

# VRV IV+ heat pump, without continuous heating Technical data book 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

### Daikin's solution for comfort & low energy consumption

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



Inverter



## 2 Specifications

### 1 - 1 RXYQ-U

Technical Specifications				RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U
Recommended combination				4 x FXFQ50AVEB	4 x FXFQ63AVEB	6 x FXFQ50AVEB	1 x FXFQ50AVEB + 5 x FXFQ63AVEB	4 x FXFQ63AVEB + 2 x FXFQ80AVEB
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 FXMQ50P7VEB	4 x FXMQ63P7VEB	6 x FXMQ50P7VEB	1 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB
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	13.7	16.0	18.4	20.6	23.2
	Max.	6°CWB	kW	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)	50.0 (2)
COP at nom. capacity	6°CWB	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 (35°C - 27/19)	EERd		3.0	2.3	2.4	2.6	2.1
		Pdc	kW	22.4	28.0	33.5	40.0	45.0
	B Condition (30°C - 27/19)	EERd		5.2	4.7	4.3	4.1	3.9
		Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition (25°C - 27/19)	EERd		9.5	8.3	7.7	7.8	7.7
		Pdc	kW	10.6	13.3	15.9	18.9	21.3
	D Condition (20°C - 27/19)	EERd		18.8	17.0	13.9	14.3	14.2
		Pdc	kW	8.0	9.3	9.4	8.4	9.5
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd		2.6	2.4		2.6	2.1
		Pdc	kW	22.4	28.0	33.5	40.0	45.0
	B Condition (30°C - 27/19)	EERd		4.9	4.7	4.0	4.1	3.8
		Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition (25°C - 27/19)	EERd		8.8	8.5	7.1	7.9	7.6
Space cooling recommended combination 2		Pdc	kW	10.6	13.3	15.9	18.9	21.3
	D Condition (20°C - 27/19)	EERd		15.1	17.2	13.1	14.0	
Space cooling recommended combination 2		Pdc	kW	8.8	9.3	9.1	8.4	9.5
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd		3.0	2.3	2.4	2.6	2.1
		Pdc	kW	22.4	28.0	33.5	40.0	45.0
	B Condition (30°C - 27/19)	EERd		5.1	4.7	4.2	4.0	3.7
		Pdc	kW	16.5	20.6	24.7	29.5	33.2
	C Condition (25°C - 27/19)	EERd		9.6	8.4	7.7		7.4
		Pdc	kW	10.6	13.3	15.9	19.0	21.3
	D Condition (20°C - 27/19)	EERd		16.0	16.9	13.7	14.0	14.1
		Pdc	kW	9.1	9.3	9.4	8.4	9.5
Space heating (Average climate)	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				
	A Condition (-7°C)	COPd (declared COP)		2.7	2.6	2.4	2.6	
		Pdh (declared heating cap) kW		12.1	14.2	16.3	18.2	20.5
	B Condition (2°C)	COPd (declared COP)		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)		6.3	6.4	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)		7.9	8.2	7.9	8.5	8.6
		Pdh (declared heating cap) kW		5.9		6.3	4.9	

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Technical Specifications					RXYQ8U		RXYQ10U		RXYQ12U		RXYQ14U		RXYQ16U		
Space heating (Average climate) recommended combination 2	A	COPd (declared COP)			2.7				2.4		2.6				
	Condition	Pdh (declared heating cap)	kW		12.1		14.2		16.3		18.2		20.5		
	B	COPd (declared COP)			3.9		4.0		3.9		3.5				
	Condition	Pdh (declared heating cap)	kW		7.4		8.6		9.9		11.1		12.2		
	C	COPd (declared COP)			6.3		6.5		6.1				6.3		
	Condition	Pdh (declared heating cap)	kW		5.0		5.5		6.4		7.1		8.0		
	D	COPd (declared COP)			7.8		8.3		7.9		8.6		8.7		
	Condition	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		
Space heating (Average climate) recommended combination 2	TOL	Tol (temperature operating limit)							-10						
Space heating (Average climate) recommended combination 3	A	COPd (declared COP)			2.7		2.6		2.4		2.6				
	Condition	Pdh (declared heating cap)	kW		12.1		14.2		16.3		18.2		20.5		
	B	COPd (declared COP)			3.9		3.7		3.9		3.5				
	Condition	Pdh (declared heating cap)	kW		7.4		8.6		9.9		11.1		12.5		
	C	COPd (declared COP)			6.2		6.4		6.0		6.1		6.2		
	Condition	Pdh (declared heating cap)	kW		4.9		5.5		6.4		7.1		8.0		
	D	COPd (declared COP)			7.8		8.1		7.8		8.5		8.6		
	Condition	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)							-10						
Capacity range		HP			8		10		12		14		16		
PED	Category				Category II										
	Most critical part	Name			Accumulator										
		Ps*V	Bar*I		325						415				
Maximum number of connectable indoor units					64 (3)										
Indoor index connection	Min.				100.0		125.0		150.0		175.0		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	198						275					
	Packed unit		kg	211						291					
Packing	Material				Carton										
	Weight		kg		1.8						2.2				
Packing 2	Material				Wood										
	Weight		kg		11.0						14.0				
Packing 3	Material				Plastic										
	Weight		kg		0.5						0.6				
Casing	Colour				Daikin White										
Casing	Material				Painted galvanized steel plate										
Heat exchanger	Type				Cross fin coil										
	Indoor side				Air										
	Outdoor side				Air										
	Air flow rate	Cooling	Rated	m³/h	9,720	10,500		11,100		13,380		15,600			
		Heating	Rated	m³/h	9,720	10,500		11,100		13,380		15,600			
Fan	Quantity				1						2				
	External static pressure	Max.		Pa	78										
Fan motor	Quantity				1						2				
	Type				DC motor										
	Output		W		550						750				

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Technical Specifications					RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U
Compressor	Quantity				1			2	
	Type				Hermetically sealed scroll compressor				
Operation range	Crankcase heater				33				
	Cooling	Min.	°CDB		-5.0				
		Max.	°CDB		43.0				
	Heating	Min.	°CWB		-20.0				
Max.		°CWB		15.5					
Sound power level	Cooling	Nom.	dBA		78.0 (4)	79.1 (4)	83.4 (4)	80.9 (4)	85.6 (4)
	Heating	Nom.	dBA		62.7 (4)	64.8 (4)	64.9 (4)	68.3 (4)	68.6 (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		TCO2Eq		12.3	12.5	13.2	21.5	23.6
	Charge		kg		5.9	6.0	6.3	10.3	11.3
Refrigerant oil	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type	Braze connection						
		OD	mm		9,52		12.7		
	Gas	Type	Braze connection						
		OD	mm		19.1	22.2	28.6		
	Total piping length	System	Actual	m	1,000 (6)				
Defrost method					Reversed cycle				
Capacity control	Method				Inverter controlled				
Indication if the heater is equipped with a supplementary heater					no				
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0				
Power consumption in other than active mode	Crankcase heater	Cooling	PCK	kW	0.000				
		Heating	PCK	kW	0.052		0.077		
Power consumption in other than active mode	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		
	Thermostat-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 FXFQ50AVEB + 5 x FXFQ63AVEB		2 x FXFQ50AVEB + 6 x FXFQ63AVEB	
Recommended combination 2				3 x FXSQ50A2VEB + 5 x FXSQ63A2VEB		2 x FXSQ50A2VEB + 6 x FXSQ63A2VEB	
Recommended combination 3				3 x FXMQ50P7VEB + 5 x FXMQ63P7VEB		2 x FXMQ50P7VEB + 6 x FXMQ63P7VEB	
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	27.9		31.0	
	Max.	6°CWB	kW	56.5 (2)		63.0 (2)	
COP at nom. capacity	6°CWB		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	
ηs,c			%	238.3		233.7	
ηs,c recommended combination 2				236.8		233.9	
ηs,c recommended combination 3				238.2		233.1	
ηs,h			%	163.1		156.6	
ηs,h recommended combination 2				164.8		158.2	
ηs,h recommended combination 3				159.6		153.4	

## 2 Specifications

### 1 - 1 RXYQ-U

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Technical Specifications				RXYQ18U	RXYQ20U
Space cooling	A Condition (35°C -27/19)	EERd		1.9	
		Pdc	kW	50.4	52.0
	B Condition (30°C -27/19)	EERd		3.8	3.7
		Pdc	kW	37.1	38.3
	C Condition (25°C -27/19)	EERd		7.5	7.3
		Pdc	kW	23.9	24.6
	D Condition (20°C - 27/19)	EERd		18.3	
		Pdc	kW	11.5	
Space cooling recommended combination 2	A Condition (35°C -27/19)	EERd		1.9	
		Pdc	kW	50.4	52.0
	B Condition (30°C -27/19)	EERd		3.7	3.6
		Pdc	kW	37.1	38.3
	C Condition (25°C -27/19)	EERd		7.5	7.3
		Pdc	kW	23.9	24.6
	D Condition (20°C - 27/19)	EERd		18.1	18.9
		Pdc	kW	11.4	10.9
Space cooling recommended combination 3	A Condition (35°C -27/19)	EERd		1.9	
		Pdc	kW	50.4	52.0
	B Condition (30°C -27/19)	EERd		3.7	3.6
		Pdc	kW	37.1	38.3
	C Condition (25°C -27/19)	EERd		7.6	7.3
		Pdc	kW	23.9	24.6
	D Condition (20°C - 27/19)	EERd		18.3	
		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	COPd (declared COP)		1.9	1.8
		Pdh (declared heating cap)	kW	27.9	31.0
		Tol (temperature operating limit)	°C	-10	
	A Condition (-7°C)	COPd (declared COP)		2.4	2.1
		Pdh (declared heating cap)	kW	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		3.7	3.6
		Pdh (declared heating cap)	kW	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		6.7	6.5
		Pdh (declared heating cap)	kW	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		9.0	9.1
		Pdh (declared heating cap)	kW	7.1	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)		2.4	2.2
		Pdh (declared heating cap)	kW	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		3.8	3.7
		Pdh (declared heating cap)	kW	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		6.8	6.5
		Pdh (declared heating cap)	kW	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		9.1	9.2
		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
Space heating (Average climate) recommended combination 2	TOL	Tol (temperature operating limit)		-10	



## 2 Specifications

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Technical Specifications					RXYQ18U		RXYQ20U	
Space heating (Average climate) recommended combination 3	A	COPd (declared COP)			2.4		2.1	
	Condition	Pdh (declared heating cap)	kW		24.7		27.4	
	B	COPd (declared COP)			3.7		3.6	
	Condition	Pdh (declared heating cap)	kW		15.0		16.7	
	C	COPd (declared COP)			6.5		6.3	
	Condition	Pdh (declared heating cap)	kW		9.7		10.7	
	D	COPd (declared COP)			8.7			
	Condition	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			
Capacity range			HP	18		20		
PED	Category			Category II				
	Most critical part	Name		Accumulator				
		Ps*V	Bar*I	493				
Maximum number of connectable indoor units					64 (3)			
Indoor index connection	Min.			225.0		250.0		
	Max.			585.0		650.0		
Dimensions	Unit	Height	mm		1,685			
		Width	mm		1,240			
		Depth	mm		765			
	Packed unit	Height	mm		1,820			
		Width	mm		1,305			
		Depth	mm		860			
Weight	Unit	kg		308				
	Packed unit	kg		324				
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				
Casing	Material			Painted galvanized steel plate				
Heat exchanger	Type			Cross fin coil				
	Indoor side			Air				
	Outdoor side			Air				
	Air flow rate	Cooling	Rated	m³/h	15,060	15,660		
Fan	Quantity	Heating	Rated	m³/h	15,060	15,660		
	External static pressure	Max.	Pa	78				
Fan motor	Quantity			2				
	Type			DC motor				
	Output	W		750				
Compressor	Quantity			2				
	Type			Hermetically sealed scroll compressor				
	Crankcase heater	W		33				
Operation range	Cooling	Min.	°CDB		-5.0			
		Max.	°CDB		43.0			
	Heating	Min.	°CWB		-20.0			
		Max.	°CWB		15.5			
Sound power level	Cooling	Nom.	dBA		83.8 (4)	87.9 (4)		
	Heating	Nom.	dBA		66.3 (4)	67.0 (4)		
Sound pressure level	Cooling	Nom.	dBA		62.0 (5)	65.0 (5)		
Refrigerant	Type			R-410A				
	GWP			2,087.5				
	Charge	TCO2Eq		24.4	24.6			
	Charge	kg		11.7	11.8			
Refrigerant oil			Type	Synthetic (ether) oil FVC68D				

## 2 Specifications

### 1 - 1 RXYQ-U

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Technical Specifications					RXYQ18U	RXYQ20U
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					Inverter controlled	
Indication if the heater is equipped with a supplementary heater					no	
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0	
		Cooling	PCK	kW	0.000	
Power consumption in other than active mode	Crankcase heater	Heating	PCK	kW	0.089	
		Cooling	POFF	kW	0.075	
Power consumption in other than active mode	Off mode	Heating	POFF	kW	0.089	
		Cooling	PSB	kW	0.075	
	Standby mode	Heating	PSB	kW	0.089	
		Cooling	PTO	kW	0.010	
	Thermostat-off mode	Heating	PTO	kW	0.098	
		Cooling	PTO	kW	0.25	
Cooling	Cdc (Degradation cooling)				0.25	
Heating	Cdh (Degradation heating)				0.25	
Safety devices	Item	01			High pressure switch	
		02			Fan driver overload protector	
		03			Inverter overload protector	
		04			PC board fuse	
		05			Leakage current detector	

Standard accessories: Installation manual; Quantity: 1;

Standard accessories: Operation manual; Quantity: 1;

Standard accessories: Connection pipes; Quantity: 1;

Electrical Specifications				RXYQ8U	RXYQ10U	RXYQ12U	RXYQ14U	RXYQ16U
Power supply	Name			Y1				
	Phase			3N~				
	Frequency Hz			50				
	Voltage V			380-415				
Power supply intake				Both indoor and outdoor unit				
Voltage range	Min.	%		-10				
	Max.	%		10				
Current	Nominal running current (RLA)	Cooling	A	7.2 (7)	-			
Current - 50Hz	Starting current (MSC) - remark			See note 8				
	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)	Total	A	1.2 (11)	1.3 (11)	1.5 (11)	1.8 (11)	2.6 (11)
Wiring connections - 50Hz	For power supply	Quantity		5G				
	For connection 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	Starting current (MSC) - remark		See note 8	
	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)
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 Specifications

## 1 - 1 RXYQ-U

(2)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m |  
(3)Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% ≤ CR ≤ 130%) |  
(4)Sound power level is an absolute value that a sound source generates. |  
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |  
(6)Refer to refrigerant pipe selection or installation manual |  
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |  
(8)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 |  
MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |  
Maximum allowable voltage range variation between phases is 2%. |  
Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |  
The AUTOMATIC ESEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation functionality ( variable refrigerant temperature ) |  
The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality |  
Sound values are measured in a semi-anechoic room. |  
Soundpressure system [dBA] = 10\*log[10^(A/10)+10^(B/10)+10^(C/10)] , with Unit A = A dBA, Unit B = B dBA, Unit C = C dBA |  
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 |  
Ssc: Short-circuit power |  
For detailed contents of standard accessories, see installation/operation manual |  
Multi combination (22~54HP) data is corresponding with the standard multi combination

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 FXFQ50AVEB + 4 x FXFQ63AVEB	4 x FXFQ50AVEB + 4 x FXFQ63AVEB + 2 x FXFQ80AVEB	7 x FXFQ50AVEB + 5 x FXFQ63AVEB	6 x FXFQ50AVEB + 4 x FXFQ63AVEB + 2 x FXFQ80AVEB	9 x FXFQ50AVEB + 5 x FXFQ63AVEB	
Recommended combination 2				6 x FXSQ50A2VEB + 4 x FXSQ63A2VEB	4 x FXSQ50A2VEB + 4 x FXSQ63A2VEB + 2x	7 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	6 x FXSQ50A2VEB + 4 x FXSQ63A2VEB + 2x	9 x FXSQ50A2VEB + 5 x FXSQ63A2VEB	
Recommended combination 3				6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB	4 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2x	7 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2x	9 x FXMQ50P7VEB + 5 x FXMQ63P7VEB	
Cooling capacity	Prated,c		kW	61.5 (1)	67.4 (1)	73.5 (1)	78.5 (1)	83.9 (1)	
Heating capacity	Nom.	6°CWB	kW	61.5 (2)	67.4 (2)	73.5 (2)	78.5 (2)	83.9 (2)	
	Prated,h		kW	34.4	36.9	39.0	41.6	46.3	
	Max.	6°CWB	kW	69.0 (2)	75.0 (2)	82.5 (2)	87.5 (2)	94.0 (2)	
COP at nom. capacity	6°CWB		kW/kW	3.57 (2)	3.76 (2)	3.61 (2)	3.54 (2)	3.51 (2)	
ESEER - Automatic				7.07	6.81	6.89	6.69	6.60	
ESEER - Standard				5.58	5.42	5.39	5.23	5.17	
SCOP				4.4	4.3	4.2		4.3	
SCOP recommended combination 2				4.4	4.3	4.2		4.3	
SCOP recommended combination 3				4.3		4.2		4.3	
SEER				6.9	6.8	6.7	6.5		
SEER recommended combination 2				6.7	6.6	6.5	6.3		
SEER recommended combination 3				6.9	6.7	6.6	6.4	6.5	
ηs,c				%	274.5	269.9	264.2	257.8	256.8
ηs,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 (35°C -27/19)	EERd		2.6	2.5	2.6	2.3	2.1	
		Pdc	kW	61.5	67.4	73.5	78.5	83.9	
	B Condition (30°C -27/19)	EERd		4.8	4.6		4.4	4.3	
		Pdc	kW	45.3	49.7	54.2	57.8	61.8	
	C Condition (25°C -27/19)	EERd		8.5	8.6	8.2	8.1	8.2	
		Pdc	kW	29.1	31.9	34.8	37.2	39.7	
	D Condition (20°C -27/19)	EERd		16.0	15.2	14.2	14.3	16.8	
		Pdc	kW	18.8	15.8	16.2	16.5	21.0	
Space cooling recommended combination 2	A Condition (35°C -27/19)	EERd		2.6	2.4	2.6	2.3	2.1	
		Pdc	kW	61.5	67.4	73.5	78.5	83.9	
	B Condition (30°C -27/19)	EERd		4.6	4.5	4.4	4.3	4.2	
		Pdc	kW	45.3	49.7	54.1	57.8	61.8	
Space cooling recommended combination 2	C Condition (25°C -27/19)	EERd		8.2	8.4	7.9	7.8	7.9	
		Pdc	kW	29.1	31.9	34.8	37.2	39.7	
	D Condition (20°C -27/19)	EERd		15.6	14.7	13.6	13.8	16.1	
		Pdc	kW	18.4	15.4	15.7	16.5	20.5	
Space cooling recommended combination 3	A Condition (35°C -27/19)	EERd			2.5		2.3	2.1	
		Pdc	kW	61.5	67.4	73.5	78.5	83.9	
	B Condition (30°C -27/19)	EERd		4.8	4.5		4.3		
		Pdc	kW	45.3	49.7	54.2	57.8	61.8	
	C Condition (25°C -27/19)	EERd		8.5	8.4	8.1	8.0	8.2	
		Pdc	kW	29.1	31.9	34.8	37.2	39.7	
	D Condition (20°C -27/19)	EERd		15.8	15.2	14.0	14.1	16.6	
		Pdc	kW	18.8	15.7	16.0	16.6	21.0	

## 2 Specifications

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Technical specifications System					RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U	
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.3	2.5	2.3	2.2	2.1	
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3	
		Tbiv (bivalent temperature) °C			-10					
	TOL	COPd (declared COP)			2.3	2.5	2.3	2.2	2.1	
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3	
		Tol (temperature operating limit) °C			-10					
	A Condition (-7°C)	COPd (declared COP)			2.6	2.8	2.6		41.0	
		Pdh (declared heating cap) kW			30.4	32.6	34.5	36.8		
	B Condition (2°C)	COPd (declared COP)			4.0	3.7	3.8		3.9	
		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	6.2	6.5	
		Pdh (declared heating cap) kW			11.9	13.0	13.5	14.4	16.0	
	D Condition (12°C)	COPd (declared COP)			8.2	8.9	8.8	9.0		
		Pdh (declared heating cap) kW			6.0	5.7	6.0	6.4	7.1	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)			2.6	2.7	2.6		41.0	
		Pdh (declared heating cap) kW			30.4	32.6	34.5	36.8		
	B Condition (2°C)	COPd (declared COP)			4.1	3.7	3.8		3.9	
		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		2.1	
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3	
		Tbiv (bivalent temperature) °C			-10					
	Space heating (Average climate) recommended combination 2	TOL	COPd (declared COP)			2.2	2.4	2.2		2.1
			Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3
			Tol (temperature operating limit) °C			-10				
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.6	2.7	2.6		2.5	
		Pdh (declared heating cap) kW			30.4	32.6	34.5	36.8	41.0	
	B Condition (2°C)	COPd (declared COP)			4.0	3.7	3.8		3.9	
		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		2.1	
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3	
		Tbiv (bivalent temperature) °C			-10					
	TOL	COPd (declared COP)			2.3	2.4	2.2		2.1	
		Pdh (declared heating cap) kW			34.4	36.9	39.0	41.6	46.3	
		Tol (temperature operating limit) °C			-10					
Capacity range HP				22	24	26	28	30		
PED Category				Category II						
Maximum number of connectable indoor units				64 (3)						
Indoor index connection	Min.			275.0	300.0	325.0	350.0	375.0		
	Max.			715.0	780.0	845.0	910.0	975.0		
Heat exchanger	Indoor side			Air						
	Outdoor side			Air						
	Air flow rate	Cooling	Rated	m³/h	21,600	25,320	24,480	26,700	26,160	
Sound power level	Heating	Rated	m³/h	21,600	25,320	24,480	26,700	26,160		
	Cooling	Nom.	dBA	84.8 (4)	86.3 (4)	85.3 (4)	87.6 (4)	86.6 (4)		
Sound pressure level	Heating	Nom.	dBA	67.8 (4)	69.6 (4)	69.9 (4)	70.1 (4)	68.7 (4)		
	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						

