



# Air Conditioning Technical Data



EEDEN13-100

RZQSG-L(8)Y1



# TABLE OF CONTENTS

## RZQSG-L(8)Y1

1	Features .....	2
2	Specifications .....	3
	Nominal Capacity And Nominal Input .....	3
	Technical Specifications .....	5
	Electrical Specifications .....	7
3	Electrical data .....	8
	Electrical Data .....	8
4	Options .....	10
	Options .....	10
5	Combination table .....	11
	Combination Table .....	11
6	Capacity tables .....	12
	Cooling Capacity Tables .....	12
	Heating Capacity Tables .....	15
	Capacity Correction Factor .....	18
7	Dimensional drawings .....	19
	Dimensional Drawings .....	19
8	Centre of gravity .....	20
	Centre of Gravity .....	20
9	Piping diagrams .....	21
	Piping Diagrams .....	21
	Piping Diagram Twin Application .....	22
	Piping Diagram Triple Application .....	23
	Piping Diagram Double Twin Application .....	24
10	Wiring diagrams .....	25
	Wiring Diagrams - Three Phase .....	25
11	Sound data .....	26
	Sound Power Spectrum .....	26
	Sound Pressure Spectrum - Cooling .....	27
	Sound Pressure Spectrum - Heating .....	28
	Sound Pressure Spectrum Quiet Mode .....	29
12	Installation .....	30
	Installation Method .....	30
13	Operation range .....	32
	Operation Range .....	32

# 1 Features

- Seasonal classic series already comply with EU's 2014 Eco-Design requirements
- Top efficiency: - new compressor that offers substantial efficiency improvements - new control logic that optimises efficiency at the most frequently encountered operating conditions and that optimises the auxiliary modes (when the unit is not active) - newly designed heat exchangers that optimise the refrigerant flow at the most frequent operating conditions (temperature and load) - via improved nominal performances
- Re-use of existing R-22 or R-407C technology
- Guarantees operation in heating mode down to -15°C
- Maximum piping length up to 50m, minimum piping length is 5m.
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- 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.



Inverter

## 2 Specifications

2-1 Nominal Capacity And Nominal Input			FCQHG100F/RZQSG100L8Y1	FCQHG125F/RZQSG125L8Y1	FCQHG140F/RZQSG140LY1	
Cooling capacity	Nom.	kW	9.5	12.0	13.4	
Heating capacity	Nom.	kW	10.8	13.5	15.5	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++	A	-
		Pdesign	kW	9.50	12.00	-
		SEER		6.70	5.40	-
		Annual energy consumption	kWh	496	777	-
	Heating (Average climate)	Energy label		A+		-
		Pdesign	kW	8.03		-
		SCOP		4.30	4.10	-
		Annual energy consumption	kWh	2,614	2,741	-
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	EER		3.70	3.23	3.21	
	COP		4.30	3.75	3.61	
	Annual energy consumption		kWh	1,285	1,855	2,085
	Energy label	Cooling		A		-
		Heating		A		-

### Notes

(1) EER/COP according to Eurovent 2012

2-1 Nominal Capacity And Nominal 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	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++	A	-
		Pdesign	kW	9.50	12.00	-
		SEER		6.50	5.30	-
		Annual energy consumption	kWh	511	792	-
	Heating (Average climate)	Energy label		A+		-
		Pdesign	kW	7.60	8.03	-
		SCOP		4.10	4.01	-
		Annual energy consumption	kWh	2,595	2,803	-
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	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		-
		Heating		B		-

### Notes

(1) EER/COP according to Eurovent 2012

2-1 Nominal Capacity And Nominal Input			FAQ100C/RZQSG100L8Y1		
Cooling capacity	Nom.	kW	9.5		
Heating capacity	Nom.	kW	10.8		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+	
		Pdesign	kW	9.50	
		SEER		5.61	
		Annual energy consumption	kWh	592	
	Heating (Average climate)	Energy label		A+	
		Pdesign	kW	6.81	
		SCOP		4.01	
		Annual energy consumption	kWh	2,377	

## 2 Specifications

2

2-1 Nominal Capacity And Nominal Input			FAQ100C/RZQSG100L8Y1		
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	EER		3.01		
	COP		3.41		
	Annual energy consumption		kWh	1,580	
	Energy label	Cooling		B	
		Heating		B	

### Notes

(1) EER/COP according to Eurovent 2012

2-1 Nominal Capacity And Nominal 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
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A		
		Pdesign	kW	9.50	12.00	-
		SEER		5.50		
		Annual energy consumption	kWh	604	763	-
	Heating (Average climate)	Energy label		A+		
		Pdesign	kW	7.60		
		SCOP		4.01	3.85	-
		Annual energy consumption	kWh	2,653	2,763	-
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	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

(1) EER/COP according to Eurovent 2012

2-1 Nominal Capacity And Nominal Input			FBQ100C8/RZQSG100L8Y1	FBQ125C8/RZQSG125L8Y1	FBQ140C8/RZQSG140LY1	
Cooling capacity	Nom.		kW	9.5	12.0	13.4
Heating capacity	Nom.		kW	10.8	13.5	15.5
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A		
		Pdesign	kW	9.50	12.00	-
		SEER		5.50	5.20	-
		Annual energy consumption	kWh	604	807	-
	Heating (Average climate)	Energy label		A+		
		Pdesign	kW	7.60		
		SCOP		4.01	3.90	-
		Annual energy consumption	kWh	2,653	2,728	-
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	EER		3.31	3.21	3.02	
	COP		3.65	3.51	3.41	
	Annual energy consumption		kWh	1,435	1,870	2,220
	Energy label	Cooling		A		
		Heating		A	B	-

### Notes

(1) EER/COP according to Eurovent 2012

4

## 2 Specifications

2-1 Nominal Capacity And Nominal Input			FDQ125C/RZQSG125L8Y1		
Cooling capacity	Nom.	kW	12.0		
Heating capacity	Nom.	kW	13.5		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A	
		Pdesign	kW	12.00	
		SEER		5.20	
		Annual energy consumption	kWh	807	
	Heating (Average climate)	Energy label		A	
		Pdesign	kW	7.60	
		SCOP		3.90	
		Annual energy consumption	kWh	2,728	
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	EER		3.21		
	COP		3.51		
	Annual energy consumption		kWh	1,600	
	Energy label	Cooling		A	
		Heating		B	

### Notes

(1) EER/COP according to Eurovent 2012

2-1 Nominal Capacity And Nominal 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	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+		
		Pdesign	kW	9.50	12.00	-
		SEER		5.61		-
		Annual energy consumption	kWh	592	748	-
	Heating (Average climate)	Energy label		A	A+	-
		Pdesign	kW	7.60		-
		SCOP		3.91	4.01	-
		Annual energy consumption	kWh	2,721	2,653	-
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	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

(1) EER/COP according to Eurovent 2012

2-2 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		
Weight	Unit		kg	82		101
	Packed unit		kg	94		114
Heat exchanger	Fin	Type			WF fin	
		Treatment			Anti-corrosion treatment (PE)	

## 2 Specifications

2-2 Technical Specifications					RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1	
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	
			Super low	m <sup>3</sup> /min		-		
			cfm			-		
		Heating	Nom.	m <sup>3</sup> /min	83		62	
Super low			m <sup>3</sup> /min		-			
		cfm			-			
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	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				
Operation range	Cooling	Ambient	Min.	°CDB	-5			
			Max.	°CDB	46			
	Heating	Ambient	Min.	°CWB	-15			
			Max.	°CWB	15.5			
Refrigerant	Type				R-410A			
	Charge			kg	2.9		4.0	
	Control				Expansion valve (electronic type)			
	GWP				1,975			
	Circuits	Quantity			1			
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	Equivalent	m	70			
			Chargeless	m	30			
	Additional refrigerant charge			kg/m	See installation manual			
	Level difference	IU - OU	Max.	m	30.0			
IU - IU		Max.	m	0.5				
Heat insulation				Both liquid and gas pipes				
Defrost method				Reversed cycle				
Defrost control				Sensor for outdoor heat exchanger temperature				



## 2 Specifications

2-2 Technical Specifications			RZQSG100L8Y1	RZQSG125L8Y1	RZQSG140LY1
Safety devices	Item	01	High pressure switch		
		02	Fan driver overload protector		
		03	Fuse		

2-3 Electrical Specifications				RZQSG100L8Y1	RZQSG125L8Y1	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		
Current - 50Hz	Maximum fuse amps (MFA)		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

- (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 Electrical data

#### 3 - 1 Electrical Data

##### RZQSG100L8Y1

Indoor	Outdoor	Hz-Power supply	Voltage range	MCA	TOCA	MFA	Comp		OFM		IFM	
							MSC	RLA	kW	FLA	kW	FLA
FCQG100EVEB	RZQSG100L8Y1	3N~50Hz 220-240V	Min. 342V Max. 456V	14,5	—	20	—	11,4	0,2	0,6	0,106	1,0
FCQHG100FVEB				14,8	—	20	—	11,4	0,2	0,6	0,221	1,3
FCQG35FVEB x3				14,3	—	20	—	11,4	0,2	0,6	0,044x3	0,3x3
FCQG50FVEB x2				14,0	—	20	—	11,4	0,2	0,6	0,039x2	0,3x2
FCQG100FVEB				14,1	—	20	—	11,4	0,2	0,6	0,117	0,7
FFQ35B9V1B x3				14,7	—	20	—	11,4	0,2	0,6	0,055x3	0,4x3
FFQ50B9V1B x2				15,0	—	20	—	11,4	0,2	0,6	0,055x2	0,7x2
FBQ35C8VEB x3				17,7	—	20	—	11,4	0,2	0,6	0,140x3	1,2x3
FBQ50C8VEB x2				16,2	—	20	—	11,4	0,2	0,6	0,140x2	1,2x2
FBQ100C8VEB				15,2	—	20	—	11,4	0,2	0,6	0,350	1,6
FHQ35BWV1B x3				15,5	—	20	—	11,4	0,2	0,6	0,062x3	0,6x3
FHQ50BWV1B x2				14,7	—	20	—	11,4	0,2	0,6	0,062x2	0,6x2
FHQG100CVEB				14,7	—	20	—	11,4	0,2	0,6	0,150	1,2
FAQ100CVEB				13,7	—	20	—	11,4	0,2	0,6	0,064	0,4
FVQ100CVEB				14,7	—	20	—	11,4	0,2	0,6	0,238	1,2
FHQ35CAVEB x3				15,5	—	20	—	11,4	0,2	0,6	0,060 x 3	0,6 x 3
FHQ50CAVEB x2				14,7	—	20	—	11,4	0,2	0,6	0,060 x 2	0,6 x 2
FHQ100CAVEB				14,8	—	20	—	11,4	0,2	0,6	0,150	1,3

