

Air Conditioning Technical Data REMQ-U, REYQ-U



- > REMQ5U7Y1B
- > REYQ8U7Y1B
- > REYQ10U7Y1B
- > REYQ12U7Y1B
- > REYQ14U7Y1B
- > REYQ16U7Y1B

- > REYQ18U7Y1B
- > REYQ20U7Y1B

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REMQ-U, REYQ-U

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1 Features

1 - 1 REMQ-U

- Outdoor unit module for VRV IV heat recovery to create systems from 10 up to 13HP
- Free combination of outdoor units to meet installation space or efficiency requirements



Inverter

1 Features

1 - 2 REYQ-U

- Fully integrated solution with heat recovery for maximum efficiency with COPs of up to 8 !
- 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
- "Free" heating and hot water production provided by transferring heat from areas requiring cooling to areas requiring heating or hot water
- The perfect personal comfort for guests/tenants via simultaneous cooling and heating
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, continuous heating, 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
- Continuous comfort: Unique continuous heating technology makes VRV IV the best alternative to traditional heating systems
- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- Outdoor unit display for quick on-site settings and easy read out of errors together with the indication of service parameters for checking basic functions.
- 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
- Possibility to extend the operation range in cooling down to -20°C for technical cooling operation such as server rooms
- 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



Inverter

2 Specifications

2-1 Technical Specifications					REMQ5U	REYQ8U	REYQ10U	REYQ12U	REYQ14U	REYQ16U	REYQ18U	REYQ20U
Recommended combination					-	4 x FXFQ50A VEB	4 x FXFQ63A VEB	6 x FXFQ50A VEB	1 x FXFQ50A VEB + 5 x FXFQ63A VEB	4 x FXFQ63A VEB + 2 x FXFQ80A VEB	3 x FXFQ50A VEB + 5 x FXFQ63A VEB	2 x FXFQ50A VEB + 6 x FXFQ63A VEB
Recommended combination 2					-	4 x FXSQ50A 2VEB	4 x FXSQ63A 2VEB	6 x FXSQ50A 2VEB	1 x FXSQ50A 2VEB + 5 x FXSQ63A 2VEB	4 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	3 x FXSQ50A 2VEB + 5 x FXSQ63A 2VEB	2 x FXSQ50A 2VEB + 6 x FXSQ63A 2VEB
Recommended combination 3					-	4 x FXMQ50P 7VEB	4 x FXMQ63P 7VEB	6 x FXMQ50P 7VEB	1 x FXMQ50P 7VEB + 5 x FXMQ63P 7VEB	4 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	3 x FXMQ50P 7VEB + 5 x FXMQ63P 7VEB	2 x FXMQ50P 7VEB + 6 x FXMQ63P 7VEB
Cooling capacity	Prated,c			kW	14.0 (1)	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)	50.4 (1)	52.0 (1)
Heating capacity	Prated,h			kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0
	Max.	6°CWB		kW	16.0 (2)	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)	50.0 (2)	56.5 (2)	63.0 (2)
SEER					-	7.2	6.7	6.5		6.2	6.3	6.2
SEER recommended combination 2					-	6.8		6.2	6.6	6.2	6.4	6.3
SEER recommended combination 3					-	7.2	6.7	6.6		6.1	6.4	6.3
SCOP					-	4.2	4.3	4.7	4.3		4.4	4.1
SCOP recommended combination 2					-	4.1	4.3	4.6	4.2		4.3	4.1
SCOP recommended combination 3					-	4.2		4.5	4.1		4.2	4.0
ηs,c				%	-	286.1	264.8	257.0	255.8	243.1	250.6	246.7
ηs,c recommended combination 2					-	270.2	270.4	246.6	259.4	244.5	251.9	249.6
ηs,c recommended combination 3					-	286.6	266.4	259.8	259.6	241.7	252.0	248.9
ηs,h				%	-	165.1	169.7	183.8	168.3	167.5	172.5	162.7
ηs,h recommended combination 2					-	160.9	169.4	179.5	166.1	164.4	170.0	161.4
ηs,h recommended combination 3					-	163.2	166.2	178.5	160.4	160.5	164.7	157.3
Capacity range				HP	5	8	10	12	14	16	18	20
Maximum number of connectable indoor units					64 (3)							
Indoor index connection	Min.				62.5	100.0	125.0	150.0	175.0	200.0	225.0	250.0
	Max.				162.5	260.0	325.0	390.0	455.0	520.0	585.0	650.0
Dimensions	Unit	Height	mm		1,685							
		Width	mm		930				1,240			
		Depth	mm		765							
	Packed unit	Height	mm		1,820							
		Width	mm		995				1,305			
		Depth	mm		860							
Weight	Unit			kg	230				314		317	
	Packed unit			kg	243				331		334	
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			
Capacity control	Method				Inverter controlled							
Casing	Colour				Daikin White							
	Material				Painted galvanized steel plate							
Heat exchanger	Type				Cross fin coil							
	Indoor side				Air							
	Outdoor side				Air							
	Air flow rate	Cooling	Rated	m³/h	9,720		10,500	11,100	13,380	15,600	15,060	15,660
		Heating	Rated	m³/h	9,720		10,500	11,100	13,380	15,600	15,060	15,660
Compressor	Quantity				1				2			
	Type				Hermetically sealed scroll compressor							
	Crankcase heater			W	33							

2 Specifications

2-1 Technical Specifications					REMQ5U	REYQ8U	REYQ10U	REYQ12U	REYQ14U	REYQ16U	REYQ18U	REYQ20U
Fan	Quantity				1				2			
	External static pressure	Max.	Pa	78								
Fan motor	Quantity				1				2			
	Type				DC motor							
	Output			W	550				750			
Sound power level	Cooling	Nom.	dBA	78.0 (4)		79.1 (4)	83.4 (4)	80.9 (4)	85.6 (4)	83.8 (4)	87.9 (4)	
	Heating	Nom.	dBA	62.7 (4)		64.8 (4)	64.9 (4)	68.3 (4)	68.6 (4)	66.3 (4)	67.0 (4)	
Sound pressure level	Cooling	Nom.	dBA	57.0 (5)			61.0 (5)	60.0 (5)	63.0 (5)	62.0 (5)	65.0 (5)	
Operation range	Cooling	Min.~Max.	°CDB	-5.0~43.0								
	Heating	Min.~Max.	°CWB	-20.0~15.5								
Refrigerant	Type				R-410A							
	GWP				2,087.5							
	Charge			TCO ₂ eq	20.2	20.5	20.7	24.6				
				kg	9.7	9.8	9.9	11.8				
Refrigerant oil	Type				Synthetic (ether) oil FVC68D							
Piping connections	Liquid	Type			Brazed connection							
		OD	mm	9.52			12.7			15.9		
	Gas	Type			Brazed connection							
		OD	mm	19.1	22.2	28.6						
	HP/LP gas	Type			Brazing connections							
		OD	mm	15.9	19.1	22.2			28.6			
	Total piping length	System	Actual	m	-	1,000 (6)						
Defrost method					Reversed cycle							
Safety devices	Item	01			High pressure switch							
		02			Fan driver overload protector							
		03			Inverter overload protector							
		04			PC board fuse							
		05			Leakage current detector							
PED	Category				Category II							
	Most critical part	Name			Liquid receiver							
		Ps*V	Bar*l	564				672		824		
Space cooling	A Condition (35°C - 27/19)	EERd			-	3.2	2.7	2.5	2.8	2.2		
		Pdc	kW	-	22.4	28.0	33.5	40.0	45.0	50.4	52.0	
	B Condition (30°C - 27/19)	EERd			-	5.3	5.1	4.7	4.8	4.6	4.5	4.4
		Pdc	kW	-	16.5	20.6	24.7	29.5	33.2	37.1	38.3	
	C Condition (25°C - 27/19)	EERd			-	9.6	7.7	7.5	8.3	8.1	7.8	7.7
		Pdc	kW	-	10.6	13.3	15.9	18.9	21.3	23.9	24.6	
	D Condition (20°C - 27/19)	EERd			-	13.1	14.1	15.1	11.3	11.2	15.0	14.6
		Pdc	kW	-	9.4	8.4	9.8	8.4	9.5	11.6	13.6	
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			-	2.9	2.8	2.5	2.8	2.2		
		Pdc	kW	-	22.4	28.0	33.5	40.0	45.0	50.4	52.0	
	B Condition (30°C - 27/19)	EERd			-	4.9	5.1	4.5	4.8	4.5	4.4	
		Pdc	kW	-	16.5	20.6	24.7	29.5	33.2	37.1	38.3	
	C Condition (25°C - 27/19)	EERd			-	9.1	8.0	7.1	8.5	8.2	7.9	
		Pdc	kW	-	10.6	13.3	15.9	18.9	21.3	23.9	24.6	
	D Condition (20°C - 27/19)	EERd			-	12.6	14.3	14.4	11.4	11.3	15.0	14.9
		Pdc	kW	-	9.2	8.5	9.6	8.4	9.5	11.6	13.6	
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd			-	3.1	2.7	2.5	2.8	2.2		
		Pdc	kW	-	22.4	28.0	33.5	40.0	45.0	50.4	52.0	
	B Condition (30°C - 27/19)	EERd			-	5.4	5.1	4.7	4.8	4.5	4.4	
		Pdc	kW	-	16.5	20.6	24.7	29.5	33.2	37.1	38.3	
	C Condition (25°C - 27/19)	EERd			-	9.6	7.9	7.8	8.5	8.0		7.9
		Pdc	kW	-	10.6	13.3	15.9	18.9	21.3	23.9	24.6	
	D Condition (20°C - 27/19)	EERd			-	13.0	14.1	15.1	11.6	11.3	15.2	15.0
		Pdc	kW	-	9.4	8.5	9.9	8.4	9.5	11.8	13.6	

2 Specifications

2

2-1 Technical Specifications				REMQ5U	REYQ8U	REYQ10U	REYQ12U	REYQ14U	REYQ16U	REYQ18U	REYQ20U
Space heating (Average climate)	TBivalent	COPd (declared COP)		-	2.3	2.2	2.3	2.2	2.1	2.6	2.4
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C	-	-10						
	TOL	COPd (declared COP)		-	2.3	2.2	2.3	2.2	2.1	2.6	2.4
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tol (temperature operating limit)	°C	-	-10						
	A Condition (-7°C)	COPd (declared COP)		-	2.7	2.6	2.9	2.7		2.9	2.7
		Pdh (declared heating cap)	kW	-	12.1	14.2	16.3	18.2	20.5	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		-	4.0		4.2	4.0	3.9	4.1	3.7
		Pdh (declared heating cap)	kW	-	7.4	8.6	9.9	11.1	12.5	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		-	6.0	6.1	7.2	6.3	6.5	6.2	6.1
		Pdh (declared heating cap)	kW	-	5.7		6.6	7.1	8.0	9.7	10.7
Space heating (Average climate) recommended combination 2	D Condition (12°C)	COPd (declared COP)		-	9.3	10.3	9.4	6.8	6.9	8.0	8.1
		Pdh (declared heating cap)	kW	-	8.8	7.0	7.7	5.4	5.5	8.2	
	A Condition (-7°C)	COPd (declared COP)		-	2.6		2.8	2.7	2.6	2.9	2.7
		Pdh (declared heating cap)	kW	-	12.1	14.2	16.2	18.2	20.5	24.7	27.4
	B Condition (2°C)	COPd (declared COP)		-	3.9	4.0	4.1	4.0	3.9	4.0	3.7
		Pdh (declared heating cap)	kW	-	7.4	8.6	9.9	11.1	12.5	15.0	16.7
	C Condition (7°C)	COPd (declared COP)		-	5.8	6.1	7.0	6.2	6.4	6.0	6.1
		Pdh (declared heating cap)	kW	-	5.6		6.5	7.1	8.0	9.7	10.7
	D Condition (12°C)	COPd (declared COP)		-	9.0	10.3	9.1	6.6	6.7	7.9	
		Pdh (declared heating cap)	kW	-	8.7	6.9	7.6	5.2	5.3	8.0	
	TBivalent	COPd (declared COP)		-	2.2		2.3	2.1		2.5	2.4
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tbiv (bivalent temperature)	°C	-	-10						
	TOL	COPd (declared COP)		-	2.2		2.3	2.1		2.5	2.4
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0
		Tol (temperature operating limit)	°C	-	-10						

2 Specifications

2-1 Technical Specifications					REMQ5U	REYQ8U	REYQ10U	REYQ12U	REYQ14U	REYQ16U	REYQ18U	REYQ20U
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			-	2.6	2.5	2.8	2.7	2.6	2.8	2.7
		Pdh (declared heating cap)	kW	-	12.1	14.2	16.3	18.2	20.5	24.7	27.4	
	B Condition (2°C)	COPd (declared COP)			-	3.9		4.1	3.8		3.9	3.6
		Pdh (declared heating cap)	kW	-	7.4	8.6	9.9	11.1	12.5	15.0	16.7	
	C Condition (7°C)	COPd (declared COP)			-	5.8	6.0	6.9	5.9	6.2	5.8	5.9
		Pdh (declared heating cap)	kW	-	5.5	5.6	6.4	7.1	8.0	9.7	10.7	
	D Condition (12°C)	COPd (declared COP)			-	9.2	10.1	9.1	6.2	6.5	7.4	7.6
		Pdh (declared heating cap)	kW	-	8.7	6.9	7.4	4.9	5.1	7.6	7.7	
	TBivalent	COPd (declared COP)			-	2.3	2.1	2.3	2.1		2.5	2.3
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0	
		Tbiv (bivalent temperature)	°C	-	-10							
	TOL	COPd (declared COP)			-	2.3	2.1	2.3	2.1		2.5	2.3
		Pdh (declared heating cap)	kW	-	13.7	16.0	18.4	20.6	23.2	27.9	31.0	
		Tol (temperature operating limit)	°C	-	-10							
Cooling	Cdc (Degradation cooling)				-	0.25						
Heating	Cdh (Degradation heating)				-	0.25						
Power consumption in other than active mode	Crankcase heater mode	Cooling	PCK	kW	-	0.000						
		Heating	PCK	kW	-	0.059			0.110		0.134	
	Off mode	Cooling	POFF	kW	-	0.052			0.120		0.118	
		Heating	POFF	kW	-	0.059			0.110		0.134	
	Standby mode	Cooling	PSB	kW	-	0.052			0.120		0.118	
		Heating	PSB	kW	-	0.059			0.110		0.134	
	Thermostat-off mode	Cooling	PTO	kW	-	0.003			0.006		0.012	
		Heating	PTO	kW	-	0.068			0.119		0.144	
Indication if the heater is equipped with a supplementary heater					-	no						
Supplementary heater	Back-up capacity	Heating	elbu	kW	-	0.0						

Standard Accessories : Installation and operation manual; Quantity : 1;

Standard Accessories : Connection pipes; Quantity : 1;

2-2 Electrical Specifications				REMQ5U	REYQ8U	REYQ10U	REYQ12U	REYQ14U	REYQ16U	REYQ18U	REYQ20U
Power supply	Name			Y1							
	Phase			3N~							
	Frequency		Hz	50							
	Voltage		V	380-415							
Voltage range	Min.		%	-10							
	Max.		%	10							
Current	Nominal running current (RLA) - 50Hz	Cooling	A	4.1 (7)	7.7 (7)	10.5 (7)	13.8 (7)	15.6 (7)	18.5 (7)	22.0 (7)	28.5 (7)
Current - 50Hz	Starting current (MSC) - remark			(8)							
	Zmax	List		No requirements							
	Minimum circuit amps (MCA)		A	16.1 (9)		22.0 (9)	24.0 (9)	27.0 (9)	31.0 (9)	35.0 (9)	39.0 (9)
	Maximum fuse amps (MFA)		A	20 (10)		25 (10)	32 (10)		40 (10)		50 (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							
Power supply intake				Both indoor and outdoor unit							

2 Specifications

Notes

- (1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m
- (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m
- (3) Actual number of connectable indoor units depends on the indoor unit type and the connection ratio restriction for the system ($50\% \leq CR \leq 120\%$)
- (4) Sound power level is an absolute value that a sound source generates.
- (5) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.
- (6) Refer to refrigerant pipe selection or installation manual
- (7) RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB
- (8) MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always $\leq$ max. running current.
- (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

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 $S_{sc} \geq$ minimum S_{sc} value

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 Recovery operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature control operation)

The STANDARD ESEER value corresponds with normal VRV4 Heat Recovery operation, not taking into account advanced energy saving operation functionality

Sound values are measured in a semi-anechoic room.

Soundpressure system [dBA] = $10 \cdot \log[10^{A/10} + 10^{B/10} + 10^{C/10}]$, 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 $\geq 16A$ and $\leq 75A$ per phase

S_{sc} : Short-circuit power

For detailed contents of standard accessories, see installation/operation manual

Multi combination (10~54HP) data is corresponding with the standard multi combination

2-3 Technical Specifications			REYQ10U	REYQ13U	REYQ16U	REYQ18U	REYQ20U	REYQ22U	REYQ24U	REYQ26U	
System	Outdoor unit module 1		REMQ5U			REYQ8U			REYQ10U	REYQ8U	REYQ12U
	Outdoor unit module 2		REMQ5U	REYQ8U		REYQ10U	REYQ12U		REYQ16U	REYQ14U	
Continuous heating			Yes								
Recommended combination			4 x FXFQ63A VEB	3 x FXFQ50A VEB + 3 x FXFQ63A VEB	4 x FXFQ63A VEB + 2 x FXFQ80A VEB	4 x FXFQ50A VEB + 4 x FXFQ63A VEB	10 x FXFQ50A VEB	6 x FXFQ50A VEB + 4 x FXFQ63A VEB	4 x FXFQ50A VEB + 4 x FXFQ63A VEB + 2 x FXFQ80A VEB	7 x FXFQ50A VEB + 5 x FXFQ63A VEB	
Recommended combination 2			4 x FXSQ63A 2VEB	3 x FXSQ50A 2VEB + 3 x FXSQ63A 2VEB	4 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	4 x FXSQ50A 2VEB + 4 x FXSQ63A 2VEB	10 x FXSQ50A 2VEB	6 x FXSQ50A 2VEB + 4 x FXSQ63A 2VEB	4 x FXSQ50A 2VEB + 4 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	7 x FXSQ50A 2VEB + 5 x FXSQ63A 2VEB	
Recommended combination 3			4 x FXMQ63P 7VEB	3 x FXMQ50P 7VEB + 3 x FXMQ63P 7VEB	4 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	4 x FXMQ50P 7VEB + 4 x FXMQ63P 7VEB	10 x FXMQ50P 7VEB	6 x FXMQ50P 7VEB + 4 x FXMQ63P 7VEB	4 x FXMQ50P 7VEB + 4 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	7 x FXMQ50P 7VEB + 5 x FXMQ63P 7VEB	
Cooling capacity	Prated,c	kW	28.0 (1)	36.4 (1)	44.8 (1)	50.4 (1)	55.9 (1)	61.5 (1)	67.4 (1)	73.5 (1)	

2 Specifications

2-3 Technical Specifications					REYQ10U	REYQ13U	REYQ16U	REYQ18U	REYQ20U	REYQ22U	REYQ24U	REYQ26U	
Heating capacity	Prated,h		kW		16.0	21.7	23.2	27.9	31.0	34.4	36.9	37.1	
	Max.	6°CWB	kW		32.0 (2)	41.0 (2)	50.0 (2)	56.5 (2)	62.5 (2)	69.0 (2)	75.0 (2)	82.5 (2)	
SEER					7.0	7.6	7.3	6.9	6.7	6.6	6.5		
SEER recommended combination 2					7.1	7.5	7.3	6.8	6.4	6.5	6.4		
SEER recommended combination 3					6.9	7.4	7.1	6.9	6.8	6.6	6.5	6.6	
SCOP					4.0	4.1	4.3		4.5		4.3	4.5	
SCOP recommended combination 2					4.1	4.0	4.2		4.4	4.5	4.2	4.4	
SCOP recommended combination 3					4.1	4.2	4.1	4.2	4.4		4.1	4.3	
ηs,c				%	275.1	301.3	288.6	272.9	266.0	260.4	257.7	257.5	
ηs,c recommended combination 2					280.4	296.3	290.6	269.4	252.4	256.8	253.7	254.1	
ηs,c recommended combination 3					272.0	291.7	282.1	274.2	269.0	262.7	256.6	260.5	
ηs,h				%	158.8	160.6	168.2	167.9	175.7	178.5	167.6	175.5	
ηs,h recommended combination 2					160.2	157.6	164.5	166.0	173.3	176.4	164.3	172.5	
ηs,h recommended combination 3					161.0	166.5	160.4	165.0	171.9	174.1	162.1	168.6	
Capacity range				HP	10	13	16	18	20	22	24	26	
Maximum number of connectable indoor units					64 (3)								
Indoor index connection	Min.				125.0	163.0	200.0	225.0	250.0	275.0	300.0	325.0	
	Max.				325.0	423.0	520.0	585.0	650.0	715.0	780.0	845.0	
Capacity control	Method				Inverter controlled								
Heat exchanger	Indoor side				Air								
	Outdoor side				Air								
	Air flow rate	Cooling	Rated	m³/h	19,440			20,220	20,820	21,600	25,320	24,480	
		Heating	Rated	m³/h	19,440			20,220	20,820	21,600	25,320	24,480	
Sound power level	Cooling	Nom.		dBA	81.0 (4)			81.6 (4)	84.5 (4)	84.8 (4)	86.3 (4)	85.3 (4)	
	Heating	Nom.		dBA	65.7 (4)			66.9 (4)		67.8 (4)	69.6 (4)	69.9 (4)	
Sound pressure level	Cooling	Nom.		dBA	60.0 (5)				62.5 (5)		64.0 (5)	63.5 (5)	
Refrigerant	Type				R-410A								
	GWP				2,087.5								
Refrigerant oil	Type				Synthetic (ether) oil FVC68D								
Piping connections	Liquid	Type			Brazed connection								
		OD		mm	9.52	12.7		15.9			19.1		
	Gas	Type			Brazed connection								
		OD		mm	22.2	28.6				34.9			
	HP/LP gas	Type			Brazing connections								
		OD		mm	19.1		22.2		28.6				
	Total piping length	System	Actual	m	500 (6)					1,000 (6)			
Defrost method					Reversed cycle								
PED	Category				Category II								
Space cooling	A Condition (35°C - 27/19)	EERd			3.5	3.3	3.0	2.9	2.7	2.6	2.5	2.7	
		Pdc		kW	28.0	36.4	44.8	50.4	55.9	61.5	67.4	73.5	
	B Condition (30°C - 27/19)	EERd			5.8	5.5	5.0	5.2	4.9		4.8	4.7	
		Pdc		kW	20.6	26.8	33.0	37.1	41.2	45.3	49.7	54.2	
	C Condition (25°C - 27/19)	EERd			8.4	9.8	9.1	8.5	8.3	7.6	8.5	7.9	
		Pdc		kW	16.8	17.2	21.2	23.9	26.5	29.1	31.9	34.8	
	D Condition (20°C - 27/19)	EERd			13.5	14.8	15.0	13.6	12.5	14.6	12.4	13.2	
		Pdc		kW	9.6	10.0		17.8	11.8	18.2	17.3	17.6	
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			3.6	3.2	3.0	2.8	2.7	2.6	2.4	2.7	
		Pdc		kW	28.0	36.4	44.8	50.4	55.9	61.5	67.4	73.5	
	B Condition (30°C - 27/19)	EERd			5.9	5.5	5.1	5.0	4.7				
		Pdc		kW	20.6	26.8	33.0	37.1	41.2	45.3	49.7	54.2	
	C Condition (25°C - 27/19)	EERd			8.5	9.5	9.2	8.5	7.8	7.5	8.5	7.8	
		Pdc		kW	17.0	17.2	21.2	23.9	26.5	29.1	31.9	34.8	
	D Condition (20°C - 27/19)	EERd			13.9	14.7	15.1	13.3	11.7	14.4	12.1	13.0	
		Pdc		kW	9.8	10.0	10.1	17.7	11.8	18.1	17.2	17.5	

