



Air Conditioners

# Technical Data

Outdoor units optimized for seasonal efficiency



EEDEN12-100

RZQSG-LY1

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## RZQSG-LY1

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# 1 Features

- Seasonal efficiency, optimized for all seasons.
- Seasonal efficiency gives an indication on how efficient an air conditioner operates over an entire heating or cooling season.
- Re-use of existing R-22 or R-407C technology
- The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- Maximum piping length up to 50m, minimum piping length has no limitation
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall

1



## 2 Specifications

2-1 Nominal Capacity And Nominal Input				FCQHG100F / RZQSG100LY1	FCQHG125F / RZQSG125LY1	FCQHG140F / RZQSG140LY1
Cooling capacity	Nom.		kW	9.5 (3)	12.0 (3)	13.4 (3)
Heating capacity	Nom.		kW	10.8 (4)	13.5 (4)	15.5 (4)
Power input	Cooling	Nom.	kW	2.57	3.71	4.17
	Heating	Nom.	kW	2.51	3.60	4.29
EER				3.70	3.23	3.21
COP				4.30	3.75	3.61
SEER				5.70 (6)	5.21 (6)	-
SCOP				3.91 (6)	3.81 (6)	-
Annual energy consumption			kWh	1,285	1,855	2,085
Energy label	Cooling			A		
	Heating			A		

2

2-1 Nominal Capacity And Nominal Input				FCQG100F / RZQSG100LY1	FCQG125F / RZQSG125LY1	FCQG140F / RZQSG140LY1
Cooling capacity	Nom.		kW	9.5 (3)	12.0 (3)	13.4 (3)
Heating capacity	Nom.		kW	10.8 (4)	13.5 (4)	15.5 (4)
Power input	Cooling	Nom.	kW	2.88	3.74	4.45
	Heating	Nom.	kW	3.05	3.96	4.54
EER				3.30	3.21	3.01
COP				3.54	3.41	
SEER				5.11 (6)		-
SCOP				3.80 (6)	3.81 (6)	-
Annual energy consumption			kWh	1,440	1,870	2,225
Energy label	Cooling			A		B
	Heating			A	B	

2-1 Nominal Capacity And Nominal Input				FAQ100C / RZQSG100LY1		
Cooling capacity	Nom.		kW	9.5 (3)		
Heating capacity	Nom.		kW	10.8 (4)		
Power input	Cooling	Nom.	kW	3.16		
	Heating	Nom.	kW	3.17		
EER				3.01		
COP				3.41		
SEER				4.61 (6)		
SCOP				3.81 (6)		
Annual energy consumption			kWh	1,580		
Energy label	Cooling			B		
	Heating			B		

2-1 Nominal Capacity And Nominal Input				FVQ100C / RZQSG100LY1	FVQ125C / RZQSG125LY1	FVQ140C / RZQSG140LY1
Cooling capacity	Nom.		kW	9.5 (3)	12.0 (3)	13.4 (3)
Heating capacity	Nom.		kW	10.8 (4)	13.5 (4)	15.5 (4)
Power input	Cooling	Nom.	kW	2.96	4.27	4.45
	Heating	Nom.	kW	2.99	3.96	4.54
EER				3.21	2.81	3.01
COP				3.61	3.41	
SEER				5.11 (6)	4.31 (6)	-
SCOP				3.80 (6)	3.81 (6)	-
Annual energy consumption			kWh	1,480	2,135	2,225
Energy label	Cooling			A		B
	Heating			A	B	

## 2 Specifications

2

2-1 Nominal Capacity And Nominal Input				FBQ100C8 / RZQSG100LY1	FBQ125C8 / RZQSG125LY1	FBQ140C8 / RZQSG140LY1
Cooling capacity	Nom.		kW	9.5 (3)	12.0 (3)	13.4 (3)
Heating capacity	Nom.		kW	10.8 (4)	13.5 (4)	15.5 (4)
Power input	Cooling	Nom.	kW	2.87	3.74	4.44
	Heating	Nom.	kW	2.96	3.85	4.54
EER				3.31	3.21	3.02
COP				3.65	3.51	3.41
SEER				5.11 (6)	4.35 (6)	-
SCOP				3.81 (6)		-
Annual energy consumption			kWh	1,435	1,870	2,220
Energy label	Cooling			A		B
	Heating			A	B	

2-1 Nominal Capacity And Nominal Input				FHQG100C / RZQSG100LY1	FHQG125C / RZQSG125LY1	FHQG140C / RZQSG140LY1
Cooling capacity	Nom.		kW	9.5 (3)	12.0 (3)	13.4 (3)
Heating capacity	Nom.		kW	10.8 (4)	13.5 (4)	15.5 (4)
Power input	Cooling	Nom.	kW	2.96	4.15	4.45
	Heating	Nom.	kW	2.99	3.73	4.54
EER				3.21	2.89	3.01
COP				3.61	3.62	3.41
SEER				5.11 (6)	4.61 (6)	-
SCOP				3.80 (6)	3.81 (6)	-
Annual energy consumption			kWh	1,480	2,075	2,225
Energy label	Cooling			A	C	B
	Heating			A		B

2-1 Nominal Capacity And Nominal Input				FDQ125C / RZQSG125LY1		
Cooling capacity	Nom.		kW	12.0 (3)		
Heating capacity	Nom.		kW	13.5 (4)		
Power input	Cooling	Nom.	kW	3.74		
	Heating	Nom.	kW	3.85		
EER				3.21		
COP				3.51		
SEER				4.35 (6)		
SCOP				3.81 (6)		
Annual energy consumption			kWh	1,870		
Energy label	Cooling			A		
	Heating			B		

### Notes

- (1) Annual energy consumption: based on average use of 500 running hours per year at full load (nominal conditions)
- (2) Energy label: scale from A (most efficient) to G (less efficient)
- (3) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m
- (4) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m
- (5) Annual energy consumption is according to Energy labeling directive 2002/31/EC
- (6) SEER and SCOP are according to EN 14825

## 2 Specifications

2-2 Technical Specifications					RZQSG100LY1	RZQSG125LY1	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			
Weight	Unit		kg	82		101		
	Packed unit		kg	94		114		
Heat exchanger	Length		mm		904			
	Rows	Quantity		2				
	Fin pitch		mm		1.4			
	Passes	Quantity		12		16		
	Face area		m <sup>2</sup>		0.87		1.273	
	Stages	Quantity		44		64		
	Empty tubeplate hole	Quantity		0				
	Tube type		ø7 Hi-XSL					
	Fin	Type		WF fin				
		Treatment		Anti-corrosion treatment (PE)				
	Fan	Type				Propeller fan		
Discharge direction				Horizontal				
Quantity				1		2		
Air flow rate		Cooling	Nom.	m <sup>3</sup> /min		76		83
			Super low	m <sup>3</sup> /min		-		
		Heating	Nom.	m <sup>3</sup> /min		83		62
			Super low	m <sup>3</sup> /min		-		
Fan motor		Quantity				1		2
	Model				Brushless DC motor			
Output		W		200		94		
Drive				Direct drive				
Speed	Steps				8			
	Cooling	Nom.	rpm		850		700	
		Super low	rpm		-			
	Heating	Nom.	rpm		920		540	
Super low		rpm		-				
Sound power level	Cooling	Nom.	dBA		69		70	69
Sound pressure level	Cooling	Nom.	dBA		53		54	53
	Heating	Nom.	dBA		57		58	54
	Night quiet mode	Level 1	dBA		49			
Compressor	Quantity				1			
	Model				2YC63PXD		2YC90CXD	
	Type				Hermetically sealed swing compressor			
	Output		W		2,080		2,620	3,620
	Starting method				Inverter driven			
Operation range	Cooling	Ambient	Min.	°CDB		-5.0		
			Max.	°CDB		46.0		
	Heating	Ambient	Min.	°CWB		-15.0		
			Max.	°CWB		15.5		
Refrigerant	Type				R-410A			
	Charge		kg		2.9		4.0	
	Control				Expansion valve (electronic type)			
	Circuits	Quantity		1				

## 2 Specifications

2-2 Technical Specifications				RZQSG100LY1	RZQSG125LY1	RZQSG140LY1	
Refrigerant oil	Type			FVC50K			
	Charged volume		l	0.9		1.35	
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	Equiva- lent	m	70		
			Charge- less	m	30		
Additional refrigerant charge			kg/m	See installation manual 4P302555-1			
Level difference	IU - OU	Max.	m	30.0			
	IU - IU	Max.	m	0.5			
Heat insulation				Both liquid and gas pipes			
Defrost method				Pressure equalising			
Defrost control				Sensor for outdoor heat exchanger temperature			
Safety devices	Item	01		High pressure switch			
		02		Fan motor thermal protection			
		03		Fuse			

2-3 Electrical Specifications				RZQSG100LY1	RZQSG125LY1	RZQSG140LY1
Power supply	Name			Y1		
	Phase			3N~		
	Frequency		Hz	50		
	Voltage		V	380-415		
	Voltage range	Min.	%	10		
		Max.	%	10		
Current	Zmax	List	Complies to EN61000-3-11			
	Recommended fuses		A	20		25
Wiring connections	For power supply	Remark	See installation manual 4P302555-1			
	For connection with indoor	Remark	See installation manual 4P302555-1			
Power supply intake				Outdoor unit only		

### Notes

- (1) PED: assembly = category I : excluded from scope of PED due to article 1, item 3.6 of 97/23/EC
- (2) See separate drawing for electrical data
- (3) 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 system with input current  $> 16A$  and  $\leq 75A$  per phase
- (4) Short-circuit power
- (5) See separate drawings for electrical data
- (6) European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current larger than 16A and  $\leq 75A$  per phase.
- (7) Related to 3D076918

### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG100LY1

Indoor	Outdoor	Phase-Hz Power supply	Voltage range	MCA	TOCA	MFA	Comp		OFM		IFM	
							MSC	RLA	kW	FLA	kW	FLA
FCQG100EVEB	RZQSG100L7Y1B	3N-50Hz 380-415V	Min. 342V Max. 456V	14.5	—	20	—	11.4	0.2	0.6	0.106	1.0
FCQHG100FVEB	RZQSG100L7Y1B			14.8	—	20	—	11.4	0.2	0.6	0.221	1.3
FCQG35FVEB	x3 RZQSG100L7Y1B			14.3	—	20	—	11.4	0.2	0.6	0.044x3	0.3x3
FCQG50FVEB	x2 RZQSG100L7Y1B			14.0	—	20	—	11.4	0.2	0.6	0.039x2	0.3x2
FCQG100FVEB	RZQSG100L7Y1B			14.1	—	20	—	11.4	0.2	0.6	0.117	0.7
FFQ35B9V1B	x3 RZQSG100L7Y1B			14.7	—	20	—	11.4	0.2	0.6	0.055x3	0.4x3
FFQ50B9V1B	x2 RZQSG100L7Y1B			15.0	—	20	—	11.4	0.2	0.6	0.055x2	0.7x2
FBQ35C8VEB	x3 RZQSG100L7Y1B			17.7	—	20	—	11.4	0.2	0.6	0.140x3	1.2x3
FBQ50C8VEB	x2 RZQSG100L7Y1B			16.2	—	20	—	11.4	0.2	0.6	0.140x2	1.2x2
FBQ100C8VEB	RZQSG100L7Y1B			15.2	—	20	—	11.4	0.2	0.6	0.350	1.6
FHQ35B9V1B	x3 RZQSG100L7Y1B			15.5	—	20	—	11.4	0.2	0.6	0.062x3	0.6x3
FHQ50B9V1B	x2 RZQSG100L7Y1B			14.7	—	20	—	11.4	0.2	0.6	0.062x2	0.6x2
FHQ100C8VEB	RZQSG100L7Y1B			14.7	—	20	—	11.4	0.2	0.6	0.150	1.2
FAQ100C8VEB	RZQSG100L7Y1B			13.7	—	20	—	11.4	0.2	0.6	0.064	0.4
FVQ100C8VEB	RZQSG100L7Y1B			14.7	—	20	—	11.4	0.2	0.6	0.238	1.2

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#### 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)



### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG125-140LY1

Indoor	Outdoor	Phase-Hz Power supply	Voltage range	MCA	TOCA	MFA	Comp		OFM		IFM	
							MSC	RLA	kW	FLA	kW	FLA
FCQG125EVEB	RZQSG125LY1B	3N-50Hz 380-415V	Min. 342V Max. 456V	14.6	—	20	—	11.4	0.2	0.6	0.106	1.1
FCQHG125FVEB	RZQSG125LY1B			15.0	—	20	—	11.4	0.2	0.6	0.244	1.4
FCQG35FVEB	x4 RZQSG125LY1B			14.7	—	20	—	11.4	0.2	0.6	0.044x4	0.3x4
FCQG50FVEB	x3 RZQSG125LY1B			14.3	—	20	—	11.4	0.2	0.6	0.039x3	0.3x3
FCQG60FVEB	x2 RZQSG125LY1B			14.0	—	20	—	11.4	0.2	0.6	0.044x2	0.3x2
FCQG125FVEB	RZQSG125LY1B			14.5	—	20	—	11.4	0.2	0.6	0.168	1.0
FFQ35B9V1B	x4 RZQSG125LY1B			15.2	—	20	—	11.4	0.2	0.6	0.055x4	0.4x4
FFQ50B9V1B	x3 RZQSG125LY1B			15.8	—	20	—	11.4	0.2	0.6	0.055x3	0.7x3
FFQ60B9V1B	x2 RZQSG125LY1B			15.0	—	20	—	11.4	0.2	0.6	0.055x2	0.7x2
FBQ35C8VEB	x4 RZQSG125LY1B			19.2	—	20	—	11.4	0.2	0.6	0.140x4	1.2x4
FBQ50C8VEB	x3 RZQSG125LY1B			17.7	—	20	—	11.4	0.2	0.6	0.140x3	1.2x3
FBQ60C8VEB	x2 RZQSG125LY1B			16.0	—	20	—	11.4	0.2	0.6	0.350x2	1.1x2
FBQ125C8VEB	RZQSG125LY1B			15.8	—	20	—	11.4	0.2	0.6	0.350	2.1
FHQ35BWV1B	x4 RZQSG125LY1B			16.2	—	20	—	11.4	0.2	0.6	0.062x4	0.6x4
FHQ50BWV1B	x3 RZQSG125LY1B			15.5	—	20	—	11.4	0.2	0.6	0.062x3	0.6x3
FHQ60BWV1B	x2 RZQSG125LY1B			14.7	—	20	—	11.4	0.2	0.6	0.062x2	0.6x2
FHQG125CVEB	RZQSG125LY1B			15.2	—	20	—	11.4	0.2	0.6	0.150	1.6
FDQ125C7VEB	RZQSG125LY1B			15.8	—	20	—	11.4	0.2	0.6	0.350	2.1
FVQ125CVEB	RZQSG125LY1B			14.7	—	20	—	11.4	0.2	0.6	0.238	1.2
FCQG71EVEB	x2 RZQSG140LY1B			3N-50Hz 380-415V	Min. 342V Max. 456V	17.5	—	20	—	14.2	0.094+0.094	0.4+0.4
FCQG140EVEB	RZQSG140LY1B	17.9	—			20	—	14.2	0.094+0.094	0.4+0.4	0.106	1.1
FCQHG71FVEB	x2 RZQSG140LY1B	17.8	—			20	—	14.2	0.094+0.094	0.4+0.4	0.091x2	0.5x2
FCQHG140FVEB	RZQSG140LY1B	18.3	—			20	—	14.2	0.094+0.094	0.4+0.4	0.244	1.4
FCQG35FVEB	x4 RZQSG140LY1B	18.0	—			20	—	14.2	0.094+0.094	0.4+0.4	0.044x4	0.3x4
FCQG50FVEB	x3 RZQSG140LY1B	17.6	—			20	—	14.2	0.094+0.094	0.4+0.4	0.039x3	0.3x3
FCQG71FVEB	x2 RZQSG140LY1B	17.5	—			20	—	14.2	0.094+0.094	0.4+0.4	0.054x2	0.4x2
FCQG140FVEB	RZQSG140LY1B	17.8	—			20	—	14.2	0.094+0.094	0.4+0.4	0.168	1.0
FFQ35B9V1B	x4 RZQSG140LY1B	18.5	—			20	—	14.2	0.094+0.094	0.4+0.4	0.055x4	0.4x4
FFQ50B9V1B	x3 RZQSG140LY1B	19.1	—			20	—	14.2	0.094+0.094	0.4+0.4	0.055x3	0.7x3
FBQ35C8VEB	x4 RZQSG140LY1B	22.5	—			25	—	14.2	0.094+0.094	0.4+0.4	0.140x4	1.2x4
FBQ50C8VEB	x3 RZQSG140LY1B	21.0	—			25	—	14.2	0.094+0.094	0.4+0.4	0.140x3	1.2x3
FBQ71C8VEB	x2 RZQSG140LY1B	19.3	—			20	—	14.2	0.094+0.094	0.4+0.4	0.350x2	1.1x2
FBQ140C8VEB	RZQSG140LY1B	19.1	—			20	—	14.2	0.094+0.094	0.4+0.4	0.350	2.1
FHQ35BWV1B	x4 RZQSG140LY1B	19.5	—			20	—	14.2	0.094+0.094	0.4+0.4	0.062x4	0.6x4
FHQ50BWV1B	x3 RZQSG140LY1B	18.8	—			20	—	14.2	0.094+0.094	0.4+0.4	0.062x3	0.6x3
FHQG71CVEB	x2 RZQSG140LY1B	18.5	—			20	—	14.2	0.094+0.094	0.4+0.4	0.091x2	0.8x2
FHQG140CVEB	RZQSG140LY1B	18.8	—			20	—	14.2	0.094+0.094	0.4+0.4	0.150	1.8
FAQ71CVEB	x2 RZQSG140LY1B	17.5	—			20	—	14.2	0.094+0.094	0.4+0.4	0.048x2	0.4x2
FVQ140CVEB	RZQSG140LY1B	18.3	—			20	—	14.2	0.094+0.094	0.4+0.4	0.276	1.4

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#### 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

- 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
- TOCA means the total value of each OC set.
- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage variation between phases is 2%.
- MCA represents maximum input current. MFA represents capacity which may accept MCA. (next lower standard fuse rating, min.15A)
- Select wire size based on the larger value of MCA or TOCA.
- MFA is used to select the circuit breaker and the ground fault circuit interrupter. (earth leakage circuit breaker)

# 4 Options

## 4 - 1 Options

### RZQSG-LY1

Available options for RZQSG models:

Name of option		Kit name			
		RZQSG71L2V1B	RZQSG100L7V1B RZQSG100L7Y1B	RZQSG125L7V1B RZQSG125L7Y1B	RZQSG140L7V1B RZQSG140L7Y1B
Bottom plate heater		-			
Refrigerant branch piping	Twin	KHRQ22M20TA (KHRQ58T); See note 1			
	Triple	-	KHRQ127H (KHRQ58H); See note 1		
	Double twin	-	-	KHRQ22M20TA (KHRQ58T); See note 1	
Demand adapter kit		KRP58M51			

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### NOTES

- 1 For RZQSG71-140L7Y1B in combination with FCQG35-71F or FCQH71F use the refrigerant branch piping mentioned between brackets.

# 5 Combination table

## 5 - 1 Combination Table

5

### RZQSG-LY1

Multi Combination Possibilities:

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

(\*) Max capacity depends on outdoor unit

SKY-AIR	Hi cassette				Thin cassette				2x2 cassette		Duct (medium ESP)				Ceiling suspended				4-way ceiling		Wall mounted		High static		Floor standing												
	FCQHG71FVEB	FCQHG100FVEB	FCQHG125FVEB	FCQHG140FVEB	FCQGS35FVEB	FCQGS50FVEB	FCQGS71FVEB	FCQGS100FVEB	FCQGS125FVEB	FCQGS140FVEB	FCQ35889V1B	FCQ50889V1B	FCQ60889V1B	FCQ80889V1B	FCQ100889V1B	FCQ125889V1B	FCQ140889V1B	FHQ35889V1BB	FHQ50889V1BB	FHQ60889V1BB	FHQ71889V1BB	FHQ100889V1BB	FHQ125889V1BB	FHQ140889V1BB	FUC100889V1B	FUC125889V1B	FUC140889V1B	FAQ71C1VEB	FAQ100C1VEB	FQO125C7VEB	FVQ71C1VEB	FVQ100C1VEB	FVQ125C1VEB	FVQ140C1VEB			
RZQSG71L2V1B	P				2					P							2																				
RZQSG100L7V1B		P				3	2				P						3	2																			
RZQSG125L7V1B			P		4	3	2					P					4	3	2																		
RZQSG140L7V1B				P	4	3		2					P				4	3		2																	

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### NOTES

- Individual indoor capacities are not given because the combinations are for simultaneous operation (=indoor units installed in same room).
- When different indoor models are used in combination, designate the remote controller that is equipped with the most functions as the main unit.
- See the option list for the selection of the refnet kits that are necessary to install the combinations:  
 Twin: KHRQ22M20TA or KHRQ58T  
 Triple: KHRQ127H or KHRQ58H  
 Double twin: KHRQ22M20TA or KHRQ58T

# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

**RZQSG100LY1**

**Cooling**

**Cooling**

Indoor		Outdoor temperature (°CDB)											
		25			30			35			40		
°CWB	°CDB	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI
16.0	22	11.2	7.61	1.01	10.8	7.44	1.11	10.5	7.29	1.22	10.1	7.09	1.32
18.0	25	11.8	7.59	1.01	11.4	7.49	1.12	11.0	7.27	1.23	10.5	7.09	1.33
19.0	27	12.0	7.57	1.02	11.6	7.44	1.12	11.2	7.26	1.23	10.8	7.04	1.33
19.5	27	12.1	7.59	1.02	11.7	7.37	1.13	11.4	7.34	1.23	10.9	7.04	1.34
22.0	30	12.8	7.52	1.02	12.4	7.36	1.13	11.9	7.16	1.24	11.5	7.03	1.35
24.0	32	13.3	7.42	1.03	12.9	7.27	1.14	12.4	7.06	1.25	12.0	6.91	1.36

**NOTES**

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard condition.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC for other dry bulb temp. = SHC + SHC\*.  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min.) x (1-BF) x (DB\*-EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

**SYMBOLS**

AFR: Air flow rate (m<sup>3</sup>/min)  
BF: Bypass factor  
EWB: Entering wet bulb temp. (°CWB)  
EDB: Entering dry bulb temp. (°CDB)  
TC: Maximum Total cooling (heating) capacity (kW)  
SHC: Sensible heat capacity (kW)  
PI: Power input (comp.+indoor and outdoor fan motor)  
CPI: Coefficient of power input. (-)

**Caution:**  
TC and SHC are shown by kW.

(Pair)

	FCQHG100F	FCQG100F	FBQ100C8	FHQG100C	FAQ100C	FVQ100C
AFR	32.3	32	32	20	26	28
(BF)	(0.17)	(0.17)	(0.13)	(0.09)	(0.10)	(0.20)

(Twin)

	FCQG50Fx2	FFQ50B9Vx2	FBQ50C8x2	FHQ50B8x2
AFR	12.6x2	12x2	16x2	13x2
(BF)	(0.22x2)	(0.16x2)	(0.16x2)	(0.10x2)

(Triple)

	FCQG35Fx3	FFQ35B9Vx3	FBQ35C8x3	FHQ35B8x3
AFR	12.5x3	10x3	16x3	13x3
(BF)	(0.4x3)	(0.25x3)	(0.15x3)	(0.20x3)

9. Rated power input of each model is given in tables below:

(Pair)

	FCQHG100F	FCQG100F	FBQ100C8	FHQG100C	FAQ100C	FVQ100C
Cooling	2.57	2.88	2.87	2.96	3.16	2.96

(Twin)

	FCQG50Fx2	FFQ50B9Vx2	FBQ50C8x2	FHQ50B8x2
Cooling	2.76	2.86	2.93	3.39

(Triple)

	FCQG35Fx3	FFQ35B9Vx3	FBQ35C8x3	FHQ35B8x3
Cooling	2.82	2.86	2.93	3.39

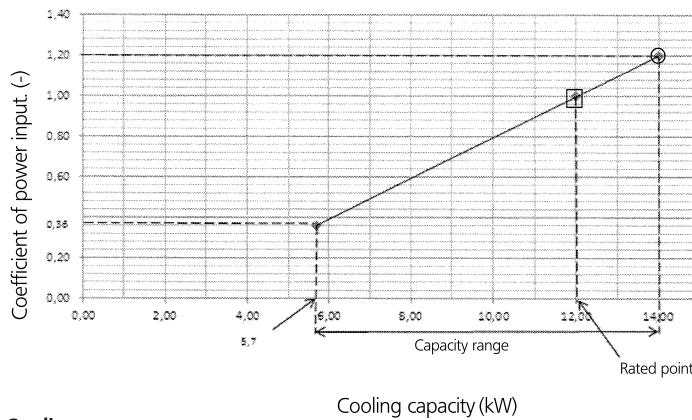
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# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

### RZQSG125LY1

#### Cooling



#### Cooling

Indoor		Outdoor temperature (°CDB)											
		25			30			35			40		
°CWB	°CDB	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI
16.0	22	14.1	9.54	0.99	13.6	9.30	1.09	13.1	9.12	1.19	12.6	8.78	1.29
18.0	25	14.7	9.50	0.99	14.2	9.32	1.09	13.7	9.09	1.20	13.2	8.83	1.31
19.0	27	15.0	9.52	1.00	14.5	9.34	1.10	14.0	9.06	1.20	13.5	8.87	1.31
19.5	27	15.2	9.52	1.00	14.7	9.26	1.11	14.2	9.08	1.20	13.6	8.81	1.31
22.0	30	16.0	9.39	1.00	15.5	9.14	1.11	14.9	8.95	1.21	14.4	8.74	1.32
24.0	32	16.7	9.31	1.01	16.1	9.09	1.12	15.5	8.89	1.23	15.0	8.63	1.33

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard conditions.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC for other dry bulb temp. = SHC + SHC\*.  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min.) x (1-BF) x (DB\*-EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

(Pair)

	FCQHG125F	FCQG125F	FBQ125C8	FHQ125C	FDQ125C	FVQ125C
AFR	33.5	33	39	31	39	28
(BF)	(0.19)	(0.21)	(0.16)	(0.134)	(0.16)	(0.16)

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
AFR	12.6x3	12x3	16x3	13x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)

- Rated power input of each model is given in tables below:

(Pair)

	FCQHG125F	FCQG125F	FBQ125C8	FHQ125C	FDQ125C	FVQ125C
Cooling	3.71	3.74	3.74	4.15	3.74	4.27

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
Cooling	3.69	4.08	3.95	4.39

#### SYMBOLS

- AFR: Air flow rate (m<sup>3</sup>/min)  
 BF: Bypass factor  
 EWB: Entering wet bulb temp. (°CWB)  
 EDB: Entering dry bulb temp. (°CDB)  
 TC: Maximum Total cooling (heating) capacity (kW)  
 SHC: Sensible heat capacity (kW)  
 PI: Power input  
 (comp.+indoor and outdoor fan motor)  
 CPI: Coefficient of power input. (-)

**Caution:**  
**TC and SHC are shown by kW.**

(Twin)

	FCQG60Fx2	FFQ60B9Vx2	FBQ60C8x2	FHQ60B8x2
AFR	13.6x2	15x2	18x2	17x2
(BF)	(0.2x2)	(0.11x2)	(0.15x2)	(0.20x2)

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
AFR	12.5x4	10x4	16x4	13x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)

(Twin)

	FCQG60Fx2	FFQ60B9Vx2	FBQ60C8x2	FHQ60B8x2
Cooling	3.66	4.08	3.95	4.39

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
Cooling	3.75	4.08	3.95	4.39

# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

**RZQSG140LY1**

**Cooling**

**Cooling**

Indoor	Outdoor temperature (°CDB)												
	25			30			35			40			
°CWB	°CDB	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	CPI	TC kW	SHC kW	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
18.0	25	16.2	10.55	0.98	15.6	10.21	1.09	15.1	10.01	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	10.37	0.99	17.0	10.16	1.10	16.4	9.83	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	9.67	1.22	16.4	9.47	1.32

**NOTES**

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard condition.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC for other dry bulb temp. = SHC + SHC\*.  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min.) x (1-BF) x (DB\*-EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

**SYMBOLS**

AFR: Air flow rate (m<sup>3</sup>/min)  
BF: Bypass factor  
EWB: Entering wet bulb temp. (°CWB)  
EDB: Entering dry bulb temp. (°CDB)  
TC: Maximum Total cooling (heating) capacity (kW)  
SHC: Sensible heat capacity (kW)  
PI: Power input  
(comp.+indoor and outdoor fan motor)  
CPI: Coefficient of power input. (-)

**Caution:**  
**TC and SHC are shown by kW.**

(Pair)

	FCQHG140F	FCQG140F	FHQ140C8	FHQG140C	FVQ140C
AFR	33.5	33	39	34	30
(BF)	(0.15)	(0.23)	(0.14)	(0.17)	(0.18)

(Twin)

	FCQHG71Fx2	FCQG71Fx2	FHQ71C8x2	FHQG71Cx2	FAQ71C
AFR	21.2x2	21.5x2	18x2	20.5x2	18x2
(BF)	(0.2x2)	(0.14x2)	(0.08x2)	(0.13x2)	(0.16x2)

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FHQ50C8x3	FHQ50B8x3
AFR	12.6x3	12x3	16x3	13x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FHQ35C8x4	FHQ35B8x4
AFR	12.5x4	10x4	16x4	13x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)

9. Rated power input of each model is given in tables below:

(Pair)

	FCQHG140F	FCQG140F	FHQ140C8	FHQG140C	FVQ140C
Cooling	4.17	4.45	4.44	4.45	4.45

(Twin)

	FCQHG71Fx2	FCQG71Fx2	FHQ71C8x2	FHQG71Cx2	FAQ71Cx2
Cooling	4.11	4.39	4.17	4.01	4.23

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FHQ50C8x3	FHQ50B8x3
Cooling	4.40	4.62	4.17	4.73

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FHQ35C8x4	FHQ35B8x4
Cooling	4.46	4.62	4.17	4.73

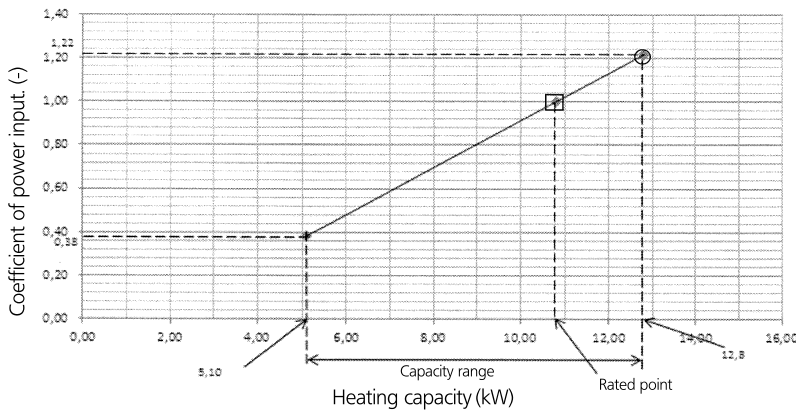
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# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

### RZQSG100LY1

#### Heating



#### Heating

Indoor °CDB	Outdoor temperature (°CWB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI
16	7.66	1.26	8.64	1.33	9.15	1.38	9.21	1.42	12.8	1.12	13.8	1.18
18	7.65	1.32	8.64	1.38	9.15	1.44	9.20	1.48	12.8	1.17	13.8	1.23
20	7.64	1.37	8.64	1.44	9.15	1.50	9.19	1.54	<b>12.8</b>	<b>1.22</b>	13.8	1.28
21	7.64	1.40	8.63	1.46	9.14	1.52	9.19	1.57	12.8	1.24	13.8	1.30
22	7.63	1.42	8.63	1.49	9.14	1.55	9.18	1.60	12.8	1.26	13.8	1.33
24	7.62	1.48	8.62	1.55	9.13	1.61	9.17	1.65	12.8	1.31	13.8	1.38

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard conditions.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC for other dry bulb temp. = SHC + SHC\*.  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min.) x (1-BF) x (DB\*-EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

(Pair)

	FCQHG100F	FCQG100F	FBQ100C8	FHQG100C	FAQ100C	FVQ100C
AFR	32.3	32	32	20	26	28
(BF)	(0.17)	(0.17)	(0.13)	(0.09)	(0.10)	(0.20)

(Triple)

	FCQG35Fx3	FFQ35B9Vx3	FBQ35C8x3	FHQ35B8x3
AFR	12.5x3	10x3	16x3	13x3
(BF)	(0.4x3)	(0.25x3)	(0.15x3)	(0.20x3)

- Rated power input of each model is given in tables below:

(Pair)

	FCQHG100F	FCQG100F	FBQ100C8	FHQG100C	FAQ100C	FVQ100C
Heating	2.51	3.05	2.96	2.99	3.17	2.99

(Triple)

	FCQG35Fx2	FFQ35B9Vx2	FBQ35C8x2	FHQ35B8x2
Heating	2.66	2.79	2.86	3.32

#### SYMBOLS

- AFR: Air flow rate (m<sup>3</sup>/min)  
 BF: Bypass factor  
 EWB: Entering wet bulb temp. (°CWB)  
 EDB: Entering dry bulb temp. (°CDB)  
 TC: Maximum Total cooling (heating) capacity (kW)  
 SHC: Sensible heat capacity (kW)  
 PI: Power input  
 (comp.+indoor and outdoor fan motor)  
 CPI: Coefficient of power input. (-)

**Caution:**  
**TC and SHC are shown by kW.**

(Twin)

	FCQG50Fx2	FFQ50B9Vx2	FBQ50C8x2	FHQ50B8x2
AFR	12.6x2	12x2	16x2	13x2
(BF)	(0.22x2)	(0.16x2)	(0.16x2)	(0.10x2)

(Twin)

	FCQG50Fx2	FFQ50B9Vx2	FBQ50C8x2	FHQ50B8x2
Heating	2.61	2.79	2.86	3.32

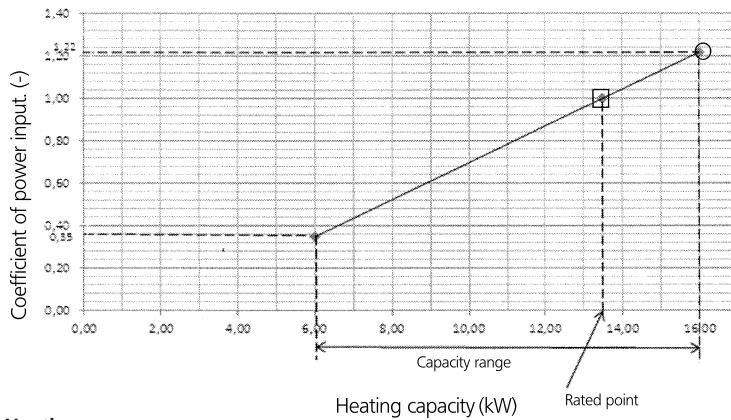
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# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

### RZQSG125LY1

#### Heating



#### Heating

Indoor °CDB	Outdoor temperature (°CWB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
	TC kW	CPI -	TC kW	CPI -	TC kW	CPI -	TC kW	CPI -	TC kW	CPI -	TC kW	CPI -
16	10.4	1.49	11.4	1.56	12.1	1.61	12.5	1.65	16.0	1.13	17.3	1.18
18	10.4	1.54	11.3	1.61	12.0	1.66	12.5	1.70	16.0	1.17	17.2	1.23
20	10.4	1.59	11.3	1.66	12.0	1.71	12.5	1.76	16.0	1.22	17.2	1.28
21	10.4	1.62	11.3	1.69	12.0	1.74	12.5	1.78	16.0	1.24	17.2	1.30
22	10.3	1.64	11.3	1.71	12.0	1.77	12.5	1.81	16.0	1.26	17.2	1.33
24	10.3	1.70	11.3	1.76	12.0	1.82	12.5	1.87	16.0	1.31	17.2	1.38

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard conditions.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC for other dry bulb temp. = SHC + SHC\*  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min) x (DB\* - EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

(Pair)

	FCQHG125F	FCQG125F	FBQ125C8	FHQG125C	FDQ125C	FVQ125C
AFR	33.5	33	39	31	39	28
(BF)	(0.19)	(0.21)	(0.16)	(0.134)	(0.16)	(0.16)

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
AFR	12.6x3	12x3	16x3	13x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)

- Rated power input of each model is given in tables below:

(Pair)

	FCQHG125F	FCQG125F	FBQ125C8	FHQG125C	FDQ125C	FVQ125C
Heating	3.60	3.96	3.85	3.73	3.85	3.96

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
Heating	3.90	4.15	4.06	4.48

#### SYMBOLS

- AFR: Air flow rate (m<sup>3</sup>/min)
- BF: Bypass factor
- EWB: Entering wet bulb temp. (°CWB)
- EDB: Entering dry bulb temp. (°CDB)
- TC: Maximum Total cooling (heating) capacity (kW)
- SHC: Sensible heat capacity (kW)
- PI: Power input  
(comp.+indoor and outdoor fan motor)
- CPI: Coefficient of power input. (-)

**Caution:**  
TC and SHC are shown by kW.

(Twin)

	FCQG60Fx2	FFQ60B9Vx2	FBQ60C8x2	FHQ60B8x2
AFR	13.6x2	15x2	18x2	17x2
(BF)	(0.2x2)	(0.11x2)	(0.15x2)	(0.20x2)

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
AFR	12.5x4	10x4	16x4	13x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)

(Twin)

	FCQG60Fx2	FFQ60B9Vx2	FBQ60C8x2	FHQ60B8x2
Heating	3.88	4.15	4.06	4.48

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
Heating	3.96	4.15	4.06	4.48



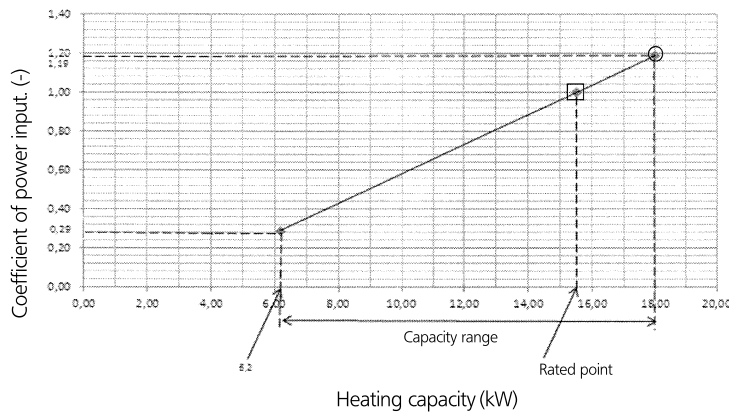
# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

6

### RZQSG140LY1

#### Heating



#### Heating

Indoor	Outdoor temperature (°CWB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI	TC kW	CPI
16	11.6	1.46	12.7	1.53	13.5	1.59	14.0	1.63	18.0	1.10	19.4	1.16
18	11.6	1.52	12.7	1.59	13.5	1.65	14.0	1.70	18.0	1.14	19.4	1.21
20	11.6	1.55	12.7	1.64	13.5	1.71	14.0	1.77	18.0	1.19	19.4	1.25
21	11.6	1.59	12.7	1.68	13.5	1.75	14.0	1.80	18.0	1.22	19.4	1.28
22	11.6	1.62	12.7	1.71	13.5	1.78	14.0	1.83	18.0	1.24	19.4	1.30
24	11.6	1.68	12.6	1.77	13.4	1.84	14.0	1.90	18.0	1.29	19.4	1.35

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. at standard conditions.  
On the figure the mark with □ show the rated capacity and rated coefficient of power input.  
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.  
SHC\* for other dry bulb temp. = SHC + SHC\*.  
SHC\* = SHC correction for other dry bulb.  
= 0.02 x AFR (m<sup>3</sup>/min) x (1-BF) x (DB\*-EDB).
- Capacities are based on the following conditions:  
Outdoor air: 85% RH.  
However, the condition rated capacity in heating is 7° CDB / 6° CWB.  
Corresponding refrigerant piping length: 5.0 m.  
Level difference: 0 m.
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

#### SYMBOLS

- AFR: Air flow rate (m<sup>3</sup>/min)  
 BF: Bypass factor  
 EWB: Entering wet bulb temp. (°CWB)  
 EDB: Entering dry bulb temp. (°CDB)  
 TC: Maximum Total cooling (heating) capacity (kW)  
 SHC: Sensible heat capacity (kW)  
 PI: Power input  
 (comp.+indoor and outdoor fan motor)  
 CPI: Coefficient of power input. (-)

**Caution:**  
**TC and SHC are shown by kW.**

(Pair)

	FCQHG140F	FCQG140F	FBQ140C8	FHQG140C	FVQ140C
AFR	33.5	33	41	34	30
(BF)	(0.15)	(0.23)	(0.14)	(0.17)	(0.18)

(Twin)

	FCQG71Fx2	FCQG71Fx2	FBQ71C8x2	FHQG71Cx2	FAQ71C
AFR	21.2x2	21.5x2	18x2	20.5x2	18x2
(BF)	(0.2x2)	(0.14x2)	(0.08x2)	(0.13x2)	(0.16x2)

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
AFR	12.6x3	12x3	16x3	13x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)