#### 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:  
Power supply: 50Hz 230V  
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)

3D077811A

### 3 Electrical data

#### 3 - 1 Electrical Data

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

Indoor	Outdoor	Hz-Power supply	Voltage range	Comp					OFM		IFM				
				MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA			
FCQG125EVEB	RZQSG125L8Y1	3N-50Hz 220-240V	Min. 342V Max. 456V	14,6	—	20	—	11,4	0,2	0,6	0,106	1,1			
FCQH125FVEB				15,0	—	20	—	11,4	0,2	0,6	0,244	1,4			
FCQG35FVEB				x4	14,7	—	20	—	11,4	0,2	0,6	0,044x4	0,3x4		
FCQG50FVEB				x3	14,3	—	20	—	11,4	0,2	0,6	0,039x3	0,3x3		
FCQG60FVEB				x2	14,0	—	20	—	11,4	0,2	0,6	0,044x2	0,3x2		
FCQG125FVEB					14,5	—	20	—	11,4	0,2	0,6	0,168	1,0		
FFQ35B9V1B				x4	15,2	—	20	—	11,4	0,2	0,6	0,055x4	0,4x4		
FFQ50B9V1B				x3	15,8	—	20	—	11,4	0,2	0,6	0,055x3	0,7x3		
FFQ60B9V1B				x2	15,0	—	20	—	11,4	0,2	0,6	0,055x2	0,7x2		
FBQ35C8VEB				x4	19,2	—	20	—	11,4	0,2	0,6	0,140x4	1,2x4		
FBQ50C8VEB				x3	17,7	—	20	—	11,4	0,2	0,6	0,140x3	1,2x3		
FBQ60C8VEB				x2	16,0	—	20	—	11,4	0,2	0,6	0,350x2	1,1x2		
FBQ125C8VEB					15,8	—	20	—	11,4	0,2	0,6	0,350	2,1		
FHQ35BWV1B				x4	16,2	—	20	—	11,4	0,2	0,6	0,062x4	0,6x4		
FHQ50BWV1B				x3	15,5	—	20	—	11,4	0,2	0,6	0,062x3	0,6x3		
FHQ60BWV1B				x2	14,7	—	20	—	11,4	0,2	0,6	0,062x2	0,6x2		
FHQG125CVEB					15,2	—	20	—	11,4	0,2	0,6	0,150	1,6		
FDQ125C7VEB					15,8	—	20	—	11,4	0,2	0,6	0,350	2,1		
FVQ125CVEB					14,7	—	20	—	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	—	20	—	11,4	0,2	0,6	0,060x3	0,6 x 3		
FHQ60CAVEB				x2	14,7	—	20	—	11,4	0,2	0,6	0,091x2	0,8 x 2		
FHQ125CAVEB					15,1	—	20	—	11,4	0,2	0,6	0,150	1,5		
FCQG71EVEB				x2	RZQSG140LY1	Min. 342V Max. 456V	17,5	—	20	—	14,2	0.094+0.094	0.4+0.4	0.048x2	0.4x2
FCQG140EVEB							17,9	—	20	—	14,2	0.094+0.094	0.4+0.4	0,106	1,1
FCQH71FVEB				x2			17,8	—	20	—	14,2	0.094+0.094	0.4+0.4	0.091x2	0.5x2
FCQH140FVEB							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			
FFQ35B9V1B	x4	18,5	—	20			—	14,2	0.094+0.094	0.4+0.4	0,055x4	0,4x4			
FFQ50B9V1B	x3	19,1	—	20			—	14,2	0.094+0.094	0.4+0.4	0,055x3	0,7x3			
FBQ35C8VEB	x4	22,5	—	25			—	14,2	0.094+0.094	0.4+0.4	0,140x4	1,2x4			
FBQ50C8VEB	x3	21,0	—	25			—	14,2	0.094+0.094	0.4+0.4	0,140x3	1,2x3			
FBQ71C8VEB	x2	19,3	—	20			—	14,2	0.094+0.094	0.4+0.4	0,350x2	1,1x2			
FBQ140C8VEB		19,1	—	20			—	14,2	0.094+0.094	0.4+0.4	0,350	2,1			
FHQ35BWV1B	x4	19,5	—	20			—	14,2	0.094+0.094	0.4+0.4	0,062x4	0,6x4			
FHQ50BWV1B	x3	18,8	—	20			—	14,2	0.094+0.094	0.4+0.4	0,062x3	0,6x3			
FHQG71CVEB	x2	18,5	—	20			—	14,2	0.094+0.094	0.4+0.4	0,091x2	0,8x2			
FHQG140CVEB		18,8	—	20			—	14,2	0.094+0.094	0.4+0.4	0,150	1,8			
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	x 4	19,5	—	20			—	14,2	0.094+0.094	0.4+0.4	0,060 x 4	0,6 x 4			
FHQ50CAVEB	x 3	18,8	—	20			—	14,2	0.094+0.094	0.4+0.4	0,060 x 3	0,6 x 3			
FHQ71CAVEB	x 2	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:  
Power supply: 50Hz 230V  
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)

3D077811A

## 4 Options

### 4 - 1 Options

#### 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	
	Triple	KHRQ127H (KHRQ58H); See note 1	
	Double twin	-	KHRQ22M20TA (KHRQ58T); See note 1
Demand adapter kit		KRP58M51	

3D076079

#### 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-L(8)Y1

Multi Combination Possibilities:

# of Fan	71	100	125	140
2 = Fan				
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 depend on outdoor unit

SKY-AIR	Hi cassette				Thin cassette				30 cassette			Duct (medium ESP)						Ceiling suspended			4way ceiling		Wall mounted		High Duct	Floor standing												
	FCQHG7FVEB	FCQHG100FVEB	FCQHG125FVEB	FCQHG140FVEB	FCQSG35FVEB	FCQSG50FVEB	FCQSG60FVEB	FCQSG71FVEB	FCQSG100FVEB	FCQSG125FVEB	FCQSG140FVEB	FCQSG35VIB	FCQSG50VIB	FCQSG60VIB	FCQSG71VIB	FCQSG100VIB	FCQSG125VIB	FCQSG140VIB	FHQ35CAVEB	FHQ50CAVEB	FHQ60CAVEB	FHQ71CAVEB	FHQ100CAVEB	FHQ125CAVEB	FHQ140CAVEB	FUQ710VEB	FUQ1000VEB	FUQ1250VEB	FAQ710VEB	FAQ1000VEB	FQO1250VEB	FVQ710VEB	FVQ1000VEB	FVQ1250VEB	FVQ1400VEB			
RZQSG100L8Y1		P			3	2					P							3	2				P															
RZQSG125L8Y1			P		4	3	2				P								4	3	2			P														
RZQSG140L8Y1	2			P	4	3		2			P	4	3		2			P	4	3		2			P													

**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

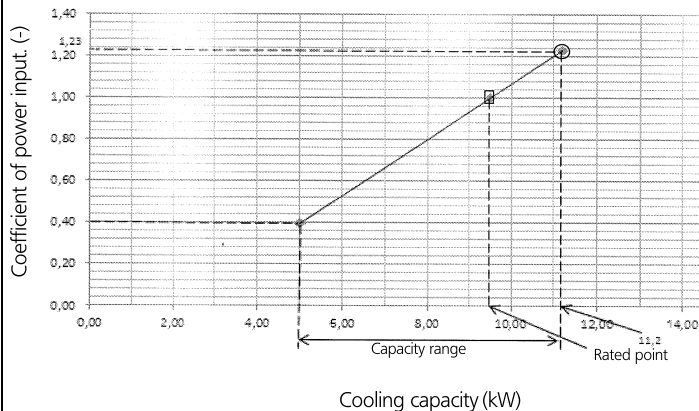
3D076080B

# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

### RZQSG100L8Y1

#### 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	1.08	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 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	FBQ100C	FHQG100C	FAQ100C	FVQ100C	FHQ100CA
AFR (BF)	32.3 (0.17)	32.0 (0.17)	32.0 (0.13)	20.0 (0.09)	26.0 (0.10)	28.0 (0.20)	28.0 (0.09)

(Triple)

	FCQG35Fx3	FFQ35B9x3	FBQ35Cx3	FHQ35B1Wx3	FHQ35CAx3
AFR (BF)	12.5x3 (0.4x3)	10.0x3 (0.25x3)	16.0x3 (0.15x3)	13.0x3 (0.20x3)	14.0x3 (0.17x3)

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

(Pair)

	FCQHG100F	FCQG100F	FBQ100C	FHQG100C	FAQ100C	FVQ100C	FHQ100CA
Cooling	2.57	2.88	2.87	2.96	3.16	2.96	2.96

(Triple)

	FCQG35Fx3	FFQ35B9x3	FBQ35Cx3	FHQ35B1Wx3	FHQ35CAx3
Cooling	2.82	2.86	2.93	3.39	3.33

#### 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)

	FCQGS0F2	FFQ50B9x2	FBQ50C2	FHQ50B1W2	FHQ50CA2
AFR (BF)	12.6x2 (0.22x2)	12.0x2 (0.16x2)	16.0x2 (0.16x2)	13.0x2 (0.10x2)	15.0x2 (0.18x2)

(Twin)