## 2 Specifications

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Technical specifications System					RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U	
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	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	
	Thermostat-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		RXYQ18U	RXYQ20U	RXYQ8U	RXYQ10U
	Outdoor unit module 2			RXYQ16U		RXYQ18U	RXYQ20U	RXYQ10U	RXYQ12U
	Outdoor unit module 3			-			RXYQ20U	RXYQ18U	
Recommended combination				8 x FXFQ63AVEB + 4 x FXFQ80AVEB	3 x FXFQ50AVEB + 9 x FXFQ63AVEB + 2 x FXFQ80AVEB	2 x FXFQ50AVEB + 10 x FXFQ63AVEB + 2 x FXFQ80AVEB	6 x FXFQ50AVEB + 10 x FXFQ63AVEB	9 x FXFQ50AVEB + 9 x FXFQ63AVEB	
Recommended combination 2				8 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	3 x FXSQ50A2VEB + 9 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	2 x FXSQ50A2VEB + 10 x FXSQ63A2VEB + 2 x FXSQ80A2VEB	6 x FXSQ50A2VEB + 10 x FXSQ63A2VEB	9 x FXSQ50A2VEB + 9 x FXSQ63A2VEB	
Recommended combination 3				8 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	3 x FXMQ50P7VEB + 9 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	2 x FXMQ50P7VEB + 10 x FXMQ63P7VEB + 2 x FXMQ80P7VEB	6 x FXMQ50P7VEB + 10 x FXMQ63P7VEB	9 x FXMQ50P7VEB + 9 x FXMQ63P7VEB	
Cooling capacity	Prated,c		kW	90.0 (1)	95.4 (1)	97.0 (1)	102.4 (1)	111.9 (1)	
Heating capacity	Nom.	6°CWB	kW	90.0 (2)	95.4 (2)	101.0 (2)	106.4 (2)	111.9 (2)	
	Prated,h		kW	46.4	51.1	54.2	60.7	62.3	
	Max.	6°CWB	kW	100.0 (2)	106.5 (2)	113.0 (2)	119.5 (2)	125.5 (2)	
COP at nom. capacity	6°CWB		kW/kW	3.59 (2)	3.56 (2)	3.36 (2)	3.49 (2)	3.56 (2)	
ESEER - Automatic				6.50	6.44	6.02	6.36	6.74	
ESEER - Standard				5.05	5.01	4.68	5.03	5.29	
SCOP				4.2		4.1	4.3		
SCOP recommended combination 2				4.2	4.3	4.2	4.3	4.4	
SCOP recommended combination 3				4.1	4.2	4.1	4.2	4.3	
SEER				6.4		6.3	6.9	6.7	
SEER recommended combination 2				6.3			6.8	6.6	
SEER recommended combination 3				6.2	6.3		6.9	6.7	
ηs,c		%		251.7	253.3	250.8	272.4	263.5	
ηs,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 (35°C - 27/19)	EERd		2.3	2.1		2.4	2.2	
		Pdc	kW	90.0	95.4	97.0	102.4	111.9	
	B Condition (30°C - 27/19)	EERd		4.3	4.2	4.1		4.5	
		Pdc	kW	66.3	70.3	71.5	75.5	82.5	
	C Condition (25°C - 27/19)	EERd		8.1	7.9		8.5	8.3	
		Pdc	kW	42.6	45.2	45.9	48.5	53.0	
	D Condition (20°C - 27/19)	EERd		14.3	16.8	16.7	17.9	16.0	
		Pdc	kW	19.0	20.1	20.4	21.6	23.6	
	Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd		2.2	2.1		2.3	2.2
			Pdc	kW	90.0	95.4	97.0	102.4	111.9
B Condition (30°C - 27/19)		EERd		4.2		4.1	4.5	4.4	
Space cooling recommended combination 2	B Condition (30°C - 27/19)	Pdc	kW	66.3	70.3	71.5	75.4	82.4	
	C Condition (25°C - 27/19)	EERd		8.0	8.1	7.9	8.4	8.1	
		Pdc	kW	42.6	45.2	45.9	48.5	53.0	
	D Condition (20°C - 27/19)	EERd		14.0	16.5		17.8	15.9	
		Pdc	kW	18.9	20.1	20.4	21.6	23.6	

## 2 Specifications

### 1 - 1 RXYQ-U

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Technical specifications System			RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U		
Space cooling recommended combination 3	A Condition (35°C -27/19)	EERd	2.2	2.1		2.4	2.2		
		Pdc	kW	90.0	95.4	97.0	102.4	111.9	
	B Condition (30°C -27/19)	EERd	4.1		4.0	4.5	4.4		
		Pdc	kW	66.3	70.3	71.5	75.5	82.5	
	C Condition (25°C -27/19)	EERd	7.8	8.0	7.8	8.5	8.4		
		Pdc	kW	42.6	45.2	45.9	48.5	53.0	
	D Condition (20°C - 27/19)	EERd	13.8	16.6	16.5	17.9	16.1		
		Pdc	kW	19.0	20.1	20.4	21.6	23.6	
	Space heating (Average climate)	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					
	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	3.7		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	6.5	6.4	6.5		
		Pdh (declared heating cap)	kW	16.1	17.7	18.8	21.3	21.6	
	D Condition (12°C)	COPd (declared COP)		9.0	8.8	8.6	8.7		
		Pdh (declared heating cap)	kW	7.1	7.9	8.3	13.1		
	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	
	Space heating (Average climate) recommended combination 2	TBivalent	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 3	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		

## 2 Specifications

### 1 - 1 RXYQ-U

Technical specifications System					RXYQ32U	RXYQ34U	RXYQ36U	RXYQ38U	RXYQ40U
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	Heating	Nom.	Rated	m³/h	31,200	30,660	31,260	35,880	36,660
	Cooling	Nom.		dB(A)	88.6 (4)	87.8 (4)	89.9 (4)	88.8 (4)	87.3 (4)
Sound pressure level	Heating	Nom.		dB(A)	71.6 (4)	70.6 (4)	70.9 (4)	69.9 (4)	70.2 (4)
	Cooling	Nom.		dB(A)	66.0 (5)	65.5 (5)	67.1 (5)	66.2 (5)	65.2 (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			34.9		41.3		
Piping connections	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	Cooling	PCK	kW	0.000				
	mode	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		
		Thermostat-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				
Recommended combination					12 x FXFQ63AVEB + 4 x FXFQ80AVEB	6 x FXFQ50AVEB + 8 x FXFQ63AVEB + 4 x FXFQ80AVEB	1 x FXFQ50AVEB + 13 x FXFQ63AVEB + 4 x FXFQ80AVEB	12 x FXFQ63AVEB + 6 x FXFQ80AVEB	3 x FXFQ50AVEB + 13 x FXFQ63AVEB + 4 x FXFQ80AVEB
Recommended combination 2					12 x FXSQ63A2VEB + 4 x FXSQ80A2VEB	6 x FXSQ50A2VEB + 8 x FXSQ63A2VEB + 4 x	1 x FXSQ50A2VEB + 13 x FXSQ63A2VEB + 4 x	12 x FXSQ63A2VEB + 6 x FXSQ80A2VEB	3 x FXSQ50A2VEB + 13 x FXSQ63A2VEB + 4 x
Recommended combination 3					12 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	6 x FXMQ50P7VEB + 8 x FXMQ63P7VEB + 4 x	1 x FXMQ50P7VEB + 13 x FXMQ63P7VEB + 4 x	12 x FXMQ63P7VEB + 6 x FXMQ80P7VEB	3 x FXMQ50P7VEB + 13 x FXMQ63P7VEB + 4 x
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	62.4	64.8	67.0	69.6	74.3
	Max.	6°CWB		kW	131.5 (2)	137.5 (2)	145.0 (2)	150.0 (2)	156.5 (2)
COP at nom. capacity	6°CWB			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 (35°C EERd -27/19) Pdc				2.3		2.4	2.3	2.1
					118.0	123.5	130.0	135.0	140.4
	B Condition (30°C EERd -27/19) Pdc				4.4		4.3	4.2	
					86.9	91.0	95.8	99.5	103.4
	C Condition (25°C EERd -27/19) Pdc				8.2		8.1		
					55.9	58.5	61.6	64.0	66.5
	D Condition (20°C - 27/19) EERd				15.4		14.3		15.9
					24.8	26.0	27.4	28.4	29.6



## 2 Specifications

### 1 - 1 RXYQ-U

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Technical specifications System			RXYQ42U		RXYQ44U		RXYQ46U		RXYQ48U		RXYQ50U		
Space cooling recommended combination 2	A Condition (35°C -27/19)	EERd			2.3				2.2		2.1		
		Pdc	kW		118.0	123.5	130.0		135.0		140.4		
	B Condition (30°C -27/19)	EERd			4.4	4.3				4.2			
Space cooling recommended combination 2	B Condition (30°C -27/19)	Pdc	kW		86.9	91.0		95.8		99.5		103.5	
	C Condition (25°C -27/19)	EERd			8.2	7.9		8.1		8.0			
		Pdc	kW		55.9	58.5		61.6		63.9		66.5	
	D Condition (20°C - 27/19)	EERd			15.3			14.0		15.6			
		Pdc	kW		24.8	26.0		27.4		28.4		29.6	
Space cooling recommended combination 3	A Condition (35°C -27/19)	EERd			2.3				2.2		2.1		
		Pdc	kW		118.0	123.5	130.0		135.0		140.4		
	B Condition (30°C -27/19)	EERd			4.3		4.2		4.1				
		Pdc	kW		87.0	91.0		95.8		99.5		103.5	
	C Condition (25°C -27/19)	EERd			8.0	7.9		7.8		7.9			
		Pdc	kW		55.9	58.5		61.6		63.9		66.5	
	D Condition (20°C - 27/19)	EERd			15.2	14.2		13.9		13.8		15.6	
		Pdc	kW		24.8	26.0		27.4		28.4		29.6	
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.4	2.3		2.4		2.3				
		Pdh (declared heating cap) kW		62.4	64.8		67.0		69.6		74.3		
		Tbiv (bivalent temperature) °C		-10									
	TOL	COPd (declared COP)		2.4	2.3		2.4		2.3				
		Pdh (declared heating cap) kW		62.4	64.8		67.0		69.6		74.3		
		Tol (temperature operating °C limit)		-10									
	A Condition (-7°C)	COPd (declared COP)		2.7									
		Pdh (declared heating cap) kW		55.2	57.3		59.3		61.6		65.7		
				3.7									
	B Condition (2°C)	COPd (declared COP)		33.6	34.9		36.1		37.5		40.0		
				6.3									
	C Condition (7°C)	COPd (declared COP)		21.6	22.4		23.2		24.1		25.7		
				8.6									
	D Condition (12°C)	COPd (declared COP)		9.9	10.0		10.3		10.7		12.0		
				2.7									
	Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)		55.2	57.3		59.3		61.6		65.7	
			3.7										
B Condition (2°C)		COPd (declared COP)		33.6	34.9		36.1		37.5		40.0		
				6.4									
C Condition (7°C)		COPd (declared COP)		21.6	22.4		22.8		24.1		25.7		
				8.7									
D Condition (12°C)		COPd (declared COP)			10.0		10.3		10.7		12.2		
				2.4									
Space heating (Average climate) recommended combination 2	TBivalent	COPd (declared COP)		62.4	64.8		67.0		69.6		74.3		
		Pdh (declared heating cap) kW											
	TOL	Tbiv (bivalent temperature) °C		-10									
		COPd (declared COP)		2.4	2.3		2.4		2.3				
	Pdh (declared heating cap) kW		62.4	64.8		67.0		69.6		74.3			
	Tol (temperature operating °C limit)		-10										



## 2 Specifications

### 1 - 1 RXYQ-U

Technical specifications System					RXYQ42U	RXYQ44U	RXYQ46U	RXYQ48U	RXYQ50U
Space heating (Average climate) recommended combination 3	A	COPd (declared COP)			2.7	2.6	2.7		2.6
	Condition	Pdh (declared heating cap)	kW		55.2	57.3	59.3	61.6	65.7
	B	COPd (declared COP)			3.7		3.6		
	Condition	Pdh (declared heating cap)	kW		33.6	34.9	36.1	37.5	40.0
	(2°C)								
	C	COPd (declared COP)			6.3	6.2		6.3	6.4
	Condition	Pdh (declared heating cap)	kW		21.6	22.4	23.2	24.1	25.7
	(7°C)								
	D	COPd (declared COP)			8.6		8.7	8.8	8.7
	Condition	Pdh (declared heating cap)	kW		9.9	10.0	10.3	10.7	11.8
	(12°C)								
	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	Min.				525.0	550.0	575.0	600.0	625.0
connection	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	Cooling	Rated	m³/h	41,700	42,300	44,580	46,800	46,260
	rate	Heating	Rated	m³/h	41,700	42,300	44,580	46,800	46,260
Sound power level	Cooling	Nom.		dB(A)	89.1 (4)	89.8 (4)	89.3 (4)	90.4 (4)	89.8 (4)
	Heating	Nom.		dB(A)	72.4 (4)		73.3 (4)	73.4 (4)	72.7 (4)
Sound pressure level	Cooling	Nom.		dB(A)	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			Braze connection				
		OD		mm	19.1				
	Gas	Type			Braze connection				
		OD		mm	41.3				
Piping connections	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	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
	Thermostat-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 FXFQ50AVEB + 14 x FXFQ63AVEB + 2 x FXFQ80AVEB		9 x FXFQ50AVEB + 15 x FXFQ63AVEB	
Recommended combination 2				6 x FXSQ50A2VEB + 14 x FXSQ63A2VEB + 2 x FXSQ80A2VEB		9 x FXSQ50A2VEB + 15 x FXSQ63A2VEB	
Recommended combination 3				6 x FXMQ50P7VEB + 14 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		9 x FXMQ50P7VEB + 15 x FXMQ63P7VEB	
Cooling capacity	Prated,c		kW	145.8 (1)		151.2 (1)	
Heating capacity	Nom.	6°CWB	kW	145.8 (2)		151.2 (2)	
	Prated,h		kW	79.0		83.7	
	Max.	6°CWB	kW	163.0 (2)		169.5 (2)	
COP at nom. capacity	6°CWB		kW/kW	3.56 (2)		3.54 (2)	
ESEER - Automatic				6.42		6.38	

## 2 Specifications

### 1 - 1 RXYQ-U

2

Technical specifications System				RXYQ52U	RXYQ54U
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
$\eta_{s,c}$				253.7	254.1
$\eta_{s,c}$ recommended combination 2				251.6	252.5
$\eta_{s,c}$ recommended combination 3				251.5	253.9
$\eta_{s,h}$				167.2	169.4
$\eta_{s,h}$ recommended combination 2				168.7	170.8
$\eta_{s,h}$ recommended combination 3				164.4	166.0
Space cooling	A Condition (35°C - 27/19)	EERd	Pdc kW	2.0	1.9
				145.8	151.2
	B Condition (30°C - 27/19)	EERd	Pdc kW	4.2	4.1
				107.4	111.4
	C Condition (25°C - 27/19)	EERd	Pdc kW	8.1	
				69.1	71.6
	D Condition (20°C - 27/19)	EERd	Pdc kW	17.6	19.1
				30.7	34.4
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd	Pdc kW	2.0	1.9
				145.8	151.2
	B Condition (30°C - 27/19)	EERd		4.1	
Space cooling recommended combination 2	B Condition (30°C - 27/19)	Pdc	kW	107.4	111.4
	C Condition (25°C - 27/19)	EERd	Pdc kW	8.1	
				69.0	71.6
	D Condition (20°C - 27/19)	EERd		17.4	18.9
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd	Pdc kW	30.7	34.1
				2.0	1.9
	B Condition (30°C - 27/19)	EERd	Pdc kW	145.8	151.2
				4.1	
	C Condition (25°C - 27/19)	EERd	Pdc kW	107.4	111.4
				8.0	8.2
	D Condition (20°C - 27/19)	EERd	Pdc kW	69.1	71.6
				17.5	19.1
Space heating (Average climate)	TBivalent	COPd (declared COP)	Pdh (declared heating cap) kW	2.2	2.1
				79.0	83.7
				-10	
	TOL	COPd (declared COP)	Pdh (declared heating cap) kW	2.2	2.1
				79.0	83.7
				-10	
	A Condition (-7°C)	COPd (declared COP)	Pdh (declared heating cap) kW	2.6	
				69.9	74.0
	B Condition (2°C)	COPd (declared COP)	Pdh (declared heating cap) kW	3.8	3.9
				42.5	45.1
	C Condition (7°C)	COPd (declared COP)	Pdh (declared heating cap) kW	6.6	6.8
				27.4	29.0
	D Condition (12°C)	COPd (declared COP)	Pdh (declared heating cap) kW	9.0	
				14.2	
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)	Pdh (declared heating cap) kW	2.6	
				69.9	74.0
	B Condition (2°C)	COPd (declared COP)	Pdh (declared heating cap) kW	3.8	3.9
				42.6	45.1
	C Condition (7°C)	COPd (declared COP)	Pdh (declared heating cap) kW	6.7	6.8
				27.4	29.0
	D Condition (12°C)	COPd (declared COP)	Pdh (declared heating cap) kW	9.1	
				14.4	
	TBivalent	COPd (declared COP)	Pdh (declared heating cap) kW	2.2	2.1
				79.0	83.7

## 2 Specifications

### 1 - 1 RXYQ-U

Technical specifications System					RXYQ52U		RXYQ54U		
Space heating (Average climate) recommended combination 2	TBivalent	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 °C limit)			-10				
Space heating (Average climate) recommended combination 3	A	COPd (declared COP)			2.6		2.5		
	Condition (-7°C)	PdH (declared heating cap) kW			69.9		74.0		
	B	COPd (declared COP)			3.7		3.8		
	Condition (2°C)	PdH (declared heating cap) kW			42.5		45.1		
	C	COPd (declared COP)			6.4		6.5		
	Condition (7°C)	PdH (declared heating cap) kW			27.3		29.0		
	D	COPd (declared COP)			8.7				
	Condition (12°C)	PdH (declared heating cap) kW			13.7				
	TBivalent	COPd (declared COP)			2.2		2.1		
		PdH (declared heating cap) kW			79.0		83.7		
TOL	Tbiv (bivalent temperature) °C			-10					
	COPd (declared COP)			2.2		2.1			
	PdH (declared heating cap) kW			79.0		83.7			
	Tol (temperature operating °C limit)			-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)				
Sound pressure level	Heating	Nom.	dBA	72.0 (4)	71.1 (4)				
	Cooling	Nom.	dBA	67.1 (5)	66.8 (5)				
Refrigerant	Type				R-410A				
	GWP				2,087.5				
Refrigerant oil	Type				Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection				
		OD	mm	19.1					
	Gas	Type			Braze connection				
		OD	mm	41.3					
Piping connections	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	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			
	Thermostat-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				50				
	Voltage				380-415				
Power supply intake					Both indoor and outdoor unit				
Voltage range	Min.				-10				
	Max.				10				

## 2 Specifications

### 1 - 1 RXYQ-U

2

Electrical specifications System		RXYQ22U	RXYQ24U	RXYQ26U	RXYQ28U	RXYQ30U
Current - 50Hz	Starting current (MSC) - remark	See note 8				
	Zmax List	No requirements				
	Minimum Ssc value	kVa	11,573 (8)	11,597 (8)	12,831 (8)	13,585 (8)
	Minimum circuit amps (MCA)	A	46.0 (9)		51.0 (9)	55.0 (9)
	Maximum fuse amps (MFA)	A	63 (10)			80 (10)
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	Starting current (MSC) - remark		See note 8				
	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)
	Maximum fuse amps (MFA)	A	80 (10)			100 (10)	
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	Starting current (MSC) - remark		See note 8				
	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)
	Maximum fuse amps (MFA)	A	100 (10)			125 (10)	
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	Starting current (MSC) - remark			See note 8	
	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)	
	Maximum fuse amps (MFA)	A	125 (10)		
Wiring connections - 50Hz	For power supply	Quantity	5G		
	For connection with indoor	Quantity	2		
		Remark	F1,F2		

## 2 Specifications

1 - 1 RXYQ-U

# 3 Options

## 3 - 1 Options

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

3

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-.	---			KKS26B81*		

### Notes

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

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

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

3D120006B

## 4 Combination table

### 4 - 1 Combination Table

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* / RYQ8*	1						
	RXYQ10* / RYQ10* / RYQ10*		1					
	RXYQ12* / RYQ12* / RYQ12*			1				
	RXYQ14* / RYQ14* / RYQ14*				1			
	RXYQ16* / RYQ16* / RYQ16*					1		
	RXYQ18* / RYQ18* / RYQ18*						1	
	RXYQ20* / RYQ20* / RYQ20*							1
	RXYQ22* / RYQ22* / RYQ22*		1	1				
	RXYQ24* / RYQ24* / RYQ24*		1		1			
	RXYQ26* / RYQ26* / RYQ26*			1	1			
Multi-combination with 2 outdoor units	RXYQ28* / RYQ28* / RYQ28*				1	1		
	RXYQ30* / RYQ30* / RYQ30*						1	
	RXYQ32* / RYQ32* / RYQ32*							1
	RXYQ34* / RYQ34* / RYQ34*						1	1
	RXYQ36* / RYQ36* / RYQ36*						1	1
	RXYQ38* / RYQ38* / RYQ38*	1	1					1
	RXYQ40* / RYQ40* / RYQ40*		1	1				1
	RXYQ42* / RYQ42* / RYQ42*			1				1
	RXYQ44* / RYQ44* / RYQ44*				1			1
	RXYQ46* / RYQ46* / RYQ46*					1		1
Multi-combination with 3 outdoor units	RXYQ48* / RYQ48* / RYQ48*						1	
	RXYQ50* / RYQ50* / RYQ50*							1
	RXYQ52* / RYQ52* / RYQ52*							
	RXYQ54* / RYQ54* / RYQ54*							
	RXYQ56* / RYQ56* / RYQ56*							
	RXYQ58* / RYQ58* / RYQ58*							
	RXYQ60* / RYQ60* / RYQ60*							
	RXYQ62* / RYQ62* / RYQ62*							
	RXYQ64* / RYQ64* / RYQ64*							
	RXYQ66* / RYQ66* / RYQ66*							
	RXYQ68* / RYQ68* / RYQ68*							

#### Remark

RXYQ8-20 = Single continuous heating

RXYQ22-54 Multi continuous heating

RXYQ8-20 = Single non-continuous heating

RXYQ22-54 Multi non-continuous heating

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

RXYQ22-54 Multi non-continuous heating replacement (VRV4-Q)

1) For single unit installation RYQ\* units (continuous heating) and RXYQ\* units (non-continuous heating)

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

3) "Continuous heating" multi-outdoor-unit combinations consist of RYMQ8-20 units (e.g. RYQ36\*=RYMQ16\*+RYMQ20\*).