(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
AFR	12.5x4	10x4	16x4	13x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)

- Rated power input of each model is given in tables below:

(Pair)

	FCQHG140F	FCQG140F	FBQ140C8	FHQG140C	FVQ140C
Heating	4.29	4.54	4.54	4.54	4.54

(Twin)

	FCQG71Fx2	FCQHG71Fx2	FBQ71C8x2	FHQG71C8x2	FAQ71Cx2
Heating	4.23	4.48	4.94	4.71	4.92

(Triple)

	FCQG50Fx3	FFQ50B9Vx3	FBQ50C8x3	FHQ50B8x3
Heating	4.48	5.16	4.94	5.73

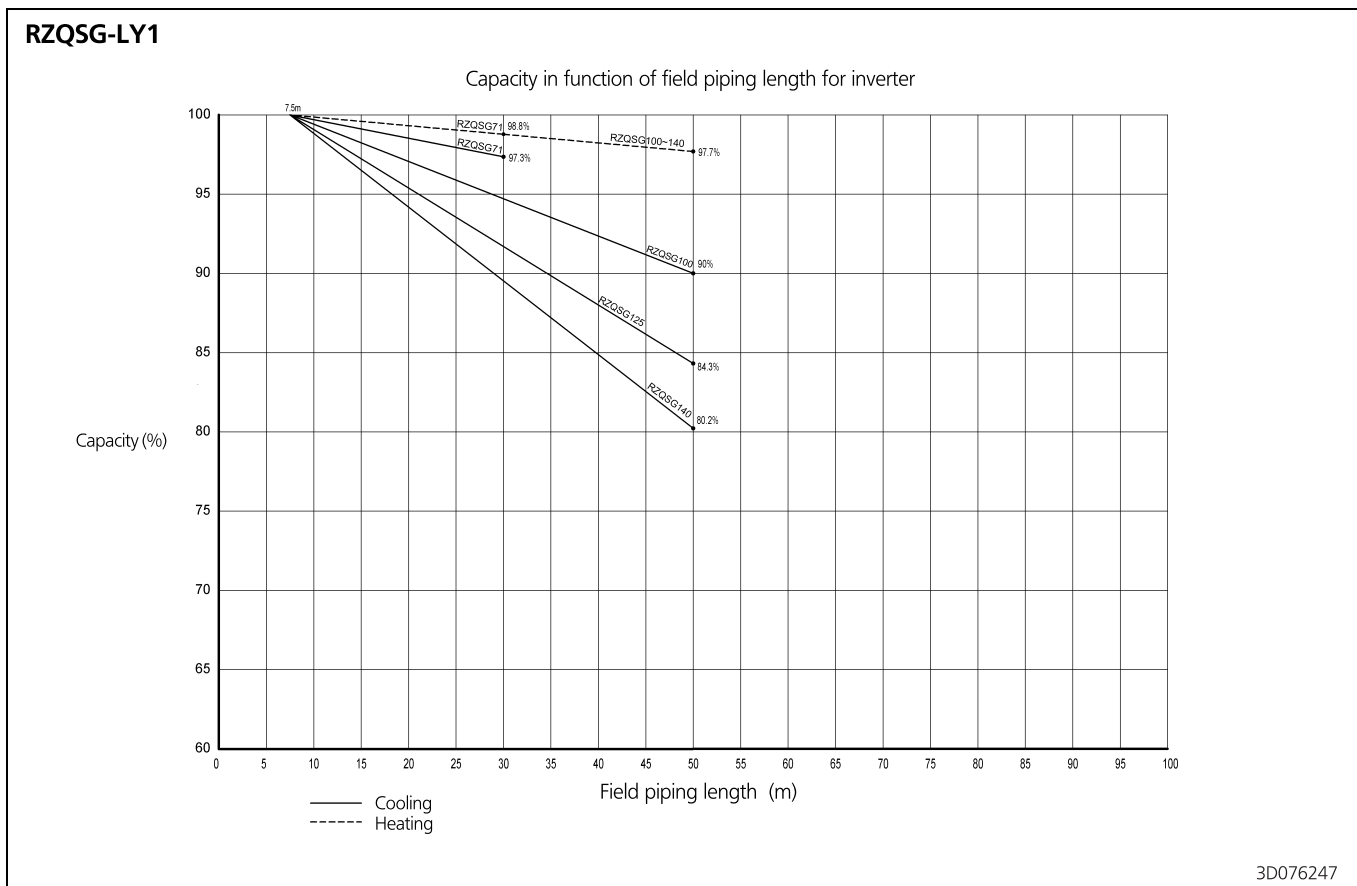
(Double twin)

