

Air Conditioning  
Technical Data

**RZQSG-L(8)Y1**





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# 1 Features

Technology and comfort combined for commercial applications

- Top efficiency: - Energy labels up to A++ (cooling) /A+ (heating) for RZQG71/100L9V1 + FCQG71/100F - compressor that offers substantial efficiency improvements - control logic that optimises efficiency at the most frequently encountered operating conditions
- Replace existing R-22 or R-407C systems without having to replace the piping
- Guarantees operation in both heating and cooling mode down to -15°C
- With a gas cooled PCB reliable cooling is guaranteed as it is not influenced by ambient temperature
- Maximum piping length up to 50m, minimum piping length is 5m.
- Outdoor units for pair, twin, triple, double twin application
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- Units optimized for seasonal efficiency give an indication on how efficient an air conditioner operates over an entire heating or cooling season.



Inverter



Auto cooling-  
heating  
changeover

## 2 Specifications

2-1 Capacity and Power input				FCQG100F/RZQSG100L8Y1	FCQG125F/RZQSG125L8Y1	FCQG140F/RZQSG140LY1	
Cooling capacity	Nom.		kW	9.5	12.0	13.4	
Heating capacity	Nom.		kW	10.8	13.5	15.5	
Power input	Cooling	Nom.	kW	2.88	3.74	4.45	
	Heating	Nom.	kW	3.05	3.96	4.54	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++		A	-
		Pdesign	kW	9.5	12	-	-
		SEER		6.5	5.3	-	-
		Annual energy consumption	kWh	512	793	-	-
	Heating (Average climate)	Energy label		A+		-	-
		Pdesign	kW	7.6	8.03	-	-
		SCOP/A		4.1	4.01	-	-
		Annual energy consumption	kWh	2,596	2,804	-	-
Nominal efficiency	EER		3.30	3.21	3.01		
	COP		3.54	3.41			
	Annual energy consumption		kWh	1,440	1,870	2,225	
	Energy label	Cooling	A		-		

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

Annual energy consumption is according to Energy labeling directive 2002/31/EC

SEER and SCOP are according to EN 14825

2-2 Capacity and Power input				FHQ100C/RZQSG100L8Y1	FHQ125C/RZQSG125L8Y1	FHQ140C/RZQSG140LY1
Cooling capacity	Nom.		kW	9.5	12.0	13.4
Heating capacity	Nom.		kW	10.8	13.5	15.5
Power input	Cooling	Nom.	kW	2.96	4.15	4.45
	Heating	Nom.	kW	2.99	3.73	4.54
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+		-
		Pdesign	kW	9.5	12	-
		SEER		5.61	-	-
		Annual energy consumption	kWh	593	749	-
	Heating (Average climate)	Energy label		A	A+	-
		Pdesign	kW	7.6	-	-
		SCOP/A		3.91	4.01	-
		Annual energy consumption	kWh	2,722	2,654	-
Nominal efficiency	EER		3.21	2.89	3.01	
	COP		3.61	3.62	3.41	
	Annual energy consumption		kWh	1,480	2,075	2,225
	Energy label	Cooling	A	C	-	
	Heating	A		-		

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-3 Capacity and Power input				FDQ125C/RZQSG125L8Y1
Cooling capacity	Nom.		kW	12.0
Heating capacity	Nom.		kW	13.5
Power input	Cooling	Nom.	kW	3.74
	Heating	Nom.	kW	3.85

## 2 Specifications

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2-3 Capacity and Power input			FDQ125C/RZQSG125L8Y1		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A	
		Pdesign	kW	12	
		SEER		5.2	
		Annual energy consumption	kWh	808	
	Heating (Average climate)	Energy label		A	
		Pdesign	kW	7.6	
		SCOP/A		3.9	
		Annual energy consumption	kWh	2,729	
Nominal efficiency	EER		3.21		
	COP		3.51		
	Annual energy consumption		kWh	1,870	
	Energy label	Cooling		A	
		Heating		B	

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-4 Capacity and Power input			FCQHG100F/RZQSG100L8Y1	FCQHG125F/RZQSG125L8Y1	FCQHG140F/RZQSG140LY1	
Cooling capacity	Nom.	kW	9.5	12.0	-	
Heating capacity	Nom.	kW	10.8	13.5	-	
Power input	Cooling	Nom.	kW	2.57	3.71	-
	Heating	Nom.	kW	2.51	3.60	-
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++	A	-
		Pdesign	kW	9.5	12	-
		SEER		6.7	5.4	-
		Annual energy consumption	kWh	497	778	-
	Heating (Average climate)	Energy label		A+		-
		Pdesign	kW	8.03		-
		SCOP/A		4.3	4.1	-
		Annual energy consumption	kWh	2,615	2,742	-
Nominal efficiency	EER		3.70	3.23	-	
	COP		4.30	3.75	-	
	Annual energy consumption		kWh	1,285	1,855	-
	Energy label	Cooling		A		-
		Heating		A		-

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-5 Capacity and Power input			FVQ100C/RZQSG100L8Y1	FVQ125C/RZQSG125L8Y1	FVQ140C/RZQSG140LY1	
Cooling capacity	Nom.	kW	9.5	12.0	13.4	
Heating capacity	Nom.	kW	10.8	13.5	15.5	
Power input	Cooling	Nom.	kW	2.96	4.27	4.45
	Heating	Nom.	kW	2.99	3.96	4.54

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## 2 Specifications

2-5 Capacity and Power input				FVQ100C/RZQSG100L8Y1	FVQ125C/RZQSG125L8Y1	FVQ140C/RZQSG140LY1
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A		
		Pdesign	kW	9.5	12	-
		SEER		5.5		
		Annual energy consumption	kWh	605	764	-
	Heating (Average climate)	Energy label		A+	A	-
		Pdesign	kW	7.6		
		SCOP/A		4.01	3.85	-
		Annual energy consumption	kWh	2,654	2,764	-
Nominal efficiency	EER			3.21	2.81	3.01
	COP			3.61	3.41	
	Annual energy consumption		kWh	1,480	2,135	2,225
	Energy label	Cooling		A	C	-
		Heating		A	B	-

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-6 Capacity and Power input				FBQ100D/RZQSG100L8Y1	FBQ125D/RZQSG125L8Y1	FBQ140D/RZQSG140LY1
Indoor unit				FBQ100D	FBQ125D	FBQ140D
Outdoor unit				RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1
Cooling capacity	Nom.	kW	9.5 (1)	12.0 (1)	13.4 (1)	
Heating capacity	Nom.	kW	10.80 (1)	13.50 (1)	15.50 (1)	
Power input	Cooling	Nom.	kW	2.84 (1)	3.72 (1)	4.38 (1)
	Heating	Nom.	kW	2.94 (1)	3.72 (1)	4.56 (1)
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+	A	-
		Pdesign	kW	9.50	12.00	-
		SEER		5.61		
		Annual energy consumption	kWh	593	768	-
	Heating (Average climate)	Energy label		A+		
		Pdesign	kW	7.60		
		SCOP/A		4.15	4.01	-
		Annual energy consumption	kWh	2,564	2,653	-
Nominal efficiency	EER			3.35 (2)	3.23 (2)	3.06 (2)
	COP			3.67 (2)	3.63 (2)	3.40 (2)
	Annual energy consumption		kWh	1,418	1,858	-
	Energy label	Cooling		A		

### Notes

(1) Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

(2) EER/COP according to Eurovent 2012, for use outside EU only

Annual energy consumption is according to Energy labeling directive 2002/31/EC

SEER and SCOP are according to EN 14825

2-7 Capacity and Power input				FUQ100C/RZQSG100L8Y1	FUQ125C/RZQSG125L8Y1
Indoor unit				FUQ100C	FUQ125C
Outdoor unit				RZQSG100L8Y1	RZQSG125L8Y1
Cooling capacity	Nom.	kW	9.5	12.0	
Heating capacity	Nom.	kW	10.8	13.5	
Power input	Cooling	Nom.	kW	2.96	4.53
	Heating	Nom.	kW	2.99	3.95

## 2 Specifications

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2-7 Capacity and Power input					FUQ100C/RZQSG100L8Y1		FUQ125C/RZQSG125L8Y1	
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A+		A	
		Pdesign		kW	9.50		12.00	
		SEER			5.61		5.30	
		Annual energy consumption		kWh	593		793	
	Heating (Average climate)	Energy label			A+		A	
		Pdesign		kW	7.60			
SCOP/A			4.01		3.85			
Annual energy consumption		kWh	2,654		2,764			
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	69		70	
	Sound power level indoor	Cooling	Nom.	dBA	64		65	
Nominal efficiency	EER				3.21		2.65	
	COP				3.61		3.41	
	Annual energy consumption			kWh	1,480		2,265	
	Energy label	Cooling			A		D	
		Heating			A		B	

2-8 Capacity and Power input					FAQ100C9/RZQSG100L8Y1			
Cooling capacity	Nom.			kW	9.5			
Heating capacity	Nom.			kW	10.8			
Power input	Cooling	Nom.		kW	3.16			
	Heating	Nom.		kW	3.17			
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A+			
		Pdesign		kW	9.50			
		SEER			5.61			
		Annual energy consumption		kWh	593			
	Heating (Average climate)	Energy label			A+			
		Pdesign		kW	6.81			
SCOP/A			4.01					
Annual energy consumption		kWh	2,378					
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	69			
	Sound power level indoor	Cooling	Nom.	dBA	65			
Nominal efficiency	EER				3.01			
	COP				3.41			
	Annual energy consumption			kWh	1,580			
	Energy label	Cooling			B			
		Heating			B			

### Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-9 Technical Specifications					RZQSG100L8Y1		RZQSG125L8Y1		RZQSG140LY1	
Capacity control	Method				Inverter controlled					
Casing	Colour				Ivory white					
	Material				Painted galvanized steel plate					
Dimensions	Unit	Height	mm		990			1,430		
		Width	mm		940					
		Depth	mm		320					
	Packed unit	Height	mm		1,170			1,610		
		Width	mm		1,015					
		Depth	mm		422					

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## 2 Specifications

2-9 Technical Specifications					RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1
Weight	Unit			kg	82		101
	Packed unit			kg	88		114
Packing	Weight			kg	6		-
Heat exchanger	Fin	Type			WF fin		
		Treatment			Anti-corrosion treatment (PE)		
Compressor	Quantity			1			
	Type			Hermetically sealed swing compressor			
	Starting method			Inverter driven			
Fan	Type			Propeller fan			
	Discharge direction			Horizontal			
	Quantity			1		2	
	Air flow rate	Cooling	Nom.	m <sup>3</sup> /min	76	77	83
			Moderate	m <sup>3</sup> /min	55		-
		Heating	Nom.	m <sup>3</sup> /min	83		62
Moderate			m <sup>3</sup> /min	55		-	
Fan motor	Quantity			1		2	
	Model			Brushless DC motor			
	Output			W	200		94
	Drive			Direct drive			
	Speed	Cooling	Super low	rpm	-		
			Heating	Super low	rpm	-	
Sound power level	Cooling			dBA	69	70	69
	Heating			dBA	-		
Sound pressure level	Cooling	Nom.	dBA	53	54	53	
	Heating	Nom.	dBA	57	58	54	
	Night quiet mode	Level 1	dBA	49			
Operation range	Cooling	Ambient	Min.	°CDB	-15		
			Max.	°CDB	46		
	Heating	Ambient	Min.	°CWB	-15		
			Max.	°CWB	15.5		
Refrigerant	Type			R-410A			
	Charge			kg	2.9		4.0
				TCO <sub>2</sub> eq	6.1		8.4
	Control			Expansion valve (electronic type)			
	GWP			2,087.5			
	Circuits	Quantity			1		

## 2 Specifications

2

2-9 Technical Specifications				RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1	
Piping connections	Liquid	Quantity		1			
		Type		Flare connection			
		OD	mm	9.52			
	Gas	Quantity		1			
		Type		Flare connection			
		OD	mm	15.9			
	Drain	Quantity		5			
		Type		Hole			
		ID	mm	-			
		OD	mm	26			
	Piping length	OU - IU	Min.	m	5		
			Max.	m	50		
		System	Equivalent	m	70		
Chargel ess			m	30			
Additional refrigerant charge			kg/m	See installation manual			
Level difference	IU - OU	Max.	m	30			
	IU - IU	Max.	m	0.5			
Heat insulation			Both liquid and gas pipes				
Refrigerant oil	Type			FVC50K			
	Charged volume		l	0.9	1.35		
Defrost method			Reversed cycle				
Defrost control			Sensor for outdoor heat exchanger temperature				
Safety devices	Item	01	High pressure switch				
		02	Fan driver overload protector				
		03	Fuse				

Standard Accessories : Tie-wraps; Quantity : 2;

Standard Accessories : Installation manual; Quantity : 1;

2-10 Electrical Specifications				RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1
Power supply	Name		Y1			
	Phase		3N~			
	Frequency		Hz	50		
	Voltage		V	380-415		
	Voltage range	Min.	%	342	-10	
Max.		%	456	10		
Current - 50Hz	Maximum fuse amps (MFA)		A	16	20	
Current	Zmax	List	Complies to EN61000-3-11			
	Recommended fuses		A	20		
Current - 60Hz	Maximum fuse amps (MFA)		A	-		
Wiring connections	For power supply	Remark	See installation manual outdoor unit			
	For connection with indoor	Remark	See installation manual outdoor unit			
Power supply intake			Outdoor unit only			

### Notes

PED: assembly = category I : excluded from scope of PED due to article 1, item 3.6 of 97/23/EC

See separate drawing for electrical data

Contains fluorinated greenhouse gases

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

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

### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG100L8Y1

Indoor	Outdoor	Power supply	Voltage range		MCA	TOCA	MFA	Compressor		OFM		IFM	
								MSC	RLA	kW	FLA	kW	FLA
FCQG100EVEB	RZQSG100L8Y1B	3N~ 50Hz 380-415V	Minimum: 342 V Maximum 466 V		14.5	—	16	—	11.4	0.2	0.6	0.106	1
FCQH100FVEB	RZQSG100L8Y1B				14.8	—	16	—	11.4	0.2	0.6	0.221	1.3
FCQG35FVEB	x3 RZQSG100L8Y1B				14.3	—	16	—	11.4	0.2	0.6	0.044x3	0.3x3
FCQG50FVEB	x2 RZQSG100L8Y1B				14.0	—	16	—	11.4	0.2	0.6	0.039x2	0.3x2
FCQG100FVEB	RZQSG100L8Y1B				14.1	—	16	—	11.4	0.2	0.6	0.117	0.7
FFQ35C2VEB	x3 RZQSG100L8Y1B				14.7	—	16	—	11.4	0.2	0.6	0.05x3	0.4x3
FFQ50C2VEB	x2 RZQSG100L8Y1B				14.2	—	16	—	11.4	0.2	0.6	0.05x2	0.4x2
FDXS35F2VEB	x3 RZQSG100L8Y1B				14.3	—	16	—	11.4	0.2	0.6	0.034x3	0.3x3
FDXS50F2VEB9	x2 RZQSG100L8Y1B				14.5	—	16	—	11.4	0.2	0.6	0.06x2	0.5x2
FBQ35C8VEB	x3 RZQSG100L8Y1B				17.7	—	20	—	11.4	0.2	0.6	0.140x3	1.2x3
FBQ50C8VEB	x2 RZQSG100L8Y1B				16.2	—	20	—	11.4	0.2	0.6	0.140x2	1.2x2
FBQ100C8VEB	RZQSG100L8Y1B				15.2	—	16	—	11.4	0.2	0.6	0.350	1.6
FAQ100CVEB9	RZQSG100L8Y1B				13.7	—	16	—	11.4	0.2	0.6	0.064	0.4
FVQ100CVEB	RZQSG100L8Y1B				14.7	—	16	—	11.4	0.2	0.6	0.238	1.2
FHQ35CBVEB	x3 RZQSG100L8Y1B				15.5	—	16	—	11.4	0.2	0.6	0.060 x 3	0.6 x 3
FHQ50CBVEB	x2 RZQSG100L8Y1B				14.7	—	16	—	11.4	0.2	0.6	0.060 x 2	0.6 x 2
FHQ100CBVEB	RZQSG100L8Y1B				14.8	—	16	—	11.4	0.2	0.6	0.150	1.3
FUQ100CVEB	RZQSG100L8Y1B				14.8	—	16	—	11.4	0.2	0.6	0.106	1.3

