



Air Conditioning  
Technical Data  
RXYSQ-T8Y  
RXYSQ-TY1



- > RXYSQ8TMY1B
- > RXYSQ10TMY1B
- > RXYSQ12TMY1B
- > RXYSQ4T8YB
- > RXYSQ5T8YB
- > RXYSQ6T8YB

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# 1 Features

## 1 - 1 RXYSQ-TY1

- Space saving trunk design for flexible installation
- Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Nexura ...
- Wide range of units (4 to 12HP) suitable for projects up to 200m<sup>2</sup> with space limitations
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- Customize your VRV for best seasonal efficiency & comfort with the weather dependant Variable Refrigerant Temperature function. Increased seasonal efficiency with up to 28%. No more cold draft by supply of high outblow temperatures
- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- 3 steps in night quiet mode: step 1: 47dBA, step 2: 44 dBA, step 3: 41 dBA
- Possibility to limit peak power consumption between 30 and 80%, for example during periods with high power demand
- Connectable to all VRV control systems
- Keep your system in top condition via our i-Net service: 24/7 monitoring for maximum efficiency, extended lifetime, immediate service support thanks to failure prediction and a clear understanding of operability and usage



Inverter

# 1 Features

## 1 - 2 RXYSQ-T8Y

- Space saving trunk design for flexible installation
- Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Nexura ...
- Wide range of units (4 to 12HP) suitable for projects up to 200m<sup>2</sup> with space limitations
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
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- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- 3 steps in night quiet mode: step 1: 47dBA, step 2: 44 dBA, step 3: 41 dBA
- Possibility to limit peak power consumption between 30 and 80%, for example during periods with high power demand
- Connectable to all VRV control systems
- Keep your system in top condition via our i-Net service: 24/7 monitoring for maximum efficiency, extended lifetime, immediate service support thanks to failure prediction and a clear understanding of operability and usage



Inverter

## 2 Specifications

2-1 Technical Specifications				RXYSQ8TY1	RXYSQ10TY1	RXYSQ12TY1	RXYSQ4T8Y	RXYSQ5T8Y	RXYSQ6T8Y		
Capacity range			HP	8	10	12	4	5	6		
Cooling capacity	Nom.	35°C AHRI	kW	22.4 (1)	28.0	33.5	-				
			Btu/h	76,400	95,500	114,300	-				
		35°C CDB	kW	-							
		46°C AHRI	kW	17.0	20.0	24.0	-				
			Btu/h	58,000	68,200	81,850.0	-				
		48°C AHRI	kW	15.0	17.0	20.0	-				
Btu/h	51,150		58,000	68,200.0	-						
Eurovent		kW	22.4	28.0	33.5	12.1 (1)	14.0 (1)	15.5 (1)			
Heating capacity	Nom.	6°C CWB	kW	22.4 (2)	28.0 (2)	33.5 (2)	12.1 (2)	14.0 (2)	15.5 (2)		
	Max.	6°C CWB	kW	25.0 (2)	31.5 (2)	37.5 (2)	14.2 (2)	16.0 (2)	18.0 (2)		
Power input - 50Hz	Cooling	Nom.	35°C AHRI	kW	6.78	8.54	10.2	-			
			35°C CD B	kW	-						
			46°C AHRI	kW	5.80	7.02	8.60	-			
			48°C AHRI	kW	5.34	6.80	7.97	-			
			Eurovent	kW	6.12	8.24	10.2	3.03 (1)	3.73 (1)	4.56 (1)	
	Heating	Nom.	6°C CWB	kW	5.20 (2)	6.60 (2)	8.19 (2)	2.68 (2)	3.27 (2)	3.97 (2)	
		Max.	6°C CWB	kW	6.22 (2)	8.33 (2)	10.2 (2)	3.43 (2)	4.09 (2)	5.25 (2)	
Capacity control	Method			Inverter controlled							
EER at nom. capacity	35°C AHRI	Btu/h		11.3	11.2		-				
		kW/kW		3.30 (1)	3.28 (1)		-				
	35°C CDB	kW/kW		-							
	46°C AHRI	Btu/h		10.0	9.72	9.52	-				
		kW/kW		2.93	2.85	2.79	-				
	48°C AHRI	Btu/h		9.58	8.53	8.56	-				
kW/kW		2.81	2.50	2.51	-						
Eurovent		kW/kW		3.66	3.40	3.30	4.00 (1)	3.75 (1)	3.40 (1)		
COP at nom. capacity	6°C CWB	Btu/h		12.5	-						
		kW/kW		4.31 (2)	4.24 (2)	4.09 (2)	4.52 (2)	4.28 (2)	3.90 (2)		
COP at max. capacity	6°C CWB	kW/kW		4.02 (2)	3.78 (2)	3.66 (2)	4.14 (2)	3.91 (2)	3.43 (2)		
ESEER - Automatic				6.72	6.41	6.18	7.89	7.49	6.73		
ESEER - Standard				5.63	5.02	4.87	6.18	5.77	5.23		
Maximum number of connectable indoor units				64 (3)							
Indoor index connection	Min.			100	125	150	50	62.5	70		
	Nom.			-							
	Max.			260	325	390	130	162.5	182		
Dimensions	Unit	Height	mm	1,430	1,615		1,345				
		Width	mm	940			900				
		Depth	mm	320	460		320				
	Packed unit	Height	mm	1,615	1,745		1,524				
		Width	mm	1,030	1,015		980				
		Depth	mm	420	575		420				
Weight	Unit		kg	144	175	180	104				
	Packed unit		kg	158	191	196	114				
Packing	Material			Carton							
	Weight		kg	5.6	8.2		3.9				
Packing 2	Material			Wood							
	Weight		kg	5.5	8.8		5.6				
Packing 3	Material			Plastic							
	Weight		kg	0.3	0.4		0.5				
Casing	Colour			Daikin White							
	Material			Painted galvanized steel plate							
Heat exchanger	Type			Cross fin coil							
	Fin	Treatment		Anti-corrosion treatment							

## 2 Specifications

2-1 Technical Specifications				RXYSQ8TY1	RXYSQ10TY1	RXYSQ12TY1	RXYSQ4T8Y	RXYSQ5T8Y	RXYSQ6T8Y	
Compressor	Quantity			1						
	Type			Hermetically sealed scroll compressor			Hermetically sealed swing compressor			
	Crankcase heater	W		33			-			
Fan	Quantity			2						
	Air flow rate	Cooling	Nom.	m <sup>3</sup> /min	140	182		106		
	External static pressure	Max.		Pa	-					
	Discharge direction			Horizontal						
	Type			Propeller fan						
Fan motor	Quantity			2						
	Output			W		200		70		
	Model			Brushless DC motor						
Sound power level	Cooling	Nom.	dBA	73 (4)	74 (4)	76 (4)	68 (4)	69 (4)	70 (4)	
Sound pressure level	Cooling	Nom.	dBA	55 (5)		57 (5)	50 (5)	51 (5)		
Operation range	Cooling	Min.~Max.		°CDB	-5~52			-5~46		
	Heating	Min.~Max.		°CWB	-20~15.5					
Refrigerant	Type			R-410A						
	GWP			2,087.5						
	Charge			TCO <sub>2</sub> eq	9.4	14.6	16.7	7.5		
			kg	5.5	7	8	3.6			
Refrigerant oil	Type			Synthetic (ether) oil FVC68D			Synthetic (ether) oil FVC50K			
	Charged volume			l	2.6	3.2	3.4	1.4		
Piping connections	Liquid	Type		Braze connection			Flare connection			
		OD		mm	9.52		12.7	9.52		
	Gas	Type		Braze connection			Flare connection		Braze connection	
		OD		mm	19.1	22.2	25.4	15.9		19.1
	Total piping length	System	Actual	m	-			300 (6)		
	Level difference	OU - IU	Outdoor unit in highest position	m	-					
			Indoor unit in highest position	m	-					
Heat insulation			Both liquid and gas pipes							
Piping length	OU - IU	Max.	m	300			-			
Defrost method				Reversed cycle						
Safety devices	Item	01		High pressure switch						
		02		Fan driver overload protector						
		03		Inverter overload protector						
		04		PC board fuse						
PED	Category			Category II			Category I			
	Most critical part	Name		Accumulator			Compressor			
		Ps*V	Bar*l		202	279		167		

Standard Accessories : Installation manual;

Standard Accessories : Operation manual;

Standard Accessories : Connection pipes;

2-2 Electrical Specifications				RXYSQ8TY1	RXYSQ10TY1	RXYSQ12TY1	RXYSQ4T8Y	RXYSQ5T8Y	RXYSQ6T8Y	
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	9.6 (7)	10.7 (7)	13.4 (7)	4.44 (7)	5.55 (7)	6.84 (7)	

## 2 Specifications

2-2 Electrical Specifications				RXYSQ8TY1	RXYSQ10TY1	RXYSQ12TY1	RXYSQ4T8Y	RXYSQ5T8Y	RXYSQ6T8Y
Current - 50Hz	Zmax	List		-			No requirements		
	Minimum Ssc value		kVa	910 (8)	564 (8)	615 (8)	-		
	Minimum circuit amps (MCA)		A	18.5	22.0	24.0	14.1 (9)		
	Maximum fuse amps (MFA)		A	25		32	16 (10)		
	Total overcurrent amps (TOCA)		A	16.5 (11)	25.0 (11)	27.0 (11)	14.1 (11)		
	Full load amps (FLA)	Total	A	1.4			0.6 (12)		
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					

### Notes

(1) Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series. Eurovent 2015 tolerances are used.

(2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series. Eurovent 2015 tolerances are used.

(3) Actual number of units depends on the indoor unit type (VRV DX indoor, RA DX indoor, etc.) and the connection ratio restriction for the system (being:  $50\% \leq CR \leq 130\%$ ).

(4) Sound power level is an absolute value that a sound source generates.

(5) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.

(6) Ssc: Short-circuit power

(7) RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB

(8) Refer to refrigerant pipe selection or installation manual

(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) TOCA means the total value of each OC set.

(12) FLA means the nominal running current of the fan

Sound values are measured in a semi-anechoic room.

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

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.

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Maximum allowable voltage range variation between phases is 2%.

In accordance with EN/IEC 61000-3-11, respectively 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  $Z_{sys} \leq Z_{max}$ , respectively  $S_{sc} \geq$  minimum Ssc value.

EN/IEC 61000-3-11: European/international technical standard setting the limits for voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with rated  $\leq 75A$

EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current  $> 16A$  and  $\leq 75A$  per phase

$Z_{sys}$ : system impedance

The automatic ESEER value corresponds with normal VRV IV-S heat pump operation, including the advanced energy saving functionality (variable refrigerant temperature control).

The standard ESEER value corresponds with normal VRV IV-S heat pump operation, not taking into account the advanced energy saving functionality.

FLA: nominal running current fan

Minimum Ssc (=Short-circuit power) value: Equipment complying with EN/IEC 61000-3-12: European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current  $> 16A$  and  $\leq 75A$  per phase



# 3 Options

## 3 - 1 Options

**RXYSQ-TV1**  
**RXYSQ-TV1**  
**RXYSQ-TY1**

Nr.	Item	RXYSQ4~5TMV1B	RXYSQ4~6T7V1B	RXYSQ4~6T7Y1B	RXYSQ8~12TMY1B	RXYSQ6T7Y1B9
I.	Refnet header	KHRQ22M29H				
		-	-	-	KHRQ22M64H	-
II.	Refnet joint	KHRQ22M20T				
		-	-	-	KHRQ22M29T9	-
1a.	Cool/heat selector (switch)	-	-	KRC19-26	-	KRC19-26
1b.	Cool/heat selector (fixing box)	-	-	KJB111A	-	KJB111A
1c.	Cool/heat selector (PCB)	-	EBRP2B	-	-	-
1d.	Cool/heat selector (cable)	-	-	EKCHSC	-	EKCHSC
2.	Drain plug kit	-	-	EKDK04	-	EKDK04
3.	VRV configurator	EKPCAB*				
4.	Demand PCB	DTA104A61/62*				
5.	Branch provider - 2 rooms	BPMKS967A2				
6.	Branch provider - 3 rooms	BPMKS967A3				

**Notes**

1. All options are kits
2. To mount option 1a, option 1b is required.
3. For RXYSQ4~6T7Y1B  
To operate the cool/heat selector function, options 1a and 1c are both required.
4. For RXYSQ4~6T7Y1B  
To operate the cool/heat selector function, options 1a and 1d are both required.

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## RXYSQ-T8Y

Nr.	Item	RXYSQ4~5TMV1B	RXYSQ4~6T7V1B RXYSQ4~6T8VB	RXYSQ4~6T7Y1B RXYSQ4~6T8YB	RXYSQ8~12TMY1B	RXYSQ6T7Y1B9 RXYSQ6T8Y1B9
I.	Refnet header	KHRQ22M29H				
		-	-	-	KHRQ22M64H	-
II.	Refnet joint	KHRQ22M20T				
		-	-	-	KHRQ22M29T9	-
1a.	Cool/heat selector (switch)	-	-	KRC19-26	-	KRC19-26
1b.	Cool/heat selector (fixing box)	-	-	KJB111A	-	KJB111A
1c.	Cool/heat selector (PCB)	-	EBRP2B	-	-	-
1d.	Cool/heat selector (cable)	-	-	EKCHSC	-	EKCHSC
2.	Drain plug kit	-	-	EKDK04	-	EKDK04
3.	VRV configurator	EKPCAB*				
4.	Demand PCB	DTA104A61/62*				
5.	Branch provider - 2 rooms	BPMKS967A2				
6.	Branch provider - 3 rooms	BPMKS967A3				

**Notes**

1. All options are kits
2. To mount option 1a, option 1b is required.
3. For RXYSQ4~6T7Y1B  
For RXYSQ4~6T8VB  
To operate the cool/heat selector function, options 1a and 1c are both required.
4. For RXYSQ4~6T7Y1B  
For RXYSQ4~6T8YB  
To operate the cool/heat selector function, options 1a and 1d are both required.

3D097778B

# 4 Combination table

## 4 - 1 Combination Table

4

**RXYSQ-TV1**  
**RXYSQ-TV1**  
**RXYSQ-TY1**

Indoor unit combination pattern	VRV* DX box + indoor unit	RA DX box + indoor unit	Hydrobox unit	Air handling unit (AHU) <sup>(1)</sup>
VRV* DX box + indoor unit	O	X	X	O
RA DX box + indoor unit	X	O	X	X
Hydrobox unit <sup>(1)</sup>	X	X	X	X
Air handling unit (AHU)	O <sub>1</sub>	X	X	O <sub>1</sub>

O: Allowed  
X: Not allowed

**Notes**

- O<sub>1</sub>
  - Combination of AHU only + control box EKEQFA (not combined with VRV DX indoor units)
    - X-control is possible (up to 3x [EKEV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
    - Y-control is possible (up to 3x [EKEV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
    - W-control is possible (up to 3x [EKEV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
  - Combination of AHU only + control box EKEQMA (not combined with VRV DX indoor units)
    - Z-control is possible (the allowed number of [EKEV + EKEQMA boxes] is determined by the connection ratio (90-110%) and the capacity of the outdoor unit.
- Combination of AHU and VRV DX indoor units
  - Z-control is possible [EKEQMA\* boxes are allowed, but with a limited connection ratio].
- <sup>(1)</sup> The following units are considered AHUs:
  - EKEV + EKEQ(MA/FA) + AHU coil
  - Biddle air curtain
  - FXMQ\_MF units

**Information**

- W/M units are considered to be regular VRV DX indoor units.

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**RXYSQ-TV1**  
**RXYSQ-TV1**  
**RXYSQ-TY1**

Combination table	RXYSQ4~5TMV1B	RXYSQ4~6T7V1B	RXYSQ4~6T7Y1B	RXYSQ8~12TMV1B
VRV* DX box + indoor unit	O	O	O	O
RA DX box + indoor unit	O	O	O	O
Hydrobox unit	X	X	X	X
Air handling unit (AHU) <sup>(2)</sup>	O	O	O	O

O: Allowed  
X: Not allowed

**Notes**

- <sup>(2)</sup> The following units are considered AHUs:
  - EKEV + EKEQ(MA/FA) + AHU coil
  - Biddle air curtain
  - FXMQ\_MF units

3D097983

# 4 Combination table

## 4 - 1 Combination Table

RVSCQ-TV1  
RXYSQ-TV1\_TY1

**VRV4-S**  
**Heat pump**  
**RA/SA DX indoor unit**  
**Compatibility list**

Configuration			Indoor unit type
RA indoor unit	Wall-mounted	Emura	FTXG20L (W/S)
			FTXG25L (W/S)
			FTXG35L (W/S)
			FTXG50L (W/S)
		FTXS	FTXS20K
			FTXS25K
			FTXS35K
			FTXS42K
			FTXS50K
			FTXS60G
			FTXS71G
			FTXS15K
		CTXS	CTXS15K
			CTXS35K
	Floor-standing	Flex	FLXS25B
	Ceiling-mounted		FLXS35B
			FLXS50B
			FLXS60B
	Floor-standing	FVXS	FVXS25F
			FVXS35F
			FVXS50F
		Nexura	FVXG25K
			FVXG35K
			FVXG50K
		FNQ	FNQ25A
			FNQ35A
			FNQ50A
			FNQ60A
Duct	FDXS	FDXS25F	
		FDXS30F	
		FDXS50F9	
		FDXS60F	

Configuration			Indoor unit type
SA indoor unit	Cassette	Fully Flat 2x2	FFQ25C
			FFQ35C
			FFQ50C
			FFQ60C
		Roundflow 3x3	FCQG35F
			FCQG50F
	Ceiling-suspended	FCQG60F	
		FCQG71F	
		FHQ35C	
		FHQ50C	
		FHQ60C	
	Duct		FHQ71C
			FBQ35D
			FBQ50D
			FBQ60D
FBQ71D			

**Remark**

1. The limitations on the use of RA/SA indoor units with the VRV4-S Heat Pump are subject to the rules set out in drawings 3D097983 and 3D097984.