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

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

5) RYQ8-20 "Continuous heating" multi-outdoor-unit combinations cannot contain RXYQ\* units.

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

7) Multi "Non-continuous heating" replacement models only consist of RXYQ8-20 modules (e.g. RXYQ36\*=RXYQ16\*+RXYQ20\*).

8) Replacement units cannot be combined with other units.

9) T-series outdoor units and U-series outdoor units cannot share the same refrigerant circuit. When combining these units, make sure they are part of separate refrigerant circuits.

**3D120060**

# 4 Combination table

## 4 - 1 Combination Table

RXYQ-U  
RYYQ-U  
RYMQ-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) <sup>(3)</sup>
·VRV* DX· indoor unit	O	O	O	O
·RA DX· indoor unit	O	O	X	X
Hydrobox unit	O	X	O <sub>1</sub>	X
Air handling unit <sup>(3)</sup>	O	X	X	O <sub>2</sub>

O: Allowed  
X: Not allowed

### Notes

1. ·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·}}]
2. O<sub>1</sub>
  - 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·).
  - Only connect ·Hydrobox· units of the ·HXY\*· series.  
 → ·HXHD\*· series ·Hydrobox· units are not allowed.
3. O<sub>2</sub>
  - Combination of ·AHU· only + control box ·EKEQFA· (the combination with ·VRV DX· indoor units is not allowed; maximum ·54·HP for ·400 + 2x500· class ·EKEV· kit)  
 → ·X·-control is possible (up to ·3x· {·EKEV+·EKEQFA\*· boxes} can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.  
 → ·Y·-control is possible (up to ·3x· {·EKEV+·EKEQFA\*· boxes} can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.  
 → ·W·-control is possible (up to ·3x· {·EKEV+·EKEQFA\*· boxes} can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
  - Combination of ·AHU· only + control box ·EKEQMA· (not combined with ·VRV DX· indoor units)  
 → Z-control is possible (the allowed number of {·EKEV + EKEQMA· boxes} is determined by the connection ratio (·90-110%·) and the capacity of the outdoor unit.
4. Combination of ·AHU· and ·VRV DX· indoor units  
 → Z-control is possible (·EKEQMA\*· boxes are allowed, but with a limited connection ratio).
5. The combination of ·AHU· with ·Hydrobox· units or ·RA DX· indoor units is not allowed.
6. (3) The following units are considered AHUs:  
 → ·EKEV + EKEQ(MA/FA) + AHU· coil  
 → ·Biddle· air curtain  
 → ·FXMQ\_MF· units

### Information

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

3D079543F

RXYQ-U  
RYYQ-U  
RYMQ-U

VRV4

Heat pump

Indoor unit combination restrictions

(2/2)

Combination table	RYYQ*	RYYQ*	RXYQ* RXMLQ* RXYLQ*	RXYQ* RXMLQ* RXYLQ*
	Single continuous heating	Multi continuous heating	Single non-continuous heating	Multi non-continuous heating
·VRV* DX· indoor unit	O	O	O	O
·RA DX· indoor unit	O	X	O	X
Hydrobox unit	O	O <sub>1</sub>	O	O <sub>1</sub>
Air handling unit (AHU) <sup>(2)</sup>	O	O	O	O

O: Allowed  
X: Not allowed

### Notes

1. O<sub>1</sub>
  - Available upon request through the ·SPN· procedure.
2. (2) The following units are considered AHUs:  
 → ·EKEV + EKEQ(MA/FA) + AHU· coil  
 → ·Biddle· air curtain  
 → ·FXMQ\_MF· units

3D079543F



## 4 Combination table

### 4 - 1 Combination Table

RXYQ-U  
RYYQ-U  
RYMQ-U  
RXYLQ-T  
RXMLQ-T

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

Wall mounted type	Emura	FTXJ20M FTXJ25M FTXJ35M FTXJ50M FTXA20 FTXA25 FTXA35 FTXA42 FTXA50
Ceiling/wall mounted	Flex	FLXS25B FLXS35B FLXS50B FLXS60B
Floor standing type	FVXM	FVXM25F FVXM35F FVXM50F CVXM20A FVXM25A FVXM35A FVXM50A FVXM60A
	Nexura	FVXG25K FVXG35K FVXG50K

#### Remark

The limitations on the use of ·RA DX· indoor units with the ·VRV4· Heat Pump are subject to the rules set out in drawings ·3D079543· and ·3D079540·. If you want to connect ·RA·/·SA· ·DX· cassette, ceiling-mounted, or duct indoor units, use their ·VRV DX· indoor unit equivalents instead.

**3D082373E**

## 5 Capacity tables

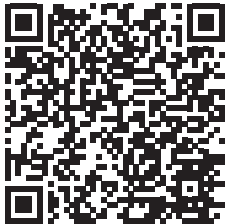
### 5 - 1 Capacity Table Legend

5

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

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

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

$A = B \times C$

Inlet air temperature of heat exchanger

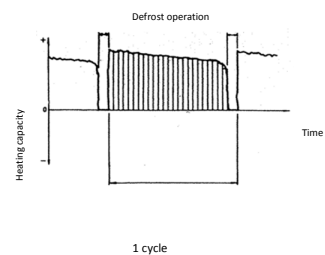
	[°C DB/°C WB] 1/-7/-6 or less	-5/-5,6	-3/-3,7	0/-0,7	3/2,2	5/4,1	7/6
Integrated correction factor for frost accumulation C							
8HP	0,95	0,93	0,88	0,84	0,85	0,90	1,00
10HP	0,95	0,93	0,87	0,79	0,80	0,88	1,00
12HP	0,95	0,92	0,87	0,75	0,76	0,85	1,00
14HP	0,95	0,92	0,86	0,72	0,73	0,84	1,00
16HP	0,95	0,92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



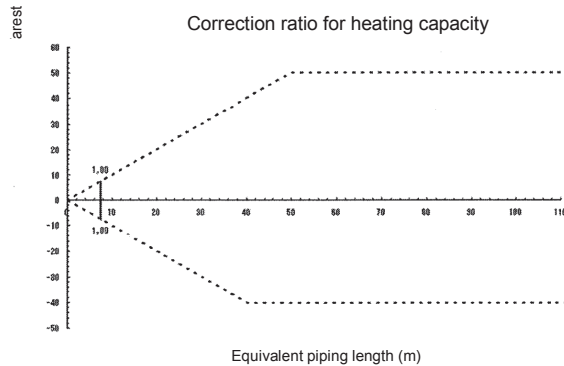
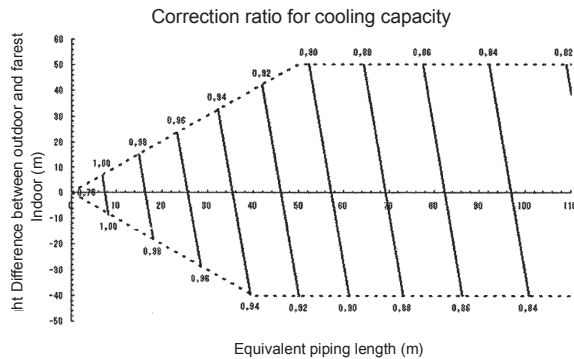
3D079898A

# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

RXYQQ8U  
RXYQ8U  
RYYQ8U  
RYMQ8U

5



### NOTES

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

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

- Method of calculating the capacity of the outdoor units

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

Condition: Indoor connection ratio does not exceed 100%.

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

Condition: Indoor connection ratio exceeds 100%.

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

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

Model	Gas	Liquid
8HP	22.2	12.7

- When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).

\*Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

Diameter of main pipes (standard size)

Model	Gas	Liquid
8HP	19.1	9.5

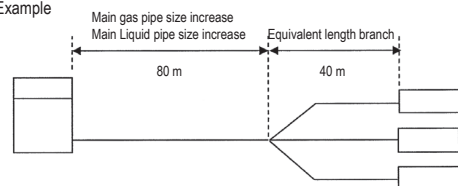
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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

Example



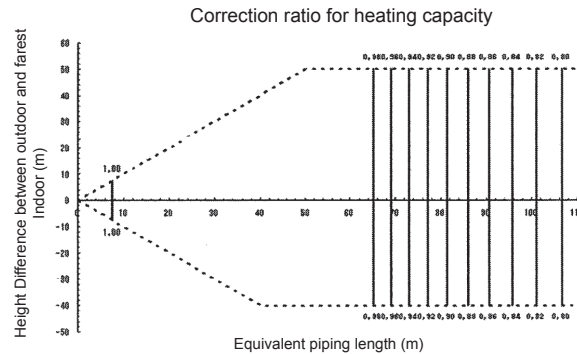
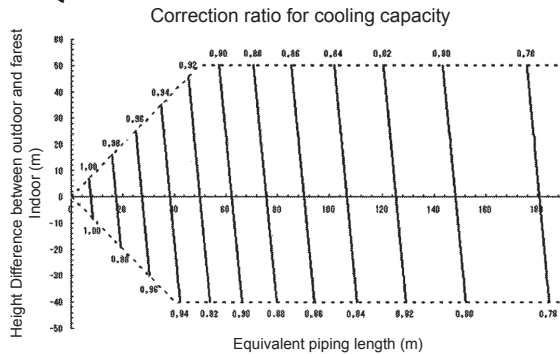
In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m  
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m  
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.86  
heating capacity when height difference = 0 is thus approximately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

3D079897A

# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

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%.

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

Condition: Indoor connection ratio exceeds 100%.

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

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

Model	Gas	Liquid
RXYQ10P	25.4*	12.7

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

- When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).

\*Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

Diameter of main pipes (standard size)

Model	Gas	Liquid
10 HP	22.2	9.5

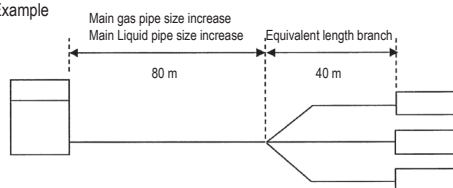
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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

#### Example



In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m  
(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m

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

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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

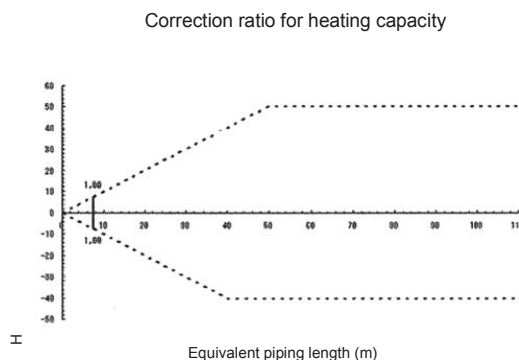
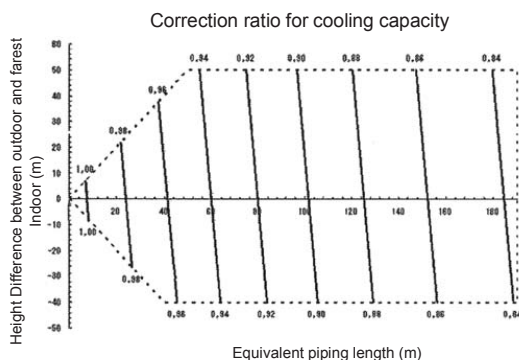
RXYQQ12,14,16,24,36U

RXYQ12,14,24,36U

RYYQ12,14,24,36U

RYMQ12,14U

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
12 HP	28.6	15.9
14 HP	28.6	15.9
24 HP	34.9	19.1
36 HP	41.3	22.2

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

Diameter of main pipes (standard size)

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

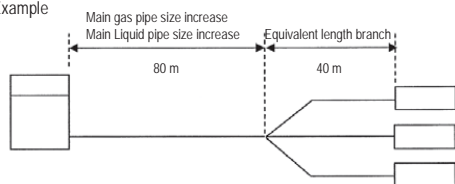
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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

Example



In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m

(Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m

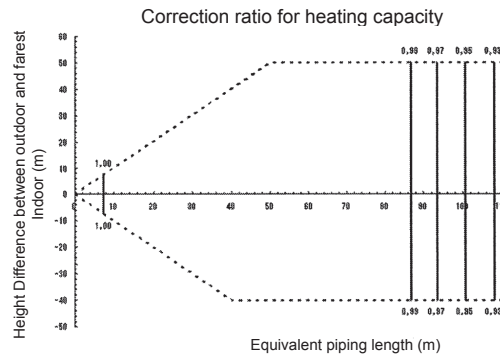
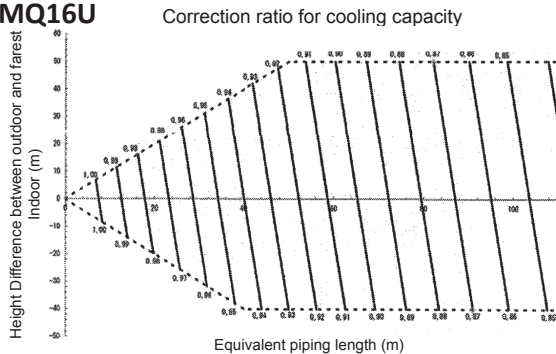
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.89  
heating capacity when height difference = 0 is thus approximately 1.0

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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

RXYQQ16U  
RXYQ16U  
RYYQ16U  
RYMQ16U



### 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

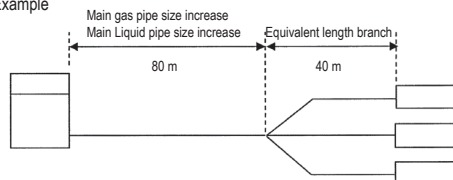
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

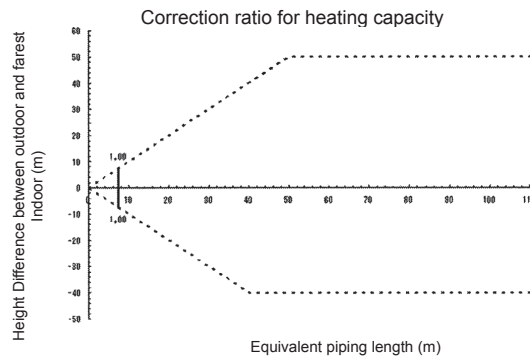
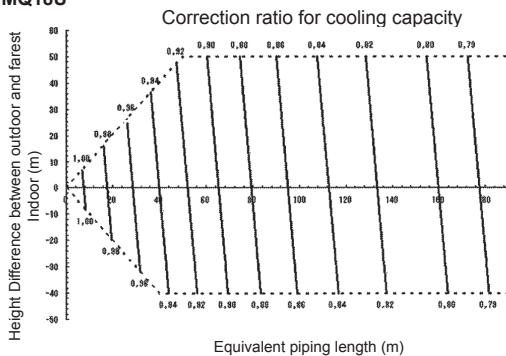
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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

5

RXYQQ18,26,28,30,38,40,42,44U  
RXYQ18,26,28,30,38,40,42,44U  
RYYQ18,26,28,30,38,40,42,44U  
RYYMQ18U



### 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

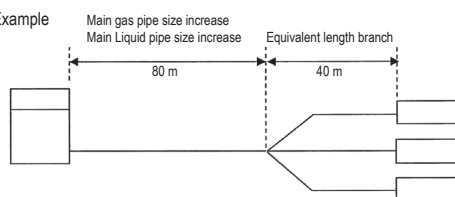
- Equivalent length used in the above figures is based upon the following equivalent length

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

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 (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

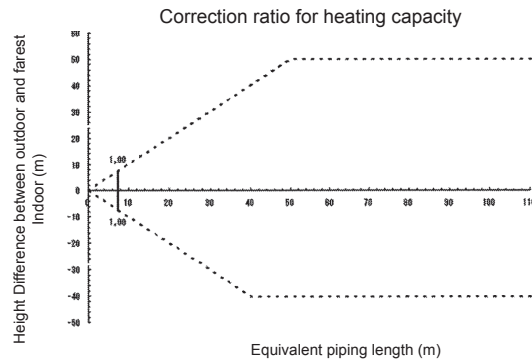
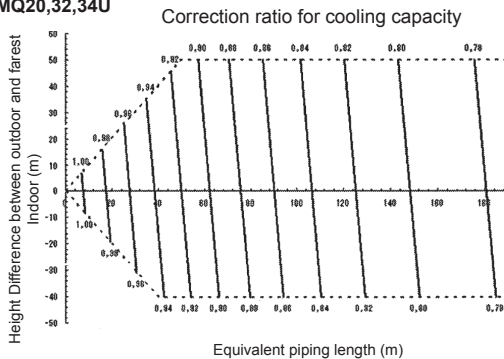
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# 5 Capacity tables

## 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

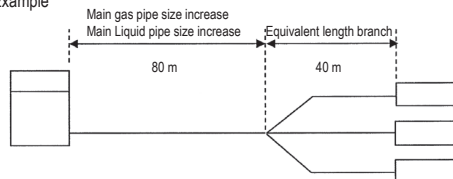
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

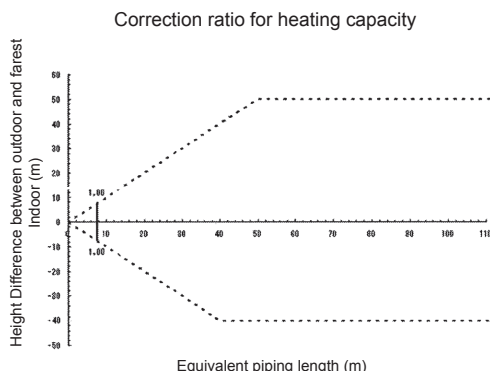
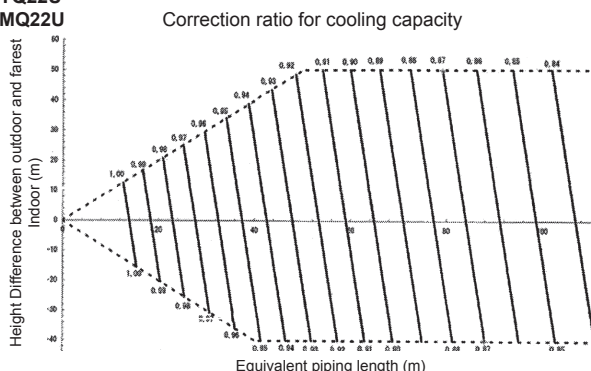
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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

5

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

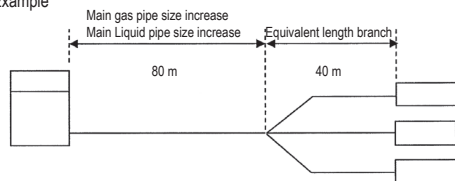
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