	FCQG35Fx4	FFQ35B9Vx4	FBQ35C8x4	FHQ35B8x4
Heating	4.54	5.16	4.94	5.73

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## 6 Capacity tables

### 6 - 3 Capacity Correction Factor

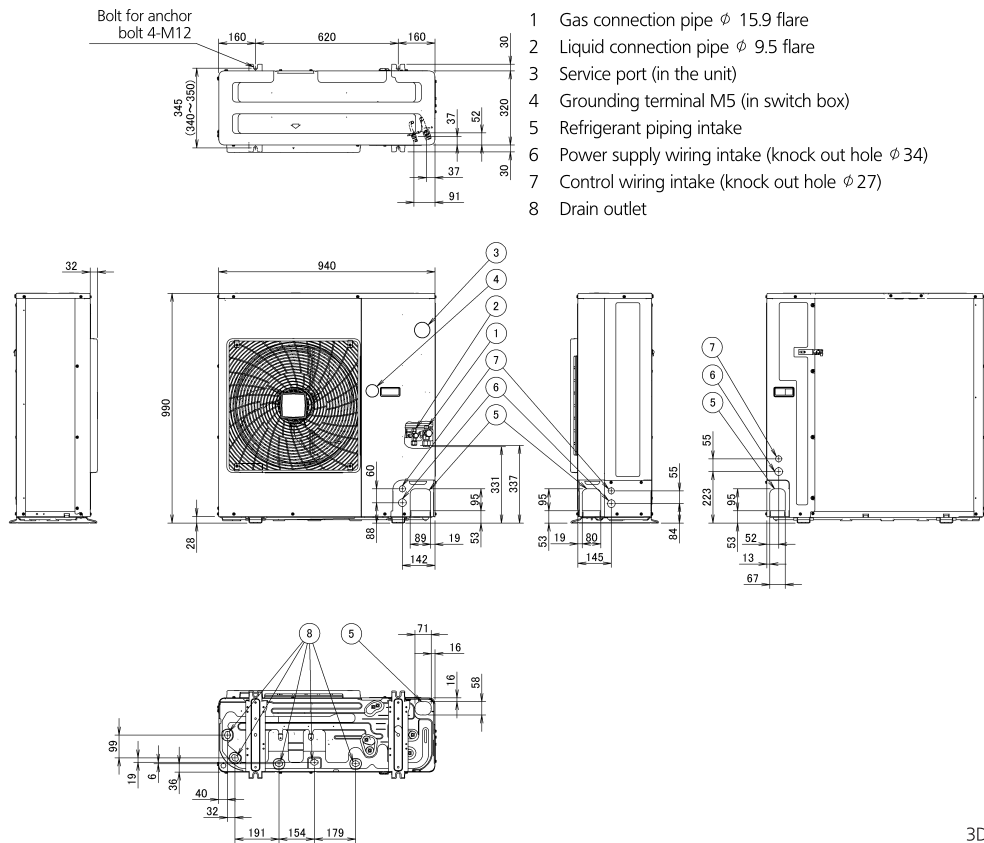


# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

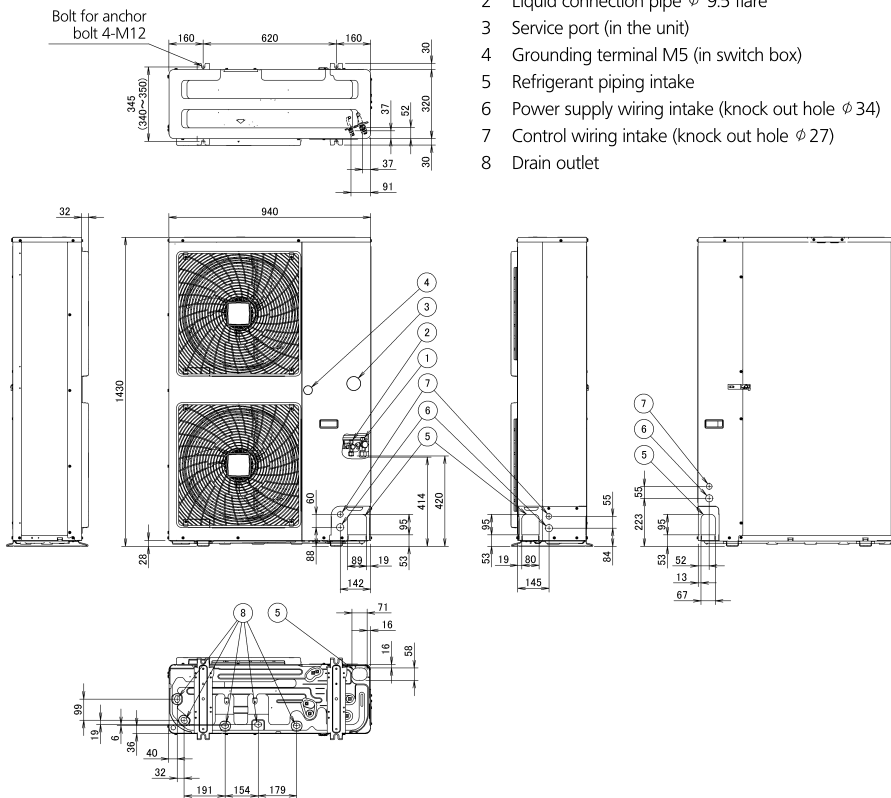
7

### RZQSG100-125LY1



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### RZQSG140LY1

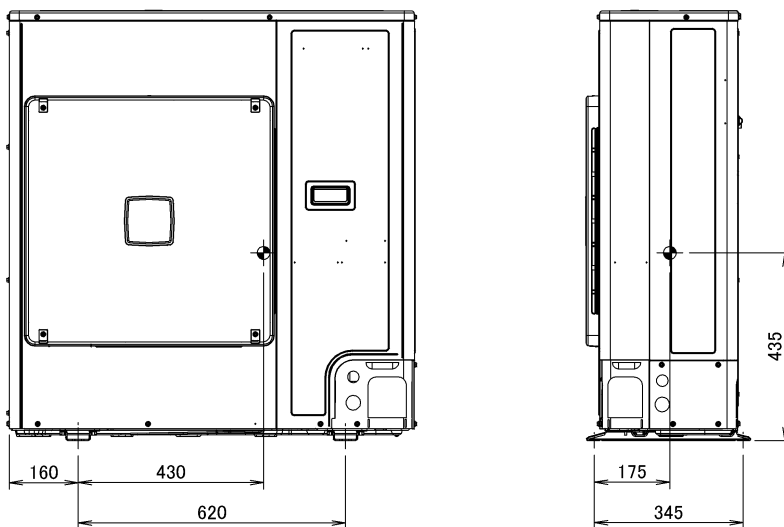


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## 8 Centre of gravity

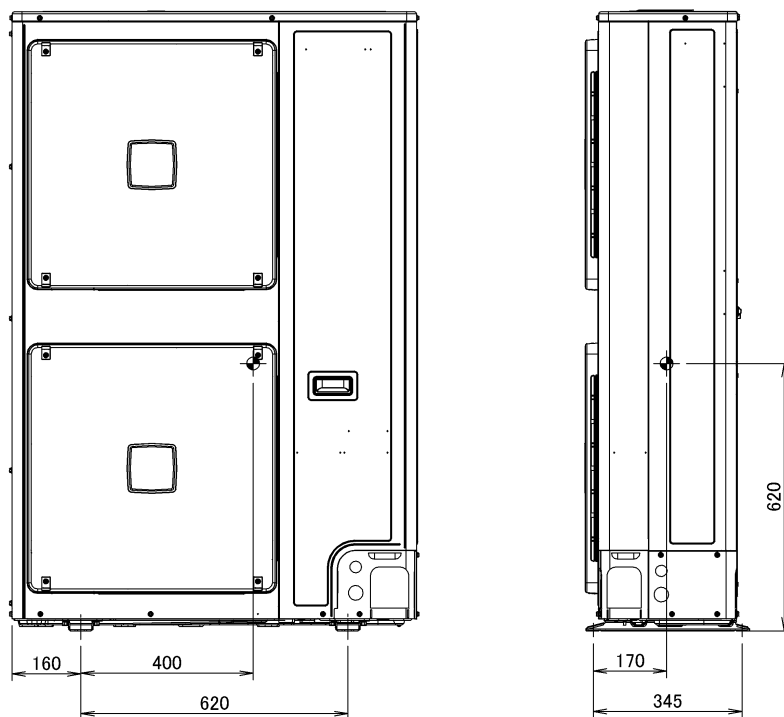
### 8 - 1 Centre of Gravity

RZQSG100-125LY1



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RZQSG140LY1

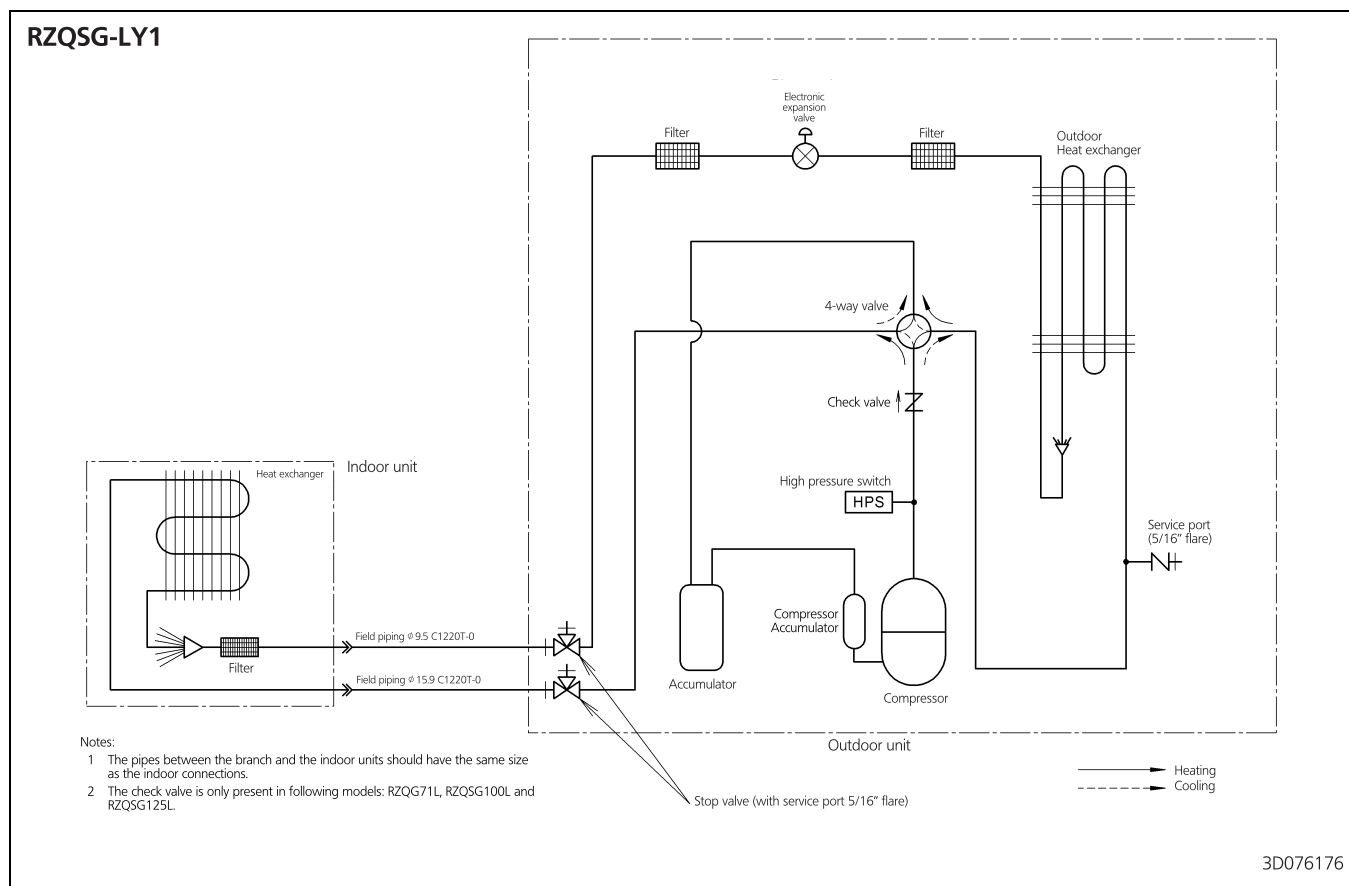


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# 9 Piping diagrams

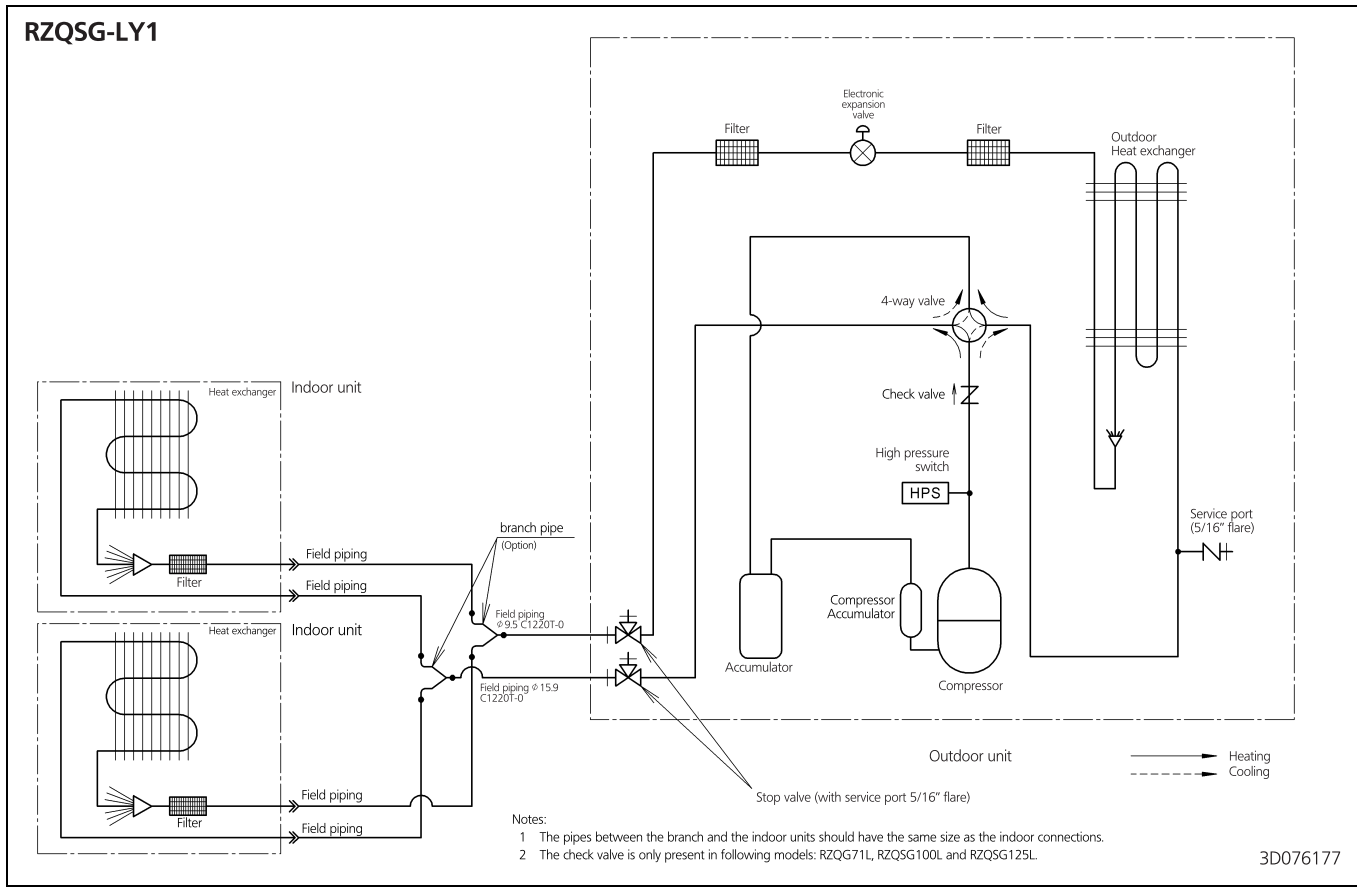
## 9 - 1 Piping Diagrams

9



# 9 Piping diagrams

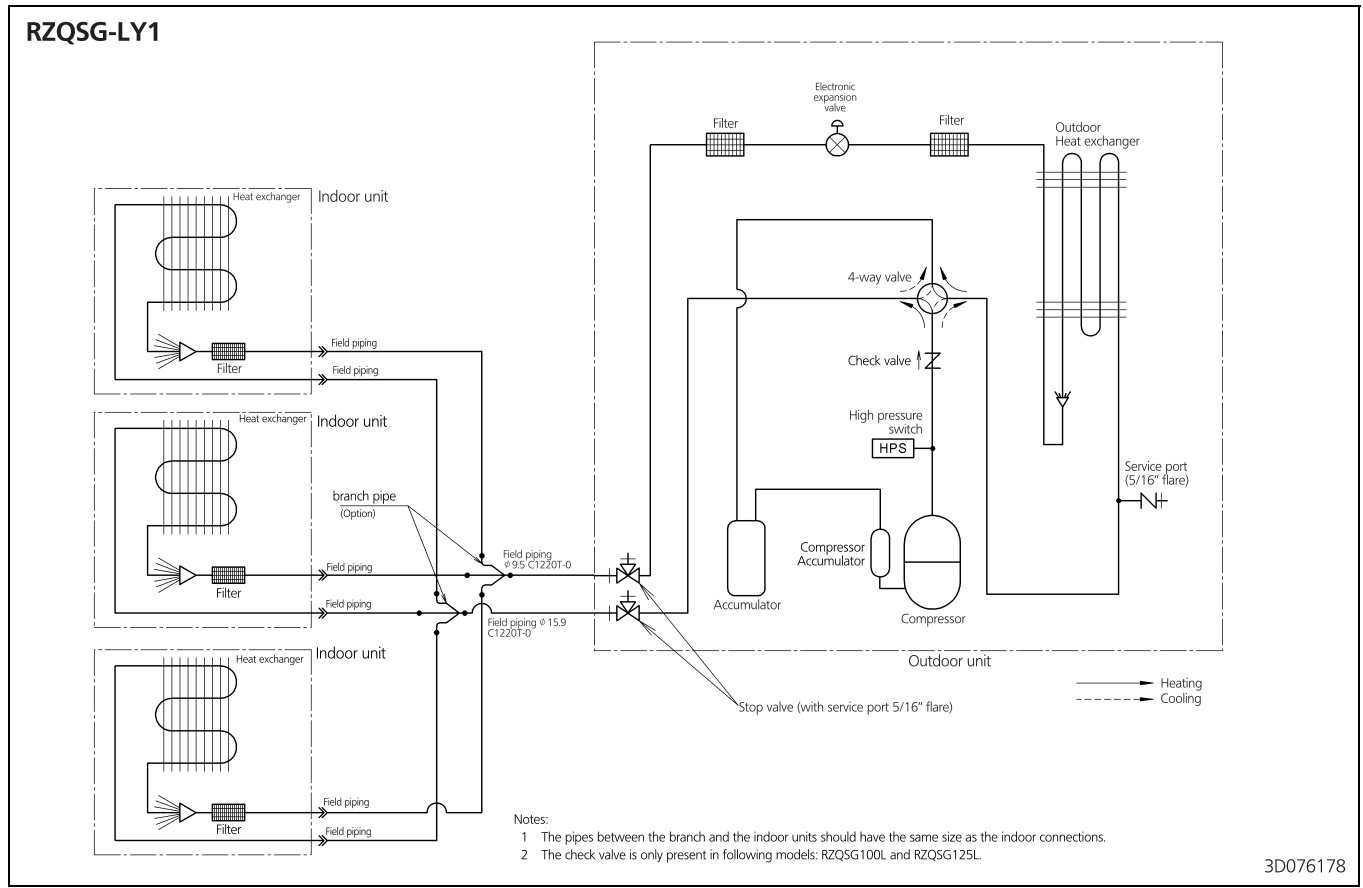
## 9 - 2 Piping Diagram Twin Application



# 9 Piping diagrams

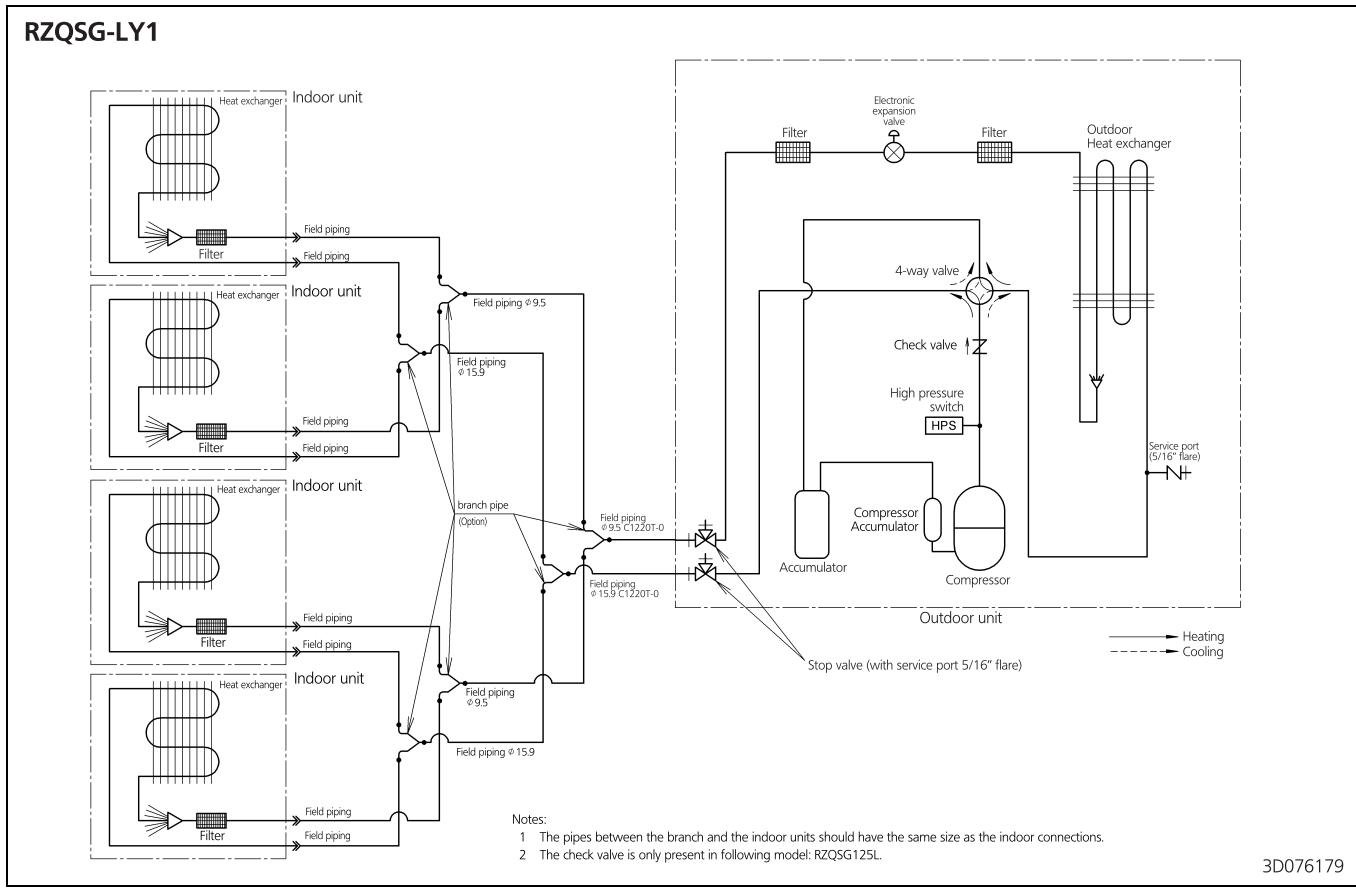
## 9 - 3 Piping Diagram Triple Application

