (5)	
Refrigerant	Type				R-410A					
	GWP				2,087.5					
Refrigerant oil	Type				Synthetic (ether) oil FVC68D					
Piping connections	Liquid	Type		Brazed connection						
		OD		mm		19.1				
	Gas	Type		Brazed 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	Crankcase 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	
Cooling	Cdc (Degradation cooling)				0.25					
Heating	Cdh (Degradation heating)				0.25					

Technical specifications System		RXYQ52U	RXYQ54U
System	Outdoor unit module 1	RXYQ16U	RXYQ18U
	Outdoor unit module 2		RXYQ18U
	Outdoor unit module 3		RXYQ18U
Recommended combination		6 x FXFQ50BVEB + 14 x FXFQ63BVEB + 2 x FXFQ80BVEB	9 x FXFQ50BVEB + 15 x FXFQ63BVEB
Recommended combination 2		6 x FXSQ50A2VEB + 14 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	9 x FXSQ50A2VEB + 15 x FXSQ63A2VEB
Recommended combination 3		6 x FXMQ50P7VEB9 + 14 x FXMQ63P7VEB9 + 2 x FXMQ80P7VEB9	9 x FXMQ50P7VEB9 + 15 x FXMQ63P7VEB9

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Technical specifications System				RXYQ52U	RXYQ54U
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)
COP at nom. capacity	kW/kW		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,c recommended combination 2		%		251.6	252.5
ηs,c recommended combination 3		%		251.5	253.9
ηs,h		%		167.2	169.4
ηs,h recommended combination 2		%		168.7	170.8
ηs,h recommended combination 3		%		164.4	166.0
Space cooling	A Condition	EERd		2.0	1.9
	(35°C - 27/19)	Pdc	kW	145.8	151.2
	B Condition	EERd		4.2	4.1
	(30°C - 27/19)	Pdc	kW	107.4	111.4
	C Condition	EERd			8.1
	(25°C - 27/19)	Pdc	kW	69.1	71.6
	D Condition	EERd		17.6	19.1
	(20°C - 27/19)	Pdc	kW	30.7	34.4
Space cooling recommended combination 2	A Condition	EERd		2.0	1.9
	(35°C - 27/19)	Pdc	kW	145.8	151.2
	B Condition	EERd			4.1
	(30°C - 27/19)				
Space cooling recommended combination 2	B Condition	Pdc	kW	107.4	111.4
	(30°C - 27/19)				
	C Condition	EERd			8.1
	(25°C - 27/19)	Pdc	kW	69.0	71.6
	D Condition	EERd		17.4	18.9
	(20°C - 27/19)	Pdc	kW	30.7	34.1
Space cooling recommended combination 3	A Condition	EERd		2.0	1.9
	(35°C - 27/19)	Pdc	kW	145.8	151.2
	B Condition	EERd			4.1
	(30°C - 27/19)	Pdc	kW	107.4	111.4
	C Condition	EERd		8.0	8.2
	(25°C - 27/19)	Pdc	kW	69.1	71.6
	D Condition	EERd		17.5	19.1
	(20°C - 27/19)	Pdc	kW	30.7	34.7
	TBivalent	COPd (declared COP)		2.2	2.1
		Pdh (declared heating cap)	kW	79.0	83.7
Space heating (Average climate)		Tbiv (bivalent temperature)	°C		-10
	TOL	Tol (temperature operating limit)	°C		-10
	A Condition	COPd (declared COP)			2.6
	(-7°C)	Pdh (declared heating cap)	kW	69.9	74.0
	B Condition	COPd (declared COP)		3.8	3.9
	(2°C)	Pdh (declared heating cap)	kW	42.5	45.1
	C Condition	COPd (declared COP)		6.6	6.8
	(7°C)	Pdh (declared heating cap)	kW	27.4	29.0
	D Condition	COPd (declared COP)			9.0
	(12°C)	Pdh (declared heating cap)	kW		14.2
Space heating (Average climate) recommended combination 2	A Condition	COPd (declared COP)			2.6
	(-7°C)	Pdh (declared heating cap)	kW	69.9	74.0
	B Condition	COPd (declared COP)		3.8	3.9
	(2°C)	Pdh (declared heating cap)	kW	42.6	45.1
	C Condition	COPd (declared COP)		6.7	6.8
	(7°C)	Pdh (declared heating cap)	kW	27.4	29.0
	D Condition	COPd (declared COP)			9.1
	(12°C)	Pdh (declared heating cap)	kW		14.4
	TBivalent	COPd (declared COP)		2.2	2.1
		Pdh (declared heating cap)	kW	79.0	83.7
Space heating (Average climate) recommended combination 2		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

2 Specifications

2 - 1 Specifications

2

Technical specifications System					RXYQ52U		RXYQ54U	
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.6		2.5	
		Pdh (declared heating cap)		kW	69.9		74.0	
	B Condition (2°C)	COPd (declared COP)			3.7		3.8	
		Pdh (declared heating cap)		kW	42.5		45.1	
	C Condition (7°C)	COPd (declared COP)			6.4		6.5	
		Pdh (declared heating cap)		kW	27.3		29.0	
	D Condition (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	
Heating		Rated	m³/h	45,720		45,180		
Sound power level	Cooling	Nom.	dBA		89.3 (4)		88.6 (4)	
	Heating	Prated,h	dBA		90.5 (4)		90.1 (4)	
Sound pressure level	Cooling	Nom.	dBA		67.1 (5)		66.8 (5)	
Refrigerant	Type				R-410A			
	GWP				2,087.5			
Refrigerant oil	Type				Synthetic (ether) oil FVC68D			
Piping connections	Liquid	Type			Braze connection			
		OD	mm		19.1			
	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	Crankcase 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				RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U
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 - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-				
		Combina- tion B	Cooling	-				
	Starting current (MSC) - remark			See note 7				
	Zmax List			No requirements				
	Minimum Ssc value kVA			11,573 (8)	11,597 (8)	12,831 (8)	13,585 (8)	14,843 (8)
	Minimum circuit amps (MCA) A			46.0 (9)		51.0 (9)	55.0 (9)	59.0 (9)
	Maximum fuse amps (MFA) A			63 (10)				80 (10)
	Power Performance	Power factor	Combina- tion B	35°C ISO - Full load	-			
			46°C ISO - Full load	-				

2 Specifications

2 - 1 Specifications

Electrical specifications System				RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U
Wiring connections - 50Hz	For power supply	Quantity				5G		
	For connection with indoor	Quantity				2		
		Remark				F1,F2		

Electrical specifications System				RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U
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 - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling			-		
		Combina- tion B	Cooling			-		
	Starting current (MSC) - remark					See note 7		
	Zmax	List				No requirements		
	Minimum Ssc value	kVA		15,094 (8)	16,352 (8)	17,359 (8)	19,397 (8)	20,378 (8)
	Minimum circuit amps (MCA)	A		62.0 (9)	66.0 (9)	70.0 (9)	76.0 (9)	81.0 (9)
Power Performance	Maximum fuse amps (MFA)	A			80 (10)		100 (10)	
	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				RXYQ42U	RXYQ44U	RXYQ46U	RXYQ48U	RXYQ50U
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 - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling			-		
		Combina- tion B	Cooling			-		
	Starting current (MSC) - remark					See note 7		
	Zmax	List				No requirements		
	Minimum Ssc value	kVA		20,629 (8)	21,132 (8)	21,887 (8)	22,641 (8)	23,899 (8)
	Minimum circuit amps (MCA)	A		84.0 (9)	86.0 (9)	89.0 (9)	93.0 (9)	97.0 (9)
Power Performance	Maximum fuse amps (MFA)	A			100 (10)		125 (10)	
	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				RXYQ52U		RXYQ54U		
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 - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling			-		
		Combina- tion B	Cooling			-		
	Starting current (MSC) - remark					See note 7		
	Zmax	List				No requirements		
	Minimum Ssc value	kVA		25,157 (8)			26,415 (8)	
	Minimum circuit amps (MCA)	A		101.0 (9)			105.0 (9)	
Power Performance	Maximum fuse amps (MFA)	A			125 (10)			

2 Specifications

2 - 1 Specifications

Electrical specifications System				RXYQ52U	RXYQ54U
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 connec- tion with	Quantity		2	
	indoor	Remark		F1,F2	

3 Options

3 - 1 Options

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

No	Item	RXYQ8U RYYQ8U RXYQQ8U	RXYQ10-12U RYYQ10-12U RXYQQ10-12U	RXYQ14-18U RYYQ14-18U RXYQQ14-18U	RXYQ20U RYYQ20U RXYQQ20U	RYYQ22~54U RXYQ22~54U RXYQQ22~42U		
I.	Refnet header	KHRQ22M29H						
		KHRQ22M64H						
		---	---	---	KHRQ22M75H			
II.	Refnet joint	KHRQ22M20T						
		KHRQ22M29T9						
		KHRQ22M64T						
		---	---	---	KHRQ22M75T			
III.	Outdoor multi-connection kit	See note -2-.	---	---	---	---	BHFQ22P1007	
IV.	Outdoor multi-connection kit	See note -2-.	---	---	---	---	BHFQ22P1517	
No	Item	8HP	10HP	12HP	14HP	16HP	18HP	20HP
1a	Cool/heat selector (switch)	See note -3-.	KRC19-26A					
1b	Cool/heat selector (PCB)	BRP2A81						
1c	Cool/heat selector (fixing box)	KJB111A						
2	VRV configurator	EKPCCAB*						
3	Heater tape kit PCB	EKBPH012T7A			EKBPH020T7A			
4	Demand PCB	See	DTA104A61/62*					
5	Demand PCB mounting plate	See note -4-.	---			KKS26B1*		

Notes

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

Medium casing type -VRV4- heat pump: modules -8~12-HP

Large casing type -VRV4- heat pump: modules -14~20-HP

3D120006B

4 Combination table

4 - 1 Combination Table

4

REMQ5U

REYQ8-20U

RXYQQ8-20U

RXYTQ8-16UYF

RYYQ8-20U

RYMQ8-20U

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

Units in scope: FXZQ15A and FXAQ15A.

- 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

RXYQQ-U

RXYQ-U

RYYQ-U

RYMQ-U

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	1
	RXYQ52* / RYQ52* / RXYQ52*							2
	RXYQ54* / RYQ54* / RXYQ54*							3

Remark

RYYQ8-20 = Single continuous heating

RYYQ22-54 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 RYYQ* units (continuous heating) and RXYQ* units (non-continuous heating)

2) "Non-continuous heating" multi-outdoor-unit combinations consist of RXYQ8-20 units (e.g. RXYQ36*+RXYQ16*+RXYQ20*).

3) "Continuous heating" multi-outdoor-unit combinations consist of RYMQ8-20 units (e.g. RYYQ36*+RYMQ16*+RYMQ20*).

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

4) RYYQ8-20 units cannot be used in multi-outdoor-unit combinations.

5) RYYQ8-20 "Continuous heating" multi-outdoor-unit combinations cannot contain RXYQ* units.

6) RXYQ8-20 "Non-continuous heating" multi-outdoor-unit combinations cannot contain RYMQ* units.

7) Multi "Non-continuous heating" replacement models only consist of 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-U

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) (4)}	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· or ·EKEACBVE· (maximum ·54· HP for ·400 + 2x500 EKEKV· class or ·450 + 2 x500 EKEKVA· class kit; maximum ·42· HP for ·140 + 2 x500 EKEKV· or ·EKEKVA· class kit for cold region VRV)
The combination with ·VRV DX· indoor units is not allowed.
→ ·X·-control is possible [-{EKEKV + EKEQFA*}/{EKEAXVA + EKEACBVE}- boxes]. No Variable Refrigerant Temperature control possible.
→ ·Y·-control is possible [-{EKEKV + EKEQFA*}/{EKEAXVA + EKEACBVE}- boxes]. No Variable Refrigerant Temperature control possible.
→ ·W·-control is possible [-{EKEKV + EKEQFA*}/{EKEAXVA + EKEACBVE}- boxes]. No Variable Refrigerant Temperature control possible.
→ ·Z,Z'·-control is possible [-EKEKVA + EKEACBVE· boxes].
 - Combination of ·AHU· only + control box ·EKEQMA· (not combined with ·VRV DX· indoor units)
→ ·Z·-control is possible [-EKEKV + EKEQMA*· boxes].
- Combination of ·AHU· and ·VRV DX· indoor units
→ ·Z·-control is possible [-EKEQMA*· boxes].
→ ·Z,Z'·-control is possible [-EKEACBVE· boxes].
- The combination of ·AHU· with ·Hydrobox· units or ·RA DX· indoor units is not allowed.
- (3) The following units are considered AHUs:
→ {EKEKV + EKEQ(MA/FA)} / {EKEKVA + EKEACBVE} + AHU· coil
→ ·Biddle· air curtain
→ ·FXMQ_MF· units
Information
→ ·VKM· units are considered to be regular ·VRV DX· indoor units.

3D079543G

RXYQ-U

VRV4

Heat pump

Indoor unit combination restrictions

(2/2)

Combination table	RXYQ*	RYYQ*	RXYQ* RXMLQ* RXYLQ* Single non-continuous heating	RXYQ* RXMLQ* RXYLQ* 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.
- The following units are considered AHUs:
→ {EKEKV + EKEQ(MA/FA)} / {EKEKVA + EKEACBVE} + AHU· coil
→ ·Biddle· air curtain
→ ·FXMQ_MF· units

3D079543G

4 Combination table

4 - 1 Combination Table

RXYQ-U

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

Configuration			Indoor unit type
·RA· indoor unit	Wall-mounted	<i>Emura</i>	FTXJ20A*
			FTXJ25A*
			FTXJ35A*
			FTXJ42A*
			FTXJ50A*
		<i>Perfera (FTXM)</i>	FTXM20(R/A)
			FTXM25(R/A)
			FTXM35(R/A)
			FTXM42(R/A)
			FTXM50(R/A)
			FTXM60(R/A)
			FTXM71(R/A)
		<i>Stylish</i>	FTXA20C
			FTXA25C
			FTXA35C
			FTXA42C
			FTXA50C
	Floor-standing	<i>Perfera (FVXM)</i>	CVXM20(A/B)*
			FVXM25(A/B)*
			FVXM35(A/B)*
			FVXM50(A/B)*

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.

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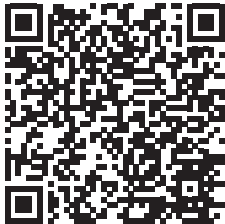
5 Capacity tables

5 - 1 Capacity Table Legend

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

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

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



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



5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQQ-U

RXYQ-U

RYYQ-U

RYMQ-U

VRV4

Heat pump

Integrated heating capacity coefficient

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

Formula

A = Integrated heating capacity

B = Capacity characteristics value (see table)

C = Integrated correction factor for frost accumulation (see table)

A = B * C

Inlet air temperature of heat exchanger

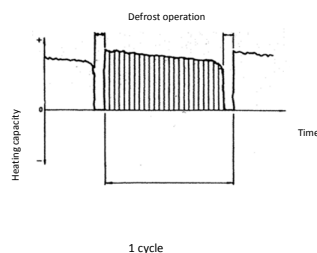
	[°C DB/°C WB]	1/7/7.6 or less	-5/-5.6	-3/-3.7	0/-0.7	3/2.2	5/4.1	7/6
Integrated correction factor for frost accumulation C								
8HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00	
10HP	0.95	0.93	0.87	0.79	0.80	0.88	1.00	
12HP	0.95	0.92	0.87	0.75	0.76	0.85	1.00	
14HP	0.95	0.92	0.86	0.72	0.73	0.84	1.00	
16HP	0.95	0.92	0.86	0.72	0.72	0.83	1.00	
18HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00	
20HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00	
22HP	0.95	0.92	0.87	0.77	0.78	0.86	1.00	
24HP	0.95	0.92	0.87	0.75	0.76	0.85	1.00	
26HP	0.95	0.92	0.86	0.73	0.74	0.84	1.00	
28HP	0.95	0.92	0.86	0.73	0.74	0.84	1.00	
30HP	0.95	0.93	0.87	0.80	0.81	0.88	1.00	
32HP	0.95	0.92	0.86	0.71	0.72	0.83	1.00	
34HP	0.95	0.92	0.87	0.78	0.79	0.87	1.00	
36HP	0.95	0.92	0.87	0.78	0.79	0.87	1.00	
38HP	0.95	0.93	0.88	0.83	0.84	0.89	1.00	
40HP	0.95	0.93	0.87	0.80	0.81	0.88	1.00	
42HP	0.95	0.92	0.86	0.73	0.74	0.84	1.00	
44HP	0.95	0.92	0.86	0.72	0.73	0.84	1.00	
46HP	0.95	0.92	0.86	0.72	0.72	0.83	1.00	
48HP	0.95	0.92	0.86	0.71	0.72	0.83	1.00	
50HP	0.95	0.92	0.87	0.76	0.77	0.86	1.00	
52HP	0.95	0.93	0.87	0.80	0.81	0.88	1.00	
54HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00	

Notes

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

When there is an accumulation of snow against the outdoor unit heat exchanger, there will always be a temporary reduction in capacity depending on the outdoor temperature (°C DB), relative humidity (RH) and the amount of frosting which occurs.