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**RXYSQ-TV1/TY1**

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

Units in scope: FXZQ15A and FXAQ15A.

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

**Remark**

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

# 4 Combination table

## 4 - 1 Combination Table

4

### RXYSQ-T8Y

Configuration		Indoor unit type		
RA indoor unit	Wall-mounted	Emura	FTXG20L (W/S)	
			FTXG25L (W/S)	
			FTXG35L (W/S)	
			FTXG50L (W/S)	
		FTXS	FTXS20K	
			FTXS25K	
			FTXS35K	
			FTXS42K	
			FTXS50K	
			FTXS60G	
			FTXS71G	
			CTXS	CTXS15K
				CTXS35K
			Floor-standing Ceiling-mounted	Flex
	FLXS35B			
	FLXS50B			
	FLXS60B			
	Floor-standing	FVXS	FVXS25F	
			FVXS35F	
			FVXS50F	
			Nexura	FVXG25K
				FVXG35K
				FVXG50K
		FNQ	FNQ25A	
			FNQ35A	
			FNQ50A	
		Duct	FDXS	FDXS25F
				FDXS30F
FDXS50F9				
FDXS60F				

Configuration		Indoor unit type	
SA indoor unit	Cassette	Fully Flat 2x2	FFQ25C
			FFQ35C
		FFQ50C	
		FFQ60C	
		Roundflow 3x3	FCQG35F
			FCQG50F
	Ceiling-suspended	FCQG60F	
		FCQG71F	
	Duct		FHQ35C
			FHQ50C
			FHQ60C
			FHQ71C
			FBQ35D
		FBQ50D	
	FBQ60D		
	FBQ71D		

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### RXYSQ-T8Y

Combination table	RXYSQ4~5TMV1B	RXYSQ4~6T7V1B	RXYSQ4~6T7Y1B	RXYSQ8~12TMV1B
·VRV* DX- indoor unit	O	O	O	O
·RA DX- indoor unit	O	O	O	O
Hydrobox unit	X	X	X	X
Air handling unit (AHU) (2)	O	O	O	O

O: Allowed  
X: Not allowed

Notes

- (2) The following units are considered AHUs:
  - ·EKEV + EKEQ(MA/FA) + AHU- coil
  - ·Biddle- air curtain
  - ·FXMQ\_MF- units

3D097983

## 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.

[Click here to access the capacity table viewer.](#)



- For more information about all our tools we offer [click here to see the overview](#) on my.daikin.eu



# 5 Capacity tables

## 5 - 2 Integrated Heating Capacity Correction Factor

5

RXYSQ-TV1  
RXYSQ-TV1  
RXYSQ-TY1

### Integrated heating capacity coefficient

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

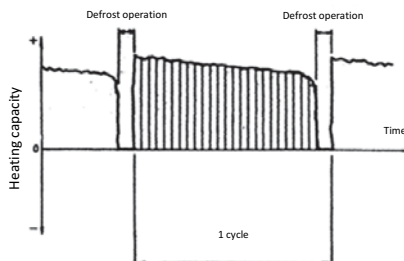
Formula

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

$$A = B * C$$

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
RXYSQ4TMV1B							
RXYSQ5TMV1B							
RXYSQ4T7V1B							
RXYSQ5T7V1B							
RXYSQ6T7V1B	0,88	0,86	0,80	0,75	0,76	0,82	1,00
RXYSQ4T7Y1B							
RXYSQ5T7Y1B							
RXYSQ6T7Y1B							
RXYSQ6T7Y1B9							
RXYSQ8TMY1B	0,95	0,93	0,88	0,84	0,85	0,90	1,00
RXYSQ10TMY1B	0,95	0,93	0,87	0,79	0,80	0,88	1,00
RXYSQ12TMY1B	0,95	0,92	0,87	0,75	0,76	0,85	1,00



Notes

- (1) The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).
- (2) 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.

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### RXYSQ-T8Y

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

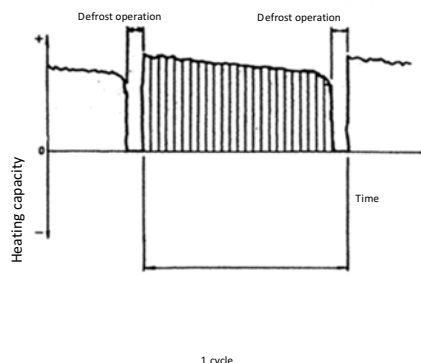
Formula

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

$$A = B * C$$

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
RXYSQ4TMV1B							
RXYSQ5TMV1B							
RXYSQ4T7V1B							
RXYSQ5T7V1B							
RXYSQ6T7V1B							
RXYSQ4T7Y1B							
RXYSQ5T7Y1B							
RXYSQ6T7Y1B	0,88	0,86	0,80	0,75	0,76	0,82	1,00
RXYSQ6T7Y1B9							
RXYSQ4T8VB							
RXYSQ5T8VB							
RXYSQ6T8VB							
RXYSQ4T8YB							
RXYSQ5T8YB							
RXYSQ6T8YB							
RXYSQ6T8Y1B9							
RXYSQ8TMY1B	0,95	0,93	0,88	0,84	0,85	0,90	1,00
RXYSQ10TMY1B	0,95	0,93	0,87	0,79	0,80	0,88	1,00
RXYSQ12TMY1B	0,95	0,92	0,87	0,75	0,76	0,85	1,00



Notes

- (1) The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).
- (2) 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.

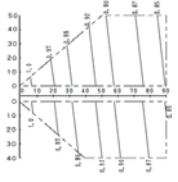
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# 5 Capacity tables

## 5 - 3 Capacity Correction Factor

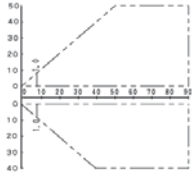
### RXYSQ8TY1

Correction ratio for cooling capacity



x-axis : Equivalent piping length [m]  
y-axis : Height difference between outdoor unit and furthest indoor unit [m]

Correction ratio for heating capacity



x-axis : Equivalent piping length [m]  
y-axis : Height difference between outdoor unit and furthest indoor unit [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. With this outdoor unit, the following control is used:  
- in case of cooling: constant evaporating pressure control  
- in case of heating: constant condensing pressure control

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

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

4. When the overall equivalent piping length is 90 m or more, the diameter of the main gas pipes (outdoor unit - branch sections) must be increased. For the new diameters, see below.

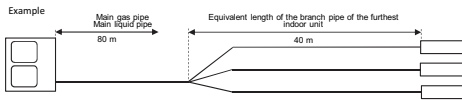
Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
RXYSQ8TY1B	9,5	12,7	19,1	22,2

5. Overall equivalent length  
 Overall equivalent length = Equivalent length of the main pipe × Correction factor + Equivalent length of the branch pipes

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
 When calculating the heating capacity: liquid pipe size

	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,3



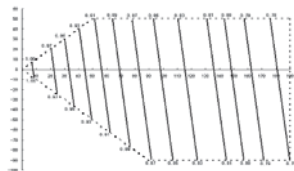
**Overall equivalent length**  
 • Cooling mode = 80 m × 0,5 + 40 m = 80 m  
 • Heating mode = 80 m × 0,3 + 40 m = 64 m

**Capacity correction ratio (height difference = 0)**  
 • Cooling mode = 0,87  
 • Heating mode = 1,00

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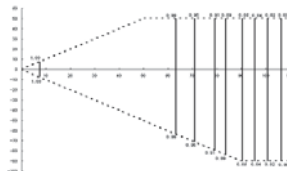
### RXYSQ10TY1

Correction ratio for cooling capacity



x-axis : Equivalent piping length [m]  
y-axis : Height difference between outdoor unit and furthest indoor unit [m]

Correction ratio for heating capacity



x-axis : Equivalent piping length [m]  
y-axis : Height difference between outdoor unit and furthest indoor unit [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. With this outdoor unit, the following control is used:  
- in case of cooling: constant evaporating pressure control  
- in case of heating: constant condensing pressure control

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

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

4. When the overall equivalent piping length is 90 m or more, the diameter of the main gas pipes (outdoor unit - branch sections) must be increased. For the new diameters, see below.

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
RXYSQ10TY1B	9,5	12,7	22,2	25,4 *

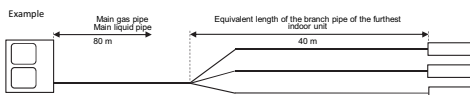
\* If not available on-site, do not increase the piping diameter.  
 If not increased, do not apply a correction factor to the equivalent piping length (see note 5).

5. Overall equivalent length  
 Overall equivalent length = Equivalent length of the main pipe × Correction factor + Equivalent length of the branch pipes

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
 When calculating the heating capacity: liquid pipe size

	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,2



**Overall equivalent length**  
 • Cooling mode = 80 m × 0,5 + 40 m = 80 m  
 • Heating mode = 80 m × 0,2 + 40 m = 56 m

**Capacity correction ratio (height difference = 0)**  
 • Cooling mode = 0,87  
 • Heating mode = 0,99

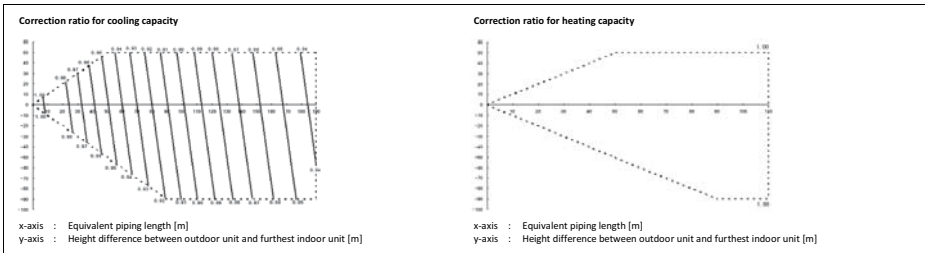
3D094660

# 5 Capacity tables

## 5 - 3 Capacity Correction Factor

5

### RXYSQ12TY1



- 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.
  - With this outdoor unit, the following control is used:
    - in case of cooling: constant evaporating pressure control
    - in case of heating: constant condensing pressure control

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

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

4. When the overall equivalent piping length is 90 m or more, the diameter of the main gas pipes (outdoor unit - branch sections) must be increased. For the new diameters, see below.

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
RXYSQ12TY1B	12,7	15,9	25,4	28,6

5. Overall equivalent length

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

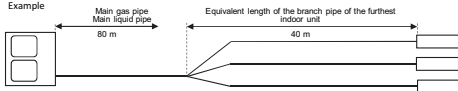
Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size

When calculating the heating capacity: liquid pipe size

	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,3

Example



**Overall equivalent length**

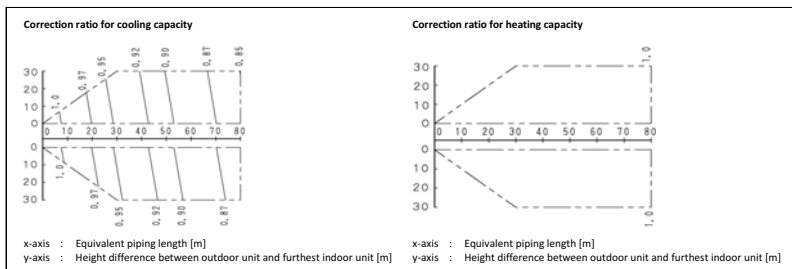
- Cooling mode = 80 m × 0,5 + 40 m = 80 m
- Heating mode = 80 m × 0,2 + 40 m = 64 m

**Capacity correction ratio (height difference = 0)**

- Cooling mode = 0,92
- Heating mode = 1,00

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### RXYSQ-T8Y



- 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.

2. With this outdoor unit, the following control is used: - in case of cooling: constant evaporating pressure control - in case of heating: constant condensing pressure control

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

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

4. When the overall equivalent piping length is 90 m or more, the diameter of the main gas pipes (outdoor unit - branch sections) must be increased. For the new diameters, see below.

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
4HP / 5HP	9,5	Not increased	15,9	19,1
6 HP	9,5	Not increased	19,1	22,2

5. Overall equivalent length

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

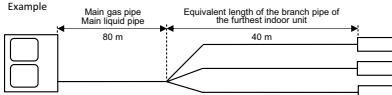
Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size

When calculating the heating capacity: liquid pipe size

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

Example



**Overall equivalent length**

- Cooling mode = 80 m × 0,5 + 40 m = 80 m
- Heating mode = 80 m × 0,5 + 40 m = 80 m