9



# 9 Piping diagrams

## 9 - 4 Piping Diagram Double Twin Application





# 10 Wiring diagrams

## 10 - 1 Wiring Diagrams - Three Phase

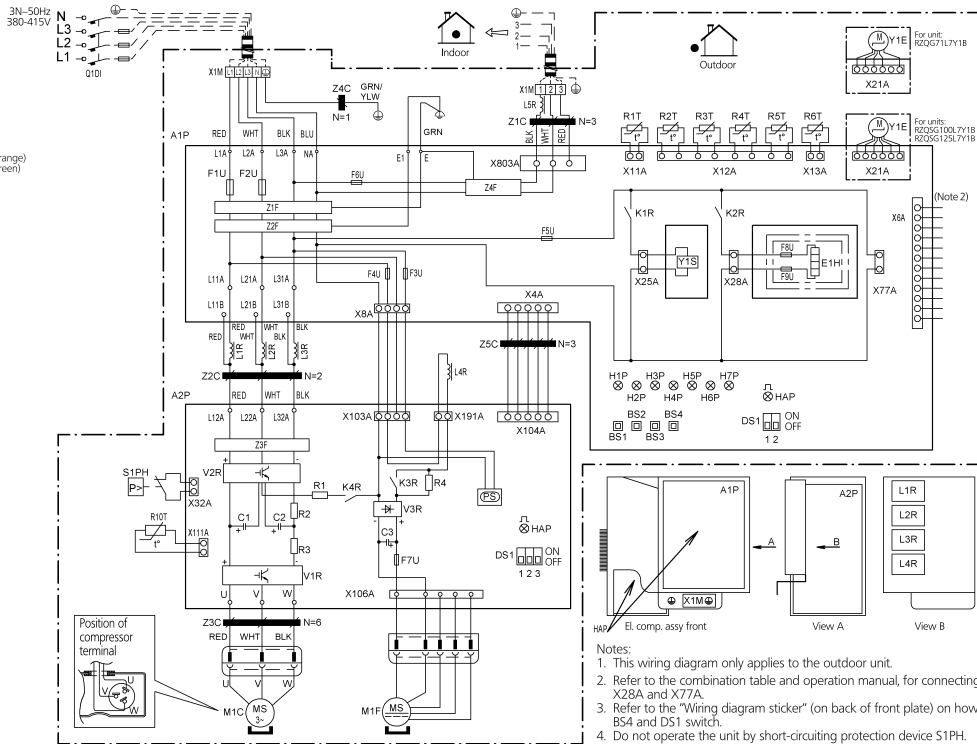
10

### RZQSG100-125LY1

- A1P : Printed circuit board (Inverter)
- A2P : Printed circuit board (Inverter)
- BS1-BS2 : Push button switch
- C1-C3 : Capacitor
- DS1(A1P) : Dip switch
- DS1(A2P) : Dip switch
- E1H : Bottomplate heater (Option)
- FU1 : Fuse (35.5A / 500V)
- F2U : Fuse (35.5A / 500V)
- F3U-F6U : Fuse (T 6.3A / 250V)
- F7U-F8U : Fuse (T 6.3A / 250V)
- F9U-F9U : Fuse (T 1.0A / 250V)
- H1P-H7P : Light emitting diode (service monitor orange)
- HAP(A1P/A2P) : Light emitting diode (service monitor green)
- K1R : Magnetic relay (Y15)
- K2R (A1P) : Magnetic relay
- K2R (A2P) : Magnetic relay
- K4R : Magnetic relay
- L1R-L3R : Reactor
- L4R : Reactor (Outdoor fan motor)
- L5R : Reactor (Transmission line)
- M1C : Motor (compressor)
- M1F : Motor (fan)
- PS : Switching power supply
- Q1D1 : Field earth leakage breaker (30mA)
- R1-R4 : Resistor
- R1T : Thermistor (air)
- R2T : Thermistor (discharge)
- R3T : Thermistor (Suction)
- R4T : Thermistor (Heat exchanger)
- R5T : Thermistor (Heat exchanger middle)
- R6T : Thermistor (liquid)
- R10T : Thermistor (fin)
- S1PH : Pressure switch (High)
- V1R/V2R : KGBT Power module
- V3R : Diode module
- X6A : Connector (Option)
- X1M : Terminal strip
- Y1E : Electronic expansion valve
- Y1S : Solenoid valve (4 way valve)
- Z1C-Z5C : Noise filter (ferrite core)
- Z1F-Z4F : Noise filter

- L: Live
- N: Neutral
- Field wiring
- Protective earth (screw)
- Noiseless earth
- Terminal
- Connection
- Terminal strip
- Connector
- Relay connector
- Option

- BLK: Black
- BLU: Blue
- BRN: Brown
- GRN: Green
- ORG: Orange
- RED: Red
- WHT: White
- YLW: Yellow



- Notes:
1. This wiring diagram only applies to the outdoor unit.
  2. Refer to the combination table and operation manual, for connecting wiring X6A, X28A and X77A.
  3. Refer to the "Wiring diagram sticker" (on back of front plate) on how to use BS1-BS4 and DS1 switch.
  4. Do not operate the unit by short-circuiting protection device S1PH.
  5. Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: "OFF".

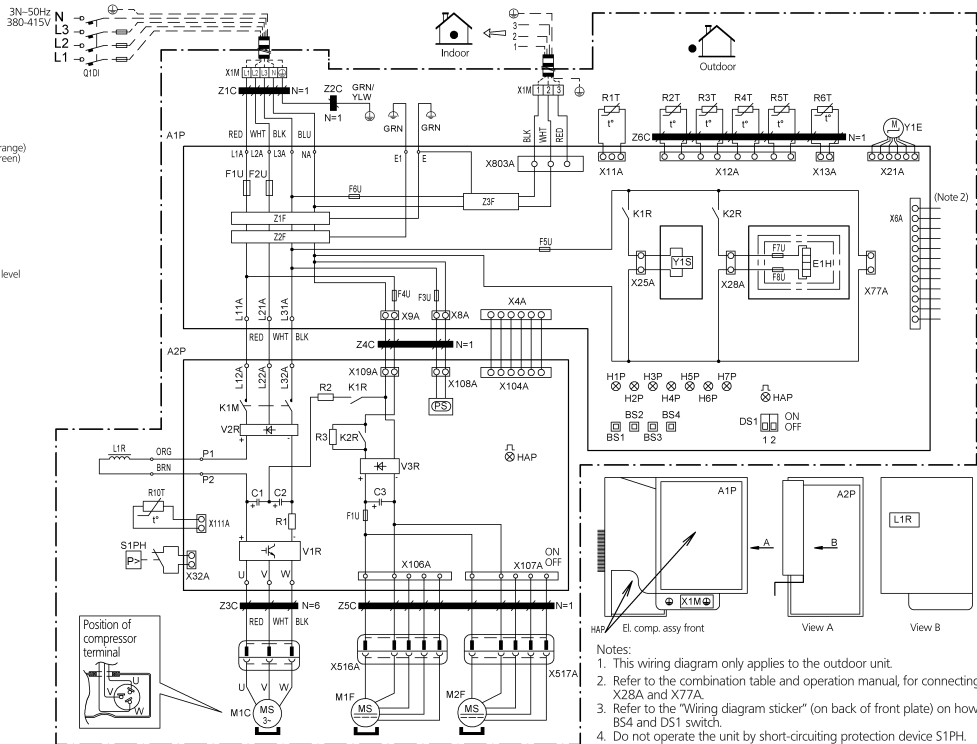
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### RZQSG140LY1

- A1P : Printed circuit board (Inverter)
- A2P : Printed circuit board (Inverter)
- BS1-BS2 : Push button switch
- C1-C3 : Capacitor
- DS1 : Dip switch
- E1H : Bottomplate heater (Option)
- FU1 : Fuse (31.5A / 250V)
- F2U : Fuse (31.5A / 250V)
- F3U-F6U : Fuse (T 6.3A / 250V)
- F7U-F8U : Fuse (T 6.3A / 250V)
- F9U (A2P) : Fuse (T 1.0A / 250V)
- H1P-H7P : Light emitting diode (service monitor orange)
- HAP(A1P/A2P) : Light emitting diode (service monitor green)
- K1M : Magnetic relay
- K1R (A1P) : Magnetic relay (Y15)
- K2R (A1P) : Magnetic relay
- K2R (A2P) : Magnetic relay
- L1R : Reactor
- M1C : Motor (compressor)
- M1F : Motor (fan) (upper)
- M2F : Motor (fan) (lower)
- PS : Switching power supply
- Q1D1 : Maximum allowable piping length and level difference (30mA)
- R1-R3 : Resistor
- R1T : Thermistor (air)
- R2T : Thermistor (discharge)
- R3T : Thermistor (Suction)
- R4T : Thermistor (Heat exchanger)
- R5T : Thermistor (Heat exchanger middle)
- R6T : Thermistor (liquid)
- R10T : Thermistor (fin)
- S1PH : Pressure switch (High)
- V1R : KGBT Power module
- V2R/V3R : Diode module
- X6A : Connector (Option)
- X1M : Terminal strip
- Y1E : Electronic expansion valve
- Y1S : Solenoid valve (4 way valve)
- Z1C-Z6C : Noise filter (ferrite core)
- Z1F-Z3F : Noise filter

- L: Live
- N: Neutral
- Field wiring
- Protective earth (screw)
- Noiseless earth
- Terminal
- Connection
- Terminal strip
- Connector
- Relay connector
- Option

- BLK: Black
- BLU: Blue
- BRN: Brown
- GRN: Green
- ORG: Orange
- RED: Red
- WHT: White
- YLW: Yellow

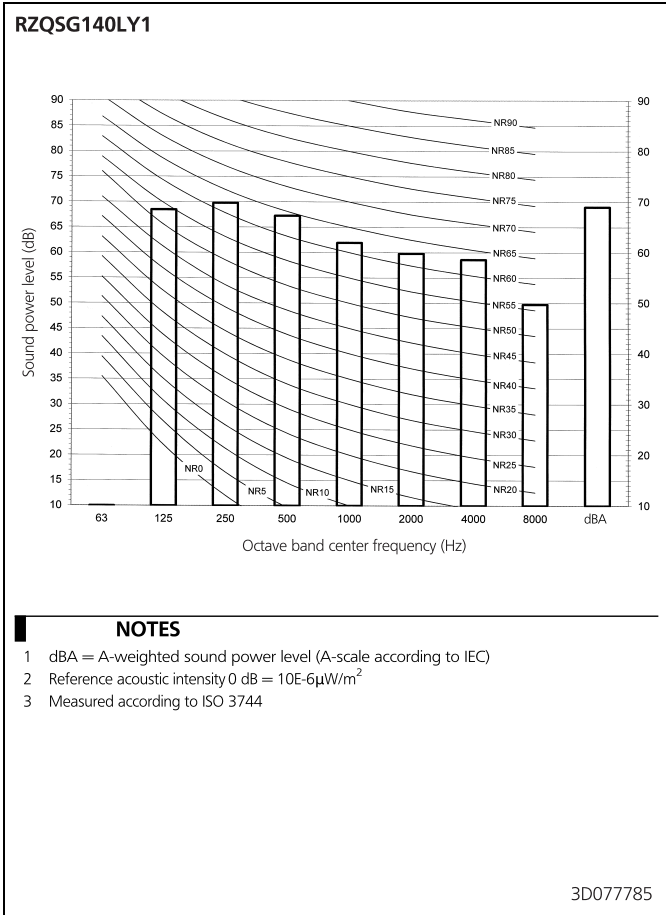
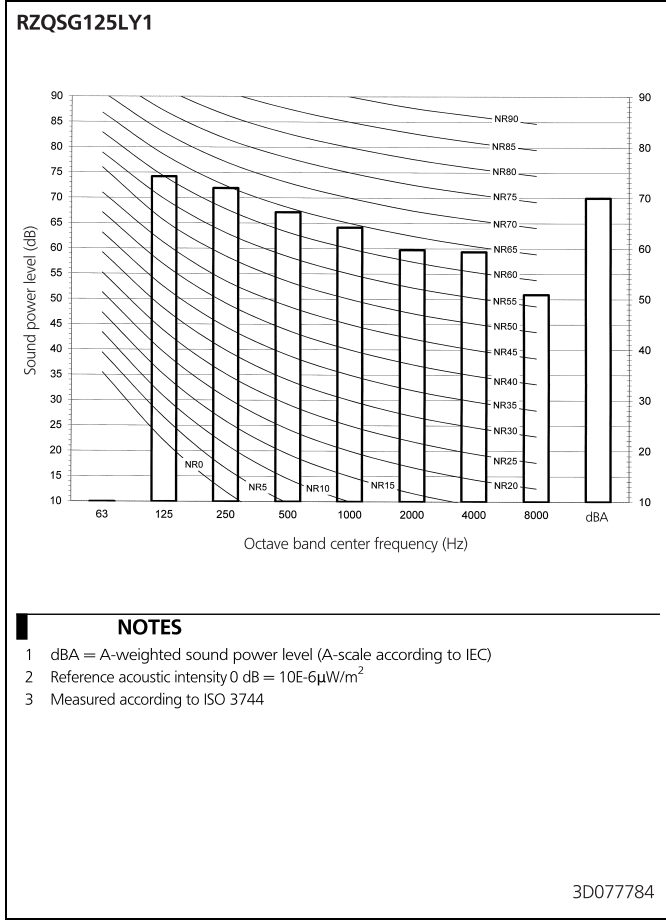
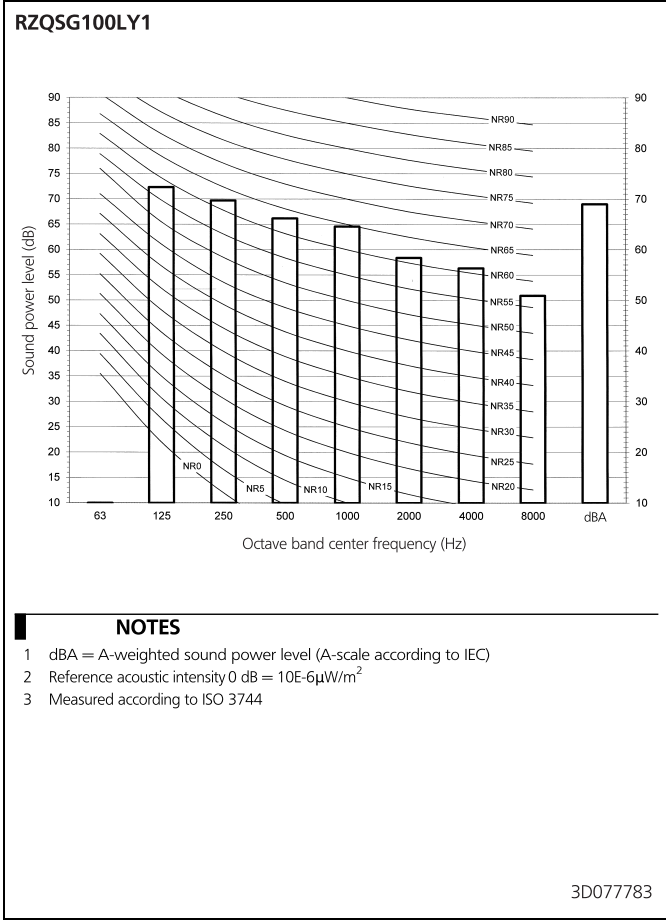