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

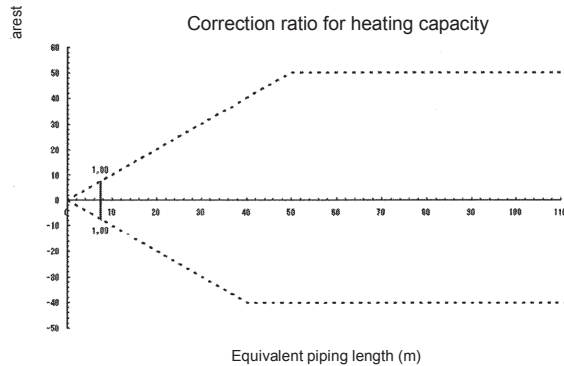
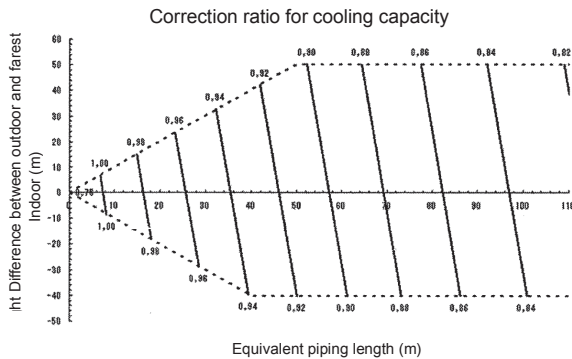


3D079898A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQQ8U
RXYQ8U
RYYQ8U
RYMQ8U



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

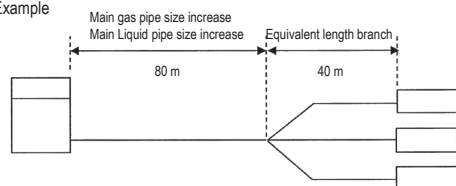
- Equivalent length used in the above figures is based upon the following equivalent length

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

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



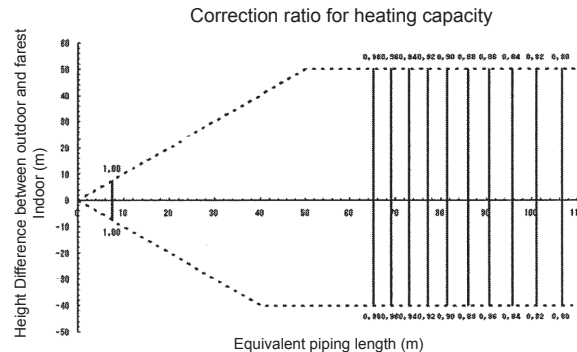
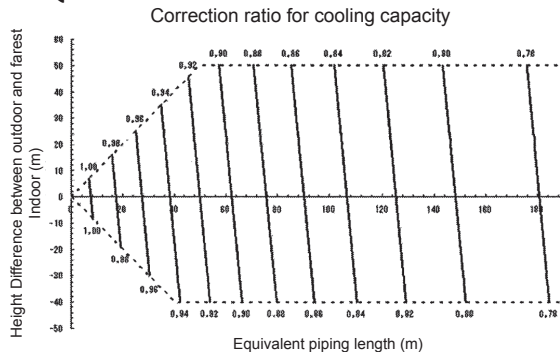
In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.86
heating capacity when height difference = 0 is thus approximately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

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



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
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

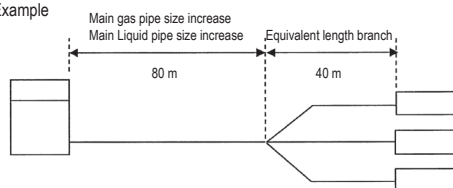
- Equivalent length used in the above figures is based upon the following equivalent length

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

Choose 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

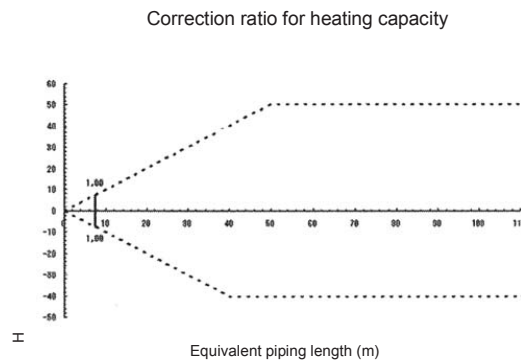
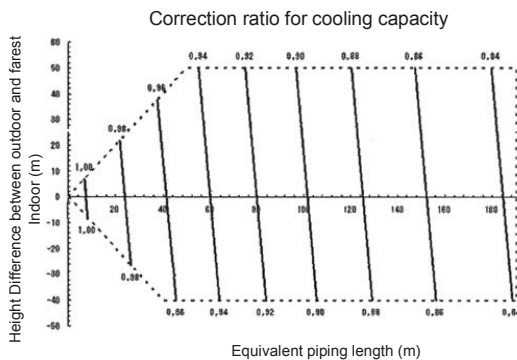
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.87
heating capacity when height difference = 0 is thus approximately 0.90

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

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



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
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

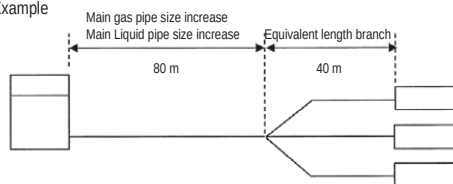
- Equivalent length used in the above figures is based upon the following equivalent length

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

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	0.89
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

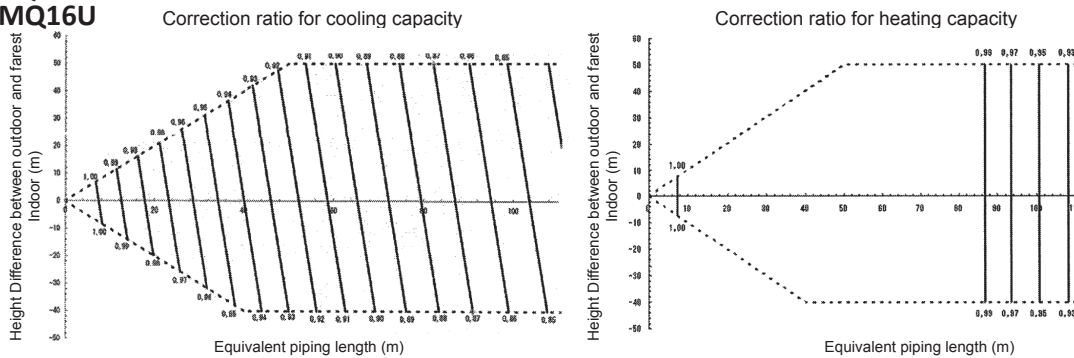
3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U

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
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

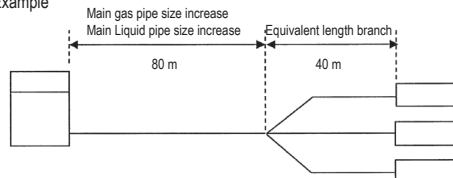
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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5 Capacity tables

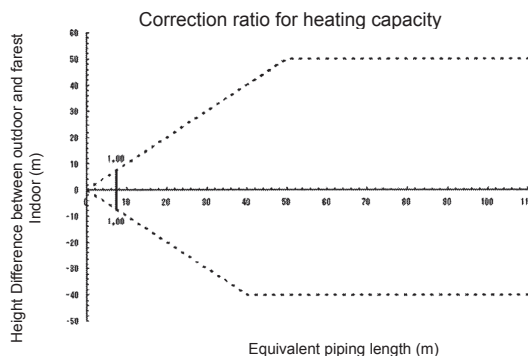
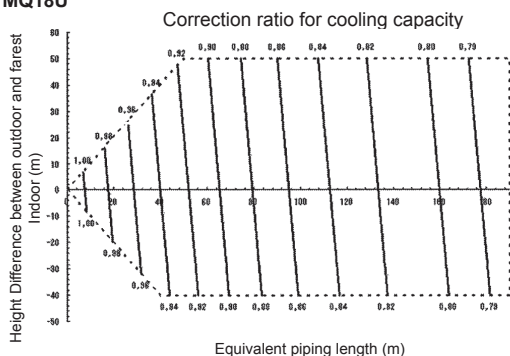
5 - 2 Capacity Correction Factor

RXYQ18,26,28,30,38,40,42,44U

RXYQ18,26,28,30,38,40,42,44U

RYYQ18,26,28,30,38,40,42,44U

RYMQ18U



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

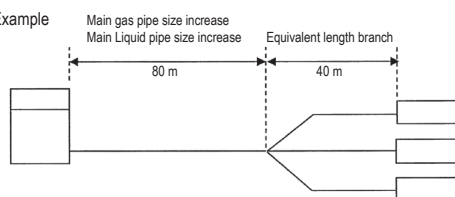
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

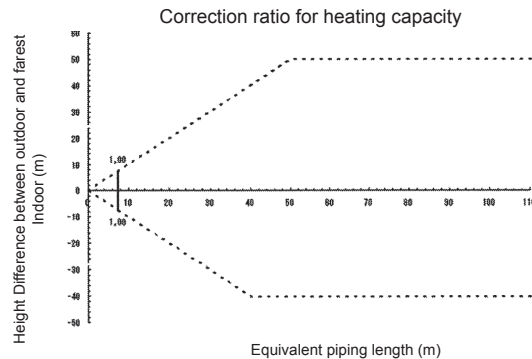
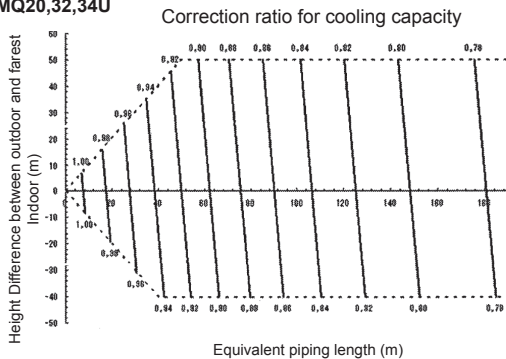
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83 heating capacity when height difference = 0 is thus approximately 1.0

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5 Capacity tables

5 - 2 Capacity Correction Factor

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



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

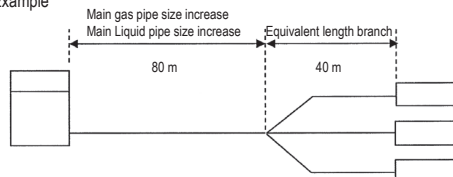
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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5 Capacity tables

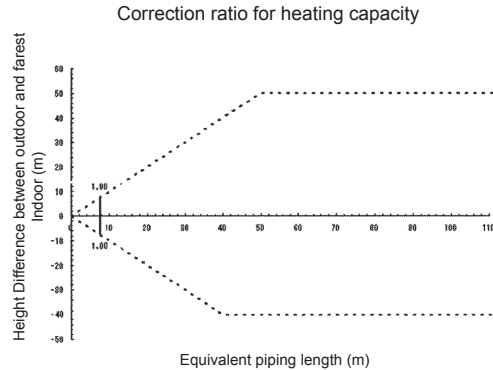
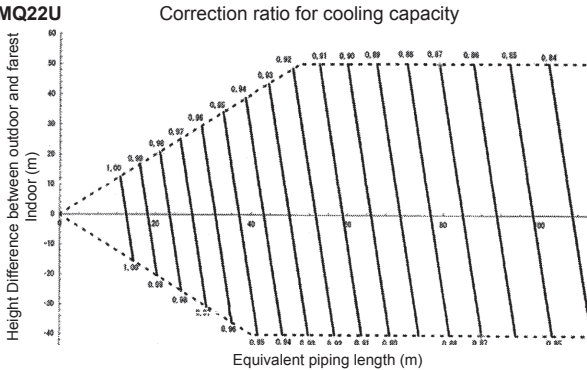
5 - 2 Capacity Correction Factor

RXYQQ22U

RXYQ22U

RYYQ22U

RYMQ22U



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
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

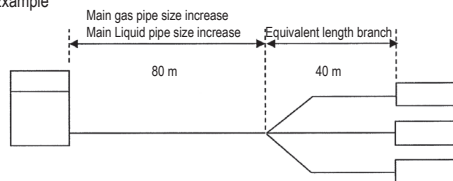
- Equivalent length used in the above figures is based upon the following equivalent length

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

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 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

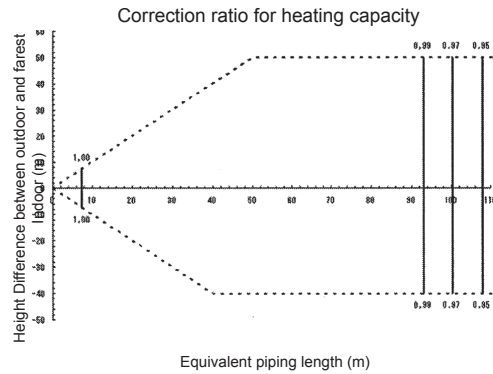
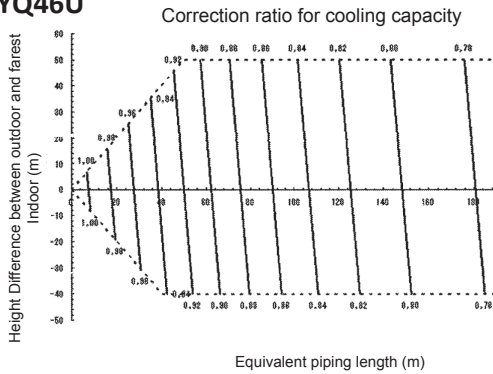
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5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ46U

RXYQ46U



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

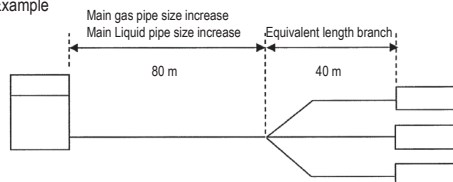
- Equivalent length used in the above figures is based upon the following equivalent length

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

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	
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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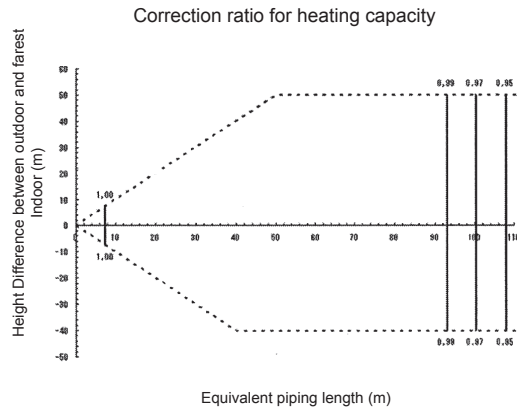
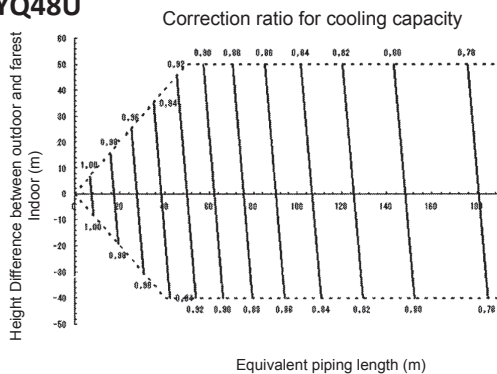
5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ48U

RXYQQ48U

RXYQ48U



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

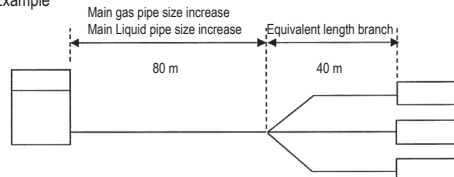
- Equivalent length used in the above figures is based upon the following equivalent length

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

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 = $80 \text{ m} \times 1.0 + 40 \text{ m} = 120 \text{ m}$
(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 0.97

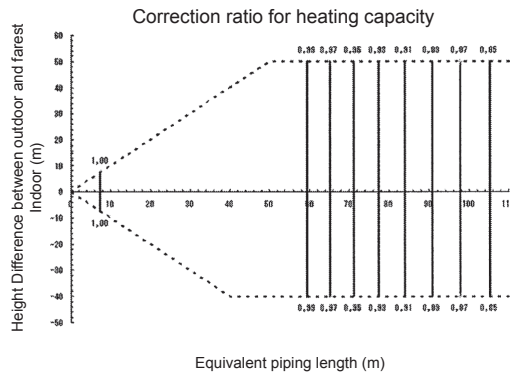
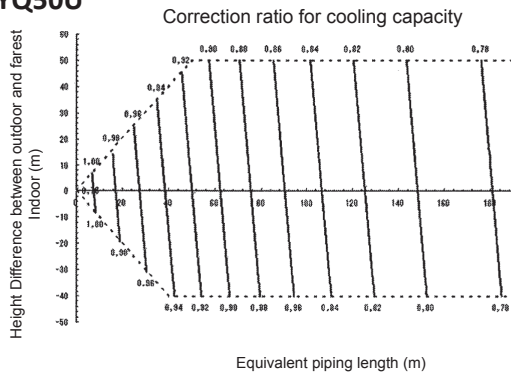
3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ50U
RXYQ50U
RXYQ50U

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
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

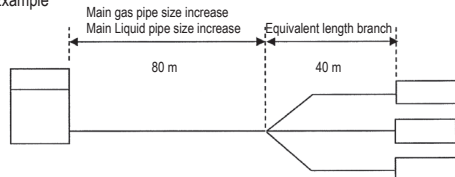
- Equivalent length used in the above figures is based upon the following equivalent length