**Symbols**

- MCA: Minimum Circuit Ampere [A]
- TOCA: Total overcurrent amps [A]
- MFA: Maximum Fuse Ampere [A]
- MSC: Maximum current of the starting compressor [A]
- RLA: Rated load amps [A]
- OFM: Outdoor fan motor
- IFM: Indoor fan motor
- FLA: Full Load Ampere [A]
- KW: Fan motor rated output [kW]

**Notes**

1. The RLA is based on the following conditions.
  - Cooling
    - Indoor temperature 27.0°C DB / 19.0°C WB
    - Outdoor temperature 35.0°C DB
  - Heating
    - Indoor temperature 20.0°C DB
    - Outdoor temperature 7.0°C DB / 6.0°C WB
2. TOCA is the total value of each overcurrent set.
3. Voltage range
  - The units are suitable for use with electrical systems in which the voltage supplied to the unit terminals is not below or above the listed range limits.
4. The maximum allowable voltage that is unbalanced between phases is 2%.
5. MCA is the maximum input current.
  - The capacity of the MFA must be greater than that of the MCA.
  - Select the MFA according to the table.
6. Select the wire size according to the MCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interruptor.
  - Earth leakage circuit breaker

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### 3 Electrical data

#### 3 - 1 Electrical Data

#### RZQSG125-140L(8)Y1

Indoor	Outdoor	Power supply	Voltage range	MCA	TOCA	MFA	Compressor		OFM		IFM			
							MSC	RLA	KW	FLA	KW	FLA		
FCQG125EVEB	RZQSG125L8Y1B	3N~ 50Hz 380-415V	Minimum: 342 V Maximum 456 V	14,6	—	16	—	11,4	0,2	0,6	0,106	1,1		
FCQH125FVEB	RZQSG125L8Y1B			15,0	—	16	—	11,4	0,2	0,6	0,244	1,4		
FCQG35FVEB	x4 RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,044x4	0,3x4		
FCQG50FVEB	x3 RZQSG125L8Y1B			14,3	—	16	—	11,4	0,2	0,6	0,039x3	0,3x3		
FCQG60FVEB	x2 RZQSG125L8Y1B			14,0	—	16	—	11,4	0,2	0,6	0,044x2	0,3x2		
FCQG125FVEB	RZQSG125L8Y1B			14,5	—	16	—	11,4	0,2	0,6	0,168	1		
FFQ35C2VEB	x4 RZQSG125L8Y1B			15,2	—	16	—	11,4	0,2	0,6	0,05x4	0,4x4		
FFQ50C2VEB	x3 RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,05x3	0,4x3		
FFQ60C2VEB	x2 RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,05x2	0,6x2		
FDXS35F2VEB	x4 RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,034x4	0,3x4		
FDXS50F2VEB9	x3 RZQSG125L8Y1B			15,1	—	16	—	11,4	0,2	0,6	0,060x3	0,5x3		
FDXS60F2VEB	x2 RZQSG125L8Y1B			14,5	—	16	—	11,4	0,2	0,6	0,060x2	0,5x2		
FBQ35C8VEB	x4 RZQSG125L8Y1B			19,2	—	20	—	11,4	0,2	0,6	0,140x4	1,2x4		
FBQ50C8VEB	x3 RZQSG125L8Y1B			17,7	—	20	—	11,4	0,2	0,6	0,140x3	1,2x3		
FBQ60C8VEB	x2 RZQSG125L8Y1B			16,0	—	20	—	11,4	0,2	0,6	0,350x2	1,1x2		
FBQ125C8VEB	RZQSG125L8Y1B			15,8	—	16	—	11,4	0,2	0,6	0,350	2,1		
FDQ125C7VEB	RZQSG125L8Y1B			15,8	—	16	—	11,4	0,2	0,6	0,350	2,1		
FVQ125CVEB	RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,238	1,2		
FHQ35CBVEB	x4 RZQSG125L8Y1B			16,2	—	20	—	11,4	0,2	0,6	0,060x4	0,6 x 4		
FHQ50CBVEB	x3 RZQSG125L8Y1B			15,5	—	16	—	11,4	0,2	0,6	0,060x3	0,6 x 3		
FHQ60CBVEB	x2 RZQSG125L8Y1B			14,7	—	16	—	11,4	0,2	0,6	0,091x2	0,8 x 2		
FHQ125CBVEB	RZQSG125L8Y1B			15,1	—	16	—	11,4	0,2	0,6	0,15	1,5		
FUQ125CVEB	RZQSG125L8Y1B			15,0	—	16	—	11,4	0,2	0,6	0,106	1,4		
FCQG71EVEB	x2 RZQSG140L7Y1B			3N~ 50Hz 380-415V	Minimum: 342 V Maximum 456 V	17,5	—	20	—	14,2	0,094+0,094	0,4+0,4	0,048x2	0,4x2
FCQG140EVEB	RZQSG140L7Y1B					17,875	—	20	—	14,2	0,094+0,094	0,4+0,4	0,106	1,1
FCQH71FVEB	x2 RZQSG140L7Y1B					17,75	—	20	—	14,2	0,094+0,094	0,4+0,4	0,091x2	0,5x2
FCQH140FVEB	RZQSG140L7Y1B					18,25	—	20	—	14,2	0,094+0,094	0,4+0,4	0,244	1,4
FCQG35FVEB	x4 RZQSG140L7Y1B					18	—	20	—	14,2	0,094+0,094	0,4+0,4	0,044x4	0,3x4
FCQG50FVEB	x3 RZQSG140L7Y1B					17,625	—	20	—	14,2	0,094+0,094	0,4+0,4	0,039x3	0,3x3
FCQG71FVEB	x2 RZQSG140L7Y1B					17,5	—	20	—	14,2	0,094+0,094	0,4+0,4	0,054x2	0,4x2
FCQG140FVEB	RZQSG140L7Y1B					17,75	—	20	—	14,2	0,094+0,094	0,4+0,4	0,168	1
FFQ35C2VEB	x4 RZQSG140L7Y1B					18,5	—	20	—	14,2	0,094+0,094	0,4+0,4	0,05x4	0,4x4
FFQ50C2VEB	x3 RZQSG140L7Y1B	18	—			20	—	14,2	0,094+0,094	0,4+0,4	0,05x3	0,4x3		
FFQ60C2VEB	x2 RZQSG140L7Y1B	18	—			20	—	14,2	0,094+0,094	0,4+0,4	0,034x4	0,3x4		
FDXS35F2VEB	x4 RZQSG140L7Y1B	18,375	—			20	—	14,2	0,094+0,094	0,4+0,4	0,06x3	0,5x3		
FDXS50F2VEB9	x3 RZQSG140L7Y1B	22,5	—			25	—	14,2	0,094+0,094	0,4+0,4	0,140x4	1,2x4		
FBQ35C8VEB	x4 RZQSG140L7Y1B	21	—			25	—	14,2	0,094+0,094	0,4+0,4	0,140x3	1,2x3		
FBQ50C8VEB	x3 RZQSG140L7Y1B	19,25	—			20	—	14,2	0,094+0,094	0,4+0,4	0,350x2	1,1x2		
FBQ71C8VEB	x2 RZQSG140L7Y1B	19,125	—			20	—	14,2	0,094+0,094	0,4+0,4	0,35	2,1		
FBQ140C8VEB	RZQSG140L7Y1B	17,5	—			20	—	14,2	0,094+0,094	0,4+0,4	0,048x2	0,4x2		
FAQ71CVEB9	x2 RZQSG140L7Y1B	18,25	—			20	—	14,2	0,094+0,094	0,4+0,4	0,276	1,4		
FVQ140CVEB	RZQSG140L7Y1B	19,5	—			20	—	14,2	0,094+0,094	0,4+0,4	0,060 x 4	0,6 x 4		
FHQ35CBVEB	x 4 RZQSG140L7Y1B	18,8	—			20	—	14,2	0,094+0,094	0,4+0,4	0,060 x 3	0,6 x 3		
FHQ50CBVEB	x 3 RZQSG140L7Y1B	18,5	—			20	—	14,2	0,094+0,094	0,4+0,4	0,091 x 2	0,8 x 2		
FHQ71CBVEB	x 2 RZQSG140L7Y1B	18,8	—			20	—	14,2	0,094+0,094	0,4+0,4	0,15	1,8		
FHQ140CBVEB	RZQSG140L7Y1B	18,8	—			20	—	14,2	0,094+0,094	0,4+0,4	0,046 x 2	0,9 x 2		
FUQ71CVEB	x2 RZQSG140L7Y1B	18,8	—			20	—	14,2	0,094+0,094	0,4+0,4	0,046 x 2	0,9 x 2		

**Symbols**

- MCA: Minimum Circuit Ampere [A]
- TOCA: Total overcurrent amps [A]
- MFA: Maximum Fuse Ampere [A]
- MSC: Maximum current of the starting compressor [A]
- RLA: Rated load amps [A]
- OFM: Outdoor fan motor
- IFM: Indoor fan motor
- FLA: Full Load Ampere [A]
- KW: Fan motor rated output [kW]

**Notes**

1. The RLA is based on the following conditions.
  - Cooling
    - Indoor temperature 27.0°C DB / 19.0°C WB
    - Outdoor temperature 35.0°C DB
  - Heating
    - Indoor temperature 20.0°C DB
    - Outdoor temperature 7.0°C DB / 6.0°C WB
2. TOCA is the total value of each overcurrent set.
3. Voltage range
  - The units are suitable for use with electrical systems in which the voltage supplied to the unit terminals is not below or above the listed range limits.
4. The maximum allowable voltage that is unbalanced between phases is 2%.
5. MCA is the maximum input current.
  - The capacity of the MFA must be greater than that of the MCA.
  - Select the MFA according to the table.
6. Select the wire size according to the MCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interruptor.
  - Earth leakage circuit breaker

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### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG-L(8)Y1

Unit combination		Minimum Ssc value (kVA)
FFQ35B9V1B	x3	936
FFQ50B9V1B	x2	951
FHQ35BWW1B	x3	977
FHQ50BWW1B	x2	936
FBQ35C8VEB	x3	1092
FBQ50C8VEB	x2	1014
FCQG35FVEB	x3	915
FCQG50FVEB	x2	899
FBQ100C8VEB	x1	962
FCQG100FVEB	x1	905
FCQHG100FVEB	x1	941
FAQ100CVEB	x1	884
FVQ100CVEB	x1	936
FHQG100CVEB	x1	936
FUQ100BWW1B	x1	925
FFQ35B9V1B	x4	962
FFQ50B9V1B	x3	993
FFQ60B9V1B	x2	951
FHQ35BWW1B	x4	1014
FHQ50BWW1B	x3	977
FHQ60BWW1B	x2	936
FBQ35C8VEB	x4	1170
FBQ50C8VEB	x3	1092
FBQ60C8VEB	x2	1003
FCQG35FVEB	x4	936
FCQG50FVEB	x3	915
FCQG60FVEB	x2	899
FBQ125C8VEB	x1	993
FCQG125FVEB	x1	925
FCQHG125FVEB	x1	951
FVQ125CVEB	x1	936
FHQG125CVEB	x1	962
FUQ125BWW1B	x1	925
FDQ125C7VEB	x1	993

Unit combination		Minimum Ssc value (kVA)
FFQ35B9V1B	x4	962
FFQ50B9V1B	x3	993
FHQ35BWW1B	x4	1014
FHQ50BWW1B	x3	977
FBQ35C8VEB	x4	1170
FBQ50C8VEB	x3	1092
FCQG35FVEB	x4	936
FCQG50FVEB	x3	915
FCQG71FVEB	x2	910
FCQHG71FVEB	x2	925
FAQ71CVEB	x2	910
FHQG71CVEB	x2	962
FBQ71C8VEB	x2	1003
FUQ71BWW1B	x2	936
FBQ140C8VEB	x1	993
FCQG140FVEB	x1	925
FCQHG140FVEB	x1	951
FVQ140CVEB	x1	951
FHQG140CVEB	x1	977
FFQ35B9V1B	x4	962
FFQ50B9V1B	x3	993
FHQ35BWW1B	x4	1014
FHQ50BWW1B	x3	977
FBQ35C8VEB	x4	1170
FBQ50C8VEB	x3	1092
FCQG35FVEB	x4	936
FCQG50FVEB	x3	915
FCQG71FVEB	x2	910
FCQHG71FVEB	x2	925
FAQ71CVEB	x2	910
FHQG71CVEB	x2	962
FBQ71C8VEB	x2	1003
FBQ140C8VEB	x1	993
FCQG140FVEB	x1	925
FCQHG140FVEB	x1	951
FVQ140CVEB	x1	951
FHQG140CVEB	x1	977

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#### NOTES

- In accordance with EN/IEC 61000-3-12<sup>(1)</sup>, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with Ssc<sup>(2)</sup> ≥ minimum Ssc value.

- <sup>(1)</sup> European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase.

- <sup>(2)</sup> Short-circuit power

### 3 Electrical data

#### 3 - 1 Electrical Data

3

##### RZQSG100-125L8Y1

Unit combination restrictions		Power supply					COMP		OFM		IFM	
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
2xFNQ50A2VEB	RZQSG100L8Y1B	3N~ 50Hz	380- 415V	MAX. 50Hz 456V MIN. 50Hz 342V	14,6	16	-	11,4	0,2	0,6	2x0.06	2x0.5
3xFNQ35A2VEB	RZQSG100L8Y1B				14,5	16	-	11,4	0,2	0,6	3x0.034	3x0.3
2xFNQ60A2VEB	RZQSG125L8Y1B				14,7	16	-	11,4	0,2	0,6	2x0.06	2x0.5
3xFNQ50A2VEB	RZQSG125L8Y1B				15,2	16	-	11,4	0,2	0,6	3x0.06	3x0.5
4xFNQ35A2VEB	RZQSG125L8Y1B				14,9	16	-	11,4	0,2	0,6	4x0.034	4x0.3

Notes

- The RLA is based on the following conditions.  
Indoor temperature 27°C DB / 19°C WB  
Outdoor temperature 35°C DB
- Select the wire size according to the MCA.
- The maximum allowable voltage that is unbalanced between phases is 2%.
- Use a circuit breaker instead of a fuse.