- Notes:
1. This wiring diagram only applies to the outdoor unit.
  2. Refer to the combination table and operation manual, for connecting wiring X6A, X28A and X77A.
  3. Refer to the "Wiring diagram sticker" (on back of front plate) on how to use BS1-BS4 and DS1 switch.
  4. Do not operate the unit by short-circuiting protection device S1PH.
  5. Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: "OFF".

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# 11 Sound data

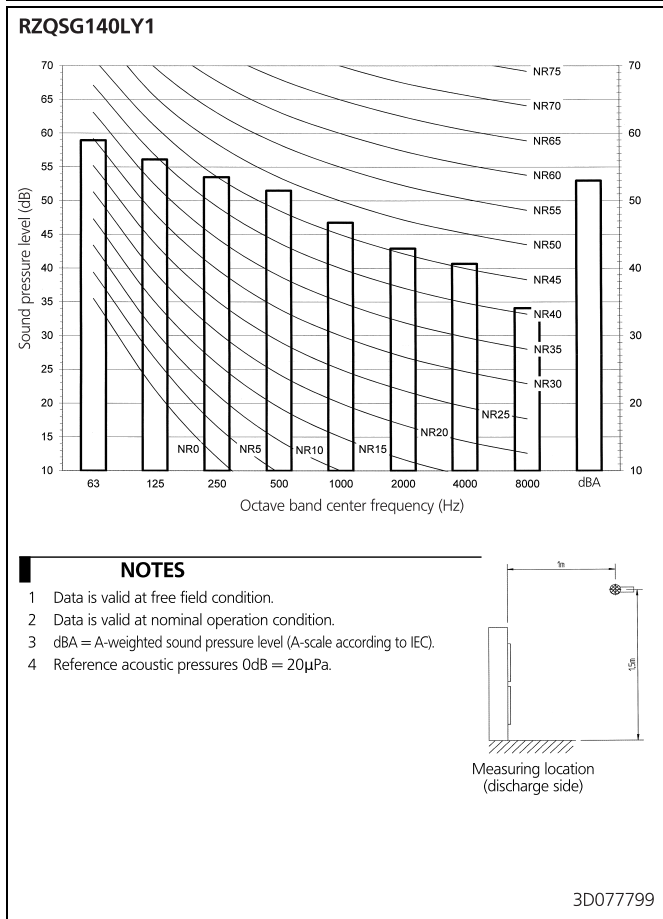
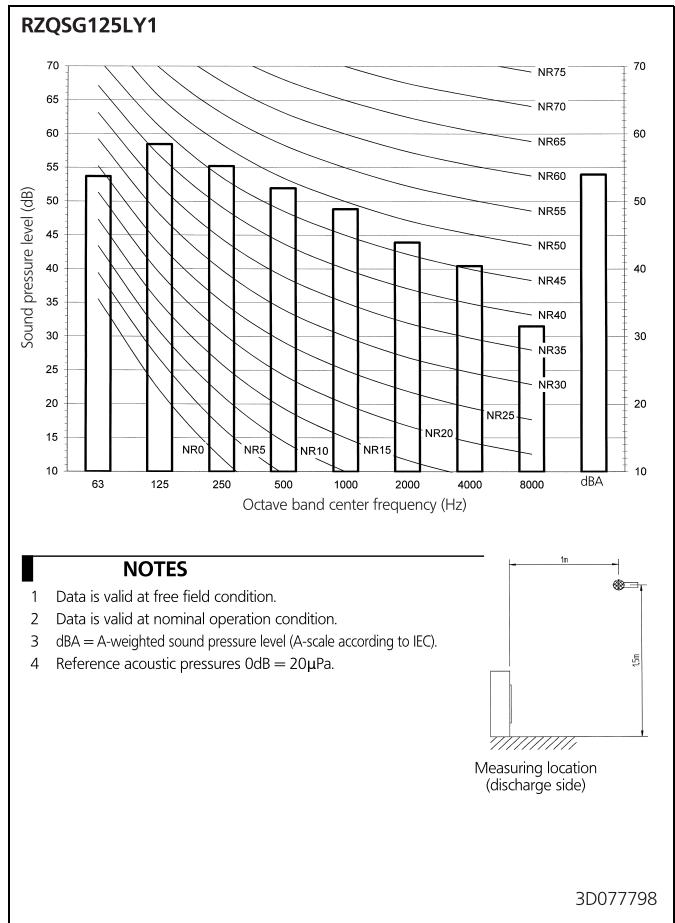
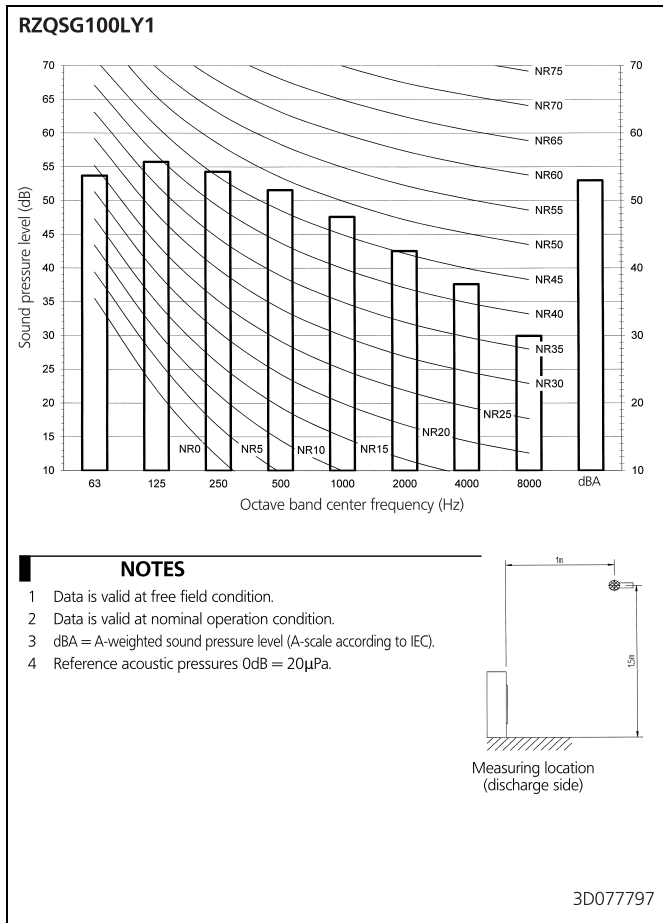
## 11 - 1 Sound Power Spectrum



# 11 Sound data

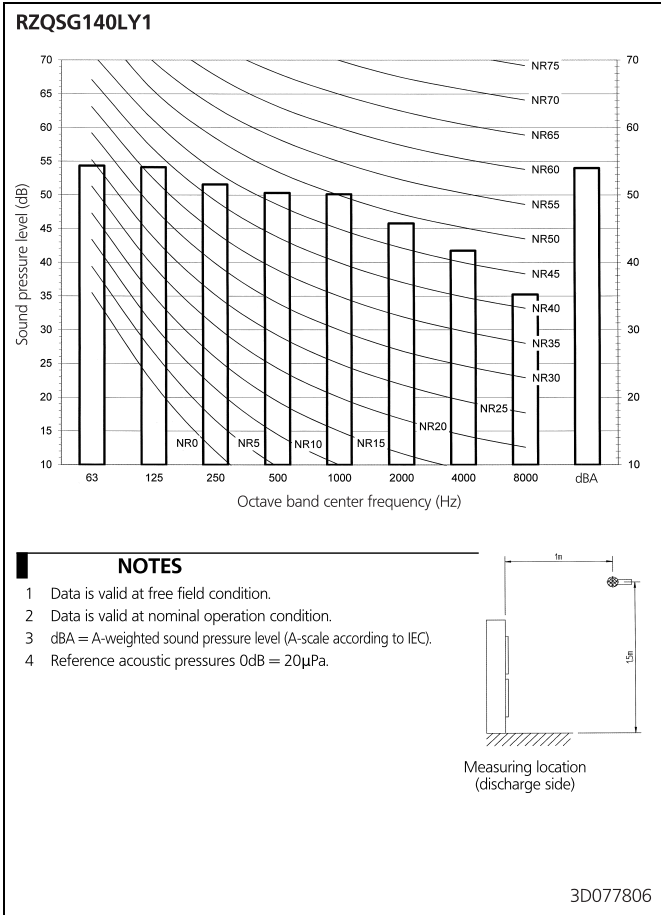
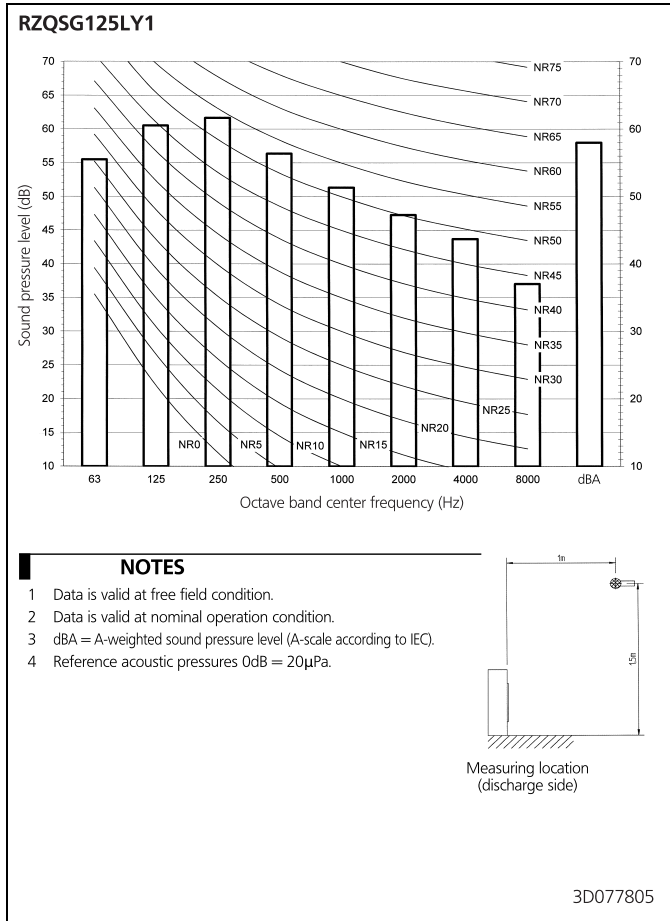
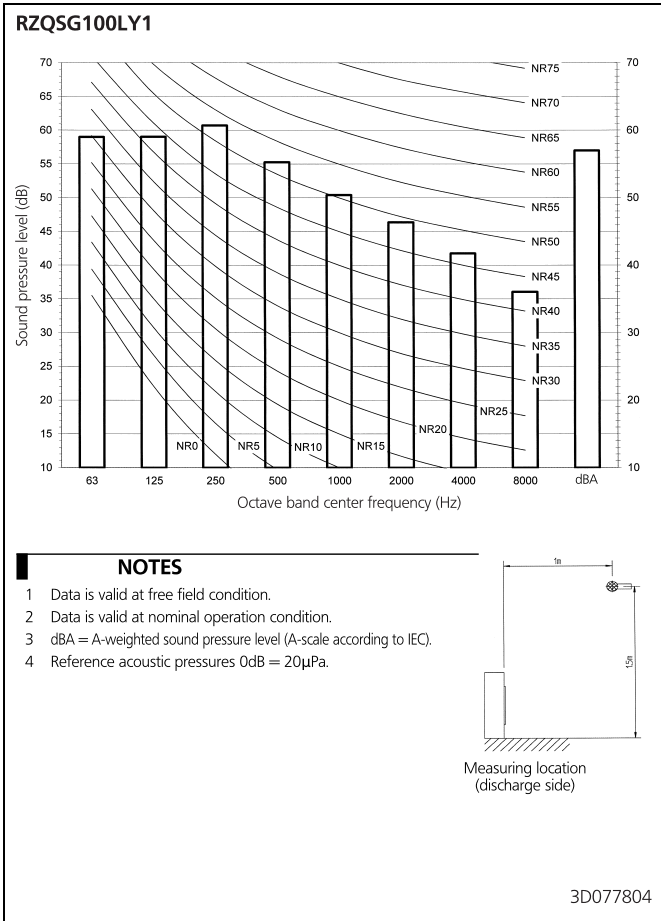
## 11 - 2 Sound Pressure Spectrum - Cooling