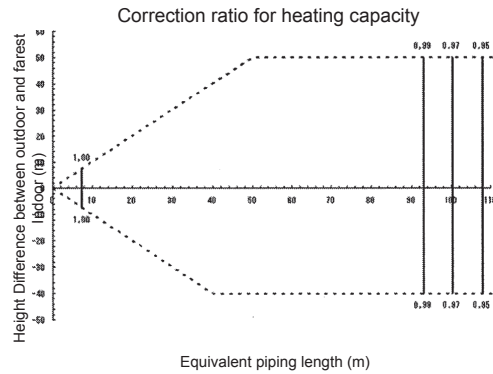
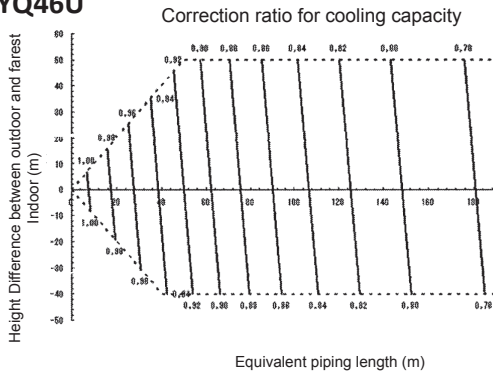
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# 5 Capacity tables

## 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

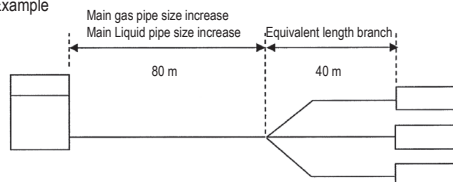
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

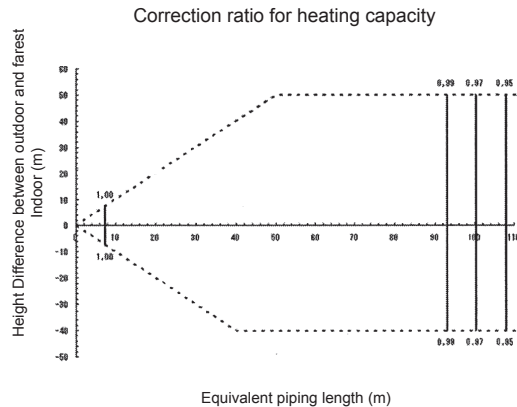
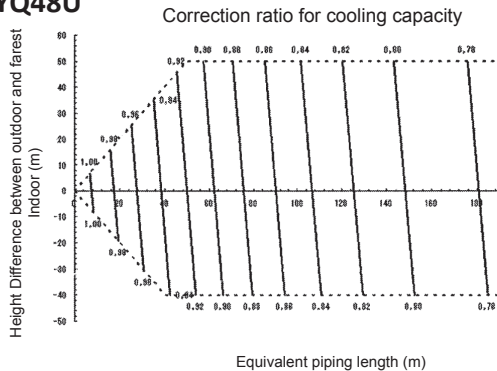
3D079897A

# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

5

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

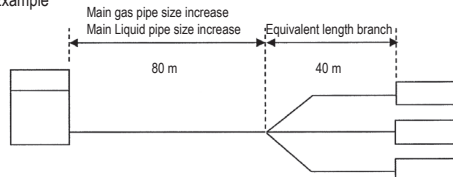
- Equivalent length used in the above figures is based upon the following equivalent length

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

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



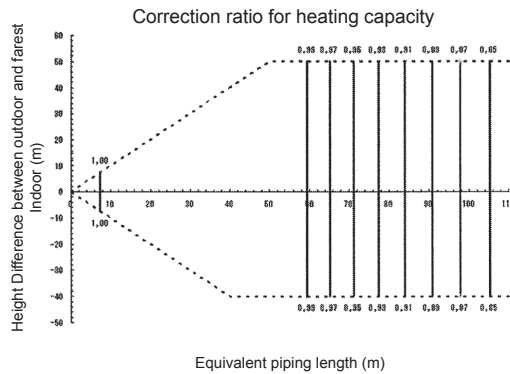
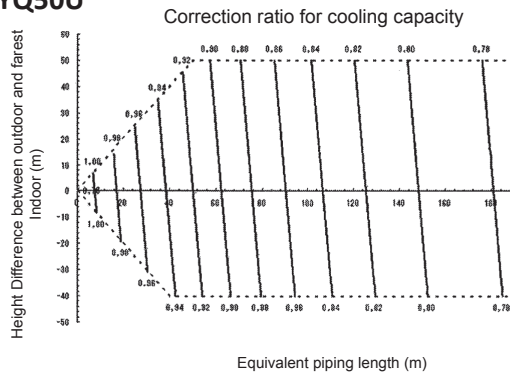
In the above case (Cooling) Overall equivalent length =  $80 \text{ m} \times 1.0 + 40 \text{ m} = 120 \text{ m}$   
(Heating) Overall equivalent length =  $80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$   
The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83  
heating capacity when height difference = 0 is thus approximately 0.97

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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

RYYQ50U  
RXYQ50U  
RXYQ50U



### 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

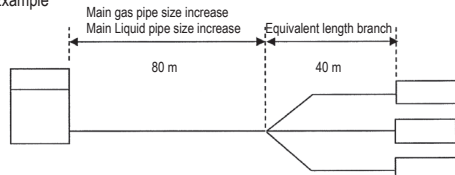
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

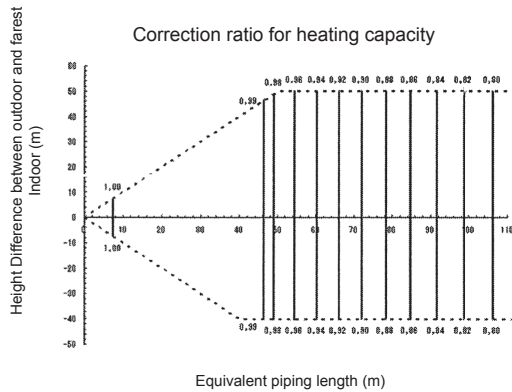
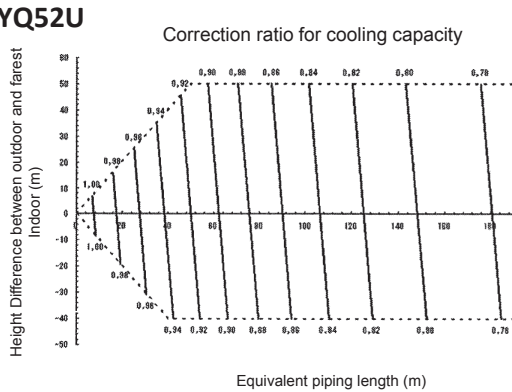
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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

RYYQ52U  
RXYQ52U  
RXYQ52U

5



### NOTES

- These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown in the above figures.
- With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
- Method of calculating the capacity of the outdoor units  
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

Condition: Indoor connection ratio does not exceed 100%.

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

Condition: Indoor connection ratio exceeds 100%.

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

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

Model	Gas	Liquid
52 HP	41.3	22.2

- When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).

\*Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

Diameter of main pipes (standard size)

Model	Gas	Liquid
52 HP	41.3	19.1

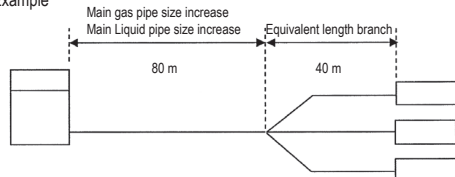
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

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

Example



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

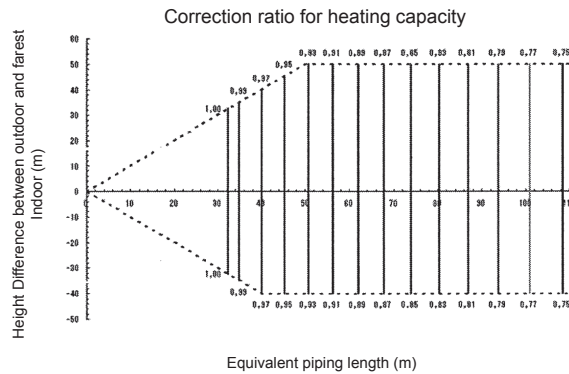
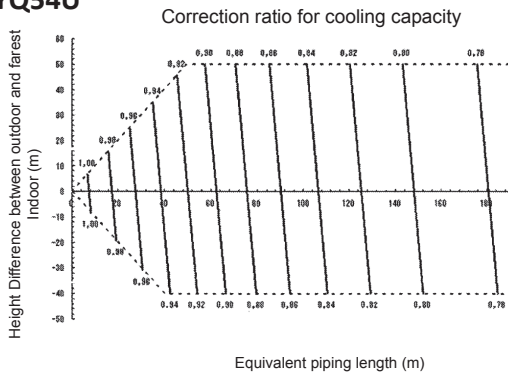
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# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

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

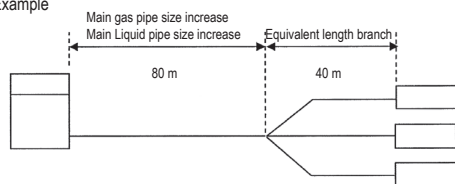
- Equivalent length used in the above figures is based upon the following equivalent length

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

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

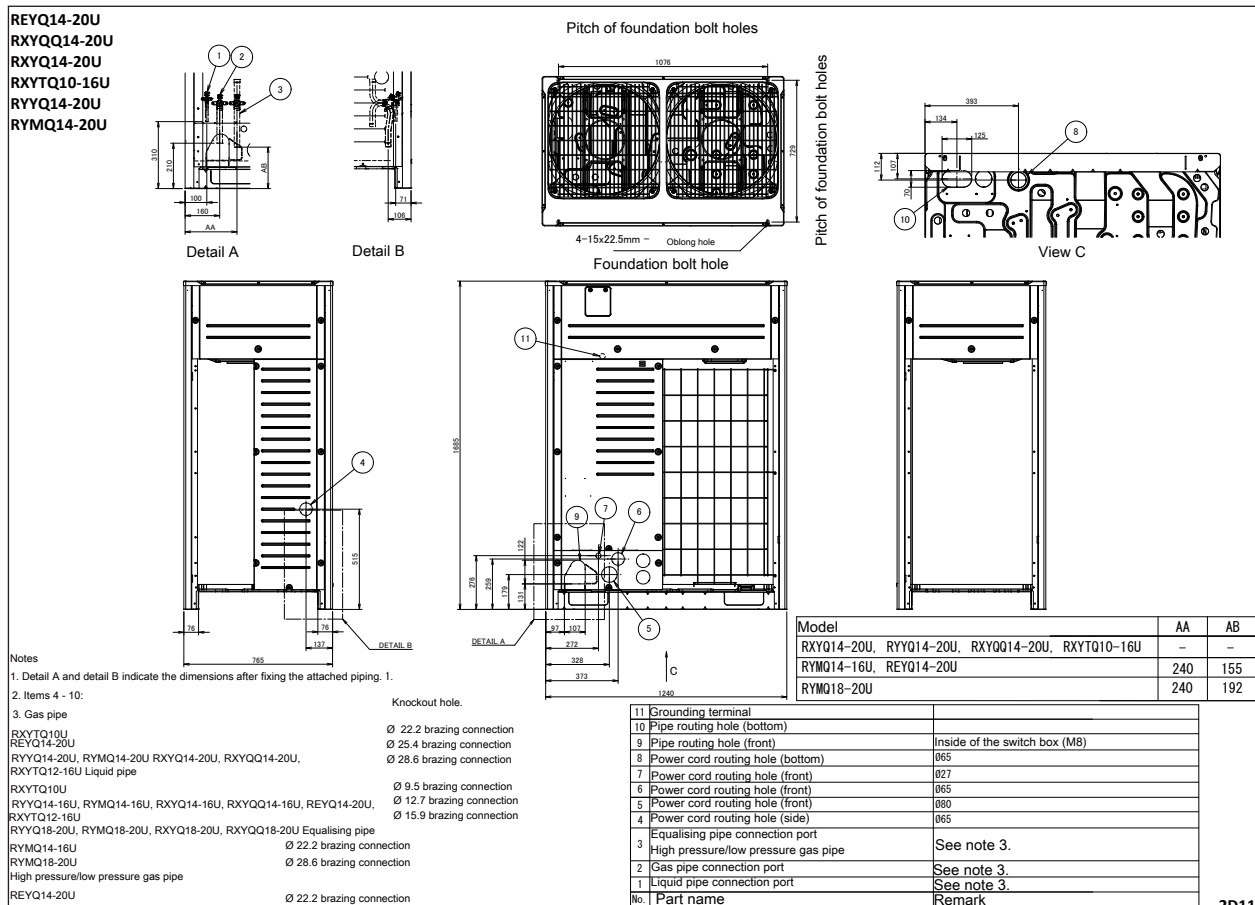
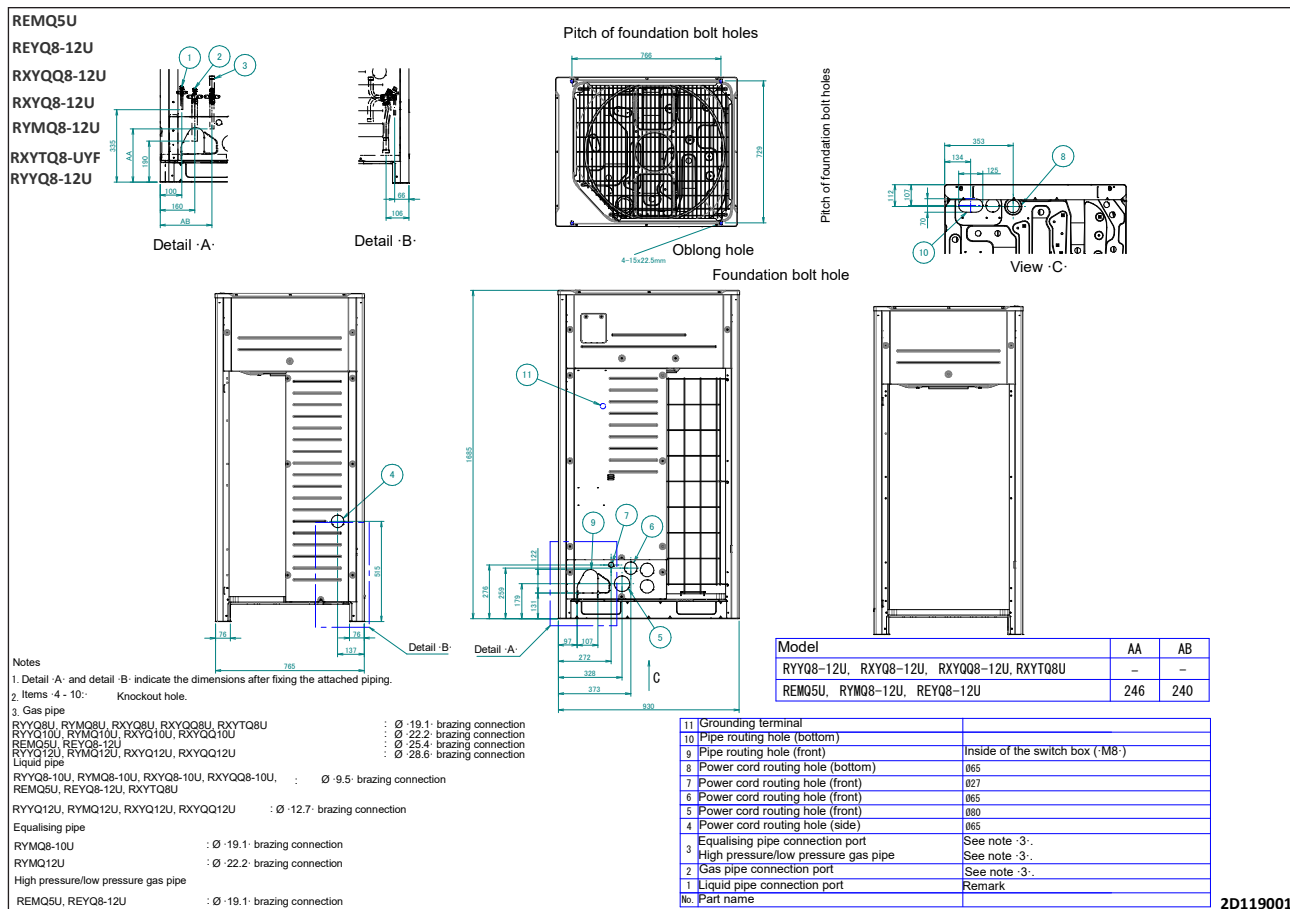
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## 6 Dimensional drawings

## 6 - 1 Dimensional Drawings

6



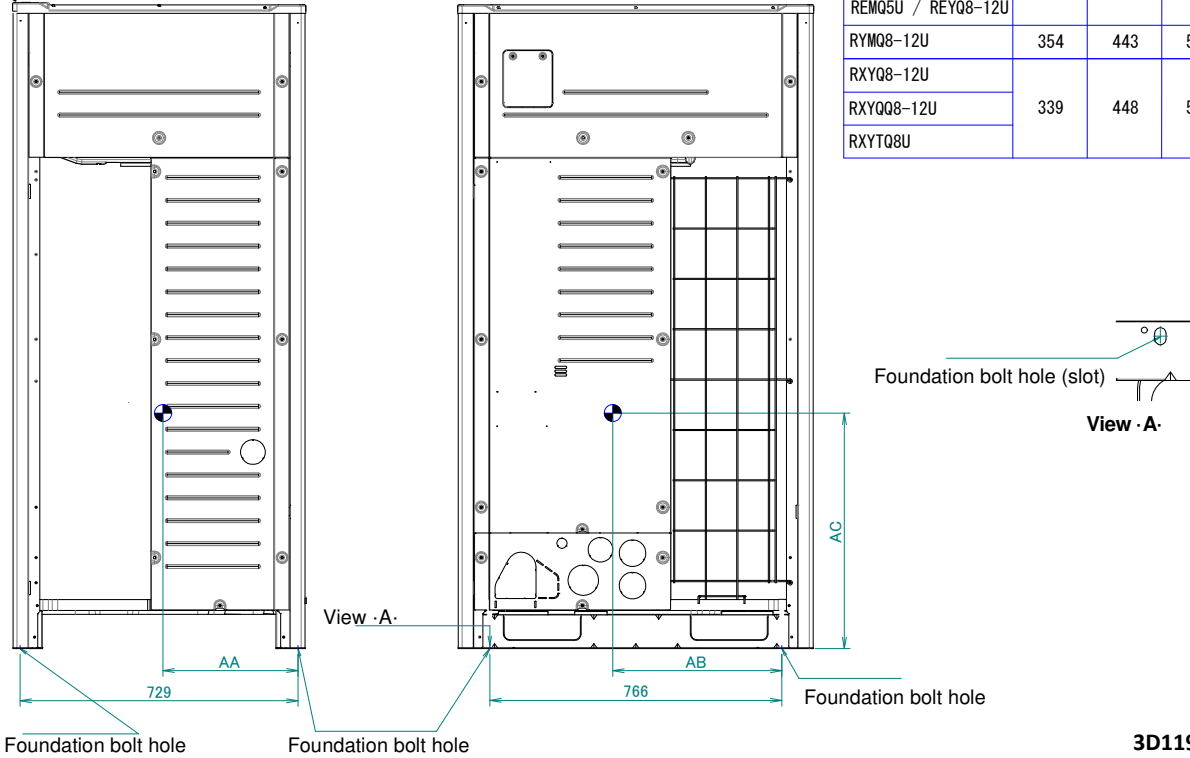


# 7 Centre of gravity

## 7 - 1 Centre of Gravity

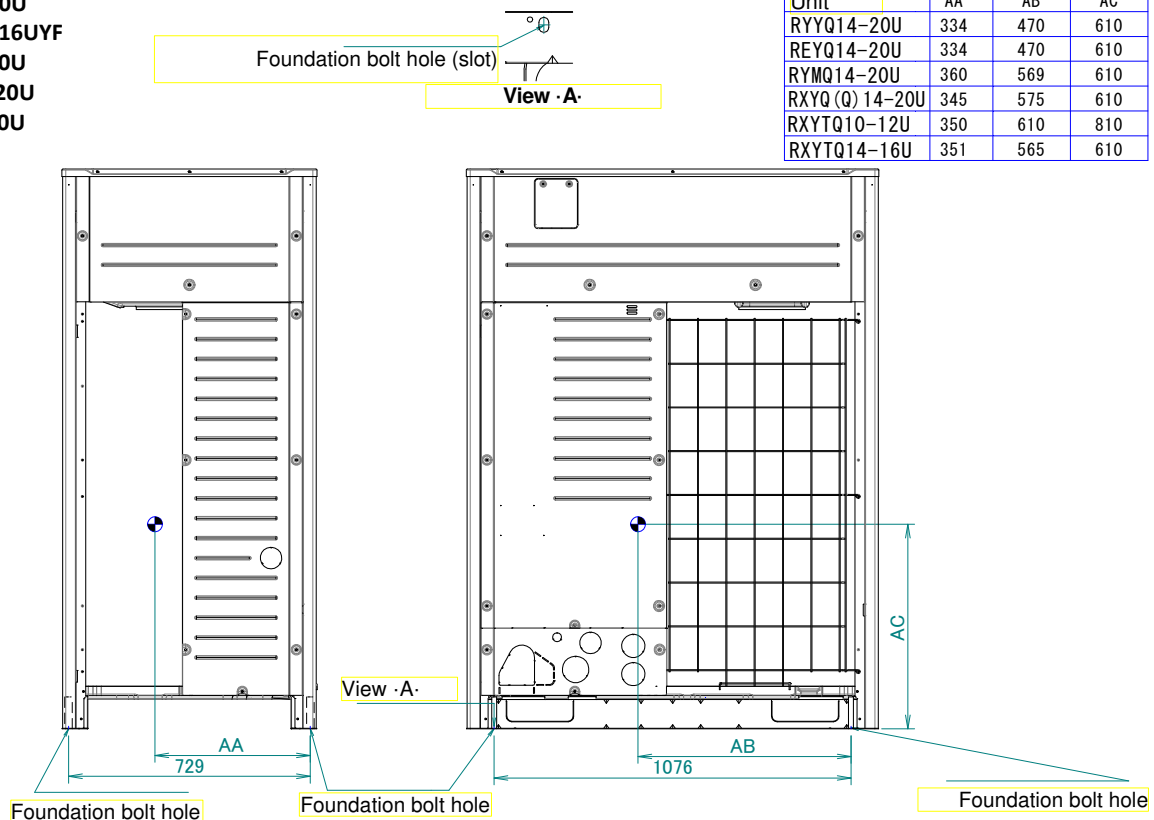
RXYQQ8-12U  
RXYQ8-12U  
RXYTQ8UYF  
RYYQ8-12U  
RYMQ8-12U  
REMQ5U  
REYQ8-12U