**Capacity correction ratio (height difference = 0)**

- Cooling mode = 0,86
- Heating mode = 1,00

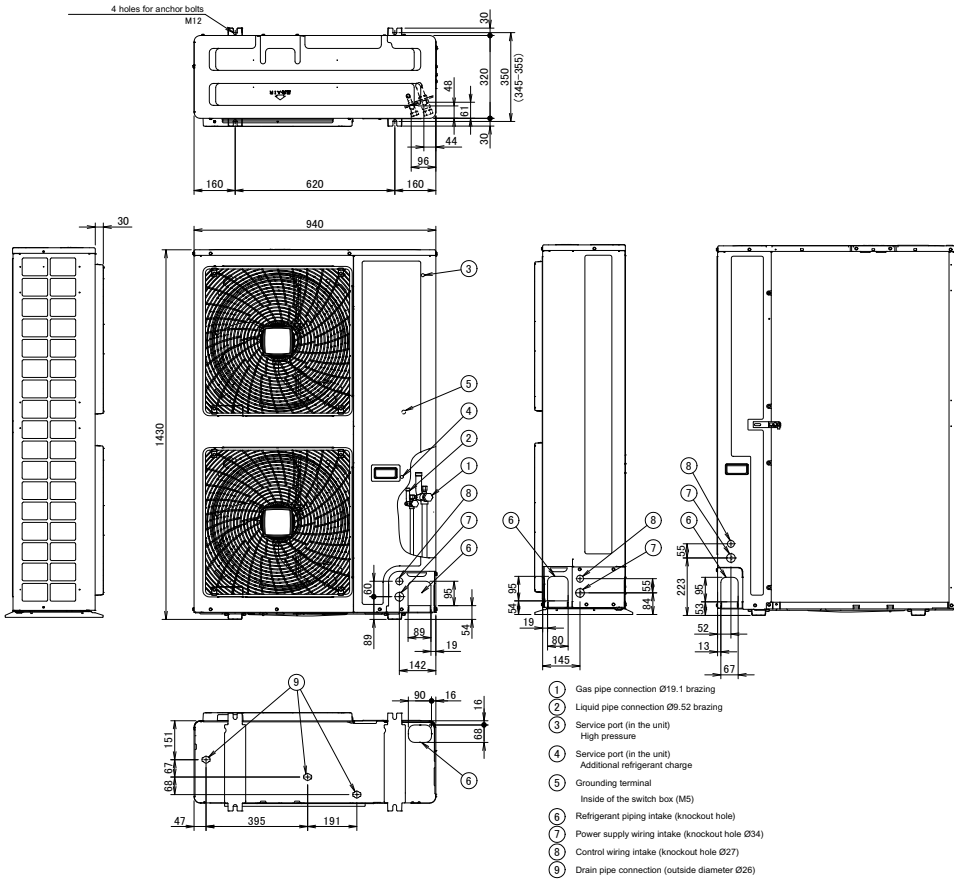
3D094660A



# 6 Dimensional drawings

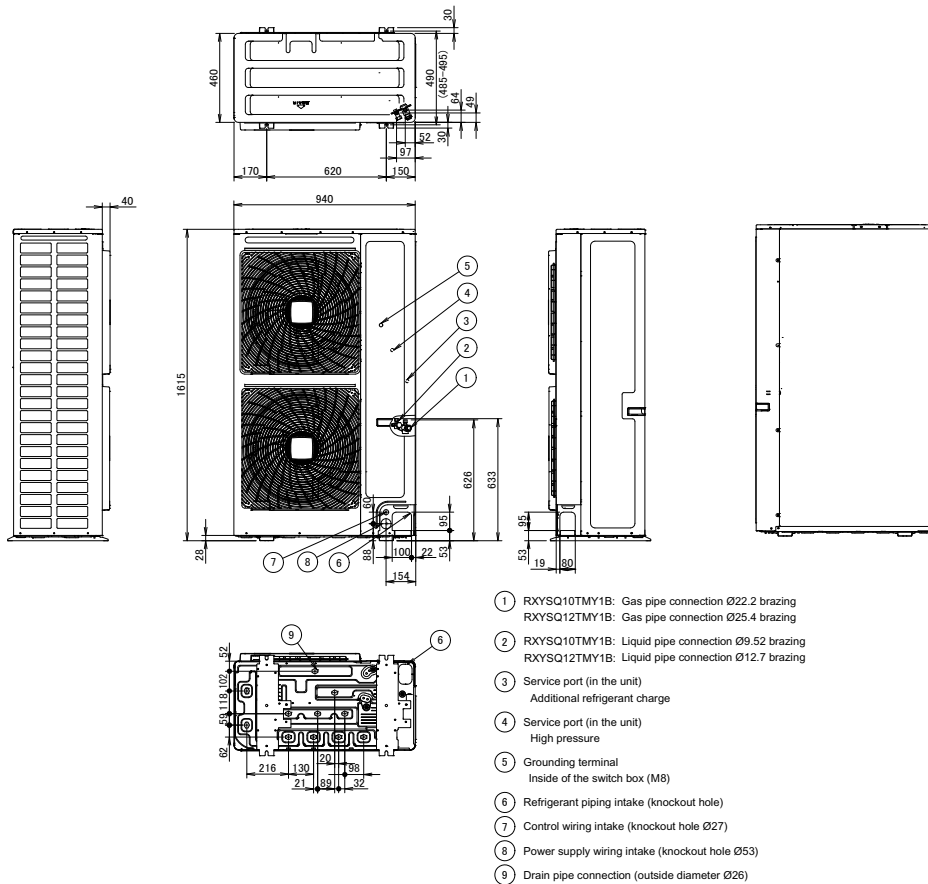
## 6 - 1 Dimensional Drawings

### RXYSQ8TY1



3D098108

### RXYSQ10-12TY1



3D098109

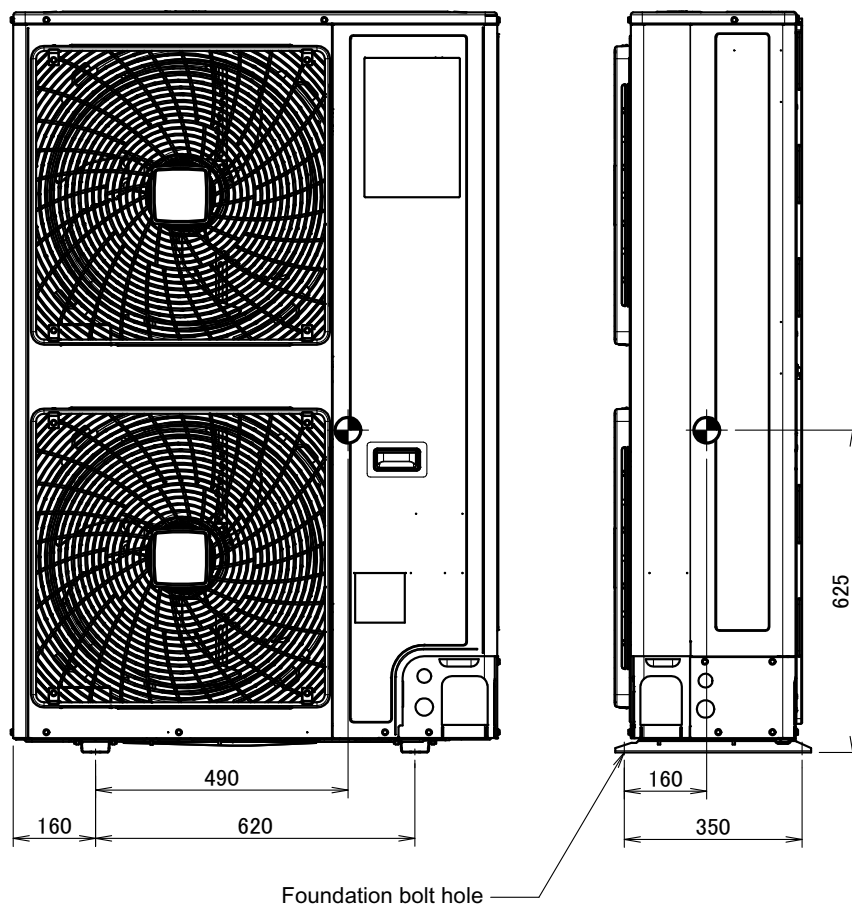


## 7 Centre of gravity

### 7 - 1 Centre of Gravity

RXYSQ8TY1

7

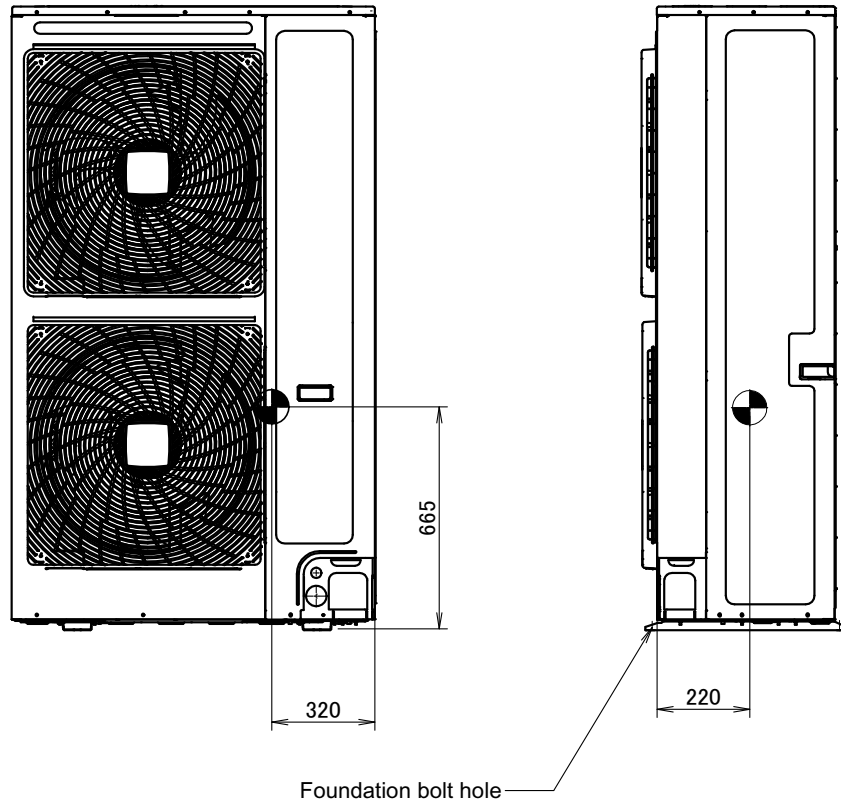


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## 7 Centre of gravity

### 7 - 1 Centre of Gravity

RXYSQ10-12TY1

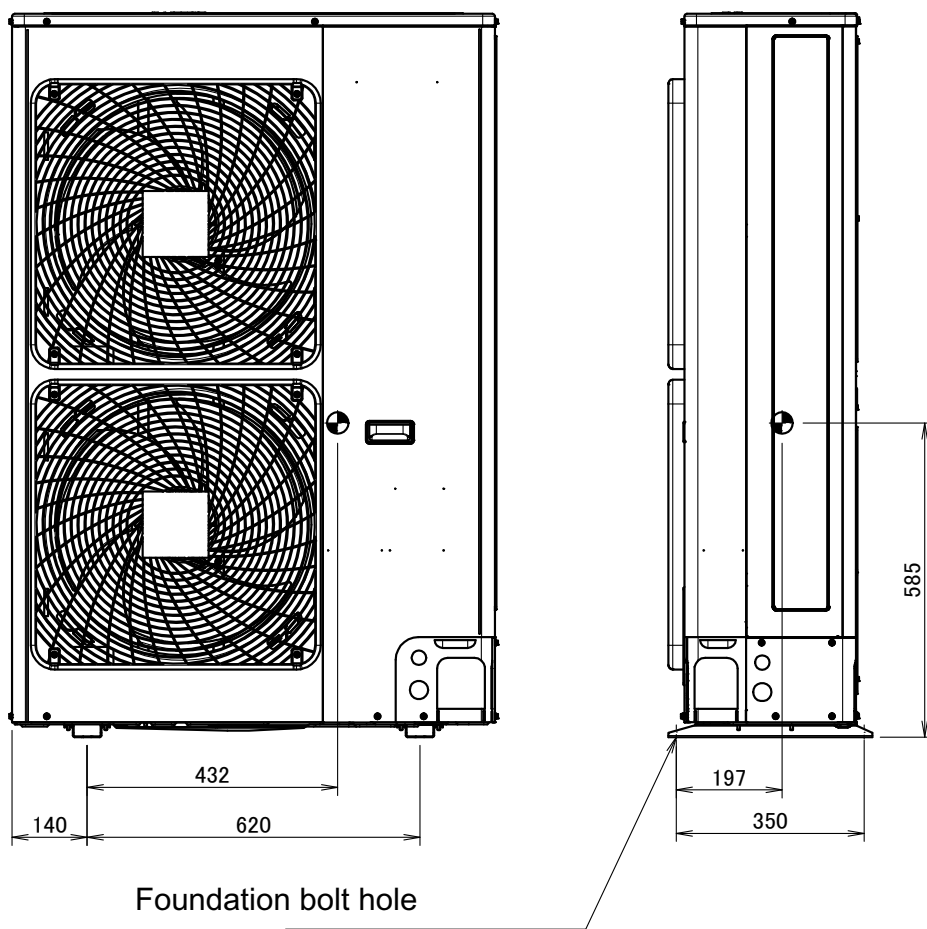


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# 7 Centre of gravity

## 7 - 1 Centre of Gravity

# RXYSQ-T8Y



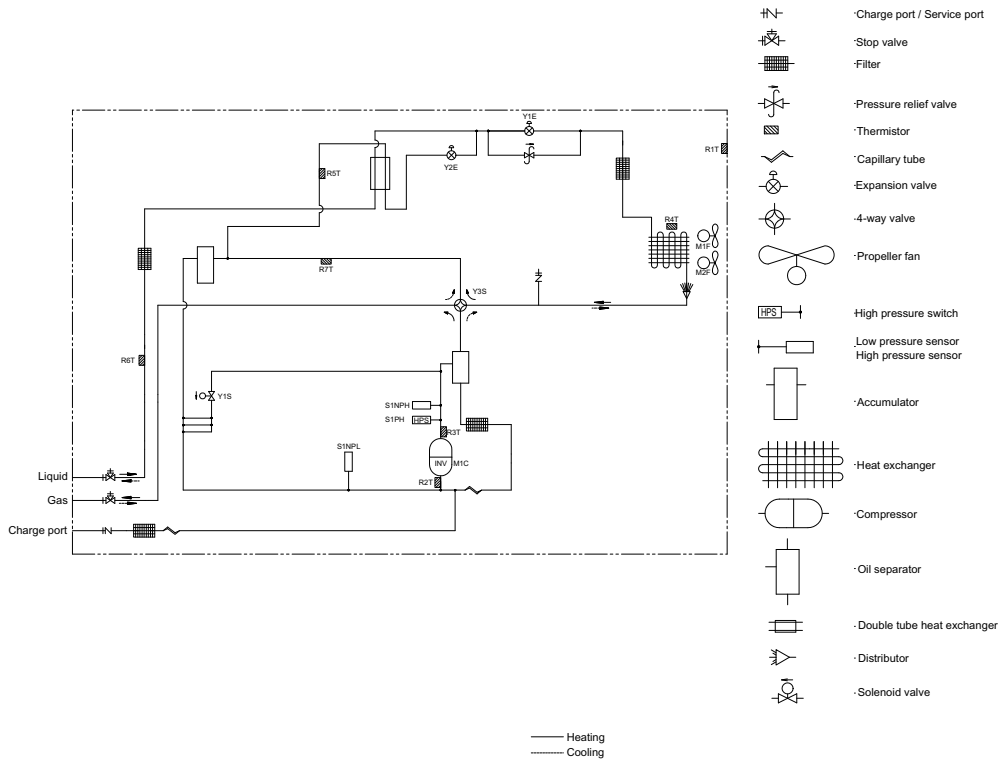
**4D094635**

# 8 Piping diagrams

## 8 - 1 Piping Diagrams

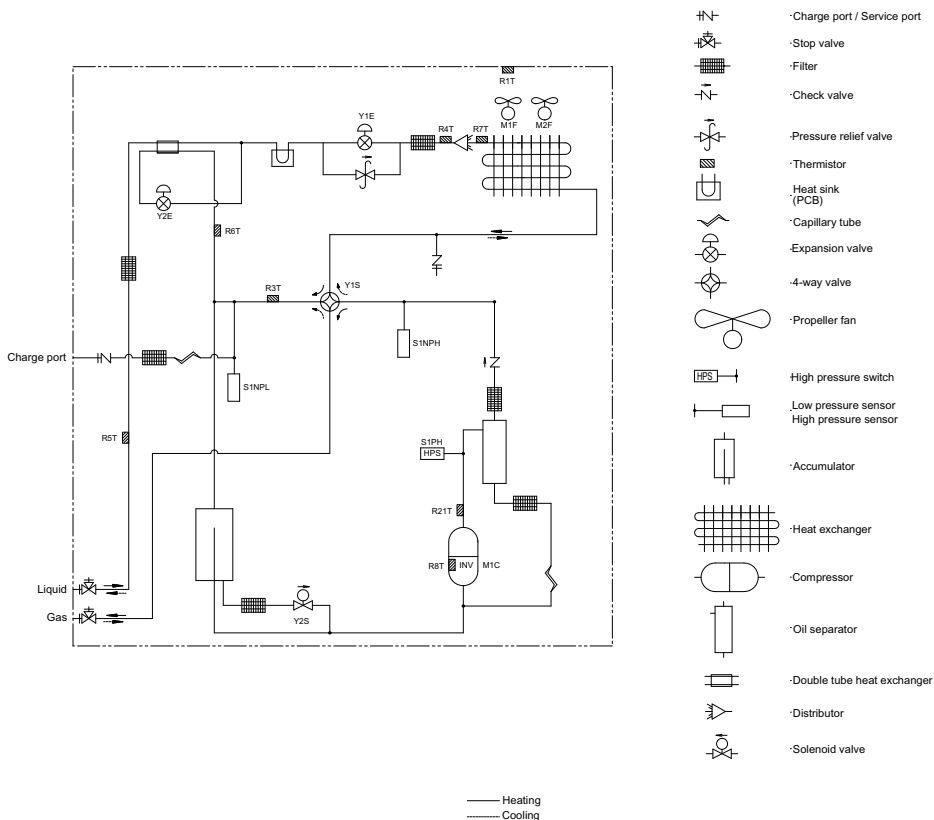
8

RXYSQ8TY1



3D097887

RXYSQ10-12TY1

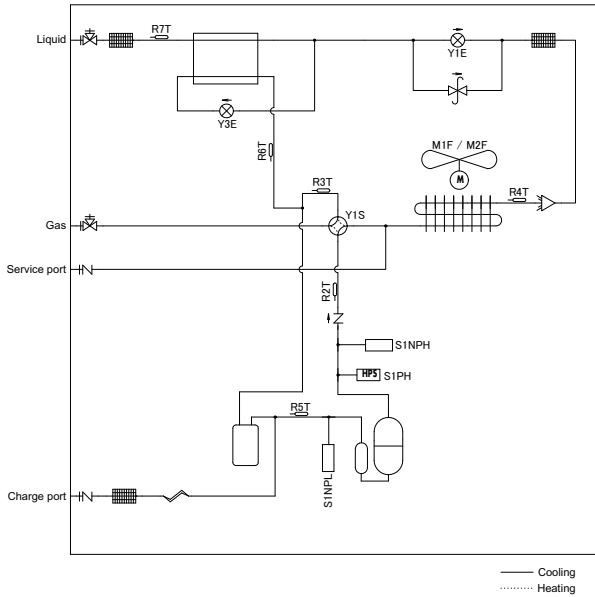


3D097888

# 8 Piping diagrams

## 8 - 1 Piping Diagrams

### RXYSQ-T8Y



- Charge port / Service port
- Stop valve
- Filter
- Check valve
- Pressure relief valve
- Thermistor
- Capillary tube
- Expansion valve
- 4-way valve
- Propeller fan
- High pressure switch
- Low pressure sensor
- High pressure sensor
- Accumulator
- Heat exchanger
- Compressor
- Compressor  
· Accumulator
- Double tube heat exchanger
- Distributor

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### RXYSQ-T8Y

For the reference drawing, see page 2/3.

		Maximum piping length		Maximum height difference		Total piping length
		Longest pipe (A+[B,D+E,H]) Actual / (Equivalent)	After first branch (B,D+E,H) Actual	Indoor-to-outdoor (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	
Standard	RXYSQ4~5TMV1B	70/(90)m	40m	30/(30)m	15m	300m
	RXYSQ4~6T7(V/Y)1B	120/(150)m	40m	50/(40)m	15m	300m
VRV DX indoor units only	RXYSQ4~6T8(V/Y)B	100/(130)m	40m	50/(40)m	15m	300m
	RXYSQ8TMY1B	120/(150)m	40m	50/(40)m	15m	300m
	RXYSQ10~12TMY1B	35/(45)m	40m	30/(30)m	15m	140m
RA connection	RXYSQ4~5TMV1B	65/(85)m	40m	30/(30)m	15m	140m
	RXYSQ4~6T7(V/Y)1B	80/(100)m	40m	30/(30)m	15m	140m
	RXYSQ4~6T8(V/Y)B	80/(100)m	40m	30/(30)m	15m	140m
	RXYSQ8TMY1B	80/(100)m	40m	30/(30)m	15m	140m
Air handling unit (AHU) connection	Pair	50/(55)m <sup>(1)</sup>	-	40/(40)m	-	-
	Multi	50/(55)m <sup>(2)</sup>	40m	40/(40)m	15m	300m
	Mix	50/(55)m <sup>(3)</sup>	40m	40/(40)m	15m	300m

**Notes**

1. The allowable minimum length is 5 m.
2. Multiple air handling units (AHU)(EKEXV + EKEQ kits).
3. Mix of air handling units (AHU) and VRV DX indoor units.