	FCQGS0F2	FFQ50B9x2	FBQ50C2	FHQ50B1W2	FHQ50CA2
Cooling	2.76	2.86	2.93	3.39	3.35

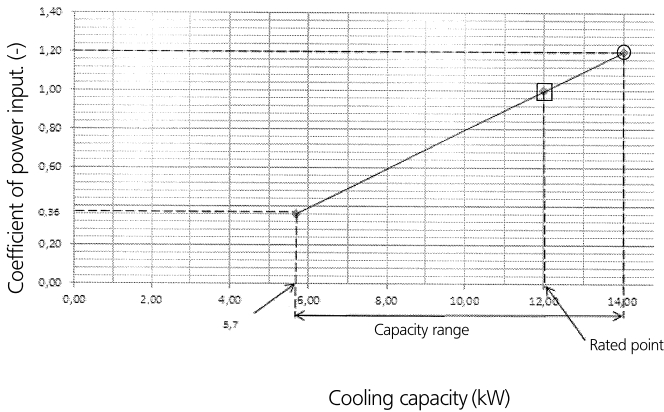
3D07653A

# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

### RZQSG125L8Y1

#### 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	8,83	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)

	FCQH125F	FCQG125F	FBQ125C	FHQ125C	FDQ125C	FVQ125C	FHQ125CA
AFR (BF)	33.5 (0.19)	33.0 (0.21)	39.0 (0.16)	31.0 (0.134)	39.0 (0.16)	28.0 (0.16)	31.0 (0.14)

(Triple)

	FCQ50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50B9x3	FHQ50CAx3
AFR (BF)	12.6x3 (0.22x3)	12.0x3 (0.16x3)	16.0x3 (0.16x3)	13.0x3 (0.10x3)	15.0x3 (0.18x3)

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

(Pair)

	FCQH125F	FCQG125F	FBQ125C	FHQ125C	FDQ125C	FVQ125C	FHQ125CA
Cooling	3.71	3.74	3.74	4.15	3.74	4.27	4.15

(Triple)

	FCQ50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50B9x3	FHQ50CAx3
Cooling	3.69	4.08	3.95	4.39	4.33

#### 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	FFQ60B9x2	FBQ60Cx2	FHQ60B9x2	FHQ60CAx2
AFR (BF)	13.6x2 (0.2x2)	15.0x2 (0.11x2)	18.0x2 (0.15x2)	17.0x2 (0.20x2)	19.5x2 (0.20x2)

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
AFR (BF)	12.5x4 (0.4x4)	10x4 (0.25x4)	16x4 (0.15x4)	13x4 (0.20x4)	14x4 (0.17x4)

(Twin)

	FCQG60Fx2	FFQ60B9x2	FBQ60Cx2	FHQ60B9x2	FHQ60CAx2
Cooling	3.66	4.08	3.95	4.39	4.34

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
Cooling	3.75	4.08	3.95	4.39	4.31

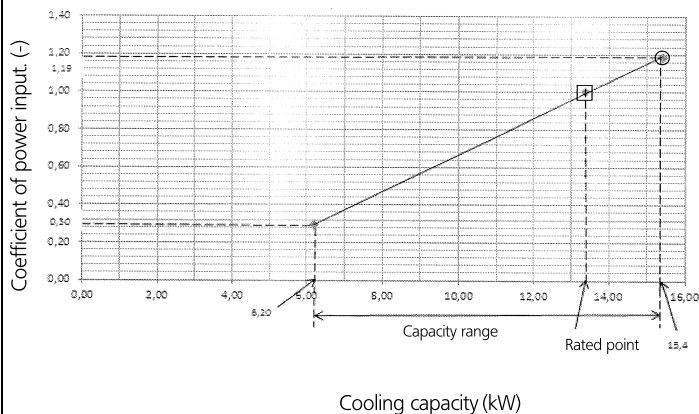
3D076754A

# 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	9.89	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	9.86	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 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)

	FCQH140F	FCQ140F	FBQ140C	FHQ140C	FVQ140C	FHQ140CA
AFR	33.5	33.0	39	34.0	30.0	34.0
(BF)	(0.15)	(0.23)	(0.14)	(0.17)	(0.18)	(0.17)

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50B9x3	FHQ50CAx3
AFR	12.6x3	12.0x3	16.0x3	13.0x3	15.0x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)	(0.18x3)

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

(Pair)

	FCQH140F	FCQ140F	FBQ140C	FHQ140C	FVQ140C	FHQ140CA
Cooling	4.17	4.45	4.44	4.45	4.45	4.45

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50B9x3	FHQ50CAx3
Cooling	4.40	4.62	4.17	4.73	4.67

#### 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)

	FCQH71Fx2	FCQ71Fx2	FBQ71Cx2	FHQ71Cx2	FAQ71Cx2	FHQ71CAx2
AFR	21.2x2	21.5x2	18.0x2	20.5x2	18.0x2	20.5x2
(BF)	(0.2x2)	(0.14x2)	(0.08x2)	(0.13x2)	(0.16x2)	(0.13x2)

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
AFR	12.5x4	10.0x4	16.0x4	13.0x4	14.0x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)	(0.20x4)

(Twin)

	FCQH71Fx2	FCQ71Fx2	FBQ71Cx2	FHQ71Cx2	FAQ71Cx2	FHQ71CAx2
Cooling	4.11	4.39	4.17	4.01	4.23	4.01

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
Cooling	4.46	4.62	4.17	4.73	4.65

3D076755A

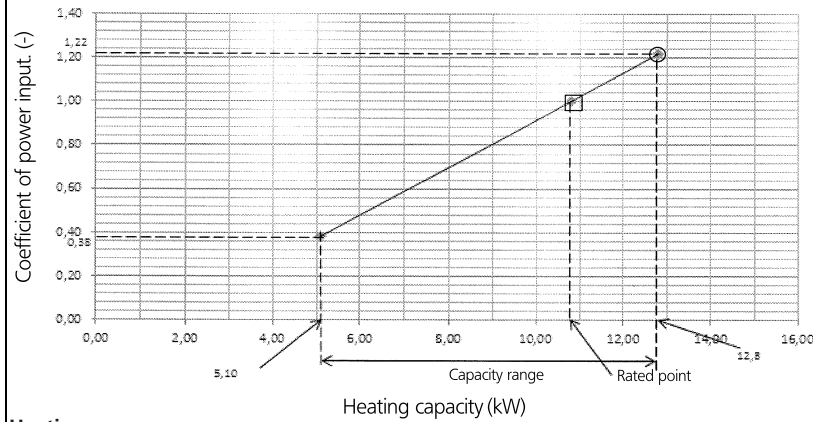


# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

### RZQSG100L8Y1

#### 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	8.58	0.93	9.45	0.99	10.1	1.02	10.4	1.05	12.8	1.12	13.8	1.18
18	8.57	0.97	9.44	1.02	10.0	1.07	10.3	1.10	12.8	1.17	13.8	1.23
20	8.56	1.01	9.43	1.07	10.0	1.11	10.3	1.14	12.8	1.22	13.8	1.28
21	8.56	1.03	9.42	1.09	10.0	1.13	10.3	1.16	12.8	1.24	13.8	1.30
22	8.55	1.04	9.42	1.10	10.0	1.14	10.3	1.18	12.8	1.26	13.8	1.33
24	8.54	1.09	9.41	1.15	10.0	1.19	10.3	1.23	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)

	FCQH100F	FCQG100F	FBQ100C	FHQ100C	FAQ100C	FVQ100C	FHQ100CA
AFR (BF)	32.3 (0.17)	32.0 (0.17)	32.0 (0.13)	20.0 (0.09)	26.0 (0.10)	28.0 (0.20)	28.0 (0.09)

(Triple)

	FCQG35F3	FFQ35B9x3	FBQ35C3	FHQ35BWx3	FHQ35CAx3
AFR (BF)	12.5x3 (0.4x3)	10.0x3 (0.25x3)	16.0x3 (0.15x3)	13.0x3 (0.20x3)	14.0x3 (0.17x3)

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

(Pair)

	FCQH100F	FCQG100F	FBQ100C	FHQ100C	FAQ100C	FVQ100C	FHQ100CA
Heating	2.51	3.05	2.96	2.99	3.17	2.99	2.99

(Triple)

	FCQG35F3	FFQ35B9x3	FBQ35C3	FHQ35BWx3	FHQ35CAx3
Heating	2.66	2.79	2.86	3.32	3.26

#### 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)

	FCQG50F2	FFQ50B9x2	FBQ50C2	FHQ50BWx2	FHQ50CAx2
AFR (BF)	12.6x2 (0.22x2)	12.0x2 (0.16x2)	16.0x2 (0.16x2)	13.0x2 (0.10x2)	15.0x2 (0.18x2)

(Twin)

	FCQG50F2	FFQ50B9x2	FBQ50C2	FHQ50BWx2	FHQ50CAx2
Heating	2.61	2.79	2.86	3.32	3.28

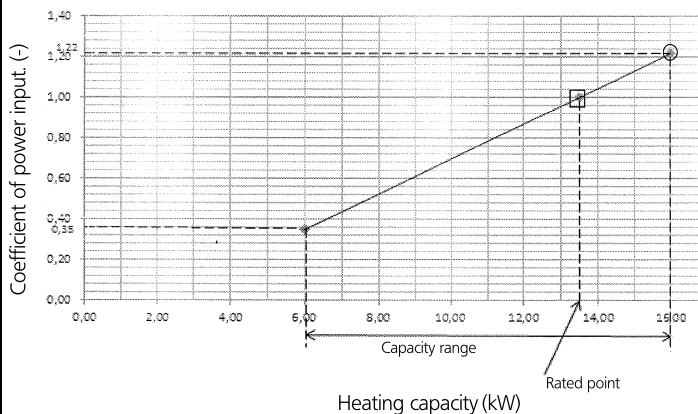
3D076753A

# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

### RZQSG125L8Y1

#### 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	10.7	0.93	11.8	0.99	12.6	1.02	13.0	1.05	16.0	1.12	17.3	1.18
18	10.7	0.97	11.8	1.02	12.5	1.07	12.9	1.10	16.0	1.17	17.3	1.23
20	10.7	1.01	11.8	1.07	12.5	1.11	12.9	1.14	16.0	1.22	17.3	1.28
21	10.7	1.03	11.8	1.09	12.5	1.13	12.9	1.16	16.0	1.24	17.3	1.31
22	10.7	1.04	11.8	1.10	12.5	1.14	12.9	1.18	16.0	1.27	17.3	1.33
24	10.7	1.09	11.8	1.15	12.5	1.19	12.9	1.23	16.0	1.31	17.3	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)

	FCQH6125F	FCQG125F	FBQ125C	FHQG125C	FDQ125C	FVQ125C	FHQ125CA
AFR	33.5	33.0	39.0	31.0	39.0	28.0	31.0
(BF)	(0.19)	(0.21)	(0.16)	(0.134)	(0.16)	(0.16)	(0.14)

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50Bw3	FHQ50CAx3
AFR	12.6x3	12.0x3	16.0x3	13.0x3	15.0x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)	(0.18x3)