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



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

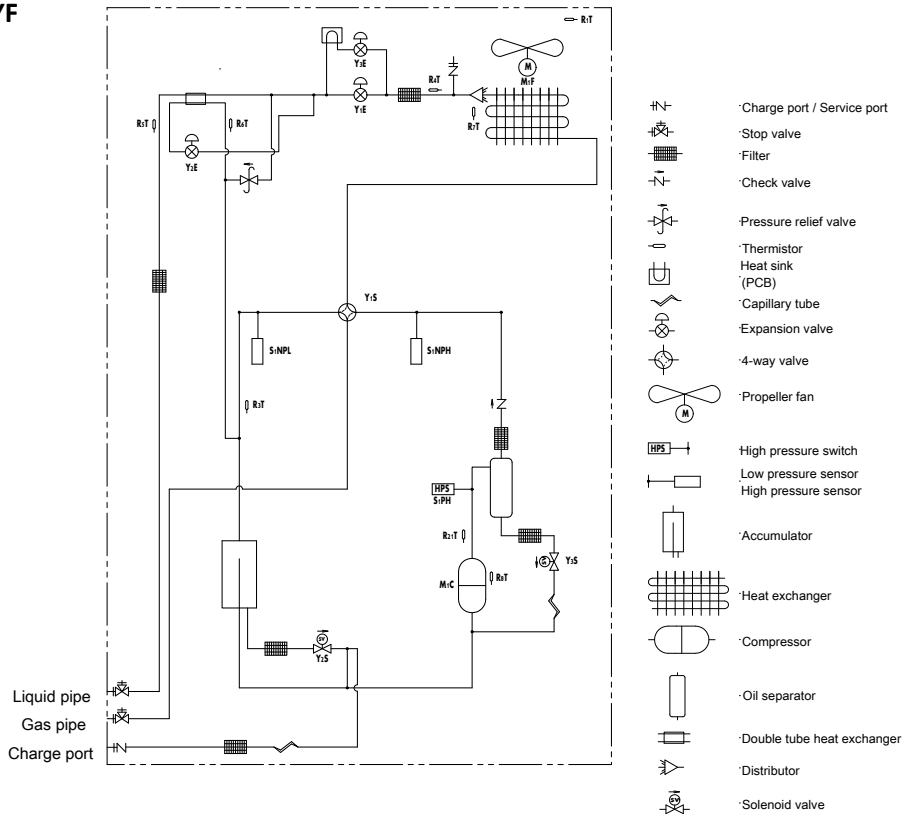
Unit	AA	AB	AC
RYYQ14-20U	334	470	610
REYQ14-20U	334	470	610
RYMQ14-20U	360	569	610
RXYQ (Q) 14-20U	345	575	610
RXYTQ10-12U	350	610	810
RXYTQ14-16U	351	565	610



# 8 Piping diagrams

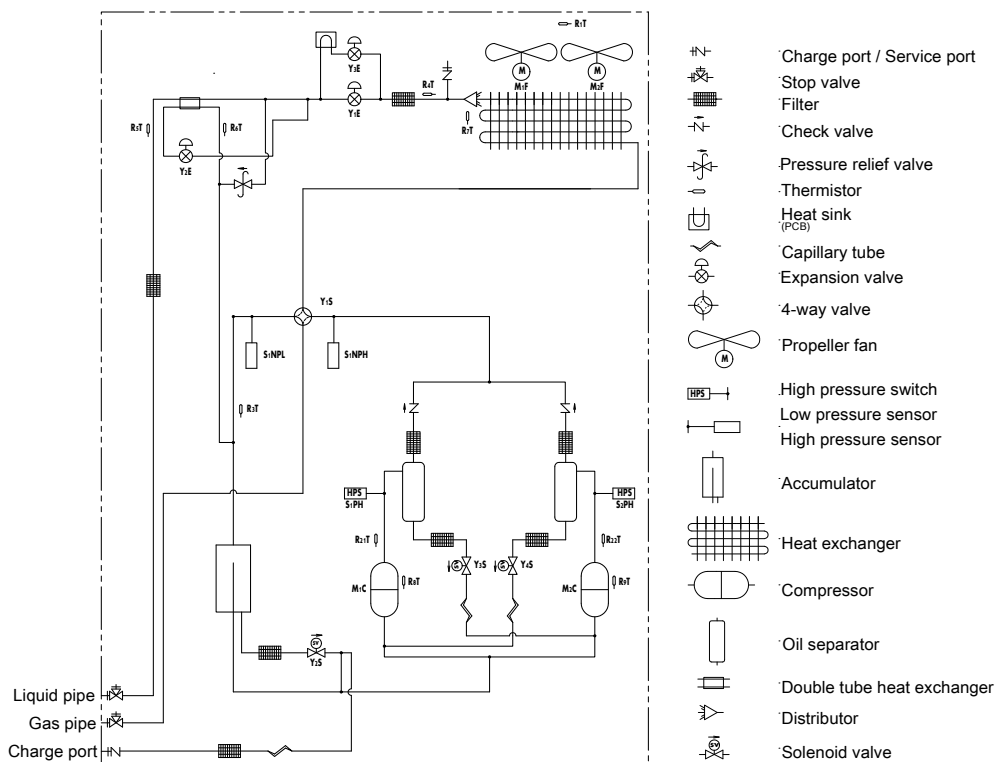
## 8 - 1 Piping Diagrams

RXYQ8-12U  
RXYTQ8UYF



3D118179

RXYQ14-20U  
RXYQ14-16UYF



3D118180

# 9 Wiring diagrams

## 9 - 1 Notes & Legend

**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)		

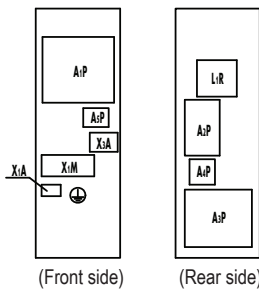
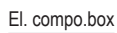
### NOTES

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.

2D117534

## 9 - 2 Wiring Diagrams - Single Phase

### Wiring diagram



## 8,10,12 class

**2D117534**

## 9 - 3 Wiring Diagrams - Three Phase

9

**Wiring diagram**

Power supply: 50Hz 3N~380V 50Hz 3N~380V 60Hz












Q1/Q2 F1/F2

50Hz 3N~380V 50Hz 3N~380V 60Hz

AP, ZC, X1A, X1B, X1C, X1D, X1E, X1F, X1G, X1H, X1I, X1J, X1K, X1L, X1M, X1N, X1O, X1P, X1Q, X1R, X1S, X1T, X1U, X1V, X1W, X1X, X1Y, X1Z, X2A, X2B, X2C, X2D, X2E, X2F, X2G, X2H, X2I, X2J, X2K, X2L, X2M, X2N, X2O, X2P, X2Q, X2R, X2S, X2T, X2U, X2V, X2W, X2X, X2Y, X2Z, X3A, X3B, X3C, X3D, X3E, X3F, X3G, X3H, X3I, X3J, X3K, X3L, X3M, X3N, X3O, X3P, X3Q, X3R, X3S, X3T, X3U, X3V, X3W, X3X, X3Y, X3Z, X4A, X4B, X4C, X4D, X4E, X4F, X4G, X4H, X4I, X4J, X4K, X4L, X4M, X4N, X4O, X4P, X4Q, X4R, X4S, X4T, X4U, X4V, X4W, X4X, X4Y, X4Z, X5A, X5B, X5C, X5D, X5E, X5F, X5G, X5H, X5I, X5J, X5K, X5L, X5M, X5N, X5O, X5P, X5Q, X5R, X5S, X5T, X5U, X5V, X5W, X5X, X5Y, X5Z, X6A, X6B, X6C, X6D, X6E, X6F, X6G, X6H, X6I, X6J, X6K, X6L, X6M, X6N, X6O, X6P, X6Q, X6R, X6S, X6T, X6U, X6V, X6W, X6X, X6Y, X6Z, X7A, X7B, X7C, X7D, X7E, X7F, X7G, X7H, X7I, X7J, X7K, X7L, X7M, X7N, X7O, X7P, X7Q, X7R, X7S, X7T, X7U, X7V, X7W, X7X, X7Y, X7Z, X8A, X8B, X8C, X8D, X8E, X8F, X8G, X8H, X8I, X8J, X8K, X8L, X8M, X8N, X8O, X8P, X8Q, X8R, X8S, X8T, X8U, X8V, X8W, X8X, X8Y, X8Z, X9A, X9B, X9C, X9D, X9E, X9F, X9G, X9H, X9I, X9J, X9K, X9L, X9M, X9N, X9O, X9P, X9Q, X9R, X9S, X9T, X9U, X9V, X9W, X9X, X9Y, X9Z, X10A, X10B, X10C, X10D, X10E, X10F, X10G, X10H, X10I, X10J, X10K, X10L, X10M, X10N, X10O, X10P, X10Q, X10R, X10S, X10T, X10U, X10V, X10W, X10X, X10Y, X10Z, X11A, X11B, X11C, X11D, X11E, X11F, X11G, X11H, X11I, X11J, X11K, X11L, X11M, X11N, X11O, X11P, X11Q, X11R, X11S, X11T, X11U, X11V, X11W, X11X, X11Y, X11Z, X12A, X12B, X12C, X12D, X12E, X12F, X12G, X12H, X12I, X12J, X12K, X12L, X12M, X12N, X12O, X12P, X12Q, X12R, X12S, X12T, X12U, X12V, X12W, X12X, X12Y, X12Z, X13A, X13B, X13C, X13D, X13E, X13F, X13G, X13H, X13I, X13J, X13K, X13L, X13M, X13N, X13O, X13P, X13Q, X13R, X13S, X13T, X13U, X13V, X13W, X13X, X13Y, X13Z, X14A, X14B, X14C, X14D, X14E, X14F, X14G, X14H, X14I, X14J, X14K, X14L, X14M, X14N, X14O, X14P, X14Q, X14R, X14S, X14T, X14U, X14V, X14W, X14X, X14Y, X14Z, X15A, X15B, X15C, X15D, X15E, X15F, X15G, X15H, X15I, X15J, X15K, X15L, X15M, X15N, X15O, X15P, X15Q, X15R, X15S, X15T, X15U, X15V, X15W, X15X, X15Y, X15Z, X16A, X16B, X16C, X16D, X16E, X16F, X16G, X16H, X16I, X16J, X16K, X16L, X16M, X16N, X16O, X16P, X16Q, X16R, X16S, X16T, X16U, X16V, X16W, X16X, X16Y, X16Z, X17A, X17B, X17C, X17D, X17E, X17F, X17G, X17H, X17I, X17J, X17K, X17L, X17M, X17N, X17O, X17P, X17Q, X17R, X17S, X17T, X17U, X17V, X17W, X17X, X17Y, X17Z, X18A, X18B, X18C, X18D, X18E, X18F, X18G, X18H, X18I, X18J, X18K, X18L, X18M, X18N, X18O, X18P, X18Q, X18R, X18S, X18T, X18U, X18V, X18W, X18X, X18Y, X18Z, X19A, X19B, X19C, X19D, X19E, X19F, X19G, X19H, X19I, X19J, X19K, X19L, X19M, X19N, X19O, X19P, X19Q, X19R, X19S, X19T, X19U, X19V, X19W, X19X, X19Y, X19Z, X20A, X20B, X20C, X20D, X20E, X20F, X20G, X20H, X20I, X20J, X20K, X20L, X20M, X20N, X20O, X20P, X20Q, X20R, X20S, X20T, X20U, X20V, X20W, X20X, X20Y, X20Z, X21A, X21B, X21C, X21D, X21E, X21F, X21G, X21H, X21I, X21J, X21K, X21L, X21M, X21N, X21O, X21P, X21Q, X21R, X21S, X21T, X21U, X21V, X21W, X21X, X21Y, X21Z, X22A, X22B, X22C, X22D, X22E, X22F, X22G, X22H, X22I, X22J, X22K, X22L, X22M, X22N, X22O, X22P, X22Q, X22R, X22S, X22T, X22U, X22V, X22W, X22X, X22Y, X22Z, X23A, X23B, X23C, X23D, X23E, X23F, X23G, X23H, X23I, X23J, X23K, X23L, X23M, X23N, X23O, X23P, X23Q, X23R, X23S, X23T, X23U, X23V, X23W, X23X, X23Y, X23Z, X24A, X24B, X24C, X24D, X24E, X24F, X24G, X24H, X24I, X24J, X24K, X24L, X24M, X24N, X24O, X24P, X24Q, X24R, X24S, X24T, X24U, X24V, X24W, X24X, X24Y, X24Z, X25A, X25B, X25C, X25D, X25E, X25F, X25G, X25H, X25I, X25J, X25K, X25L, X25M, X25N, X25O, X25P, X25Q, X25R, X25S, X25T, X25U, X25V, X25W, X25X, X25Y, X25Z, X26A, X26B, X26C, X26D, X26E, X26F, X26G, X26H, X26I, X26J, X26K, X26L, X26M, X26N, X26O, X26P, X26Q, X26R, X26S, X26T, X26U, X26V, X26W, X26X, X26Y, X26Z, X27A, X27B, X27C, X27D, X27E, X27F, X27G, X27H, X27I, X27J, X27K, X27L, X27M, X27N, X27O, X27P, X27Q, X27R, X27S, X27T, X27U, X27V, X27W, X27X, X27Y, X27Z, X28A, X28B, X28C, X28D, X28E, X28F, X28G, X28H, X28I, X28J, X28K, X28L, X28M, X28N, X28O, X28P, X28Q, X28R, X28S, X28T, X28U, X28V, X28W, X28X, X28Y, X28Z, X29A, X29B, X29C, X29D, X29E, X29F, X29G, X29H, X29I, X29J, X29K, X29L, X29M, X29N, X29O, X29P, X29Q, X29R, X29S, X29T, X29U, X29V, X29W, X29X, X29Y, X29Z, X30A, X30B, X30C, X30D, X30E, X30F, X3

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

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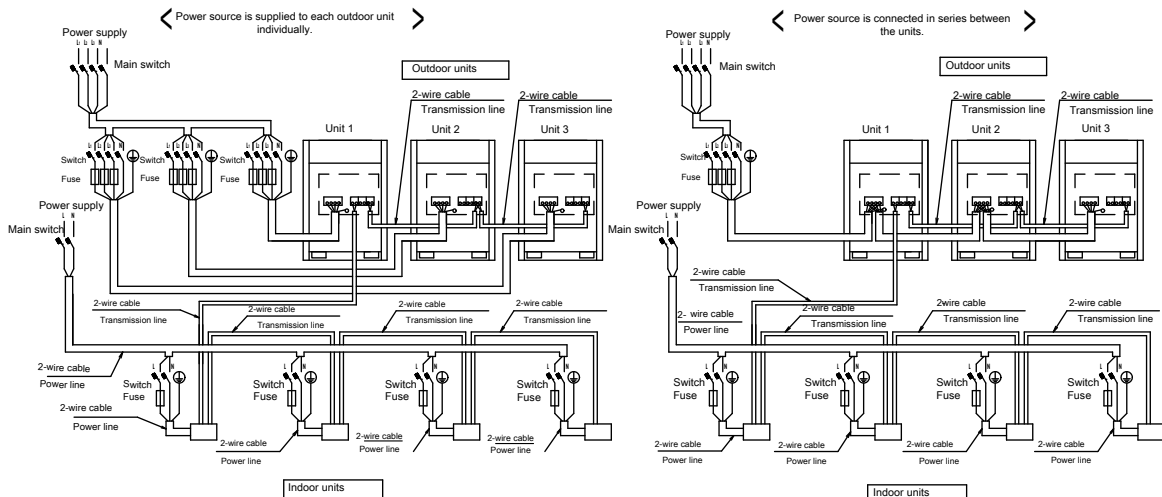
# 10 External connection diagrams