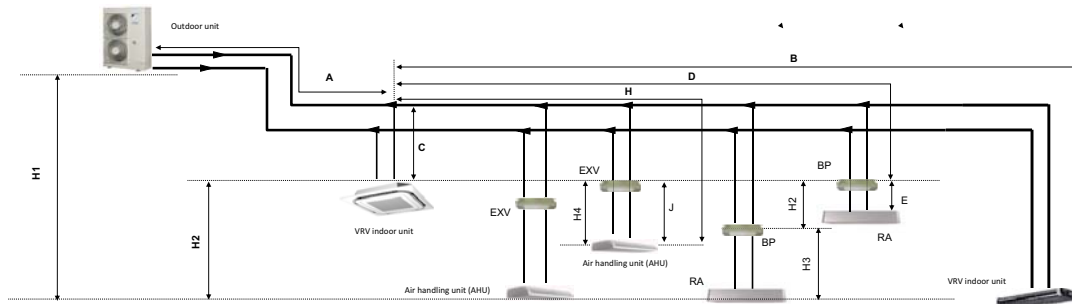
3D097984A

# 8 Piping diagrams

## 8 - 1 Piping Diagrams

8

### RXYSQ-T8Y



**Notes**

- Schematic indication. Illustrations may differ from the actual appearance of the unit.
- This is only to illustrate piping length limitations. Refer to combination table 3D097983 for details about the allowed combinations.

		Allowed piping length		Maximum height difference	
		BP to RA (E)	EXV to AHU (J)	BP to RA (H3)	EXV to AHU (H4)
RA connection	Pair	2~15m	-	5m	-
Air handling unit (AHU)	Multi (1)	-	≤5m	-	5m
Connection	Mix (2)	-	≤5m	-	5m

**Notes**

- Multiple air handling units (-AHU)-{EKE XV + EKEQ kits}.
- Mix of air handling units (-AHU) and -VRV DX- indoor units.

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### RXYSQ-T8Y

System pattern	Total		Allowed capacity		
	Capacity	Maximum allowed amount of connectable indoor units (-VRV, RA, AHU-) Excluding -BP- units and including -EXV- kits.	VRV DX indoor unit	-RA DX- indoor unit	Air handling unit (AHU)
Allowed connection ratio (CR)					
Other combinations are not allowed.					
VRV DX- indoor units only	50~130%	Maximum -64-	50~130%	-	-
RA DX- indoor units only	80~130%	Maximum -32- (1)	-	80~130%	-
VRV DX- indoor unit + -AHU- Mix	50~110% (3)	Maximum -64- (2)	50~110%	-	0~110%
-AHU- only					
Pair + multi (4)	90~110% (3)	Maximum -64- (2)	-	-	90~110%

**Notes**

- There is no restriction on the number of connectable -BP- boxes.
- EKE XV- kits are also considered indoor units.
- Restrictions regarding the air handling unit capacity
- Pair AHU = system with 1 air handling unit connected to one outdoor unit  
Multi AHU = system with multiple air handling units connected to one outdoor unit

**About ventilation applications**

- FXMQ MF- units are considered air handling units, following air handling unit limitations.
  - Maximum connection ratio when combined with -VRV DX- indoor units: CR ≤ 30%.
  - Maximum connection ratio when only air handling units are connected: CR ≤ 100%.
  - Minimum connection ratio when only -FXMQ MF- units are connected: CR ≥ 50%
 For information on the operation range, refer to the documentation of the -FXMQ MF- unit.
- Biddle air curtains are considered air handling units, following air handling unit limitations. For information on the operation range, refer to the documentation of the Biddle unit.
- EKE XV + EKEQ units combined with an air handling unit are considered air handling units, following air handling unit limitations. For information on the operation range, refer to the documentation of the -EKE XV-EKEQ- unit.
- VKM- units are considered to be regular -VRV DX- indoor units. For information on the operation range, refer to the documentation of the -VKM- unit.
- Because there is no refrigerant connection with the outdoor unit (only communication F1/F2), -VAM- units do not have connection limitations. However, since there is communication via F1/F2, count them as regular indoor unit when calculating the maximum allowed number of connectable indoor units.

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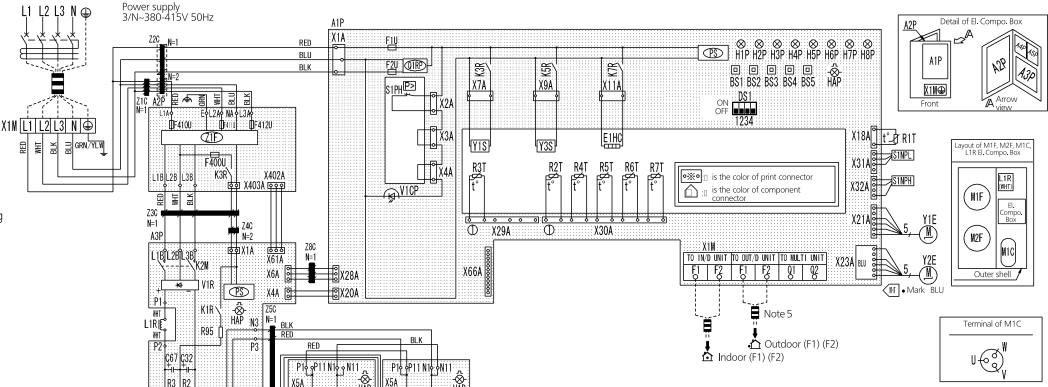


# 9 Wiring diagrams

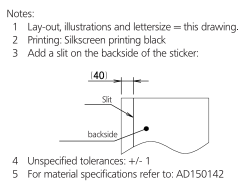
## 9 - 1 Wiring Diagrams - Three Phase

### RXYSQ8TY1

- A1P : Printed circuit board (Main)
- A2P : Printed circuit board (Noise filter)
- A3P : Printed circuit board (INV)
- A4P : Printed circuit board (Fan 1)
- A5P : Printed circuit board (Fan 2)
- BS1-BS5 : Push button switch (Mode, set, return, test, reset)
- C32, C67 : Capacitor
- DS1 : Dip switch
- E1HC : Crankcase heater
- F101U : Fuse (5A, DC650V) (A4P) (A5P)
- F1U, F2U : Fuse (T 3.15A / 250V) (A1P)
- F400U : Fuse (T 6.3A / 250V) (A2P)
- H1P-H8P : Pilot lamp (service monitor-orange) [H2P] Prepare, Test ----- Flickering Malfunction Detection -- Light up
- HAP : Pilotlamp (service monitor - green)
- K1R : Magnetic relay (A3P)
- K2M : Magnetic contactor (M1C) (A3P)
- K3R : Magnetic relay (A2P)
- K3R : Magnetic relay (Y1S)
- K5R : Magnetic relay (Y3S)
- K7R : Magnetic relay (E1HC)
- L1R : Reactor
- M1C : Motor (compressor)
- M1F, M2F : Motor (fan)
- PS : Switching power supply (A1P) (A3P)
- Q1RP : Reverse phase protector
- R24 : Resistor (current sensor) (A4P) (A5P)
- R2, R3 : Resistor
- R95 : Resistor (current limiting)
- R1T : Thermistor (Air)
- R2T : Thermistor (Suction)
- R3T : Thermistor (M1C Discharge)
- R4T : Thermistor (heat exchanger deicer)
- R5T : Thermistor (heat exchanger outlet)
- R6T : Thermistor (Liquid pipe)
- R7T : Thermistor (Accumulator)
- S1NPH : Pressure sensor (High)
- S1NPL : Pressure sensor (low)
- S1PH : High pressure switch
- V1CP : Safety devices input
- V1R : IGBT Module (A4P) (A5P)
- V1R : Diode bridge IGBT Module (A3P)
- X1A, X2A : Connector (M1F)
- X3A, X4A : Connector (M2F)
- X1M : Terminal strip (Power supply)
- X1M : Terminal strip (Control) (A1P)
- Y1E : Electronic expansion valve (Main)
- Y2E : Electronic expansion valve (Subcool)
- Y1S : Solenoid valve (hot gas)
- Y3S : Solenoid valve (4 way valve)
- Z1C-8C : Noise filter (ferite core)
- Z1F : Noise filter (with surge absorber)



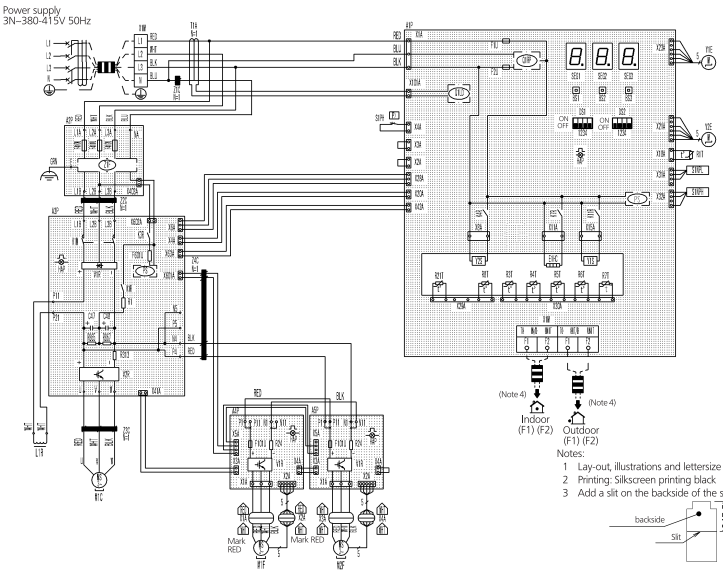
- Notes:
1. This wiring diagram only applies to the outdoor unit.
  2. ■■■■■ : Field wiring
  3. □ : Terminal, ○ : Connector, ⊕ : Movable connector, ⊖ : Fixed connector, -○- : Terminal strip, ⊕ : Protective earth (screw), ⊕ : Noiseless earth
  4. Refer to the installation manual, for connection wiring to indoor-outdoor transmission F1 - F2, outdoor-outdoor transmission F1 - F2.
  5. Refer to 'installation manual' (on back front plate). How to use BS1-BS5 and DS1 switch.
  6. When operating, do not short circuit for protection device. (S1PH)
  7. Colours: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green



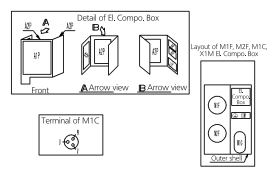
2D094434D

### RXYSQ10-12TY1

- A1P : Printed circuit board (Main)
- A2P : Printed circuit board (Noise filter)
- A3P : Printed circuit board (INV)
- A4P : Printed circuit board (Fan 1)
- A5P : Printed circuit board (Fan 2)
- BS1-B53 : Push button switch (Mode, Set, Return)
- C47, C48 : Capacitor (A3P)
- DS1, DS2 : Dip switch (A1P)
- E1HC : Crankcase heater
- F1U, F2U : Fuse (T 3.15A / 250V) (A1P)
- F101U : Fuse (A2P) (A5P)
- F411U-F412U : Fuse (A3P)
- F601U : Fuse (A3P)
- HAP : Pilotlamp (service monitor - green) (A1P) (A3P) (A4P) (A5P)
- K1M : Magnetic contactor (A3P)
- K1R : Magnetic relay (A3P)
- K3R : Magnetic relay (Y3S) (A1P)
- K7R : Magnetic relay (E1HC) (A1P)
- K11R : Magnetic relay (Y1S) (A1P)
- L1R : Reactor
- M1C : Motor (compressor)
- M1F, M2F : Motor (fan)
- PS : Switching power supply (A1P) (A3P)
- Q1LD : Leakage detection circuit (A1P)
- Q1RP : Phase reversal detect circuit (A1P)
- R1T : Thermistor (Air) (A1P)
- R21T : Thermistor (M1C Discharge)
- R3T : Thermistor (Accumulator)
- R4T : Thermistor (Heat exchanger liq. Pipe)
- R5T : Thermistor (Subcool liq. Pipe)
- R6T : Thermistor (Heat exchanger gas pipe)
- R7T : Thermistor (heat exchanger deicer)
- R8T : Thermistor (M1C body)
- R1 : Resistor (current limiting) (A3P)
- R24 : Resistor (current sensor) (A4P)
- R313 : Resistor (current sensor) (A3P)
- R865, R867 : Resistor (A3P)
- S1NPH : Pressure sensor (High)
- S1NPL : Pressure sensor (low)
- S1PH : High pressure switch
- SEG1-SEG3 : 7-segment display (A1P)
- T1A : current sensor
- V1R : Power module (A3P) (A4P) (A5P)
- V2R : Power module (A3P)
- X1A, X2A : Connector (M1F)
- X3A, X4A : Connector (M2F)
- X1M : Terminal block (Power supply)
- X1M : Terminal block (Control) (A1P)
- Y1E : Electronic expansion valve (Main)
- Y2E : Electronic expansion valve (injection)
- Y1S : Solenoid valve (Main)
- Y2S : Solenoid valve (Accumulator oil return)
- Z1C-Z4C : Noise filter (ferite core)
- Z1F : Noise filter (with surge absorber) (A2P)



- Notes:
1. This wiring diagram only applies to the outdoor unit.
  2. ■■■■■ : Field wiring □ : Terminal block, ○ : Connector, -○- : Terminal, ⊕ : Protective earth (screw)
  3. Refer to the installation manual, for connection wiring to indoor-outdoor transmission F1 - F2, outdoor-outdoor transmission F1 - F2.
  4. How to use BS1-BS3 switch, refer to the installation manual.
  5. When operating, do not short circuit for protection device. (S1PH)
  6. Colours: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green



3D094435D

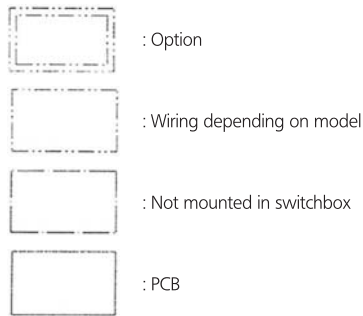
# 9 Wiring diagrams

## 9 - 1 Wiring Diagrams - Three Phase

### RXYSQ-T8Y

#### NOTES TO GO THROUGH BEFORE STARTING THE UNIT

- 1: Symbols  
 X1M : Main terminal  
 --- : Earth wiring  
 15 : Wire number 15  
 - - - - - : Field wire  
 - · - · - · : Field cable  
 → \*\*/12.2 : Connection \*\* continues on page 12 column 2  
 ① : Several wiring possibilities

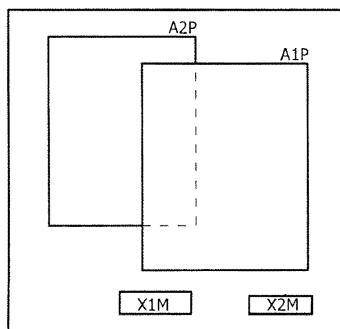


- 2: For X37A refer to the installation manual of the option.  
 3: Refer to the installation or service manual on how to use BS1-BS4 push buttons and DS1-1 - DS1-2 DIP switches.  
 4: Do not operate the unit by short-circuiting protection device S1PH.  
 5: Refer to the installation manual for indoor-outdoor transmission F1-F2 wiring.  
 6: When using the central control system, connect outdoor-outdoor transmission F1-F2.

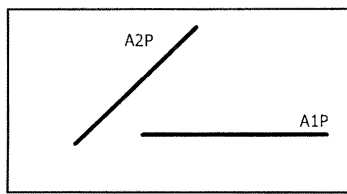
#### LEGEND

- \* : Optional  
 # : Field supply
- A1P : Main PCB  
 A2P : filter PCB  
 BS\* (A1P) : Push buttons (Mode, set, return, test, reset)  
 C\* (A2P) : Capacitor  
 DS1 (A1P) : Dipswitch  
 F1U (A1P) : Fuse T31,5A 500V  
 F2U (A1P) : Fuse T31,5A 500V  
 F1U (A2P) : Fuse T5A 250V  
 F3U (A2P) : Fuse T6,3A 250V  
 F4U (A2P) : Fuse T6,3A 250V  
 F5U (A1P) : Fuse T6,3A 250V  
 HAP (A\*P) : running LED (Service monitor-green)  
 H\*P (A1) : LED (Service monitor-orange)  
 K11M (A2P) : Magnetic contactor  
 K\*R (A\*P) : Magnetic relay  
 L1R : Reactor  
 M1C : Motor (compressor)  
 M1F : Fan motor (upper)  
 M2F : Fan motor (lower)  
 PS (A2P) : POWER SUPPLY  
 Q1DI # : Earth leakage circuit breaker  
 R\* (A2P) : Resistor  
 R1T : Thermistor (Air)  
 R2T : Thermistor (Discharge)  
 R3T : Thermistor (Suction 1)  
 R4T : Thermistor (Heat exchanger)  
 R5T : Thermistor (Suction 2)  
 R6T : Thermistor (subcool heat exchanger)  
 R7T : Thermistor (Liquid)  
 R10T : Thermistor (Fin)  
 S1NPH : High pressure sensor  
 S1NPL : Low pressure sensor  
 S1PH : High pressure switch  
 S1S \* : Air control switch  
 S2S \* : Cool / heat switch  
 V1R (A2P) : IGBT power module  
 V2R (A2P) : Diode module  
 V3R (A2P) : Diode module  
 X37A : Connector (power supply for option PCB)  
 X\*A : PCB connector  
 X\*M : Terminal strip  
 X\*Y : Connector  
 Y1E : Electronic expansion valve (Main)  
 Y3E : Electronic expansion valve (Subcool)  
 Y1S : Solenoid valve (4-way valve)  
 Z\*C : Noise filter (ferrite core)  
 Z\*F : Noise filter