2 Specifications

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2-3 Technical Specifications			REYQ10U	REYQ13U	REYQ16U	REYQ18U	REYQ20U	REYQ22U	REYQ24U	REYQ26U
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd	3.5	3.3	3.0	2.9	2.7	2.6	2.5	2.7
		Pdc kW	28.0	36.4	44.8	50.4	55.9	61.5	67.4	73.5
	B Condition (30°C - 27/19)	EERd	5.7	5.6	4.9	5.2	4.9		4.7	
		Pdc kW	20.6	26.8	33.0	37.1	41.2	45.3	49.7	54.2
	C Condition (25°C - 27/19)	EERd	8.3	9.0	8.9	8.6	8.4	7.8	8.5	8.2
		Pdc kW	16.8	18.8	21.2	23.9	26.5	29.1	31.9	34.8
	D Condition (20°C - 27/19)	EERd	13.0	14.5	14.9	13.5	12.7	14.6	12.4	13.4
		Pdc kW	9.4	9.9	10.1	18.0	11.8	18.4	17.5	18.0
Space heating (Average climate)	TBivalent	COPd (declared COP)	1.8	2.3	2.4	2.3			2.2	
		Pdh (declared heating cap) kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0
		Tbiv (bivalent temperature) °C	-10							
	TOL	COPd (declared COP)	1.8	2.3	2.4	2.3			2.2	
		Pdh (declared heating cap) kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0
		Tol (temperature operating limit) °C	-10							
	A Condition (-7°C)	COPd (declared COP)	1.9	2.6	2.7	2.6	2.8	2.7		2.8
		Pdh (declared heating cap) kW	14.2	19.2	20.5	24.7	27.4	30.4	32.6	34.5
	B Condition (2°C)	COPd (declared COP)	4.0	3.6	3.8	4.0	4.1		3.9	4.1
		Pdh (declared heating cap) kW	8.6	11.7	12.5	15.0	16.7	18.5	19.9	21.0
	C Condition (7°C)	COPd (declared COP)	6.1	6.2	6.3	6.0	6.6	6.7	6.3	6.7
		Pdh (declared heating cap) kW	5.7	7.5	8.0	11.3	12.2	12.3	12.8	13.7
	D Condition (12°C)	COPd (declared COP)	9.6	10.6	11.1	10.3	9.4	10.3	7.0	
		Pdh (declared heating cap) kW	8.9	9.1	9.2	7.0	7.7	7.0	5.7	6.0
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)	2.5		2.7	2.6	2.8	2.7	2.6	2.8
		Pdh (declared heating cap) kW	14.2	19.2	20.5	24.7	27.4	30.4	32.6	34.5
	B Condition (2°C)	COPd (declared COP)	3.9	3.6	3.7	3.9	4.1		3.9	4.1
		Pdh (declared heating cap) kW	8.6	11.7	12.5	15.0	16.7	18.5	19.9	21.0
	C Condition (7°C)	COPd (declared COP)	5.8	6.1		5.9	6.5	6.6	6.2	6.5
		Pdh (declared heating cap) kW	5.5	7.5	8.0	11.2	12.3	12.1	12.8	13.6
	D Condition (12°C)	COPd (declared COP)	9.1	10.4	10.8	10.3	9.1	10.3	6.8	6.9
		Pdh (declared heating cap) kW	8.7	9.0		6.9	7.6	6.9	5.7	6.0
	TBivalent	COPd (declared COP)	2.3	2.2	2.3	2.2	2.3	2.2	2.1	2.2
		Pdh (declared heating cap) kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0
		Tbiv (bivalent temperature) °C	-10							
	TOL	COPd (declared COP)	2.3	2.2	2.3	2.2	2.3	2.2	2.1	2.2
		Pdh (declared heating cap) kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0
		Tol (temperature operating limit) °C	-10							

2 Specifications

2-3 Technical Specifications					REYQ10U	REYQ13U	REYQ16U	REYQ18U	REYQ20U	REYQ22U	REYQ24U	REYQ26U
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.4	2.5	2.6		2.8	2.7	2.6	2.7
		Pdh (declared heating cap)	kW	14.2	19.2	20.5	24.7	27.4	30.4	32.6	34.5	
	B Condition (2°C)	COPd (declared COP)			3.9	3.7		3.9	4.0		3.8	4.0
		Pdh (declared heating cap)	kW	8.6	11.7	12.5	15.0	16.7	18.5	19.9	21.0	
	C Condition (7°C)	COPd (declared COP)			5.8	6.1	5.9		6.4		6.0	6.4
		Pdh (declared heating cap)	kW	5.5	7.5	8.0	11.1	11.9		12.8	13.5	
	D Condition (12°C)	COPd (declared COP)			9.2	16.8	10.5	10.1	9.1	10.1	6.7	6.6
		Pdh (declared heating cap)	kW	8.7	5.1	8.9	6.9	7.4	6.9	5.7	6.0	
	TBivalent	COPd (declared COP)			2.2		2.3	2.2	2.3	2.2	2.1	2.2
		Pdh (declared heating cap)	kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0	
		Tbiv (bivalent temperature)	°C	-10								
	TOL	COPd (declared COP)			2.2		2.3	2.2	2.3	2.2	2.1	2.2
		Pdh (declared heating cap)	kW	16.0	21.7	23.2	27.9	31.0	34.4	36.9	39.0	
		Tol (temperature operating limit)	°C	-10								
Cooling	Cdc (Degradation cooling)				0.25							
Heating	Cdh (Degradation heating)				0.25							
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.105						0.172	
		Heating	POFF	kW	0.117						0.169	
	Standby mode	Cooling	PSB	kW	0.105						0.172	
		Heating	PSB	kW	0.117						0.169	
	Thermostat-off mode	Cooling	PTO	kW	0.006						0.009	
		Heating	PTO	kW	0.136						0.187	
Indication if the heater is equipped with a supplementary heater					no							
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0							

Standard Accessories : Installation and operation manual; Quantity : 1;

Standard Accessories : Connection pipes; Quantity : 1;

2-4 Technical Specifications		REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U
System	Outdoor unit module 1	REYQ12U		REYQ16U			REYQ8U	REYQ10U	
	Outdoor unit module 2	REYQ16U	REYQ18U	REYQ16U	REYQ18U	REYQ20U	REYQ12U		REYQ16U
	Outdoor unit module 3	-					REYQ18U		REYQ16U
Continuous heating		Yes							
Recommended combination		6 x FXFQ50A VEB + 4 x FXFQ63A VEB + 2 x FXFQ80A VEB	9 x FXFQ50A VEB + 5 x FXFQ63A VEB	8 x FXFQ63A VEB + 4 x FXFQ80A VEB	3 x FXFQ50A VEB + 9 x FXFQ63A VEB + 2 x FXFQ80A VEB	2 x FXFQ50A VEB + 10 x FXFQ63A VEB + 2 x FXFQ80A VEB	6 x FXFQ50A VEB + 10 x FXFQ63A VEB	9 x FXFQ50A VEB + 9 x FXFQ63A VEB	12 x FXFQ63A VEB + 4 x FXFQ80A VEB
Recommended combination 2		6 x FXSQ50A 2VEB + 4 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	9 x FXSQ50A 2VEB + 5 x FXSQ63A 2VEB	8 x FXSQ63A 2VEB + 4 x FXSQ80A 2VEB	3 x FXSQ50A 2VEB + 9 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	2 x FXSQ50A 2VEB + 10 x FXSQ63A 2VEB + 2 x FXSQ80A 2VEB	6 x FXSQ50A 2VEB + 10 x FXSQ63A 2VEB	9 x FXSQ50A 2VEB + 9 x FXSQ63A 2VEB	12 x FXSQ63A 2VEB + 4 x FXSQ80A 2VEB

2 Specifications

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2-4 Technical Specifications					REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U	
Recommended combination 3					6 x FXMQ50P 7VEB + 4 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	9 x FXMQ50P 7VEB + 5 x FXMQ63P 7VEB	8 x FXMQ63P 7VEB + 4 x FXMQ80P 7VEB	3 x FXMQ50P 7VEB + 9 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	2 x FXMQ50P 7VEB + 10 x FXMQ63P 7VEB + 2 x FXMQ80P 7VEB	6 x FXMQ50P 7VEB + 10 x FXMQ63P 7VEB	9 x FXMQ50P 7VEB + 9 x FXMQ63P 7VEB	12 x FXMQ63P 7VEB + 4 x FXMQ80P 7VEB	
Cooling capacity	Prated,c			kW	78.5 (1)	83.9 (1)	90.0 (1)	95.4 (1)	97.0 (1)	106.3 (1)	111.9 (1)	118.0 (1)	
Heating capacity	Prated,h			kW	39.7	44.4	46.4	51.1	54.2	58.1	58.9	60.9	
	Max.	6°CWB		kW	87.5 (2)	94.0 (2)	100.0 (2)	106.5 (2)	113.0 (2)	119.0 (2)	125.5 (2)	131.5 (2)	
SEER					6.4	6.7	6.2	6.6	6.5	6.8	6.6	6.3	
SEER recommended combination 2					6.3	6.6	6.2	6.6	6.5	6.6		6.4	
SEER recommended combination 3					6.4	6.8	6.1	6.6	6.5	6.9	6.7	6.3	
SCOP					4.4	4.6	4.3	4.4	4.2	4.5		4.3	
SCOP recommended combination 2					4.4	4.5	4.2	4.3	4.2	4.4		4.2	
SCOP recommended combination 3					4.3	4.4	4.1	4.2	4.1	4.3		4.1	
ηs,c				%	251.9	266.8	243.1	259.2	255.3	269.2	259.6	250.2	
ηs,c recommended combination 2					247.9	262.9	244.5	260.6	257.6	263.0	259.5	252.5	
ηs,c recommended combination 3					252.2	269.3	241.7	259.8	255.8	271.4	263.1	249.6	
ηs,h				%	174.8	179.4	169.1	172.0	166.3	176.0	176.1	167.8	
ηs,h recommended combination 2					171.3	176.1	166.1	169.3	164.2	172.4	173.4	165.4	
ηs,h recommended combination 3					168.4	172.6	162.2	164.4	160.0	170.3	170.1	161.9	
Capacity range				HP	28	30	32	34	36	38	40	42	
Maximum number of connectable indoor units					64 (3)								
Indoor index connection	Min.				350.0	375.0	400.0	425.0	450.0	475.0	500.0	525.0	
	Max.				910.0	975.0	1,040.0	1,105.0	1,170.0	1,235.0	1,300.0	1,365.0	
Capacity control	Method				Inverter controlled								
Heat exchanger	Indoor side				Air								
	Outdoor side				Air								
	Air flow rate	Cooling	Rated	m³/h	26,700	26,160	31,200	30,660	31,260	35,880	36,660	41,700	
		Heating	Rated	m³/h	26,700	26,160	31,200	30,660	31,260	35,880	36,660	41,700	
Sound power level	Cooling	Nom.		dBA	87.6 (4)	86.6 (4)	88.6 (4)	87.8 (4)	89.9 (4)	87.2 (4)	87.3 (4)	89.1 (4)	
	Heating	Nom.		dBA	70.1 (4)	68.7 (4)	71.6 (4)	70.6 (4)	70.9 (4)	69.7 (4)	70.2 (4)	72.4 (4)	
Sound pressure level	Cooling	Nom.		dBA	65.1 (5)	64.5 (5)	66.0 (5)	65.5 (5)	67.1 (5)	65.2 (5)		66.5 (5)	
Refrigerant	Type				R-410A								
	GWP				2,087.5								
Refrigerant oil	Type				Synthetic (ether) oil FVC68D								
Piping connections	Liquid	Type			Braze connection								
		OD		mm	19.1								
	Gas	Type			Braze connection								
		OD		mm	34.9				41.3				
	HP/LP gas	Type			Brazing connections								
		OD		mm	28.6					34.9			
	Total piping length		System	Actual	m	1,000 (6)							
	Defrost method					Reversed cycle							
PED	Category				Category II								
Space cooling	A Condition (35°C - 27/19)	EERd			2.4		2.2	2.3		2.5		2.3	
		Pdc		kW	78.5	83.9	90.0	95.4	97.0	106.3	111.9	118.0	
	B Condition (30°C - 27/19)	EERd			4.6	4.8	4.6	4.8	4.7	4.9		4.7	
		Pdc		kW	57.9	61.8	66.3	70.3	71.5	78.3	82.5	86.9	
	C Condition (25°C - 27/19)	EERd			7.8	8.2	8.1	8.4	8.2	8.4	8.0		
		Pdc		kW	37.2	39.7	42.6	45.2	45.9	50.4	53.0	55.9	
	D Condition (20°C - 27/19)	EERd			13.3	15.9	11.2	13.7	13.6	14.9	12.6	12.3	
		Pdc		kW	17.7	21.3	18.9	21.0	23.1	30.8	23.6	24.8	

2 Specifications

2-4 Technical Specifications				REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd		2.4		2.2	2.3		2.5		2.4
		Pdc	kW	78.5	83.9	90.0	95.4	97.0	106.3	111.9	118.0
	B Condition (30°C - 27/19)	EERd		4.5	4.7	4.5	4.7		4.8		4.7
		Pdc	kW	57.8	61.8	66.3	70.3	71.5	78.3	82.5	86.9
	C Condition (25°C - 27/19)	EERd		7.7	8.0	8.2	8.5	8.4	8.2	8.0	8.2
		Pdc	kW	37.2	39.7	42.6	45.2	45.9	50.3	53.0	55.9
	D Condition (20°C - 27/19)	EERd		13.0	15.6	11.3	13.8		14.5	12.9	12.4
		Pdc	kW	17.6	21.2	18.9	21.1	23.1	30.5	23.6	24.8
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd		2.4		2.2	2.3		2.5		2.3
		Pdc	kW	78.5	83.9	90.0	95.4	97.0	106.3	111.9	118.0
	B Condition (30°C - 27/19)	EERd		4.6	4.8	4.5	4.7	4.6	4.9		4.6
		Pdc	kW	57.8	61.8	66.3	70.3	71.5	78.3	82.5	87.0
	C Condition (25°C - 27/19)	EERd		7.9	8.4	8.0	8.5	8.3	8.6	8.3	8.0
		Pdc	kW	37.2	39.7	42.6	45.2	45.9	50.4	53.0	55.9
	D Condition (20°C - 27/19)	EERd		13.4	16.0	11.3	13.9	13.8	14.9	12.9	12.4
		Pdc	kW	17.9	21.7	19.0	21.3	23.0	31.2	23.6	24.8
Space heating (Average climate)	TBivalent	COPd (declared COP)		2.2	2.5	2.1	2.3		2.4		2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4
		Tbiv (bivalent temperature)	°C	-10							
	TOL	COPd (declared COP)		2.2	2.5	2.1	2.3		2.4		2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4
		Tol (temperature operating limit)	°C	-10							
	A Condition (-7°C)	COPd (declared COP)		2.8	2.9	2.7	2.8	2.7	2.8		2.6
		Pdh (declared heating cap)	kW	36.8	40.9	41.0	45.2	47.9	53.0	55.1	55.2
	B Condition (2°C)	COPd (declared COP)		4.1		3.9	4.0	3.8	4.1		4.0
		Pdh (declared heating cap)	kW	22.4	24.9	25.0	27.5	29.2	32.3	33.5	33.6
	C Condition (7°C)	COPd (declared COP)		6.8	6.5		6.3		6.4		
		Pdh (declared heating cap)	kW	14.6	16.2	16.1	17.7	18.8	21.9		21.8
	D Condition (12°C)	COPd (declared COP)		7.2	9.4	7.4	8.0		8.7	8.6	6.9
		Pdh (declared heating cap)	kW	6.4	7.7	7.1	8.2	8.3	9.2	9.6	11.0
	A Condition (-7°C)	COPd (declared COP)		2.7	2.9	2.6	2.8	2.7	2.8		2.6
		Pdh (declared heating cap)	kW	36.8	40.9	41.0	45.2	47.9	53.0	55.1	55.2
	B Condition (2°C)	COPd (declared COP)		4.0	4.1	3.9		3.8	4.0		3.9
		Pdh (declared heating cap)	kW	22.4	24.9	25.0	27.5	29.2	32.3	33.5	33.6
	C Condition (7°C)	COPd (declared COP)		6.7	6.4		6.2		6.3		
		Pdh (declared heating cap)	kW	14.5	16.2	16.1	17.7	18.8	21.8		21.7
	D Condition (12°C)	COPd (declared COP)		7.1	9.1	7.2	7.9	7.8	8.4	8.3	6.7
		Pdh (declared heating cap)	kW	6.4	7.6	7.1	8.0	8.3	9.2	9.6	10.6
Space heating (Average climate) recommended combination 2	TBivalent	COPd (declared COP)		2.2	2.4	2.1	2.3	2.2	2.4		2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4
		Tbiv (bivalent temperature)	°C	-10							
	TOL	COPd (declared COP)		2.2	2.4	2.1	2.3	2.2	2.4		2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4
		Tol (temperature operating limit)	°C	-10							

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2-4 Technical Specifications					REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.7	2.8	2.6	2.7	2.6	2.8	2.7	2.6
		Pdh (declared heating cap)	kW	36.8	40.9	41.0	45.2	47.9	53.1	55.1	55.2	
	B Condition (2°C)	COPd (declared COP)			3.9	4.0	3.8		3.7	4.0		3.8
		Pdh (declared heating cap)	kW	22.4	24.9	25.0	27.5	29.2	32.3	33.5	33.6	
	C Condition (7°C)	COPd (declared COP)			6.5	6.2		6.0		6.1		6.2
		Pdh (declared heating cap)	kW	14.4	16.0	16.1	17.7	18.8	20.8	21.6	21.7	
	D Condition (12°C)	COPd (declared COP)			6.9	9.1	7.0	7.4		8.4	8.3	6.5
		Pdh (declared heating cap)	kW	6.4	7.4	7.1	7.9	8.3	9.2	9.6	10.2	
	TBivalent	COPd (declared COP)			2.2	2.4	2.1	2.3	2.2	2.4	2.3	2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4	
		Tbiv (bivalent temperature)	°C	-10								
	TOL	COPd (declared COP)			2.2	2.4	2.1	2.3	2.2	2.4	2.3	2.1
		Pdh (declared heating cap)	kW	41.6	46.3	46.4	51.1	54.2	60.0	62.3	62.4	
		Tol (temperature operating limit)	°C	-10								
Cooling	Cdc (Degradation cooling)				0.25							
Heating	Cdh (Degradation heating)				0.25							
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.172	0.170	0.240	0.238		0.223		0.292
		Heating	POFF	kW	0.169	0.193	0.220	0.244		0.252		0.279
	Standby mode	Cooling	PSB	kW	0.172	0.170	0.240	0.238		0.223		0.292
		Heating	PSB	kW	0.169	0.193	0.220	0.244		0.252		0.279
	Thermostat-off mode	Cooling	PTO	kW	0.009	0.016	0.013	0.019				0.016
		Heating	PTO	kW	0.187	0.212	0.238	0.263		0.279		0.306
Indication if the heater is equipped with a supplementary heater					no							
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0							

Standard Accessories : Installation and operation manual; Quantity : 1;

Standard Accessories : Connection pipes; Quantity : 1;

2-5 Technical Specifications				REYQ44U	REYQ46U	REYQ48U	REYQ50U	REYQ52U	REYQ54U
System	Outdoor unit module 1			REYQ12U	REYQ14U	REYQ16U			REYQ18U
	Outdoor unit module 2			REYQ16U				REYQ18U	
	Outdoor unit module 3			REYQ16U			REYQ18U		
Continuous heating				Yes					
Recommended combination				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	6 x FXFQ50AVEB + 14 x FXFQ63AVEB + 2 x FXFQ80AVEB	9 x FXFQ50AVEB + 15 x FXFQ63AVEB
Recommended combination 2				6 x FXSQ50A2VE B + 8 x FXSQ63A2VE B + 4 x FXSQ80A2VE B	1 x FXSQ50A2VE B + 13 x FXSQ63A2VE B + 4 x FXSQ80A2VE B	12 x FXSQ63A2VE B + 6 x FXSQ80A2VE B	3 x FXSQ50A2VE B + 13 x FXSQ63A2VE B + 4 x FXSQ80A2VE B	6 x FXSQ50A2VE B + 14 x FXSQ63A2VE B + 2 x FXSQ80A2VE B	9 x FXSQ50A2VE B + 15 x FXSQ63A2VE B
Recommended combination 3				6 x FXMQ50P7VE B + 8 x FXMQ63P7VE B + 4 x FXMQ80P7VE B	1 x FXMQ50P7VE B + 13 x FXMQ63P7VE B + 4 x FXMQ80P7VE B	12 x FXMQ63P7VE B + 6 x FXMQ80P7VE B	3 x FXMQ50P7VE B + 13 x FXMQ63P7VE B + 4 x FXMQ80P7VE B	6 x FXMQ50P7VE B + 14 x FXMQ63P7VE B + 2 x FXMQ80P7VE B	9 x FXMQ50P7VE B + 15 x FXMQ63P7VE B
Cooling capacity	Prated,c		kW	123.5 (1)	130.0 (1)	135.0 (1)	140.4 (1)	145.8 (1)	151.2 (1)

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2-5 Technical Specifications					REYQ44U	REYQ46U	REYQ48U	REYQ50U	REYQ52U	REYQ54U
Heating capacity	Prated,h		kW		62.9	67.0	69.6	74.3	79.0	83.7
	Max.	6°CWB	kW		137.5 (2)	145.0 (2)	150.0 (2)	156.5 (2)	163.0 (2)	169.5 (2)
SEER					6.3	6.2		6.4	6.7	7.0
SEER recommended combination 2					6.3		6.2	6.5	6.7	7.0
SEER recommended combination 3					6.3	6.2	6.1	6.4	6.7	7.0
SCOP					4.4	4.3			4.4	
SCOP recommended combination 2					4.3	4.2		4.3		
SCOP recommended combination 3					4.2	4.1		4.2		
ηs,c			%	249.3	246.8	243.1	254.4	265.7	275.2	
ηs,c recommended combination 2					247.1	248.8	244.5	255.9	267.0	276.7
ηs,c recommended combination 3					249.0	246.9	241.7	254.5	266.8	276.7
ηs,h			%	171.9	168.8	168.5	170.3	171.7	173.3	
ηs,h recommended combination 2					168.7	165.9	165.3	167.5	169.3	170.8
ηs,h recommended combination 3					165.4	161.5		163.0	164.3	165.5
Capacity range				HP	44	46	48	50	52	54
Maximum number of connectable indoor units					64 (3)					
Indoor index connection	Min.				550.0	575.0	600.0	625.0	650.0	675.0
	Max.				1,430.0	1,495.0	1,560.0	1,625.0	1,690.0	1,755.0
Capacity control	Method				Inverter controlled					
Heat exchanger	Indoor side				Air					
	Outdoor side				Air					
	Air flow rate	Cooling	Rated	m³/h	42,300	44,580	46,800	46,260	45,720	45,180
		Heating	Rated	m³/h	42,300	44,580	46,800	46,260	45,720	45,180
Sound power level	Cooling	Nom.		dBA	89.8 (4)	89.3 (4)	90.4 (4)	89.8 (4)	89.3 (4)	88.6 (4)
	Heating	Nom.		dBA	72.4 (4)	73.3 (4)	73.4 (4)	72.7 (4)	72.0 (4)	71.1 (4)
Sound pressure level	Cooling	Nom.		dBA	67.2 (5)	67.0 (5)	67.8 (5)	67.5 (5)	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			Brazed connection					
		OD		mm	19.1					
	Gas	Type			Brazed connection					
		OD		mm	41.3					
	HP/LP gas	Type			Brazing connections					
		OD		mm	34.9					
	Total piping length	System	Actual	m	1,000 (6)					
Defrost method					Reversed cycle					
PED	Category				Category II					
Space cooling	A Condition (35°C - 27/19)	EERd			2.3	2.4	2.2	2.3		2.4
		Pdc		kW	123.5	130.0	135.0	140.4	145.8	151.2
	B Condition (30°C - 27/19)	EERd			4.6			4.7	4.8	5.0
		Pdc		kW	91.0	95.8	99.5	103.5	107.4	111.4
	C Condition (25°C - 27/19)	EERd			7.9	8.1		8.3	8.4	8.6
		Pdc		kW	58.5	61.6	64.0	66.5	69.1	71.6
	D Condition (20°C - 27/19)	EERd			12.7	11.2		13.0	15.0	16.7
		Pdc		kW	26.0	27.4	28.4	29.6	30.7	34.7
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			2.3	2.4	2.2	2.3		2.4
		Pdc		kW	123.5	130.0	135.0	140.4	145.8	151.2
	B Condition (30°C - 27/19)	EERd			4.5	4.6	4.5	4.7	4.8	4.9
		Pdc		kW	91.0	95.8	99.5	103.4	107.4	111.4
	C Condition (25°C - 27/19)	EERd			7.9	8.3	8.2	8.4	8.6	8.8
		Pdc		kW	58.5	61.6	63.9	66.5	69.1	71.6
	D Condition (20°C - 27/19)	EERd			12.5	11.4	11.3	13.1	15.0	16.7
		Pdc		kW	26.0	27.4	28.4	29.6	31.2	34.9