## 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.

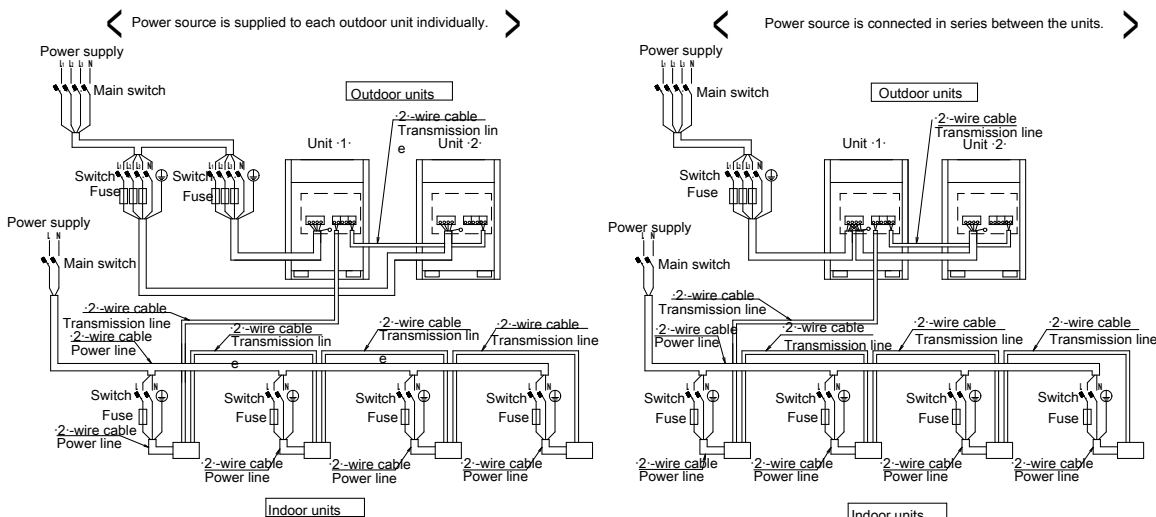


**3D119200**

**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

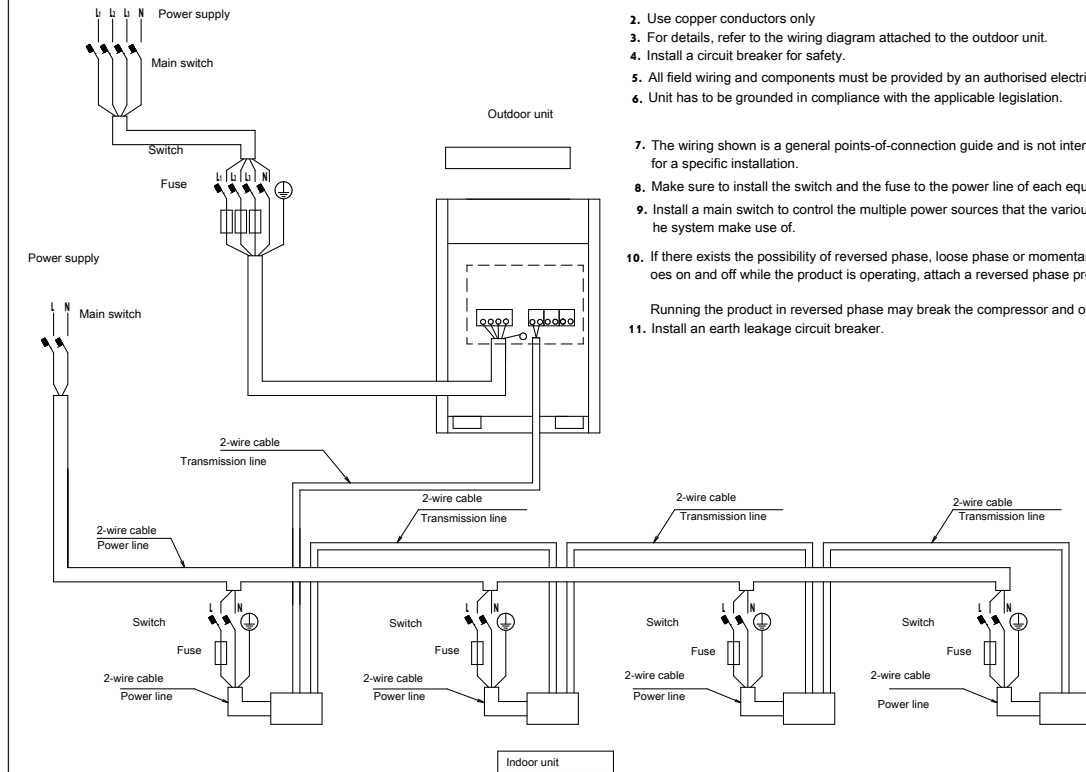
RXYQQ8-20U

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

3D119317

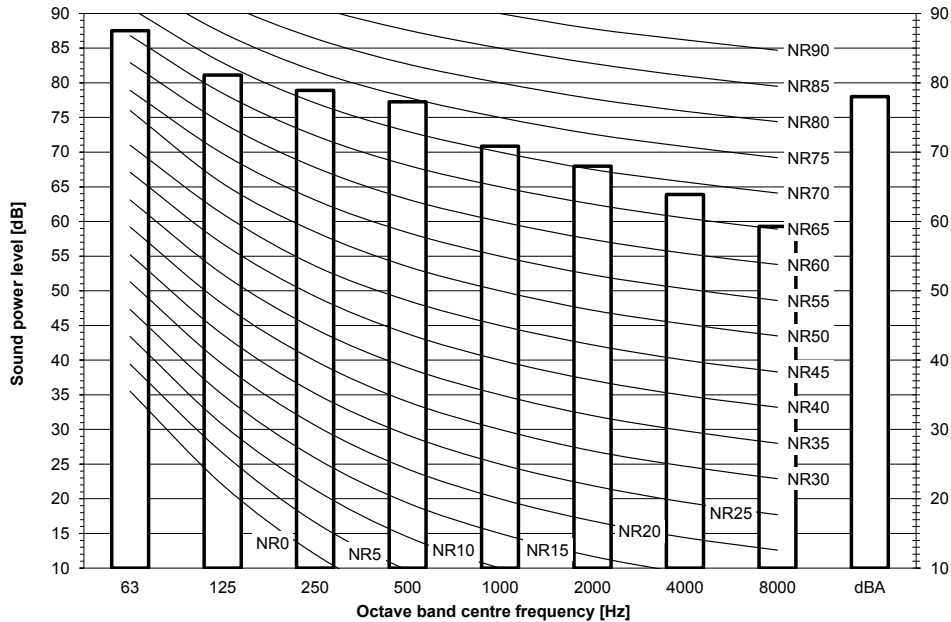


# 11 Sound data

## 11 - 1 Sound Power Spectrum

11

REMQ5U  
REYQ8U  
RXYQQ8U  
RXYQ8U  
RXYTQ8UYF  
RYYQ8U  
RYMQ8U



### Notes

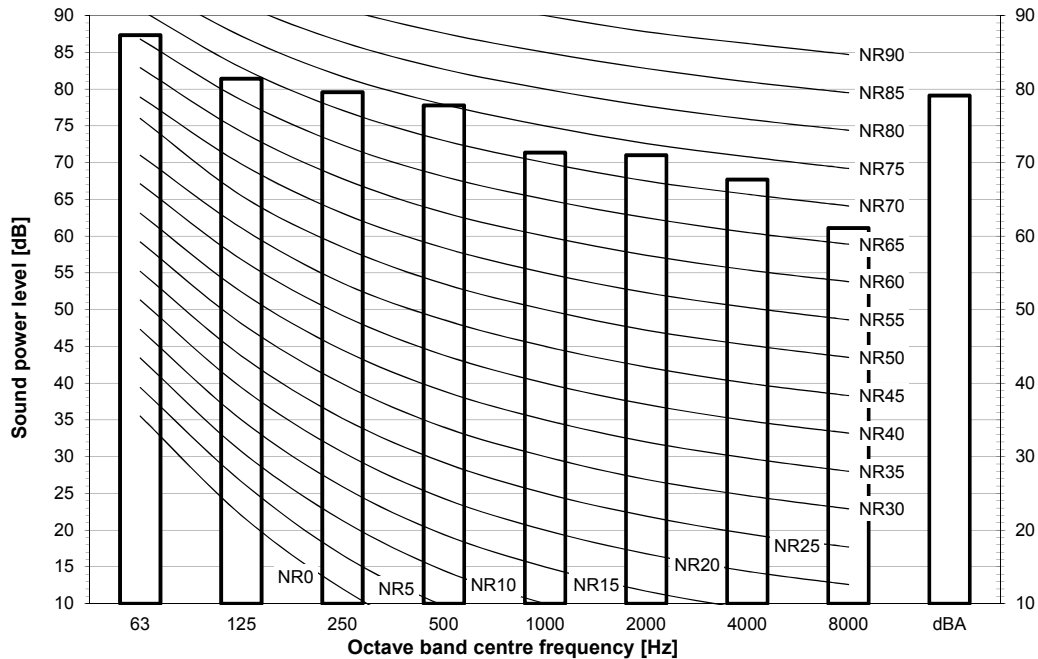
dBA = A-weighted sound power level (A scale according to IEC).

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 =  $10E-6\mu W/m^2$

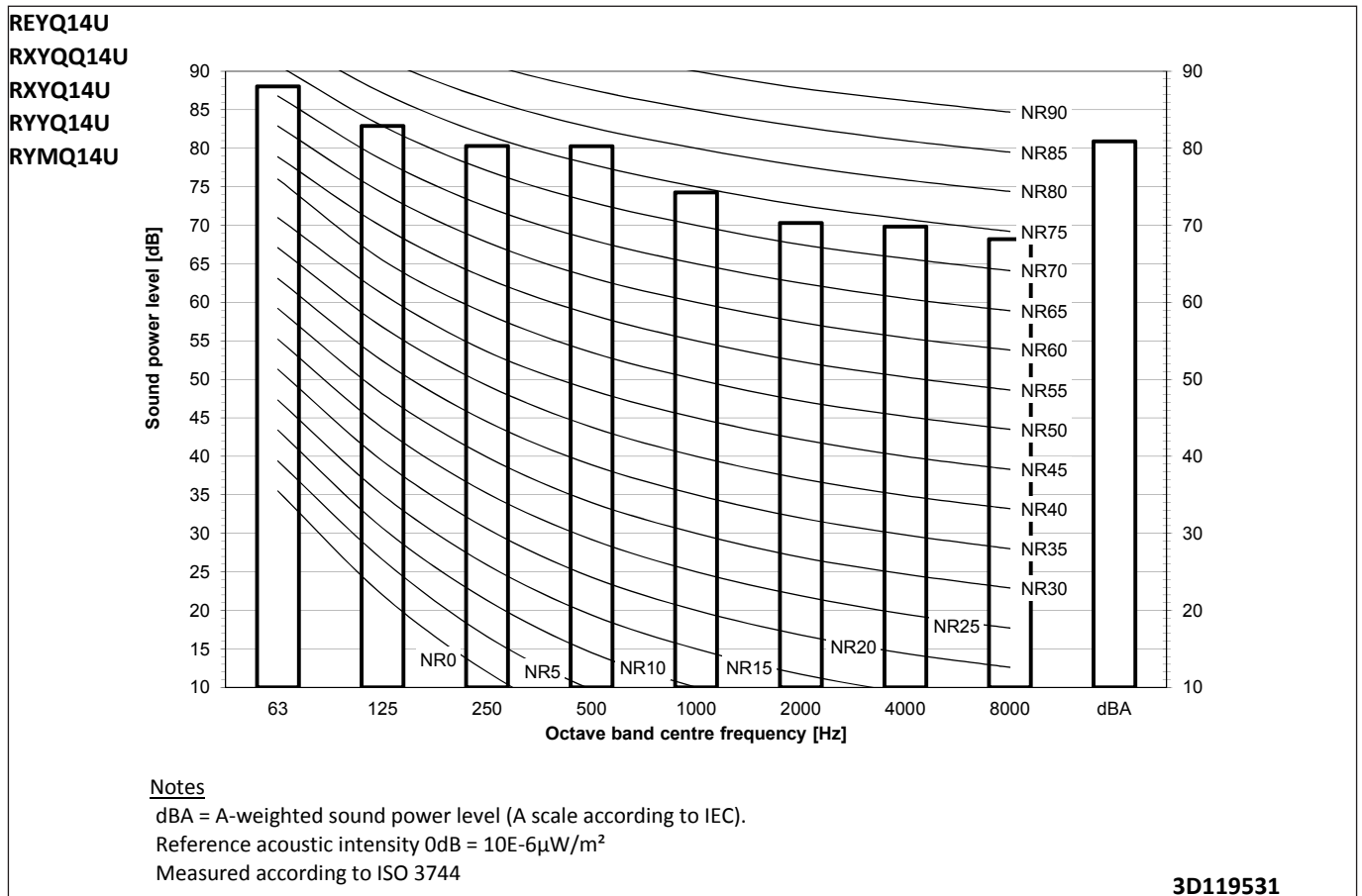
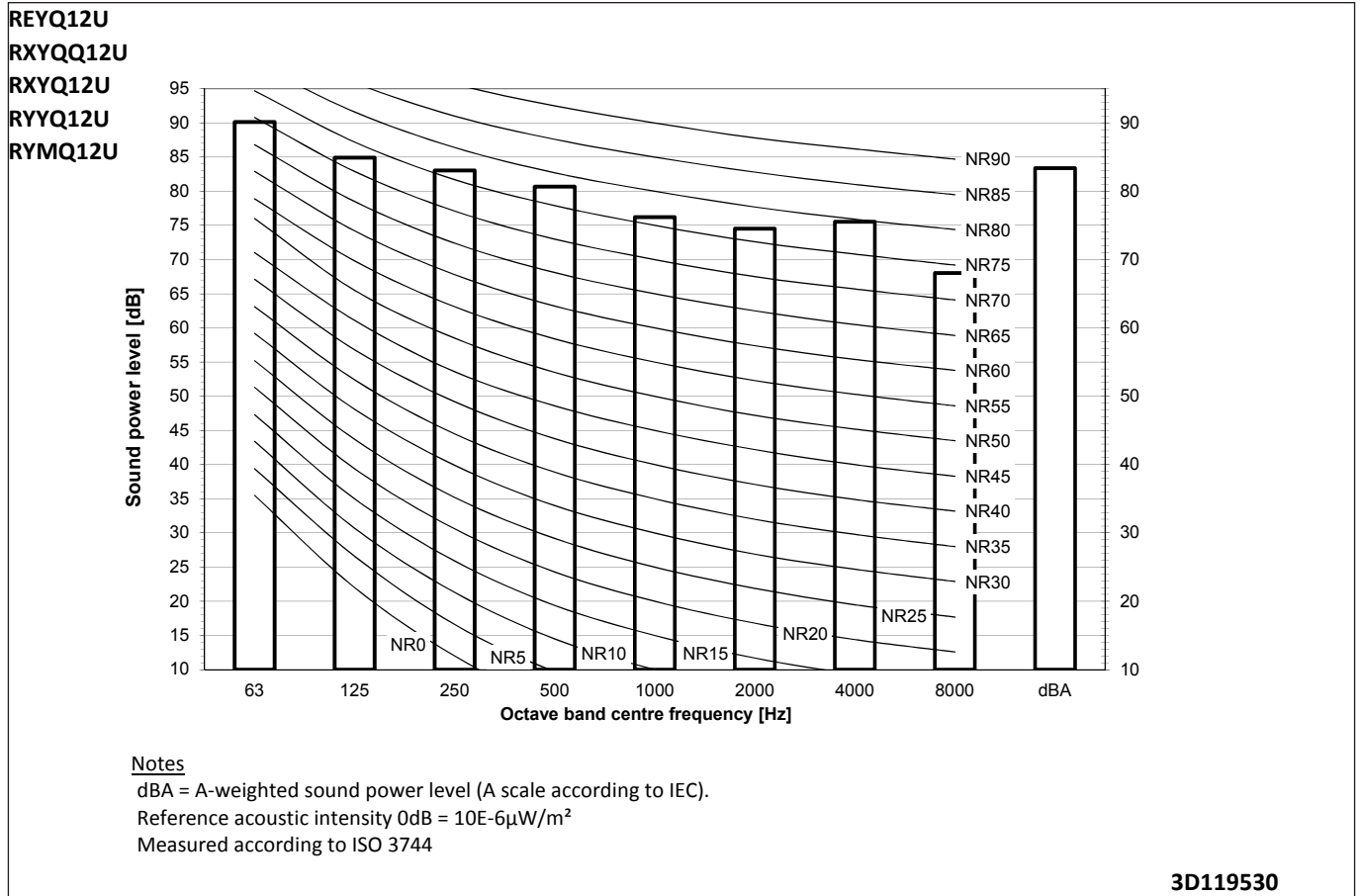
Measured according to ISO 3744

3D119529



# 11 Sound data

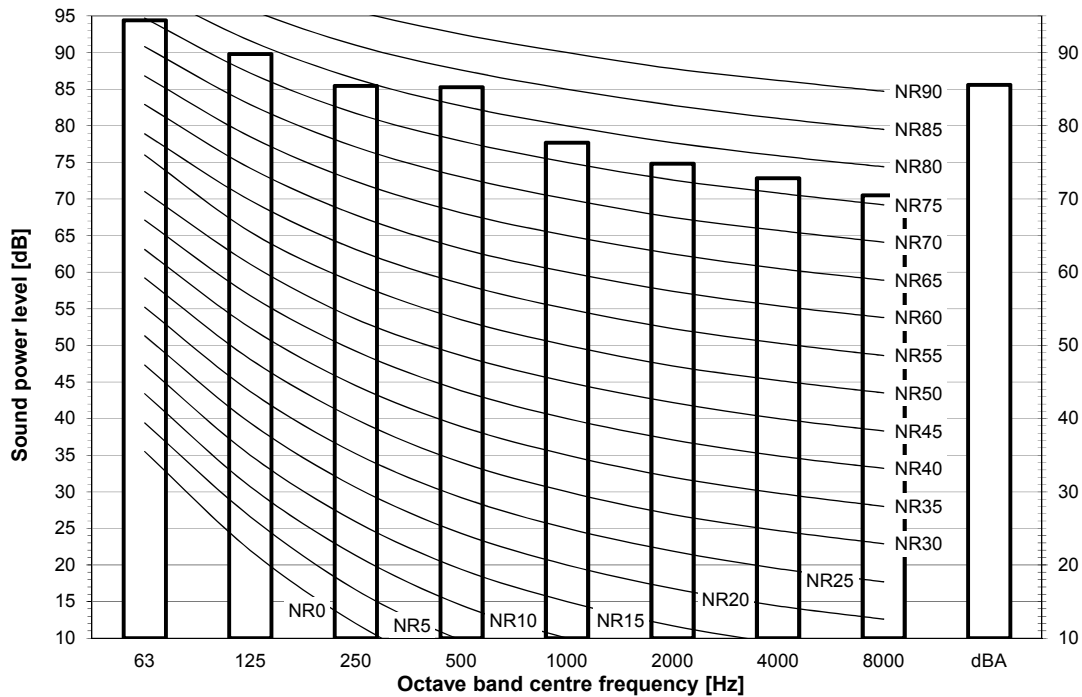
## 11 - 1 Sound Power Spectrum



# 11 Sound data

## 11 - 1 Sound Power Spectrum

REYQ16U  
RXYQ16U  
RXYQ16U  
RYYQ16U  
RYMQ16U

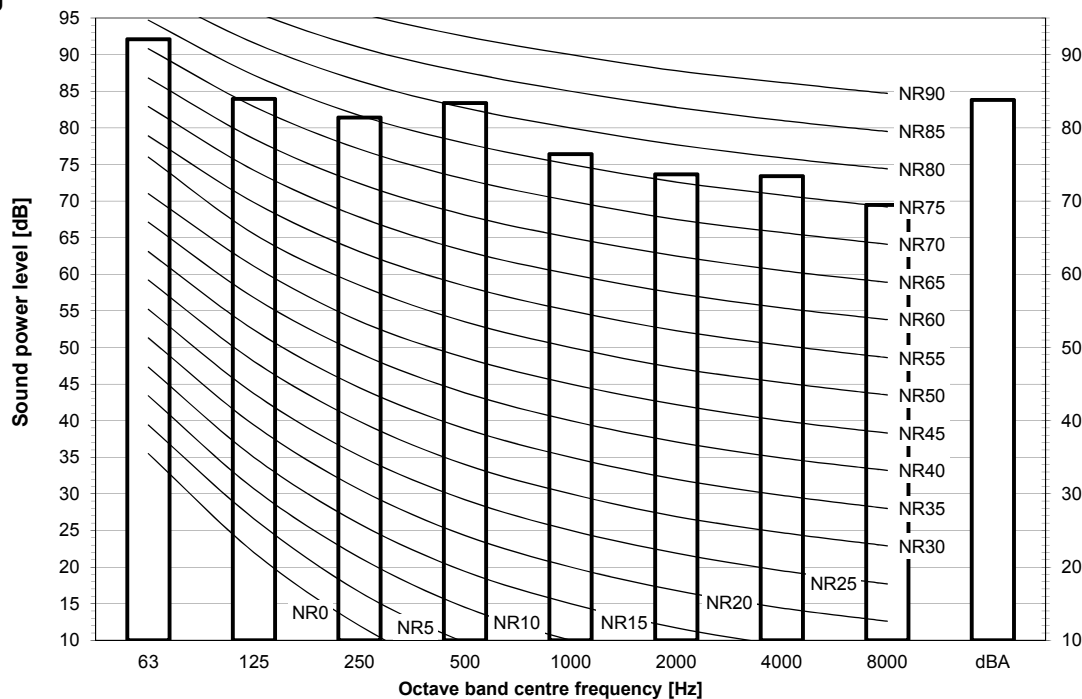


### Notes

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

3D119532

REYQ18U  
RXYQ18U  
RXYQ18U  
RYYQ18U  
RYMQ18U



### Notes

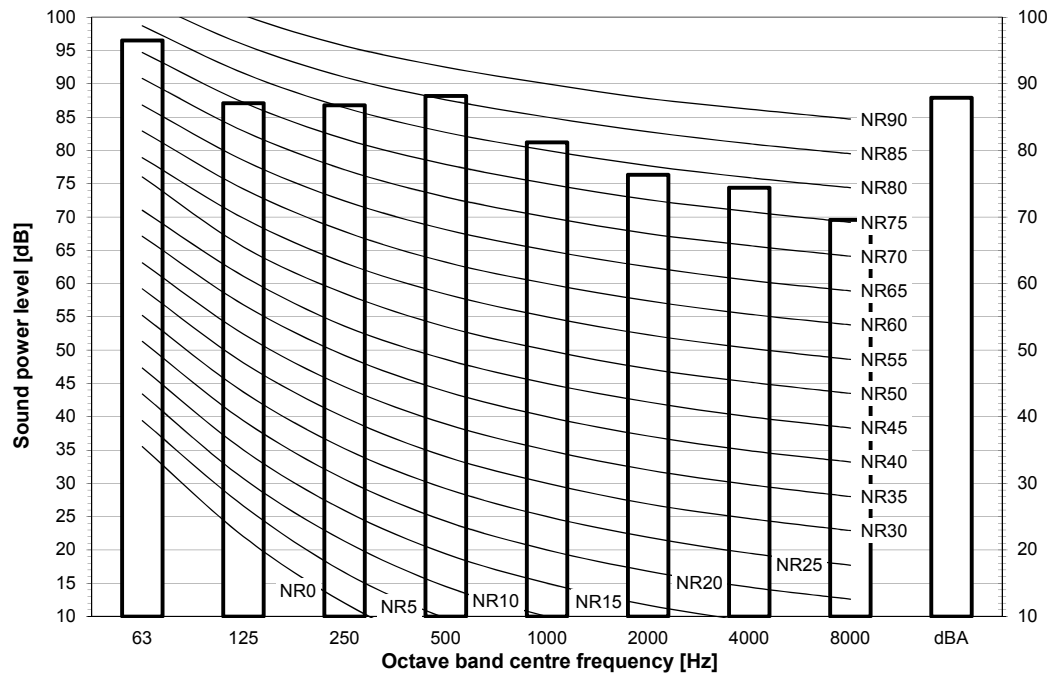
dBA = A-weighted sound power level (A scale according to IEC).  
Reference acoustic intensity 0dB =  $10E-6\mu W/m^2$   
Measured according to ISO 3744