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

(Pair)

	FCQH6125F	FCQG125F	FBQ125C	FHQG125C	FDQ125C	FVQ125C	FHQ125CA
Heating	3.60	3.96	3.85	3.73	3.85	3.96	3.73

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50Bw3	FHQ50CAx3
Heating	3.90	4.15	4.06	4.48	4.42

#### 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	FFQ60B9x2	FBQ60Cx2	FHQ60Bw2	FHQ60CAx2
AFR	13.6x2	15.0x2	18.0x2	17.0x2	19.5x2
(BF)	(0.2x2)	(0.11x2)	(0.15x2)	(0.20x2)	(0.20x2)

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35Bw4	FHQ35CAx4
AFR	12.5x4	10x4	16x4	13x4	14x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)	(0.17x4)

(Twin)

	FCQG60Fx2	FFQ60B9x2	FBQ60Cx2	FHQ60Bw2	FHQ60CAx2
Heating	3.88	4.15	4.06	4.48	4.43

(Double twin)

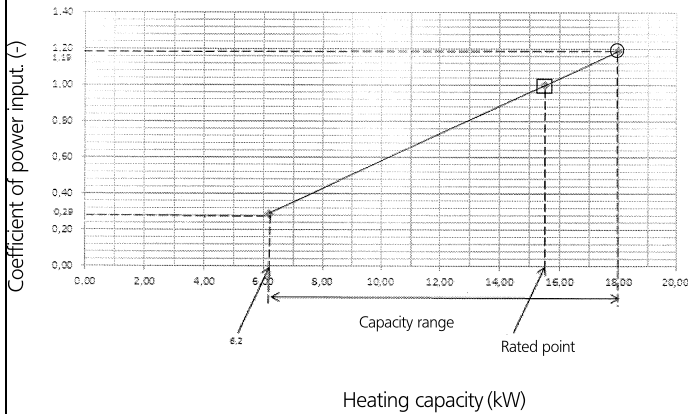
	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35Bw4	FHQ35CAx4
Heating	3.96	4.15	4.06	4.48	4.32

# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

### RZQSG140LY1

#### 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	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	18.0	1.19	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	1.08	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

#### 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	FBQ140C	FHQG140C	FVQ140C	FHQ140CA
AFR	33.5	33.0	41	34.0	30.0	34.0
(BF)	(0.15)	(0.23)	(0.14)	(0.17)	(0.18)	(0.17)

(Twin)

	FCQHG71Fx2	FCQG71Fx2	FBQ71Cx2	FHQG71Cx2	FAQ71Cx2	FHQ71CAx2
AFR	21.2x2	21.5x2	18.0x2	20.5x2	18.0x2	20.5x2
(BF)	(0.2x2)	(0.14x2)	(0.08x2)	(0.13x2)	(0.16x2)	(0.13x2)

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50C3	FHQ50Bw3	FHQ50CAx3
AFR	12.6x3	12.0x3	16.0x3	13.0x3	15.0x3
(BF)	(0.22x3)	(0.16x3)	(0.16x3)	(0.10x3)	(0.18x3)

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35Bw4	FHQ35CAx4
AFR	12.5x4	10.0x4	16.0x4	13.0x4	14.0x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)	(0.20x4)

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

(Pair)

	FCQHG140F	FCQG140F	FBQ140C	FHQG140C	FVQ140C	FHQ140CA
Heating	4.29	4.54	4.54	4.54	4.54	4.54

(Twin)

	FCQHG71Fx2	FCQG71Fx2	FBQ71Cx2	FHQG71Cx2	FAQ71Cx2	FHQ71CAx2
Heating	4.23	4.48	4.94	4.71	4.92	4.71

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50C3	FHQ50Bw3	FHQ50CAx3
Heating	4.48	5.16	4.94	5.73	5.67

(Double twin)

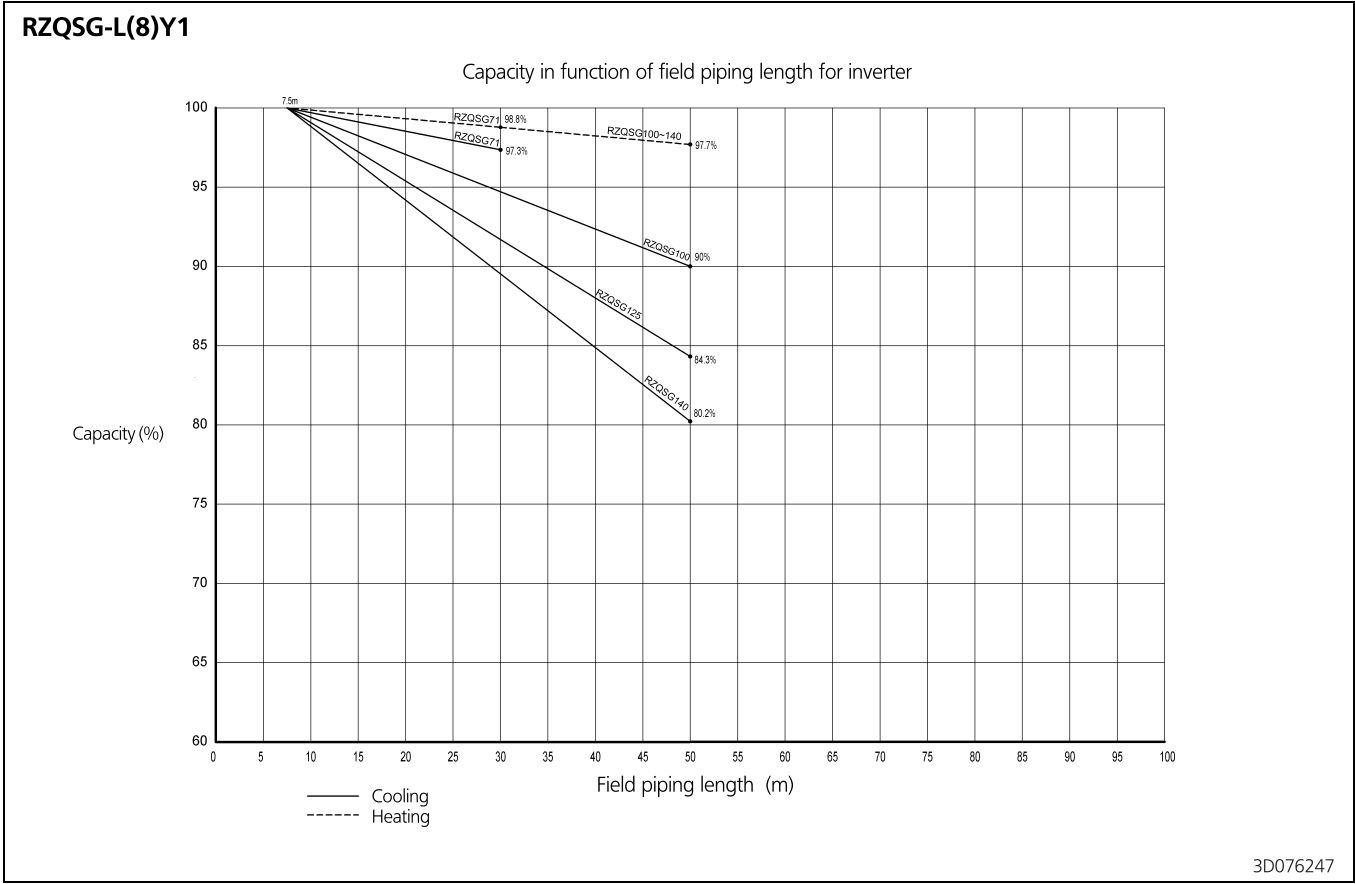
	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35Bw4	FHQ35CAx4
Heating	4.54	5.16	4.94	5.73	5.57