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

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



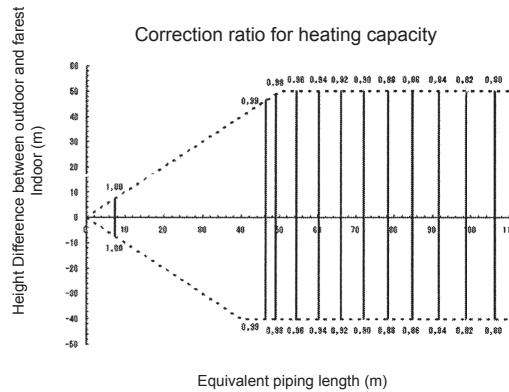
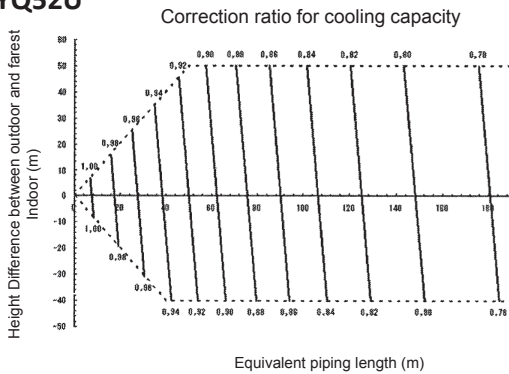
In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83
heating capacity when height difference = 0 is thus approximately 0.92

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5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ52U
RXYQ52U
RXYQ52U



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

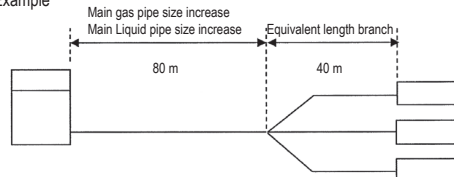
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

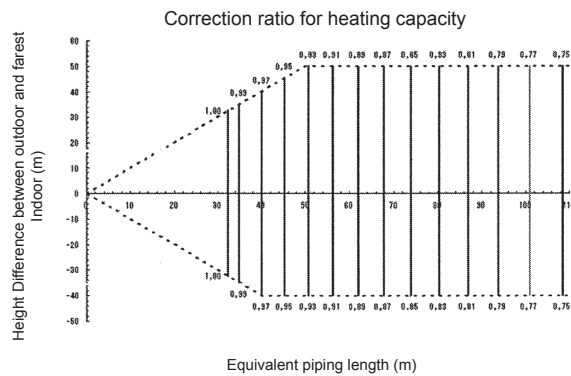
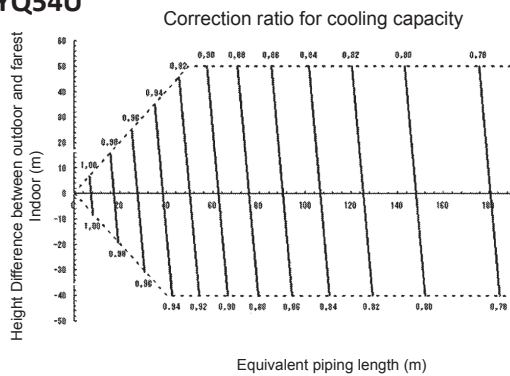
3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ54U
RXYQQ54U
RXYQ54U

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

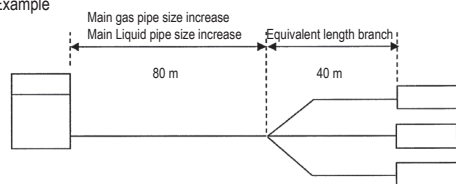
- Equivalent length used in the above figures is based upon the following equivalent length

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

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	
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

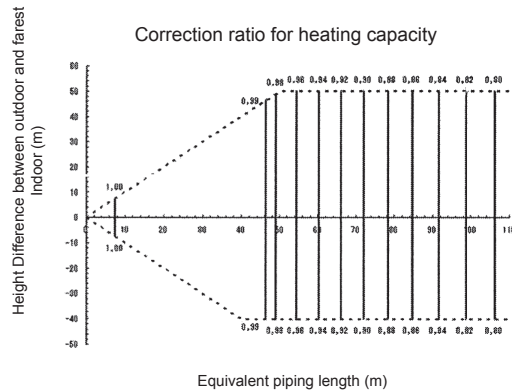
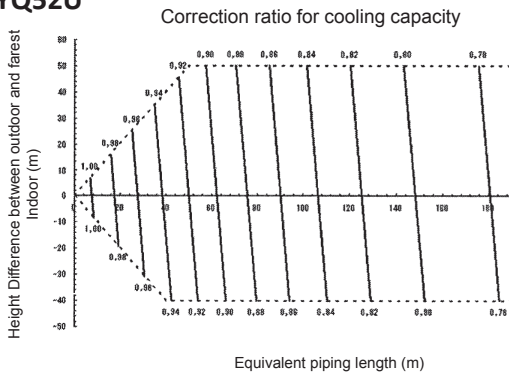
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83
heating capacity when height difference = 0 is thus approximately 0.83

3D079897A

5 Capacity tables

5 - 2 Capacity Correction Factor

RYYQ52U
RXYQ52U
RXYQ52U



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

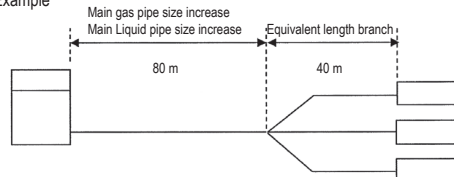
- Equivalent length used in the above figures is based upon the following equivalent length

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

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



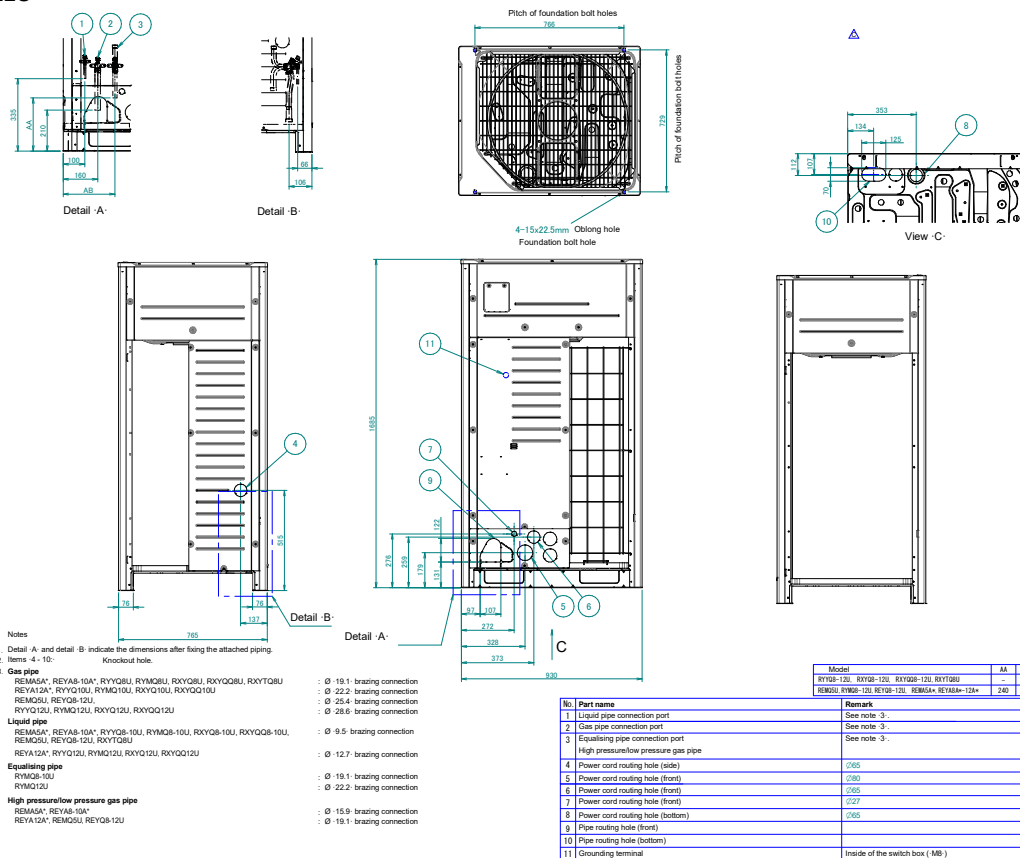
In the above case (Cooling) Overall equivalent length = $80 \text{ m} \times 1.0 + 40 \text{ m} = 120 \text{ m}$
(Heating) Overall equivalent length = $80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83
heating capacity when height difference = 0 is thus approximately 0.88