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2-5 Technical Specifications			REYQ44U	REYQ46U	REYQ48U	REYQ50U	REYQ52U	REYQ54U
Space cooling recommended combination 3	A Condition (35°C - 27/19)	EERd	2.3	2.4	2.2	2.3		2.4
		Pdc kW	123.5	130.0	135.0	140.4	145.8	151.2
	B Condition (30°C - 27/19)	EERd	4.5	4.6	4.5	4.6	4.8	4.9
		Pdc kW	91.0	95.8	99.5	103.5	107.4	111.4
	C Condition (25°C - 27/19)	EERd	8.0	8.2	8.0	8.3	8.6	8.8
		Pdc kW	58.5	61.6	63.9	66.5	69.1	71.6
	D Condition (20°C - 27/19)	EERd	12.8	11.4	11.3	13.2	15.2	16.8
		Pdc kW	26.0	27.4	28.4	29.6	31.7	35.4
Space heating (Average climate)	TBivalent	COPd (declared COP)	2.2	2.1		2.3	2.4	2.6
		Pdh (declared heating cap) kW	64.8	67.0	69.6	74.3	79.0	83.7
		Tbiv (bivalent temperature) °C	-10					
	TOL	COPd (declared COP)	2.2	2.1		2.3	2.4	2.6
		Pdh (declared heating cap) kW	64.8	67.0	69.6	74.3	79.0	83.7
		Tol (temperature operating limit) °C	-10					
	A Condition (-7°C)	COPd (declared COP)	2.7			2.8		2.9
		Pdh (declared heating cap) kW	57.3	59.3	61.5	65.7	69.9	74.0
	B Condition (2°C)	COPd (declared COP)	4.0			4.0		4.1
		Pdh (declared heating cap) kW	34.9	36.1	37.5	40.0	42.6	45.1
	C Condition (7°C)	COPd (declared COP)	6.7	6.4	6.5	6.4	6.3	6.2
		Pdh (declared heating cap) kW	22.6	23.2	24.1	25.7	27.3	29.0
	D Condition (12°C)	COPd (declared COP)	6.9			7.6		8.0
		Pdh (declared heating cap) kW	11.0			13.7		16.3
Space heating (Average climate) recommended combination 2	A Condition (-7°C)	COPd (declared COP)	2.7			2.7	2.8	2.9
		Pdh (declared heating cap) kW	57.3	59.3	61.6	65.7	69.9	74.0
	B Condition (2°C)	COPd (declared COP)	3.9				4.0	
		Pdh (declared heating cap) kW	34.9	36.1	37.5	40.0	42.5	45.1
	C Condition (7°C)	COPd (declared COP)	6.5	6.3	6.4	6.2	6.1	6.0
		Pdh (declared heating cap) kW	22.6	23.2	24.1	25.7	27.3	29.0
	D Condition (12°C)	COPd (declared COP)	6.7			7.3		7.9
		Pdh (declared heating cap) kW	10.6			13.3		16.0
	TBivalent	COPd (declared COP)	2.1			2.2	2.4	2.5
		Pdh (declared heating cap) kW	64.8	67.0	69.6	74.3	79.0	83.7
		Tbiv (bivalent temperature) °C	-10					
	TOL	COPd (declared COP)	2.1			2.2	2.4	2.5
		Pdh (declared heating cap) kW	64.8	67.0	69.6	74.3	79.0	83.7
		Tol (temperature operating limit) °C	-10					

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2-5 Technical Specifications					REYQ44U	REYQ46U	REYQ48U	REYQ50U	REYQ52U	REYQ54U
Space heating (Average climate) recommended combination 3	A Condition (-7°C)	COPd (declared COP)			2.6			2.7		2.8
		Pdh (declared heating cap)	kW		57.3	59.3	61.6	65.7	69.9	74.0
	B Condition (2°C)	COPd (declared COP)			3.9	3.8			3.9	
		Pdh (declared heating cap)	kW		34.9	36.1	37.5	40.0	42.5	45.1
	C Condition (7°C)	COPd (declared COP)			6.4	6.1	6.2	6.1	5.9	5.8
		Pdh (declared heating cap)	kW		22.4	23.2	24.1	25.7	27.3	29.0
	D Condition (12°C)	COPd (declared COP)			6.5		6.6	7.0		7.4
		Pdh (declared heating cap)	kW		10.2		10.7	12.7		15.2
	TBivalent	COPd (declared COP)			2.1			2.2	2.3	2.5
		Pdh (declared heating cap)	kW		64.8	67.0	69.6	74.3	79.0	83.7
		Tbiv (bivalent temperature)	°C		-10					
	TOL	COPd (declared COP)			2.1			2.2	2.3	2.5
		Pdh (declared heating cap)	kW		64.8	67.0	69.6	74.3	79.0	83.7
		Tol (temperature operating limit)	°C		-10					
Cooling	Cdc (Degradation cooling)				0.25					
Heating	Cdh (Degradation heating)				0.25					
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.292	0.360		0.358	0.356	0.354
		Heating	POFF	kW	0.279	0.330		0.354	0.379	0.403
	Standby mode	Cooling	PSB	kW	0.292	0.360		0.358	0.356	0.354
		Heating	PSB	kW	0.279	0.330		0.354	0.379	0.403
	Thermostat-off mode	Cooling	PTO	kW	0.016	0.019		0.025	0.031	0.037
		Heating	PTO	kW	0.306	0.357		0.382	0.406	0.431
Indication if the heater is equipped with a supplementary heater					no					
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0					

Standard Accessories : Installation and operation manual; Quantity : 1;

Standard Accessories : Connection pipes; Quantity : 1;

2-6 Electrical Specifications				REYQ10U	REYQ13U	REYQ16U	REYQ18U	REYQ20U	REYQ22U	REYQ24U	REYQ26U
Power supply	Name			Y1							
	Phase			3N~							
	Frequency		Hz	50							
	Voltage		V	380-415							
Voltage range	Min.		%	-10							
	Max.		%	10							
Current	Nominal running current (RLA) - 50Hz	Cooling	A	8.2 (7)	11.8 (7)	15.4 (7)	18.2 (7)	21.5 (7)	24.3 (7)	26.2 (7)	29.4 (7)
Current - 50Hz	Starting current (MSC) - remark			(8)							
	Zmax	List		No requirements							
	Minimum circuit amps (MCA)		A	30.0 (9)			37.0 (9)	39.0 (9)	46.0 (9)		51.0 (9)
	Maximum fuse amps (MFA)		A	40 (10)			50 (10)		63 (10)		
Wiring connections - 50Hz	For power supply	Quantity		5G							
	For connection with indoor	Quantity		2							
		Remark		F1,F2							
Power supply intake				Both indoor and outdoor unit							

2-7 Electrical Specifications					REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U
Power supply	Name				Y1							
	Phase				3N~							
	Frequency			Hz	50							
	Voltage			V	380-415							

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2-7 Electrical Specifications				REYQ28U	REYQ30U	REYQ32U	REYQ34U	REYQ36U	REYQ38U	REYQ40U	REYQ42U
Voltage range	Min.		%	-10							
	Max.		%	10							
Current	Nominal running current (RLA) - 50Hz	Cooling	A	32.3 (7)	35.8 (7)	37.0 (7)	40.5 (7)	47.0 (7)	43.5 (7)	46.3 (7)	47.5 (7)
Current - 50Hz	Starting current (MSC) - remark			(8)							
	Zmax	List		No requirements							
	Minimum circuit amps (MCA)		A	55.0 (9)	59.0 (9)	62.0 (9)	66.0 (9)	70.0 (9)	74.0 (9)	81.0 (9)	84.0 (9)
	Maximum fuse amps (MFA)		A	63 (10)	80 (10)				100 (10)		
Wiring connections - 50Hz	For power supply	Quantity		5G							
	For connection with indoor	Quantity		2							
		Remark		F1,F2							
Power supply intake				Both indoor and outdoor unit							

2-8 Electrical Specifications				REYQ44U	REYQ46U	REYQ48U	REYQ50U	REYQ52U	REYQ54U
Power supply	Name			Y1					
	Phase			3N~					
	Frequency		Hz	50					
	Voltage		V	380-415					
Voltage range	Min.		%	-10					
	Max.		%	10					
Current	Nominal running current (RLA) - 50Hz	Cooling	A	50.8 (7)	52.6 (7)	55.5 (7)	59.0 (7)	62.5 (7)	66.0 (7)
Current - 50Hz	Starting current (MSC) - remark			(8)					
	Zmax	List		No requirements					
	Minimum circuit amps (MCA)		A	86.0 (9)	89.0 (9)	93.0 (9)	97.0 (9)	101.0 (9)	105.0 (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					
Power supply intake				Both indoor and outdoor unit					

2 Specifications

Notes

- (1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m
- (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m
- (3) Actual number of connectable indoor units depends on the indoor unit type and the connection ratio restriction for the system ($50\% \leq CR \leq 120\%$)
- (4) Sound power level is an absolute value that a sound source generates.
- (5) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.
- (6) Refer to refrigerant pipe selection or installation manual
- (7) RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB
- (8) MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always $\leq$ max. running current.
- (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).

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 $S_{sc} \geq$ minimum S_{sc} value

FLA means the nominal running current of the fan

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 Recovery operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature control operation)

The STANDARD ESEER value corresponds with normal VRV4 Heat Recovery operation, not taking into account advanced energy saving operation functionality

Sound values are measured in a semi-anechoic room.

Sound pressure system [dBA] = $10 \cdot \log[10^{A/10} + 10^{B/10} + 10^{C/10}]$, 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 $I_N > 16A$ and $\leq 75A$ per phase

S_{sc} : Short-circuit power

For detailed contents of standard accessories, see installation/operation manual

Multi combination (10~54HP) data is corresponding with the standard multi combination

3 Options

3 - 1 Options

3

REMQ-U REYQ-U

VRV4
Heat recovery
Option list

Description	Option	REMQ5*	REYQ8*	REYQ10*	REYQ12*	REYQ14*	REYQ16*	REYQ18*	REYQ20*	Multi -2-	Multi -3-
Low ambient option	EKBPH012T7A (*1)	o	o	o	o	-	-	-	-	o	o
Bottom plate heater	EKBPH020T7A (*1)	-	-	-	-	o	o	o	o	o	o
PC cable kit	EKPCCAB2	o	o	o	o	o	o	o	o	o	o
Refnet header	KHRQ23M29H	o	o	o	o	o	o	o	o	o	o
	KHRQ23M64H	-	-	-	o	o	o	o	o	o	o
	KHRQ23M75H	-	-	-	-	-	-	-	-	o	o
Refnet joint	KHRQ23M20T	o	o	o	o	o	o	o	o	o	o
	KHRQ23M29T9	o	o	o	o	o	o	o	o	o	o
	KHRQ23M64T	-	-	-	o	o	o	o	o	o	o
	KHRQ23M75T	-	-	-	-	-	-	-	-	o	o
Outdoor multi-connection kit	BHFQ23P907	-	-	-	-	-	-	-	-	o	-
	BHFQ23P1357	-	-	-	-	-	-	-	-	-	o
Single -BSVQ- unit (*2) (*3)	BS1Q10A	o	o	o	o	o	o	o	o	o	o
	BS1Q16A	o	o	o	o	o	o	o	o	o	o
	BS1Q25A	o	o	o	o	o	o	o	o	o	o
	BS4Q14A	o	o	o	o	o	o	o	o	o	o
Multi -BS- unit	BS6Q14A	o	o	o	o	o	o	o	o	o	o
	BS8Q14A	o	o	o	o	o	o	o	o	o	o
	BS10Q14A	o	o	o	o	o	o	o	o	o	o
	BS12Q14A	o	o	o	o	o	o	o	o	o	o
	BS16Q14A	o	o	o	o	o	o	o	o	o	o

Notes

1. One bottom plate heater per outdoor unit required.
2. Sound reduction kit -EKBSVQLNP-
One sound reduction kit per -BSVQ- box required.
3. Technical cooling is available.
4. Multi-tenancy is available

3D119362

4 Combination table

4 - 1 Combination Table

REMQ-U

REYQ-U

Indoor unit combination pattern	VRV indoor unit	VRV indoor unit Cooling only unit	LT Hydrobox unit	HT Hydrobox unit	AHU (*3)
VRV indoor unit	o	o	o	o	o
VRV indoor unit Cooling only unit	o	o	o	Not allowed	o
LT Hydrobox unit	o	o	o (*1)	o (*1)	Not allowed
HT Hydrobox unit	o	Not allowed	o (*1)	o (*1)	Not allowed
AHU (*3)	o	o	Not allowed	Not allowed	o (*2)

Notes

1. ·Hydroboxes· indoor units may not be used without a ·VRV· indoor unit
Refer to the connection ratio restrictions.
2. ·AHUs·/air curtains may not be used without a ·VRV· indoor unit.
Refer to the connection ratio restrictions.
3. The following units are considered AHUs:
 - 3.1 ·EKEXV + EKEQM + AHU· coil
 - 3.2 ·Biddle· air curtain
 - 3.3 ·FXMQ*MF· unit

3D088013

REMQ-U

REYQ-U

VRV4

Heat recovery

Multi-unit standard combinations table

		5HP	8HP	10HP	12HP	14HP	16HP	18HP	20HP
Non-continuous heating	REMQ5* (*1)	1							
	REYQ8*		1						
	REYQ10*			1					
	REYQ12*				1				
	REYQ14*					1			
	REYQ16*						1		
	REYQ18*							1	
Continuous heating ·2· outdoor units	REYQ20*								1
	REYQ10*	2							
	REYQ13*	1	1						
	REYQ16*		2						
	REYQ18*		1	1					
	REYQ20*		1		1				
	REYQ22*			1	1				
	REYQ24*		1				1		
	REYQ26*				1	1			
	REYQ28*				1		1		
	REYQ30*				1			1	
	REYQ32*						2		
	REYQ34*						1	1	
	REYQ36*						1		1
Continuous heating ·3· outdoor units	REYQ38*		1		1			1	
	REYQ40*			1	1			1	
	REYQ42*			1			2		
	REYQ44*				1		2		
	REYQ46*					1	2		
	REYQ48*						3		
	REYQ50*						2	1	
	REYQ52*						1	2	
	REYQ54*							3	

Notes

1. The ·REMQ5· unit cannot be used as a standalone unit and may only be used in standard combinations.
2. Standard and free combinations have different piping restrictions.
3. Never combine more than ·3· units to create a multi-combination.

3D088011

5 Capacity tables

5 - 1 Capacity Table Legend

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

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

- **Capacity table database:** lets you find back and export quickly the capacity information you are looking for based upon unit model, refrigerant temperature and connection ratio.
- You can access the capacity table viewer here:

https://my.daikin.eu/content/denv/en_US/home/applications/software-finder/capacity-table-viewer.html



- An overview of **all software tools** that we offer can be found here:

https://my.daikin.eu/denv/en_US/home/applications/software-finder.html



5 Capacity tables

5 - 2 Integrated Heating Capacity Correction Factor

REMQ-U REYQ-U

The heating capacity tables do not take into account the capacity reduction in case of frost accumulation or defrost operation.

The capacity values that take these factors into account, or in other words, the integrated heating capacity values, can be calculated as follows:

Formula $A = B \cdot C$

A= Integrated heating capacity

B= Capacity characteristics value

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

Inlet air temperature of heat exchanger

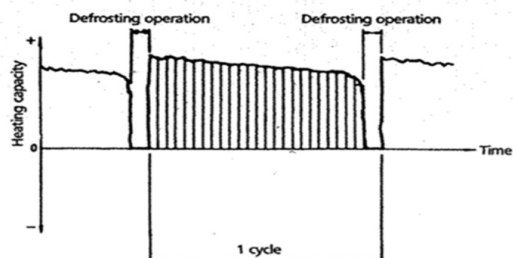
[°CDB/°CWB]	-7/-7,6	-5/-5,6	-3/-3,7	0/-0,7	3/2,2	5/4,1	7/6
-------------	---------	---------	---------	--------	-------	-------	-----

Integrated correction factor for frost accumulation (C):

For single unit installation	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
	10HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00
For multi-unit installation	13HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00
	16HP	0.95	0.93	0.88	0.84	0.85	0.90	1.00
	18HP	0.95	0.93	0.88	0.82	0.83	0.89	1.00
	20HP	0.95	0.93	0.88	0.80	0.81	0.88	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 'VRV4' corresponds with the standard multi-combination of drawing '3D088011'.



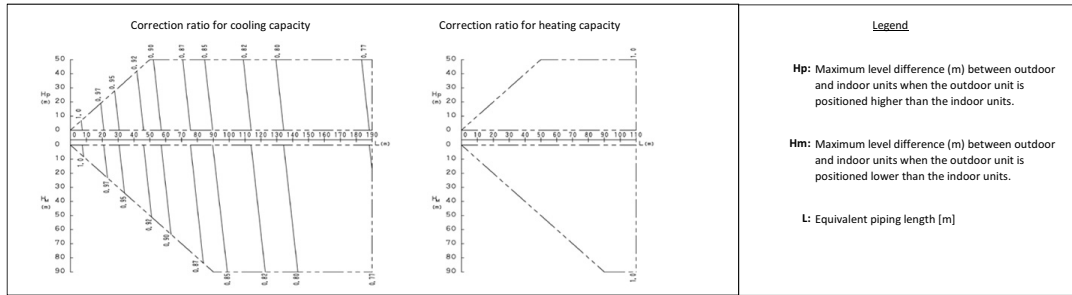
3D088034

5 Capacity tables

5 - 3 Capacity Correction Factor

5

REYQ8U
REYQ22U



Notes

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

Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
8HP	9.5	12.7
22HP	15.9	19.1

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

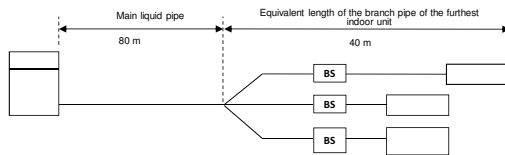
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
8HP	1	0.5	1	0.2
22HP	1	0.5	1	0.4

5. Example -8HP-



Overall equivalent length

- Cooling mode
- Heating mode

$$= 80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$$

$$= 80 \text{ m} \times 0.2 + 40 \text{ m} = 56 \text{ m}$$

Capacity correction ratio (height difference = 0)

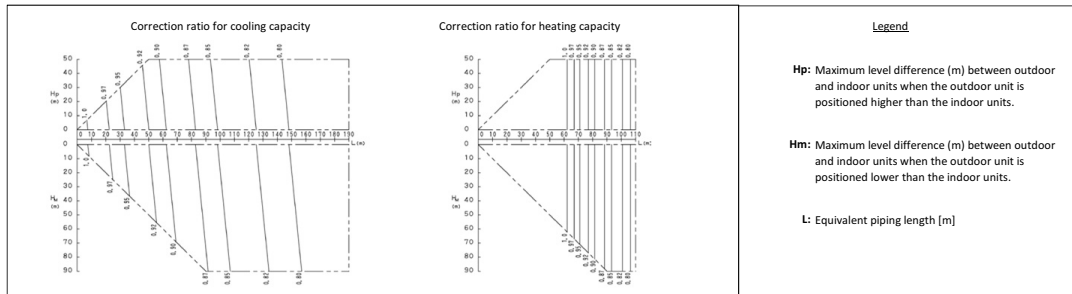
- Cooling mode
- Heating mode

$$= 0.86$$

$$= 1.0$$

3D088033

REYQ10U



Notes

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

Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
10HP	9.5	12.7

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

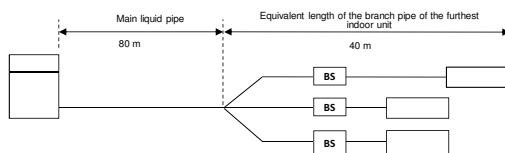
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
10HP	1	0.5	1	0.2

5. Example -10HP-



Overall equivalent length

- Cooling mode
- Heating mode

$$= 80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$$

$$= 80 \text{ m} \times 0.2 + 40 \text{ m} = 56 \text{ m}$$

Capacity correction ratio (height difference = 0)

- Cooling mode
- Heating mode

$$= 0.88$$

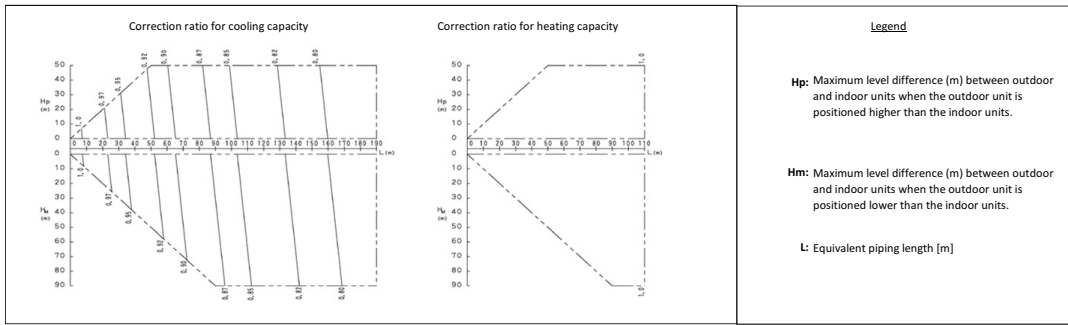
$$= 1.0$$

3D088033

5 Capacity tables

5 - 3 Capacity Correction Factor

REYQ12U
REYQ18U
REYQ26U
REYQ28U
REYQ30U
REYQ38U
REYQ40U
REYQ42U
REYQ44U



Notes

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

Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
12HP	12.7	15.9
18HP	15.9	19.1
26+28+30+38+40+42+44HP	19.1	22.2

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

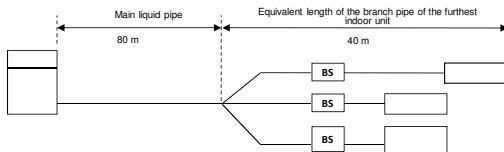
Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
12HP	1	0.5	1	0.3
18+26+28+30+38+40+42+44HP	1	0.5	1	0.4

Example -18HP-



Overall equivalent length

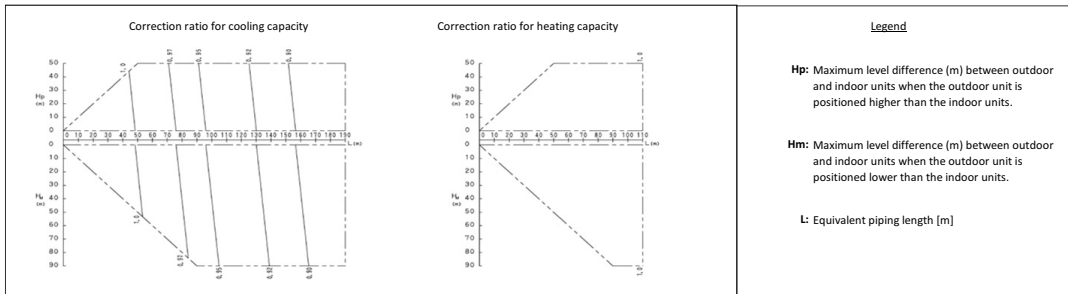
- Cooling mode = 80 m x 0.5 + 40 m = 80 m
- Heating mode = 80 m x 0.4 + 40 m = 72 m

Capacity correction ratio (height difference = 0)

- Cooling mode = 0.88
- Heating mode = 1.0

3D088033

REYQ13U
REYQ14U



Notes

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

Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
13+14HP	12.7	15.9

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

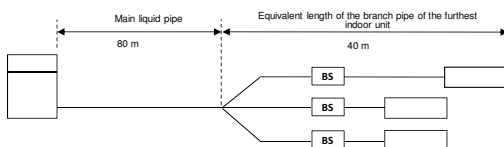
Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
13+14HP	1	0.5	1	0.3

Example -14HP-



Overall equivalent length

- Cooling mode = 80 m x 0.5 + 40 m = 80 m
- Heating mode = 80 m x 0.3 + 40 m = 64 m

Capacity correction ratio (height difference = 0)

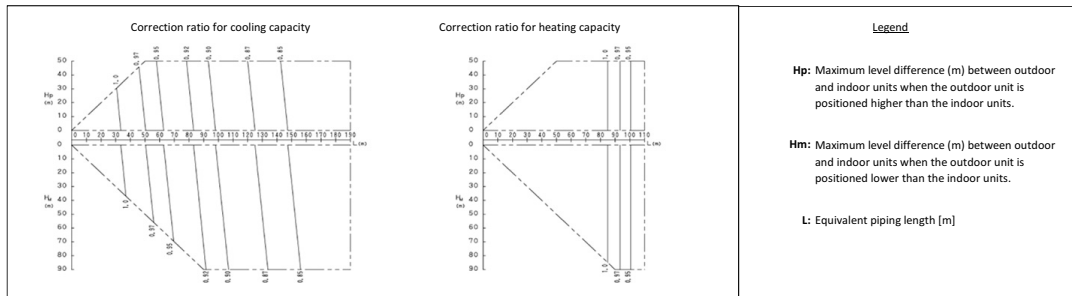
- Cooling mode = 0.96
- Heating mode = 1.0

3D088033

5 Capacity tables

5 - 3 Capacity Correction Factor

REYQ16U



Notes

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

2. Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
16HP	12.7	15.9

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

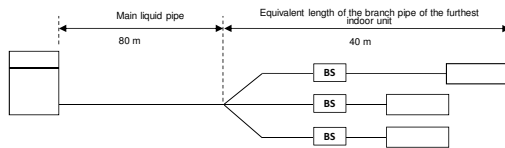
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
16HP	1	0.5	1	0.3

5. Example - 16HP.



Overall equivalent length

- Cooling mode
- Heating mode

$$= 80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$$

$$= 80 \text{ m} \times 0.3 + 40 \text{ m} = 64 \text{ m}$$

Capacity correction ratio (height difference = 0)

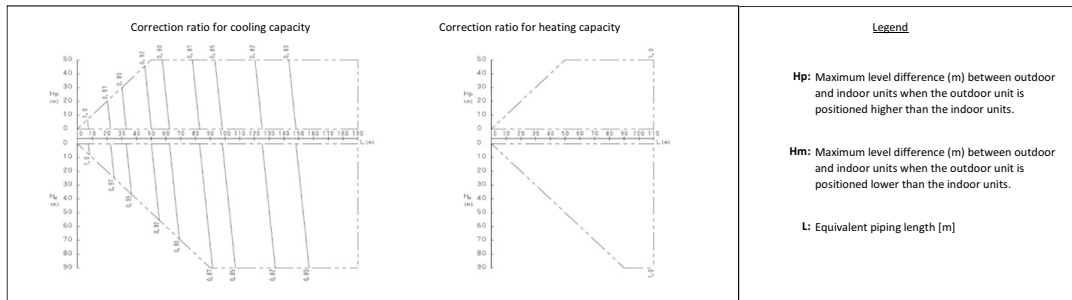
- Cooling mode
- Heating mode

$$= 0.93$$

$$= 1.0$$

3D088033

REYQ20U
REYQ32U
REYQ34U



Notes

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

2. Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%.