#### POSITION IN SWITCHBOX



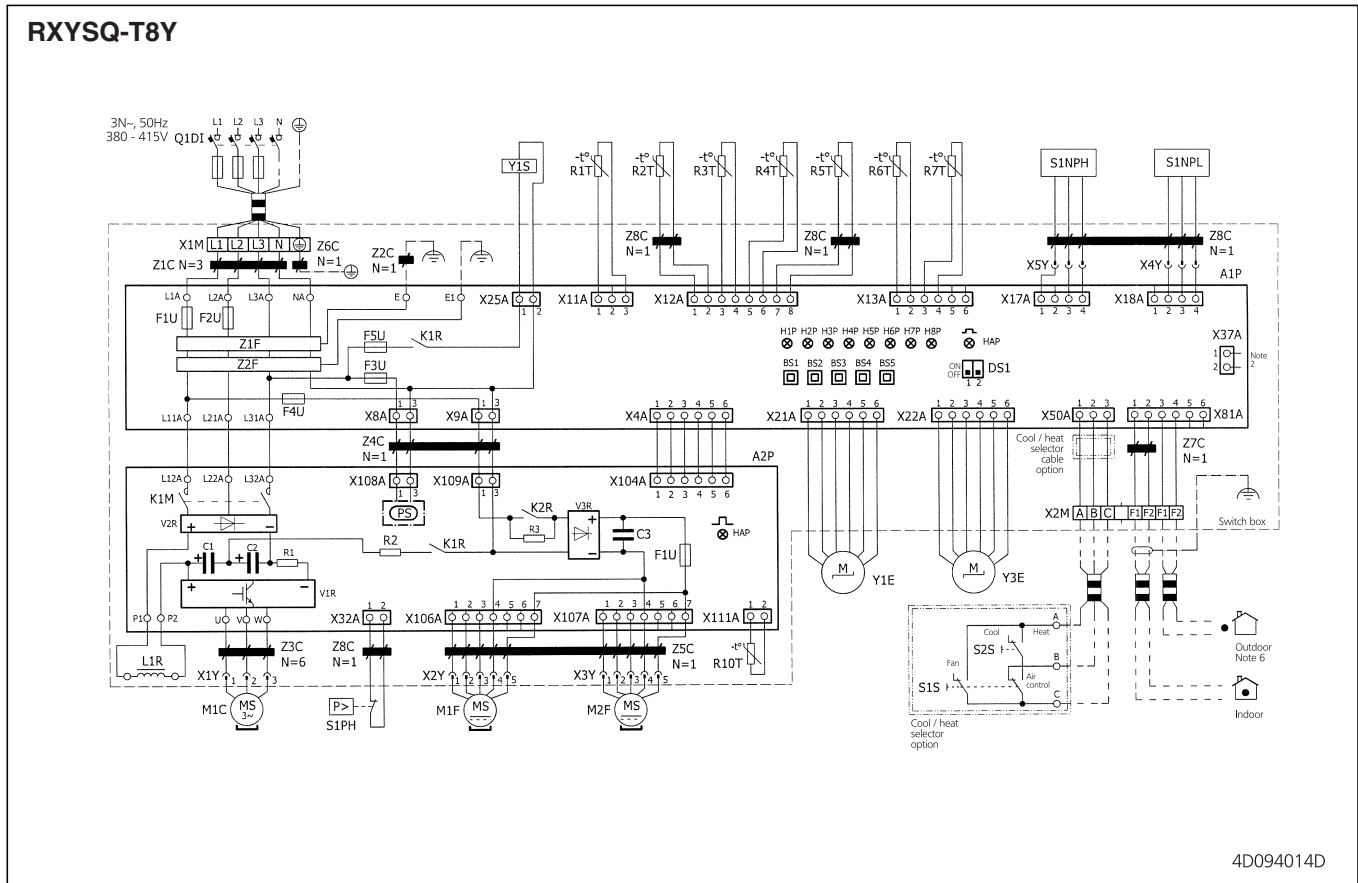
front side



Upper side

# 9 Wiring diagrams

## 9 - 1 Wiring Diagrams - Three Phase



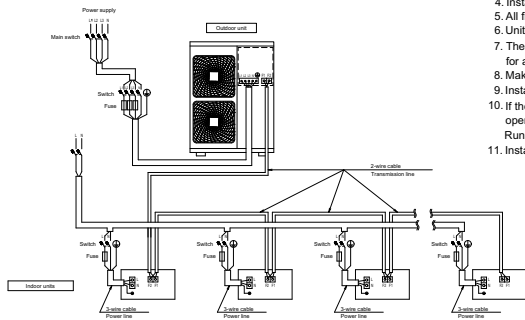
# 10 External connection diagrams

## 10 - 1 External Connection Diagrams

RXYSQ-12TY1

### External connection diagram

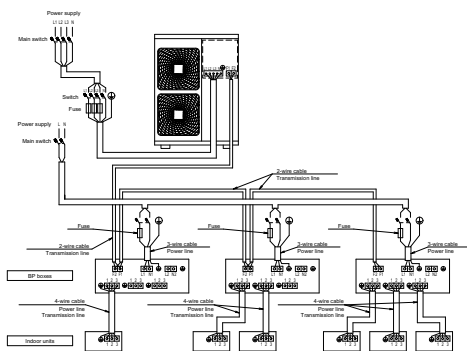
VRV indoor unit



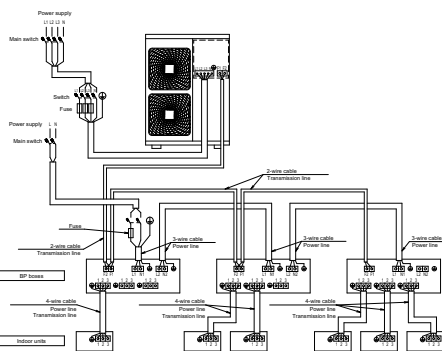
Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For 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.

BP box + RA/SA indoor unit



Power source is supplied to each BP box individually.



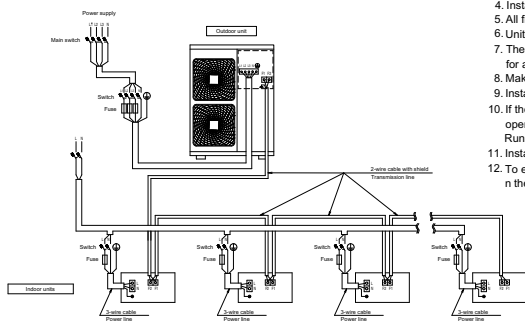
Power source is connected in series between the units.

ID094669

RXYSQ-T8Y

### External connection diagram

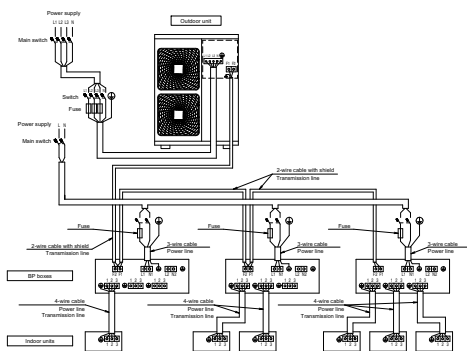
VRV indoor unit



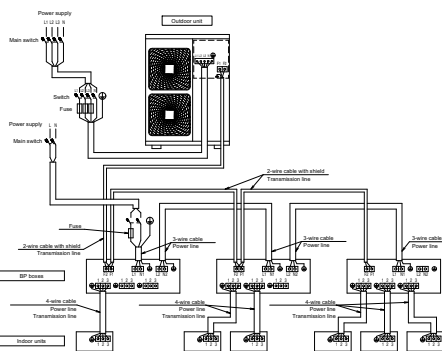
Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only
3. For 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. To ensure proper earthing, connect the shields of the incoming and outgoing transmission wiring of each indoor unit (or each BP box, depending on the system layout) to each other.

BP box + RA/SA indoor unit



Power source is supplied to each BP box individually.



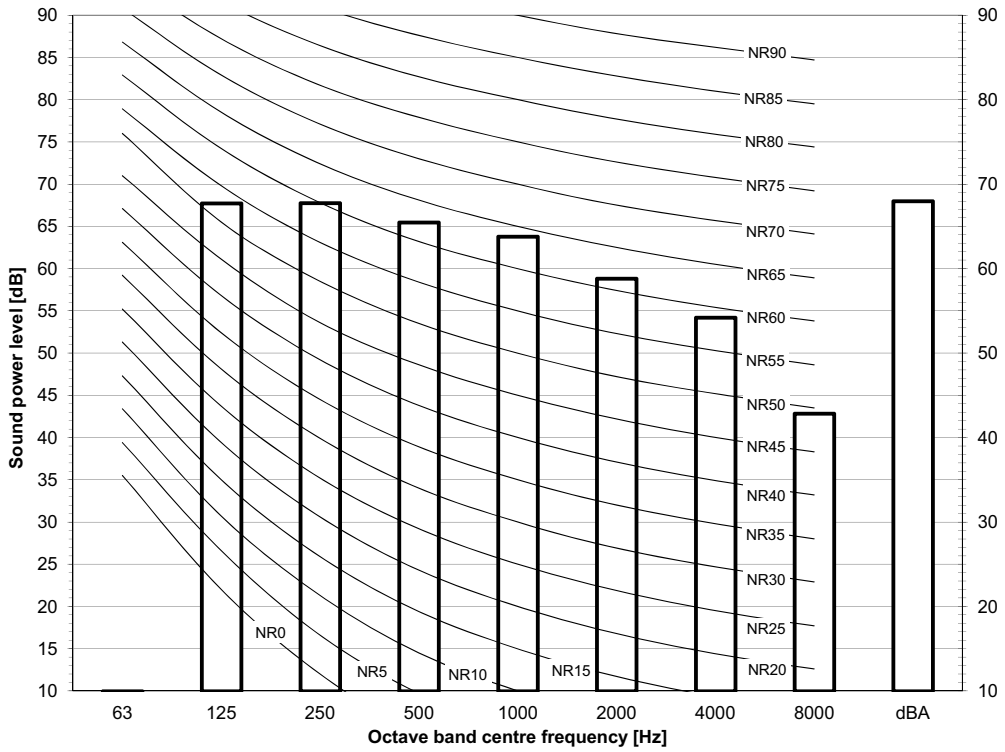
Power source is connected in series between the units.

ID094667

# 11 Sound data

## 11 - 1 Sound Power Spectrum

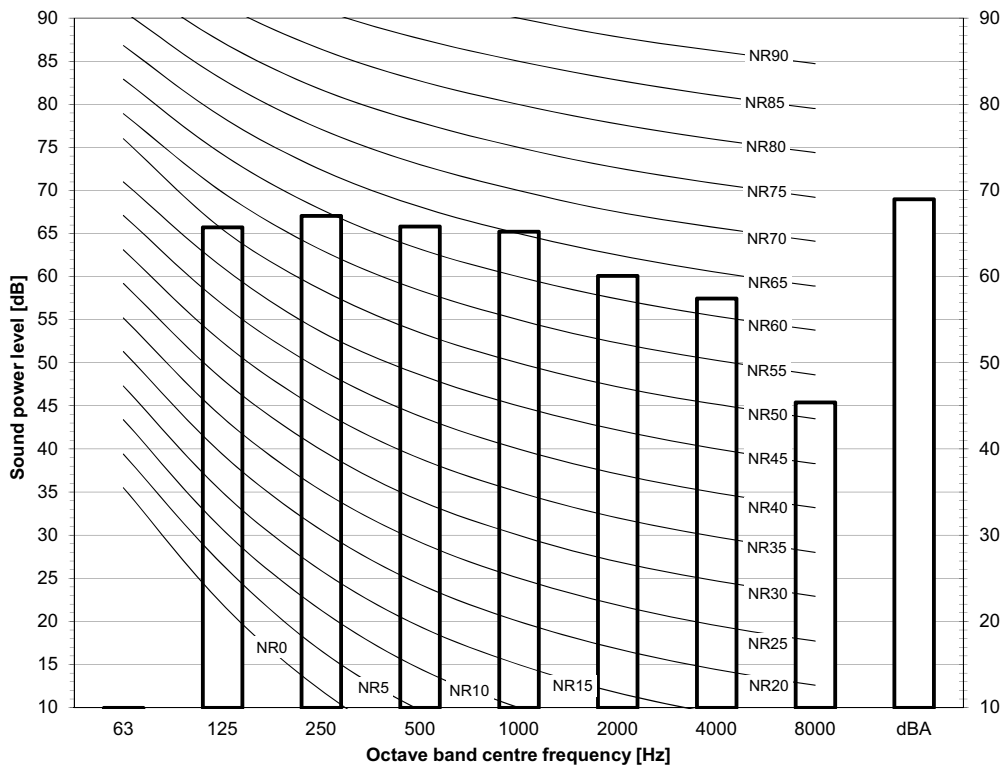
**RXYSQ4T8Y**



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

**3D098212**

**RXYSQ5T8Y**



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

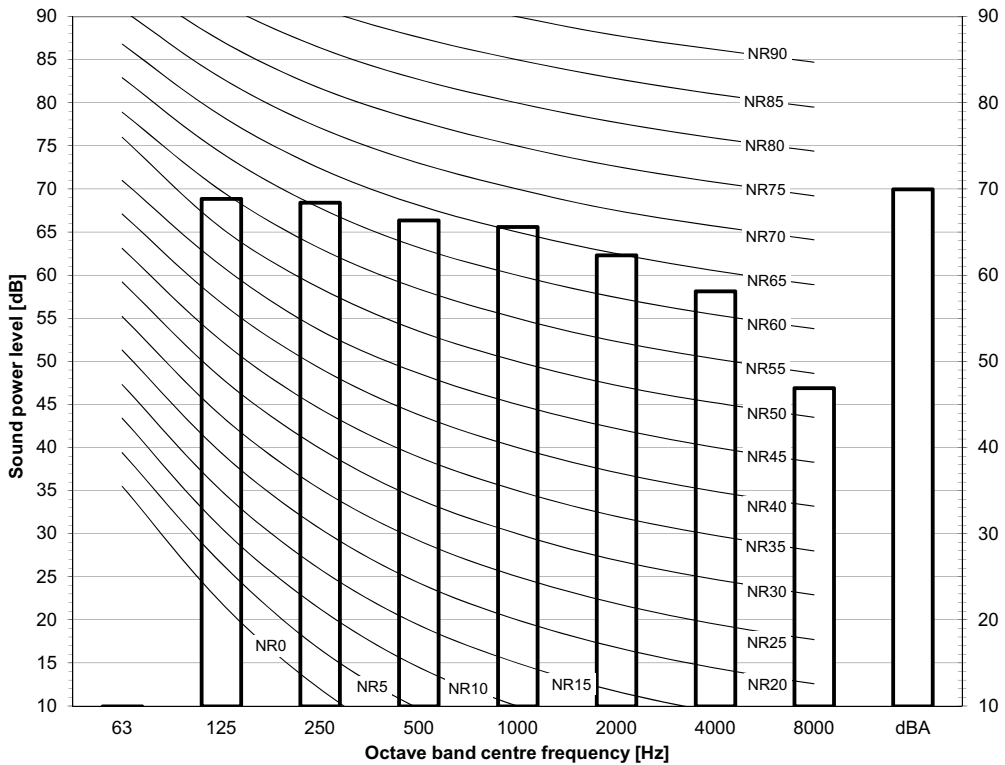
**3D098213**

# 11 Sound data

## 11 - 1 Sound Power Spectrum

11

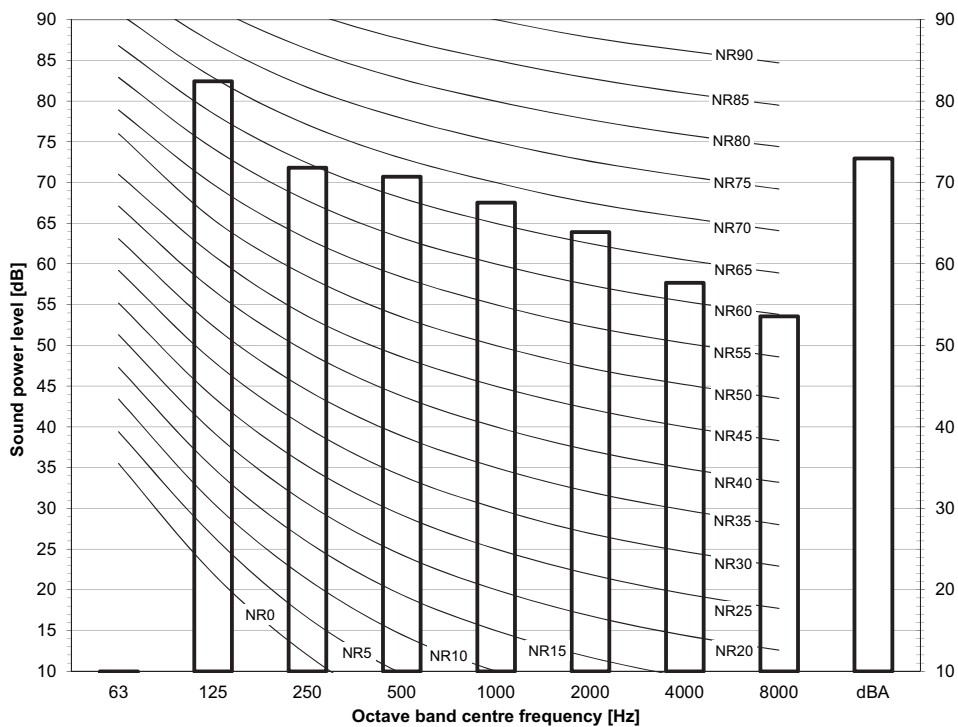
**RXYSQ6T8Y**



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

**3D098214**

**RXYSQ8TY1**



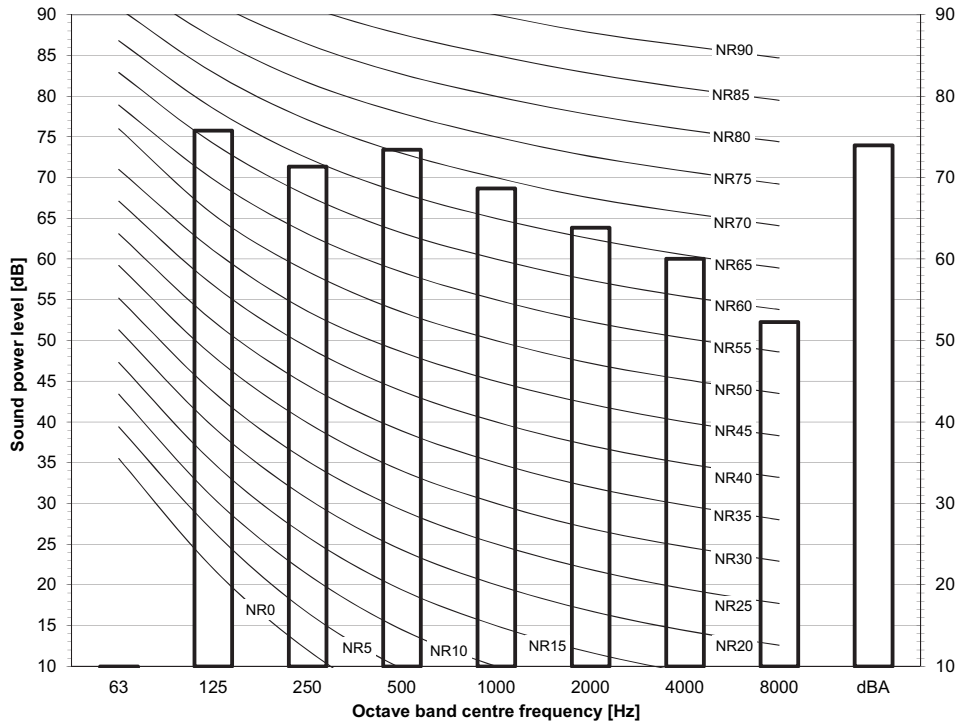
**Notes**  
 - dBA = A-weighted sound power level (A scale according to IEC).  
 - Reference acoustic intensity  $O_{dB} = 10E-6\mu W/m^2$   
 - Measured according to ISO 3744