3D079897A

6 Dimensional drawings

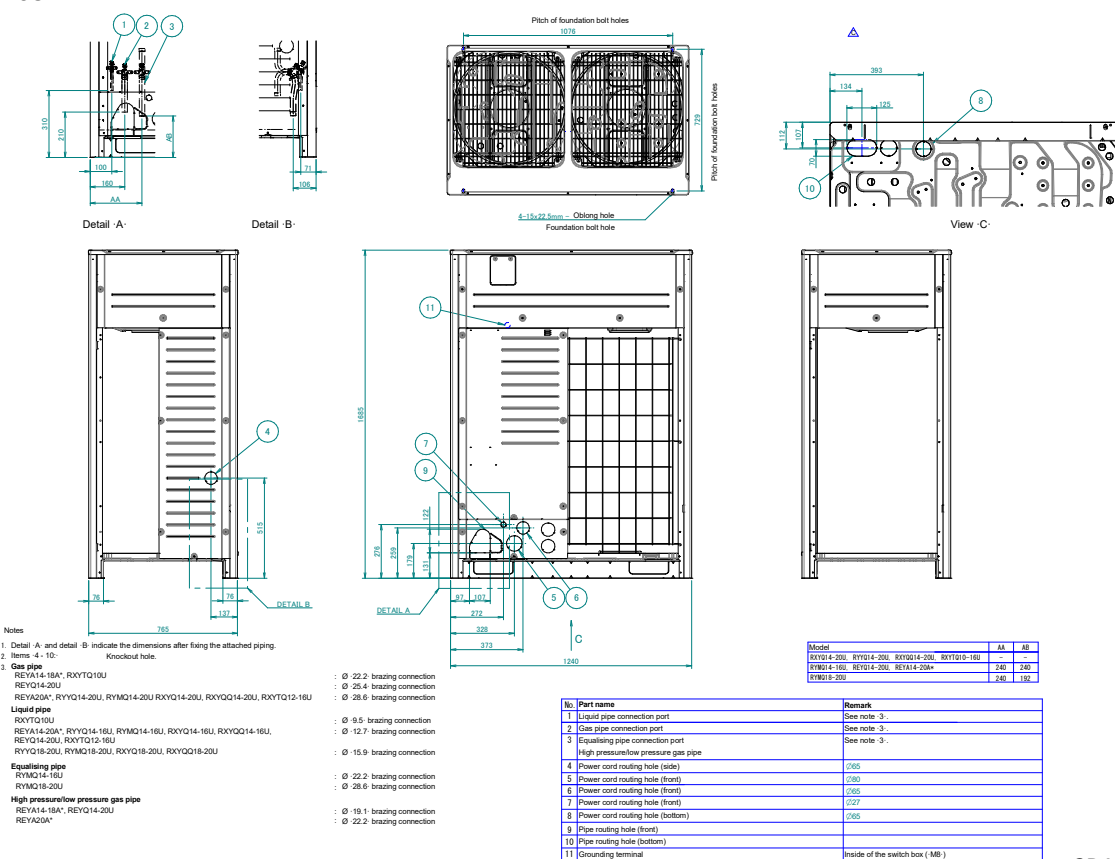
6 - 1 Dimensional Drawings

RXYQ8-12U



2D119001D

RXYQ14-20U

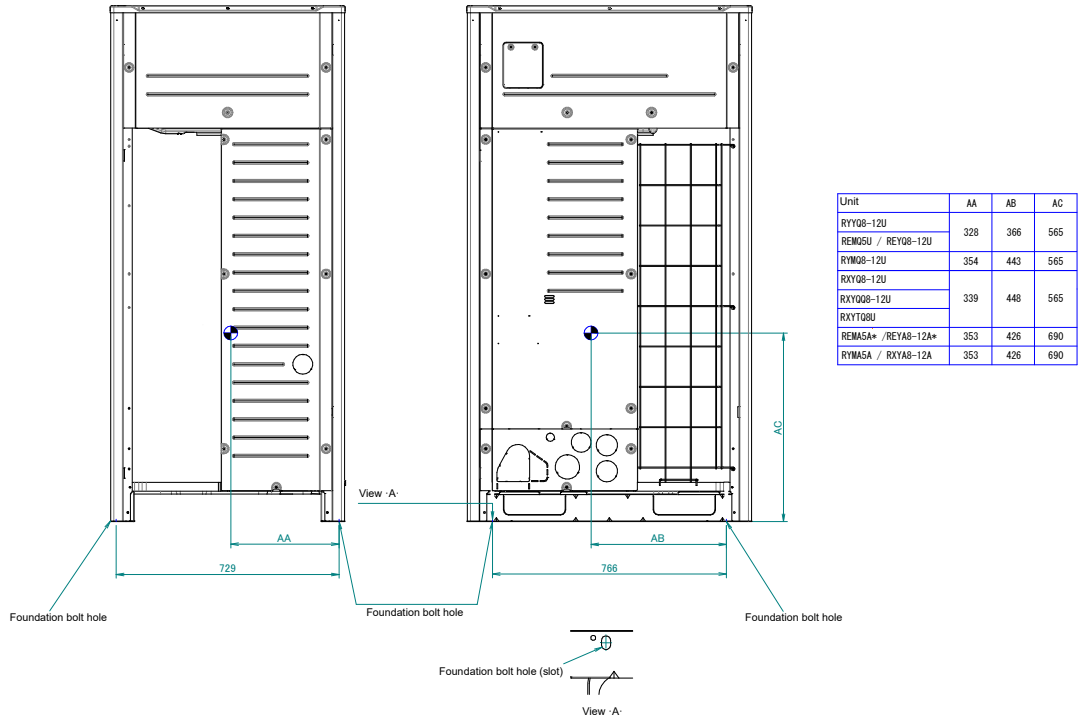


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7 Centre of gravity

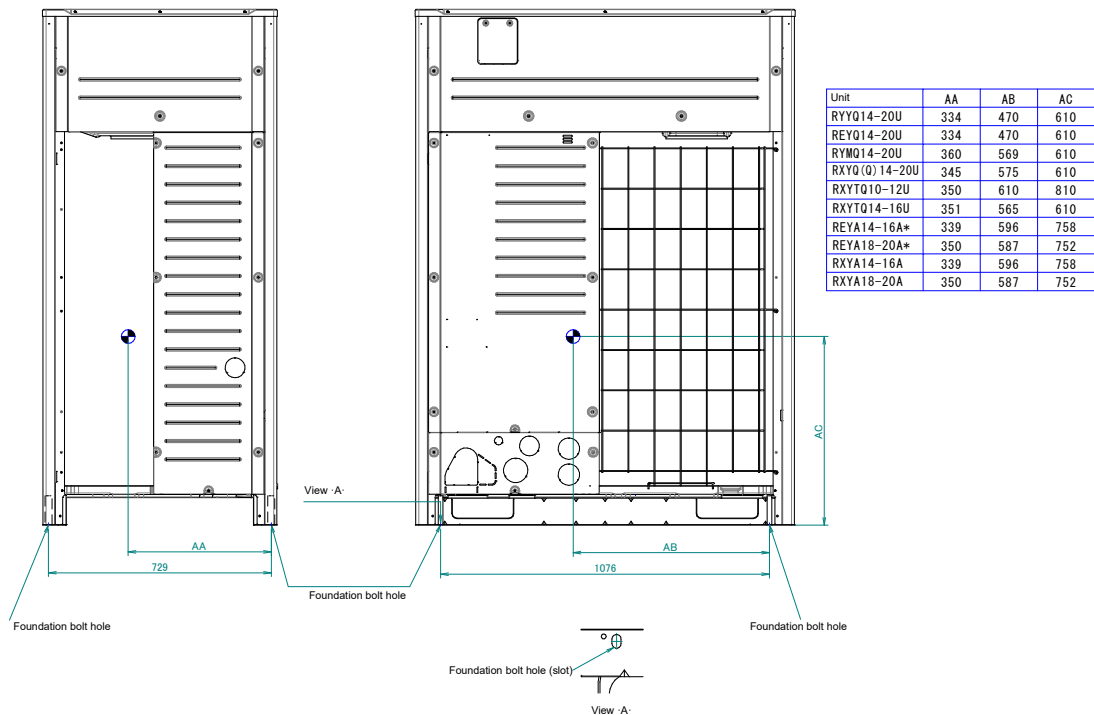
7 - 1 Centre of Gravity

RXYQ8-12U



3D119703C

RXYQ14-20U

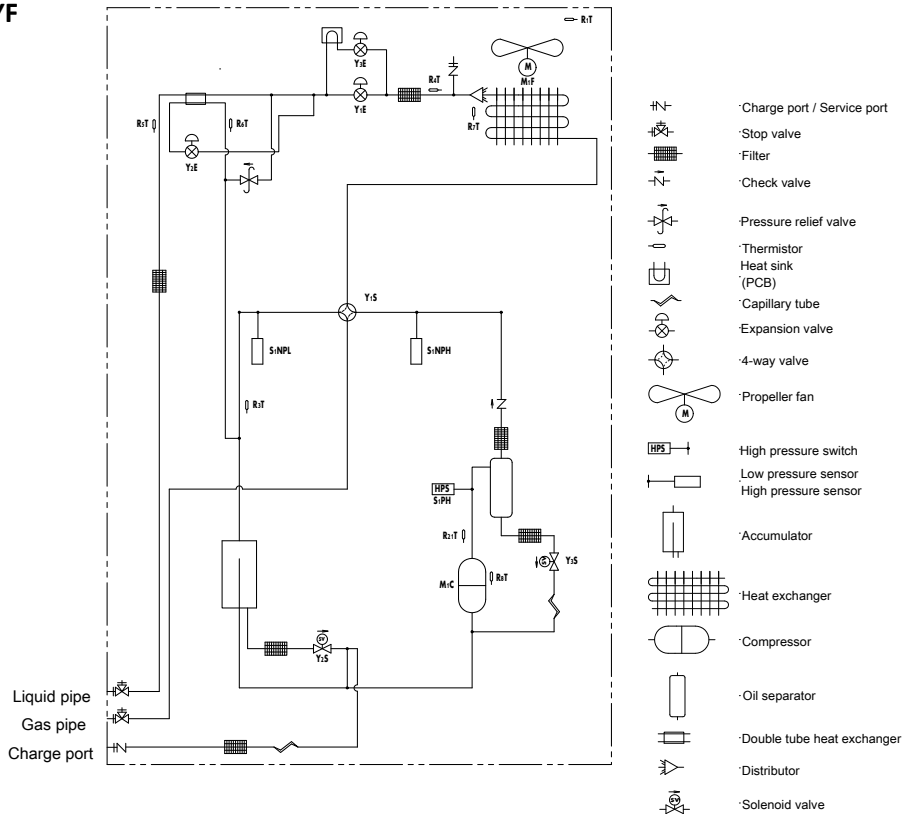


3D119704C

8 Piping diagrams

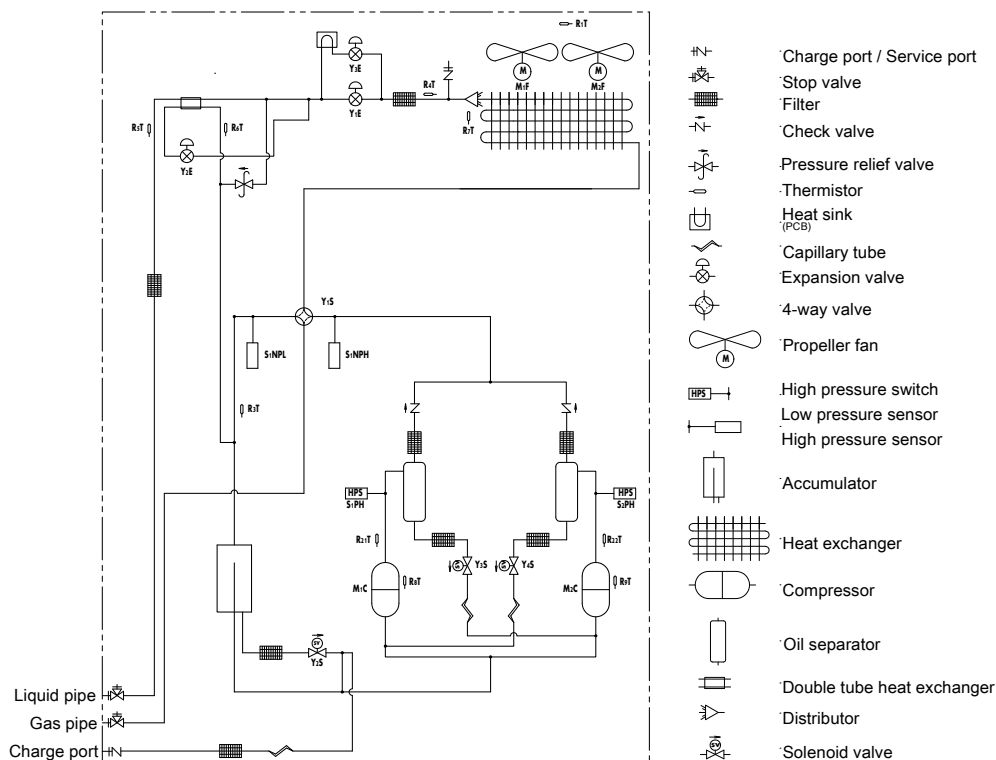
8 - 1 Piping Diagrams

RXYQ8-12U
RXYTQ8UYF



3D118179

RXYQ14-20U
RXYQ14-16UYF



3D118180

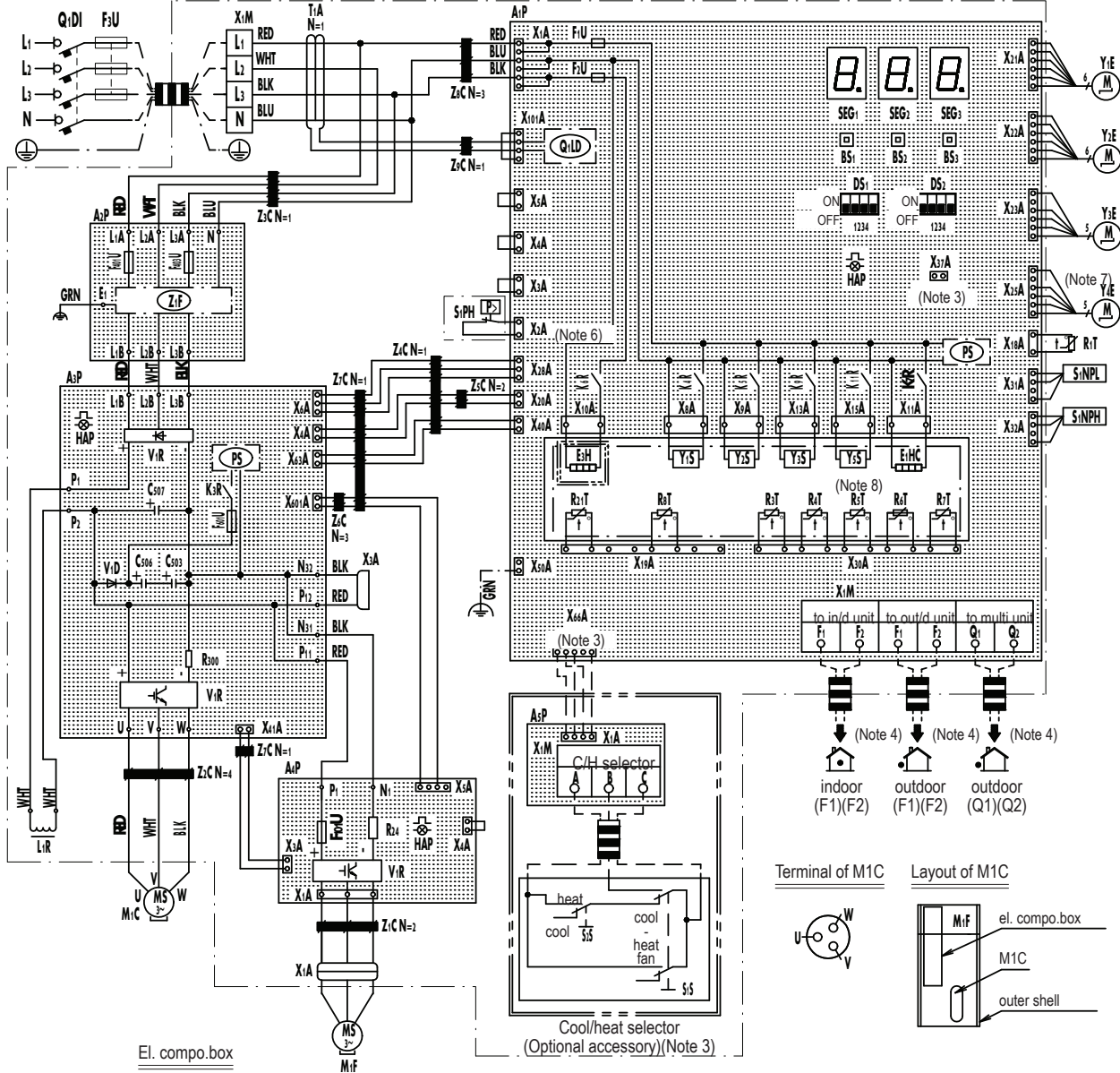
9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

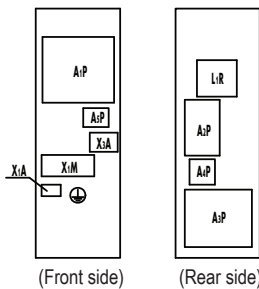
RXYQ8-12U
RXYTQ8UYF
RYYQ8-12U
RYMQ8-12U

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

Wiring diagram



El. compo.box



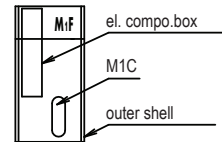
(Front side)

(Rear side)

Terminal of M1C



Layout of M1C



2D117534

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQ8-12U

RXYTQ8UYF

RYYQ8-12U

RYMQ8-12U

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/RYMQ model.
9. Colors: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

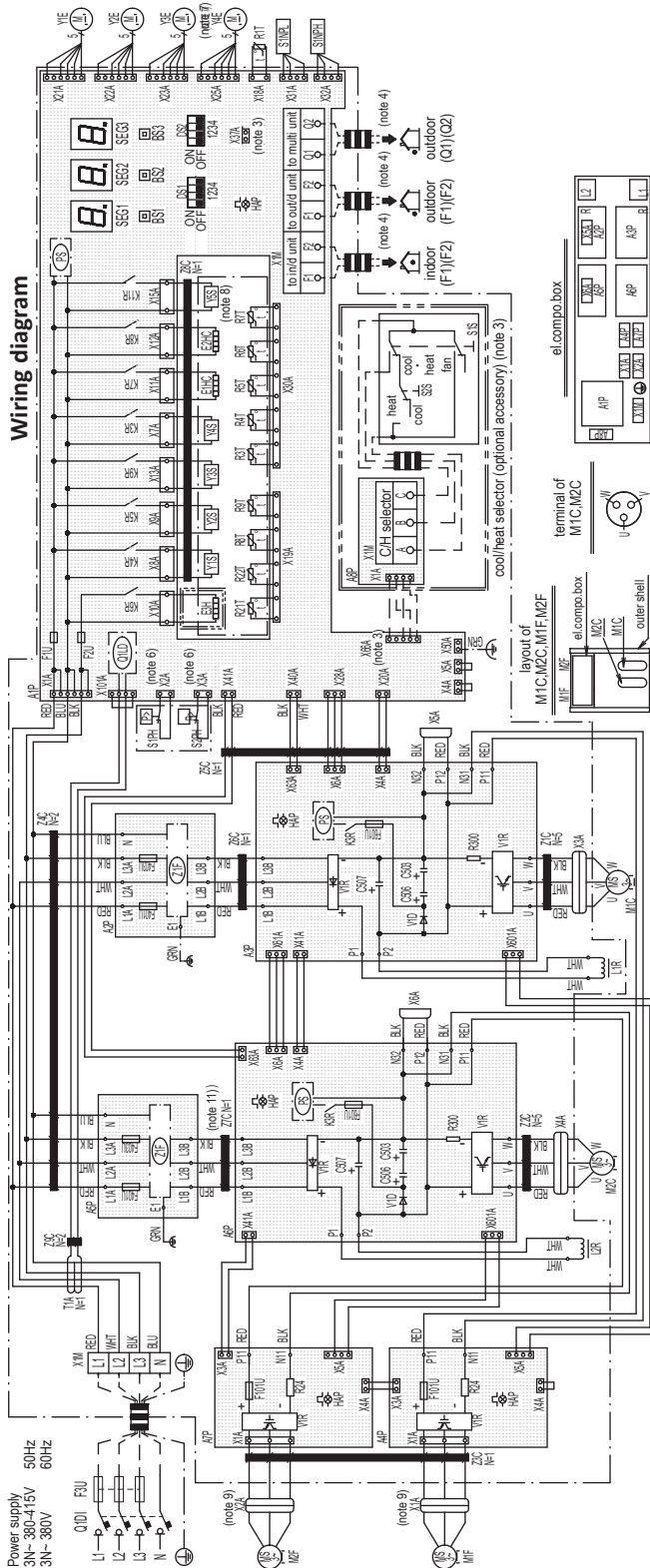
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9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQ14-20U
RYYQ14-20U
RYMQ14-20U

9



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

NOTES

1. This wiring diagram applies only to the outdoor unit.
2. : Field wiring, : terminal block, : connector, : terminal, : protective earth (screw), : functional earth, : earth wiring, : field supply, : pcb, : switch box, : option
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to "service precaution" label on el. Compo. Box cover.
6. When operating, don't shortcircuit the protection devices (S1PH,S2PH)
7. Only for RYYQ model.
8. Only for RYYQ/RYMQ model.
9. Connector X1A (M1F) is red, connector X2A (M2F) is white.
10. Colors: BLK:black, RED:red, BLU:blue, WHT:white, GRN:green.
11. Only for 14.16 class

2D117536C

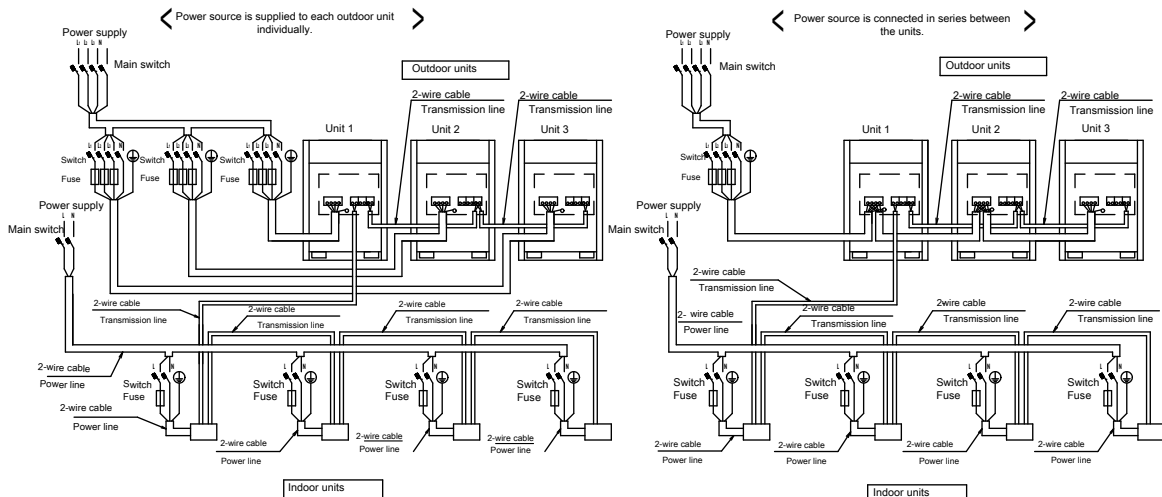
10 External connection diagrams

10 - 1 External Connection Diagrams

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

Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For details, refer to the wiring diagram attached to the outdoor unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each 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.

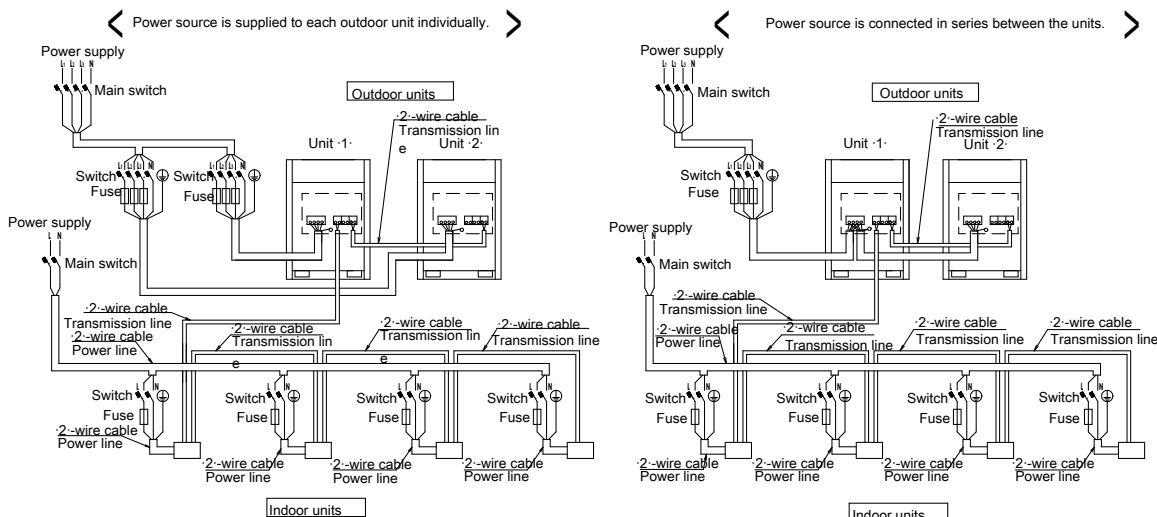


3D119200

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

Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For details, refer to the wiring diagram attached to the outdoor unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each 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.