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

Indoor connection ratio > 100%.

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
20HP	15.9	19.1
32+34HP	19.1	22.2

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

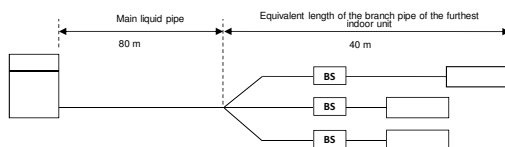
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
20+32+34HP	1	0.5	1	0.4

5. Example - 20HP.



Overall equivalent length

- Cooling mode
- Heating mode

$$= 80 \text{ m} \times 0.5 + 40 \text{ m} = 80 \text{ m}$$

$$= 80 \text{ m} \times 0.4 + 40 \text{ m} = 72 \text{ m}$$

Capacity correction ratio (height difference = 0)

- Cooling mode
- Heating mode

$$= 0.88$$

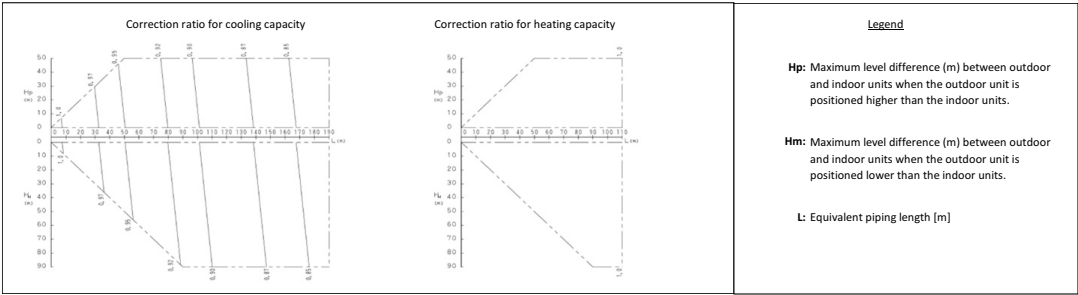
$$= 1.0$$

3D088033

5 Capacity tables

5 - 3 Capacity Correction Factor

REYQ24U



Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.
- Method of calculating the capacity of the outdoor units.**
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.
Indoor connection ratio ≤ 100%.

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

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$
- Main liquid pipe size increase**

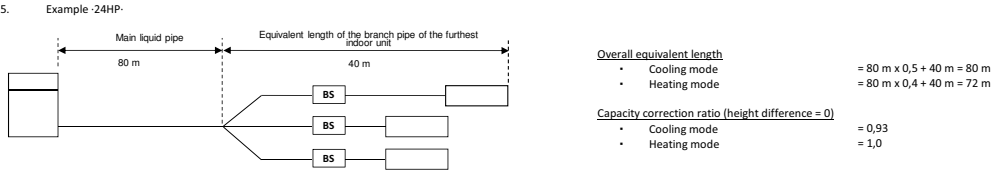
Model	Standard liquid side Ø	Increased liquid side Ø
24HP	15.9	19.1

For the allowed system setups and the rules for when to increase the main liquid piping diameter, refer to the installation manual.
- Overall equivalent length**

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

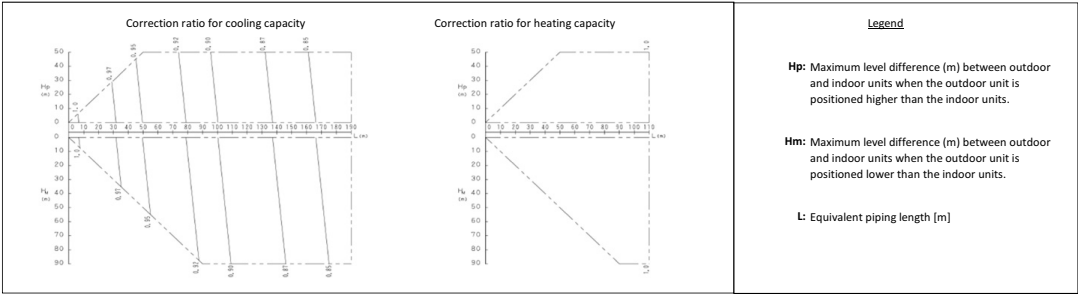
Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
24HP	1	0.5	1	0.4



3D088033

REYQ36U



Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.
- Method of calculating the capacity of the outdoor units.**
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.
Indoor connection ratio ≤ 100%.

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

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$
- Main liquid pipe size increase**

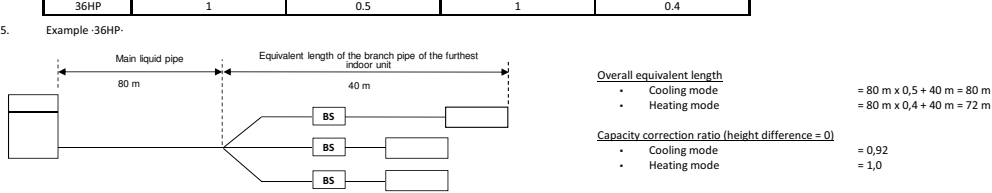
Model	Standard liquid side Ø	Increased liquid side Ø
36HP	19.1	22.2

For the allowed system setups and the rules for when to increase the main liquid piping diameter, refer to the installation manual.
- Overall equivalent length**

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
36HP	1	0.5	1	0.4

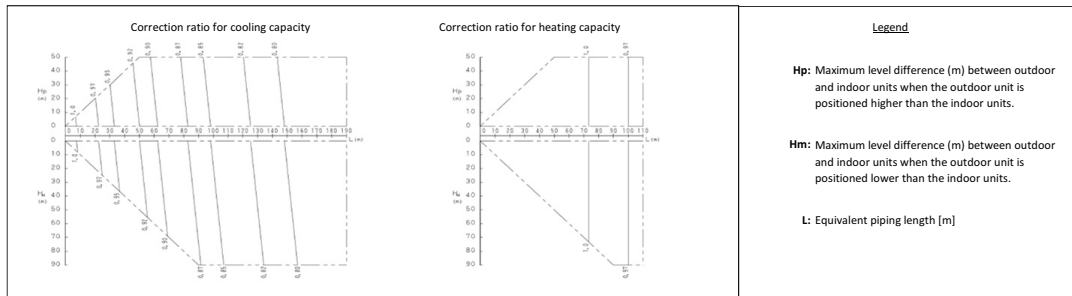


3D088033

5 Capacity tables

5 - 3 Capacity Correction Factor

REYQ46U



Legend

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

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

L: Equivalent piping length [m]

Notes

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

2. Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%

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

Indoor connection ratio > 100%

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
46HP	19.1	22.2

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

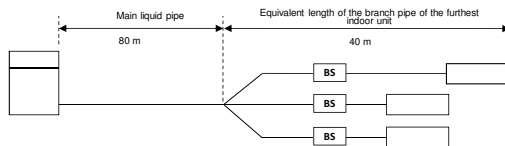
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
46HP	1	0.5	1	0.4

5. Example -46HP-



Overall equivalent length

- Cooling mode
- Heating mode

= 80 m x 0.5 + 40 m = 80 m
= 80 m x 0.4 + 40 m = 72 m

Capacity correction ratio (height difference = 0)

- Cooling mode
- Heating mode

= 0.88
= 1.0

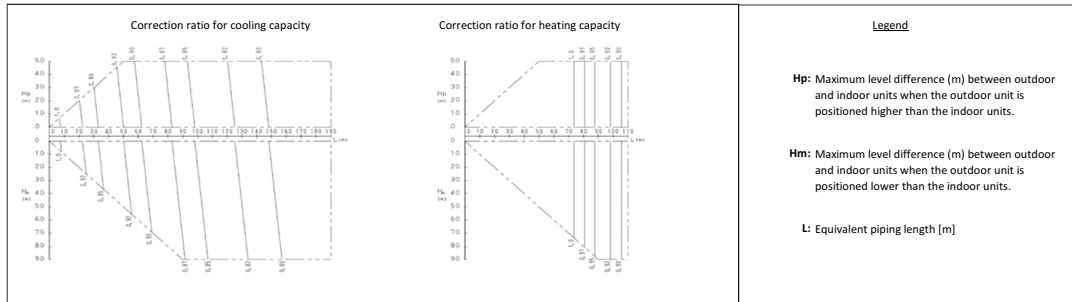
3D088033

REYQ48U

REYQ50U

REYQ52U

REYQ54U



Legend

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

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

L: Equivalent piping length [m]

Notes

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

2. Method of calculating the capacity of the outdoor units.

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

Indoor connection ratio ≤ 100%

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

Indoor connection ratio > 100%

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

3. Main liquid pipe size increase

Model	Standard liquid side Ø	Increased liquid side Ø
48~54HP	19.1	22.2

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

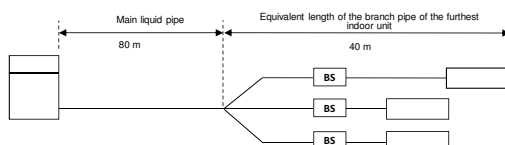
4. Overall equivalent length

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

Choose the correction factor from the following table.

Model	Correction ratio for cooling capacity		Correction ratio for heating capacity	
	Standard size	Size increase	Standard size	Size increase
48~54HP	1	0.5	1	0.4

5. Example -48HP-



Overall equivalent length

- Cooling mode
- Heating mode

= 80 m x 0.5 + 40 m = 80 m
= 80 m x 0.4 + 40 m = 72 m

Capacity correction ratio (height difference = 0)

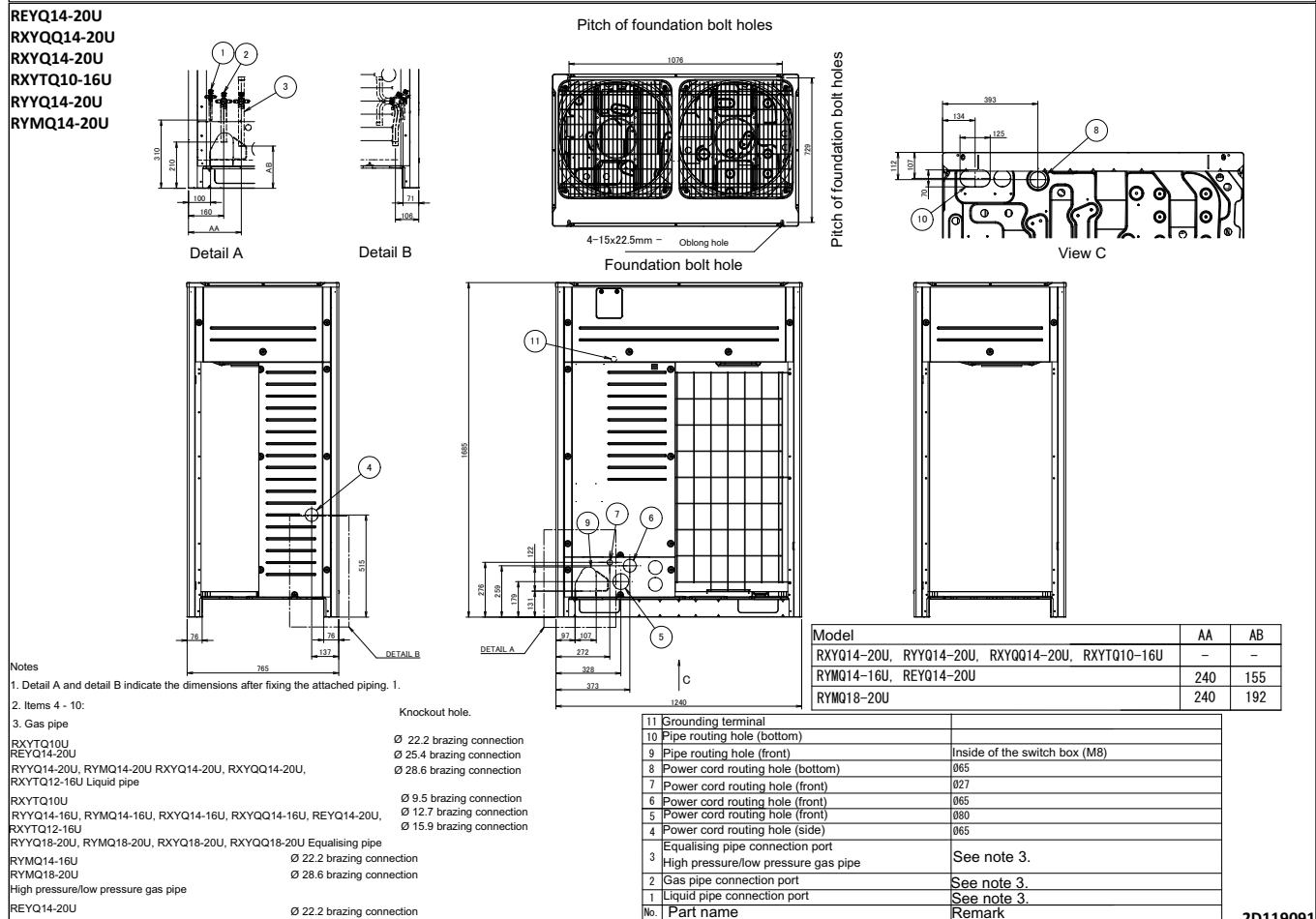
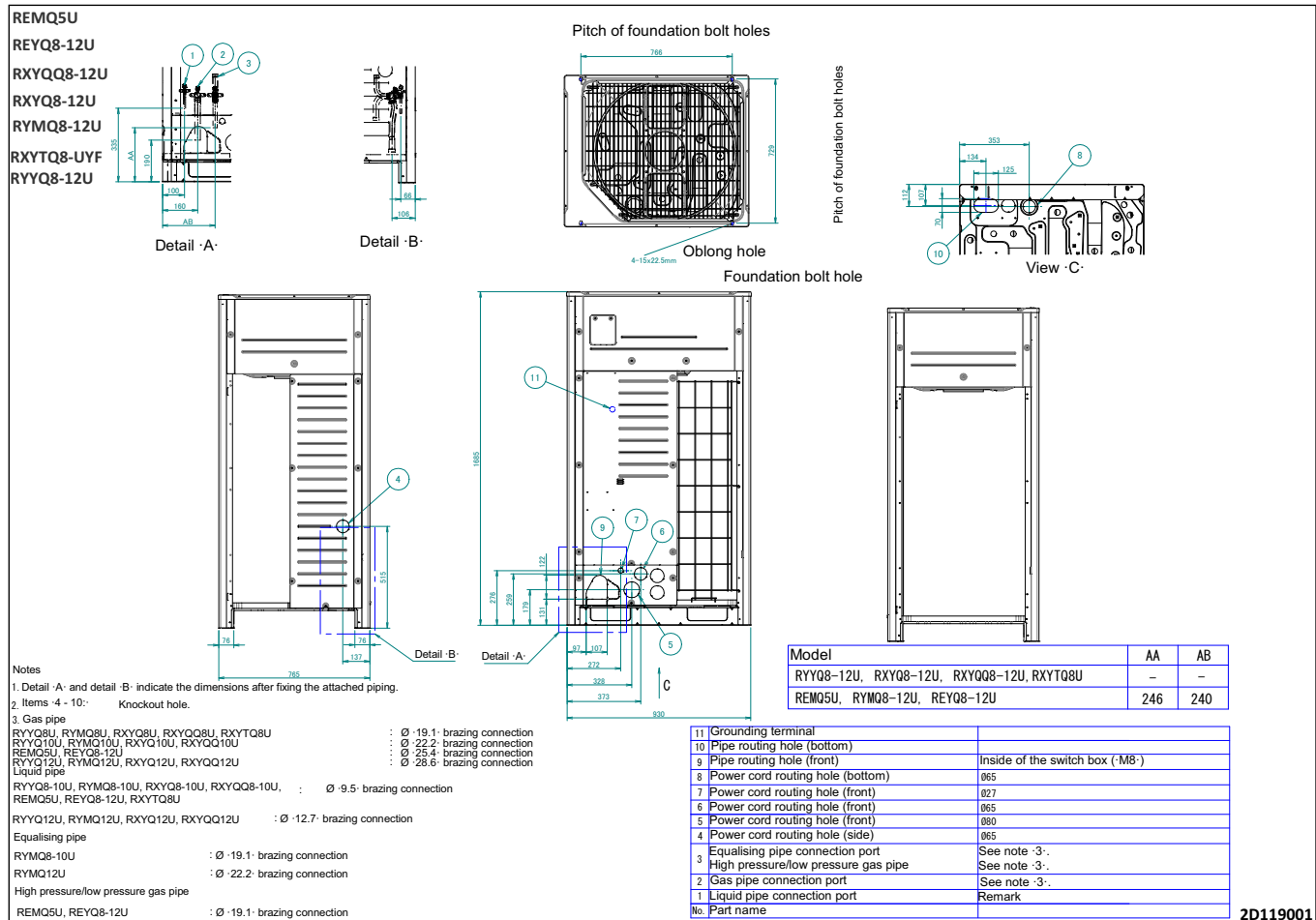
- Cooling mode
- Heating mode

= 0.88
= 1.0

3D088033

6 Dimensional drawings

6 - 1 Dimensional Drawings

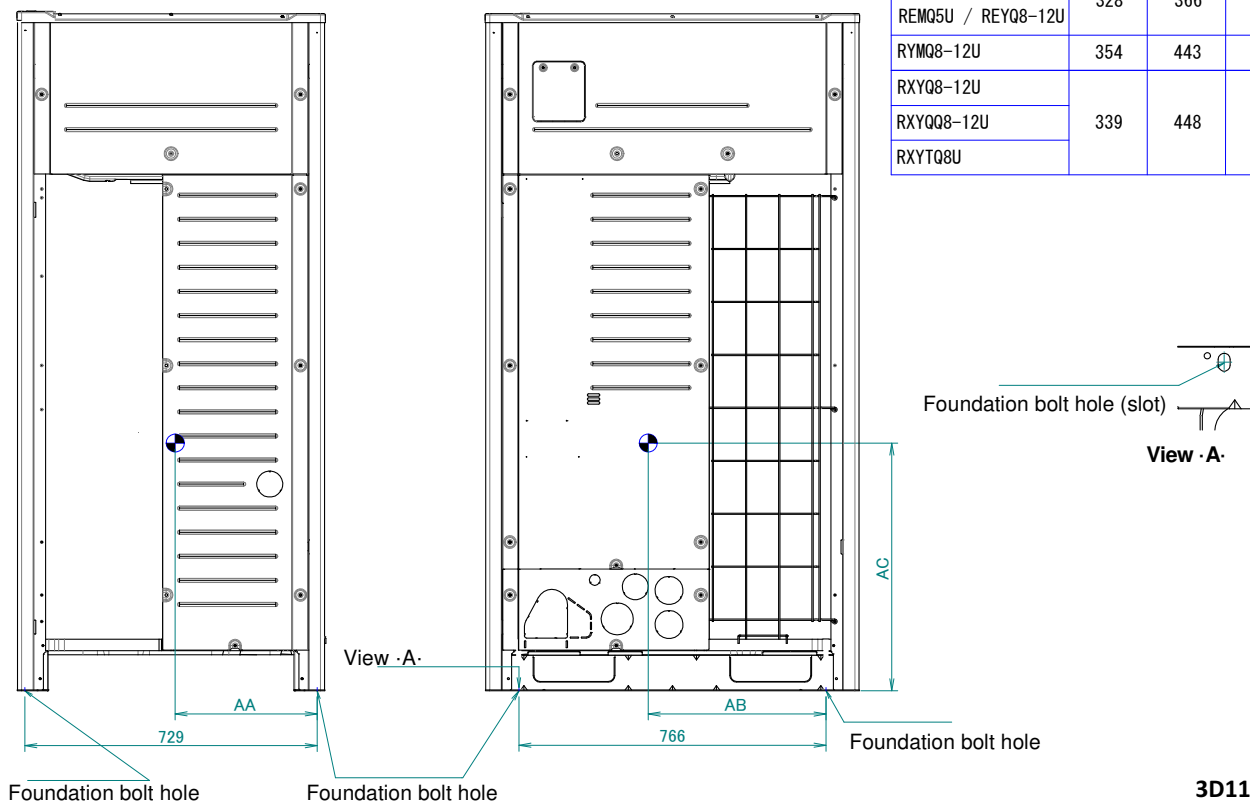


7 Centre of gravity

7 - 1 Centre of Gravity

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

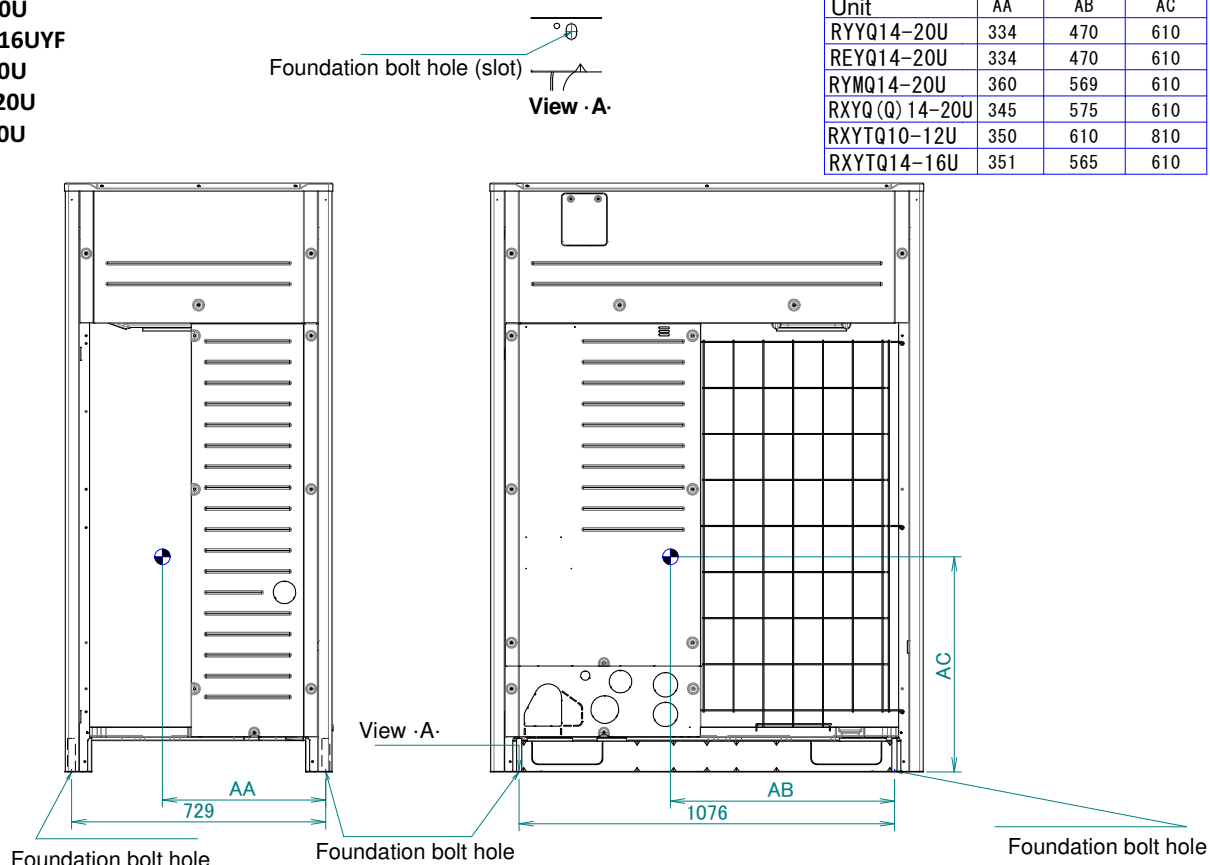
Unit	AA	AB	AC
RYYQ8-12U	328	366	565
REMQ5U / REYQ8-12U			
RYMQ8-12U	354	443	565
RXYQ8-12U	339	448	565
RXYQQ8-12U			
RXYTQ8U			