**3D098240**

# 11 Sound data

## 11 - 1 Sound Power Spectrum

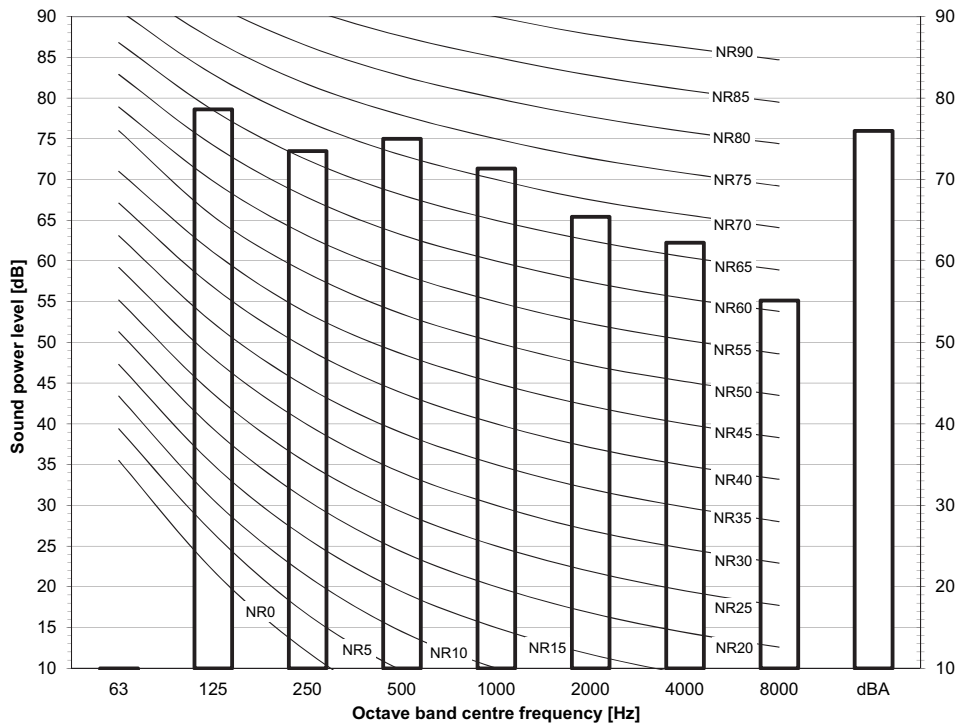
RXYSQ10TY1



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

3D098241

RXYSQ12TY1



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

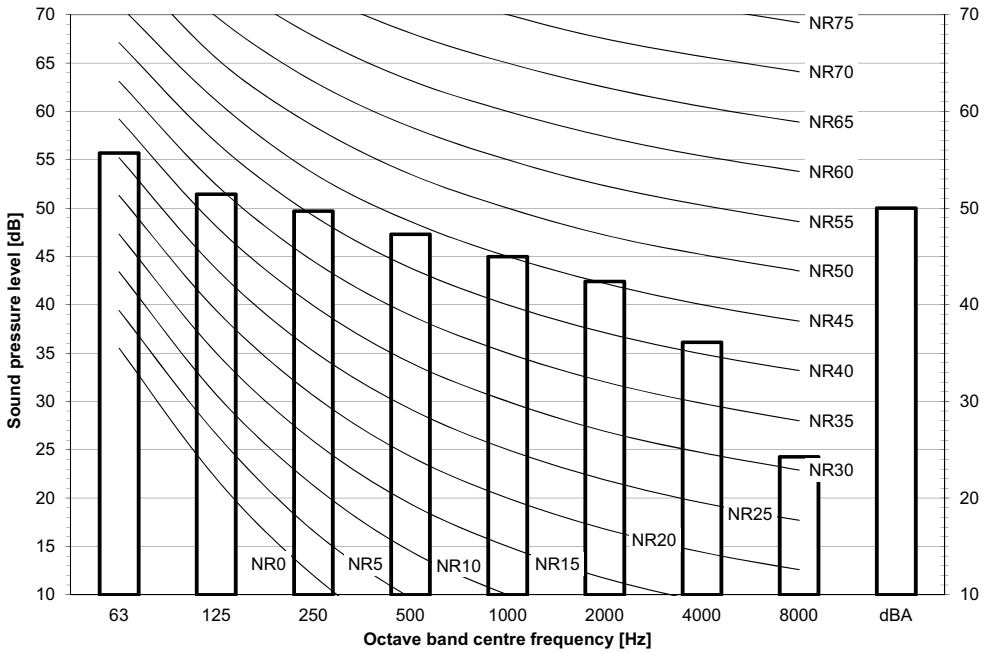
3D098242



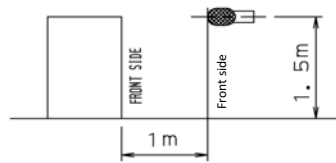
# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

### RXYSQ4T8Y

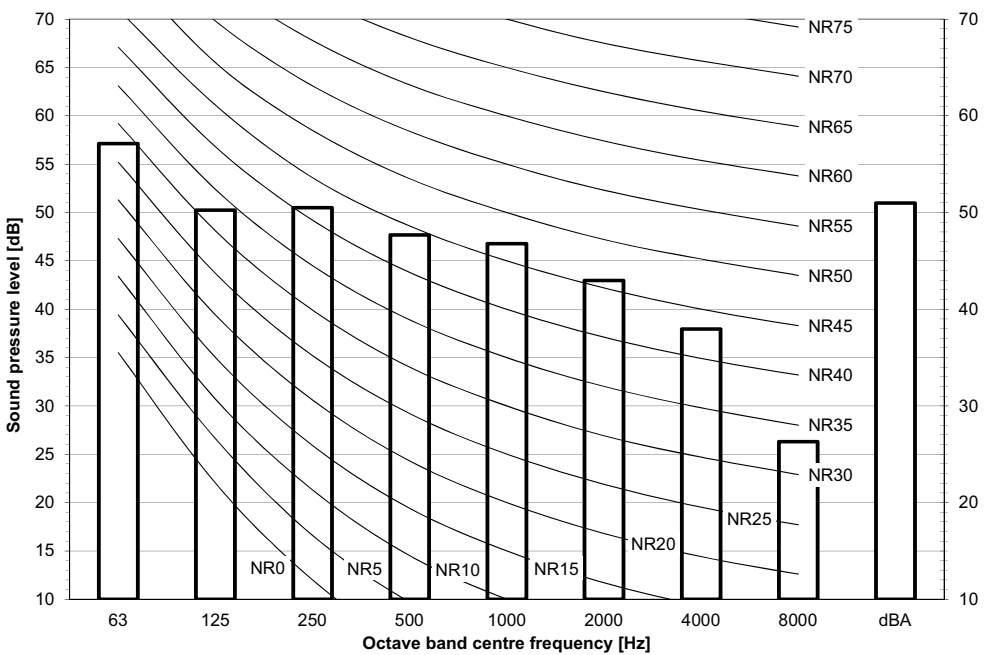


- Notes**
- Data is valid at free field condition.
  - Data is valid at nominal operation condition.
  - dBA = A-weighted sound pressure level (A scale according to IEC).
  - Reference acoustic pressure 0 dB = 20 μPa

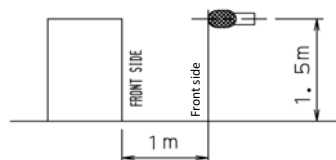


3D098215

### RXYSQ5T8Y



- 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



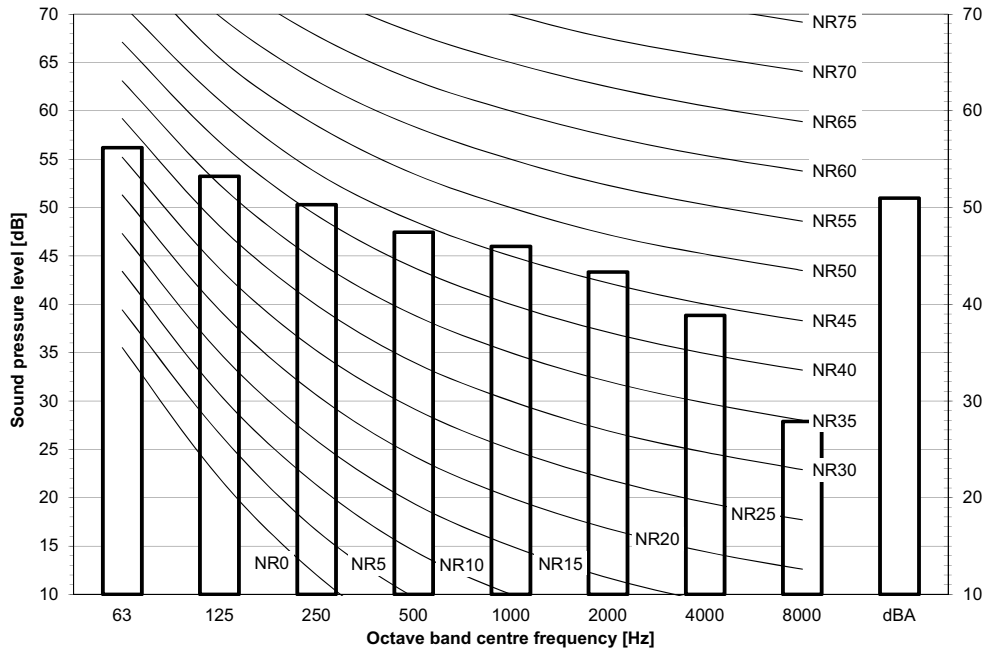
3D098216



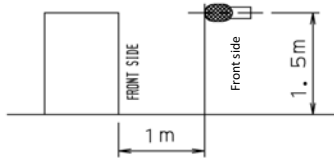
# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

**RXYSQ6T8Y**

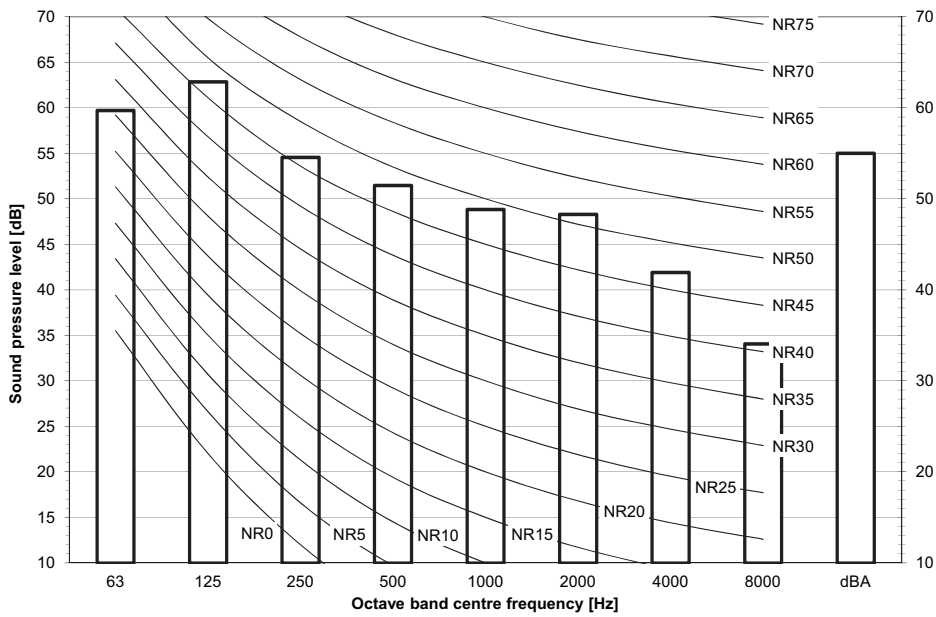


- Notes**
- Data is valid at free field condition.
  - Data is valid at nominal operation condition.
  - dBA = A-weighted sound pressure level (A scale according to IEC).
  - Reference acoustic pressure 0 dB = 20 µPa

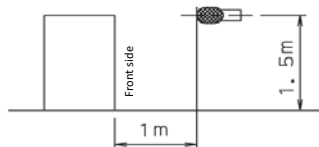


3D098217

**RXYSQ8TY1**



- 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



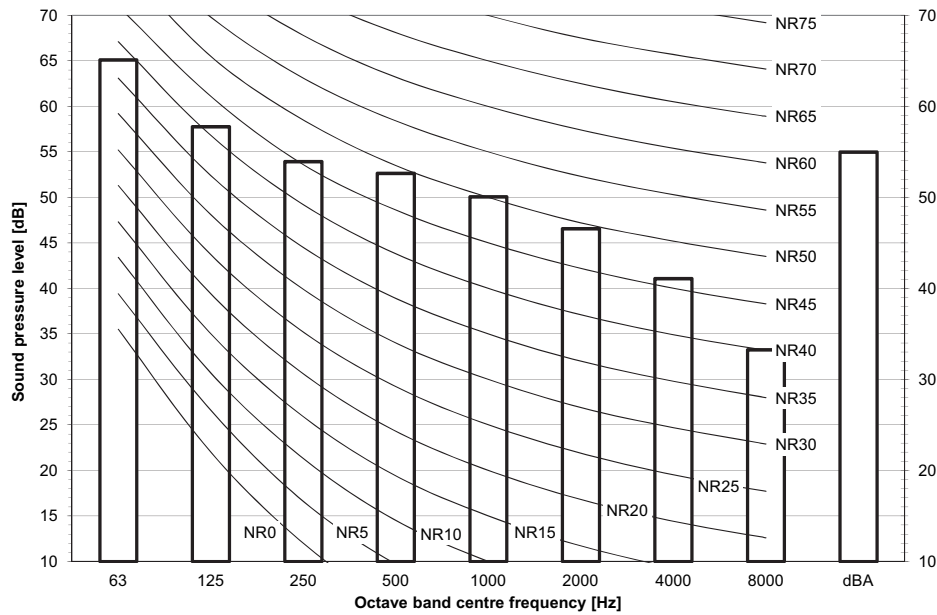
3D098245

# 11 Sound data

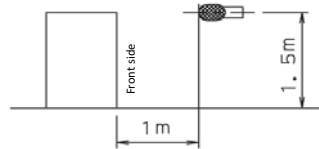
## 11 - 2 Sound Pressure Spectrum

11

RXYSQ10TY1

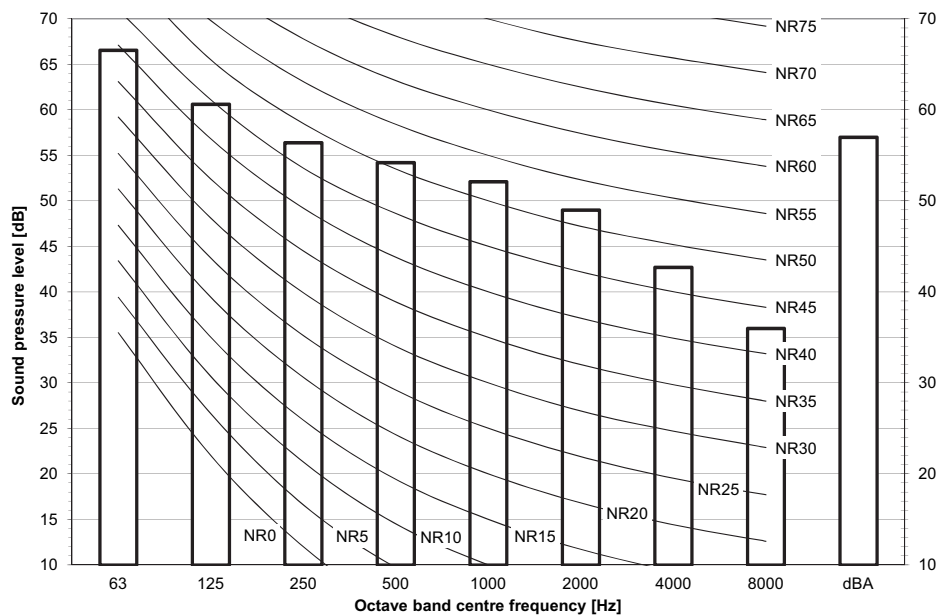


- Notes**
- Data is valid at free field condition.
  - Data is valid at nominal operation condition.
  - dBA = A-weighted sound pressure level (A scale according to IEC).
  - Reference acoustic pressure 0 dB = 20 µPa

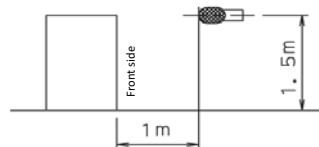


3D098246

RXYSQ12TY1



- 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



3D098247

# 12 Installation

## 12 - 1 Installation Method

RXYSQ8TY1

### Required installation space

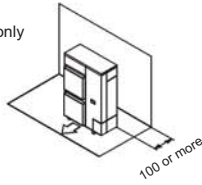
The unit of these values is mm.