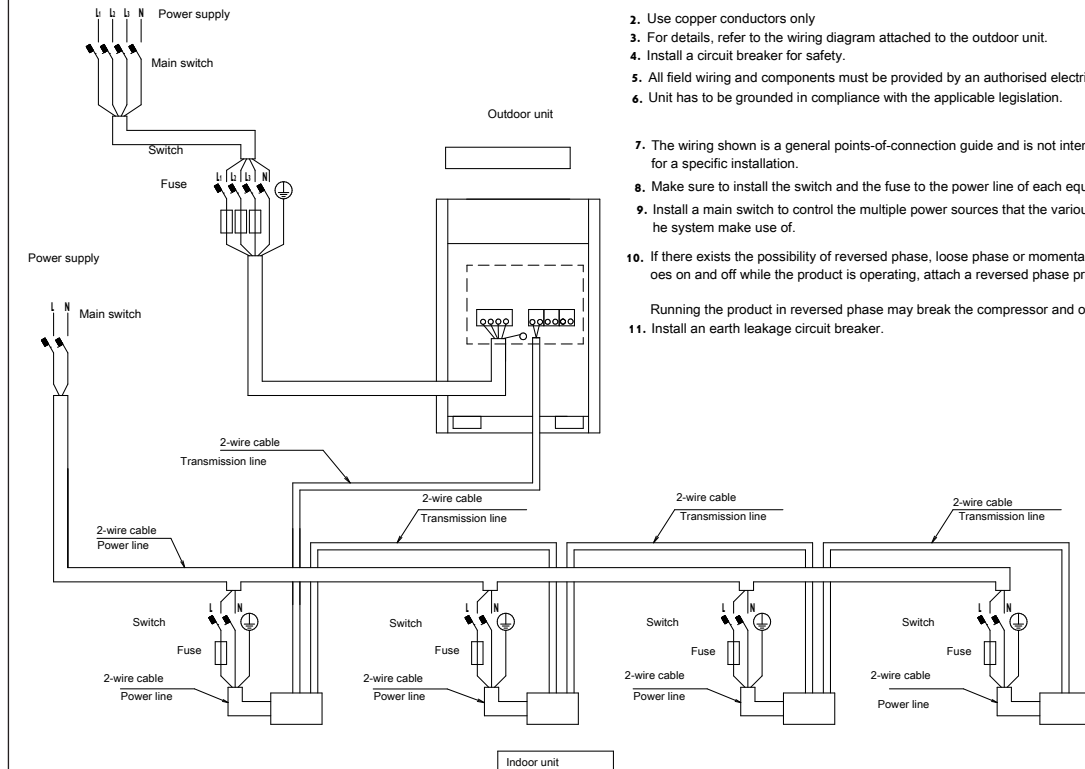


3D119316

10 External connection diagrams

10 - 1 External Connection Diagrams

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



Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable 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.
- Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.

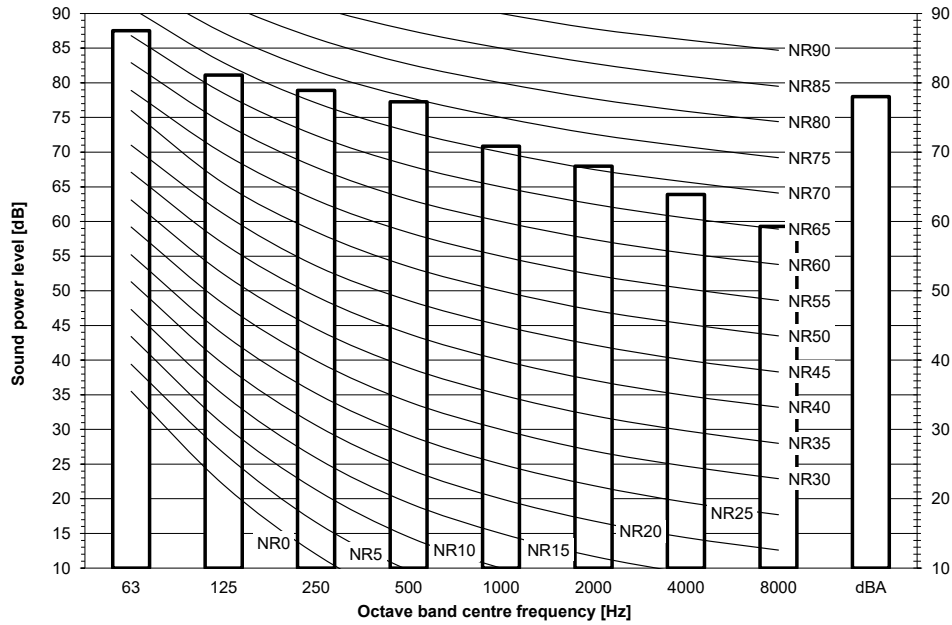
3D119317

11 Sound data

11 - 1 Sound Power Spectrum

11

REMQ5U
REYQ8U
RXYQQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U

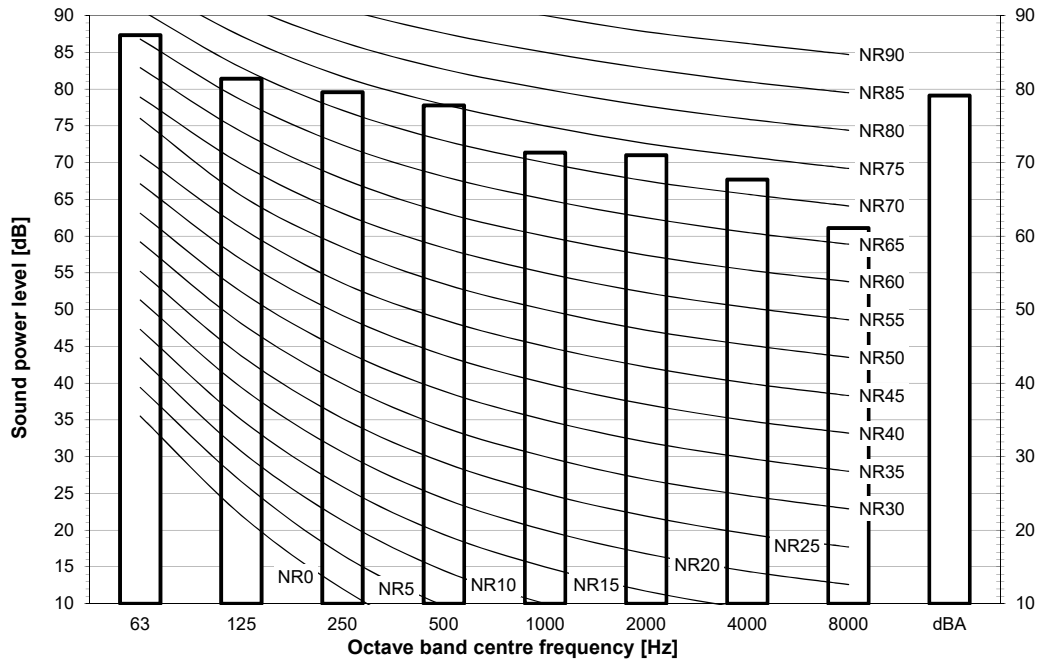


Notes

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

REYQ10U
RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



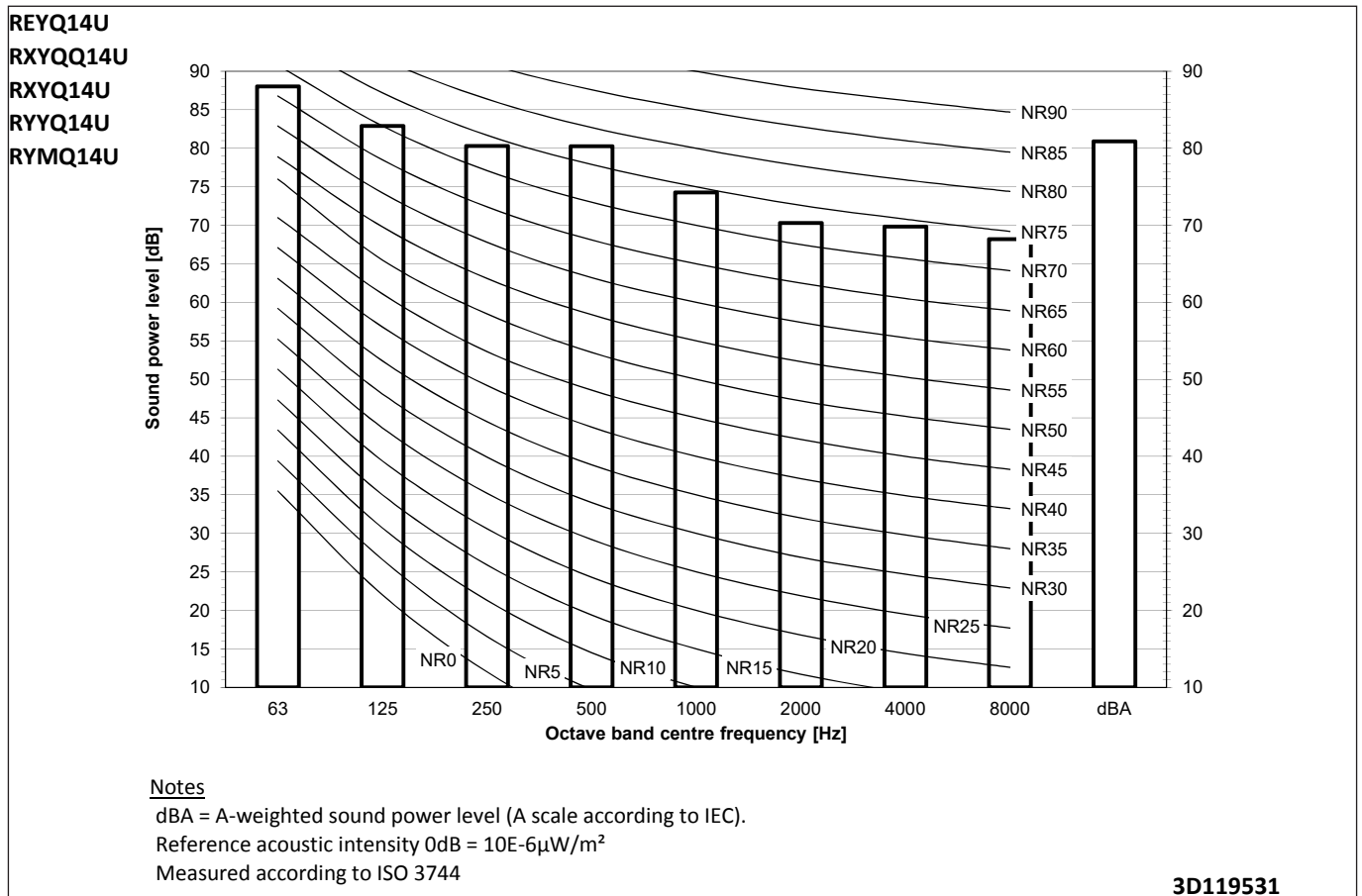
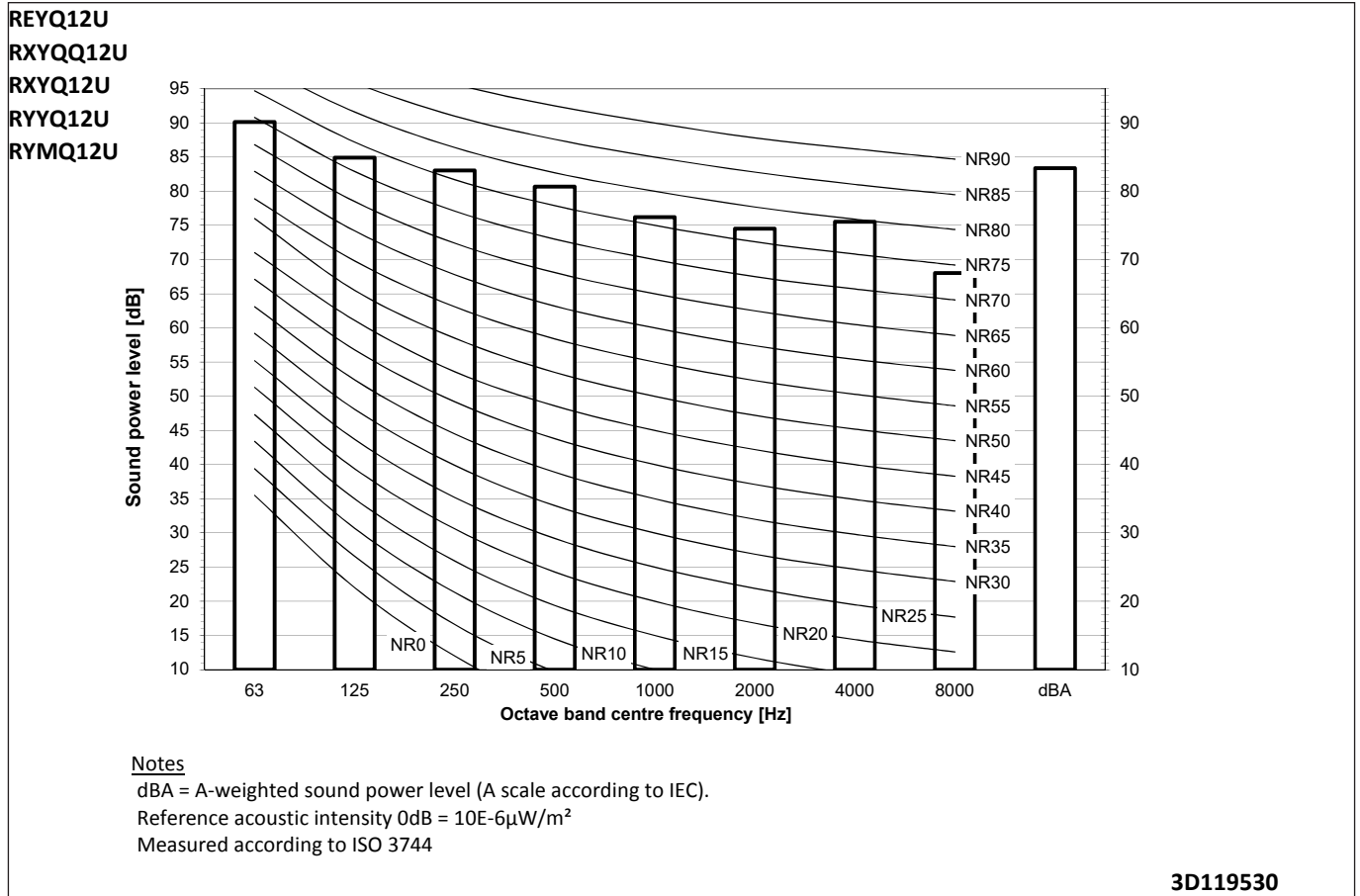
Notes

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

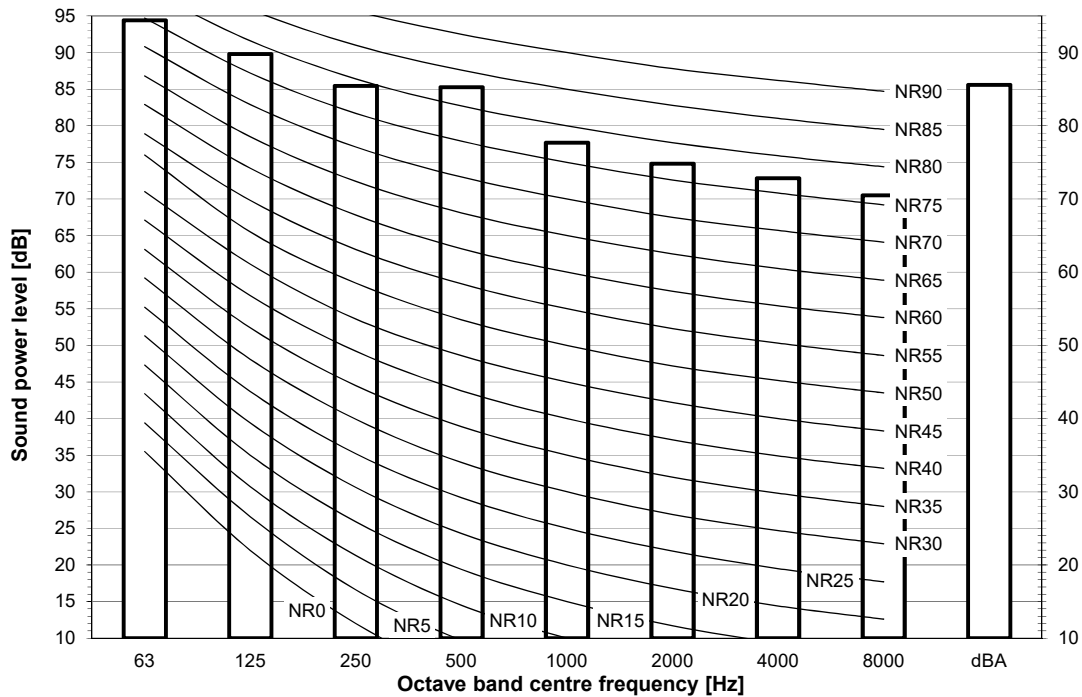
11 - 1 Sound Power Spectrum



11 Sound data

11 - 1 Sound Power Spectrum

REYQ16U
RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U



Notes

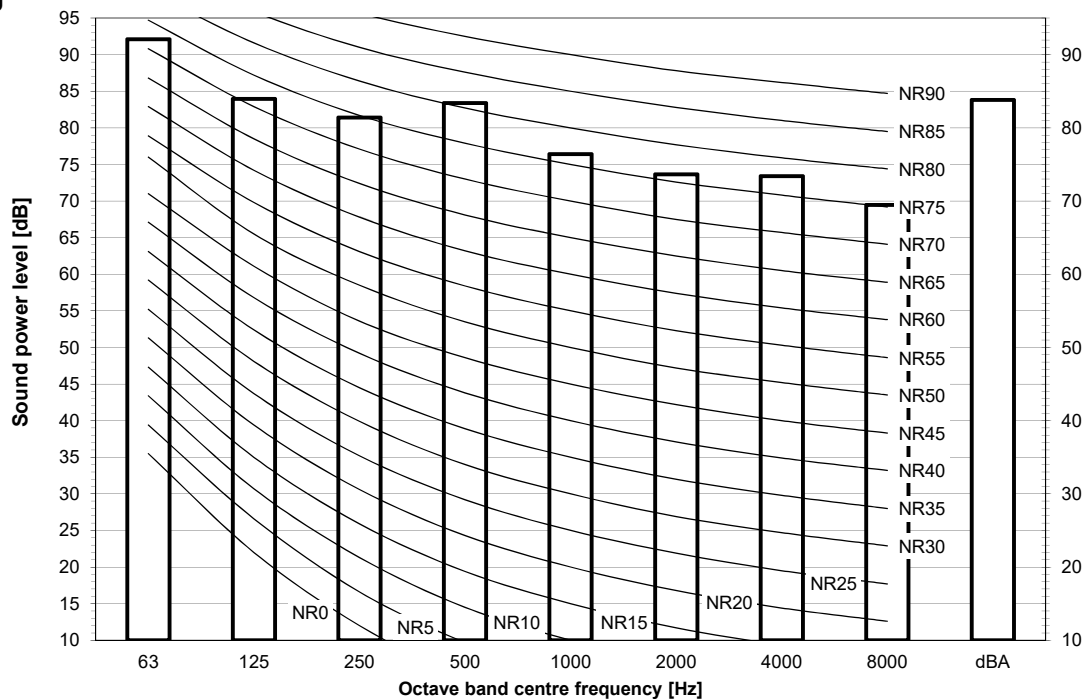
dBA = A-weighted sound power level (A scale according to IEC).