3D119703

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

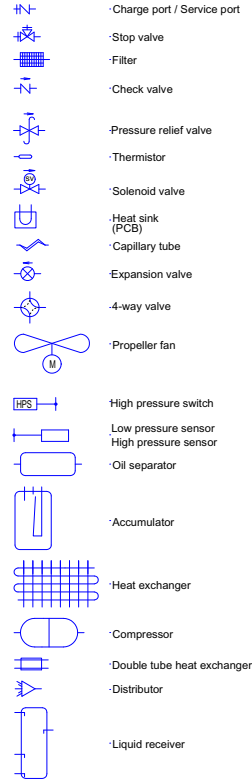
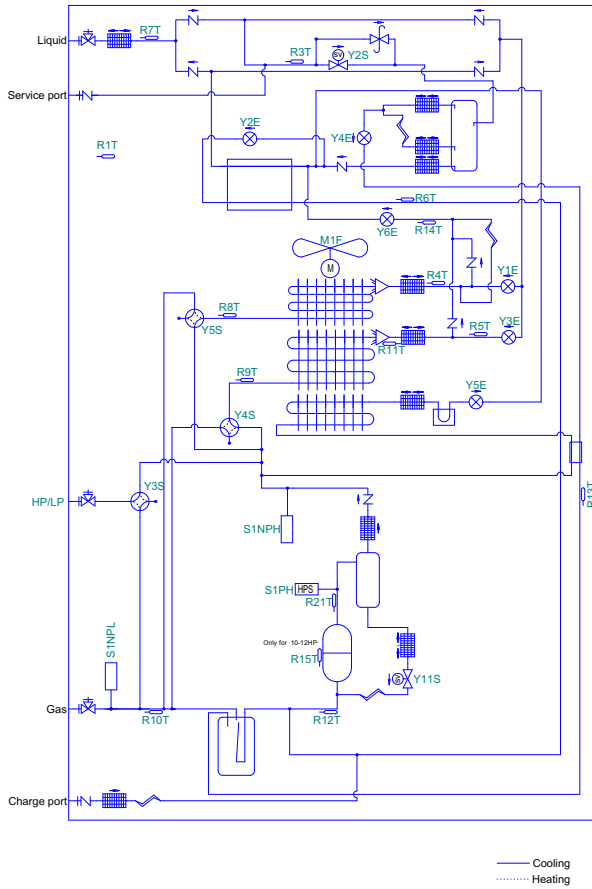


3D119704

8 Piping diagrams

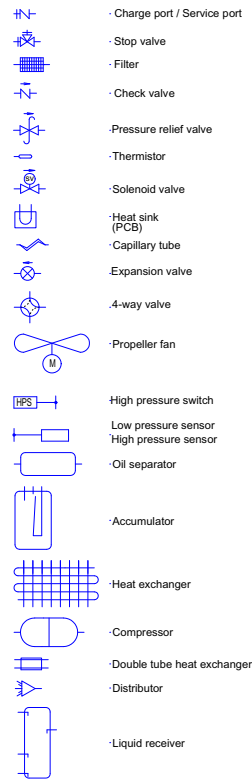
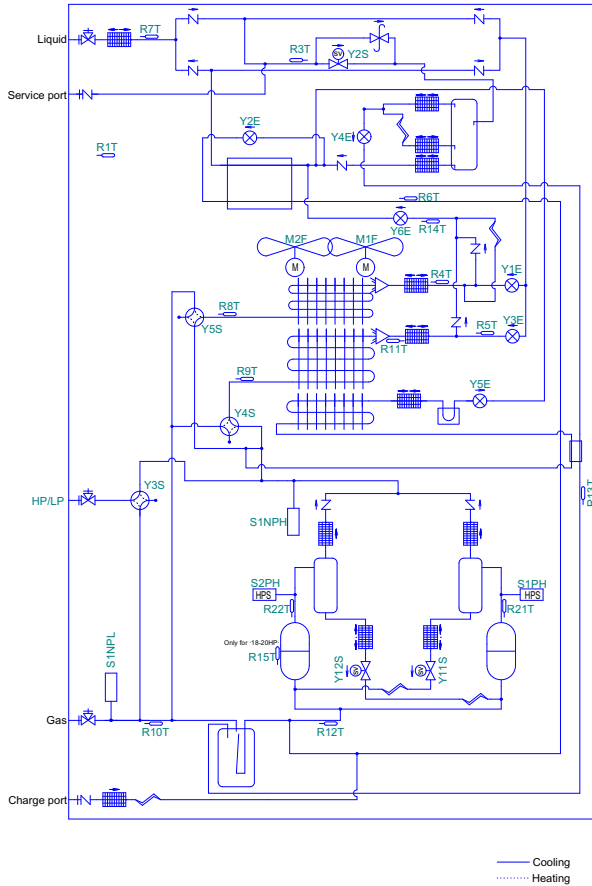
8 - 1 Piping Diagrams

REMQ5U REYQ8-12U



3D088100A

REYQ14-20U



3D088099A

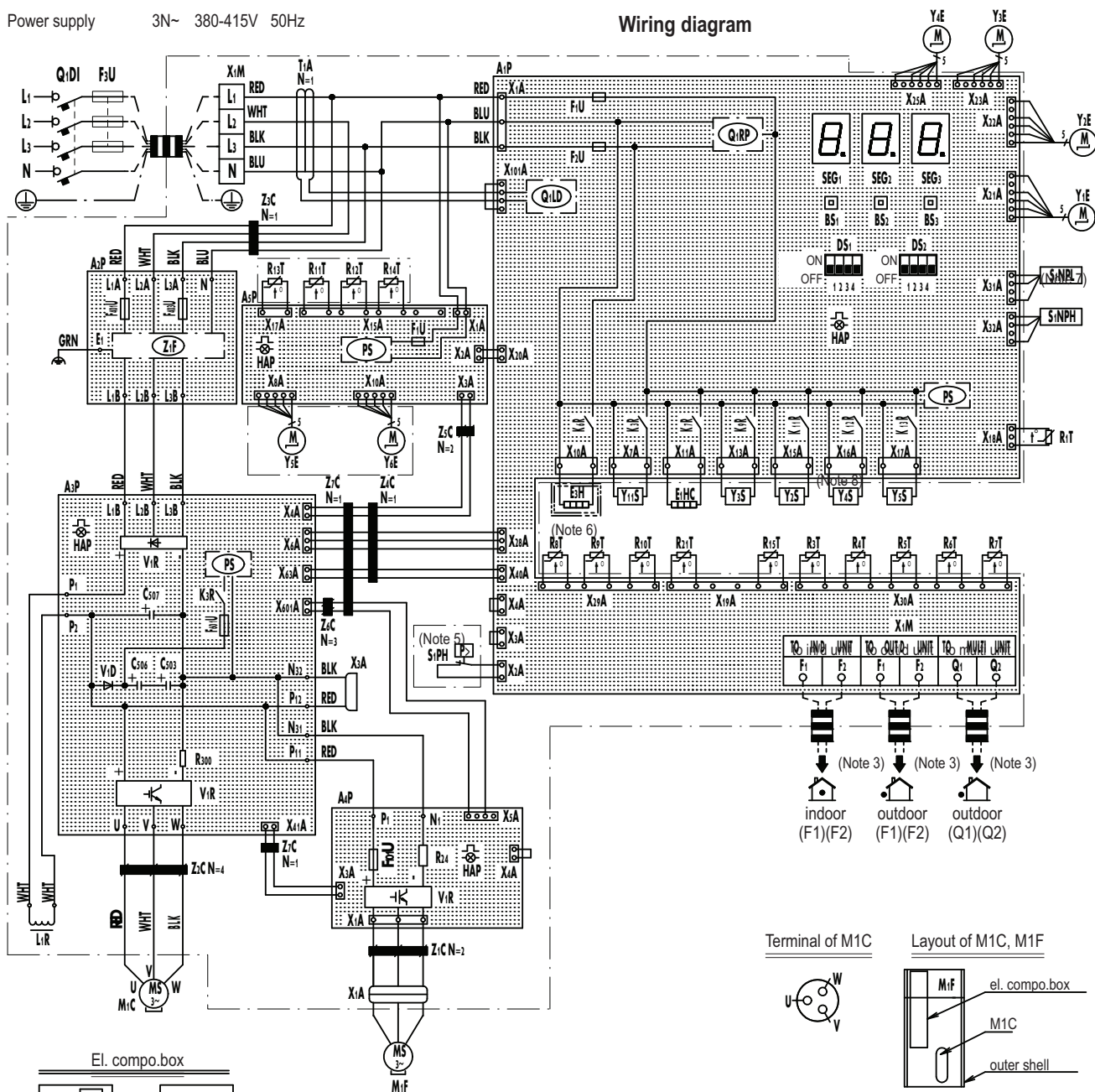
9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

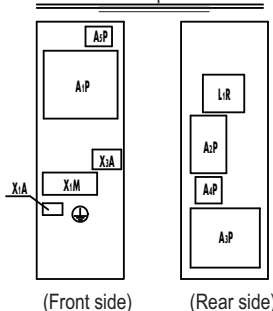
REMQ5U REYQ8-12U

Power supply 3N~ 380-415V 50Hz

Wiring diagram



El. compo.box



(Front side)

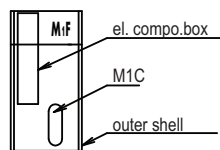
(Rear side)

5,8,10,12 class

Terminal of M1C



Layout of M1C, M1F



2D120651A

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

REMQ5U REYQ8-12U

A1P	Printed Circuit Board (Main)	R6T	Thermistor (Subcool Heat Exc.gas)
A2P	Printed Circuit Board (Noise Filter)	R7T	Thermistor (Subcool Heat Exc.liq)
A3P	Printed Circuit Board (Inv)	R8T	Thermistor (Heat Exc.gas Upper)
A4P	Printed Circuit Board (Fan)	R9T	Thermistor (Heat Exc.gas.lower)
A5P	Printed Circuit Board (Sub)	R10T	Thermistor (Suction)
BS1~3 (A1P)	Push Button Switch (Mode,Set,Return)	R11T	Thermistor (Heat Exc. Deicer)
C503,C506,C507 (A3P)	Capacitor	R12T	Thermistor (Suction Compressor)
DS1,DS2 (A1P)	DIP Switch	R13T	Thermistor (Receiver Gas)
E1HC	Crankcase Heater	R14T	Thermistor (Auto Charge)
E3H	Drainpan Heater (Option)	R15T	Thermistor (Compressor Body)
F1U,F2U (A1P)	Fuse (T,3,15A,250V)	R21T	Thermistor (M1C discharge)
F3U	Field Fuse	S1NPH	Pressure Sensor (High)
F101U (A4P)	Fuse	S1NPL	Pressure Sensor (Low)
F401U,F403U (A2P)	Fuse	S1PH	Pressure Switch (Disch)
F601U (A3P)	Fuse	SEG1~SEG3 (A1P)	7-Segment Display
HAP (A1P,A3P, A4P,A5P)	Pilotlamp (Service Monitor-Green)	T1A	Current Sensor
K3R (A1P)	Magnetic Relay (Y11S)	V1D (A3P)	Diode
K6R (A1P)	Magnetic Relay (E3H)	V1R (A3P,A4P)	Power Module
K7R (A1P)	Magnetic Relay (E1HC)	X*A	Connector
K9R (A1P)	Magnetic Relay (Y3S)	X1M	Terminal Block
K11R (A1P)	Magnetic Relay (Y2S)	X1M (A1P)	Terminal Block (Control)
K12R (A1P)	Magnetic Relay (Y4S)	Y1E	Electr. Exp. Valve (Heat Exc. Upper)
K13R (A1P)	Magnetic Relay (Y5S)	Y2E	Electr. Exp. Valve (Subcool Heat Exc.)
L1R	Reactor	Y3E	Electr. Exp. Valve (Heat Exc. Lower)
M1C	Motor (Compressor)	Y4E	Electr. Exp. Valve (Receiver Gas)
M1F	Motor (Fan)	Y5E	Electr. Exp. Valve (Inverter Cooling)
PS (A1P,A3P,A5P)	Switching Power Supply	Y6E	Electr. Exp. Valve (Auto Charge)
Q1DI	Field Earth Leakage Breaker	Y2S	Solenoid Valve (Liq.pipe)
Q1LD (A1P)	Field Earth Current Detector	Y3S	Solenoid Valve (HP/LP Gas Pipe)
Q1RP	Phase Reversal Detect Circuit (A1P)	Y4S	Solenoid Valve (Heat Exc.lower)
R24 (A4P)	Resistor (Current Sensor)	Y5S	Solenoid Valve (Heat Exc.upper)
R300 (A3P)	Resistor (Current Sensor)	Y11S	Solenoid Valve (M1C Oil Return)
R1T	Thermistor (Air)	Z*C	Noise Filter (Ferrite Core)
R3T	Thermistor (LIQ.MAIN)	Z*F (A2P)	Noise Filter (With Surge Absorber)
R4T	THERMISTOR (HEAT EXC.LIQ.UPPER)	Connector For Optional Accessories	
R5T	THERMISTOR (HEAT EXC.LIQ.LOWER)	X10A	Connector (Bottomplate Heater)

NOTES

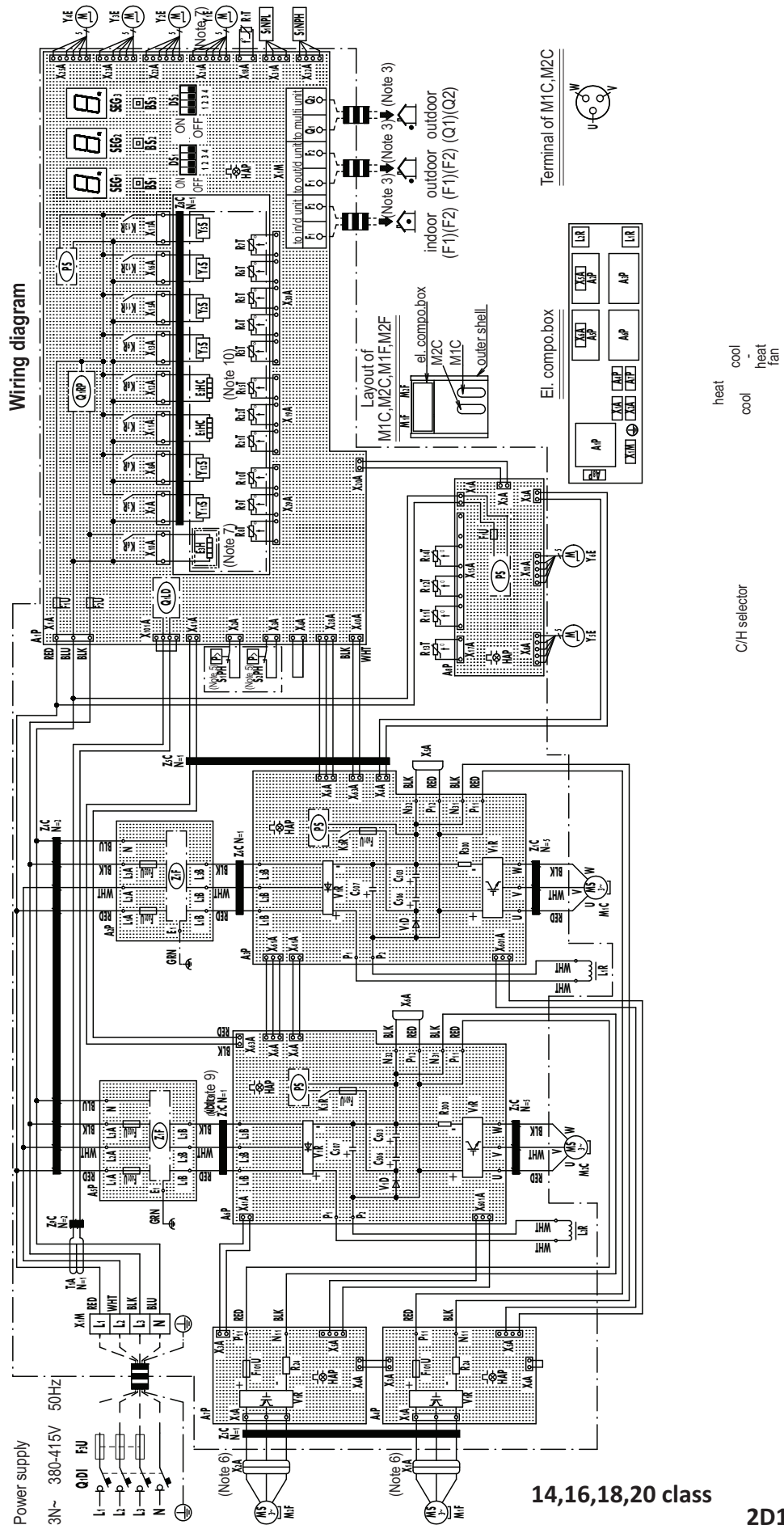
1. This wiring diagram applies only to the outdoor unit.
2. : field wiring, : terminal block, : connector, : terminal, : protective earth (screw), : functional earth, : earth wiring, : field supply, : PCB, : switch box, : option
3. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2, refer to the installation manual.
4. How to use BS1~3 switch. Refer to "service precaution" label on el. compo. box cover.
5. When operating, don't shortcircuit the protection devices (S1PH).
6. When using the optional accessory, refer to the installation manual of the optional accessory.
7. Colors: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

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9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

REYQ14-20U



9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

REYQ14-20U

A1P	Printed Circuit Board (Main)	R4T	THERMISTOR (HEAT EXC. LIQ. UPPER)
A2P,A5P	Printed Circuit Board (Noise Filter)	R5T	Thermistor (Heat Exc. Liq. Lower)
A3P,A6P	Printed Circuit Board (Inv)	R6T	Thermistor (Subcool Heat Exc. Gas)
A4P,A7P	Printed Circuit Board (Fan)	R7T	Thermistor (Subcool Heat Exc. Liq.)
A8P	Printed Circuit Board (Sub)	R8T	Thermistor (Heat Exc. Gas Upper)
BS1~3 (A1P)	Push Button Switch (Mode,Set,Return)	R9T	Thermistor (Heat Exc. Gas Lower)
C503,C506,C507 (A3P,A6P)	Capacitor	R10T	Thermistor (Suction)
DS1,DS2 (A1P)	DIP Switch	R11T	Thermistor (Heat Exc. Deicer)
E1HC,E2HC	Crankcase Heater	R12T	Thermistor (Suction Comp.)
E3H	Drainpan Heater (Option)	R13T	Thermistor (Receiver Gas)
F1U,F2U (A1P)	Fuse (T,3,15A,250V)	R14T	Thermistor (Auto Charge)
F1U (A8P)	Fuse (T,3,15A,250V)	R15T	Thermistor (Comp. Body)
F3U	Field Fuse	R21T,R22T	Thermistor (M1C ,M2C discharge)
F101U (A4P,A7P)	Fuse	S1NPH	Pressure Sensor (High)
F401U,F403U (A2P,A5P)	Fuse	S1NPL	Pressure Sensor (Low)
F601U (A3P,A6P)	Fuse	S1PH,S2PH	Pressure Switch (High)
HAP (A1P A3P,A4P, A6P,A8P)	Pilotlamp (Service Monitor-Green)	SEG1~SEG3 (A1P)	7-Segment Display
K3R (A3P,A6P)	Magnetic Relay	T1A	Current Sensor
K3R (A1P)	Magnetic Relay (Y12S)	V1D (A3P,A6P)	Diode
K4R (A1P)	Magnetic Relay (Y11S)	V1R (A3P,A4P,A6P,A7P)	Power Module
K6R (A1P)	Magnetic Relay (E3H)	X*A	Connector
K7R (A1P)	Magnetic Relay (E1HC)	X1M	Terminal Block
K8R (A1P)	Magnetic Relay (E2HC)	X1M (A1P)	Terminal Block (Control)
K9R (A1P)	Magnetic Relay (Y3S)	Y1E	Electr.exp.valve (Heat Exc. Upper)
K11R (A1P)	Magnetic Relay (Y2S)	Y2E	Electr.exp.valve (Subcool Heat Exc.)
K12R (A1P)	Magnetic Relay (Y4S)	Y3E	Electr.exp.valve (Heat Exc. Lower)
K13R (A1P)	Magnetic Relay (Y5S)	Y4E	Electr.exp.valve (Receiver Gas)
L1R,L2R	Reactor	Y5E	Electr.exp.valve (Inv. Cooling)
M1C,M2C	Motor (Compressor)	Y6E	Electr.exp.valve (Auto Charge)
M1F,M2F	Motor (Fan)	Y2S	Solenoid Valve (Liq. Pipe)
PS (A1P,A3P,A6P,A8P)	Switching Power Supply	Y3S	Solenoid Valve (Hp/Lp Gas Pipe)
Q1DI	Field Earth Leakage Breaker	Y4S	Solenoid Valve (Heat Exc. Lower)
Q1LD (A1P)	Field Earth Current Detector	Y5S	Solenoid Valve (Heat Exc. Upper)
R24 (A4P,A7P)	Resistor (Current Sensor)	Y11S	Solenoid Valve (Oil Return M1C)
R300 (A3P,A6P)	Resistor (Current Sensor)	Y12S	Solenoid Valve (Oil Return M2C)
R1T	Thermistor (Air)	Z*C	Noise Filter (Ferrite Core)
R3T	THERMISTOR (LIQUID MAIN)	Z*F (A2P,A5P)	Noise Filter (With Surge Absorber)
		Connector For Optional Accessories	
		X10A	Connector (Drainpan Heater)

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. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2, refer to the installation manual.
4. How to use BS1~3 switch. Refer to "service precaution" label on el. compo. box cover.
5. When operating, don't shortcircuit the protection devices (S1PH, S2PH).
6. Connector X1A (M1F) is red, connector X2A (M2F) is white.
7. When using the optional accessory, refer to the installation manual of the optional accessory.
8. Colors: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

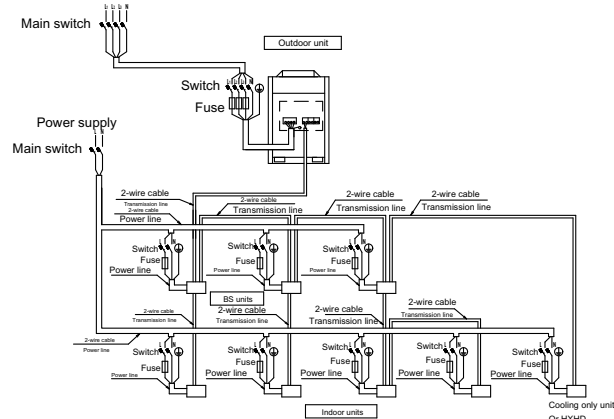
2D120652A

10 External connection diagrams

10 - 1 External Connection Diagrams

REMQ-U REYQ-U

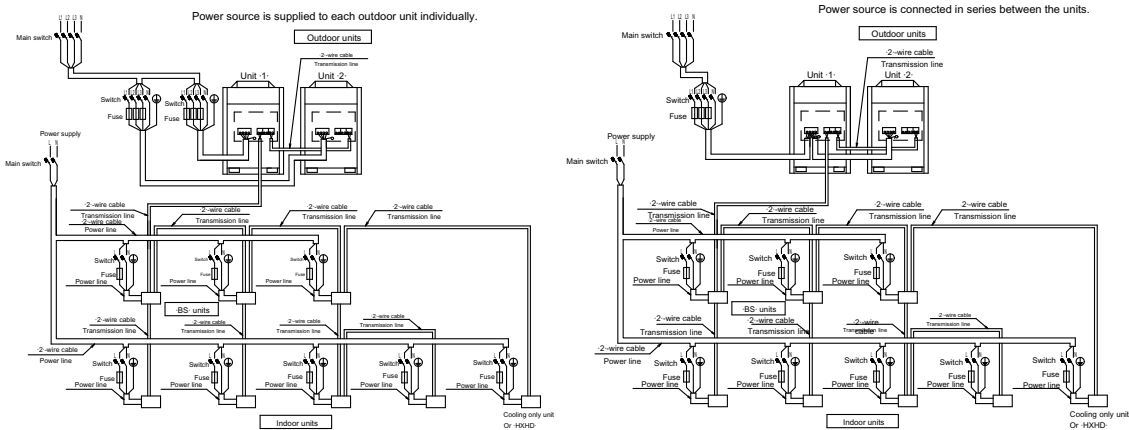
VRV4 Heat recovery
External connection diagram



1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For more details, refer to the wiring diagram of the 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 to switch to (if necessary) immediately interrupt all the system's power sources.
10. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.