#### 1. Where there is an obstacle on the suction side:

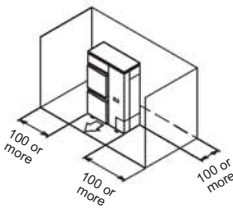
##### (a) No obstacle above

###### (1) Stand-alone installation

- Obstacle on the suction side only



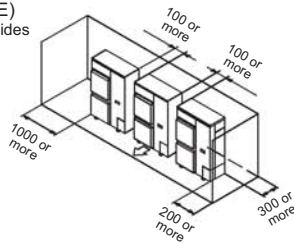
- Obstacle on both sides



###### (2) Series installation

###### (2 or more) (NOTE)

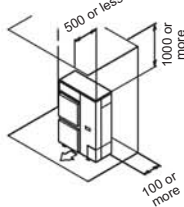
- Obstacle on both sides



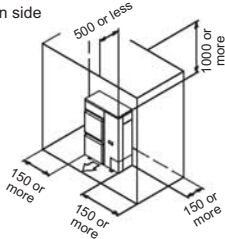
##### (b) Obstacle above, too

###### (1) Stand-alone installation

- Obstacle on the suction side, too



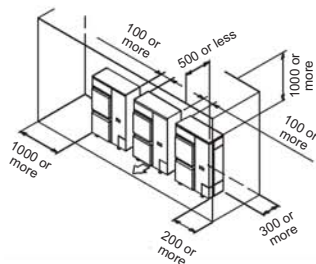
- Obstacle on the suction side and both sides



###### (2) Series installation

###### (2 or more) (NOTE)

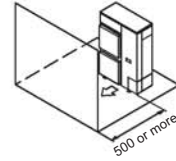
- Obstacle on the suction side and both sides



#### 2. Where there is an obstacle on the discharge side:

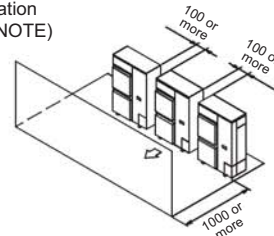
##### (a) No obstacle above

###### (1) Stand-alone installation



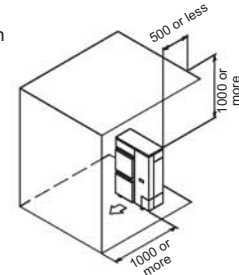
###### (2) Series installation

###### (2 or more) (NOTE)



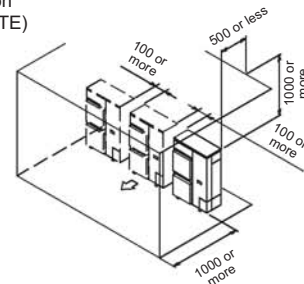
##### (b) Obstacle above, too

###### (1) Stand-alone installation



###### (2) Series installation

###### (2 or more) (NOTE)



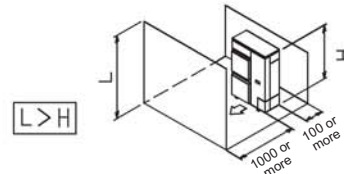
#### 3. Where there are obstacles on both suction and discharge sides:

##### Pattern 1

Where the obstacle on the discharge side is higher than the unit:  
(There is no height limit for obstructions on the intake side)

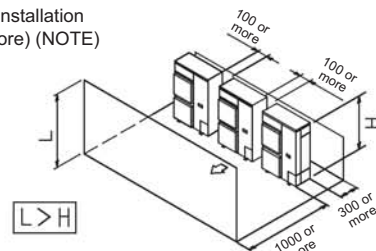
##### (a) No obstacle above

###### (1) Stand-alone installation



###### (2) Series installation

###### (2 or more) (NOTE)



### NOTE

When install the units in a line, have to leave the distance over 100 mm between the two units.

3D068442L

# 12 Installation

## 12 - 1 Installation Method

12

### RXYSQ8TY1

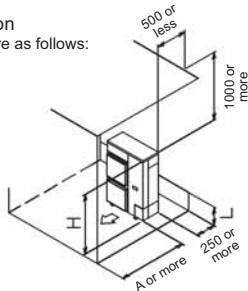
(b) Obstacle above, too

(1) Stand-alone installation

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	1000
	$1/2 H < L \leq H$	1250
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.



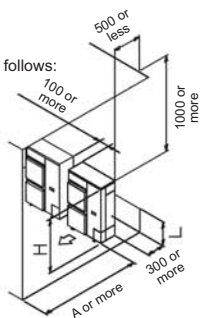
(2) Series installation (2 or more) (NOTE)

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	1000
	$1/2 H < L \leq H$	1250
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

Only two units can be installed for this series.



#### Pattern 2

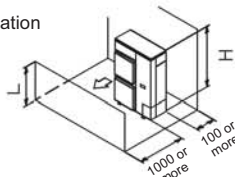
Where the obstacle on the discharge side is lower than the unit:

(There is no height limit for obstructions on the intake side)

(a) No obstacle above

(1) Stand-alone installation

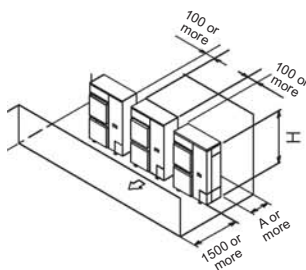
$L \leq H$



(2) Series installation (2 or more) (NOTE)

The relations between H, A and L are as follows:

	L	A
$0 < L \leq 1/2 H$		250
$1/2 H < L \leq H$		300



(b) Obstacle above, too

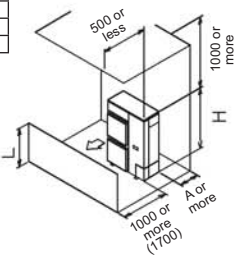
(1) Stand-alone installation

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	100
	$1/2 H < L \leq H$	200
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

If the distance exceeds the figure in the ( ), then it's no need to set the stand.



(2) Series installation (NOTE)

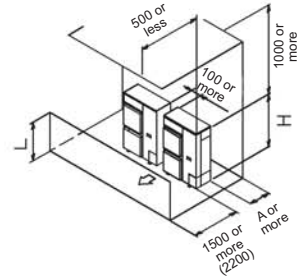
The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

Only two units can be installed for this series.

If the distance exceeds the figure in the ( ), then it's no need to set the stand.



4. Double-decker installation

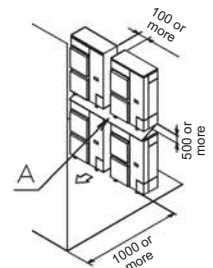
(a) Obstacle on the discharge side (NOTE).

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.

Set the board (field supply) as the detail A between two units to prevent the drainage from freezing.

Leave the enough space between the layer one and the board.



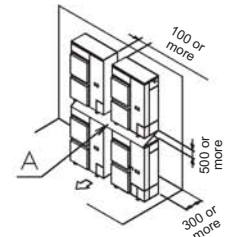
(b) Obstacle on the suction side (NOTE).

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.

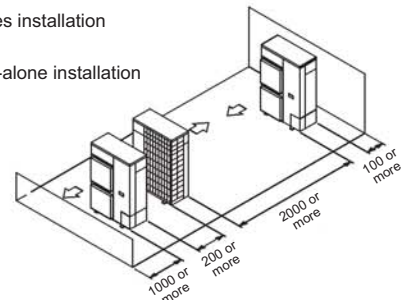
Set the board (field supply) as the detail A between two units to prevent the drainage from freezing.

Leave the enough space between the layer one and the board.



5. Multiple rows of series installation (on the rooftop, etc.)

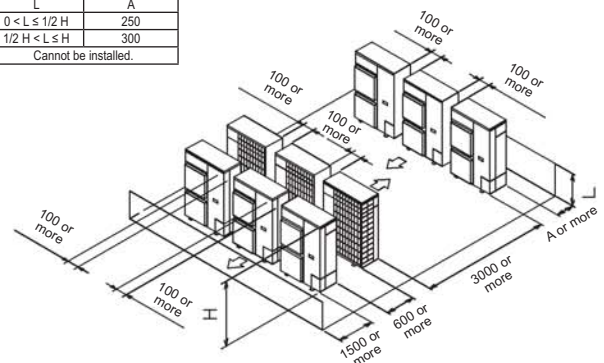
(a) One row of stand-alone installation



(b) Rows of series installation (2 or more)

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Cannot be installed.	



#### NOTE

When install the units in a line, have to leave the distance over 100 mm between the two units.

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# 12 Installation

## 12 - 1 Installation Method

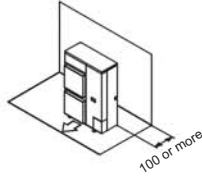
RXYSQ10-12TY1

### Required installation space

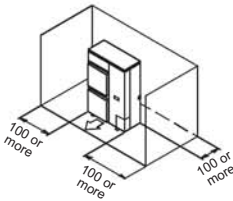
The unit of these values is mm.

#### 1. Where there is an obstacle on the suction side:

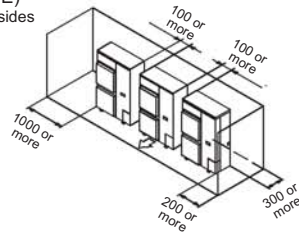
- (a) No obstacle above  
 (1) Stand-alone installation  
 • Obstacle on the suction side only



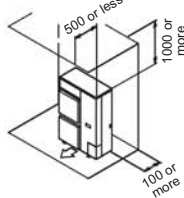
- Obstacle on both sides



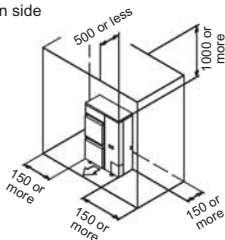
- (2) Series installation  
 (2 or more) (NOTE)  
 • Obstacle on both sides



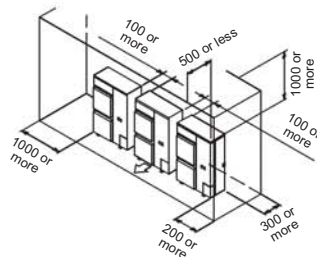
- (b) Obstacle above, too  
 (1) Stand-alone installation  
 • Obstacle on the suction side, too



- Obstacle on the suction side and both sides

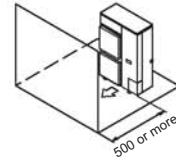


- (2) Series installation  
 (2 or more) (NOTE)  
 • Obstacle on the suction side and both sides

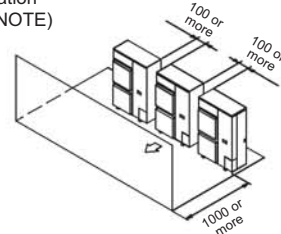


#### 2. Where there is an obstacle on the discharge side:

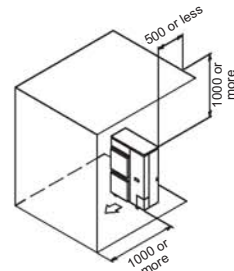
- (a) No obstacle above  
 (1) Stand-alone installation



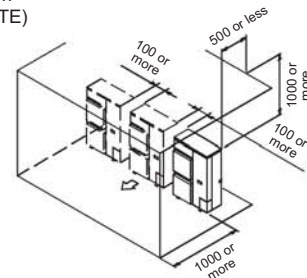
- (2) Series installation  
 (2 or more) (NOTE)



- (b) Obstacle above, too  
 (1) Stand-alone installation



- (2) Series installation  
 (2 or more) (NOTE)

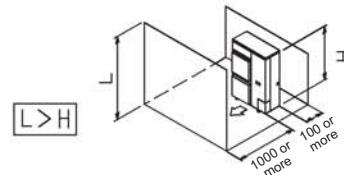


#### 3. Where there are obstacles on both suction and discharge sides:

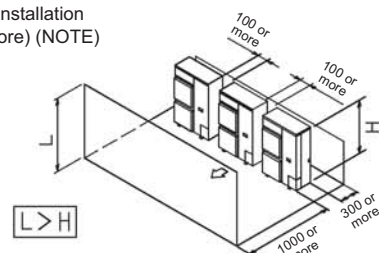
##### Pattern 1

Where the obstacle on the discharge side is higher than the unit:  
 (There is no height limit for obstructions on the intake side)

- (a) No obstacle above  
 (1) Stand-alone installation



- (2) Series installation  
 (2 or more) (NOTE)



### NOTE

When install the units in a line, have to leave the distance over 100 mm between the two units.

3D083122F



# 12 Installation

## 12 - 1 Installation Method

12

### RXYSQ10-12TY1

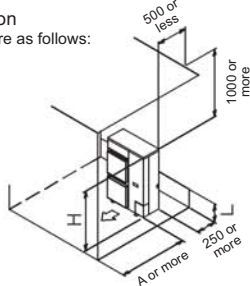
(b) Obstacle above, too

(1) Stand-alone installation

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	1000
	$1/2 H < L \leq H$	1250
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.



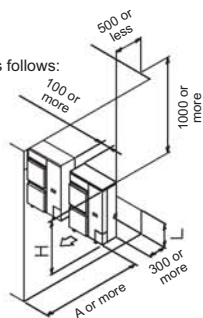
(2) Series installation (2 or more) (NOTE)

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	1000
	$1/2 H < L \leq H$	1250
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

Only two units can be installed for this series



#### Pattern 2

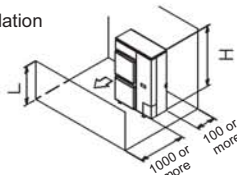
Where the obstacle on the discharge side is lower than the unit:

(There is no height limit for obstructions on the intake side)

(a) No obstacle above

(1) Stand-alone installation

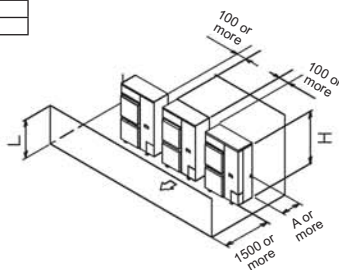
$L \leq H$



(2) Series installation (2 or more) (NOTE)

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300



(b) Obstacle above, too

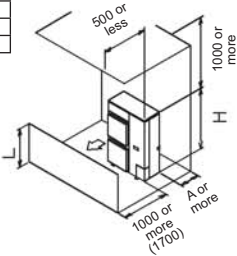
(1) Stand-alone installation

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	100
	$1/2 H < L \leq H$	200
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

If the distance exceeds the figure in the ( ), then it's no need to set the stand.



(2) Series installation (NOTE)

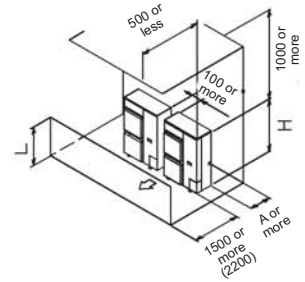
The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Set the stand as: $L \leq H$ .	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

Only two units can be installed for this series.

If the distance exceeds the figure in the ( ), then it's no need to set the stand.



4. Double-decker installation

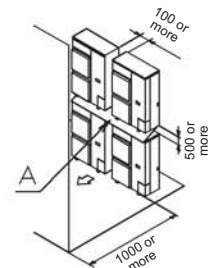
(a) Obstacle on the discharge side (NOTE).

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.

Set the board (field supply) as the detail A between two units to prevent the drainage from freezing.

Leave the enough space between the layer one and the board.



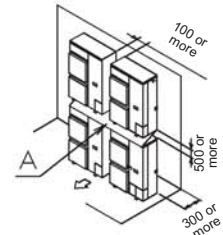
(b) Obstacle on the suction side (NOTE).

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.

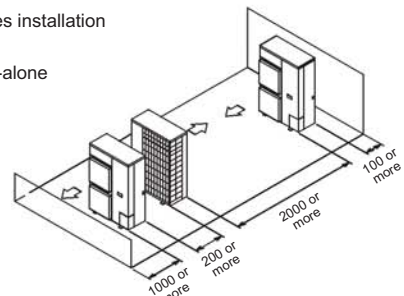
Set the board (field supply) as the detail A between two units to prevent the drainage from freezing.

Leave the enough space between the layer one and the board.