3D119533

# 11 Sound data

## 11 - 1 Sound Power Spectrum

REYQ20U  
RXYQQ20U  
RXYQ20U  
RYYQ20U  
RYMQ20U



### Notes

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

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

Measured according to ISO 3744

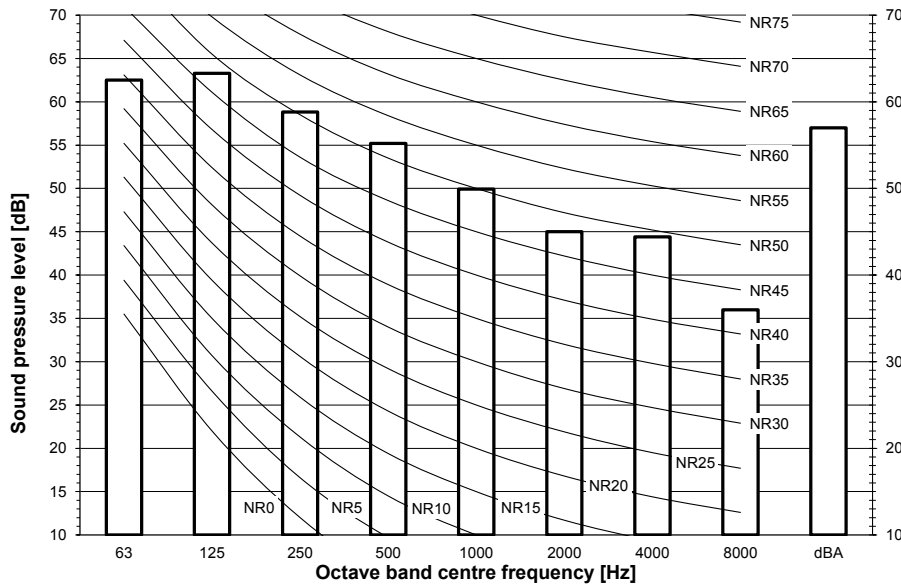
3D119534

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

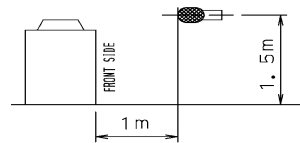
11

REMQ5U  
REYQ8U  
RXYQ8U  
RXYTQ8UYF  
RYYQ8U  
RYMQ8U



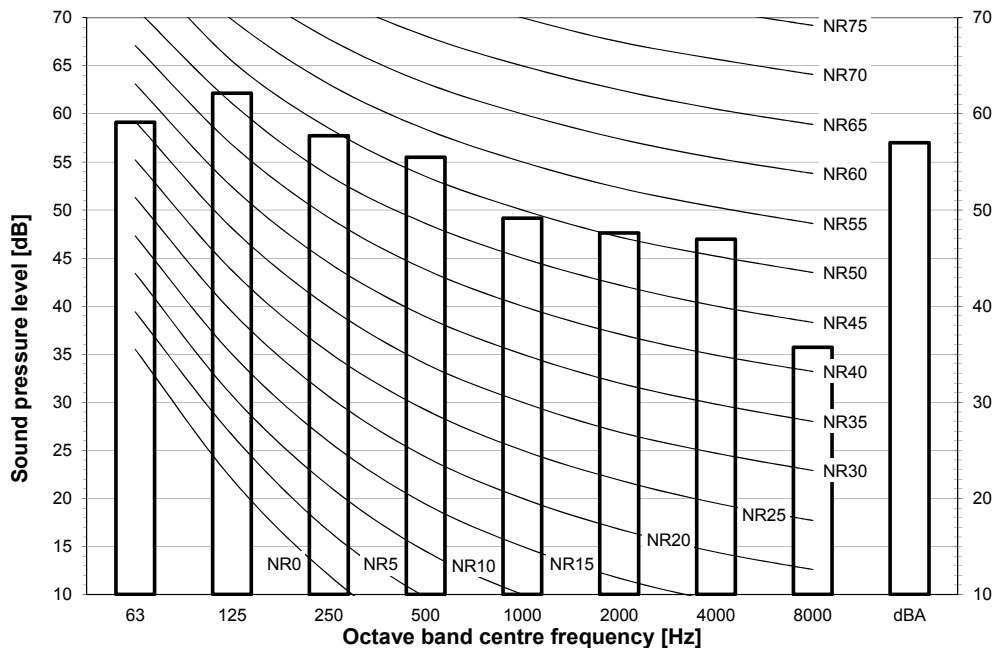
### Notes

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  $\mu$ Pa



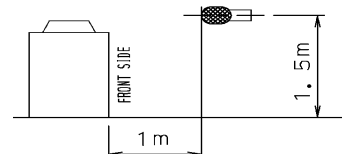
3D119521

REYQ10U  
RXYQ10U  
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  $\mu$ Pa

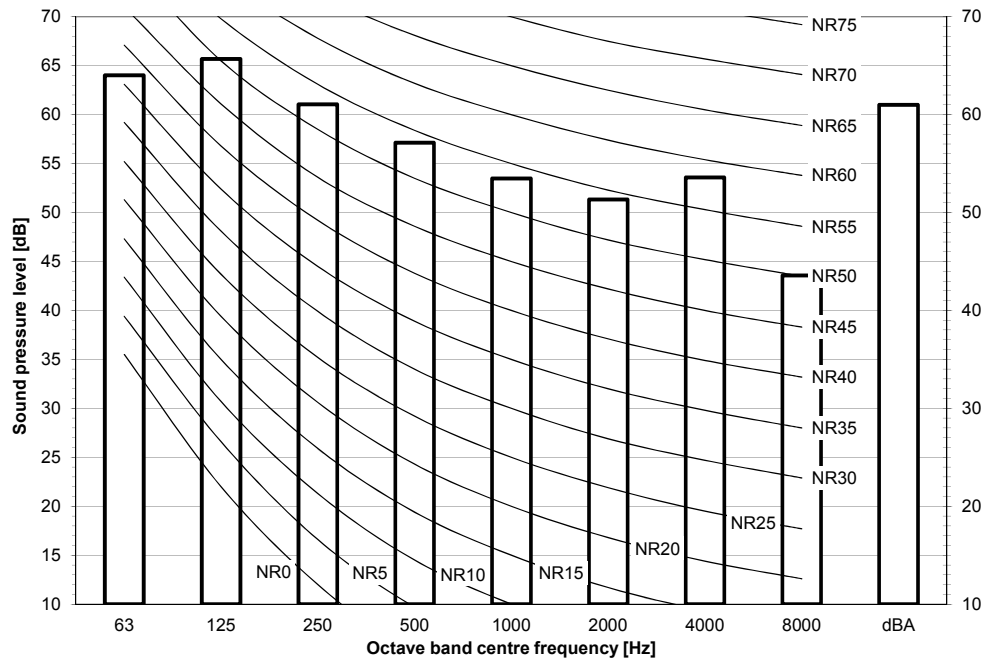


3D119522

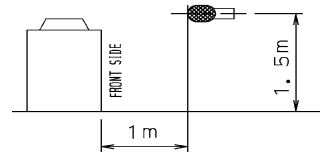
# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

REYQ12U  
RXYQ12U  
RXYQ12U  
RYYQ12U  
RYMQ12U

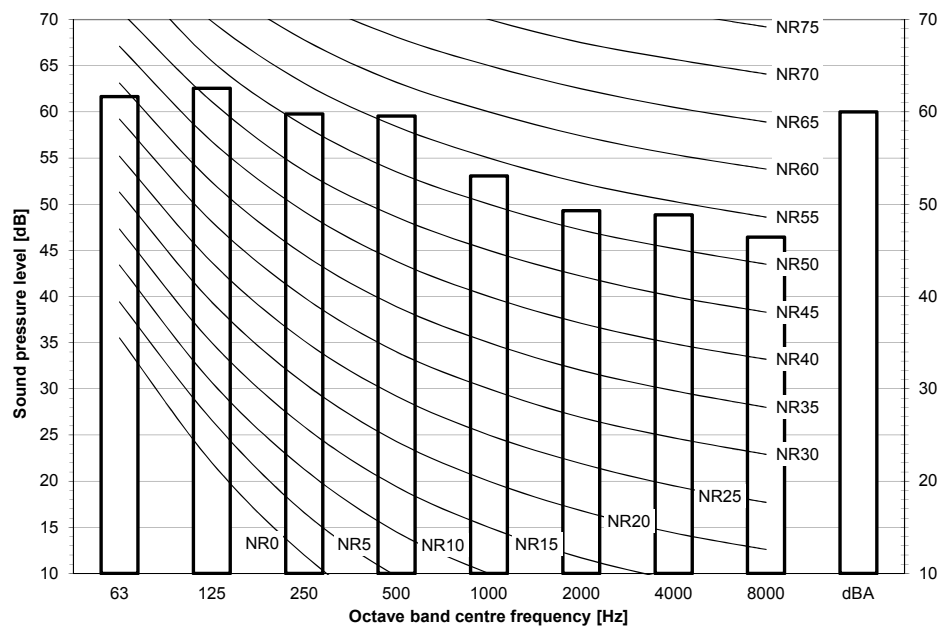


**Notes**  
Data is valid at free field condition.  
Data is valid at nominal operation condition.  
dBA = A-weighted sound pressure level (A scale according to IEC).  
Reference acoustic pressure 0 dB = 20  $\mu$ Pa

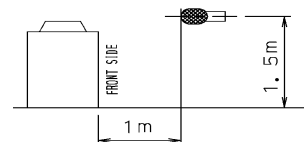


3D119523

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  $\mu$ Pa



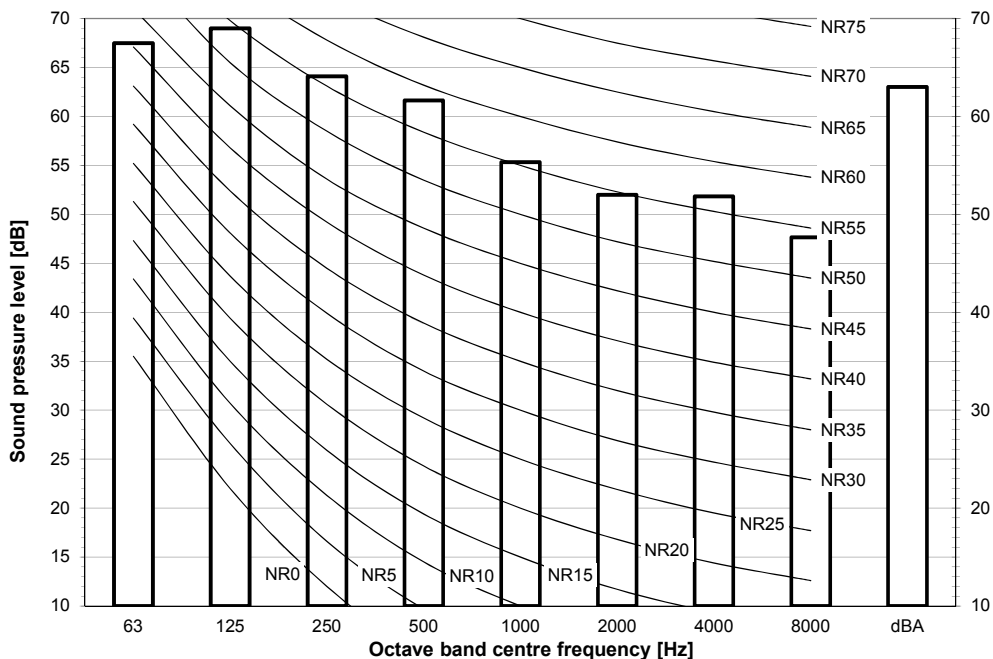
3D119524

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

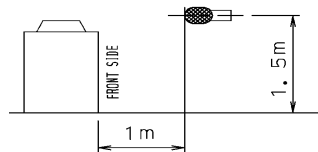
11

REYQ16U  
RXYQQ16U  
RXYQ16U  
RYYQ16U  
RYMQ16U



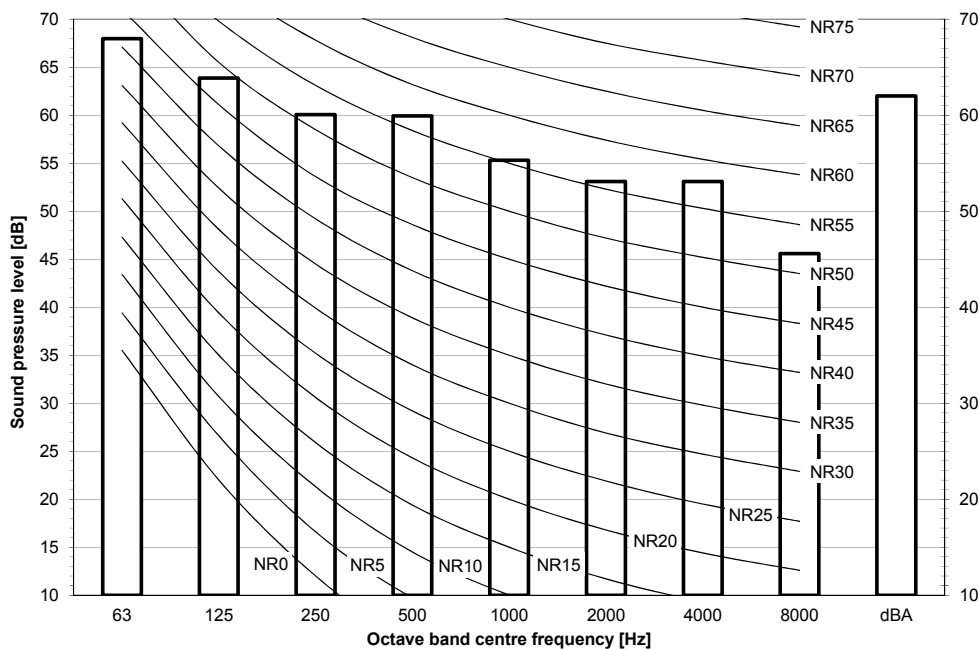
### Notes

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  $\mu$ Pa



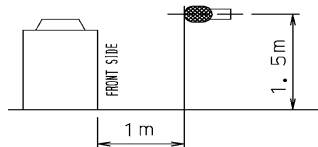
3D119525

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  $\mu$ Pa

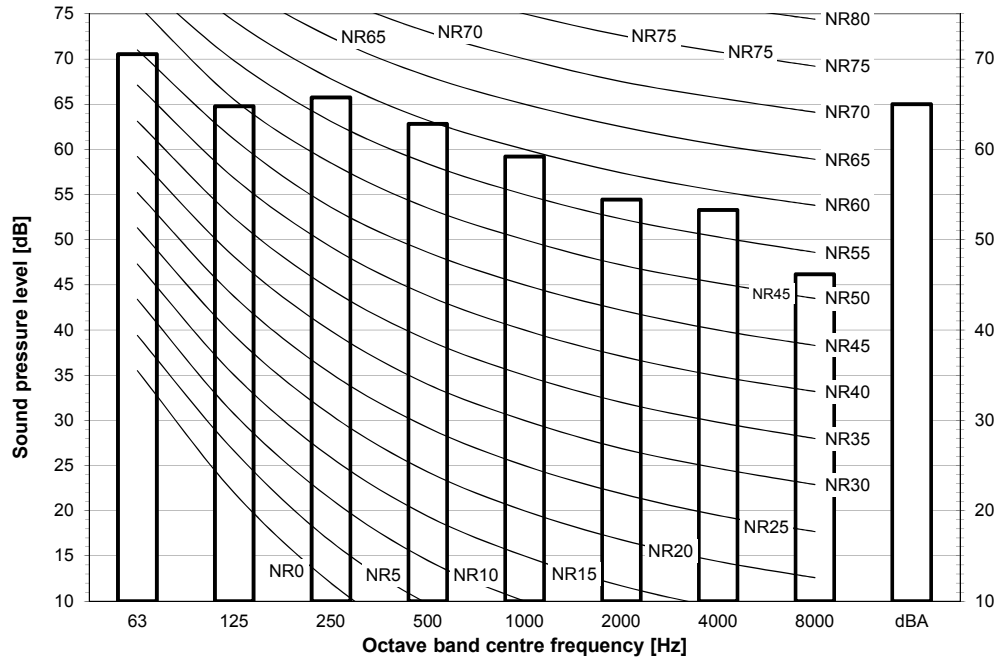


3D119526

# 11 Sound data

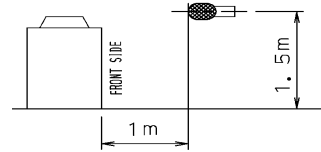
## 11 - 2 Sound Pressure Spectrum

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  $\mu$ Pa



3D119527

# 11 Sound data

## 11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

REMQ5U

REYQ8-12U

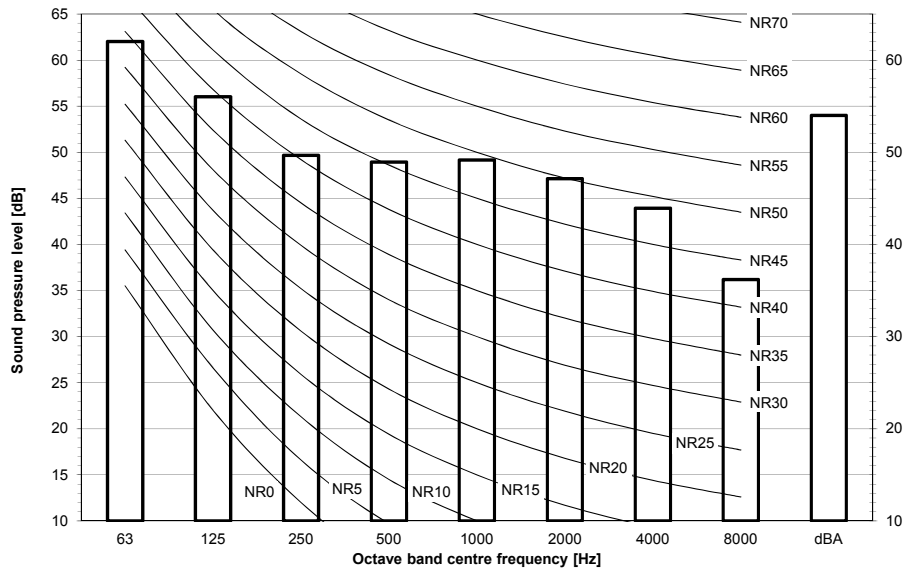
RXYQQ8-12U

RXYQ8-12U

RXYTQ8UYF

RYY8-12U

RYMQ8-12U



### Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

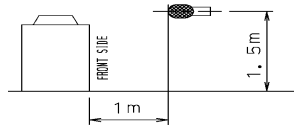
Reference acoustic pressure 0 dB = 20 μPa

Data is valid under the following conditions

Cooling operation

Outdoor Ta: 35°C

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



3D119535

REYQ14-16U

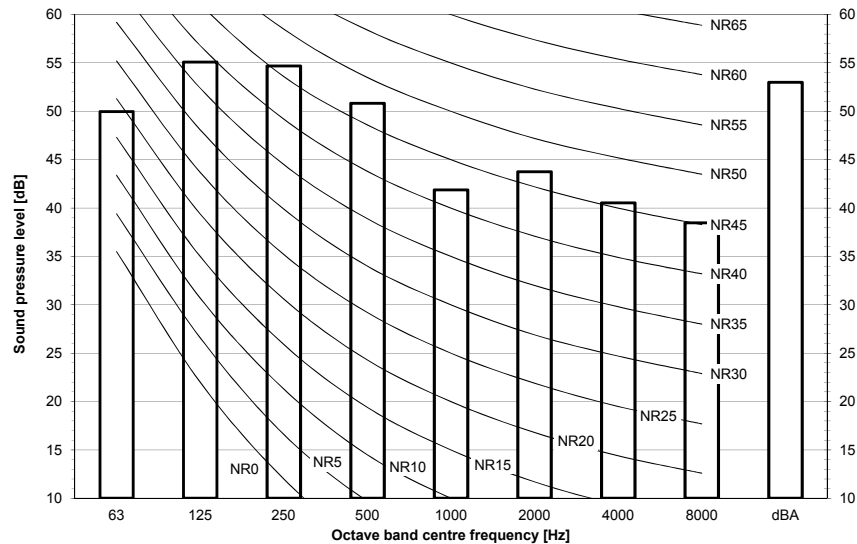
RXYQQ14-16U

RXYQ14-16U

RXYTQ14-16UYF

RYYQ14-16U

RYMQ14-16U



### Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

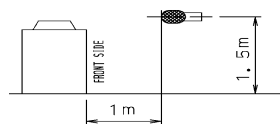
Reference acoustic pressure 0 dB = 20 μPa

Data is valid under the following conditions

Cooling operation

Outdoor Ta: 35°C

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



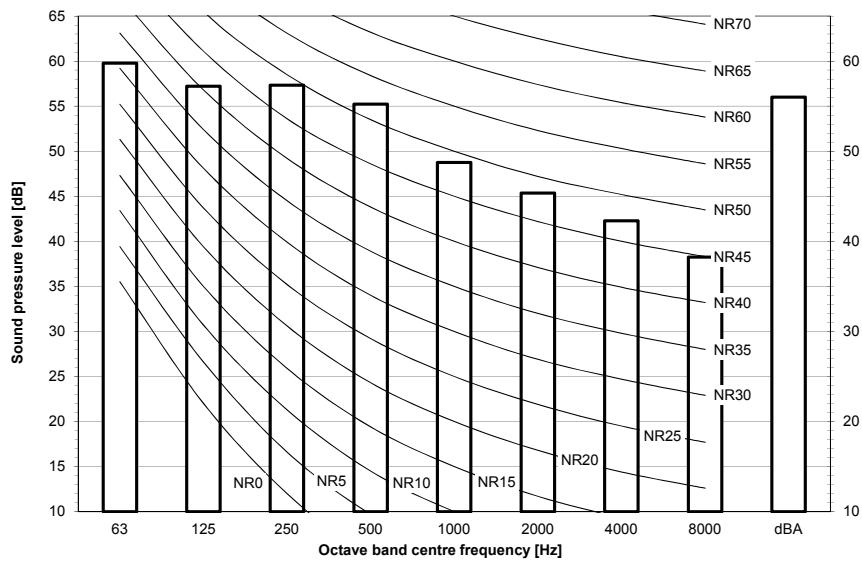
3D119538



# 11 Sound data

## 11 - 3 Sound Pressure Spectrum Quiet Mode Level 1

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



### Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

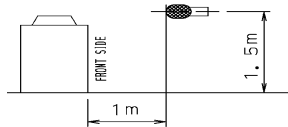
Reference acoustic pressure 0 dB = 20  $\mu$ Pa

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)

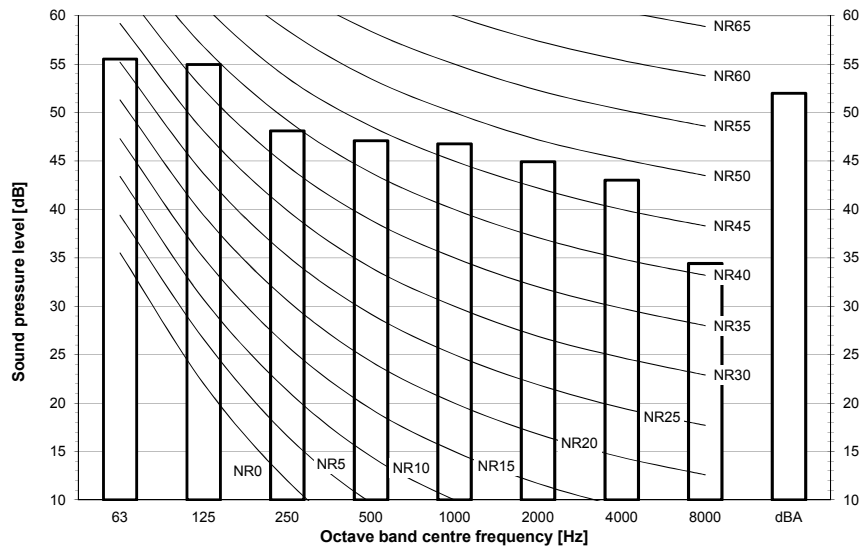


3D119541

# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode Level 2

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).