3D076755A

# 6 Capacity tables

## 6 - 3 Capacity Correction Factor

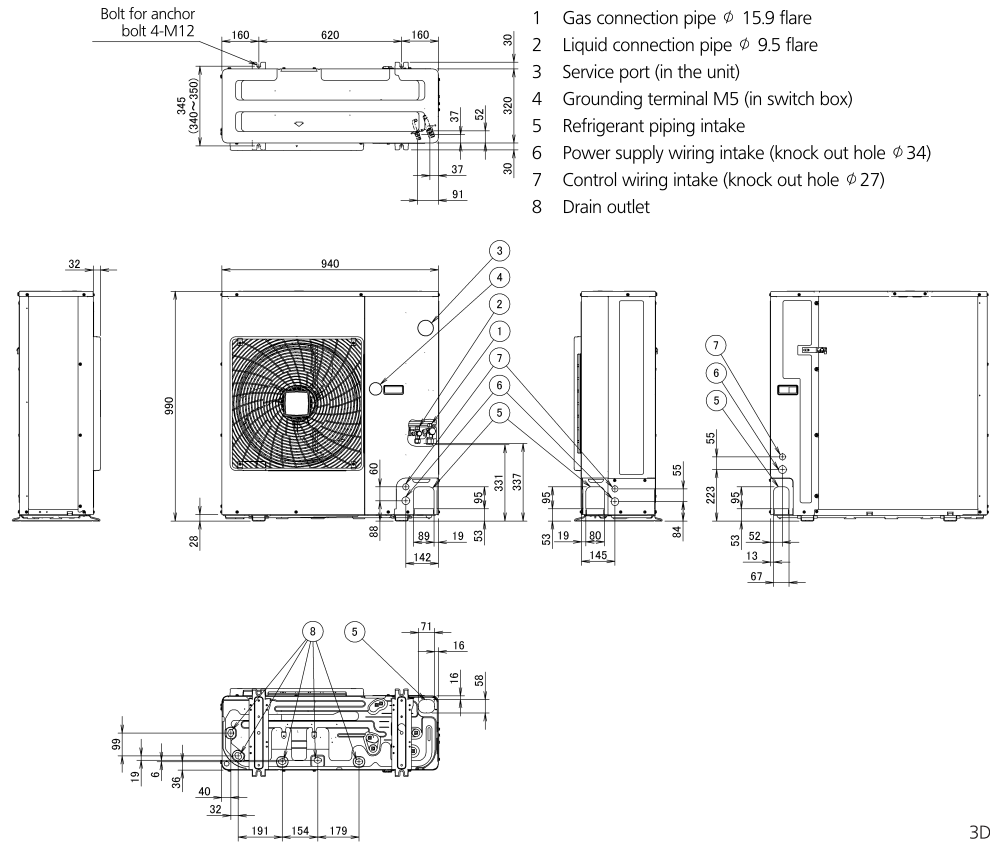
6



# 7 Dimensional drawings

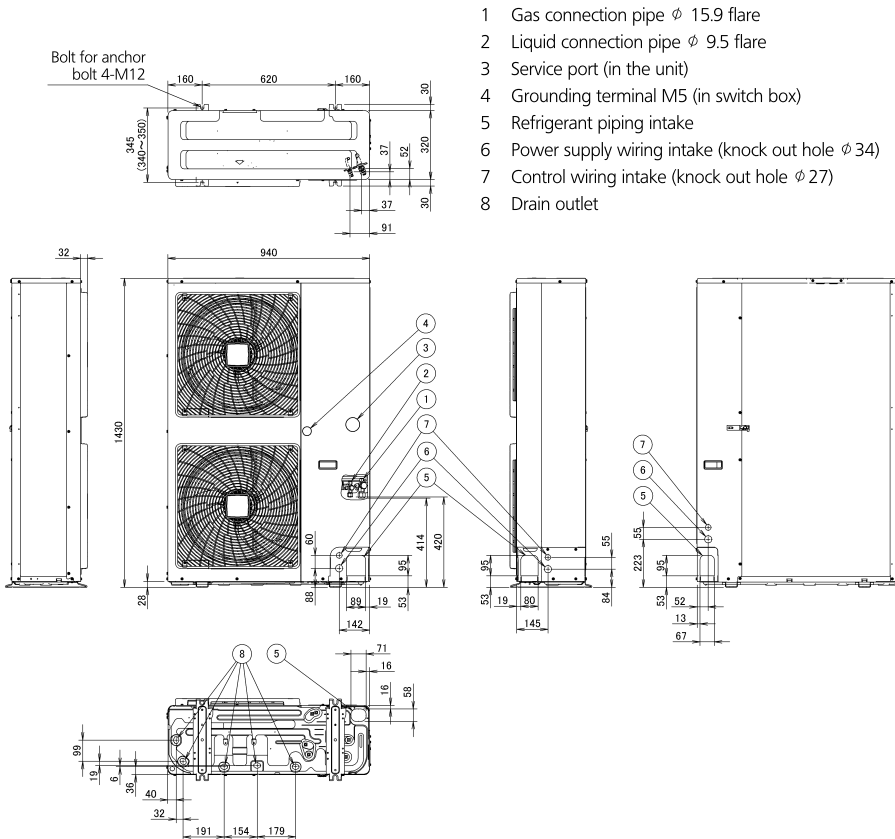
## 7 - 1 Dimensional Drawings

### RZQSG100-125L8Y1



3D076345

### RZQSG140LY1



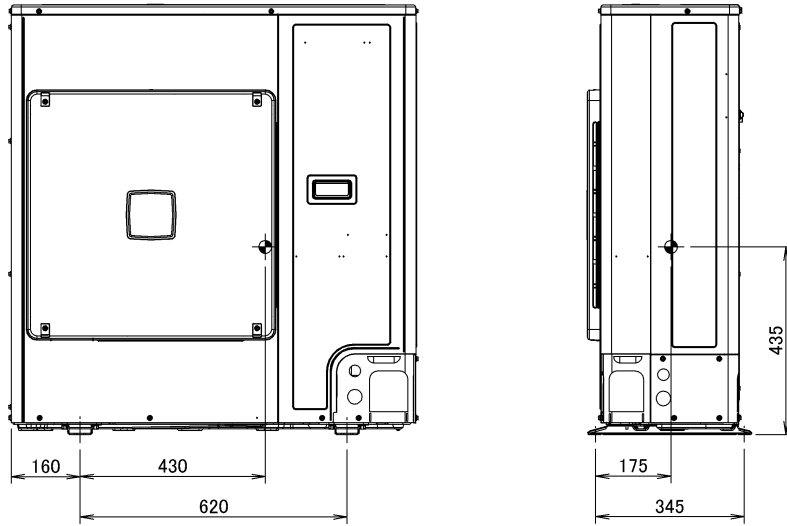
3D076346

# 8 Centre of gravity

## 8 - 1 Centre of Gravity

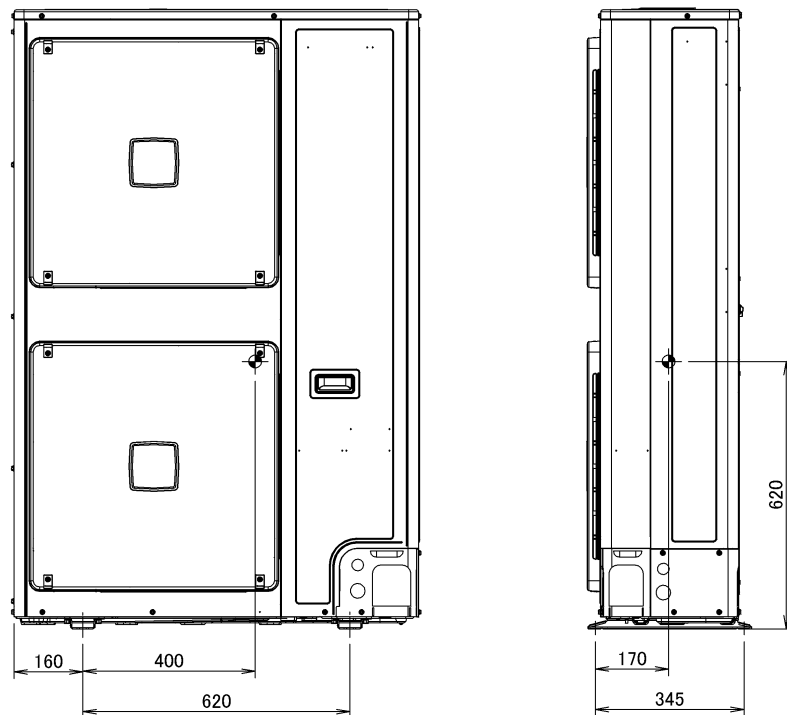