Symbols

- ① Hz
- ② Voltage
- ③ Voltage range
- MCA Minimum Circuit Ampere (A)
- MFA Maximum Fuse Ampere (A)
- RLA Rated load amps [A]

- OFM Outdoor fan motor
- IFM Indoor fan motor
- FLA Full Load Ampere (A)
- kW Fan motor rated output [kW]
- RHz Rated operating frequency [Hz]
- COMP Compressor

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##### RZQSG100-140L(8)Y1

Unit combination restrictions		Power supply					COMP		OFM		IFM	
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
3xFBQ35D2VEB	RZQSG100L8Y1B	3N~ 50Hz	380- 415V	MAX. 50Hz 456V MIN. 50Hz 342V	15,4	16	-	11,4	0,2	0,6	3x0.089	3x0.6
FBQ125D2VEB	RZQSG125L8Y1B				15,2	16	-	11,4	0,2	0,6	0,187	1,5
2xFBQ60D2VEB	RZQSG125L8Y1B				14,7	16	-	11,4	0,2	0,6	2x0.07	2x0.5
3xFBQ50D2VEB	RZQSG125L8Y1B				15,5	16	-	11,4	0,2	0,6	3x0.089	3x0.6
4xFBQ35D2VEB	RZQSG125L8Y1B				16,1	20	-	11,4	0,2	0,6	4x0.089	4x0.6
FBQ140D2VEB	RZQSG140L7Y1B				18,5	20	-	14,2	0,094 + 0,094	0,4 + 0,4	0,187	1,5
2xFBQ71D2VEB	RZQSG140L7Y1B				18	20	-	14,2	0,094 + 0,094	0,4 + 0,4	2x0.07	2x0.5
3xFBQ50D2VEB	RZQSG140L7Y1B				18,8	20	-	14,2	0,094 + 0,094	0,4 + 0,4	3x0.089	3x0.6
4xFBQ35D2VEB	RZQSG140L7Y1B				19,4	25	-	14,2	0,094 + 0,094	0,4 + 0,4	4x0.089	4x0.6

Notes

- The RLA is based on the following conditions.  
Indoor temperature 27°C DB / 19°C WB  
Outdoor temperature 35°C DB
- Select the wire size according to the MCA.
- The maximum allowable voltage that is unbalanced between phases is 2%.
- Use a circuit breaker instead of a fuse.

Symbols

- ① Hz
- ② Voltage
- ③ Voltage range
- MCA Minimum Circuit Ampere (A)
- MFA Maximum Fuse Ampere (A)
- RLA Rated load amps [A]

- OFM Outdoor fan motor
- IFM Indoor fan motor
- FLA Full Load Ampere (A)
- kW Fan motor rated output [kW]
- RHz Rated operating frequency [Hz]
- COMP Compressor

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### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG100L8Y1

Unit combination restrictions		Power supply					COMP		OFM		IFM	
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
FBQ100D2VEB	RZQSG100L8Y1B	3N~ 50Hz	380~ 415V	MAX. 50Hz 456V MIN. 50Hz 342V	14,6	16	-	11,4	0,2	0,6	0,127	1,0
2xFBQ50D2VEB	RZQSG100L8Y1B				14,8	16	-	11,4	0,2	0,6	2x0,089	2x0,6

Notes

- 1 The RLA is based on the following conditions.  
Indoor temperature 27°C DB / 19°C WB  
Outdoor temperature 35°C DB
- 2 Select the wire size according to the MCA.
- 3 The maximum allowable voltage that is unbalanced between phases is 2%.
- 4 Use a circuit breaker instead of a fuse.

Symbols

- |                                |                                    |
|--------------------------------|------------------------------------|
| ① Hz                           | OFM Outdoor fan motor              |
| ② Voltage                      | IFM Indoor fan motor               |
| ③ Voltage range                | FLA Full Load Ampere (A)           |
| MCA Minimum Circuit Ampere (A) | kW Fan motor rated output [kW]     |
| MFA Maximum Fuse Ampere (A)    | RHz Rated operating frequency [Hz] |
| RLA Rated load amps [A]        | COMP Compressor                    |

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### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG125-140L(8)Y1

Indoor	Outdoor	Phase - Hz Power supply	Voltage range				Comp		OFM		IFM	
				MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA
FCQG125EVEB	RZQSG125L8Y1B	3N ~ 50Hz 380-415V	Min. 342V Max. 456V	14,6	—	16	—	11,4	0,2	0,6	0,106	1,1
FCQHG125FVEB				15,0	—	16	—	11,4	0,2	0,6	0,244	1,4
FCQG35FVEB x4				14,7	—	16	—	11,4	0,2	0,6	0,044x4	0,3x4
FCQG50FVEB x3				14,3	—	16	—	11,4	0,2	0,6	0,039x3	0,3x3
FCQG60FVEB x2				14,0	—	16	—	11,4	0,2	0,6	0,044x2	0,3x2
FCQG125FVEB				14,5	—	16	—	11,4	0,2	0,6	0,168	1,0
FFQ35C2VEB x4				15,2	—	16	—	11,4	0,2	0,6	0,05x4	0,4x4
FFQ50C2VEB x3				14,7	—	16	—	11,4	0,2	0,6	0,05x3	0,4x3
FFQ60C2VEB x2				14,7	—	16	—	11,4	0,2	0,6	0,05x2	0,6x2
FDXS35F2VEB x4				14,7	—	16	—	11,4	0,2	0,6	0,034x4	0,3x4
FDXS50F2VEB9 x3				15,1	—	16	—	11,4	0,2	0,6	0,060x3	0,5x3
FDXS60F2VEB x2				14,5	—	16	—	11,4	0,2	0,6	0,060x2	0,5x2
FBO35C8VEB x4				19,2	—	20	—	11,4	0,2	0,6	0,140x4	1,2x4
FBO50C8VEB x3				17,7	—	20	—	11,4	0,2	0,6	0,140x3	1,2x3
FBO60C8VEB x2				16,0	—	20	—	11,4	0,2	0,6	0,350x2	1,1x2
FBO125C8VEB				15,8	—	16	—	11,4	0,2	0,6	0,350	2,1
FDO125C7VEB				15,8	—	16	—	11,4	0,2	0,6	0,350	2,1
FVQ125CVEB				14,7	—	16	—	11,4	0,2	0,6	0,238	1,2
FHQ35CAVEB x4				16,2	—	20	—	11,4	0,2	0,6	0,060x4	0,6 x 4
FHQ50CAVEB x3				15,5	—	16	—	11,4	0,2	0,6	0,060x3	0,6 x 3
FHQ60CAVEB x2				14,7	—	16	—	11,4	0,2	0,6	0,091x2	0,8 x 2
FHQ125CAVEB				15,1	—	16	—	11,4	0,2	0,6	0,150	1,5
FCQG71EVEB x2				RZQSG140L7Y1B	3N ~ 50Hz 380-415V	Min. 342V Max. 456V	17,5	—	20	—	14,2	0,094+0,094
FCQG140EVEB	17,9	—	20				—	14,2	0,094+0,094	0,4+0,4	0,106	1,1
FCQHG71FVEB x2	17,8	—	20				—	14,2	0,094+0,094	0,4+0,4	0,091x2	0,5x2
FCQHG140FVEB	18,3	—	20				—	14,2	0,094+0,094	0,4+0,4	0,244	1,4
FCQG35FVEB x4	18,0	—	20				—	14,2	0,094+0,094	0,4+0,4	0,044x4	0,3x4
FCQG50FVEB x3	17,6	—	20				—	14,2	0,094+0,094	0,4+0,4	0,039x3	0,3x3
FCQG71FVEB x2	17,5	—	20				—	14,2	0,094+0,094	0,4+0,4	0,054x2	0,4x2
FCQG140FVEB	17,8	—	20				—	14,2	0,094+0,094	0,4+0,4	0,168	1,0
FFQ35C2VEB x4	18,5	—	20				—	14,2	0,094+0,094	0,4+0,4	0,05x4	0,4x4
FFQ50C2VEB x3	18,0	—	20				—	14,2	0,094+0,094	0,4+0,4	0,05x3	0,4x3
FDXS35F2VEB x4	18,0	—	20				—	14,2	0,094+0,094	0,4+0,4	0,034x4	0,3x4
FDXS50F2VEB9 x3	18,4	—	20				—	14,2	0,094+0,094	0,4+0,4	0,06x3	0,5x3
FBO35C8VEB x4	22,5	—	25				—	14,2	0,094+0,094	0,4+0,4	0,140x4	1,2x4
FBO50C8VEB x3	21,0	—	25				—	14,2	0,094+0,094	0,4+0,4	0,140x3	1,2x3
FBO71C8VEB x2	19,3	—	20				—	14,2	0,094+0,094	0,4+0,4	0,350x2	1,1x2
FBO140C8VEB	19,1	—	20				—	14,2	0,094+0,094	0,4+0,4	0,350	2,1
FAQ71CVEB x2	17,5	—	20				—	14,2	0,094+0,094	0,4+0,4	0,048x2	0,4x2
FVQ140CVEB	18,3	—	20				—	14,2	0,094+0,094	0,4+0,4	0,276	1,4
FHQ35CAVEB x4	19,5	—	20				—	14,2	0,094+0,094	0,4+0,4	0,060 x 4	0,6 x 4
FHQ50CAVEB x3	18,8	—	20				—	14,2	0,094+0,094	0,4+0,4	0,060 x 3	0,6 x 3
FHQ71CAVEB x2	18,5	—	20				—	14,2	0,094+0,094	0,4+0,4	0,091 x 2	0,8 x 2
FHQ140CAVEB	18,8	—	20				—	14,2	0,094+0,094	0,4+0,4	0,150	1,8

#### SYMBOLS

MCA	: Min. Circuit Amps. (A)
TOCA	: Total Over-Current Amps. (A)
MFA	: Max. Fuse Amps (See note 7) (A)
MSC	: Max. current during the starting compressor. (A)
RLA	: Rated Load Amps. (A)
OFM	: Outdoor Fan Motor. (A)
IFM	: Indoor Fan Motor.
FLA	: Full Load Amps.
kW	: Fan Motor Rated Output (kW)

#### NOTES

- 1 RLA is based on the following conditions:  
Cooling  
Indoor temperature 27.0°CDB/19.0°CWB  
Outdoor temperature 35.0°CDB  
Heating  
Indoor temperature 20.0°CDB  
Outdoor temperature 7.0°CDB / 6.0°CWB
- 2 TOCA means the total value of each OC set.
- 3 Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- 4 Maximum allowable voltage variation between phases is 2%.
- 5 MCA represents maximum input current, MFA represents capacity which may accept MCA. (next lower standard fuse rating, min.15A)
- 6 Select wire size based on the larger value of MCA or TOCA.
- 7 MFA is used to select the circuit breaker and the ground fault circuit interrupter. (earth leakage circuit breaker)

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### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG140LY1

Unit combination restrictions		Power supply					COMP		OFM		IFM	
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
3xFNQ50A2VEB	RZQSG140L7Y1B	3N <sup>~</sup> 50Hz	380- 415V	MAX. 50Hz 456V	18,5	20	-	14,2	0,094 + 0,094	0,4 + 0,4	3x0,06	3x0,5
4xFNQ35A2VEB	RZQSG140L7Y1B			MIN. 50Hz 342V					0,094 + 0,094			

Notes

- 1 The RLA is based on the following conditions.  
Indoor temperature 27°C DB / 19°C WB  
Outdoor temperature 35°C DB
- 2 Select the wire size according to the MCA.
- 3 The maximum allowable voltage that is unbalanced between phases is 2%.
- 4 Use a circuit breaker instead of a fuse.

Symbols

- ① Hz
- ② Voltage
- ③ Voltage range
- MCA Minimum Circuit Ampere (A)
- MFA Maximum Fuse Ampere (A)
- RLA Rated load amps [A]

- OFM Outdoor fan motor
- IFM Indoor fan motor
- FLA Full Load Ampere (A)
- kW Fan motor rated output [kW]
- RHz Rated operating frequency [Hz]
- COMP Compressor

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# 4 Options

## 4 - 1 Options

4

### RZQSG-L(8)Y1

Available options for RZQSG models:

Name of option	Kit name		
	RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1
Bottom plate heater		-	
Refrigerant branch piping	Twin	KHRQ22M20TA (KHRQ58T); See note 1	
	Trije	KHRQ127H (KHRQ58H); See note 1	
	Double twin	-	KHRQ22M20TA (KHRQ58T); See note 1
Demand adapter kit		KRP58M51	

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### NOTES

- For RZQSG71-140L(8)Y1 in combination with FCQG35-71F or FCQH71F use the refrigerant branch piping mentioned between brackets.

# 5 Combination table

## 5 - 1 Combination Table

RZQSG-L3/9V1  
RZQSG-L(8)Y1

P= Pair	71	100	125	140
2= Twin	35+35	50+50	60+60	71+71
3= Triple		35+35+35	50+50+50 (*)	50+50+50 (*)
4= Double twin			35+35+35+35 (*)	35+35+35+35

(\*) : Maximum capacity of outdoor units

Sky Air	High Cassette	Thin cassette	2x2 cassette	Duct (medium ESP)	Ceiling-suspended	Ceiling-mounted - 4-way blow	Wall mounted type	Duct (high ESP)	Floor standing type	Slim duct
Model	FCQHG17VEB FCQHG100PVEB FCQHG125PVEB FCQHG140PVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB
RZQSG7L3V1B	P	2	2	2	2	2	P			
RZQSG100L9V1B	P	3	2	2	2	2	P			
RZQSG125L9V1B	P	4	3	2	2	2	P			
RZQSG140L9V1B	2	P	4	3	2	2	P			

Sky Air	Duct (medium ESP)	Concealed floor standing type
Model	FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB	FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB
RZQSG7L3V1B	2	2
RZQSG100L9V1B	3	2
RZQSG125L9V1B	4	3
RZQSG140L9V1B	4	3

Notes

- The capacities in the table are combined capacities (multiple units operating simultaneously) and not individual indoor unit capacities.
- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.
- For the selection of the correct renet kit, required to install a multi-combination, refer to the option list.

Twin : KHRQ22M20TA or KHRQ58T  
Triple : KHRQ127H or KHRQ58H  
Double twin : KHRQ22M20TA or KHRQ58T

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RZQSG-L3/9V1  
RZQSG-L(8)Y1

P= Pair	71	100	125	140
2= Twin	35+35	50+50	60+60	71+71
3= Triple		35+35+35	50+50+50 (*)	50+50+50 (*)
4= Double twin			35+35+35+35 (*)	35+35+35+35

(\*) : Maximum capacity of outdoor units

Sky Air	High Cassette	Thin cassette	2x2 cassette	Duct (medium ESP)	Ceiling-suspended	Ceiling-mounted - 4-way blow	Wall mounted type	Duct (high ESP)	Floor standing type	Slim duct
Model	FCQHG17VEB FCQHG100PVEB FCQHG125PVEB FCQHG140PVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB
RZQSG7L3V1B	P	2	2	2	2	2	P			
RZQSG100L9V1B	P	3	2	2	2	2	P			
RZQSG125L9V1B	P	4	3	2	2	2	P			
RZQSG140L9V1B	2	P	4	3	2	2	P			

Sky Air	High Cassette	Thin cassette	2x2 cassette	Duct (medium ESP)	Ceiling-suspended	Ceiling-mounted - 4-way blow	Wall mounted type	Duct (high ESP)	Floor standing type	Slim duct
Model	FCQHG17VEB FCQHG100PVEB FCQHG125PVEB FCQHG140PVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB FCQGT1FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB	FCQGS9PVEB FCQGS9FVEB FCQGS9FVEB FCQGS9FVEB
RZQSG7L3V1B	P	2	2	2	2	2	P			
RZQSG100L9V1B	P	3	2	2	2	2	P			
RZQSG125L9V1B	P	4	3	2	2	2	P			
RZQSG140L9V1B	2	P	4	3	2	2	P			

Sky Air	Duct (medium ESP)	Concealed floor standing type
Model	FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB	FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB FNQSA2VEB
RZQSG7L3V1B	2	2
RZQSG100L9V1B	3	2
RZQSG125L9V1B	4	3
RZQSG140L9V1B	4	3

Notes

- The capacities in the table are combined capacities (multiple units operating simultaneously) and not individual indoor unit capacities.
- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.
- For the selection of the correct renet kit, required to install a multi-combination, refer to the option list.