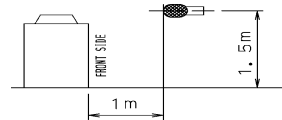
Reference acoustic pressure 0 dB = 20 µPa

Data is valid under the following conditions

Cooling operation

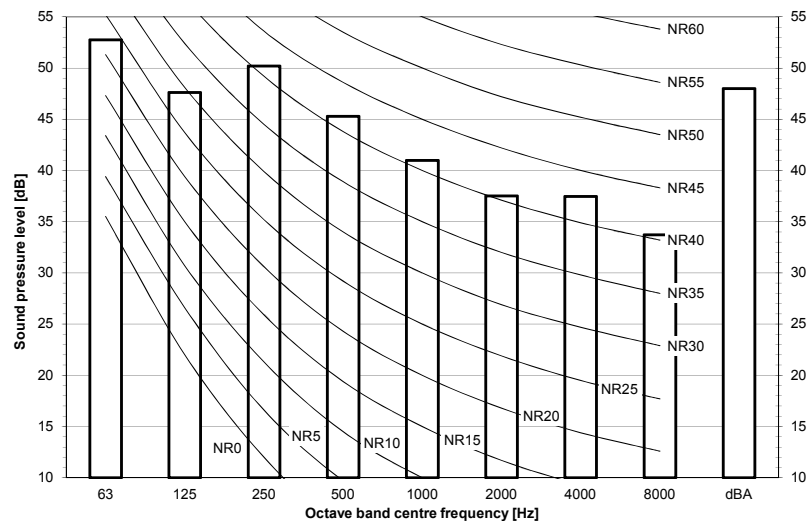
Outdoor Ta: 35°C

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).

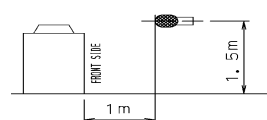
Reference acoustic pressure 0 dB = 20 µPa

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)

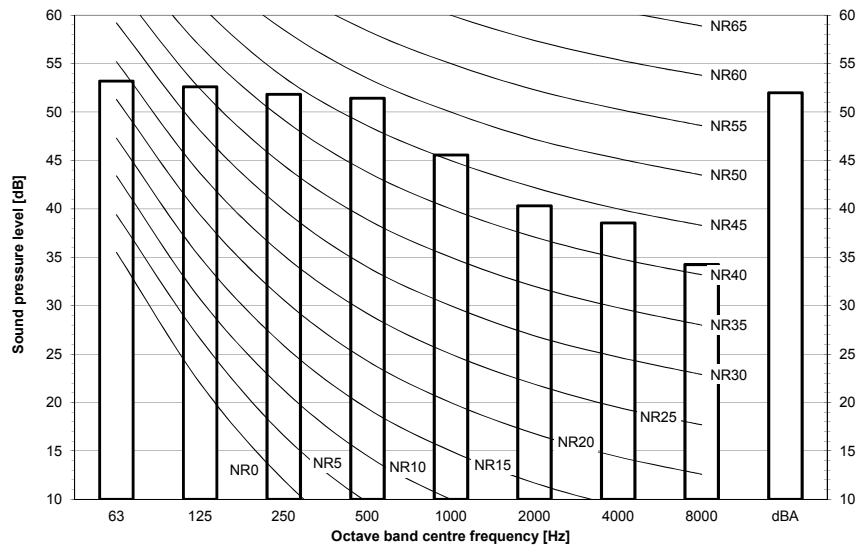


3D119539

# 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).

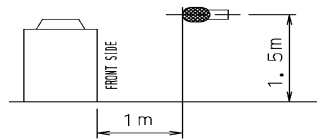
Reference acoustic pressure 0 dB = 20  $\mu$ Pa

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)



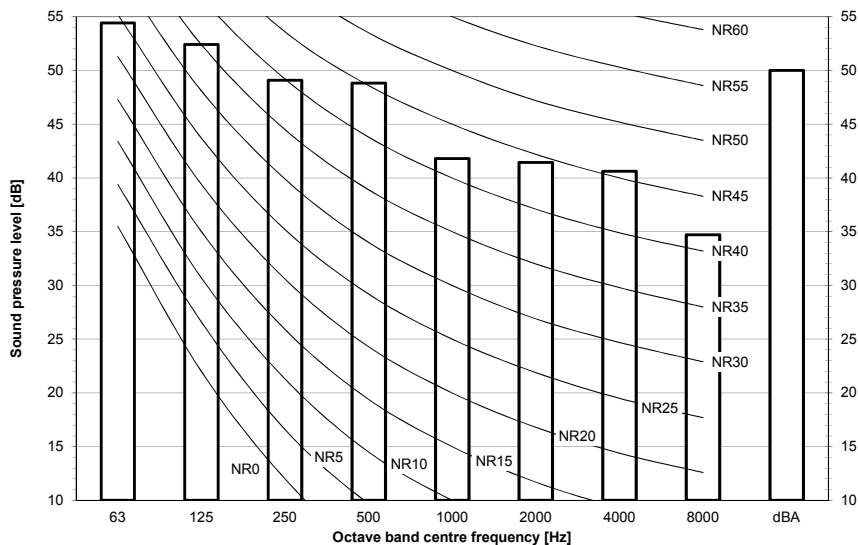
3D119542

# 11 Sound data

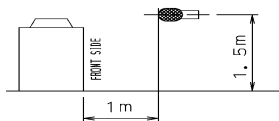
## 11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

11

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

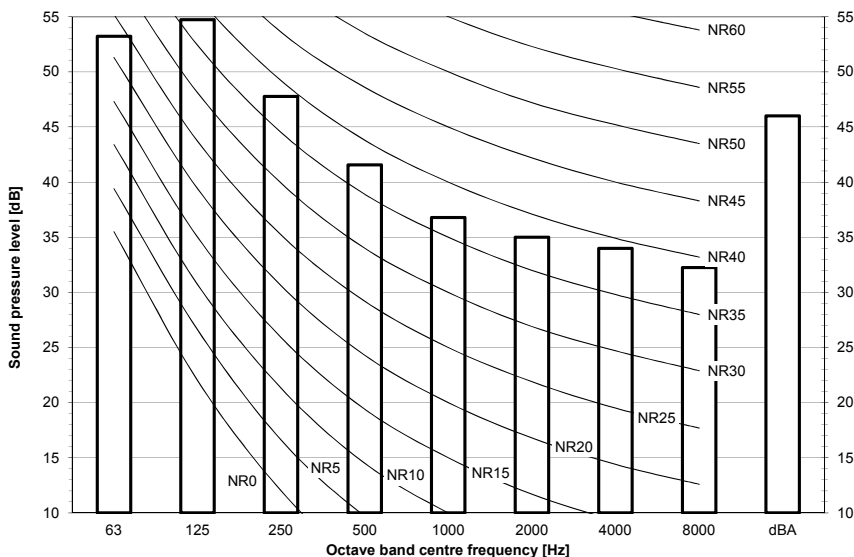


**Notes**  
Data is valid at free field condition.  
Data is valid at nominal operation condition.  
dBA = A-weighted sound pressure level (A scale according to IEC).  
Reference acoustic pressure 0 dB = 20  $\mu$ Pa  
Data is valid under the following conditions  
Cooling operation  
Outdoor Ta: 35°C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

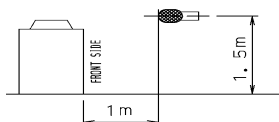


3D119537

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

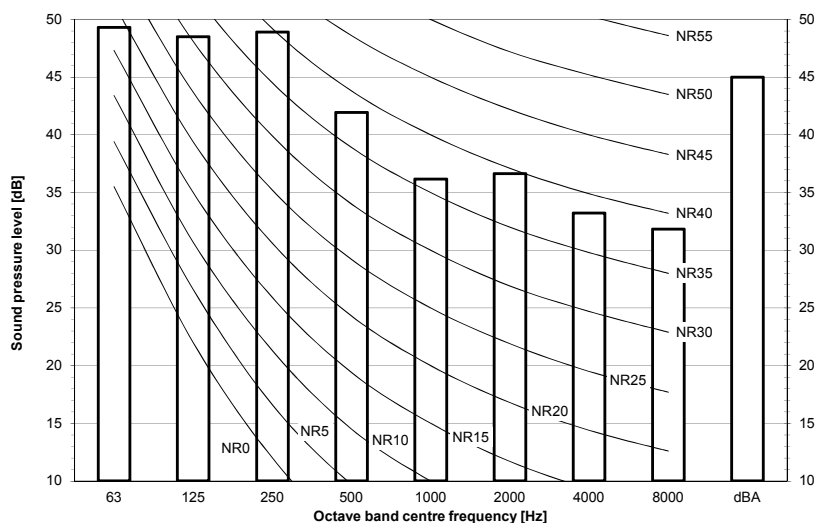


3D119540

# 11 Sound data

## 11 - 5 Sound Pressure Spectrum Quiet Mode Level 3

REYQ18-20U  
RXYQ18-20U  
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).

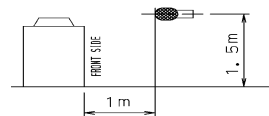
Reference acoustic pressure 0 dB = 20  $\mu$ Pa

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

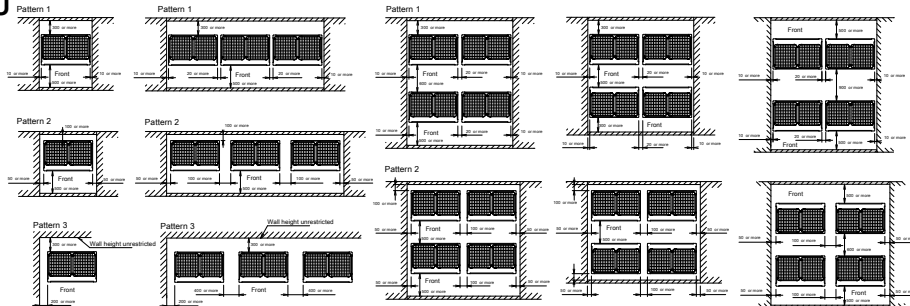
12

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

For single unit installation

For installation in rows

For centralised group layout



### Notes

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

Front: 1500mm

Suction side: 500mm

Side: height unrestricted

The installation space shown on this drawing is based on cooling operation at 35°C (outdoor temperature).

When the design outdoor ambient temperature exceeds 35°C or the load exceeds maximum ability of much generation load of heat in all outdoor unit, 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

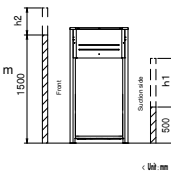
3. When installing the units, select the pattern that best fits the available space.

Always keep in mind to leave sufficient space for a person to pass between unit and wall and for the air to circulate freely.

If more units are to be installed than are catered for in the above patterns, your layout should take into account of the possibility of short circuits.

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

&lt; 500 mm &gt;



&lt; 500 mm &gt;

3D118467

# 12 Installation

## 12 - 2 Fixation and Foundation of Units

REMQ5U

REYQ8-20U

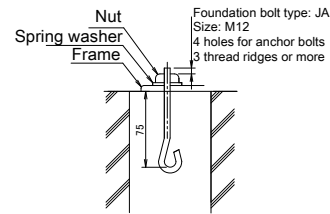
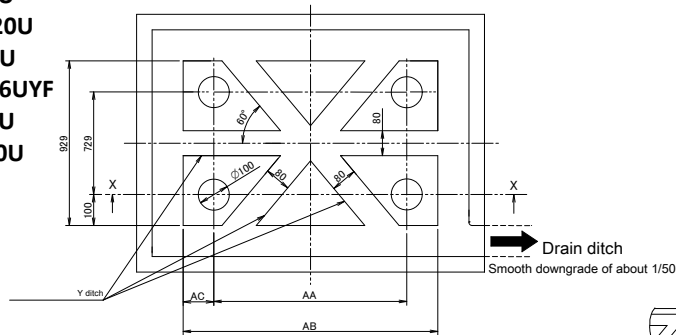
RXYQ8-20U

RXYQ8-20U

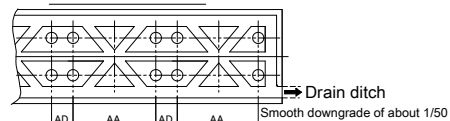
RXYTQ8-16UYF

RYYQ8-20U

RYMQ8-20U



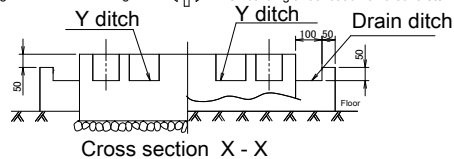
Foundation bolt fixing method



For multi-unit installation

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

When building a foundation on the ground → When building a foundation on a concrete floor



Cross section X - X

### Notes

1. Provide a drain ditch around the foundation to drain water from the installation area.
2. The surface has to be finished with mortar. The corner edges have to be chamfered.
3. Build the foundation on a concrete floor or, if not possible, make sure the foundation surface has a rough finish.
4. Use a cement/sand/gravel ratio of 1/2/4 for the concrete, and a diameter of 10 mm for the reinforcement bars (approximately, 300mm intervals).
5. When installing the equipment on a roof, make sure to check the strength of the floor and take adequate water proofing measures. **3D118459**

# 12 Installation

## 12 - 3 Refrigerant Pipe Selection

RXYQ-U  
RYYQ-Y  
RYMQ-U

12

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

### Remark

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

- (1) If all conditions below are met, the limitation can be extended up to 90 m
  - a. The piping length between all indoor units and the nearest branch kit is ≤ 40m.
  - b. It is necessary to increase the size of the gas and liquid piping if the pipe length between the first and the farthest indoor unit is >40m.  
If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.
  - c. When the piping size is increased, the piping length has to be counted as double.  
The total piping length has to be within limitations.
  - d. The piping length difference between the nearest indoor unit from the first branch to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ 40m.
- (2) If the piping length between the first branch and the BP box or VRV indoor unit is more than 20m, increase the length of the gas and liquid piping between the first branch and the BP box or VRV indoor unit.
- (3) An extension to up to 90 m is possible without an additional option kit. Respect the following conditions:
  - > If the outdoor units are positioned higher than the indoor units:
    - a. Size up the liquid piping
    - b. A dedicated setting on the outdoor unit is required.
  - > If the outdoor units are positioned lower than the indoor units:
    - a. 40~60m Minimum connection ratio: 80%  
60~65m Minimum connection ratio: 90%  
65~80m Minimum connection ratio: 100%  
80~90m Minimum connection ratio: 110%
    - b. Size up the liquid piping  
A dedicated setting on the outdoor unit is required.
- (4) The allowable minimum length is 5 m.
- (5) In case of multi-outdoor-unit combinations.
- (6) Multiple air handling units (AHU)(EKEXV + EKEQ kits).
- (7) Mix of AHU units and VRV DX indoor
- (8) If the equivalent piping length between is > 90m, size up the main liquid and gas piping.

3D079540E

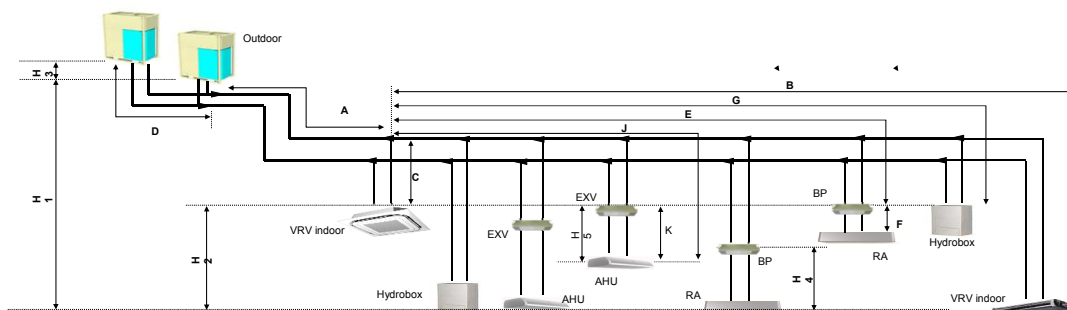


# 12 Installation

## 12 - 3 Refrigerant Pipe Selection

RXYQ-U  
RYYQ-U  
RYMQ-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)	EXV to AHU (K)	BP to RA (H4)	EXV to AHU (H5)
RA connection		2~15m	-	5m	-
AHU connection	Pair	-	≤5m	-	5m
	Multi <sup>(1)</sup>	-	≤5m	-	5m
	Mix <sup>(2)</sup>	-	≤5m	-	5m

### Remark

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

3D079540E

# 12 Installation

## 12 - 3 Refrigerant Pipe Selection

RXYQ-U  
RYYQ-U  
RYMQ-U

12

VRV4  
Heat pump  
Piping restrictions 3/3

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

### Remark

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

### About ventilation applications

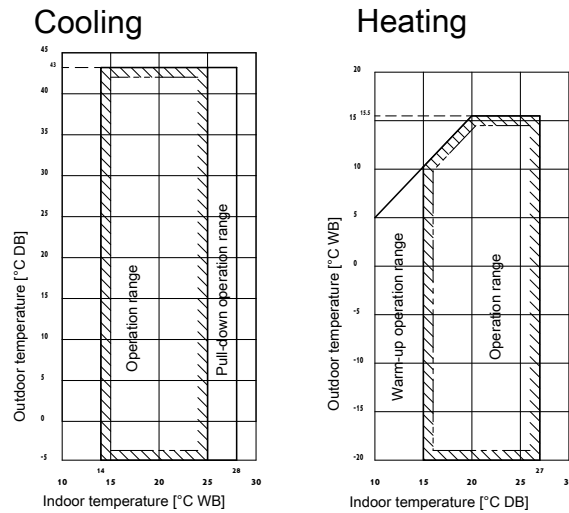
- I. FXMQ\_MF units are considered air handling units, following air handling unit limitations.  
Maximum connection ratio when combined with VRV DX indoor units: <30%.  
Maximum connection ratio when only air handling units are connected: <100%.  
For information on the operation range, refer to the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

3D079540E

# 13 Operation range

## 13 - 1 Operation Range

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



### 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

RYYQ-U

RYMQ-U

14

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

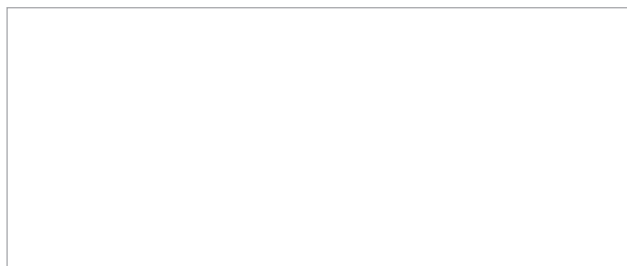
Covered by ·ENER LOT10·

FTXJ25-35-50  
FTXA20-25-35-42-50  
FLXS25-35-50-60  
FVXM25-35-50  
FVXG25-35-50  
CVXM20A  
FVXM25A-35A-50A-60A

Outside the scope of ·ENER LOT21·

EKEXV50-63-80-100-125-140-200-250-400-500 + EKEQM / EKEQF  
HXY080-125  
VKM50-80-100  
CYVS100-150-200-250  
CYVM100-150-200-250  
CYVL100-150-200-250

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10/2020



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