8

RZQSG100-125L8Y1



4D077809

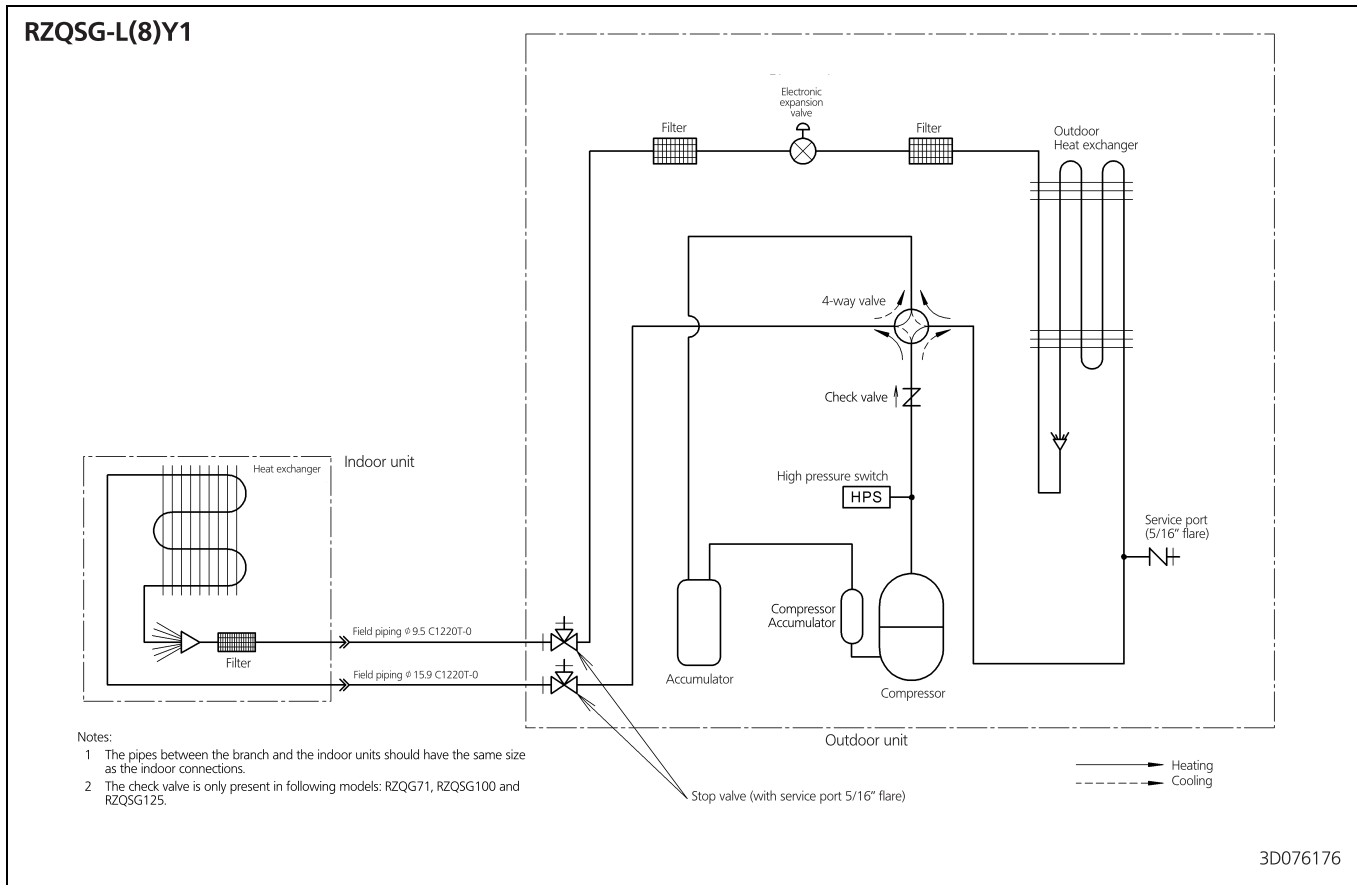
RZQSG140LY1



4D077808

# 9 Piping diagrams

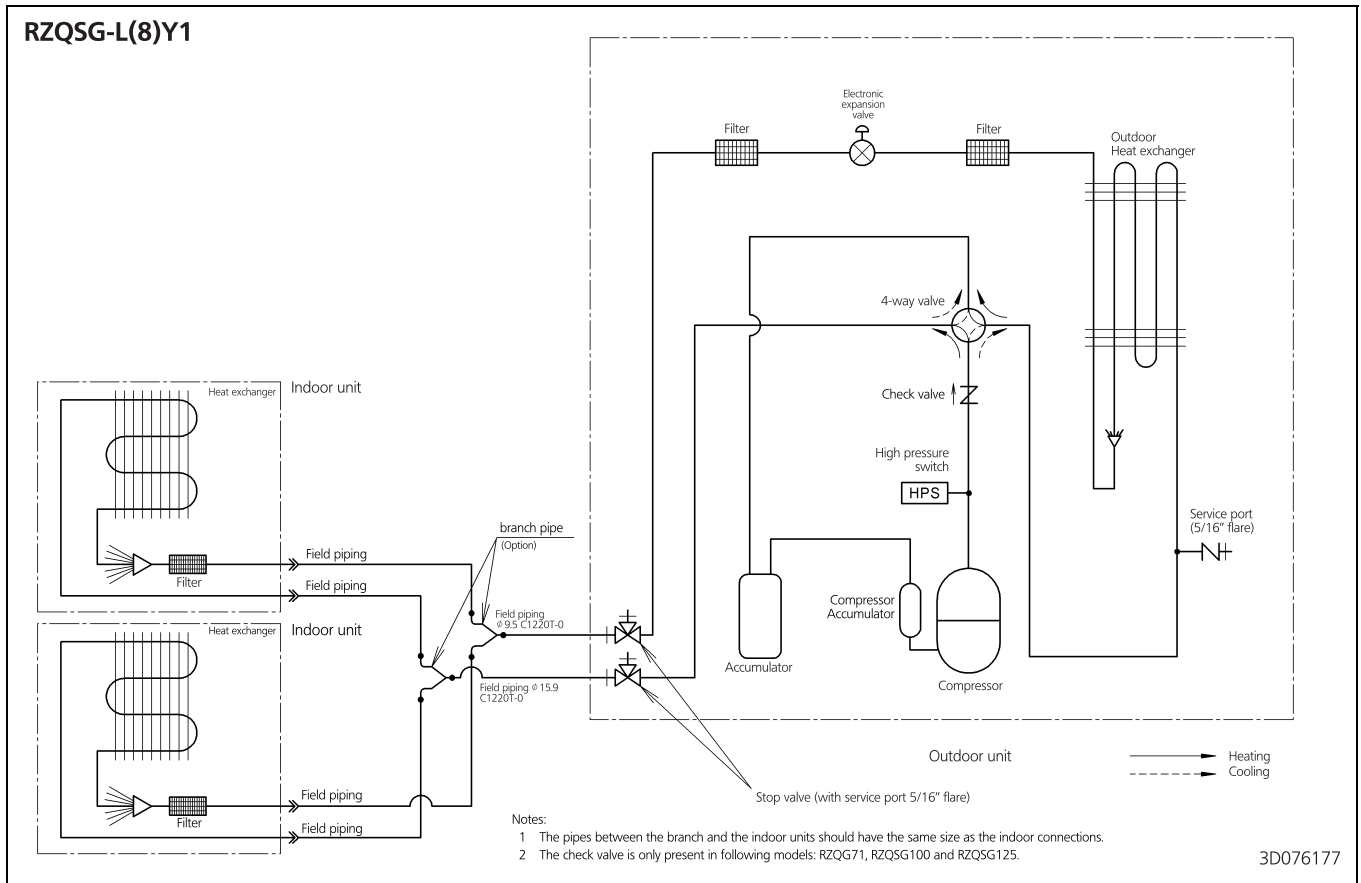
## 9 - 1 Piping Diagrams



# 9 Piping diagrams

## 9 - 2 Piping Diagram Twin Application

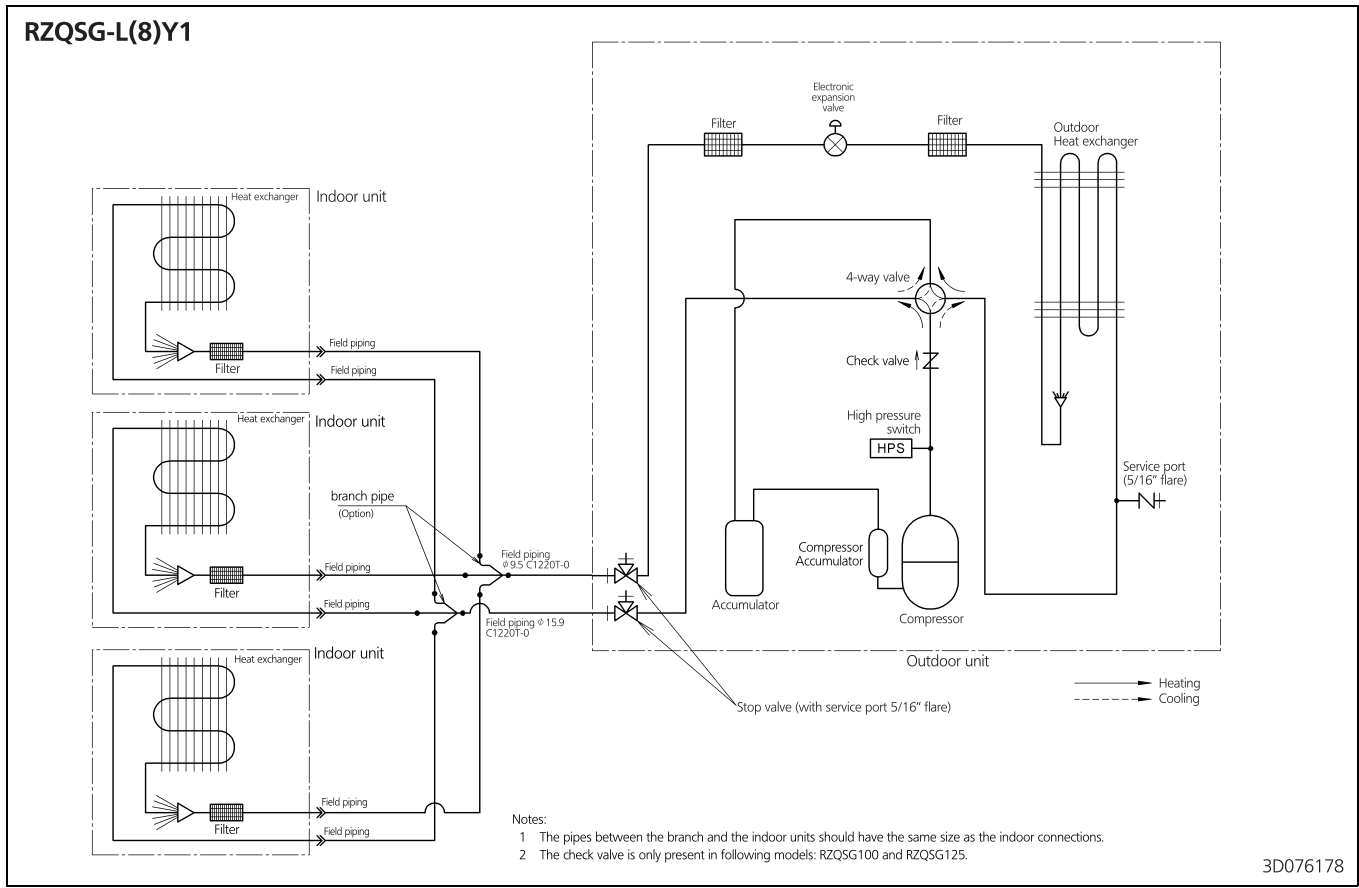
9





# 9 Piping diagrams

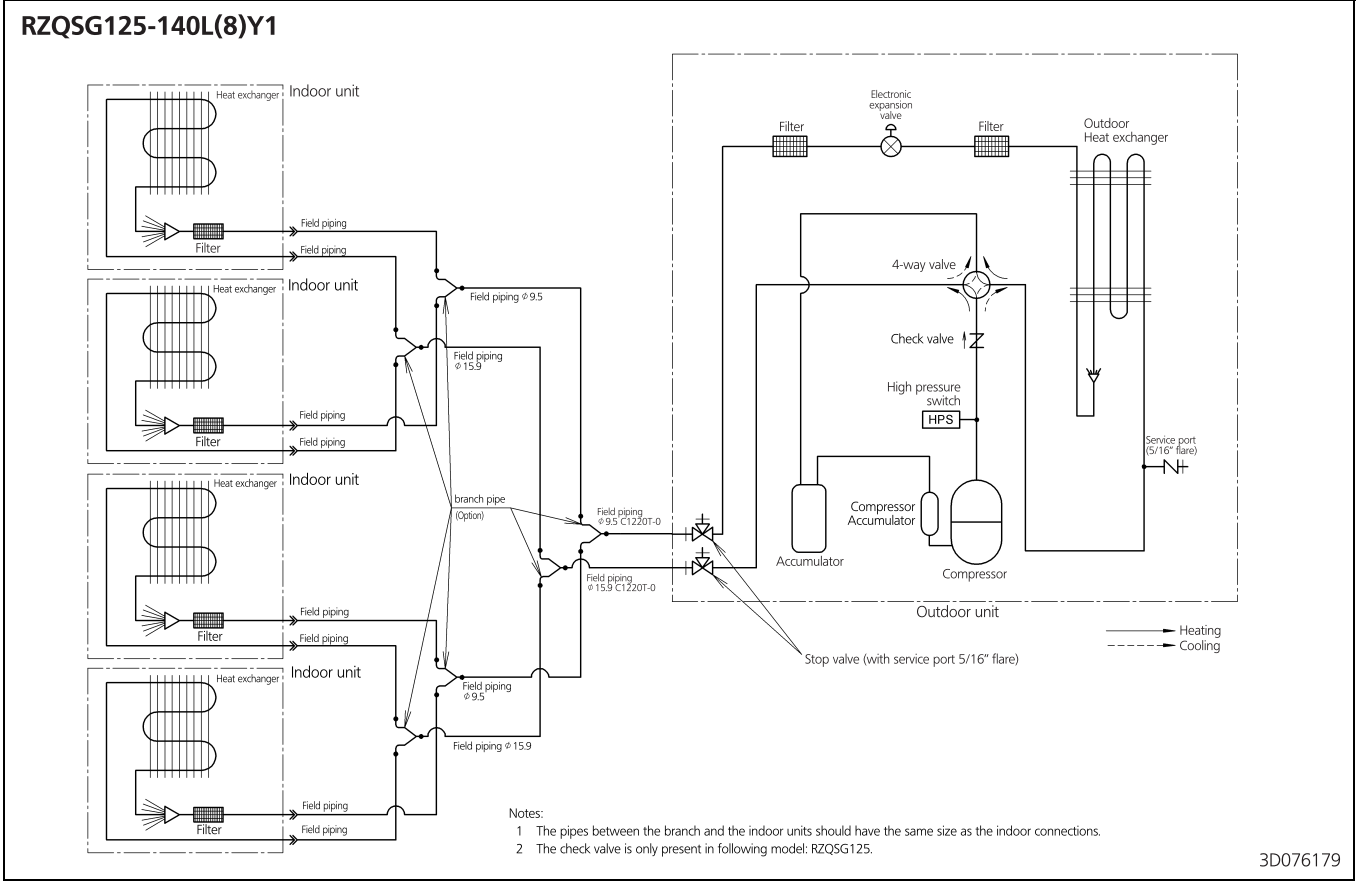
## 9 - 3 Piping Diagram Triple Application