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

Measured according to ISO 3744

3D119532

REYQ18U
RXYQQ18U
RXYQ18U
RYYQ18U
RYMQ18U



Notes

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

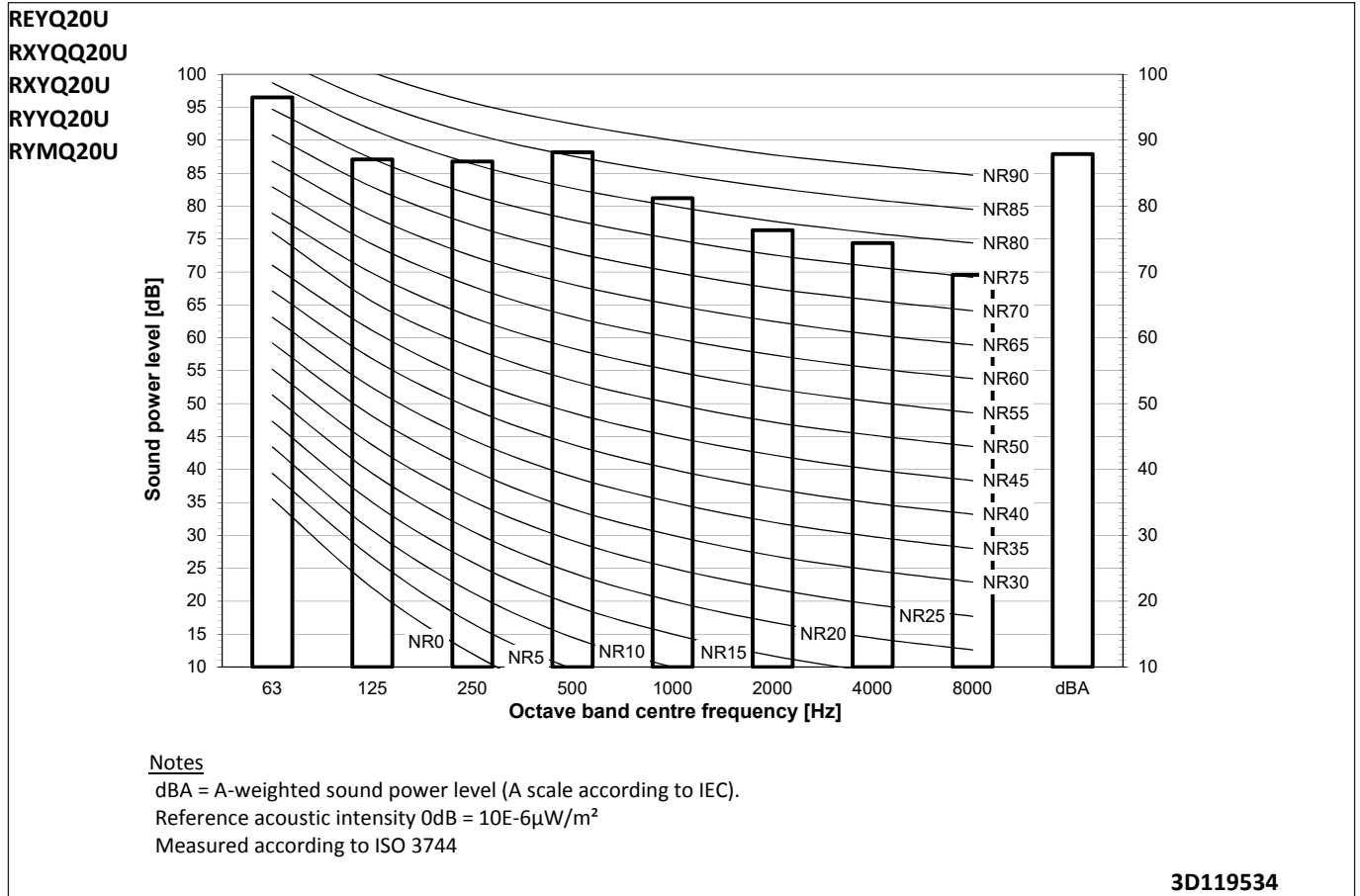
Reference acoustic intensity 0dB = $10^{-6} \mu W/m^2$