5. Multiple rows of series installation (on the rooftop, etc.)

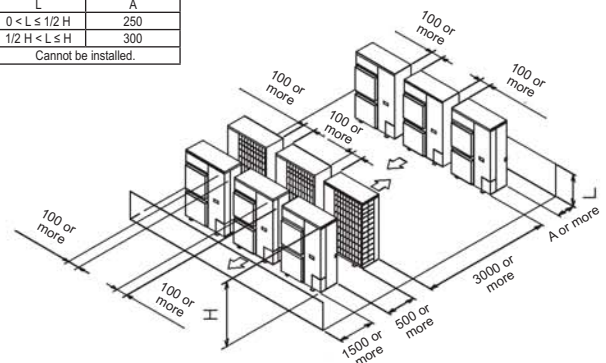
(a) One row of stand-alone installation



(b) Rows of series installation (2 or more)

The relations between H, A and L are as follows:

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Cannot be installed.	



#### NOTE

When install the units in a line, have to leave the distance over 100 mm between the two units.

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# 12 Installation

## 12 - 1 Installation Method

### RXYSQ-T8Y

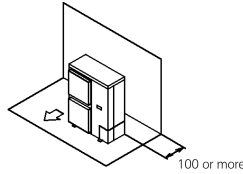
#### Required installation space

The unit of the values is mm.

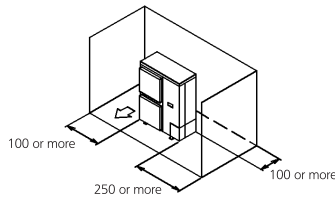
#### (A) When there are obstacles on suction sides.

##### • No obstacle above

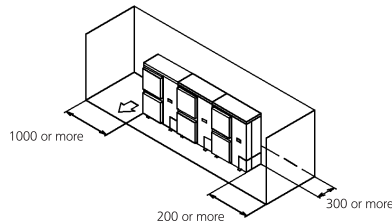
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides

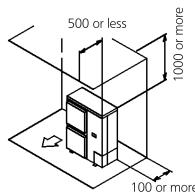


- ② Series installation (2 or more)
  - Obstacle on both sides

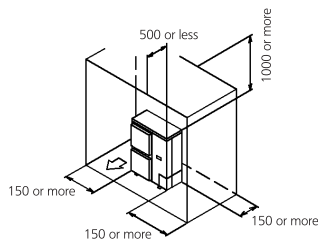


##### • Obstacle above, too.

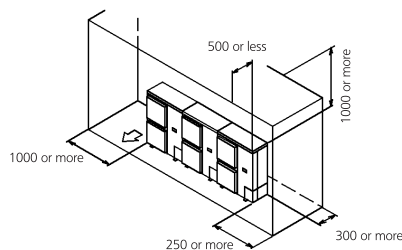
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on the suction side and both sides



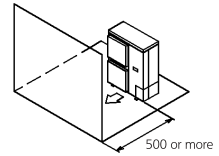
- ② Series installation (2 or more)
  - Obstacle on the suction side and both sides



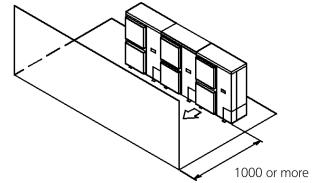
#### (B) When there are obstacles on discharge sides.

##### • No obstacle above

- ① Stand-alone installation

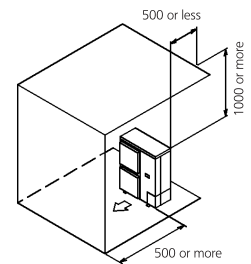


- ② Series installation (2 or more)

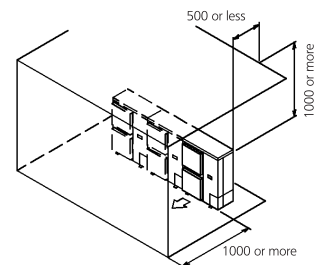


##### • Obstacle above, too

- ① Stand-alone installation



- ② Series installation (2 or more)



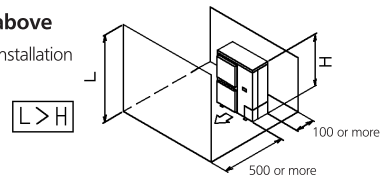
#### (C) When there are obstacles on both suction and discharge sides.

##### Pattern 1

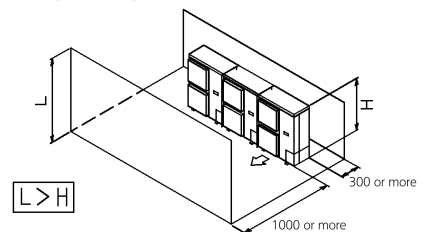
When the obstacles on the discharge side is higher than the unit.  
(There is no height limit for obstructions on the intake side.)

##### • No obstacle above

- ① Stand-alone installation



- ② Series installation (2 or more)



3D045696D

# 12 Installation

## 12 - 1 Installation Method

### RXYSQ-T8Y

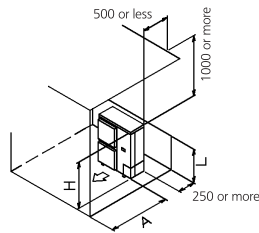
● **Obstacle above, too**

① Stand-alone installation

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	750
	$1/2 H < L \leq H$	1000
$H < L$	Set the stand as: $L \leq H$	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

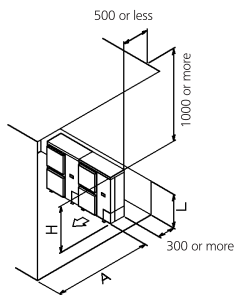


② Series installation (2 or more)

The relations between H, A and L are as follows.

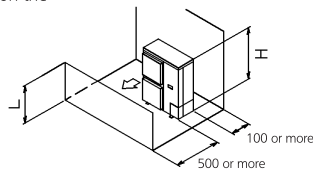
	L	A
$L \leq H$	$0 < L \leq 1/2 H$	1000
	$1/2 H < L \leq H$	1250
$H < L$	Set the stand as: $L \leq H$	

Close the bottom of the installation frame to prevent the discharged air from being bypassed. Only two units can be installed for this series.



**Pattern 2**

When the obstacle on the discharge side is lower than the unit:  
(There is no height limit for obstructions on the intake side.)



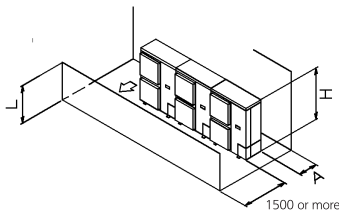
● **No obstacle above**

① Stand-alone installation  
 $L \leq H$

② Series installation (2 or more)

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300



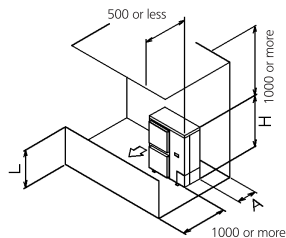
● **Obstacle above, too**

① Stand-alone installation

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	100
	$1/2 H < L \leq H$	200
$H < L$	Set the stand as: $L \leq H$	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.



② Series installation

The relations between H, A and L are as follows.

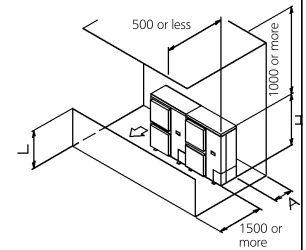
	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Set the stand as: $L \leq H$	

Close the bottom of the installation frame to prevent the discharged air from being bypassed. Only two units can be installed for this series.

**(D) Double-decker installation**

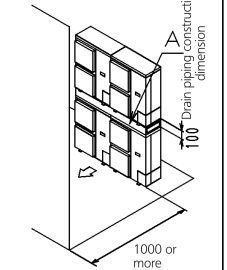
① Obstacle on the discharge side.

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed. Do not stack more than two unit.



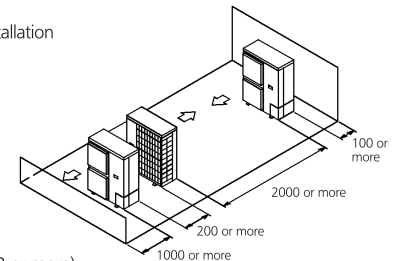
② Obstacle on the suction side.

Close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed. Do not stack more than two unit.



**(E) Multiple rows of series installation (on the rooftop, etc.)**

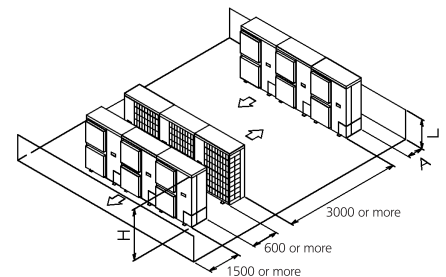
① One row of stand-alone installation



② Rows of series installation (2 or more)

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$0 < L \leq 1/2 H$	250
	$1/2 H < L \leq H$	300
$H < L$	Can not be installed	





# 12 Installation

## 12 - 2 Refrigerant Pipe Selection

RXYSCQ-TV1  
RXYSQ-TV1  
RXYSQ-TY1

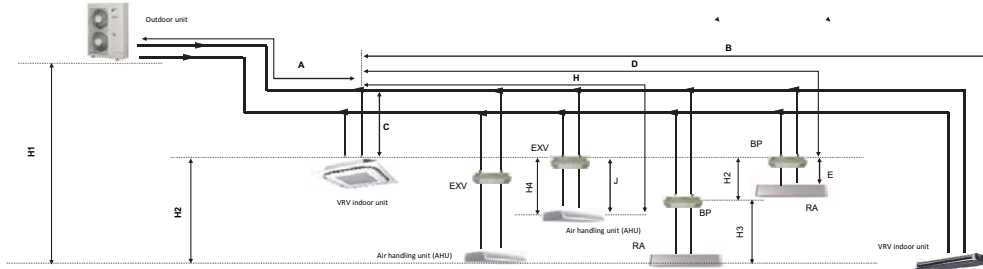
For the reference drawing, see page -2/3-.

		Maximum piping length		Maximum height difference		Total piping length
		Longest pipe (A+B,D+E,H) Actual / (Equivalent)	After first branch (B,D+E,H) Actual	Indoor-to-outdoor (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	
Standard -VRV DX- indoor units only	RXYSCQ4*STMV1B	70/(90)m	40m	30/(30)m	15m	300m
	RXYSQ4*6T7(V/Y)1B	120/(150)m	40m	50/(40)m	15m	300m
	RXYSQ8TMV1B	100/(130)m	40m	50/(40)m	15m	300m
	RXYSQ10*12TMY1B	120/(150)m	40m	50/(40)m	15m	300m
-RA- connection	RXYSCQ4*STMV1B	35/(45)m	40m	30/(30)m	15m	140m
	RXYSQ4*6T7(V/Y)1B	65/(85)m	40m	30/(30)m	15m	140m
	RXYSQ8TMV1B	80/(100)m	40m	30/(30)m	15m	140m
	RXYSQ10*12TMY1B	80/(100)m	40m	30/(30)m	15m	140m
Air handling unit (-AHU-) connection	Pair	50/(55)m (1)	-	40/(40)m	-	-
	Multi (2)	50/(55)m (1)	40m	40/(40)m	15m	300m
	Mix (3)	50/(55)m (1)	40m	40/(40)m	15m	300m

- Notes**
1. The allowable minimum length is 5- m.
  2. Multiple air handling units (-AHU-)(EKEVX- + EKEQ- kits).
  3. Mix of air handling units (-AHU-) and -VRV DX- indoor units.

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RXYSCQ-TV1  
RXYSQ-TV1  
RXYSQ-TY1



- Notes**
1. Schematic indication  
Illustrations may differ from the actual appearance of the unit.
  2. This is only to illustrate piping length limitations.  
Refer to combination table -3D097983- for details about the allowed combinations.

		Allowed piping length		Maximum height difference	
		-BP- to -RA- (E)	-EXV- to -AHU- (J)	-BP- to -RA- (H3)	-EXV- to -AHU- (H4)
-RA- connection		2*15m	-	5m	-
Air handling unit (AHU) Connection	Pair	-	≤5m	-	5m
	Multi (1)	-	≤5m	-	5m
	Mix (2)	-	≤5m	-	5m

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

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# 12 Installation

## 12 - 2 Refrigerant Pipe Selection

12

RXYSQ-TV1  
 RXYSQ-TV1  
 RXYSQ-TY1

System pattern Allowed connection ratio (CR) Other combinations are not allowed.	Total		Allowed capacity		
	Capacity	Maximum allowed amount of connectable indoor units (-VRV, RA, AHU-) Excluding -BP- units and including -EXV- kits.	VRV DX indoor unit	-RA DX- indoor unit	Air handling unit (AHU)
-VRV DX- indoor units only	50~130%	Maximum -64-	50~130%	-	-
-RA DX- indoor units only	80~130%	Maximum -32- (1)	-	80~130%	-
-VRV DX- indoor unit + -AHU- Mix	50~110% (3)	Maximum -64- (2)	50~110%	-	0~110%
-AHU- only Pair + multi (4)	90~110% (3)	Maximum -64- (2)	-	-	90~110%

**Notes**

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

**About ventilation applications**

- I. -FXMQ\_MF- units are considered air handling units, following air handling unit limitations.
  - Maximum connection ratio when combined with -VRV DX- indoor units: -CR ≤ 30%.
  - Maximum connection ratio when only air handling units are connected: -CR ≤ 100%.
  - Minimum connection ratio when only -FXMQ\_MF- units are connected: -CR ≥ 50%
 For information on the operation range, refer to the documentation of the -FXMQ\_MF- unit.
- II. -Biddle- air curtains are considered air handling units, following air handling unit limitations:  
 For information on the operation range, refer to the documentation of the -Biddle- unit.
- III. -EKEXV + EKEQ- units combined with an air handling unit are considered air handling units, following air handling unit limitations.  
 For information on the operation range, refer to the documentation of the -EKEXV-EKEQ- unit.
- IV. -VKM- units are considered to be regular -VRV DX- indoor units.  
 For information on the operation range, refer to the documentation of the -VKM- unit.
- V. Because there is no refrigerant connection with the outdoor unit (only communication F1/F2), -VAM- units do not have connection limitations.  
 However, since there is communication via F1/F2, count them as regular indoor unit when calculating the maximum allowed number of connectable indoor units.

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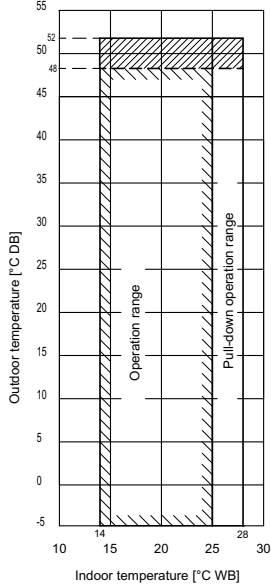
# 13 Operation range

## 13 - 1 Operation Range

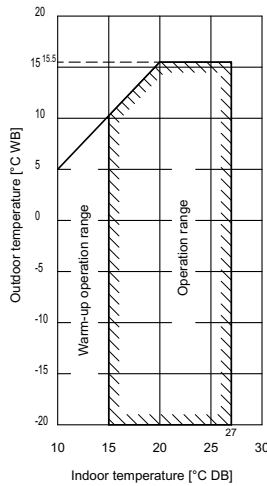
### RXYSQ8-12TY1

- Notes
- These figures assume the following operation conditions  
Indoor and outdoor units  
Equivalent piping length: 5m  
Level difference: 0m
  - Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
  - To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
  - Operation range is valid in case direct expansion indoor units are used.  
If other indoor units are used, refer to the documentation of the respective indoor units.
  - ////: Unit operation is possible, but no guaranteed capacity
  - If the unit is selected to operate at ambient temperatures <-5°C for 5 days or more, with relative humidity levels >95%, it is recommended to apply a Daikin range specifically designed for such application.  
For more information, contact your dealer.

#### Cooling



#### Heating

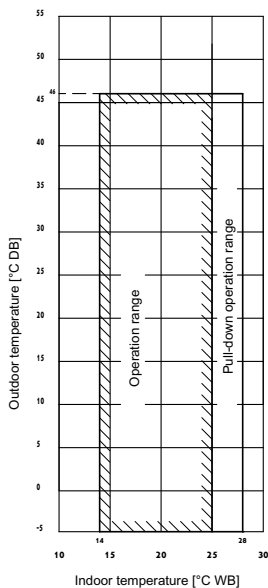


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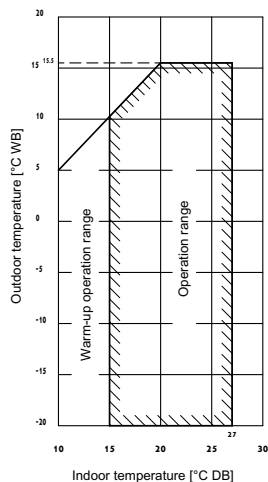
### RXYSQ-T8Y

- Notes
- These figures assume the following operation conditions  
Indoor and outdoor units  
Equivalent piping length: 5m  
Level difference: 0m
  - Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
  - To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
  - Operation range is valid in case direct expansion indoor units are used.  
If other indoor units are used, refer to the documentation of the respective indoor units.
  - If the unit is selected to operate at ambient temperatures <-5°C for 5 days or more, with relative humidity levels >95%, it is recommended to apply a Daikin range specifically designed for such application.  
For more information, contact your dealer.

#### Cooling



#### Heating

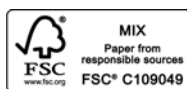
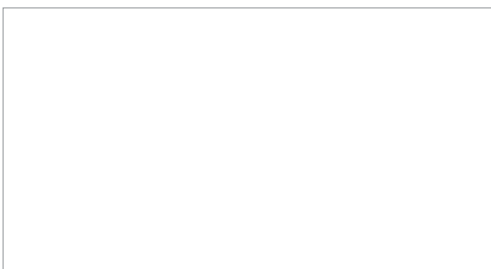


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Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - [www.daikin.eu](http://www.daikin.eu) - BE 0412 120 336 - RPR Oostende



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