# 9 Piping diagrams

## 9 - 4 Piping Diagram Double Twin Application

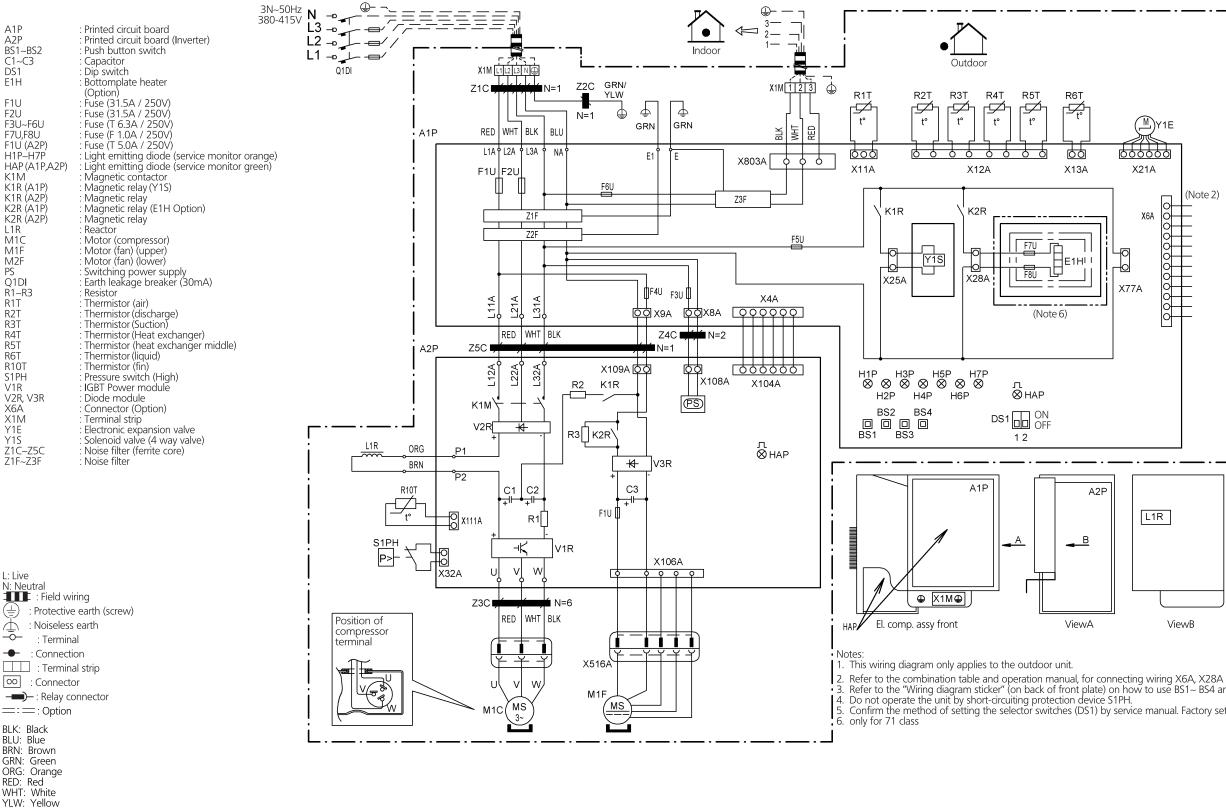
9



# 10 Wiring diagrams

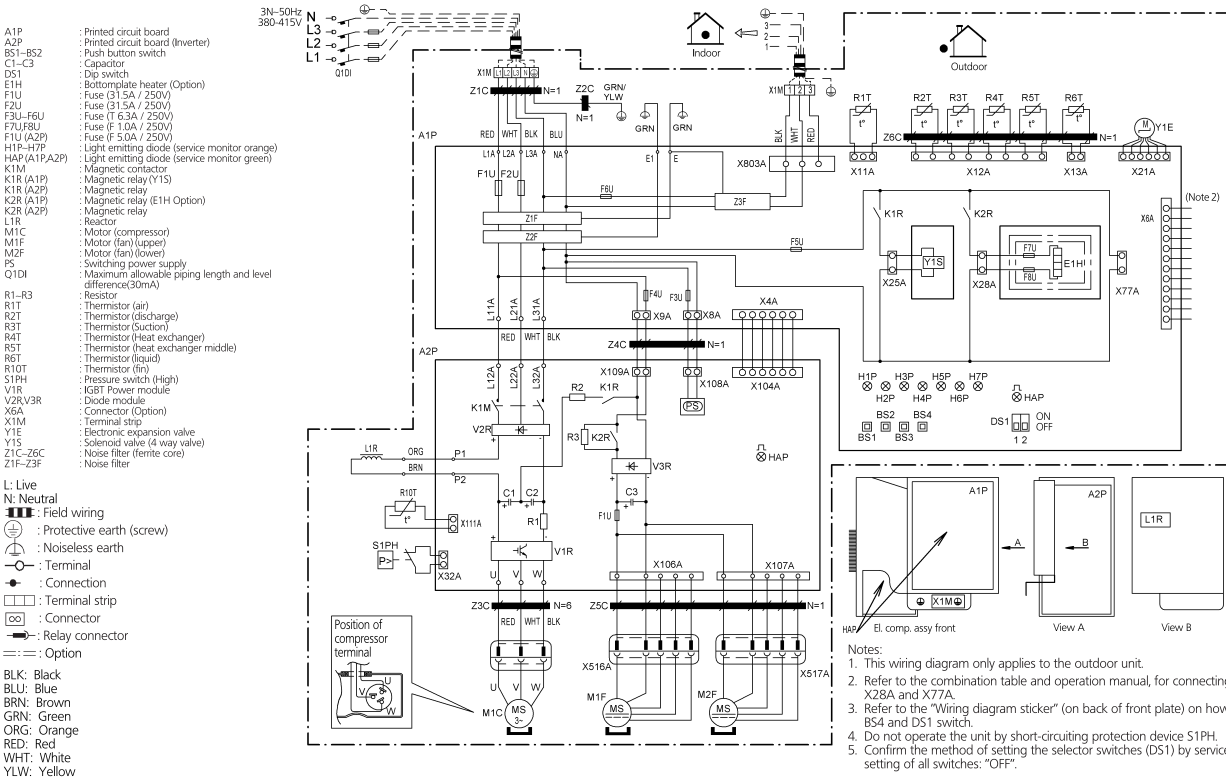
## 10 - 1 Wiring Diagrams - Three Phase

### RZQSG100-125L8Y1



2D080114B

### RZQSG140LY1



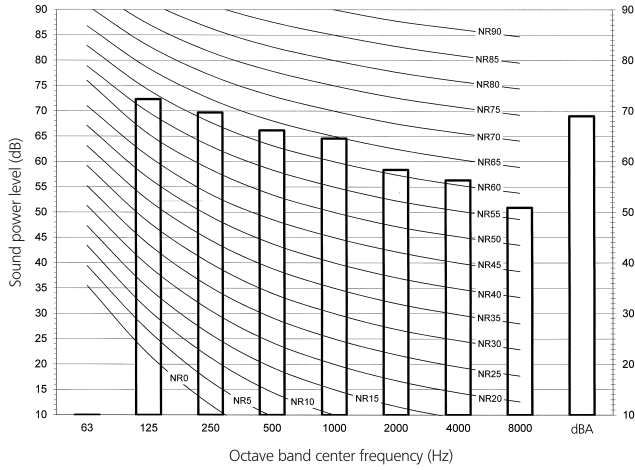
2D077192

# 11 Sound data

## 11 - 1 Sound Power Spectrum

11

RZQSG100L8Y1

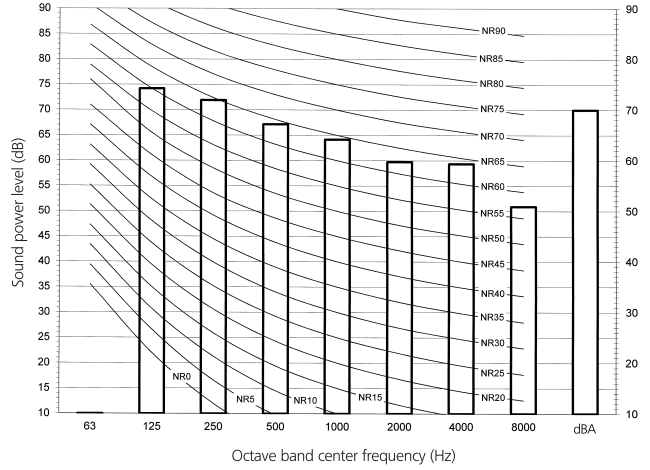


**NOTES**

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

3D077783

RZQSG125L8Y1

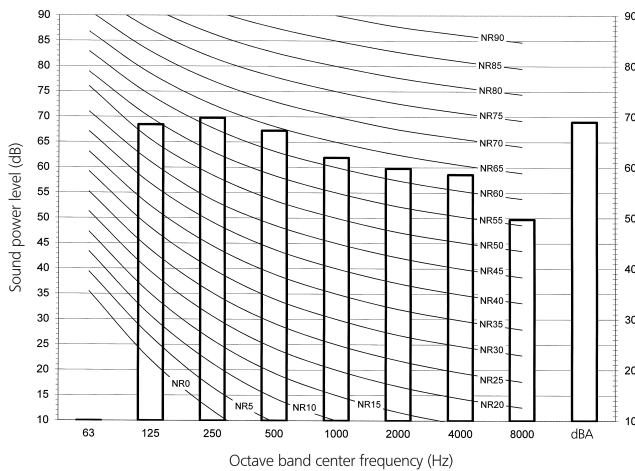


**NOTES**

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

3D077784

RZQSG140LY1



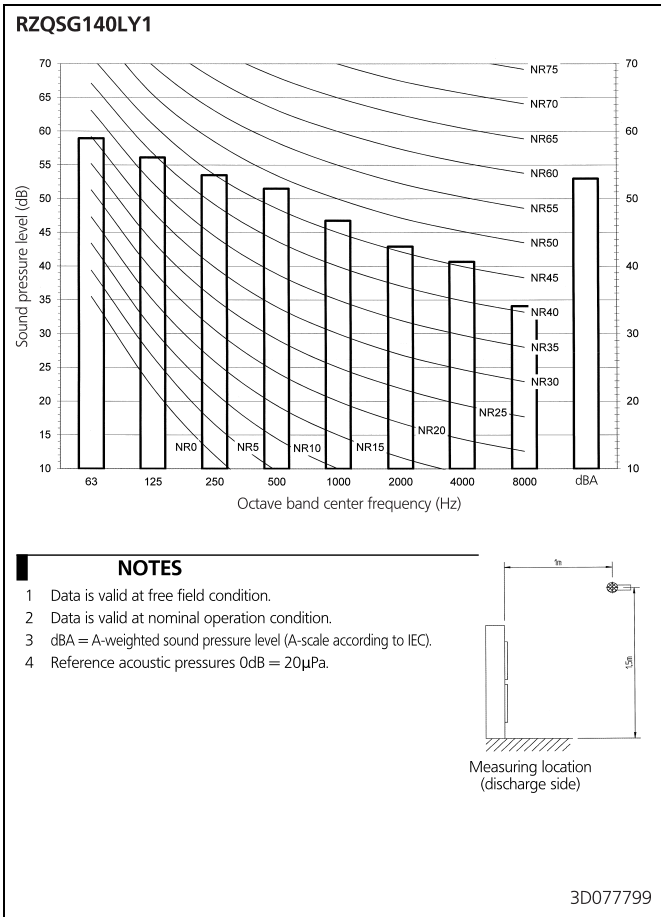
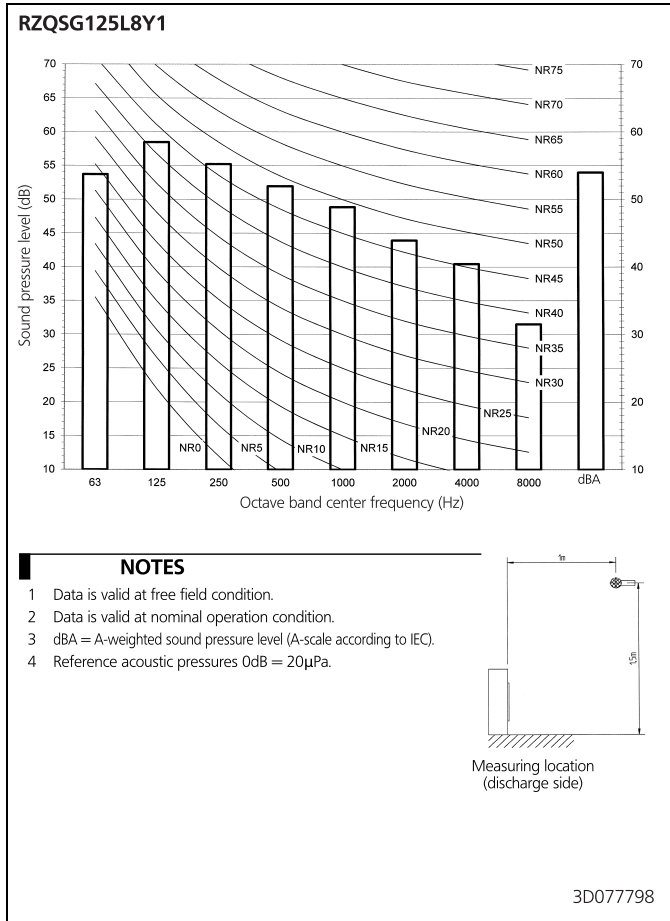