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REMQ-U REYQ-U



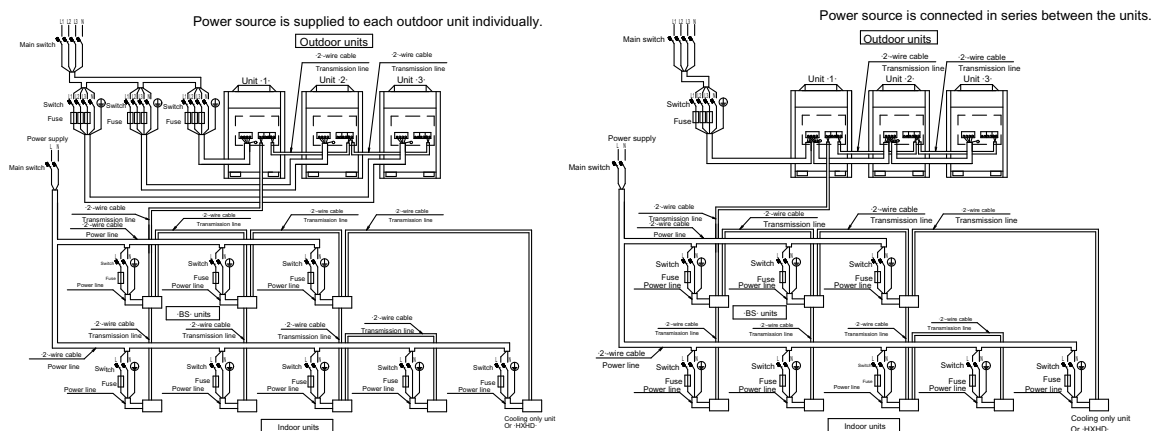
1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For more details, refer to the wiring diagram of the unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised 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 to switch to (if necessary) immediately interrupt all the system's power sources.
10. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.
12. The capacity of UNIT1 must be larger than that of UNIT2 when the power source is connected in series between the units.

3D088094

10 External connection diagrams

10 - 1 External Connection Diagrams

REMQ-U REYQ-U



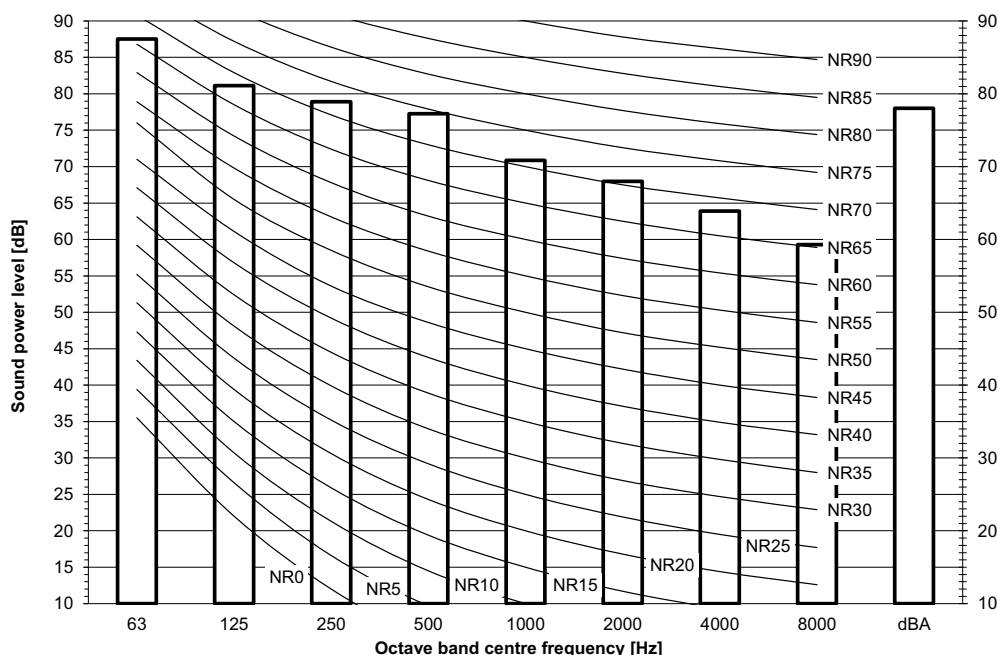
1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For more details, refer to the wiring diagram of the unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised 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 to switch to (if necessary) immediately interrupt all the system's power sources.
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.
10. Running the product in reversed phase may break the compressor and other parts.
11. Install an earth leakage circuit breaker.
12. The capacity of UNIT1 must be larger than that of UNIT2 when the power source is connected in series between the units.

3D088016

11 Sound data

11 - 1 Sound Power Spectrum

REMQ5U
REYQ8U
RXYQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U

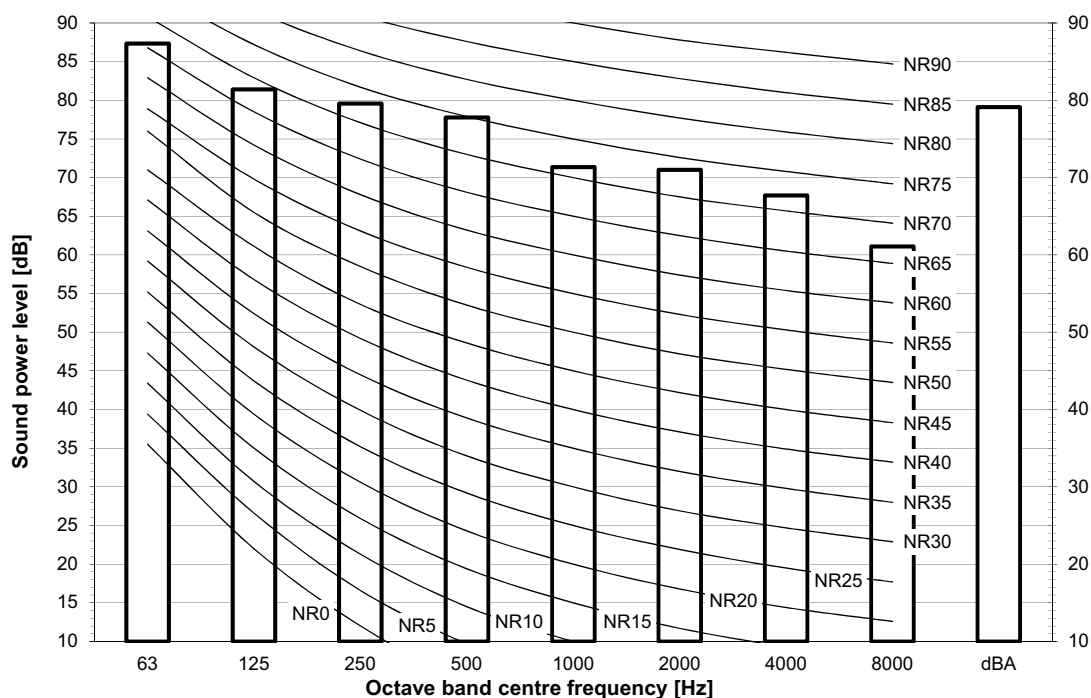


Notes

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

3D119528

REYQ10U
RXYQ10U
RXYQ10U
RYYQ10U
RYMQ10U



Notes

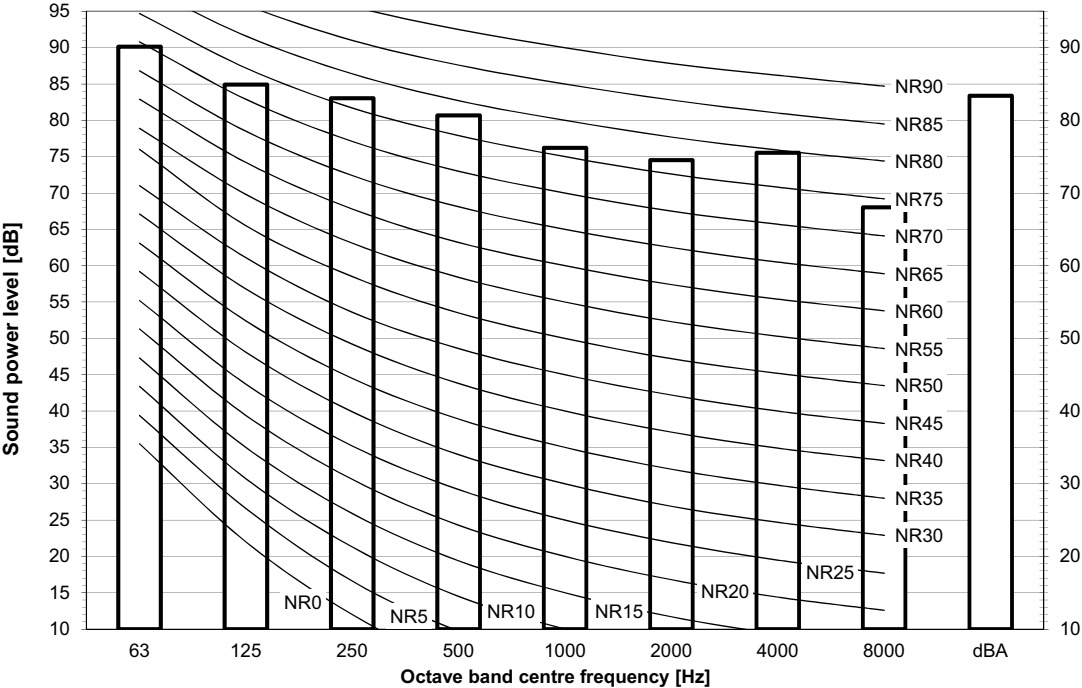
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6μW/m²
Measured according to ISO 3744

3D119529

11 Sound data

11 - 1 Sound Power Spectrum

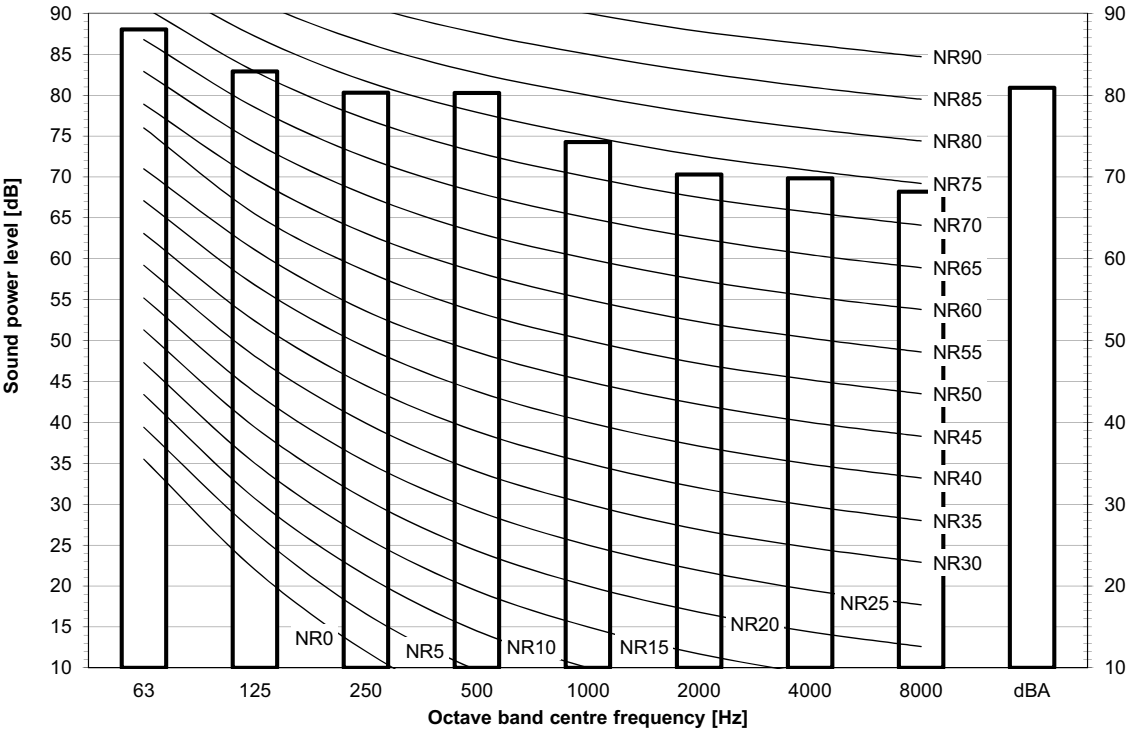
REYQ12U
RXYQ12U
RXYQ12U
RYYQ12U
RYMQ12U



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

3D119530

REYQ14U
RXYQ14U
RXYQ14U
RYYQ14U
RYMQ14U



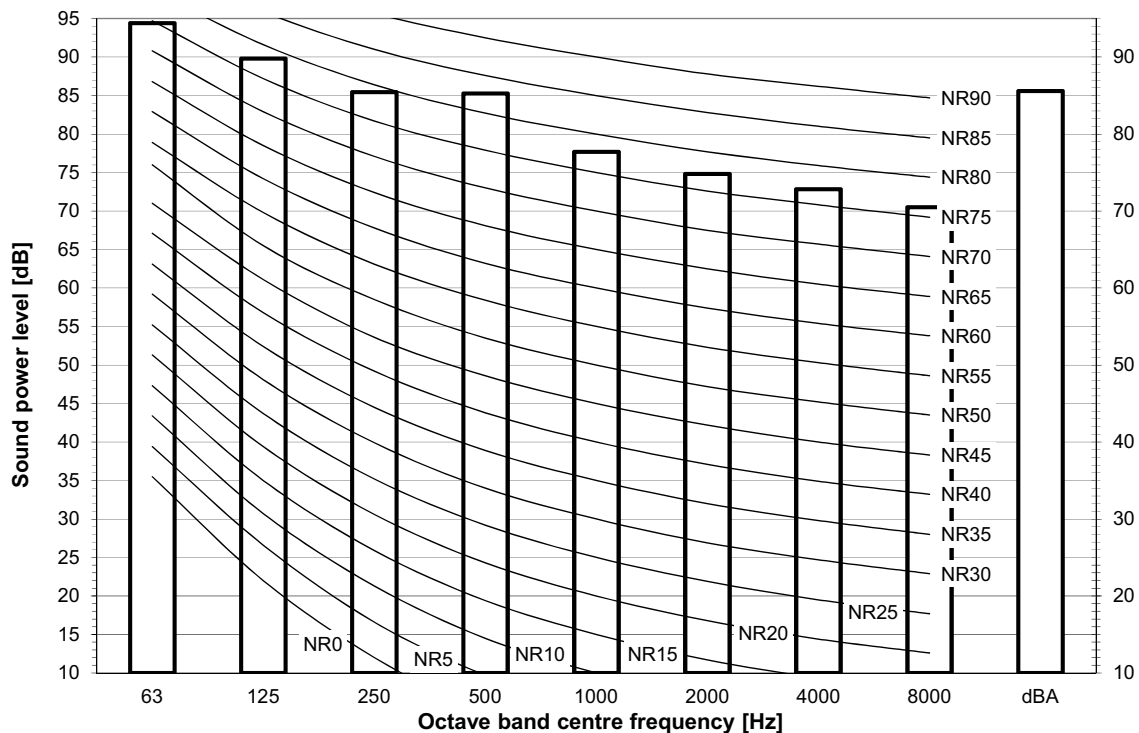
Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = 10E-6μW/m²
Measured according to ISO 3744

3D119531

11 Sound data

11 - 1 Sound Power Spectrum

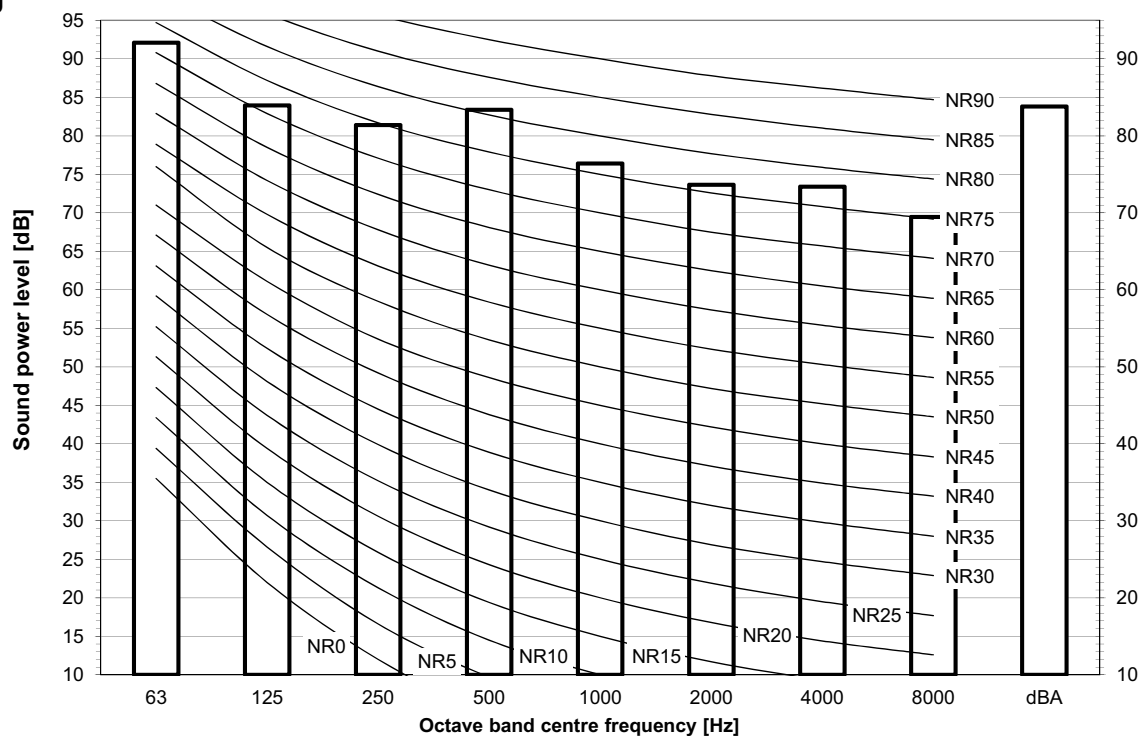
REYQ16U
RXYQ16U
RXYQ16U
RYYQ16U
RYMQ16U



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

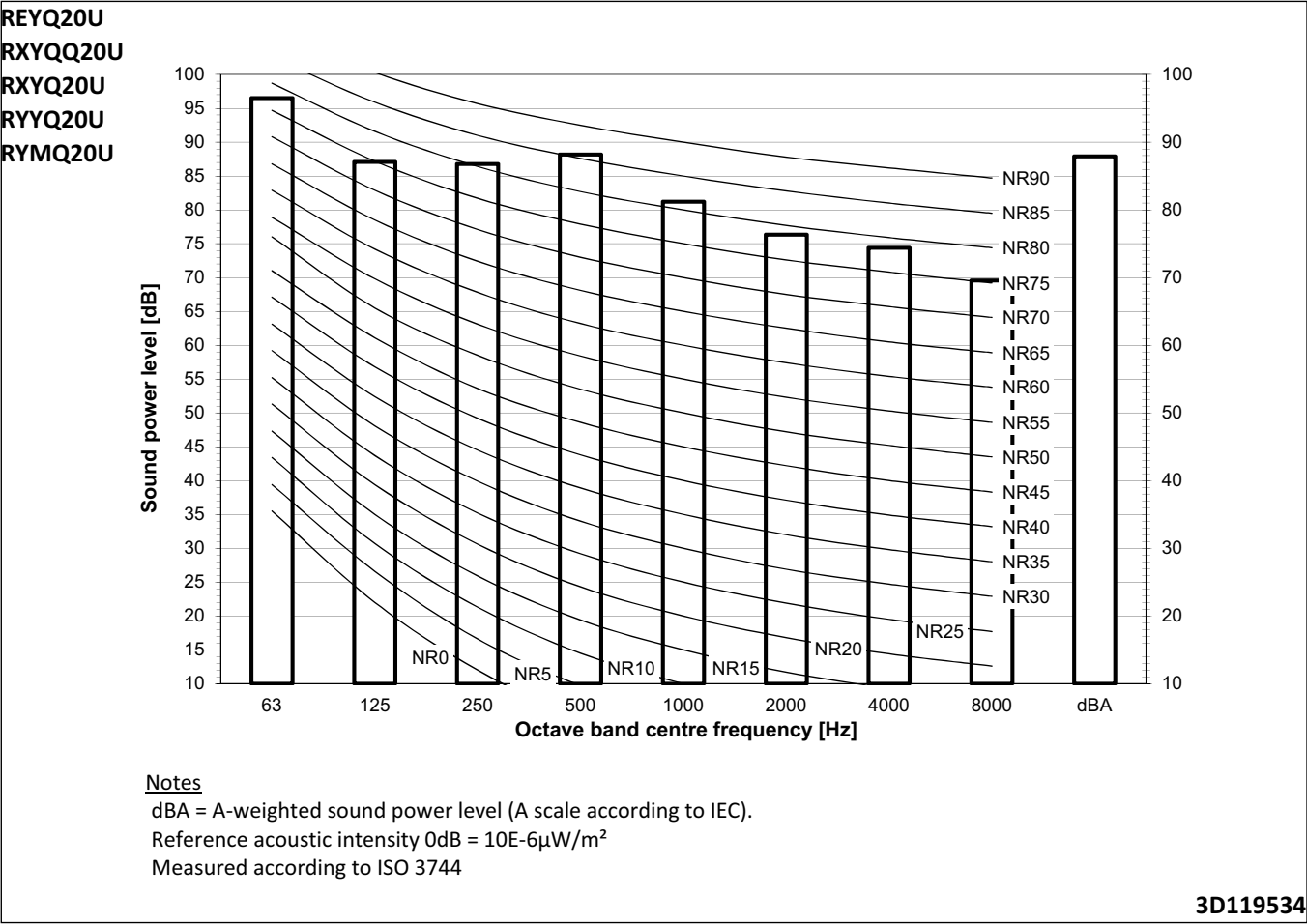


Notes
dBA = A-weighted sound power level (A scale according to IEC).
Reference acoustic intensity 0dB = $10E-6\mu W/m^2$
Measured according to ISO 3744