Twin : KHRQ22M20TA or KHRQ58T  
Triple : KHRQ127H or KHRQ58H  
Double twin : KHRQ22M20TA or KHRQ58T

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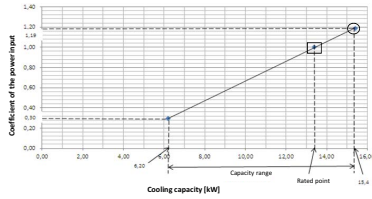


# 6 Capacity tables

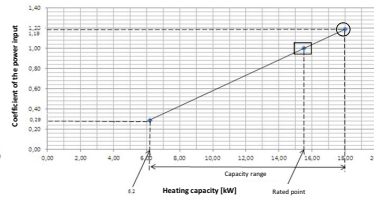
## 6 - 1 Cooling/Heating Capacity Tables

RZQSG140L9V1  
RZQSG140LY1

Cooling



Heating



**Symbol**  
 AFR: Air flow rate [m<sup>3</sup>/min]  
 BF: Bypass factor  
 EWB: Entering wet-bulb temperature (°C WB)  
 EDB: Entering dry-bulb temperature (°C DB)  
 TC: Maximum total cooling/heating capacity [kW]  
 SHC: Sensible heat capacity [kW]  
 CPI: Coefficient of the power input  
 PI: Power input [kW]  
 compressor + indoor and outdoor fan motors

Cooling

Indoor	Outdoor temperature (°C DB)												
	25			30			35			40			
°C WB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	
16.0	22	15.5	10.47	0.98	14.9	10.25	1.08	14.4	10.08	1.18	13.9	9.69	1.28
19.0	25	16.2	10.95	0.98	15.6	10.24	1.09	15.1	10.08	1.19	14.5	9.71	1.30
19.0	27	16.6	10.43	0.99	16.0	10.18	1.09	<b>15.4</b>	<b>9.98</b>	<b>1.19</b>	14.8	9.76	1.30
19.5	27	16.7	10.49	0.99	16.1	10.16	1.10	15.6	10.00	1.19	15.0	9.66	1.30
22.0	30	17.6	10.97	0.99	17.0	10.19	1.10	16.4	9.95	1.21	15.8	9.60	1.31
24.0	32	18.4	10.20	1.00	17.7	10.00	1.11	17.0	9.87	1.22	16.4	9.47	1.32

Heating

Indoor	Outdoor temperature (°C WB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
°C DB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	11.6	0.91	12.7	0.97	13.6	1.00	13.9	1.03	18.0	1.09	19.4	1.16
18	11.6	0.95	12.7	1.00	13.6	1.04	13.9	1.07	18.0	1.14	19.4	1.21
20	11.6	0.99	12.7	1.05	13.5	1.09	13.9	1.11	<b>18.0</b>	<b>1.19</b>	19.4	1.25
21	11.5	1.00	12.7	1.06	13.5	1.11	13.9	1.13	18.0	1.21	19.4	1.28
22	11.5	1.02	12.7	1.09	13.5	1.12	13.9	1.16	18.0	1.24	19.4	1.30
24	11.5	1.07	12.6	1.12	13.5	1.17	13.9	1.20	18.0	1.29	19.4	1.35

- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
- = Maximum at standard conditions  
□ = Rated capacity and rated coefficient of the power input  
The maximum capacity is not guaranteed except at standard conditions.
- SHC is based on indoor units EWB & EDB.  
SHC for other dry-bulb temperatures = SHC + SHC\*  
SHC\* = SHC correction for other dry-bulb temperatures  
= 0.02 × AFR (m<sup>3</sup>/min) × (1-BF) × (DB\* - EDB)
- The capacities are based on the following conditions:  
Outdoor air: 85% RH  
However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
Corresponding refrigerant piping length: 5.0 m  
Level difference: 0m
- CPI is a percentage value compared to the rated value which is 1.00.
- The error rate for this value is less than 5% and depends on the indoor unit type.
- The heating performance takes into account the drop that occurs during defrost operation.
- The air flow rate and bypass factor are mentioned in the table.

9. The rated power input for each model is mentioned in the table below.

Pair	FCQ5140F	FCQ5140F	FRQ140C	FRQ140C	FRQ140C	FRQ140C	FRQ140C
AFR	33.5	33.0	39.0/41.0	34.0	30.0	34.0	34.0
(BF)	(0.15)	(0.23)	(0.14)	(0.17)	(0.18)	(0.17)	(0.06)

Twin	FCQ673F x 2	FCQ673F x 2	FRQ270C x 2	FRQ270C x 2	FRQ270C x 2	FRQ270C x 2
AFR	21.2 x 2	21.5 x 2	28.0 x 2	20.5 x 2	20.5 x 2	28 x 2
(BF)	(0.2 x 2)	(0.14 x 2)	(0.08 x 2)	(0.13 x 2)	(0.13 x 2)	(0.13 x 2)

Triple	FCQ835F x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3
AFR	12.6 x 3	15 x 3	12 x 3	12.7/16.0	15 x 3	12.7/16.0
(BF)	(0.22 x 3)	(0.16 x 3)	(0.18 x 3)	(0.11 x 3)	(0.13 x 3)	(0.11 x 3)

Double twin	FCQ835F x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4
AFR	12.5 x 4	15 x 4	10 x 4	8.7 x 4	15 x 4	8.7 x 4
(BF)	(0.4 x 4)	(0.15 x 4)	(0.20 x 4)	(0.17 x 4)	(0.08 x 4)	(0.17 x 4)

Pair	FCQ5140F	FCQ5140F	FRQ140C	FRQ140C	FRQ140C	FRQ140C
Cooling	4.17	4.45	4.44	4.45	4.45	4.38
Heating	4.29	4.54	4.54	4.54	4.54	4.56

Twin	FCQ673F x 2	FCQ673F x 2	FRQ270C x 2	FRQ270C x 2	FRQ270C x 2	FRQ270C x 2
Cooling	4.11	4.39	4.37	4.01	4.03	4.05
Heating	4.23	4.48	4.58	4.71	4.92	4.71

Triple	FCQ835F x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3	FRQ35C x 3
Cooling	4.40	4.17	4.67	4.43	4.68	4.17
Heating	4.48	4.94	5.67	4.39	4.61	4.94

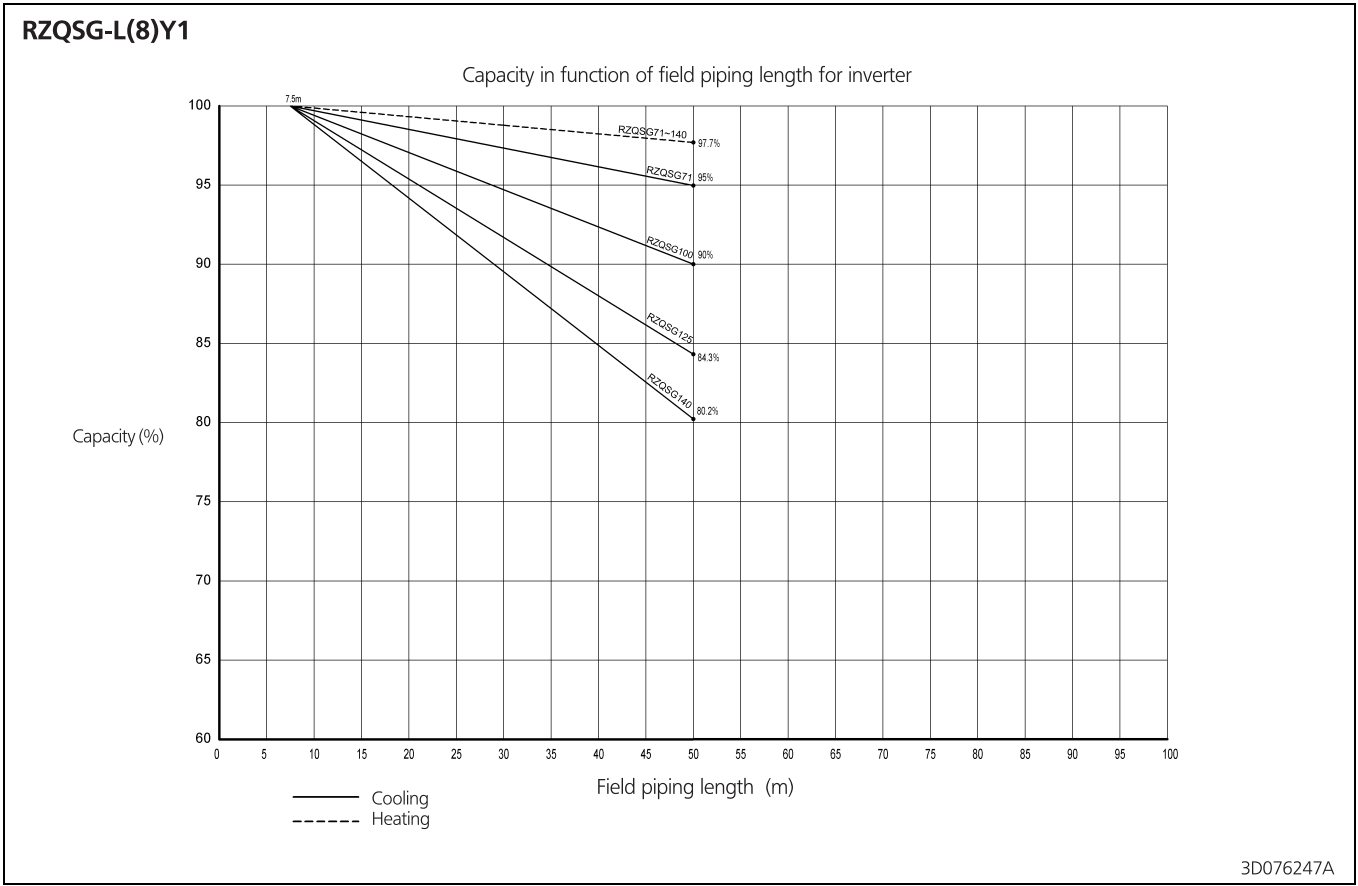
Double twin	FCQ835F x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4	FRQ35C x 4
Cooling	4.56	4.17	4.65	4.11	5.80	4.17
Heating	4.54	4.94	5.57	4.05	6.09	4.94

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# 6 Capacity tables

## 6 - 2 Capacity Correction Factor

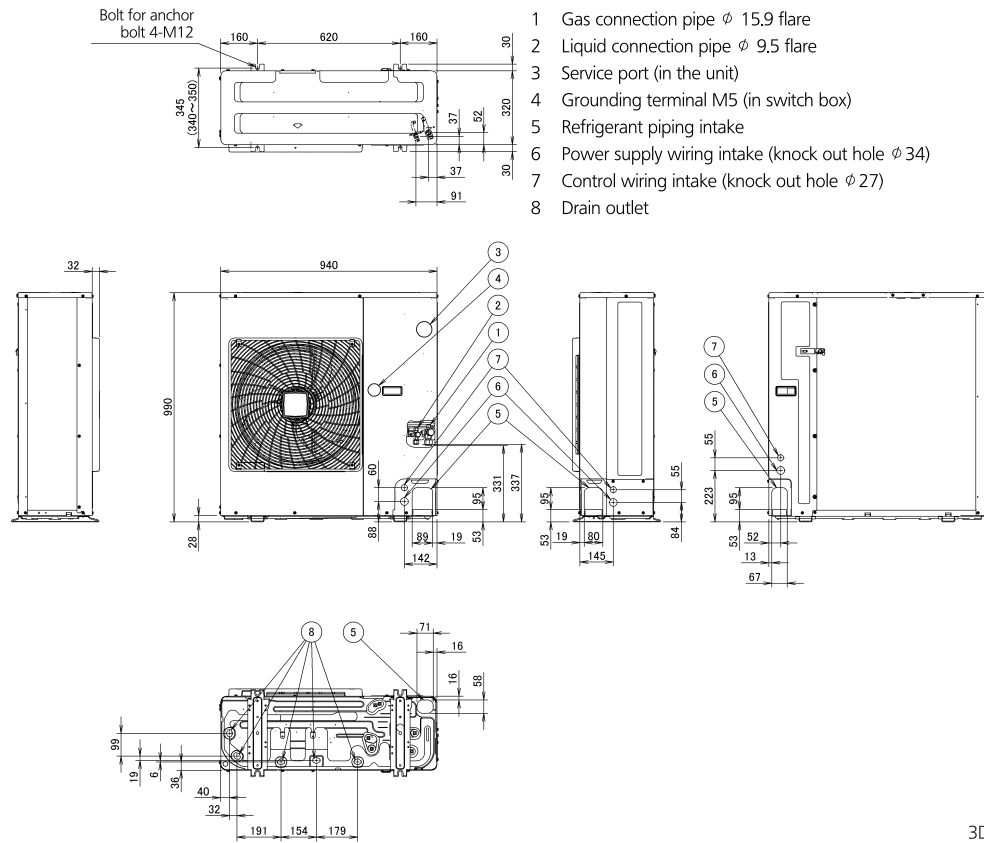
6



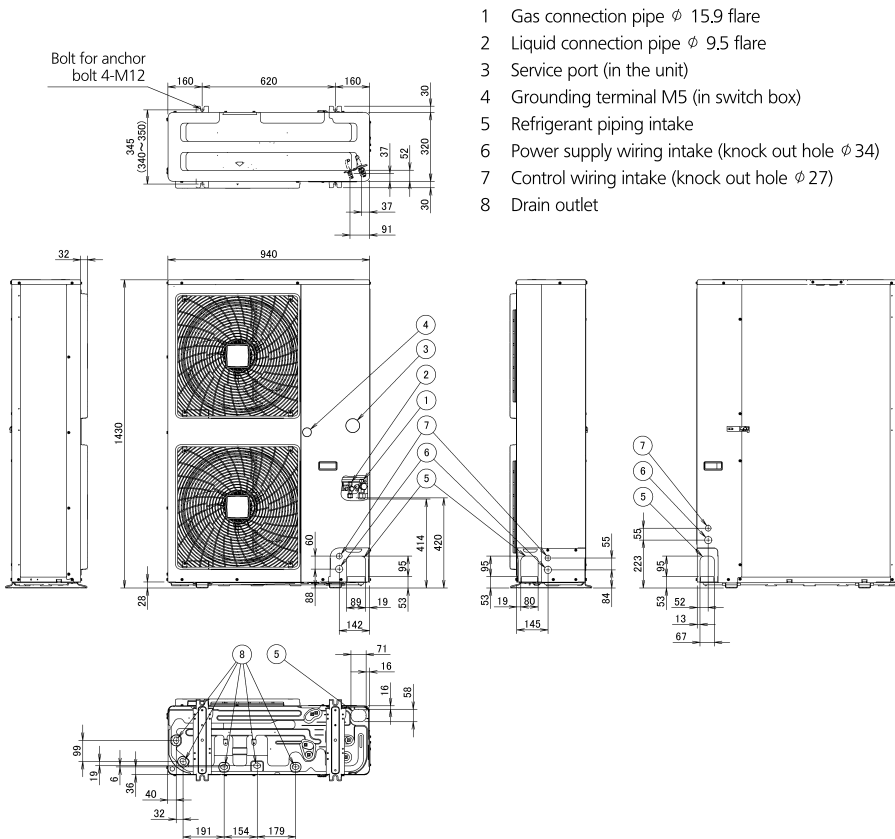
# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