Measured according to ISO 3744

3D119533

11 Sound data

11 - 1 Sound Power Spectrum

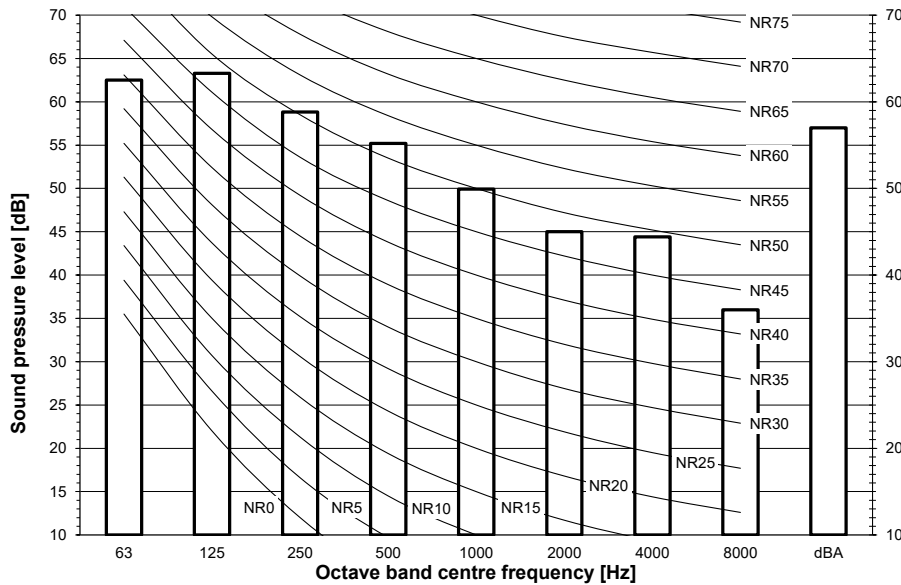


11 Sound data

11 - 2 Sound Pressure Spectrum

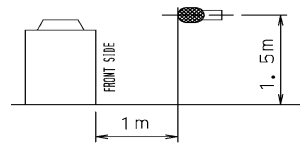
11

REMQ5U
REYQ8U
RXYQQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U



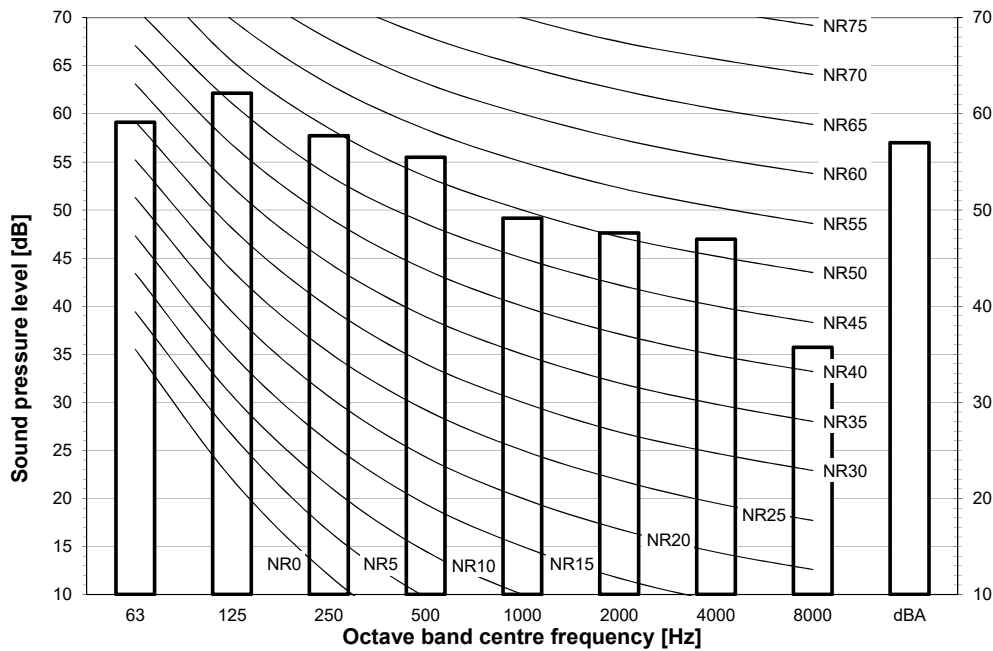
Notes

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



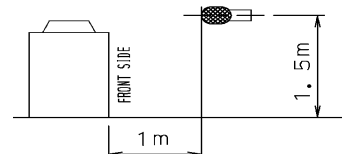
3D119521

REYQ10U
RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



Notes

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

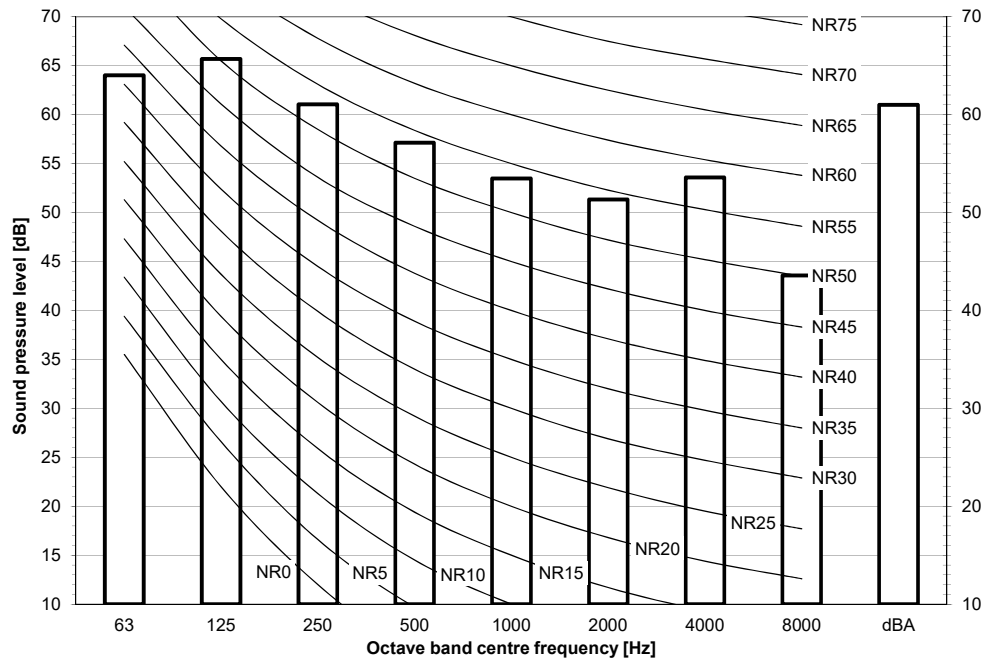


3D119522

11 Sound data

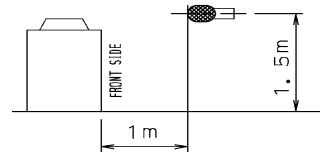
11 - 2 Sound Pressure Spectrum

REYQ12U
RXYQ12U
RXYQ12U
RYYQ12U
RYMQ12U



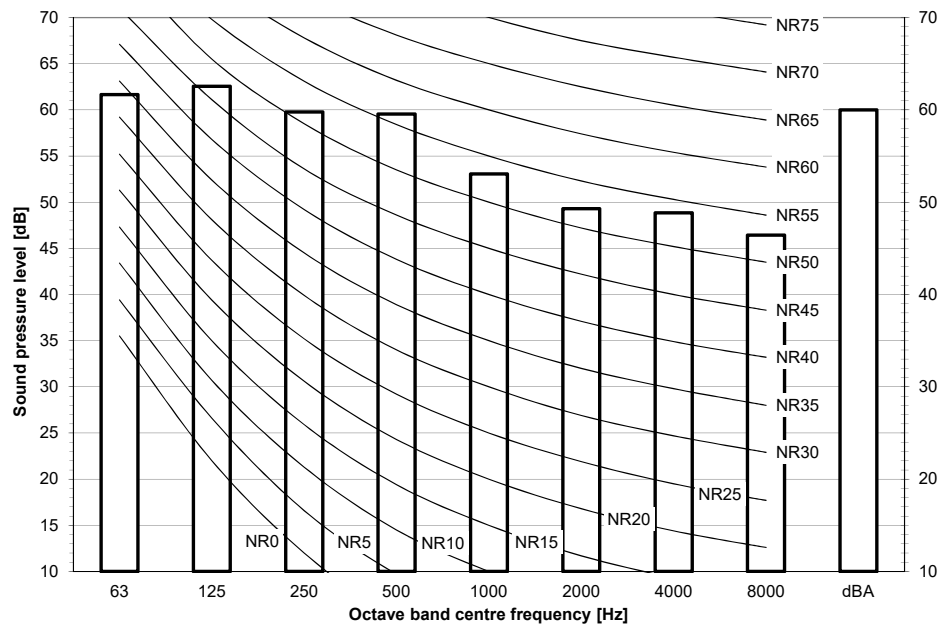
Notes

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



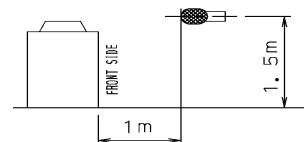
3D119523

REYQ14U
RXYQ14U
RXYQ14U
RYYQ14U
RYMQ14U



Notes

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



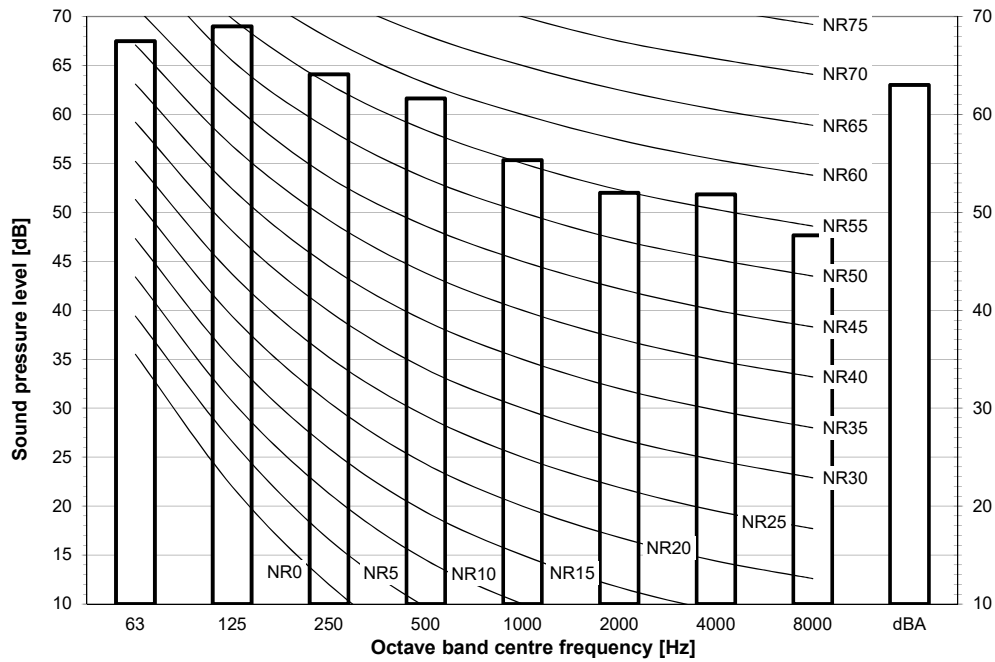
3D119524

11 Sound data

11 - 2 Sound Pressure Spectrum

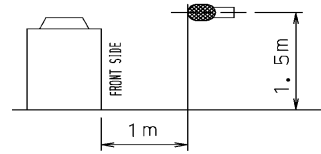
11

REYQ16U
RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U



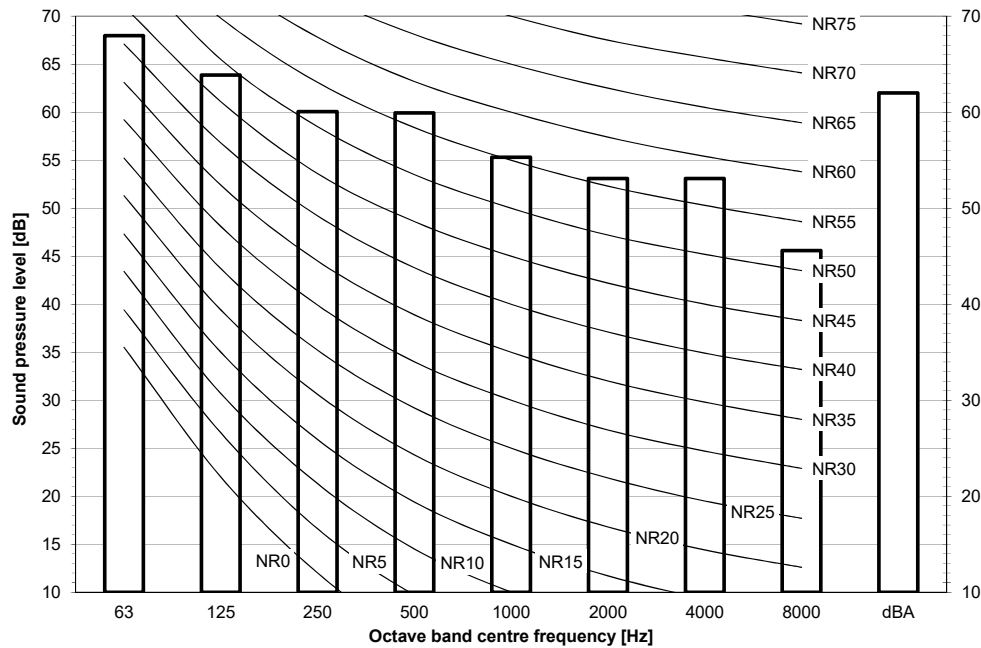
Notes

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



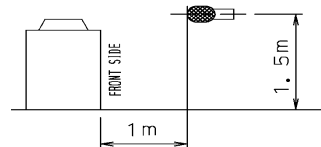
3D119525

REYQ18U
RXYQQ18U
RXYQ18U
RYYQ18U
RYMQ18U



Notes

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

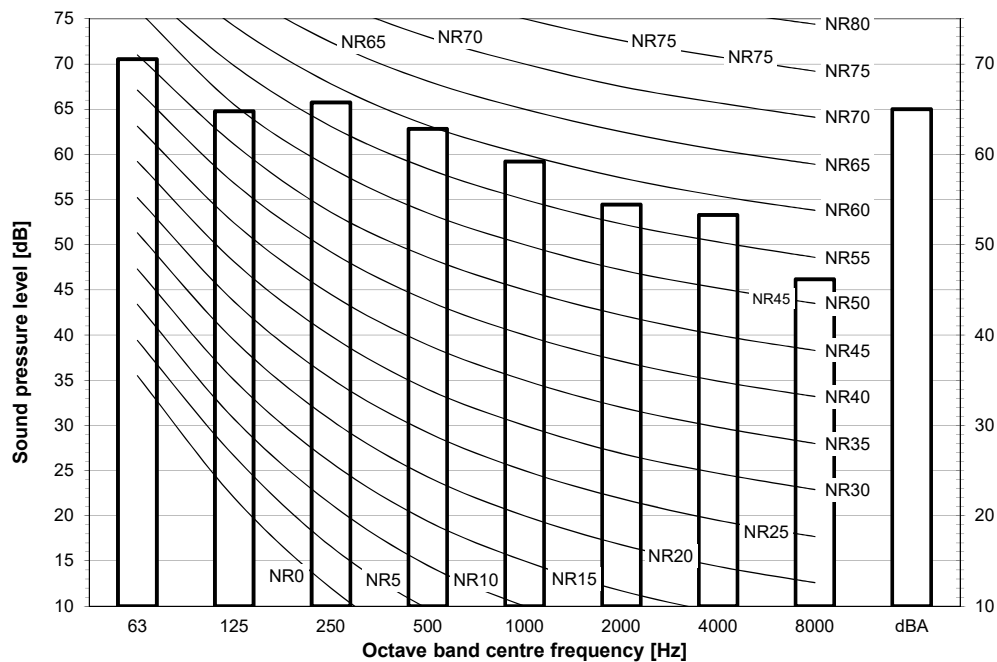


3D119526

11 Sound data

11 - 2 Sound Pressure Spectrum

REYQ20U
RXYQQ20U
RXYQ20U
RYYQ20U
RYMQ20U



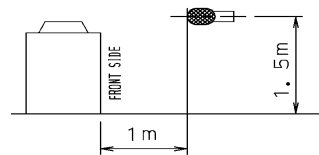
Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

Reference acoustic pressure 0 dB = 20 μ Pa



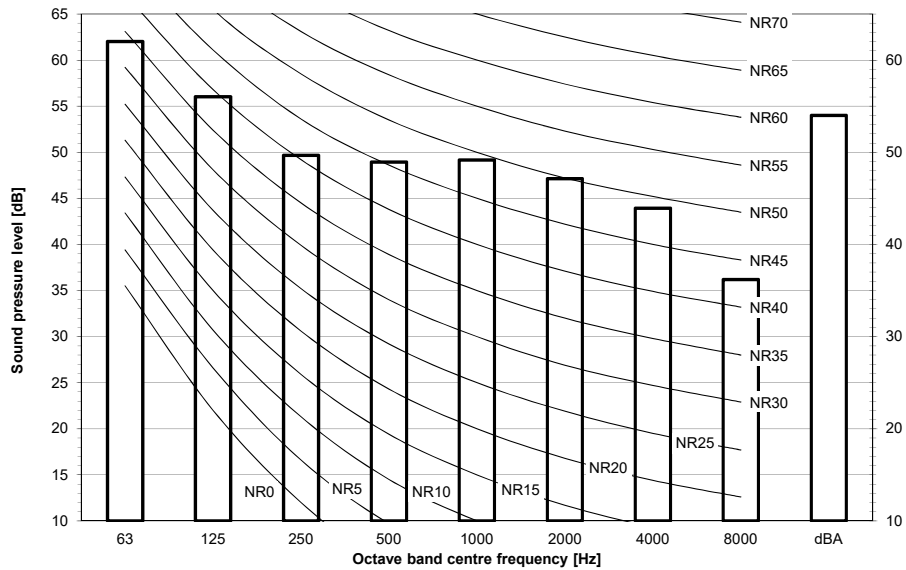
3D119527

11 Sound data

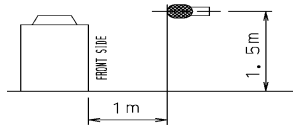
11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

11

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

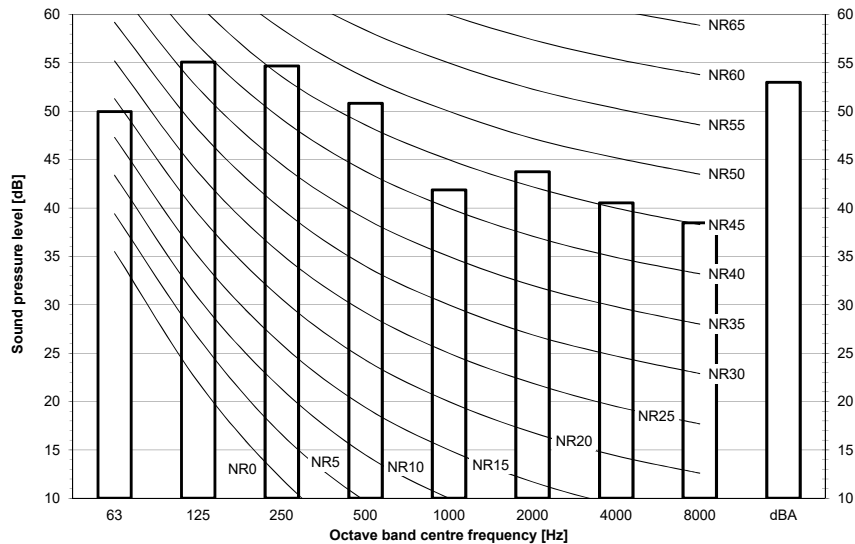


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

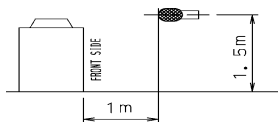


3D119535

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



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

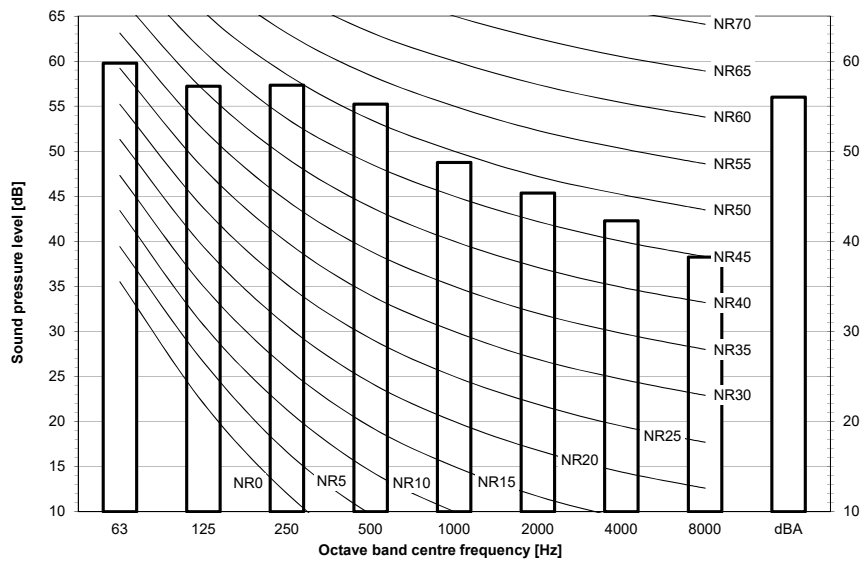


3D119538

11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

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



Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

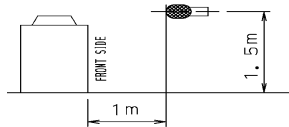
Reference acoustic pressure 0 dB = 20 μ Pa

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)



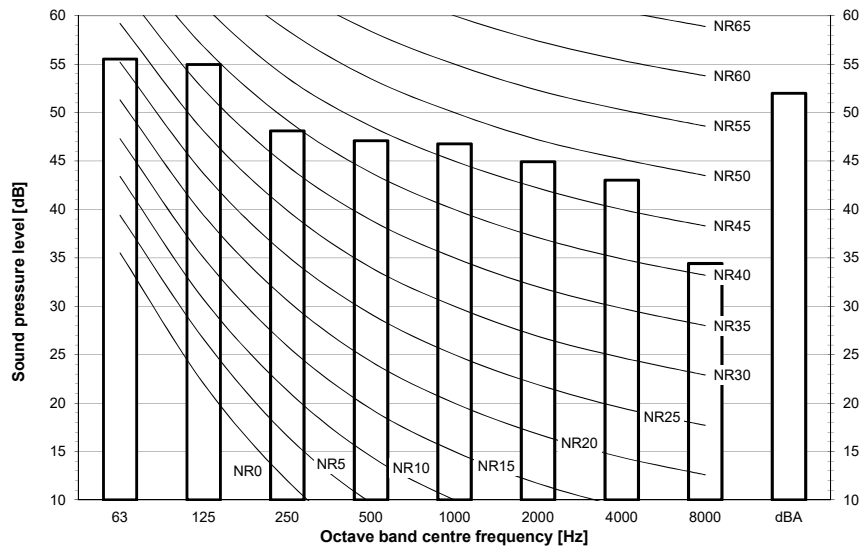
3D119541

11 Sound data

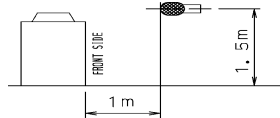
11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

11

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

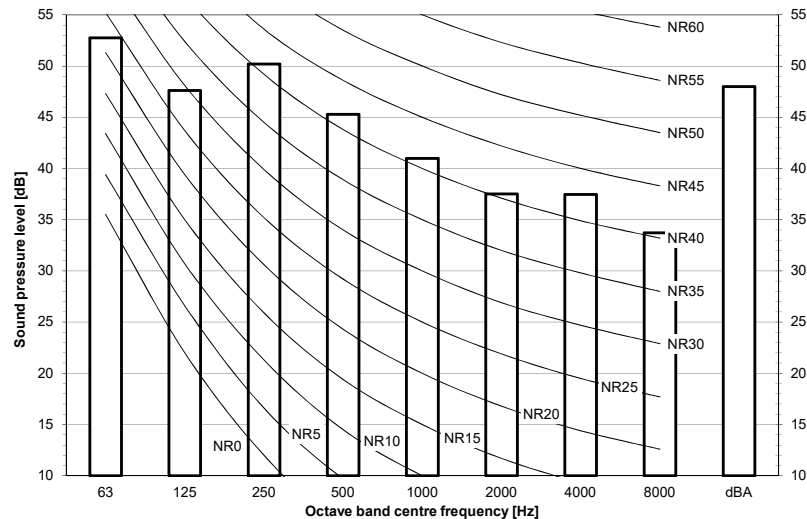


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

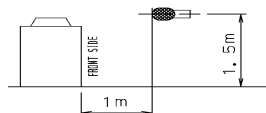


3D119536

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



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

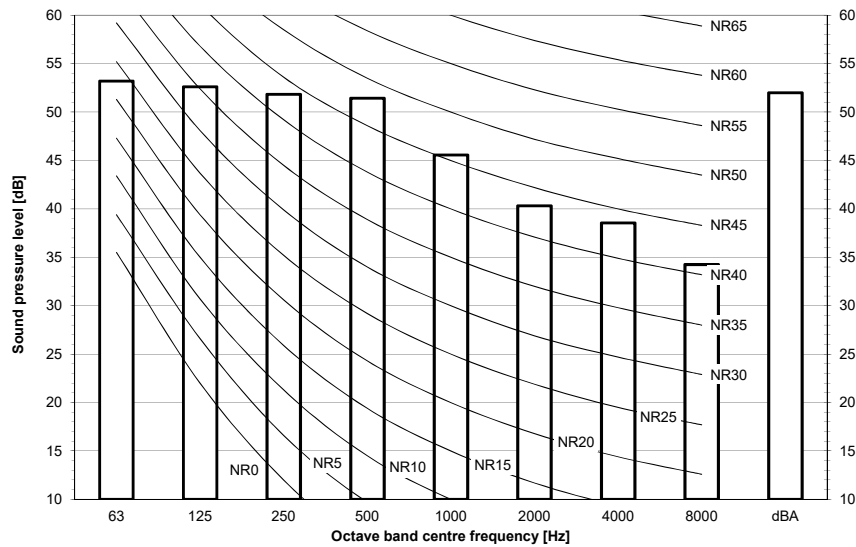


3D119539

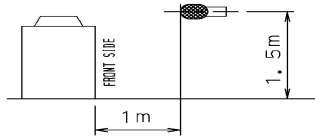
11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

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



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



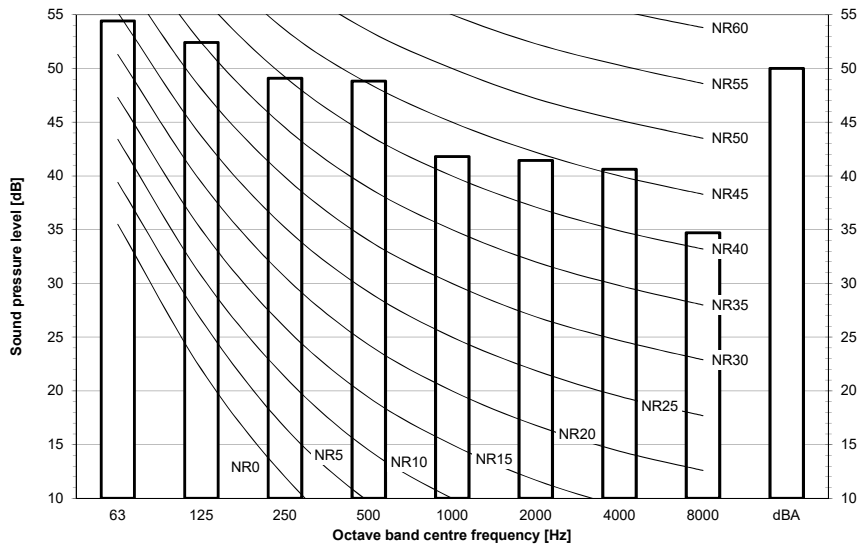
3D119542

11 Sound data

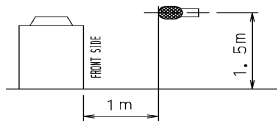
11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