3D119533

11 Sound data

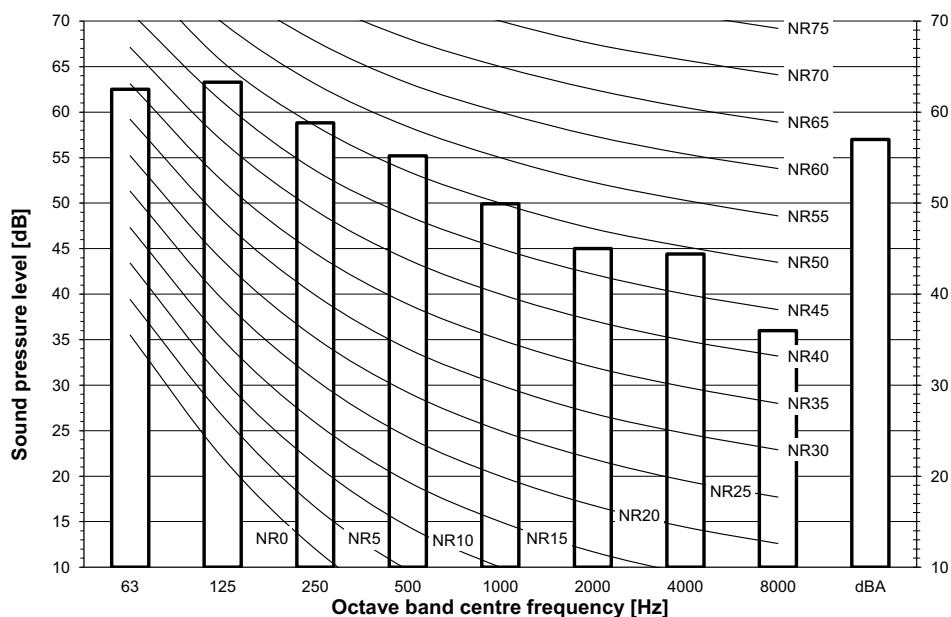
11 - 1 Sound Power Spectrum



11 Sound data

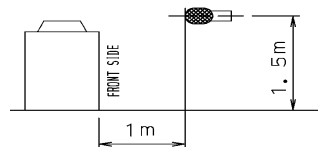
11 - 2 Sound Pressure Spectrum

REMQ5U
REYQ8U
RXYQQ8U
RXYQ8U
RXYTQ8UYF
RYYQ8U
RYMQ8U



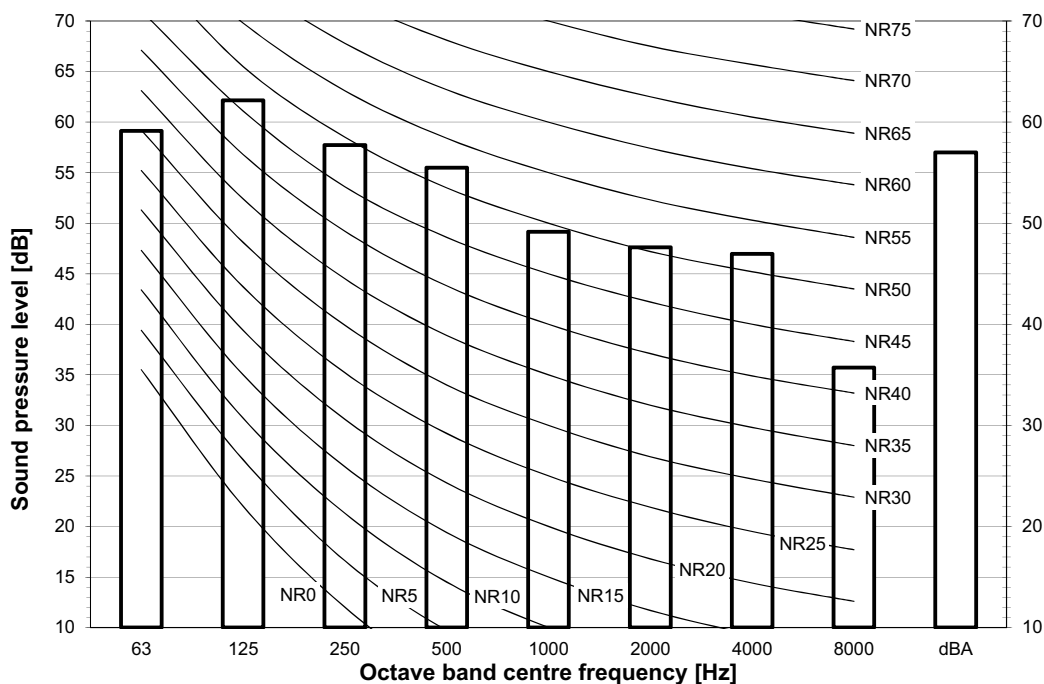
Notes

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



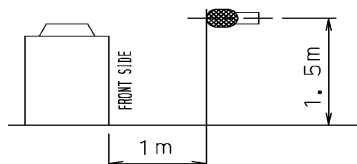
3D119521

REYQ10U
RXYQQ10U
RXYQ10U
RYYQ10U
RYMQ10U



Notes

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

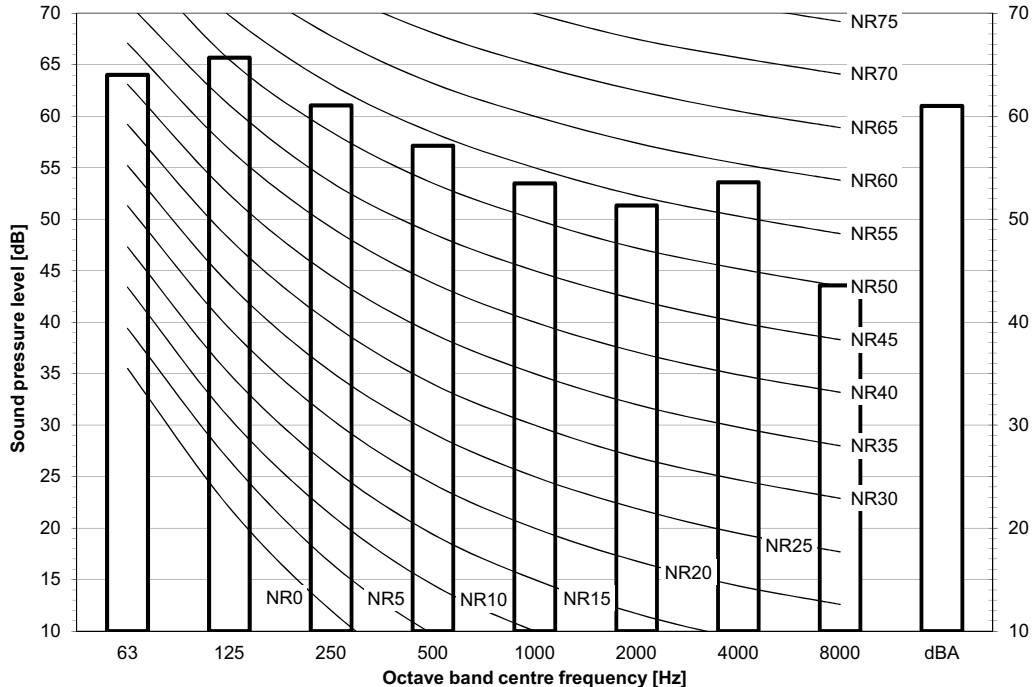


3D119522

11 Sound data

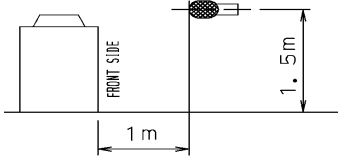
11 - 2 Sound Pressure Spectrum

REYQ12U
RXYQ12U
RXYQ12U
RYYQ12U
RYMQ12U



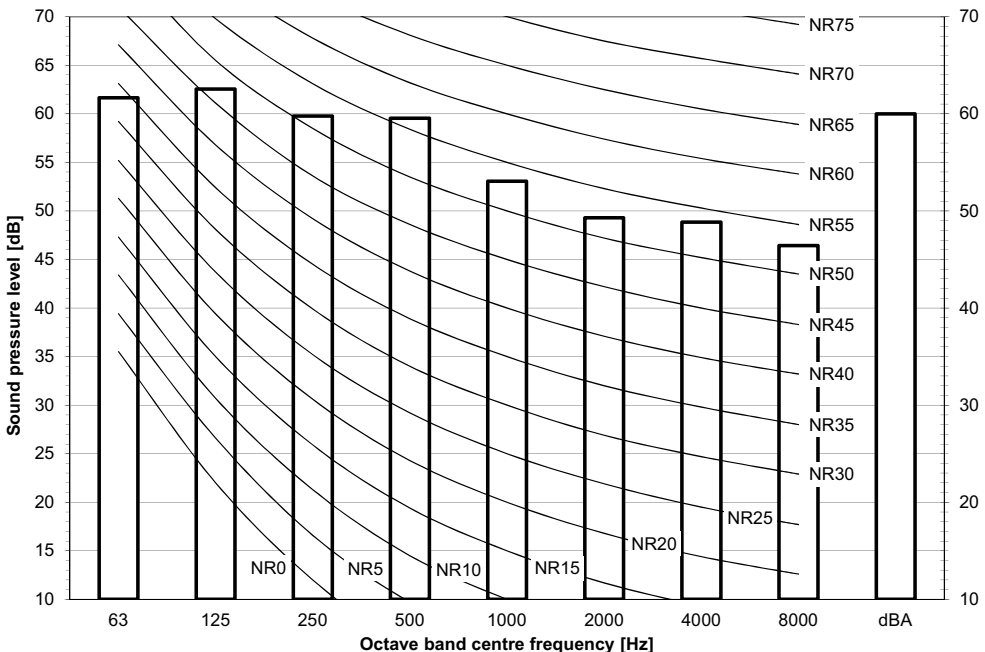
Notes

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



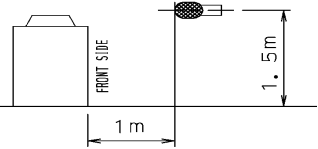
3D119523

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 µPa

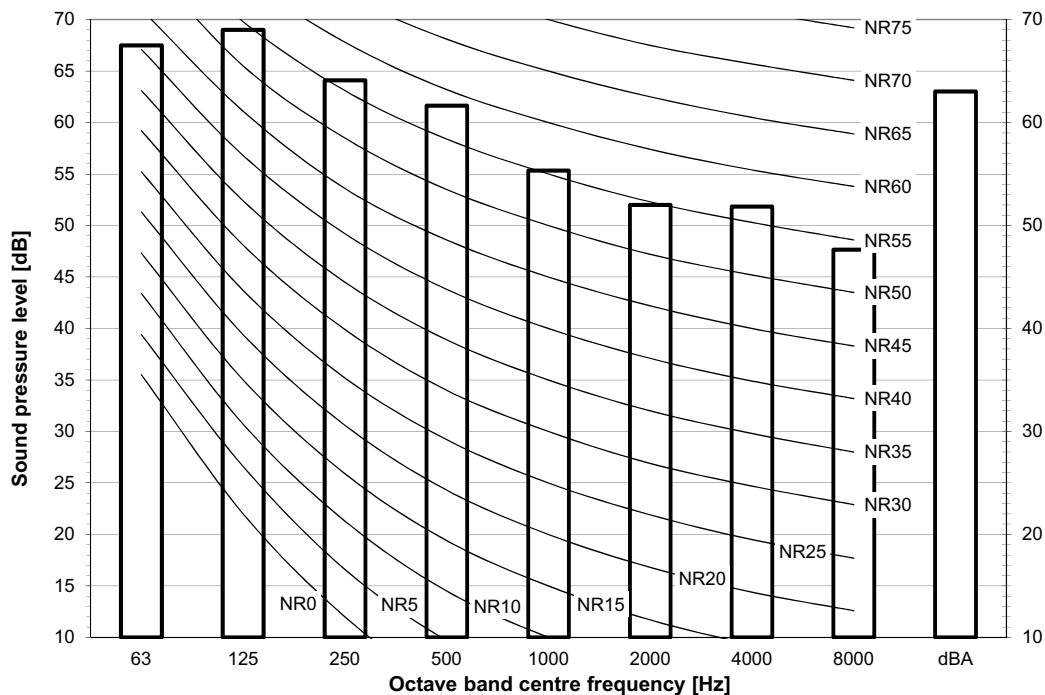


3D119524

11 Sound data

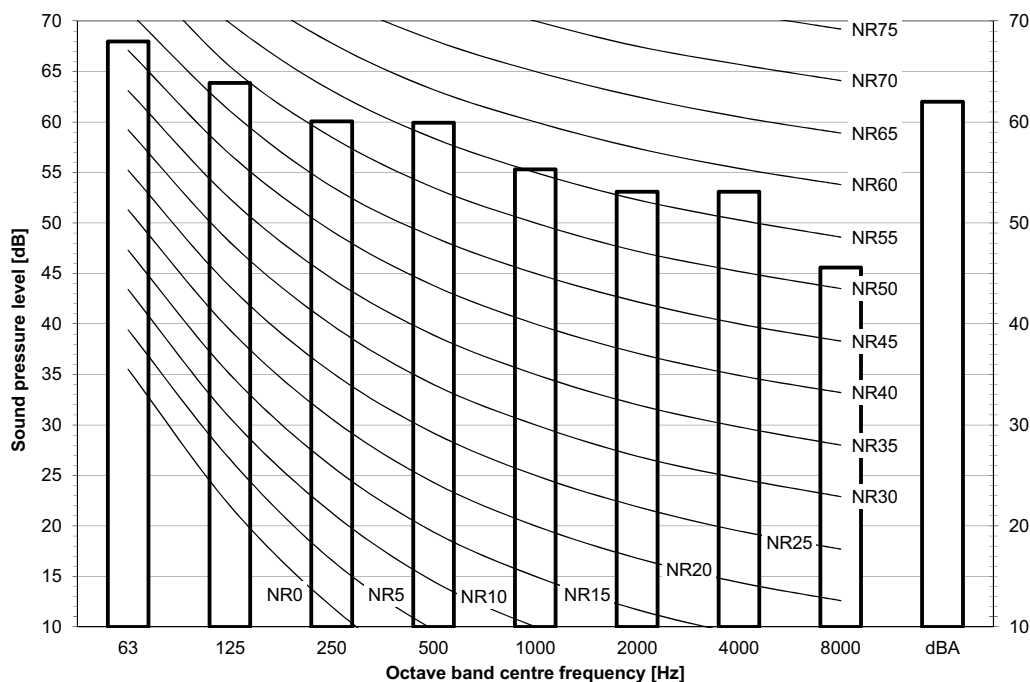
11 - 2 Sound Pressure Spectrum

REYQ16U
RXYQQ16U
RXYQ16U
RYYQ16U
RYMQ16U



3D119525

REYQ18U
RXYQQ18U
RXYQ18U
RYYQ18U
RYMQ18U

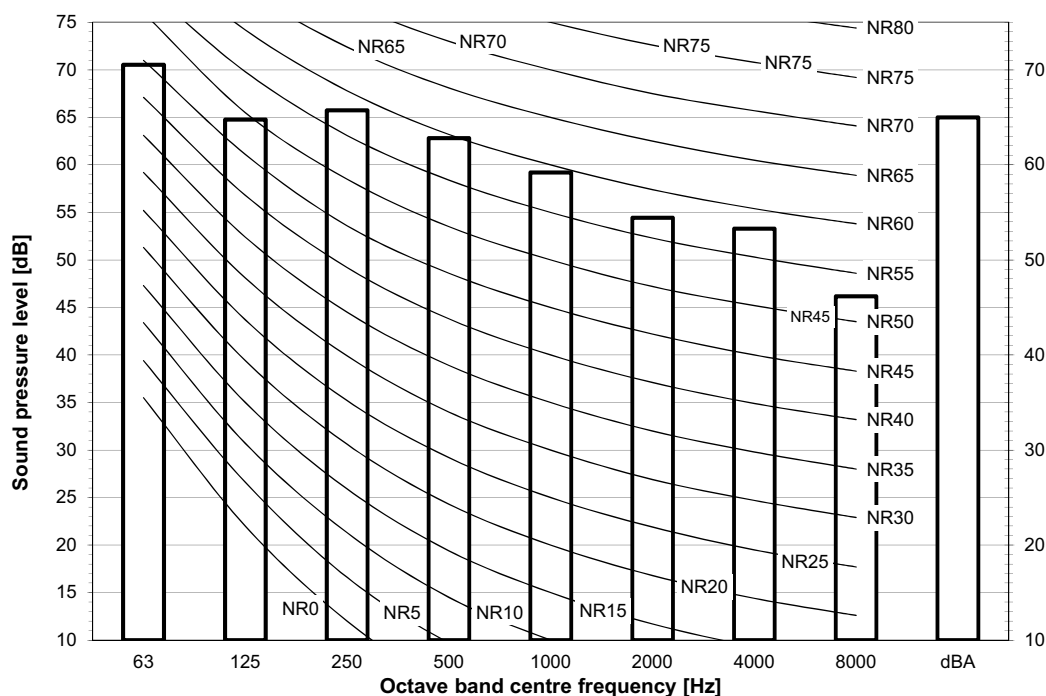


3D119526

11 Sound data

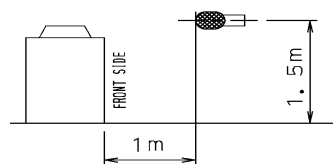
11 - 2 Sound Pressure Spectrum

REYQ20U
RXYQ20U
RXYQ20U
RYYQ20U
RYMQ20U



Notes

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



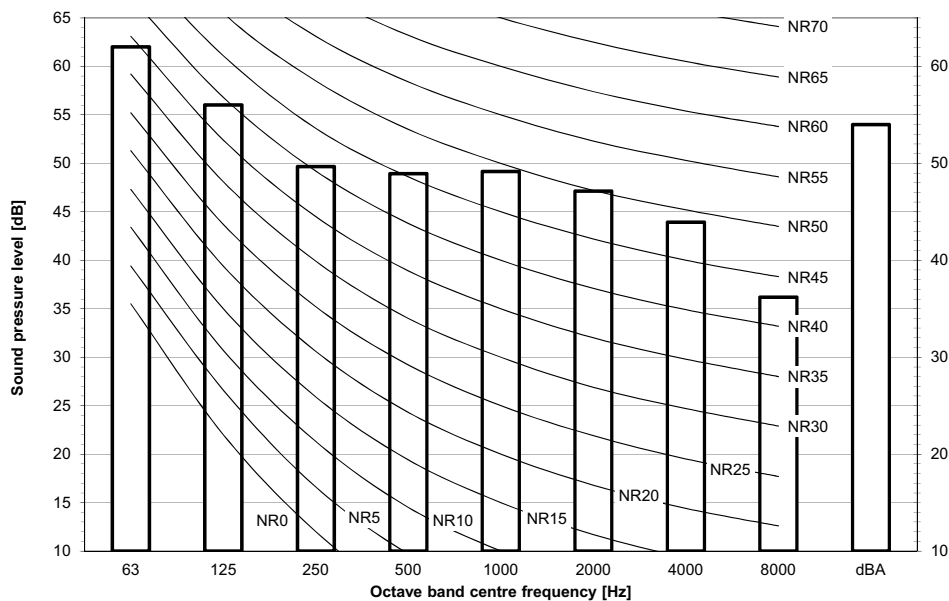
3D119527

11 Sound data

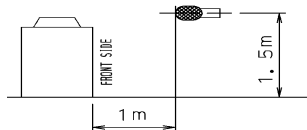
11 - 3 Sound Pressure Spectrum Quiet Mode

11

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

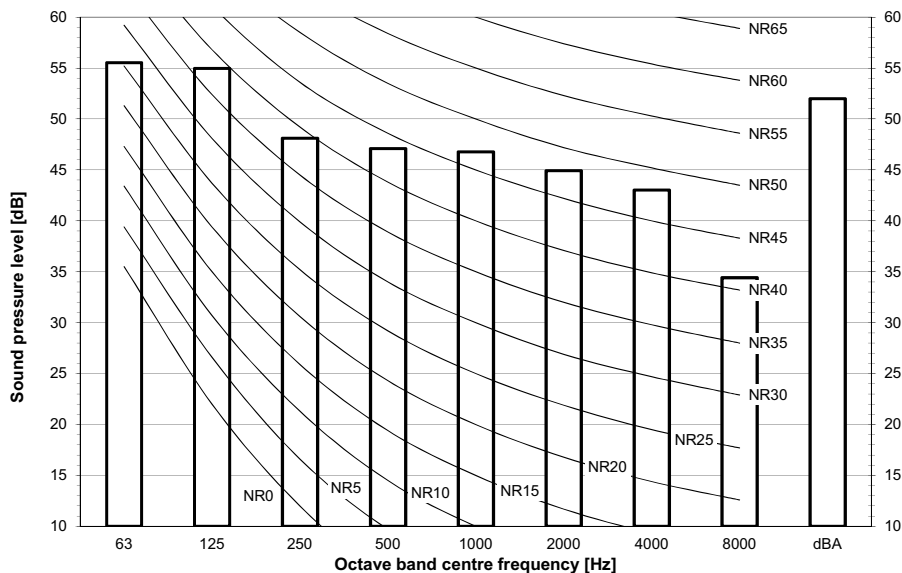


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 μ Pa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

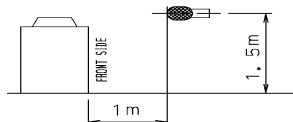


3D119535

REMQ5U
REYQ8-12U
RXYQ8-12U
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 μ Pa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

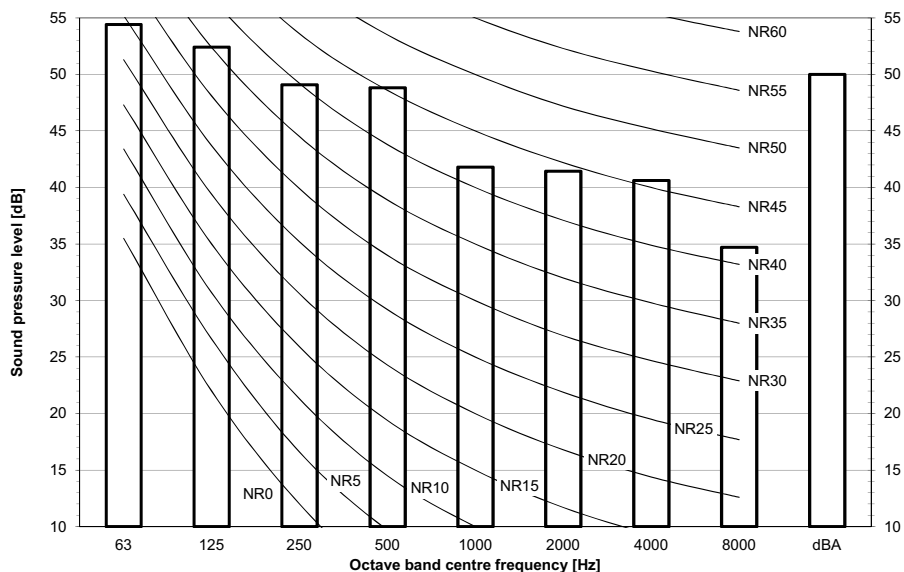


3D119536

11 Sound data

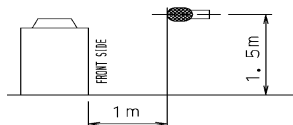
11 - 3 Sound Pressure Spectrum Quiet Mode

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



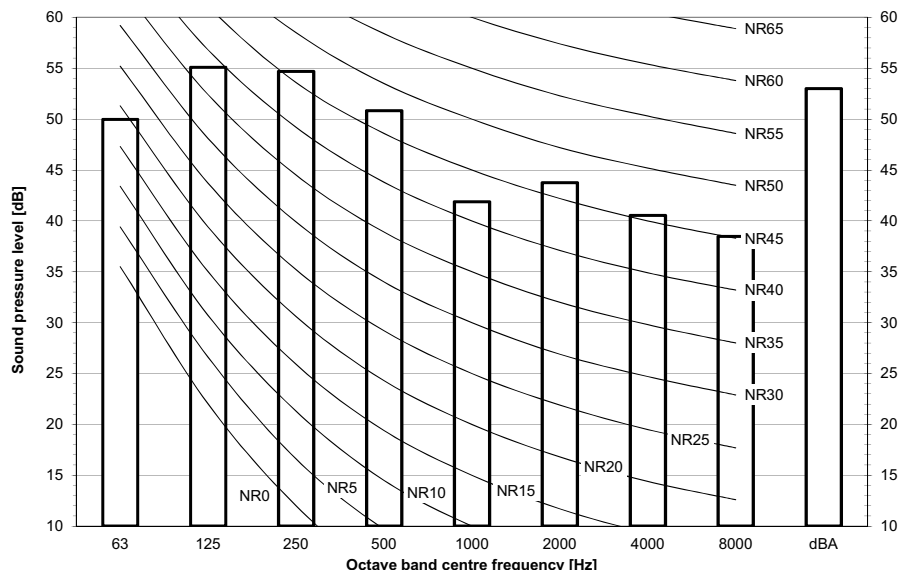
Notes

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



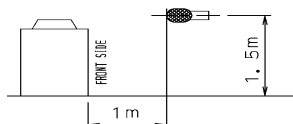
3D119537

REYQ14-16U
RXYQ14-16U
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 μ Pa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode)

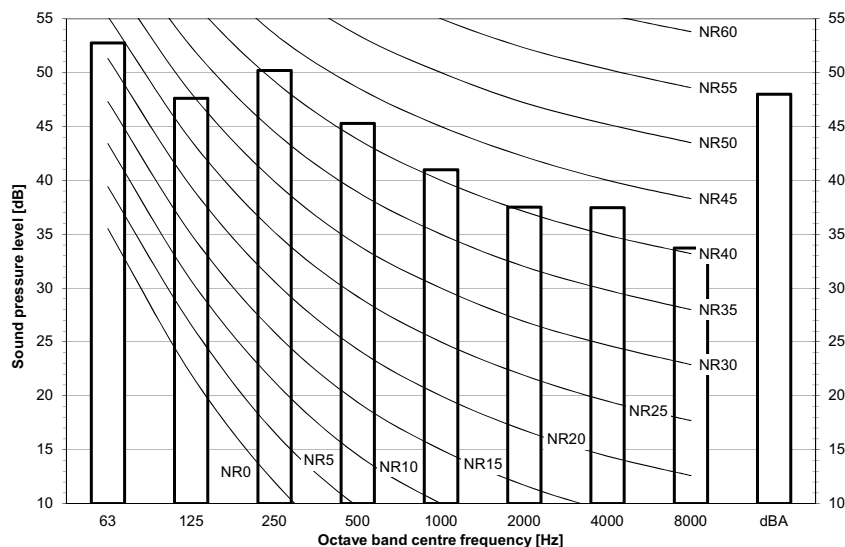


3D119538

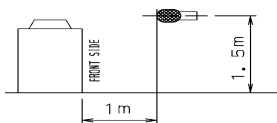
11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode

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

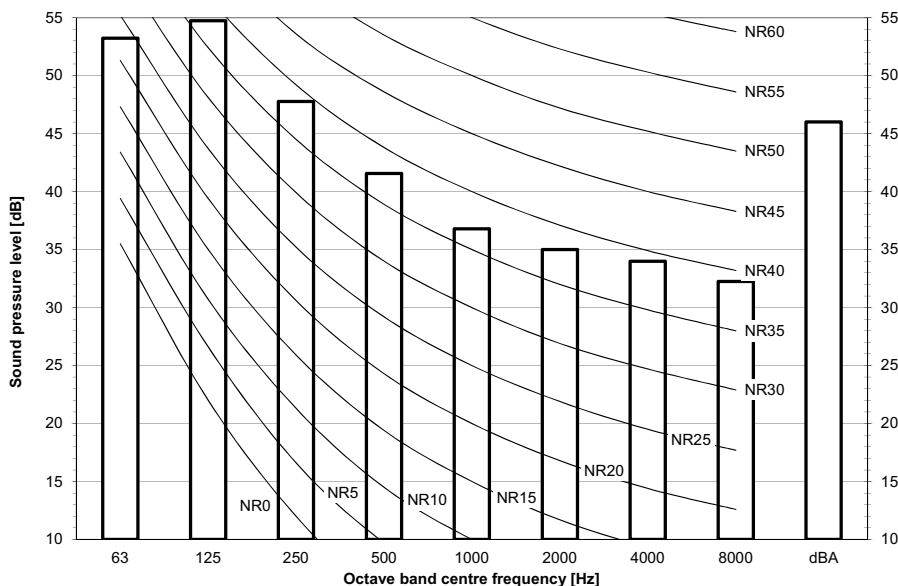


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 μ Pa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

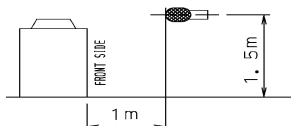


3D119539

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



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

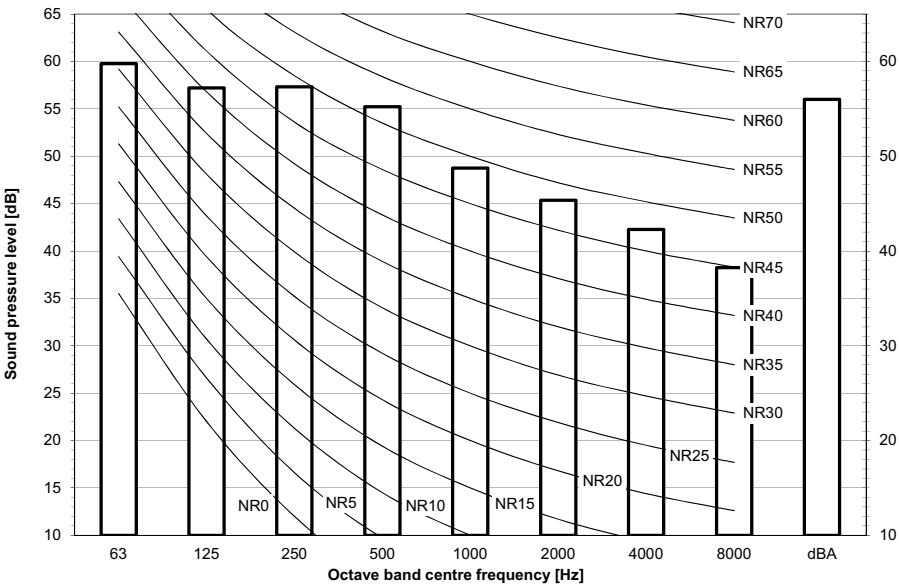


3D119540

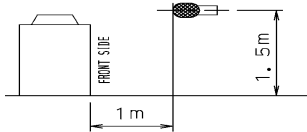
11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode

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

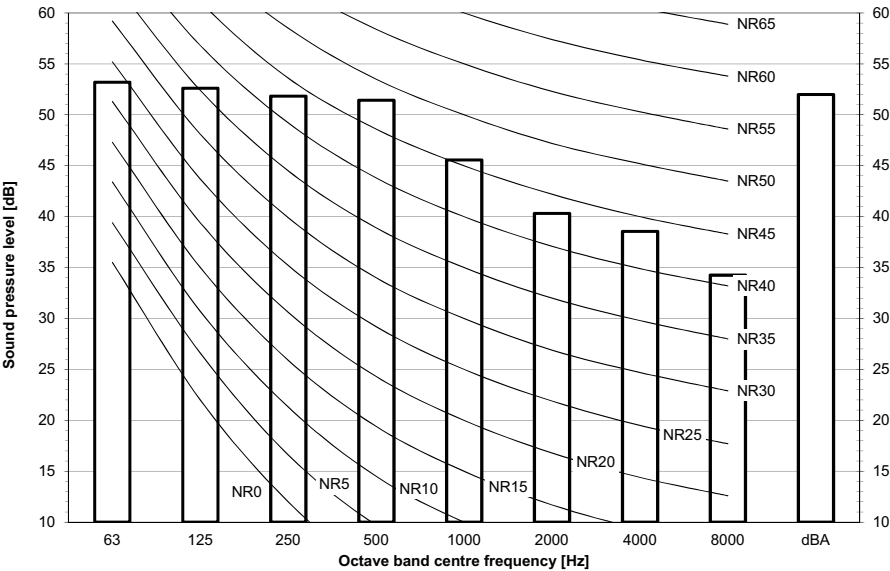


Notes
Data is valid at free field condition.
Data is valid at nominal operation condition.
dBA = A-weighted sound pressure level (A scale according to IEC).
Reference acoustic pressure 0 dB = 20 µPa
Data is valid under the following conditions
Cooling operation
Outdoor Ta: 35°C
Full load (maximum fan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

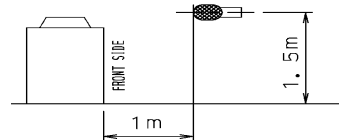


3D119541

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



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

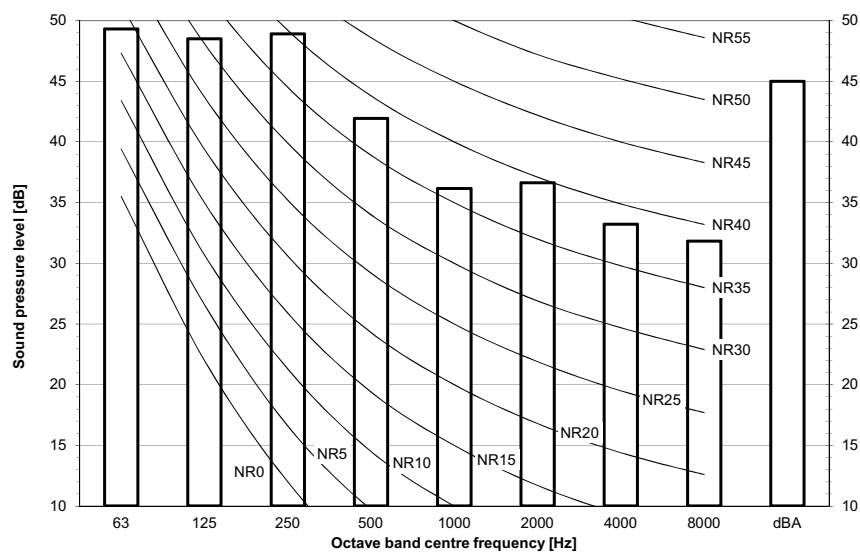


3D119542

11 Sound data

11 - 3 Sound Pressure Spectrum Quiet Mode

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



Notes

Data is valid at free field condition.

Data is valid at nominal operation condition.

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

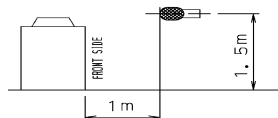
Reference acoustic pressure 0 dB = 20 μ Pa

Data is valid under the following conditions

Cooling operation

Outdoor Ta: 35°C

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



3D119543

12 Installation

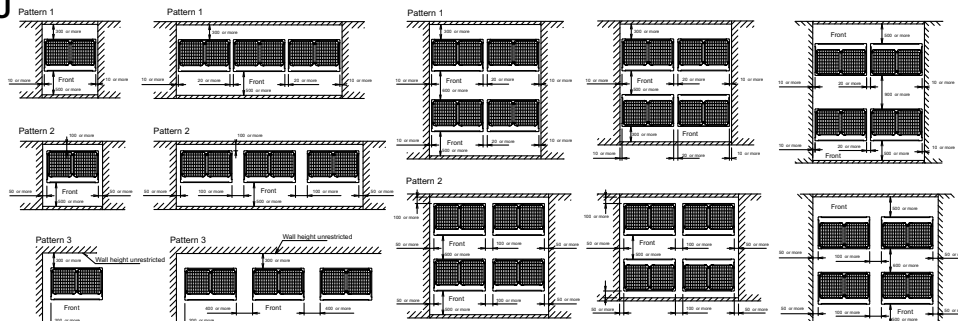
12 - 1 Installation Method

REMQ5U
REYQ8-20U
RXYQ8-20U
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:

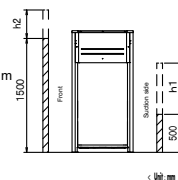
Front: 1500mm

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.

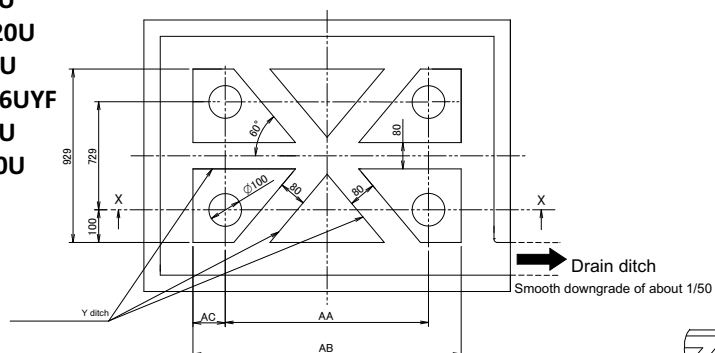
4. Provide sufficient space at the front to connect refrigerant piping (comfortably).

3D118467

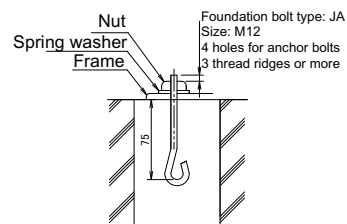
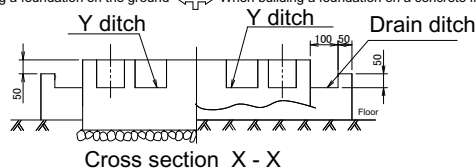
12 Installation

12 - 2 Fixation and Foundation of Units

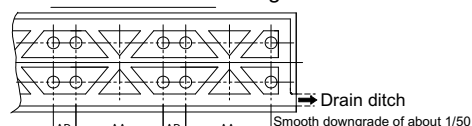
REMQ5U
REYQ8-20U
RXYQ8-20U
RXYQ8-20U
RXYTQ8-16UYF
RYYQ8-20U
RYMQ8-20U



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



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				

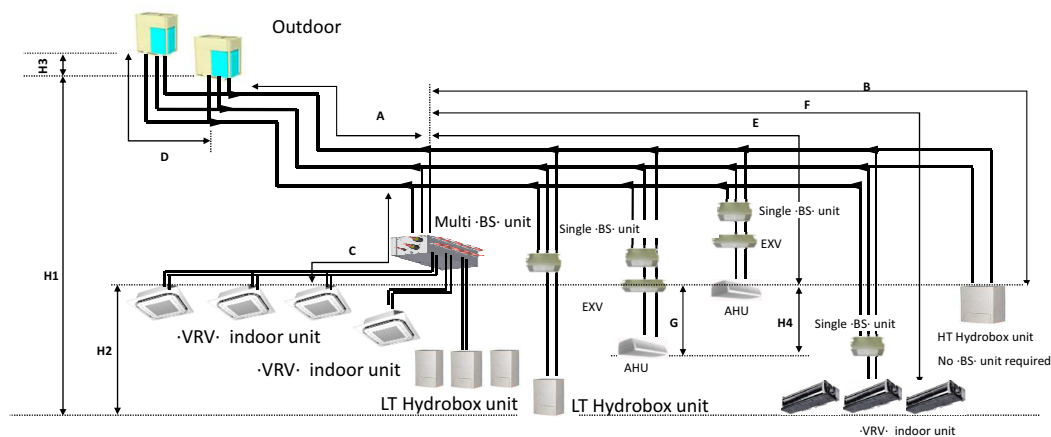
Notes

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

REMQ-U
REYQ-U



3D088012D

REMQ-U
REYQ-U

VRV4 Heat recovery Piping restrictions

	Total		Allowed capacity				
	Capacity	Maximum indoor unit quantity (-VRV, RA, AHU, Hydrobox-) (*1)	VRV indoor unit	-VRV- indoor unit without -BS- unit Cooling only (*4)	HT Hydrobox unit	LT Hydrobox unit	Air handling unit (AHU)
-VRV- indoor units only	50 ~ 130%	64	50 ~ 130 %	0 ~ 50 %	-	-	-
-VRV- indoor unit + LT Hydrobox unit	50 ~ 130%	32	50 ~ 130 %	0 ~ 50 %	-	0 ~ 80%	-
-VRV- indoor unit + HT Hydrobox unit	50 ~ 200%	32	50 ~ 110 %	-	0 ~ 100 %	-	-
(-VRV- indoor unit + LT Hydrobox unit + HT Hydrobox unit) Where (-VRV- indoor unit + LT Hydrobox unit)	50 ~ 200%	32	50 ~ 110 %	-	-	0 ~ 80%	-
	50 ~ 130%						
-AHU- only (pair + multi)	-	-	-	-	-	-	-
-VRV- indoor unit + -AHU-	50 ~ 110% (*5)	64	50 ~ 110 %	0 ~ 50 %	-	-	0 ~ 60 %

Legend
AHU Air handling unit

Notes

- Excluding -BS- units and including -EXV- kits.
- 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.
- Other combinations than mentioned in this combination table are prohibited.
- Cooling-only -VRV- indoor units cannot be combined with HT Hydrobox units.
- Restrictions regarding the air handling unit capacity

Amount of units connectable to a -BS- unit

	BS1Q10	BS1Q16	BS1Q25	Multi -BS- per branch	Multi -BS- when 2 branches are combined
	(*6)	(*6)	(*6)	(*6)	(*5) (*6)
-VRV- indoor unit	Maximum -6- units	Maximum -8- units	Maximum -8- units	Maximum -5- units	Maximum -5- units
Air handling unit (AHU)	Maximum -100- class	Maximum -160- class	Maximum -250- class	Maximum -140- class	Maximum -250- class
LT Hydrobox unit	Maximum -100- class = 1 x HXY080	Maximum -160- class = Maximum -2 x HXY080- Or maximum -1 x HXY125-	Maximum -250- class = Maximum -3 x HXY080- Or maximum -2 x HXY125- Or -HXY080 + HXY125-	Maximum -140- class = Maximum -1 x HXY080- Or maximum -1 x HXY125-	Maximum -250- class = Maximum -3 x HXY080- Or maximum -2 x HXY125- Or -HXY080 + HXY125-

Notes

- When combining -2- branches, the maximum piping length between the -BS- unit and the indoor unit is ≤ 20m. If the length of this piping is > 20m, increase the size of the liquid pipe.
- When using Hydrobox units, do not combine them with other types of units.

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12 Installation

12 - 3 Refrigerant Pipe Selection

REMQ-U
REYQ-U

VRV4
Heat recovery
Piping restrictions

12

		Maximum piping length			Maximum height difference			Total piping length
		Longest pipe from the outdoor unit or the last multi-outdoor piping branch	Longest pipe after first branch	Longest pipe from the outdoor unit to the last multi-outdoor piping branch	Indoor-to-outdoor Outdoor unit higher than indoor unit / Indoor unit higher than outdoor unit	Indoor-to-indoor	Outdoor-to-outdoor	Piping length
		Actual / Equivalent	Actual	Actual / Equivalent				
		Maximum: {A+B, A+C, A+E, A+F}	Maximum: {B,C,E,F}	Maximum: {D}	Maximum: {H1}	Maximum: {H2}	Maximum: {H3}	
Single outdoor units and standard multi-outdoor-unit combinations > 20hp	VRV- indoor units only	165/190 m (*3)	40 m (*1)	10/13 m	50/40 m (*2)	15 m	5 m	1000 m
		120/165m (*3)	40 m (*1)		50/40 m (*2)	30m		1000 m
	Hydrobox unit	135/160 m (*3)	40 m		50/40 m	15m		300 m (*4)/600 m (*5)
	AHU (*6)	165/190 m (*3)	40 m		50/40 m			1000 m
Standard multi-outdoor-unit combinations ≤ 20hp and free multi-outdoor-unit combinations	VRV- indoor units only	135/160 m (*3)	40 m (*1)	10/13 m	50/40 m (*2)	15 m	5 m	500 m
	Hydrobox unit		40 m		50/40 m			300 m (*4)/500 m (*5)
	AHU (*6)		40 m		50/40 m			500 m

	Maximum piping length	Maximum height difference
	EXV → AHU: G	EXV → AHU: H4
AHU (*6)	5 m	5 m

Notes

- If all conditions below are met, the limitation can be extended up to 90 m
 - In case of -BS1Q- units, the piping length between all indoor units and the nearest branch kit is ≤ 40-m.
 - In case of multi BS units, the piping length between all indoor units and the multi BS unit is ≤ 40-m.
 - It is required to size up the liquid piping between the first branch kit and the last.
 - In contrast to multi BS units, -BS1Q- units are not considered branch kits.
 - If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.
 - When the piping size is increased, the piping length has to be counted as double.
 - The total piping length has to be within limitations.
- The piping length difference between the nearest indoor unit to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ 40-m.
- If all conditions below are met, the limitation can be extended up to 90 m
 - If the outdoor units are positioned higher than the indoor units:
 - 2.1.1 Minimum connection ratio: -80%-
 - 2.1.2 Size up the liquid piping
 - 2.1.3 Outdoor unit setting
 - For more information, refer to the service manual.
 - 2.2 If the outdoor units are positioned lower than the indoor units:
 - 2.2.1 No technical cooling
 - 2.2.2 Size up the liquid piping
 - 2.2.3 Outdoor unit setting
 - 2.2.4 Minimum connection ratio

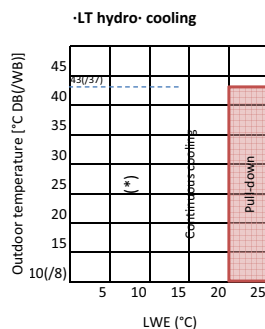
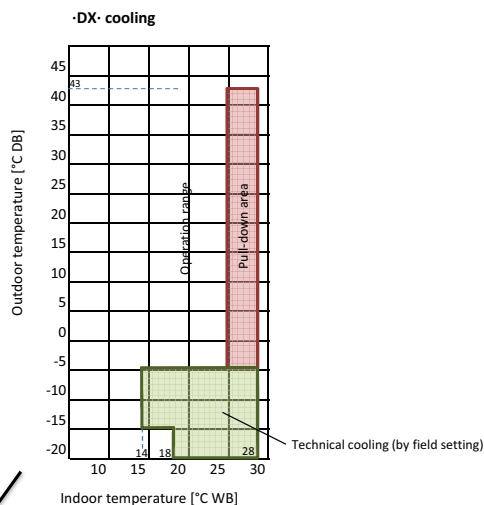
-40°-60m:	Minimum connection ratio: -80%-
-60°-65m:	Minimum connection ratio: -90%-
-65°-80m:	Minimum connection ratio: -100%-
-80°-90m:	Minimum connection ratio: -110%-
- If the equivalent piping is > 90-m, size up the main liquid piping.
- Outdoor unit ≤ 20hp
- Outdoor unit > 20hp
- Mix of -DX- units and -AHU's
- If there is no branch kit present in the system, the longest pipe after the multi -BS- unit has to be ≤ 40-m.

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13 Operation range

13 - 1 Operation Range

REMQ-U REYQ-U

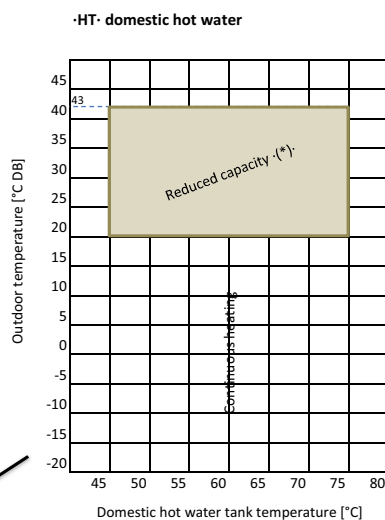
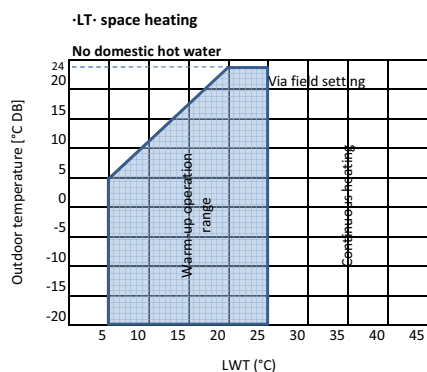


(*) : Only possible after field setting activation.

Influences ·DX· cooling operation (cold draft) and the total efficiency.

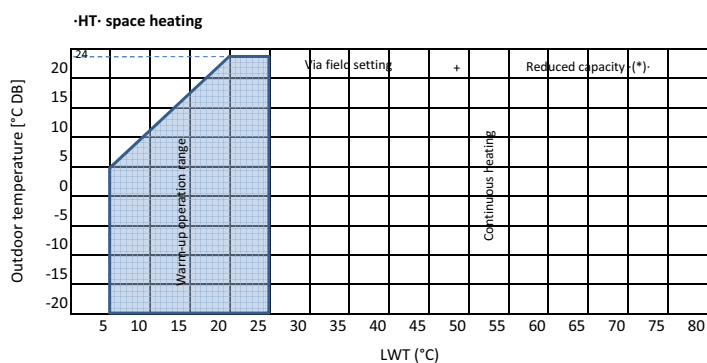
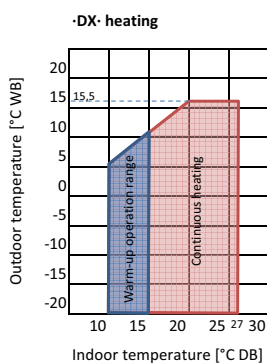
Technical cooling restrictions

- A wind cover is required.
- COP· (VRT) decrease
- Piping restrictions
- Cooling capacity decrease below -5·°C
- Possible ·BS· unit noise increase
- No multi ·BS· unit



(*)

- When the ambient temperature of the location where the HXHD is installed >20°C & <30°C: the maximum delivered capacity is limited to 60% of nominal capacity.
- When the ambient temperature of the location where the HXHD is installed can be controlled to remain ≤ 20°C at all times (installer responsibility): the nominal capacity can be delivered (under the mentioned outdoor ambient temperature conditions), when special field setting is applied. Not possible for automatic triggered DHW heat recovery



3D088014C

14 Appropriate Indoors

14 - 1 Appropriate Indoors

REMQ-U

REYQ-U

Recommended indoor units for ·REYQ*U* + REMQ5U*· outdoor units

.. HP	8	10	12	13	14	16	18	20
	4xFXMQ50	4xFXMQ63	6xFXMQ50	3xFXMQ50 3xFXMQ63	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 ·REYQ*U* + REMQ5U*· outdoor units

Covered by ·ENER LOT21·

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

Outside the scope of ·ENER LOT21·

EKEXV50-63-80-100-125-140-200-250-400-500 + EKEQM
HXY080-125
HXHD125-200
VKM50-80-100
CYVS100-150-200-250
CYVM100-150-200-250
CYVL100-150-200-250

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Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende



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