### RZQSG100-125L8Y1



### RZQSG140LY1

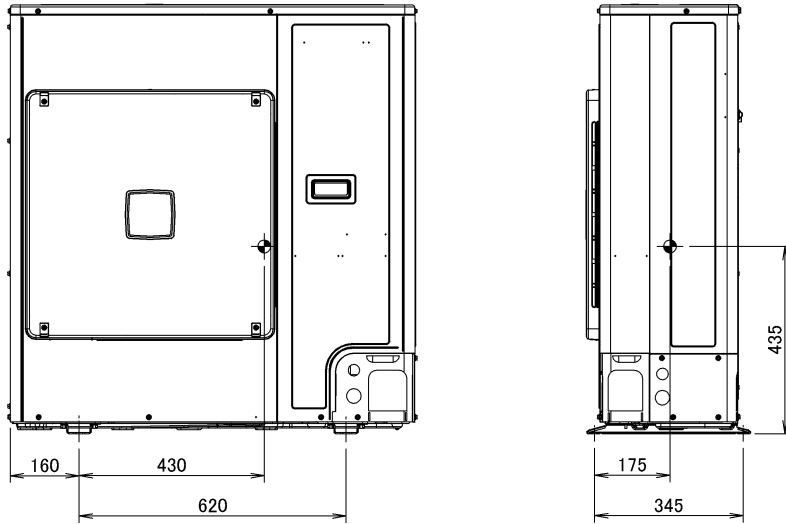


# 8 Centre of gravity

## 8 - 1 Centre of Gravity

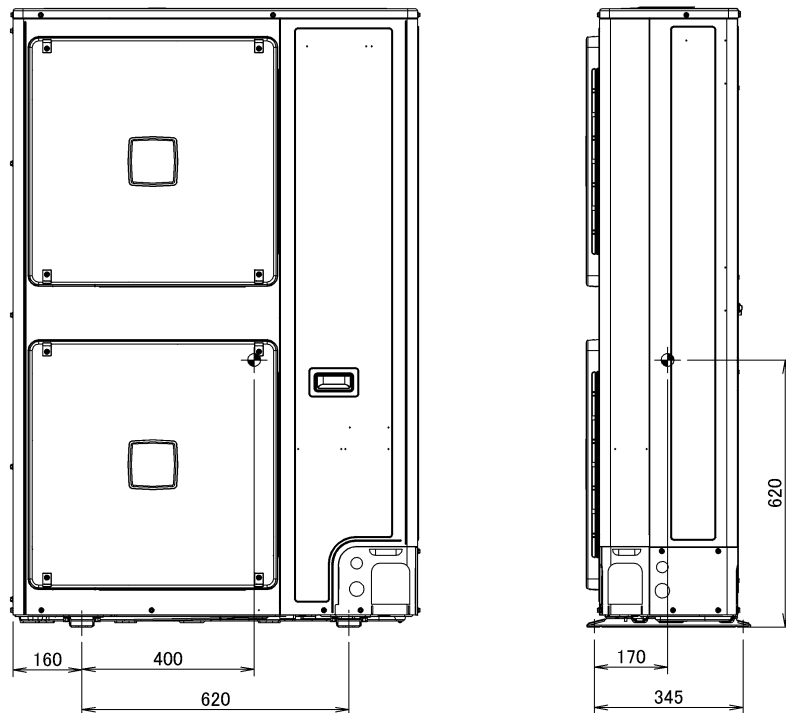
8

RZQSG100-125L8Y1



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RZQSG140LY1

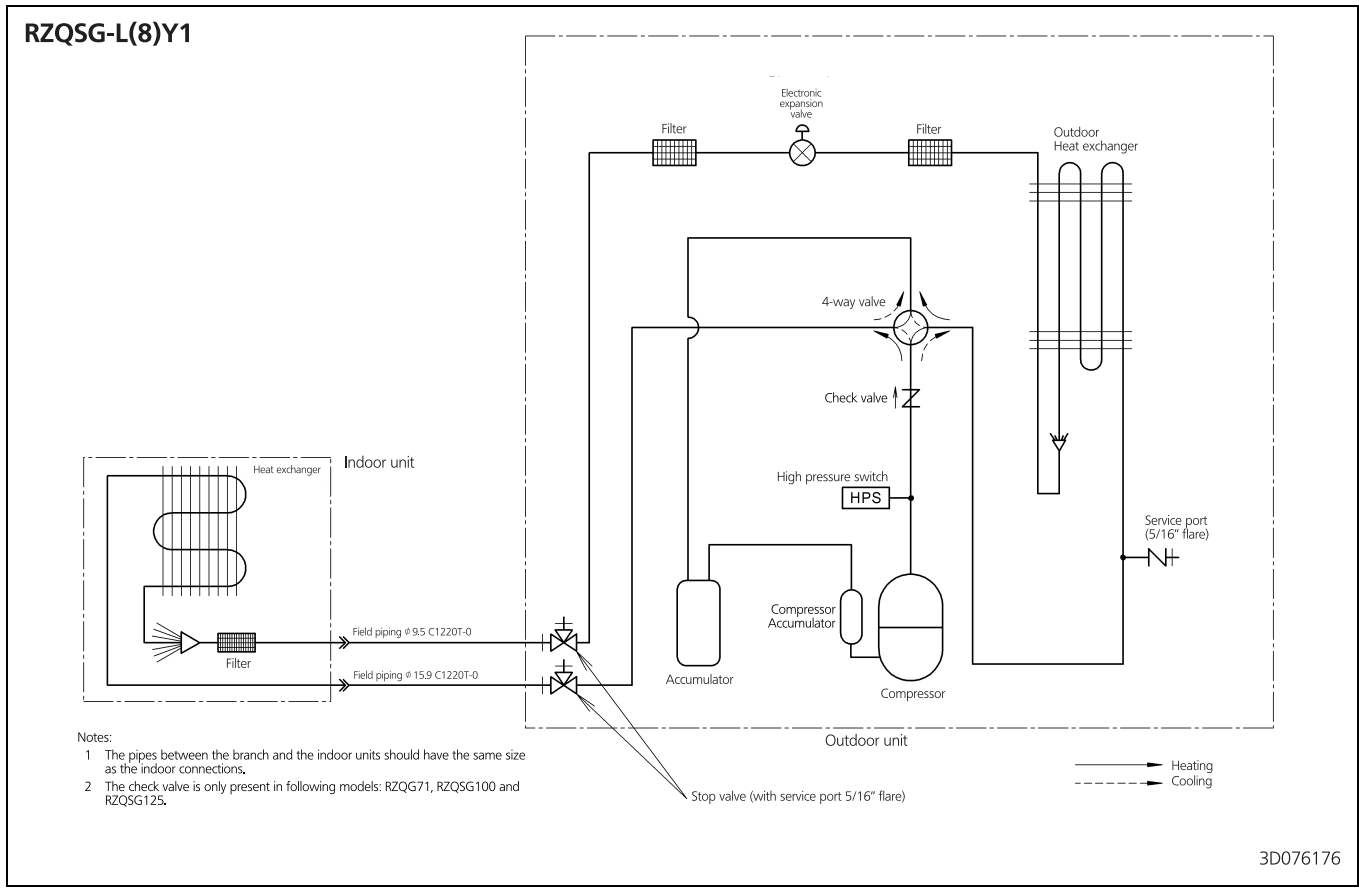


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# 9 Piping diagrams

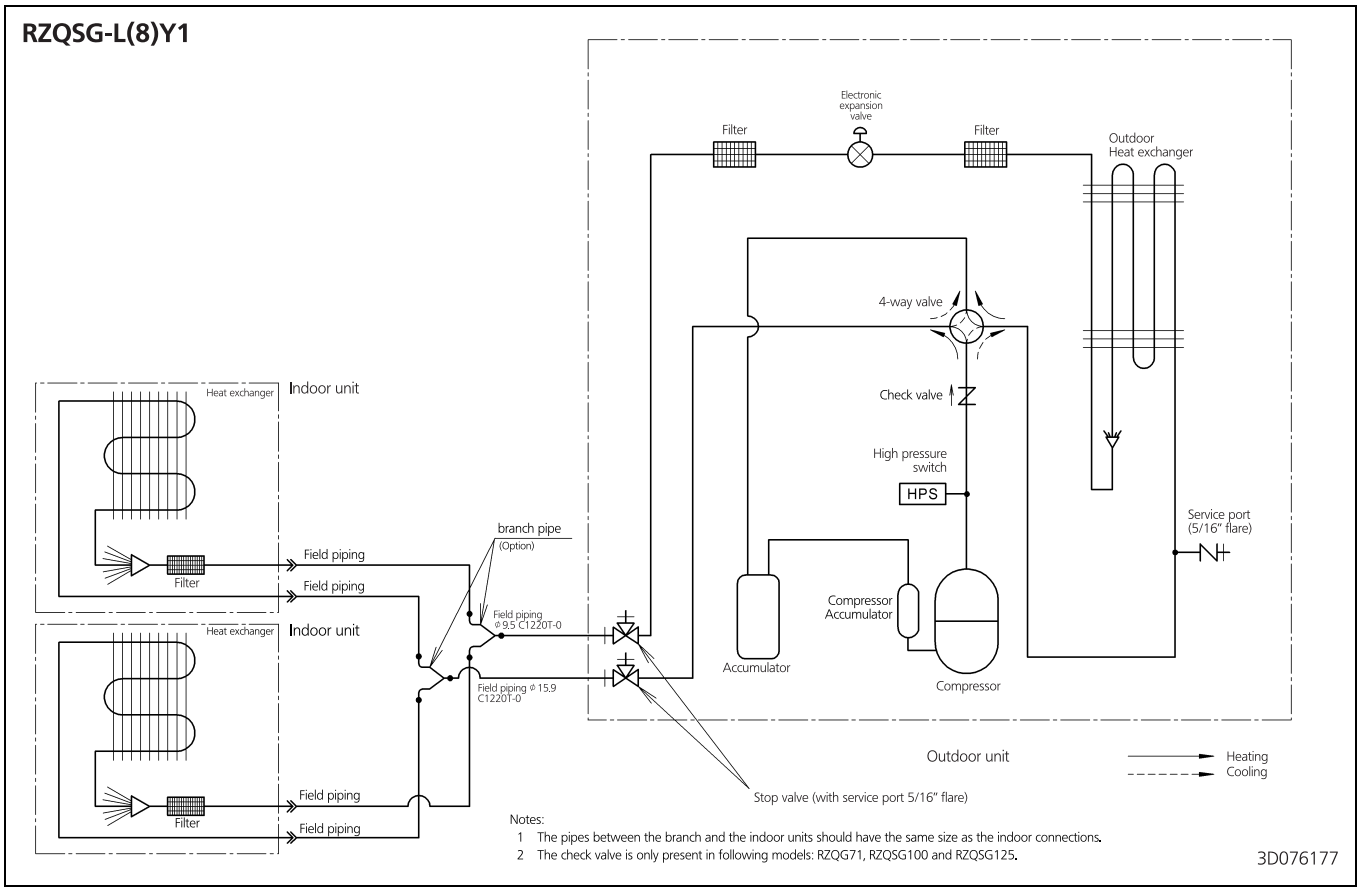
## 9 - 1 Piping Diagrams



# 9 Piping diagrams

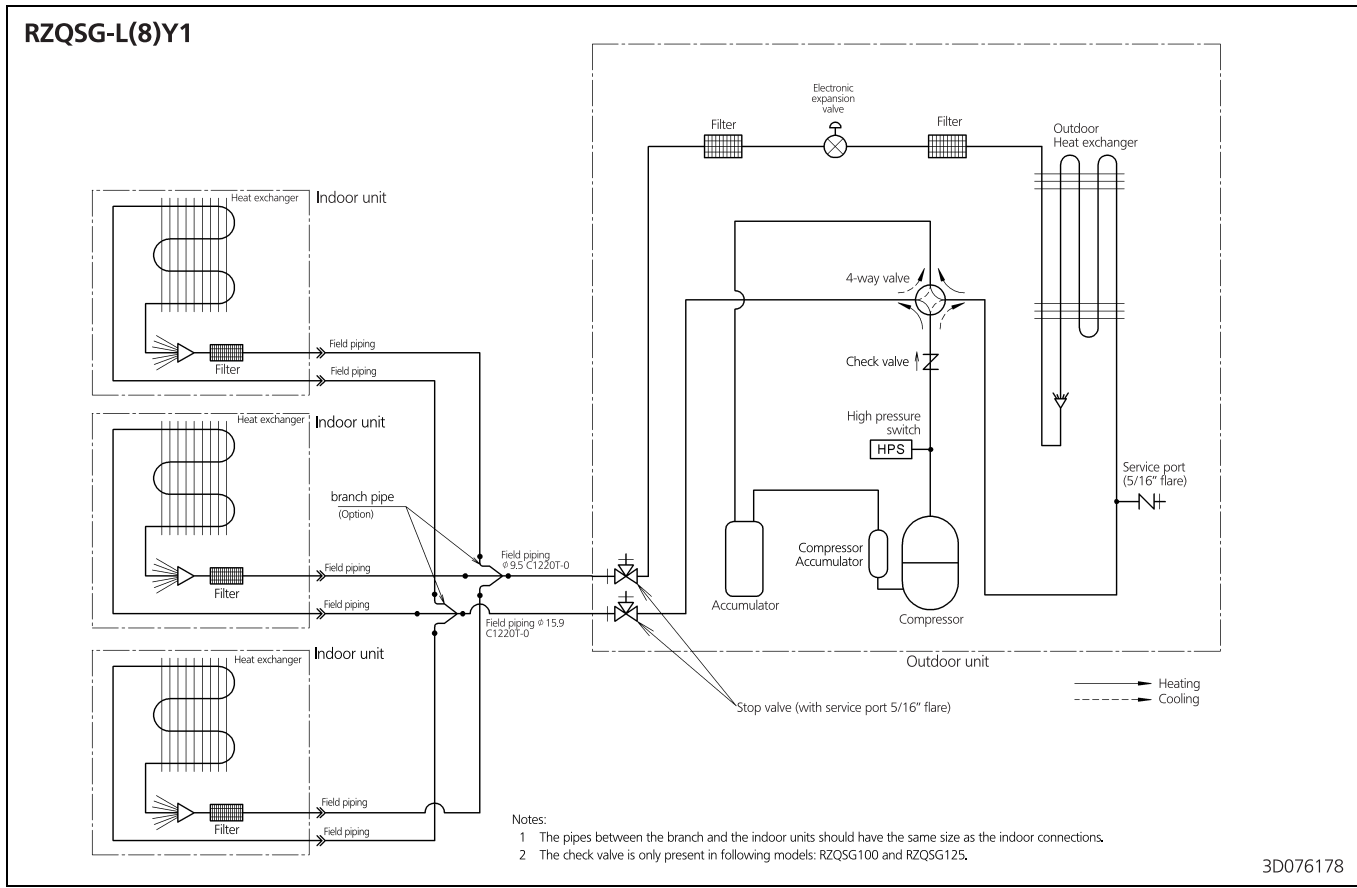
## 9 - 2 Piping Diagram Twin Application