11

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

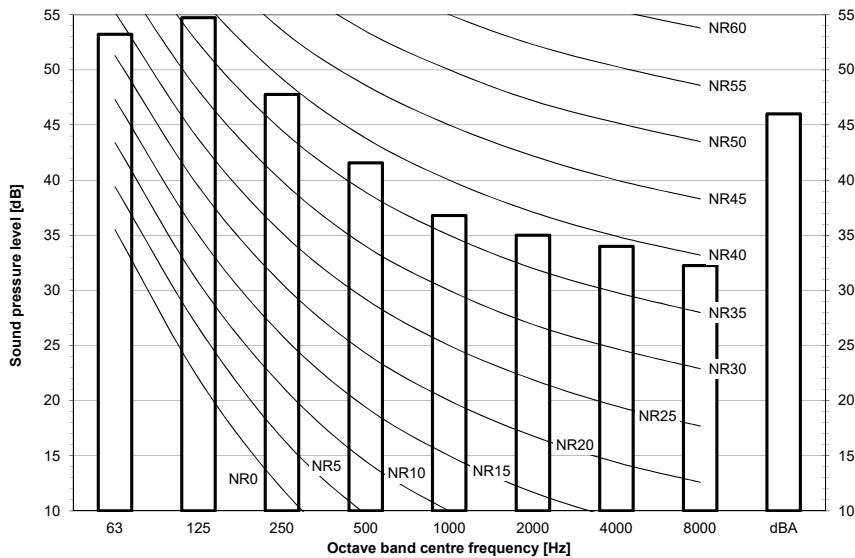


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

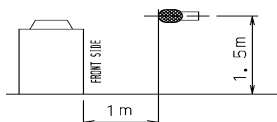


3D119537

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



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

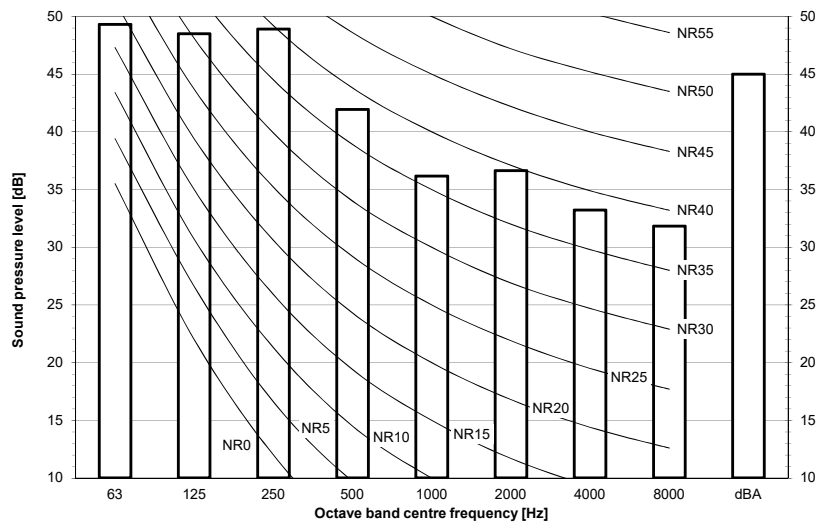


3D119540

11 Sound data

11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

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



Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

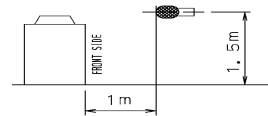
Reference acoustic pressure 0 dB = 20 μ Pa

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

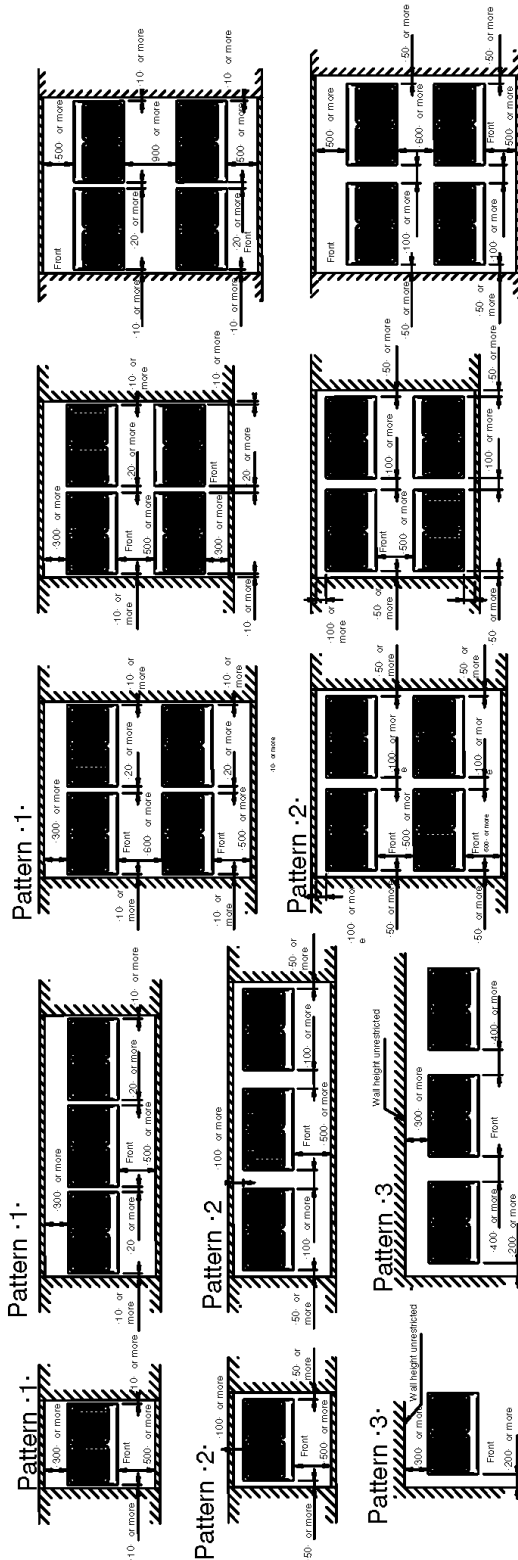
12 - 1 Installation Method

12

RXYQ-U
RYYQ-U
RYMQ-U

For centralised group layout

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

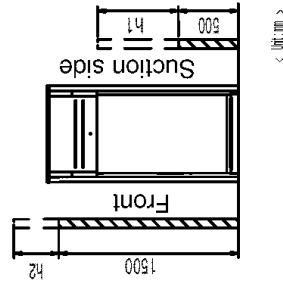
- front side: service space + h2/2

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.

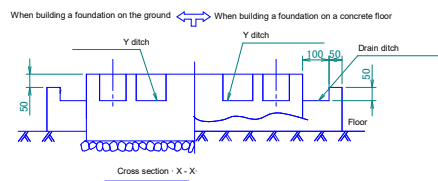
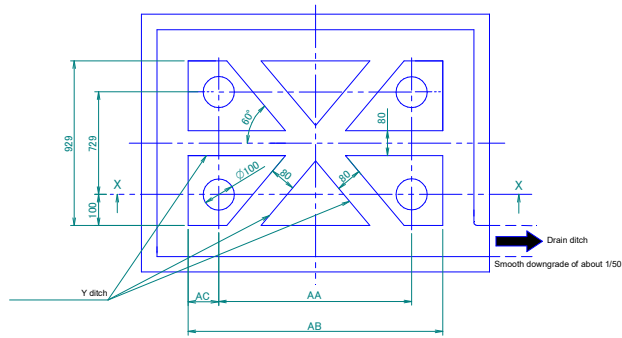


3D118467A

12 Installation

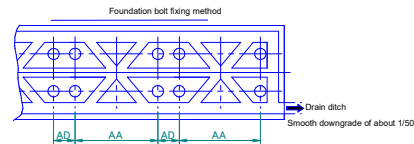
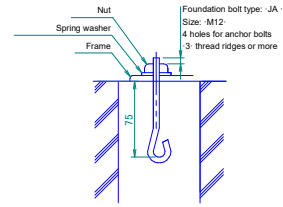
12 - 2 Fixation and Foundation of Units

RXYQ-U



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.



For multi-unit installation					
Model	AA	AB	AC	AD	
RYY08-12U					
RYM08-12U					
RIX08-12U					
RYX008-12U	766	992			
REM057/REY08-12U					
RYT008U					
REMA5*/REYAB-12A*			113	185	
RYMA5A/RYXA8-12A					
RYY014-20U					
RYM014-20U					
RIX014-20U	1076	1076			
RYX0014-20U					
REY014-20U					
RYXT010-16U					
REYA14-20A*					
RYXA14-20A					

3D118459C

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQ-U

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 (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	Outdoor-to-outdoor (H3)	
Standard							
-VRV DX- indoor units only	165/(190)m ⁽⁸⁾	40m ⁽¹⁾	10/(13)m	50/(40)m ⁽³⁾	30m	5m	1000m
Standard multi-combination							
All multi-outdoor-unit combinations except	135/(160)m ⁽⁶⁾	40m ⁽¹⁾	10/(13)m	50/(40)m ⁽³⁾	30m	5m	500m
-Hydrobox- connection	135/(160)m ⁽⁶⁾	40m	10/(13)m	50/(40)m	15m	5m	300-500m ⁽⁵⁾
-RA- connection	100/(120)m ⁽⁸⁾	50m ⁽²⁾	-	50/(40)m	15m	-	250m
-AHU- connection	Pair	50/(55)m ⁽⁴⁾	40m	10/13m	40/(40)m	-	150m ⁽⁹⁾
	Multi ⁽⁶⁾	165/(190)m ⁽⁸⁾	40m	10/13m	40/(40)m	15m	1000m
	Mix ⁽⁷⁾	165/(190)m ⁽⁸⁾	40m	10/13m	40/(40)m	15m	1000m

Remark

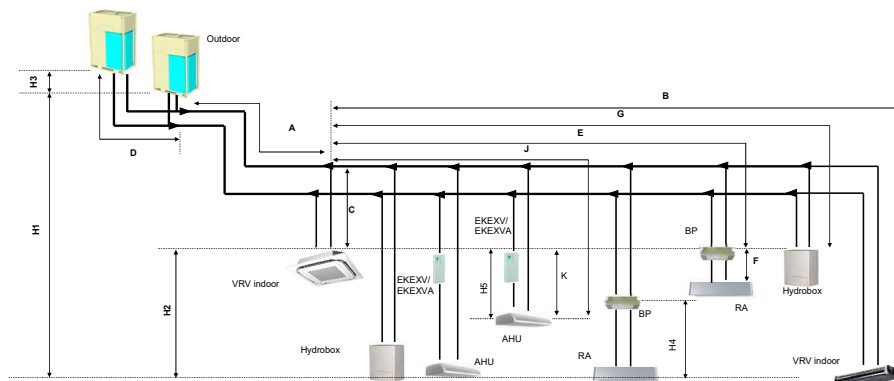
For standard multi-outdoor-unit combinations, see -3D079534-.

- (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 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 ≤ 40-m.
- (2) If the piping length between the first branch and the -BP- box or -VRV- indoor unit is more than 20-m, 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)(-EKEV- + -EKEQ- kits) or (AHU)(-EKEVA- + -EKEACBVE- kits).
- (7) Mix of -AHU- units and -VRV DX indoor-.
- (8) If the equivalent piping length between is > 90-m, size up the main liquid and gas piping.
- (9) Up to 3- piping branches are possible in case of an AHU with an interlaced heat exchanger.

3D079540F

RXYQ-U

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)	-EKEV/EKEVA- to -AHU- (K)	-BP- to -RA- (H4)	-EKEV/EKEVA- 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)(-EKEV- + -EKEQ- kits) or (AHU)(-EKEVA- + -EKEACBVE- kits).
- (2) Mix of -AHU- units and -VRV DX indoor-.

3D079540F

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQ-U

VRV4

Heat pump

Piping restrictions :3/3:

System pattern Allowed connection ratio (CR)	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)
Other combinations are not allowed.						
·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 ⁽²⁾	50~130%	-	0~80%	-
·VRV DX· indoor unit + ·AHU(EKEXV+ EKEQ*)/(EKEKXA+EKEACBVE)· Mix	50~110% ⁽³⁾	Max.64 ⁽²⁾	50~110%	-	-	0~60%
AHU only (·EKEQ*+ EKEKX·) Pair + multi	(4) 90~110% ⁽³⁾	Max.64 ^{(2) (6)}	-	-	-	90~110% ⁽³⁾
AHU only (·EKEACBVE+ EKEKXA·) Pair + multi	(4) 65/75 ⁽⁵⁾ ~110% ⁽³⁾	Max.64 ^{(2) (6)}	-	-	-	65/75 ⁽⁵⁾ ~110% ⁽³⁾

Remark

- (1) There is no restriction on the number of connectable ·BP· boxes.
 - (2) For connection with ·AHU·
·EKEXV/EKEKXA· 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 system
Multi AHU = system with multiple air handling units connected to one outdoor unit system
Mixed AHU = mix of AHU units and ·VRV DX· indoor units connected to one outdoor system
 - (5) ·75% ~ 110%·: default situation
·65% ~ 75%·: Allowed if stricter AHU volume limitations are valid.
Refer to the databook of ·EKEACBVE· for details.
 - (6) Number of AHUs that can be connected in case of pair or multi layout depends on the control types:
 - ·X·-control is possible (up to ·3· [(·EKEXV+EKEQFA·) or (·EKEKXA + EKEACBVE·) boxes] can be connected to one outdoor unit (system)).
 - ·Y·-control is possible (up to ·3· [(·EKEXV+EKEQFA·) or (·EKEKXA + EKEACBVE·) boxes] can be connected to one outdoor unit (system)).
 - ·W·-control is possible (up to ·3· [(·EKEXV+EKEQFA·) or (·EKEKXA + EKEACBVE·) boxes] can be connected to one outdoor unit (system)).
 - ·Z,Z'·-control is possible (the allowed number of [(·EKEKXA + EKEACBVE·) boxes] is determined by the connection ratio and the capacity of the outdoor unit.
 - ·Z·-control is possible (the allowed number of [(·EKEXV + EKEQMA·) boxes] is determined by the connection ratio and the capacity of the 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)/(·EKEKXA + EKEACBVE·)]: units combined with an air handling unit are considered air handling units, following a p
For information on the operation range, refer to the documentation of the [(·EKEXV+EKEQ)/(·EKEKXA+EKEACBVE·) unit.
 - IV. ·VKM· units are considered to be regular ·VRV DX· indoor units.

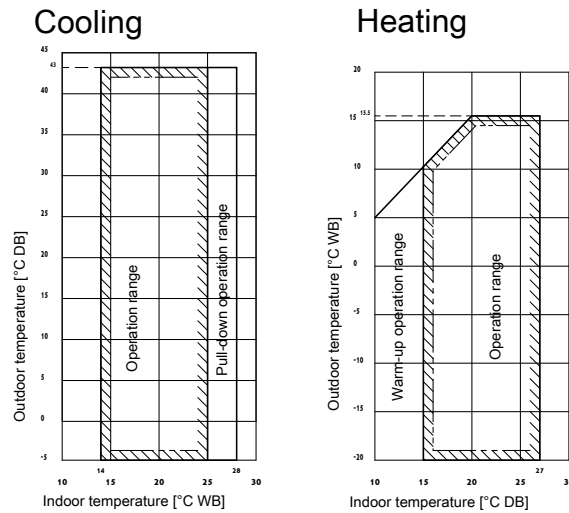
3D079540F

13 Operation range

13 - 1 Operation Range

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

13



Notes

1. These figures assume the following operation conditions

Indoor and outdoor units

Equivalent piping length: 5m

Level difference: 0m

2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).

3. To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.

4. Operation range is valid in case direct expansion indoor units are used.

3D118465

14 Appropriate Indoors

14 - 1 Appropriate Indoors

RXYQ-U

Recommended indoor units for -RXYQ*U* / RYYQ*U* / RYMQ*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* / RYMQ*U*- outdoor units

Covered by -ENER LOT21-

FXFQ20-25-32-40-50-63-80-100-125
 FXZQ15-20-25-32-40-50
 FXCQ20-25-32-40-50-63-80-125
 FXKQ20-25-32-40-50-63
 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

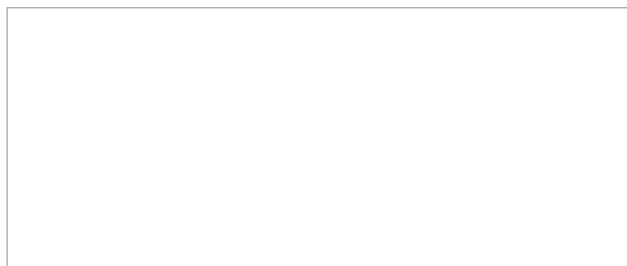
Covered by -ENER LOT10-

FTXJ20-25-35-42-50
 FTXA20-25-35-42-50
 FLXS25-35-50-60
 FVXG25-35-50
 FTXM20-25-35-42-50-60-71
 CVXM20
 FVXM25-35-50

Outside the scope of -ENER LOT21-

EKEXV50-63-80-100-125-140-200-250-400-500 + EKEQM / EKEQF
 EKEXVA 50-63-80-100-125-140-200-250-300+350+400+450+500 + EKEACBVE
 HXY080-125
 VKM50-80-100
 CYVS100*80, CYVS150*80, CYVS200*100, CYVS250*140
 CYAS100*80, CYAS150*80, CYAS200*100, CYAS250*140
 CYVM100*80, CYVM150*80, CYVM200*100, CYVM250*140
 CYAM100*80, CYAM150*80, CYAM200*100, CYAM250*140
 CYVL100*125, CYVL150*200, CYVL200*250, CYVL250*250
 CYAL100*125, CYAL150*200, CYAL200*250, CYAL250*250
 EKVDX32-50-80-100 + VAMJ8

3D118461G



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02/2026



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