11



# 11 Sound data

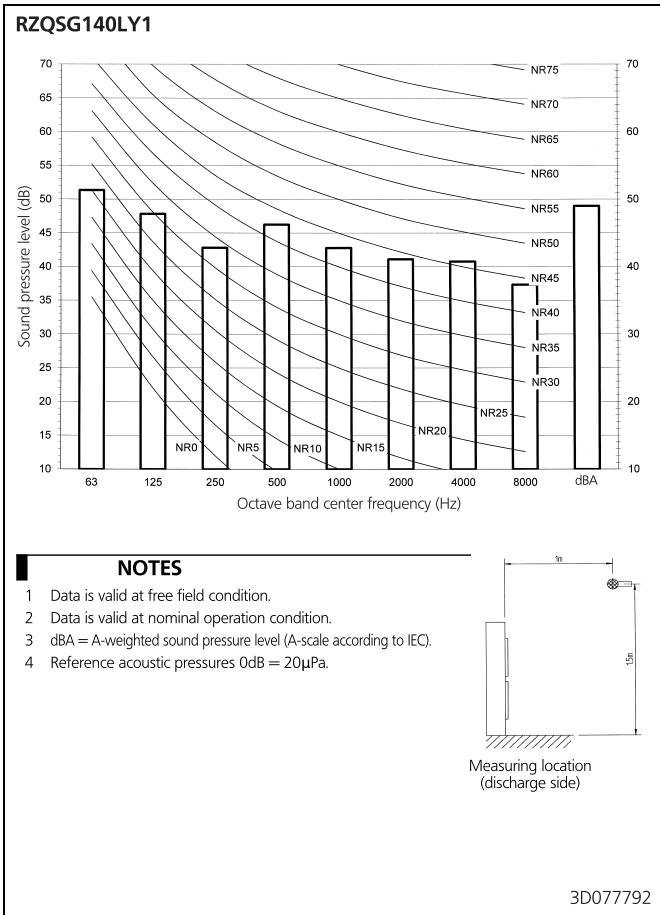
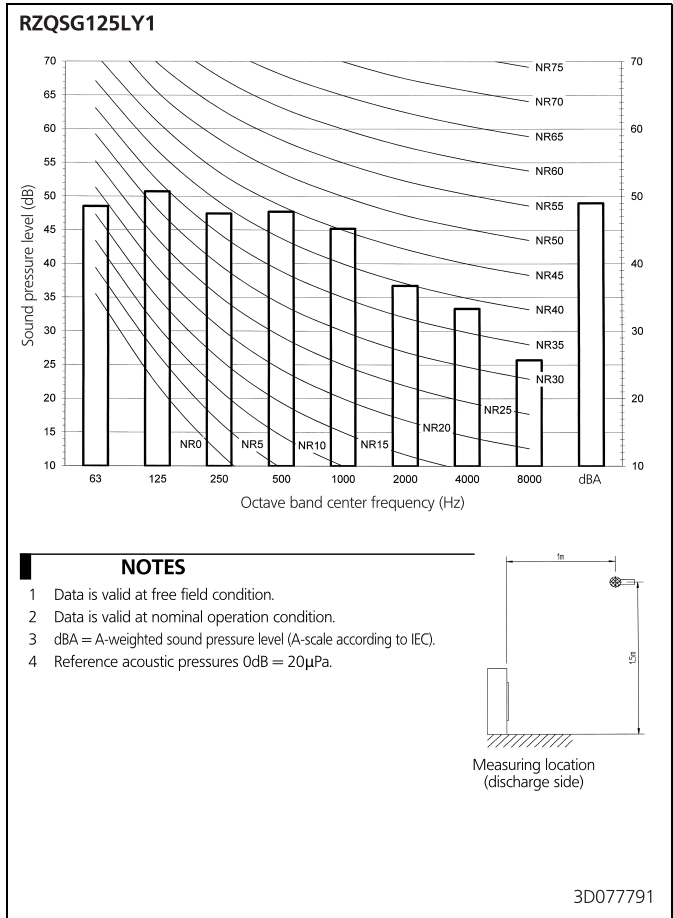
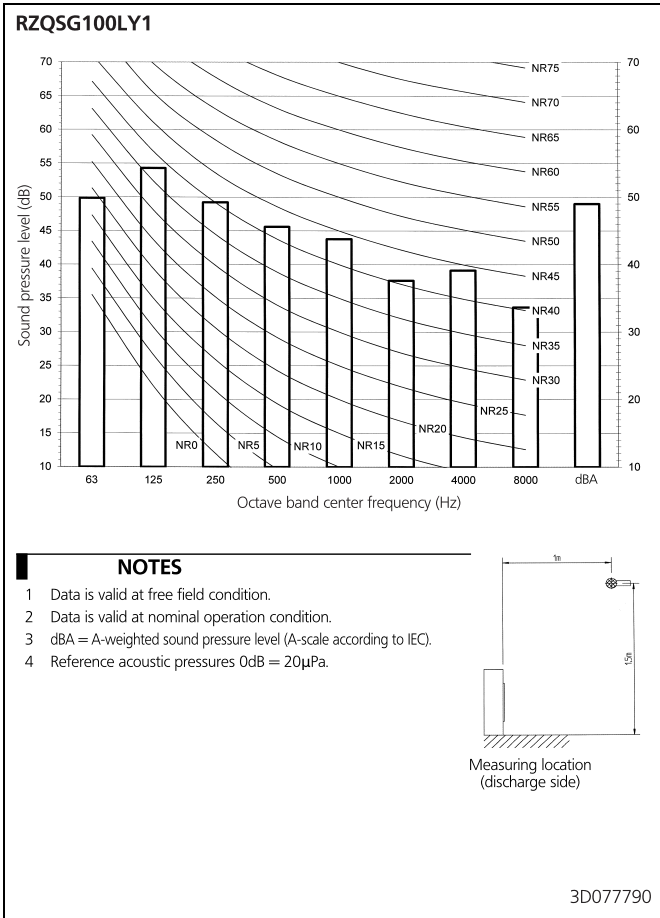
## 11 - 3 Sound Pressure Spectrum - Heating



# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode

11



# 12 Installation

## 12 - 1 Installation Method

### RZQSG-LY1

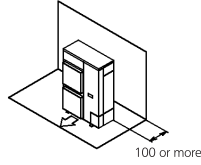
#### Installation service space

The measure of these values is "mm".

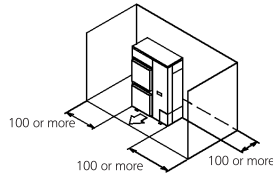
#### (A) When there are obstacles on suction sides.

##### • No obstacle above

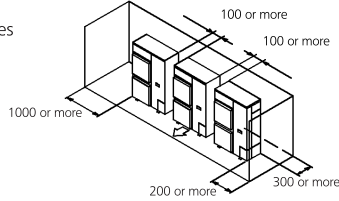
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

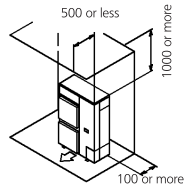


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides

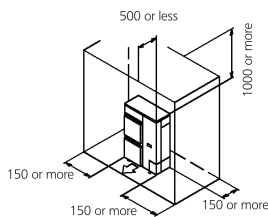


##### • Obstacle above, too.

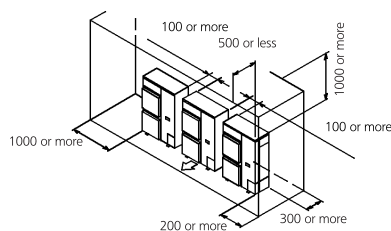
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



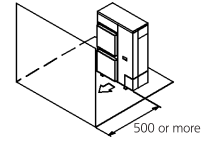
- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides



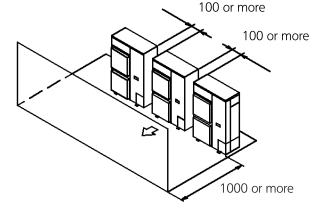
#### (B) When there are obstacles on discharge sides.

##### • No obstacle above

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

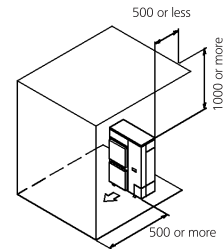


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side only

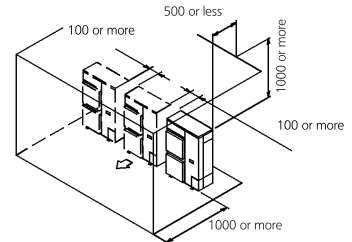


##### • Obstacle above, too

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



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



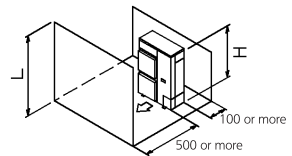
#### (C) When there are obstacles on both suction and discharge sides.:

##### Pattern 1

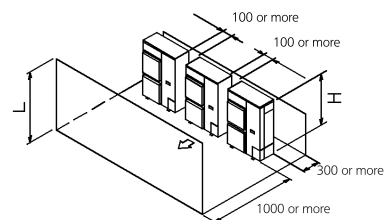
When the obstacles on the discharge side is higher than the unit. (L>H)  
(There is no limit for the height of obstructions on the suction side.)

##### • 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

12

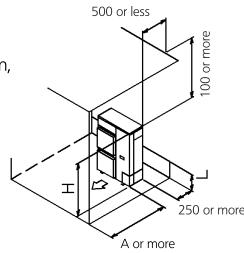
### RZQSG-LY1

#### ● 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	

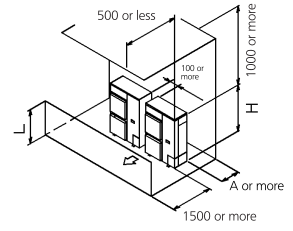


- ② Series installation (2 or more) (Note 1, 2)
  - When there are obstacles on suction, discharge and top sides.

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

	L	A
$L \leq H$	$L \leq 1/2 H$	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.



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

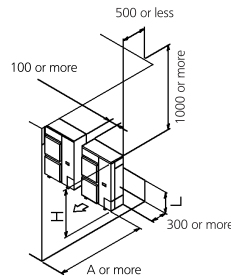
The relations between H, A and L are as follows.

	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.

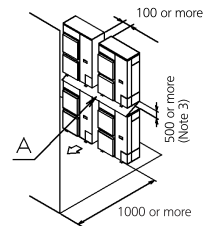
#### Pattern 2

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.)

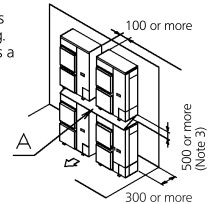


#### (D) Double-decker installation

- 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.

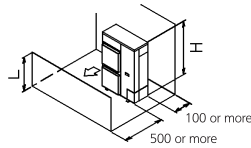


- ② Obstacle on the suction side. (Note 1)
  - Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient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



#### ● No obstacle above

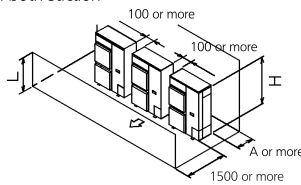
- ① Stand-alone installation
  - No obstacle above



- 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

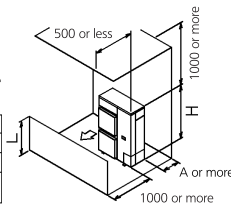


#### ● Obstacle above, too

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

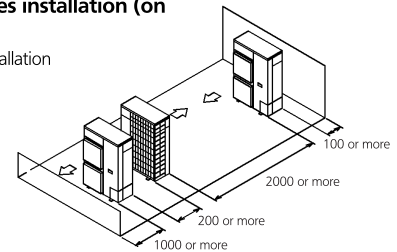
The relations between H, A and L are as follows.

	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	



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

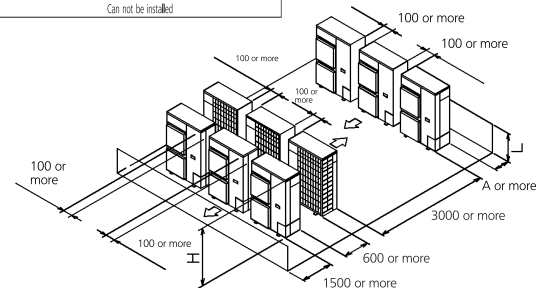
- ① One row of stand-alone installation



- 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

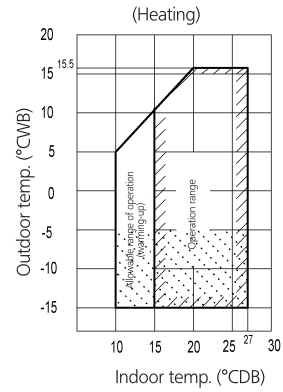
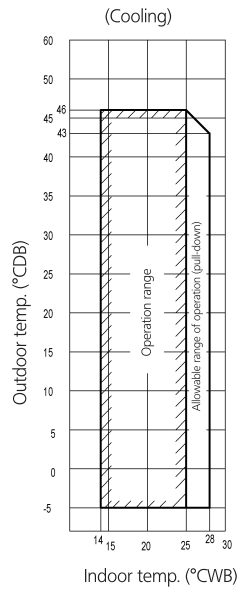
- In case of the sideways piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between 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 re-intake of discharged air.)

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# 13 Operation range

## 13 - 1 Operation Range

RZQSG-LY1



Notes:

- 1 Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 2 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.
- 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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In all of us,  
a green heart



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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