9



# 9 Piping diagrams

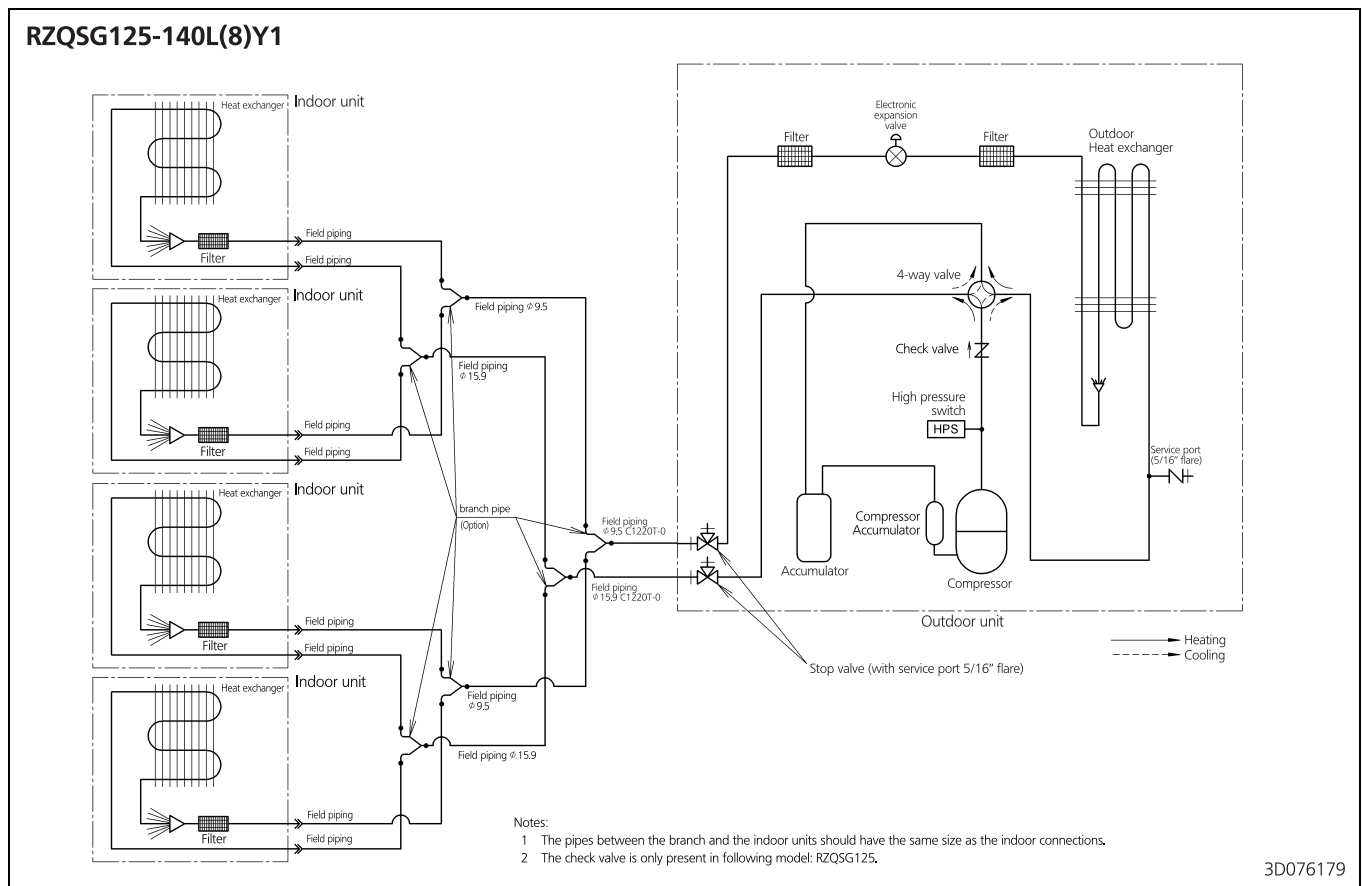
## 9 - 3 Piping Diagram Triple Application



# 9 Piping diagrams

## 9 - 4 Piping Diagram Double Twin Application

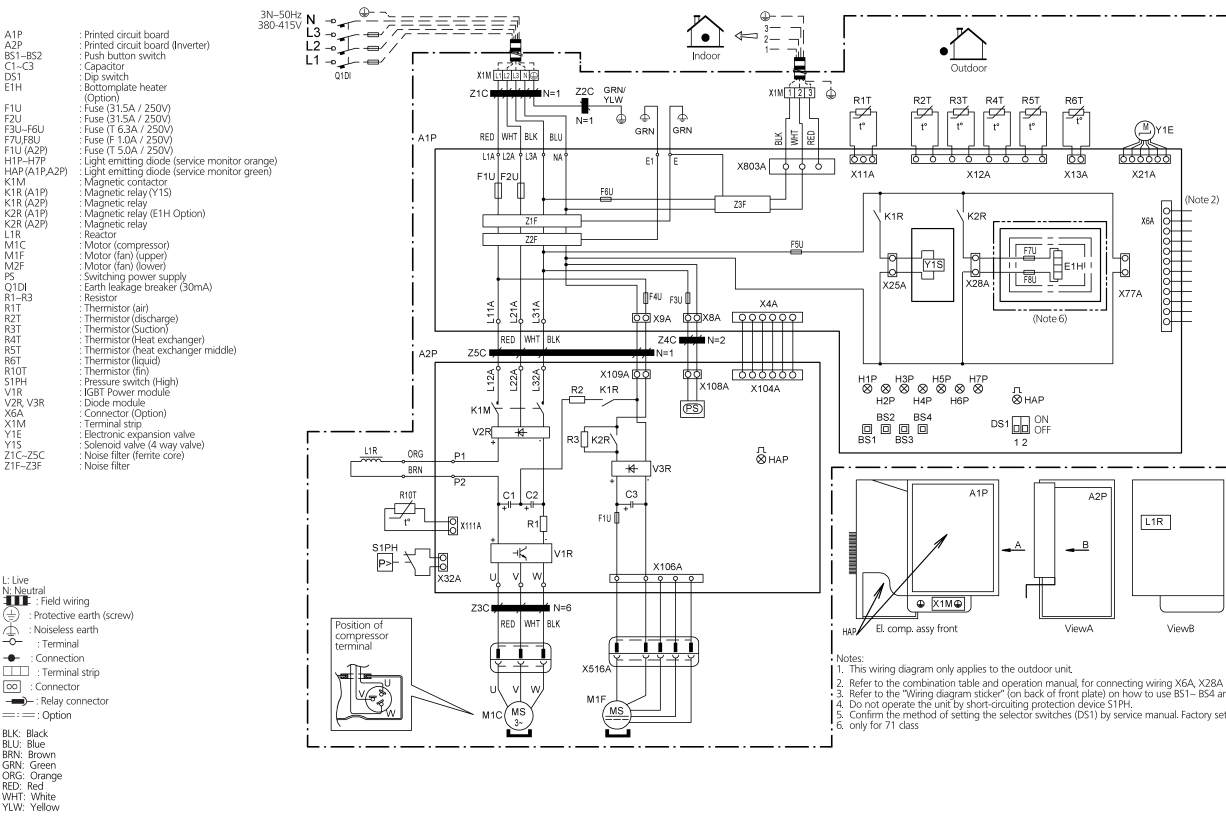
9



# 10 Wiring diagrams

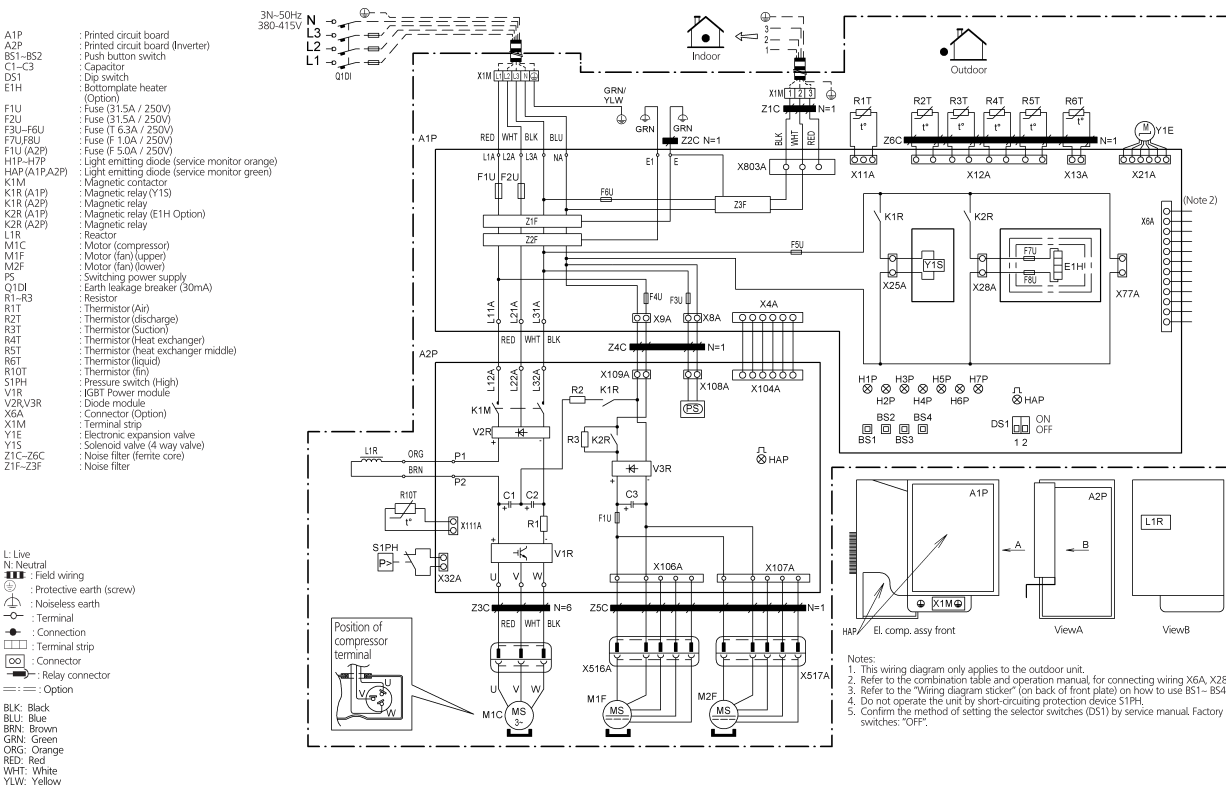
## 10 - 1 Wiring Diagrams - Three Phase

### RZQSG100-125L8Y1



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### RZQSG140LY1

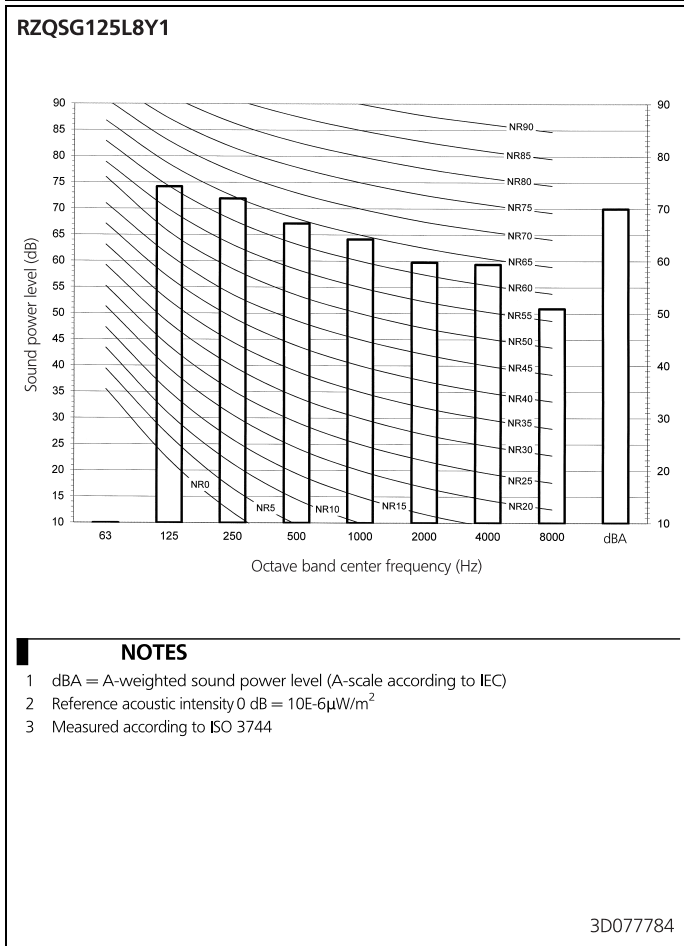
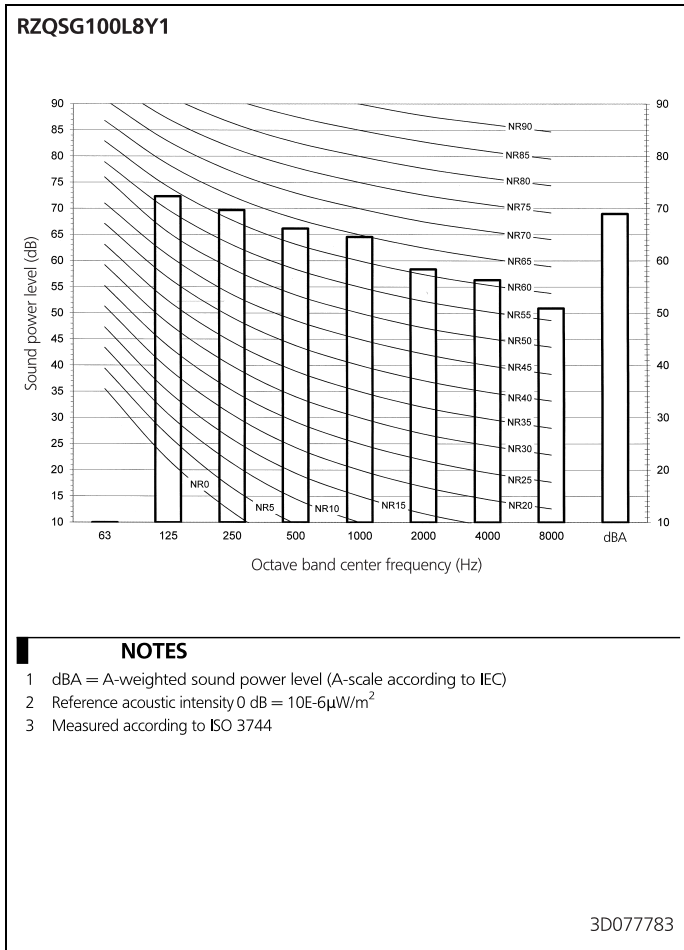


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# 11 Sound data

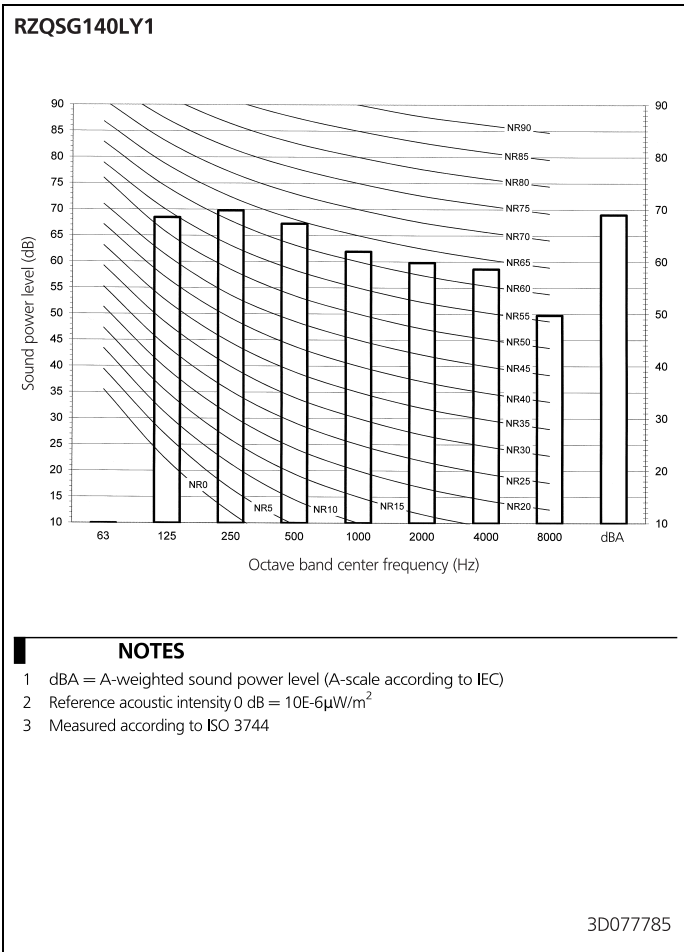
## 11 - 1 Sound Power Spectrum

11



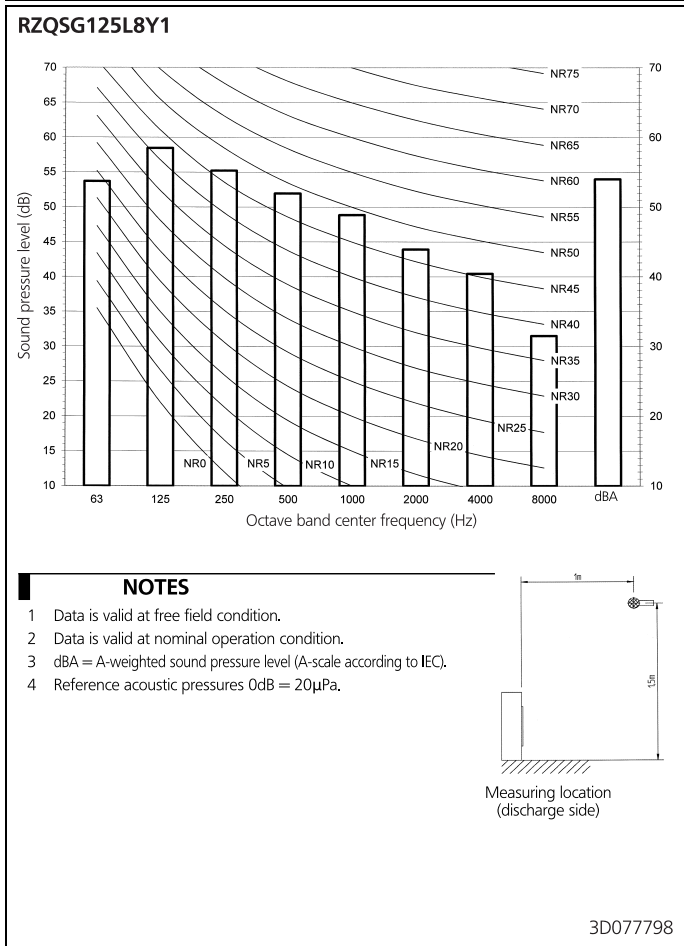
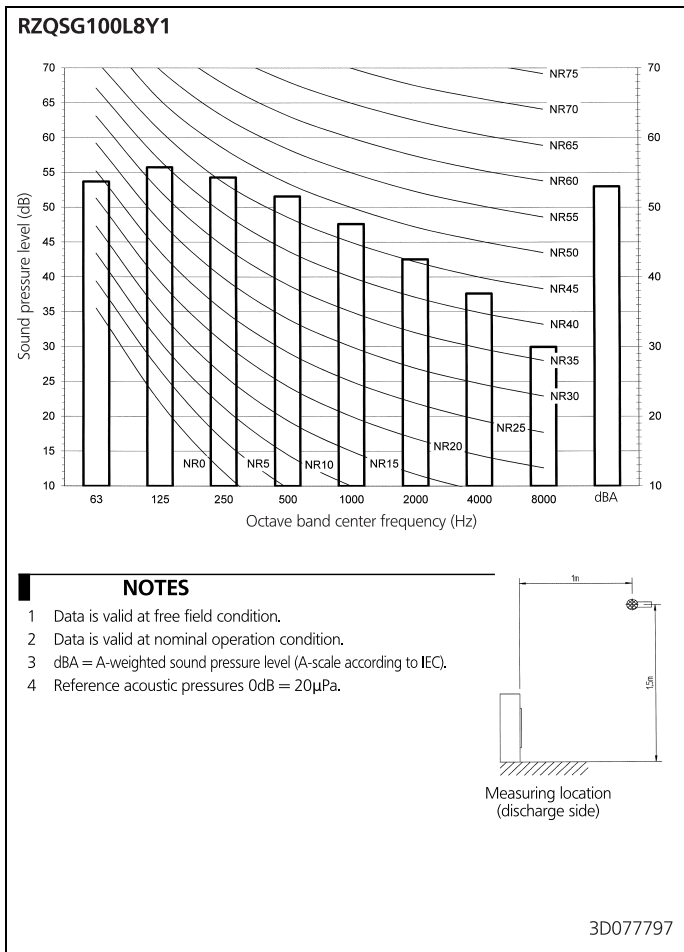
# 11 Sound data

## 11 - 1 Sound Power Spectrum



# 11 Sound data

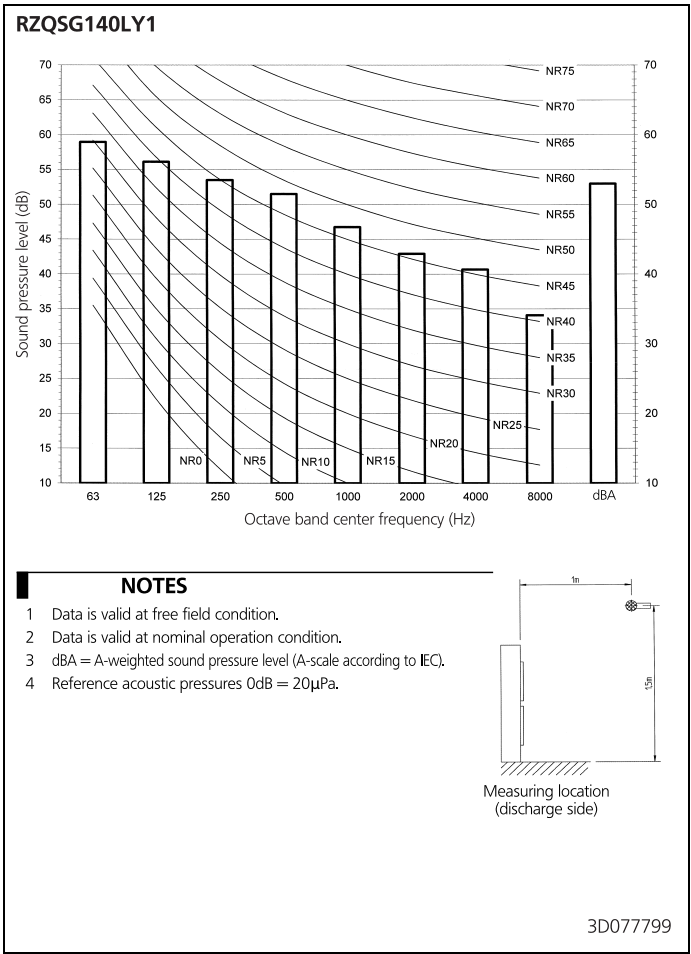
## 11 - 2 Sound Pressure Spectrum - Cooling





# 11 Sound data

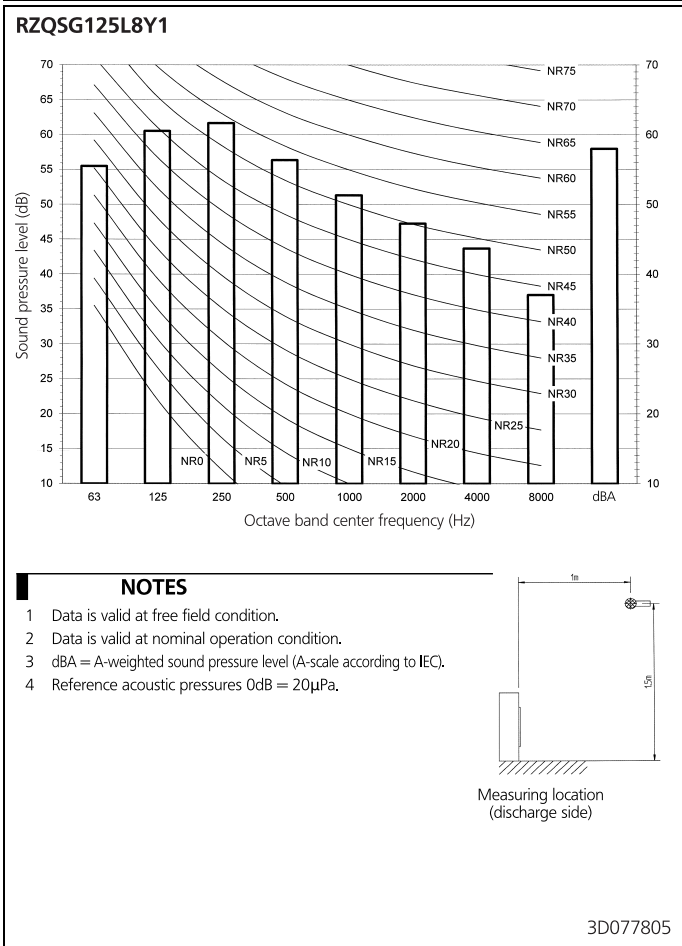
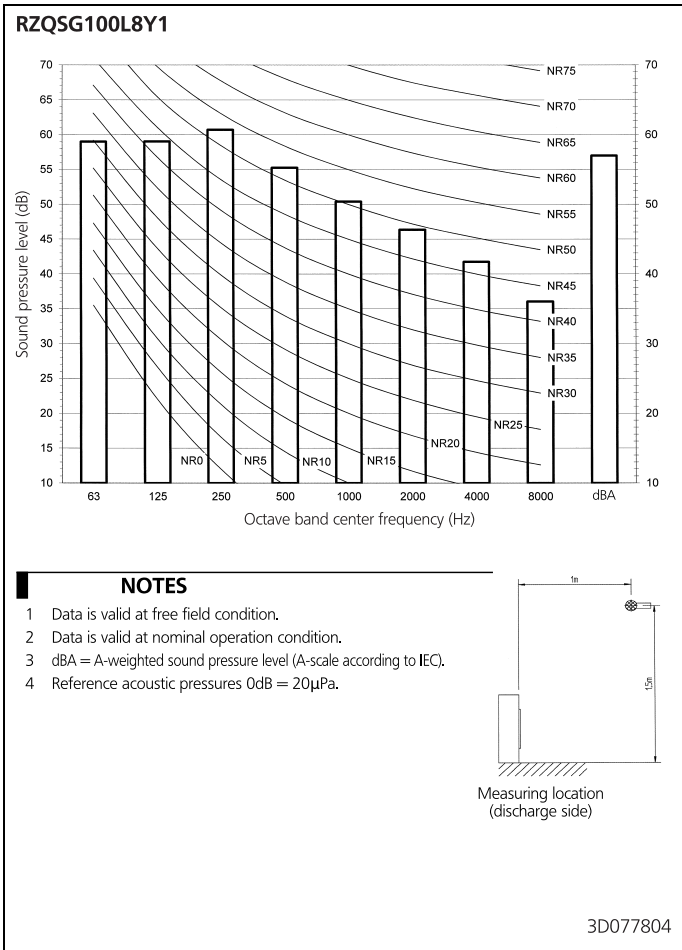
## 11 - 2 Sound Pressure Spectrum - Cooling



# 11 Sound data

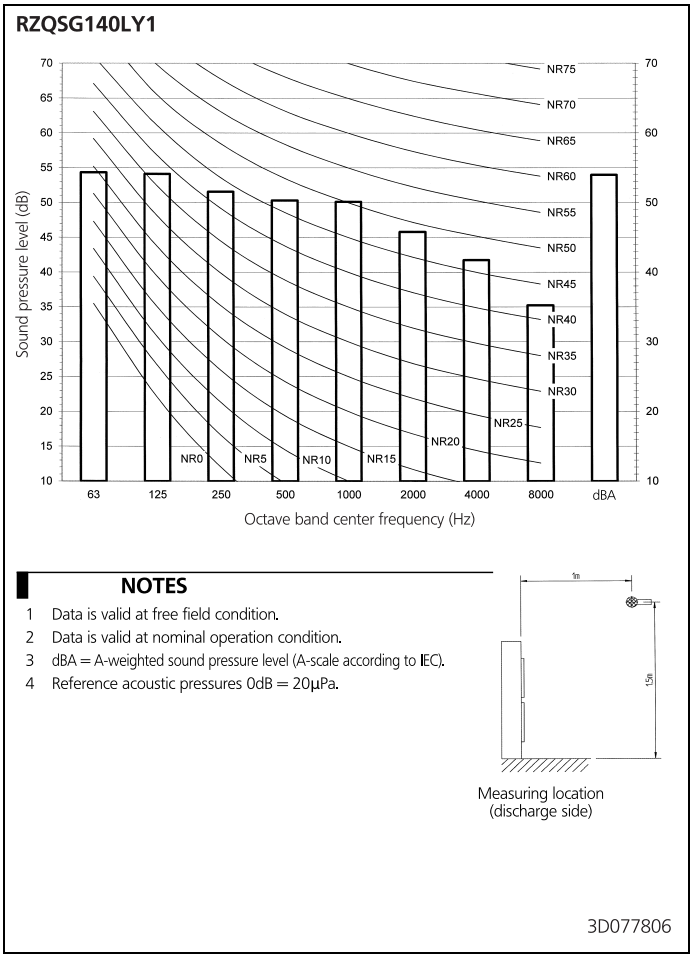
## 11 - 3 Sound Pressure Spectrum - Heating

11



# 11 Sound data

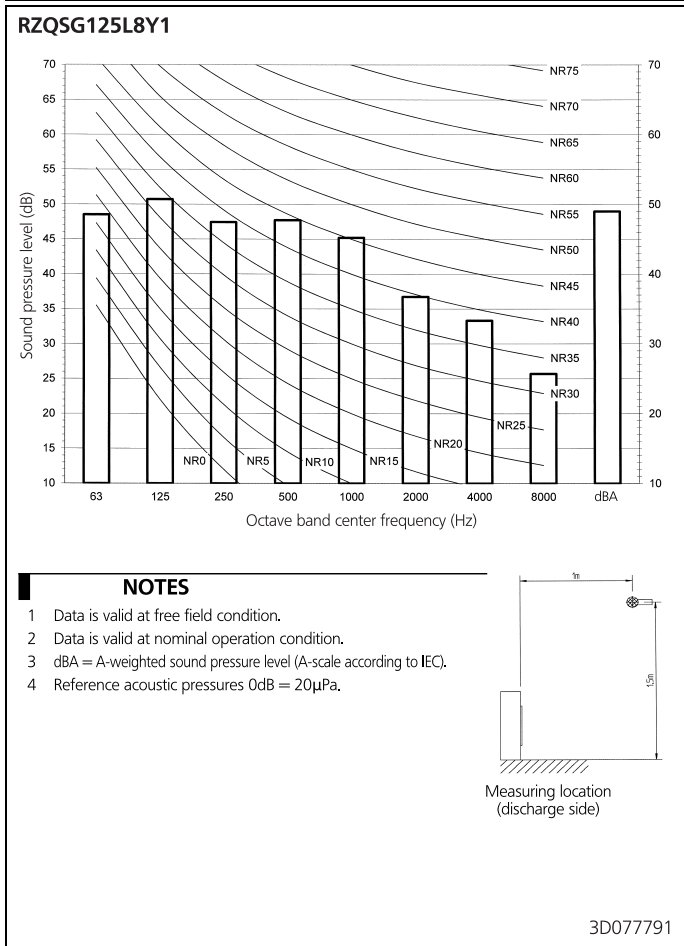
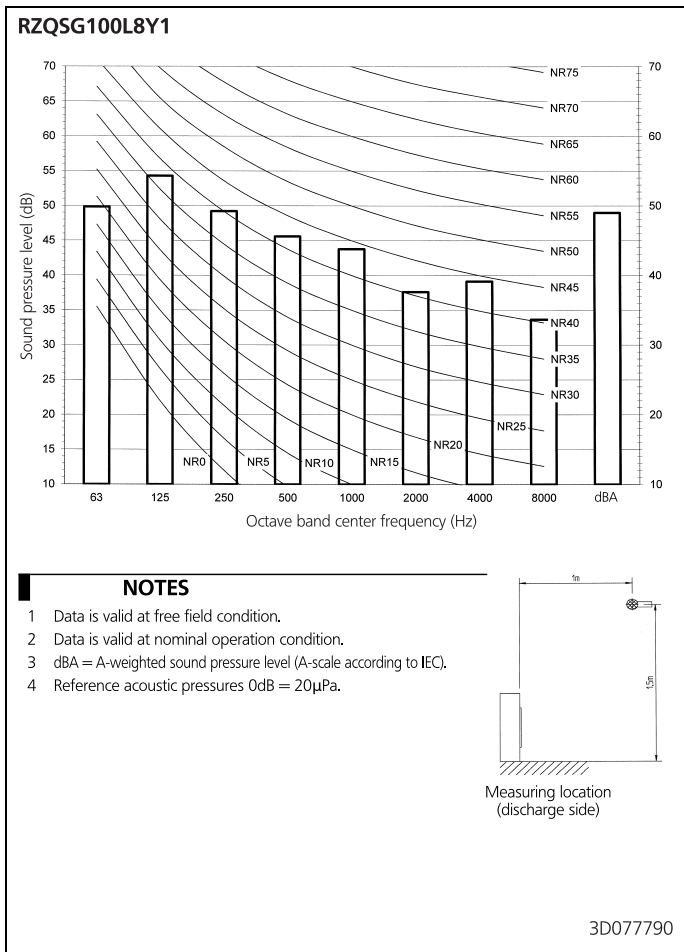
## 11 - 3 Sound Pressure Spectrum - Heating



# 11 Sound data

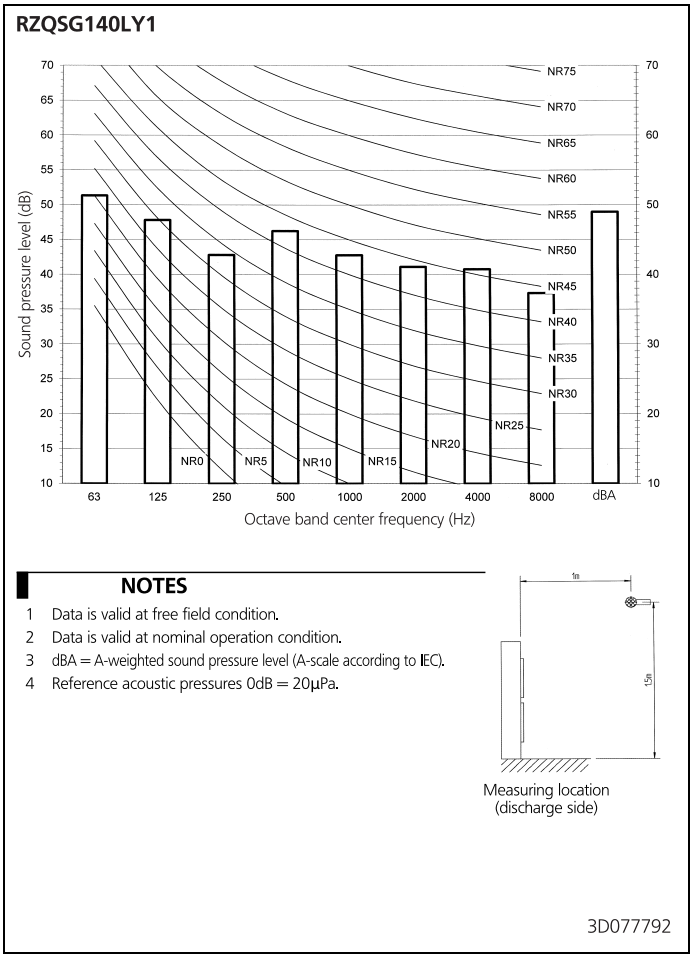
## 11 - 4 Sound Pressure Spectrum Quiet Mode

11



# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode



# 12 Installation

## 12 - 1 Installation Method

### RZQSG-L(8)Y1

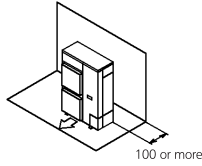
#### Installation service space

The measure of these values is "mm".

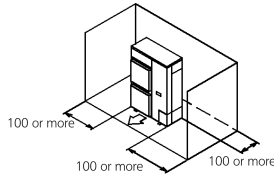
#### (A) When there are obstacles on suction sides.

##### • No obstacle above

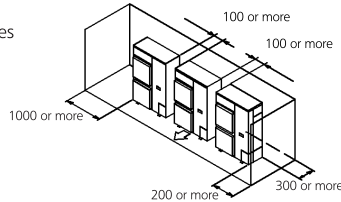
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

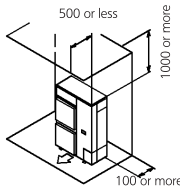


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides

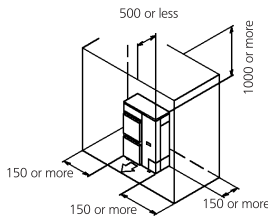


##### • Obstacle above, too.

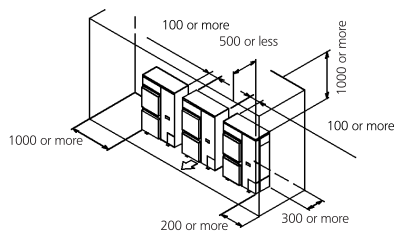
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



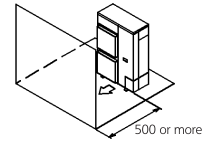
- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides



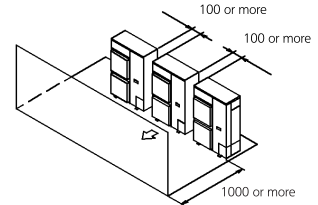
#### (B) When there are obstacles on discharge sides.

##### • No obstacle above

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

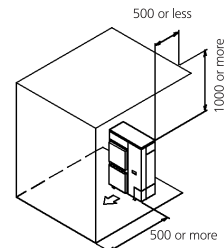


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side only

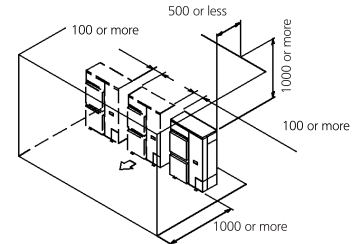


##### • Obstacle above, too

- ① Stand-alone installation
  - Obstacle on the discharge side only, too



- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side



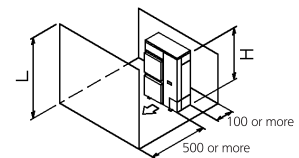
#### (C) When there are obstacles on both suction and discharge sides.:

##### Pattern 1

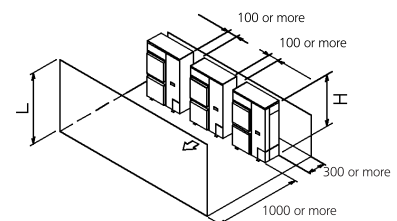
When the obstacles on the discharge side is higher than the unit. (L>H)  
(There is no limit for the height of obstructions on the suction side.)

##### • No obstacle above

- ① Stand-alone installation
  - No obstacle above



- ② Series installation (2 or more) (Note 1)
  - No obstacle above



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# 12 Installation

## 12 - 1 Installation Method

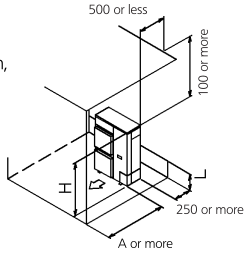
### RZQSG-L(8)Y1

● **Obstacle above, too**

- ① Stand-alone installation (Note 2)
- When there are obstacles on suction, discharge and top sides.

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

	L	A
$L \leq H$	$L \leq 1/2 H$	750 or more
	$1/2 H < L \leq H$	1000 or more
$L > H$	Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	



- ② Series installation (2 or more) (Note 1, 2)
- When there are obstacles on suction, discharge and top sides.

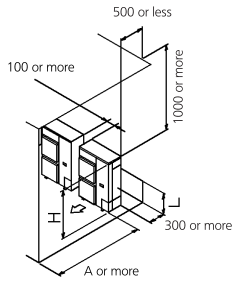
The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$	1000 or more
	$1/2 H < L \leq H$	1250 or more
$L > H$	Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	

Limit of series installation is 2 units.

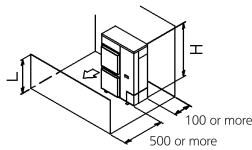
**Pattern 2**

When the obstacle on the discharge side is lower than the unit ( $L \leq H$ )  
(There is no limit for the height of obstructions on the suction side.)



● **No obstacle above**

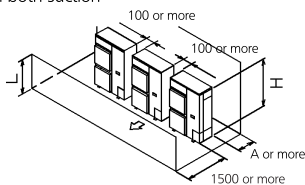
- ① Stand-alone installation
- No obstacle above



- ② Series installation (2 or more) (Note 1)
- When there are obstacles on both suction and discharge sides.

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

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

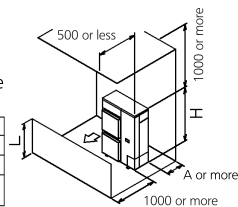


● **Obstacle above, too**

- ① Stand-alone installation (Note 2)
- When there are obstacles on suction, discharge and top sides.

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

	L	A
$L \leq H$	$L \leq 1/2 H$	100 or more
	$1/2 H < L \leq H$	200 or more
$L > H$	Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	

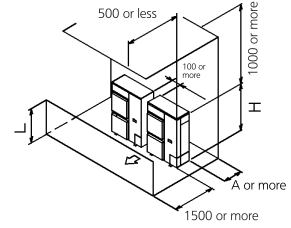


- ② Series installation (2 or more) (Note 1, 2)
- When there are obstacles on suction, discharge and top sides.

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

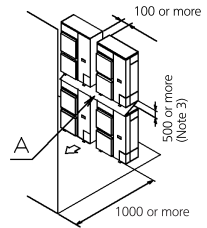
	L	A
$L \leq H$	$L \leq 1/2 H$	250 or more
	$1/2 H < L \leq H$	300 or more
$L > H$	Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	

Limit of series installation is 2 units.

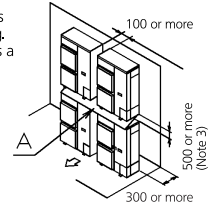


**(D) Double-decker installation**

- ① Obstacle on the discharge side. (Note 1)
- Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient height above the roof cover. This is to prevent the buildup of ice on the underside of the bottom plate.

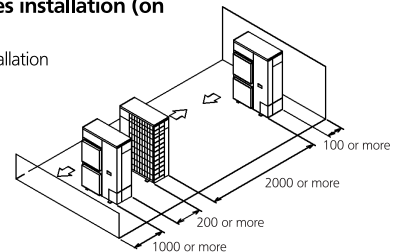


- ② Obstacle on the suction side. (Note 1)
- Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient height above the roof cover. This is to prevent the buildup of ice on the underside of the bottom plate.



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

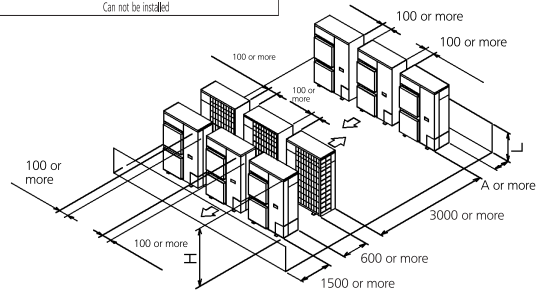
- ① One row of stand-alone installation



- ② Rows of series installation (2 or more)

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

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



**NOTES**

- 1 In case of the sideways's piping, make a 100mm gap between the unit above.
- 2 Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- 3 It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between the upper and lower outdoor units should be at least 100mm. (Close off the gap between the upper and lower units so there is no reintake of discharged air.)

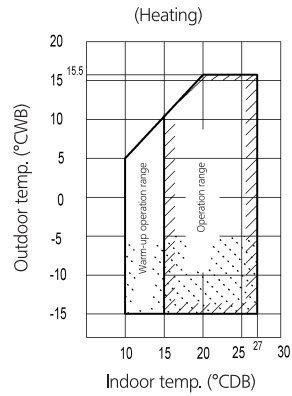
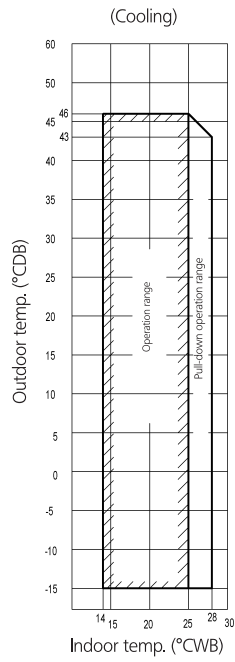
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# 13 Operation range

## 13 - 1 Operation Range

13

### RZQSG-L(8)Y1



Notes:

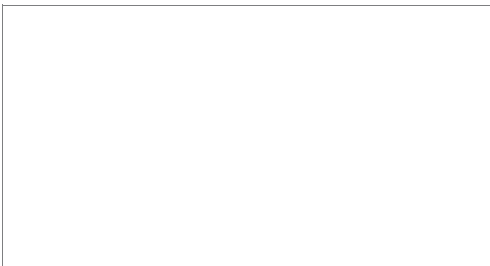
- 1 Depending on operation and installation conditions, the outdoor unit can change over to defrost operation (anti freeze-up).
- 2 To reduce the defrost operation (anti freeze-up) frequency it is recommended to install the outdoor unit in a location not exposed to wind.
- 3 In case of high humidity conditions (>92%) in this operation area, an RZQG model should be used instead of an RZQSG model. This to avoid freeze-up of the outdoor unit.

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