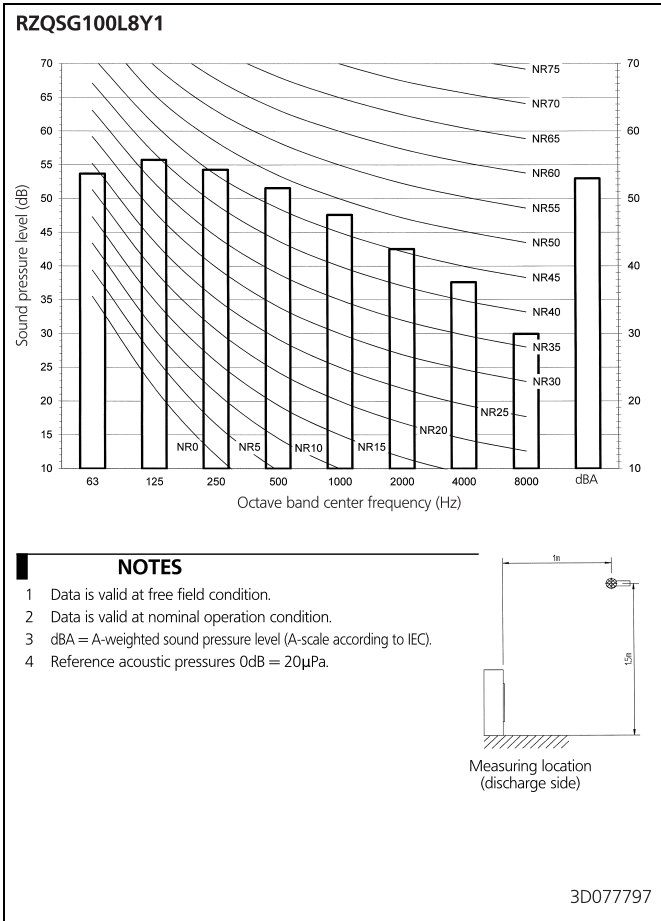
**NOTES**

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

3D077785

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Cooling

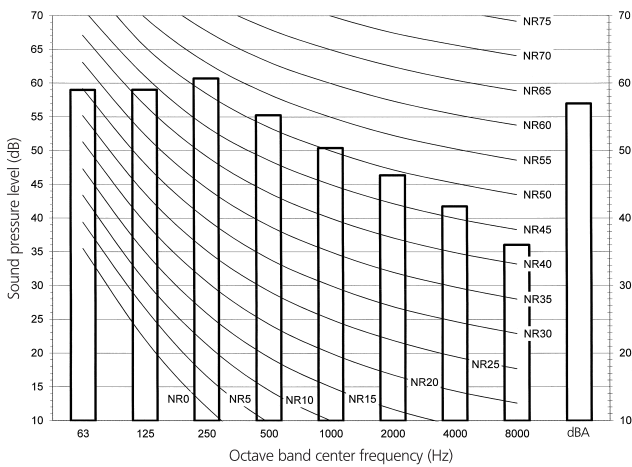


# 11 Sound data

## 11 - 3 Sound Pressure Spectrum - Heating

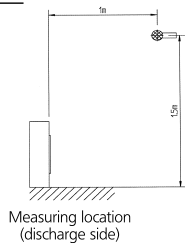
11

RZQSG100L8Y1



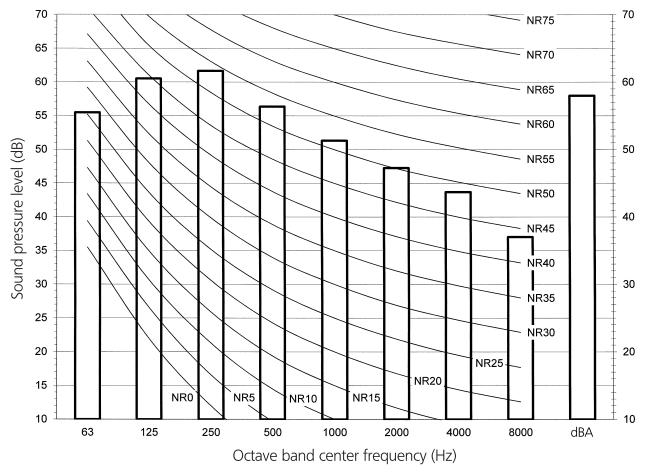
**NOTES**

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



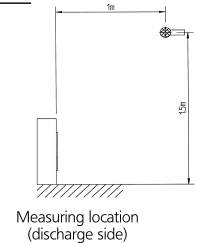
3D077804

RZQSG125L8Y1



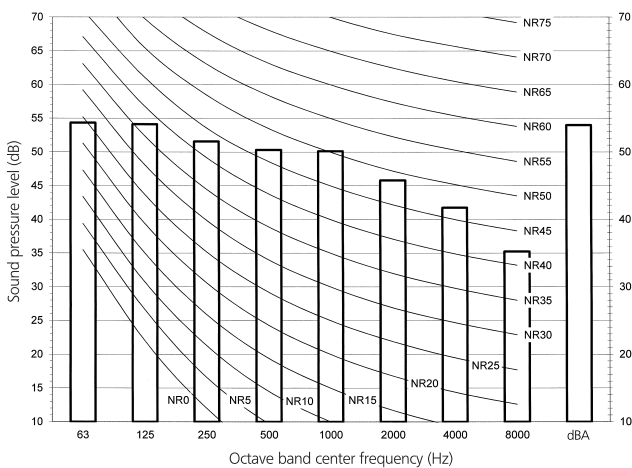
**NOTES**

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



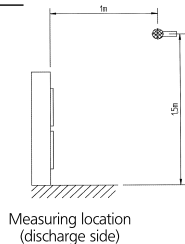
3D077805

RZQSG140LY1



**NOTES**

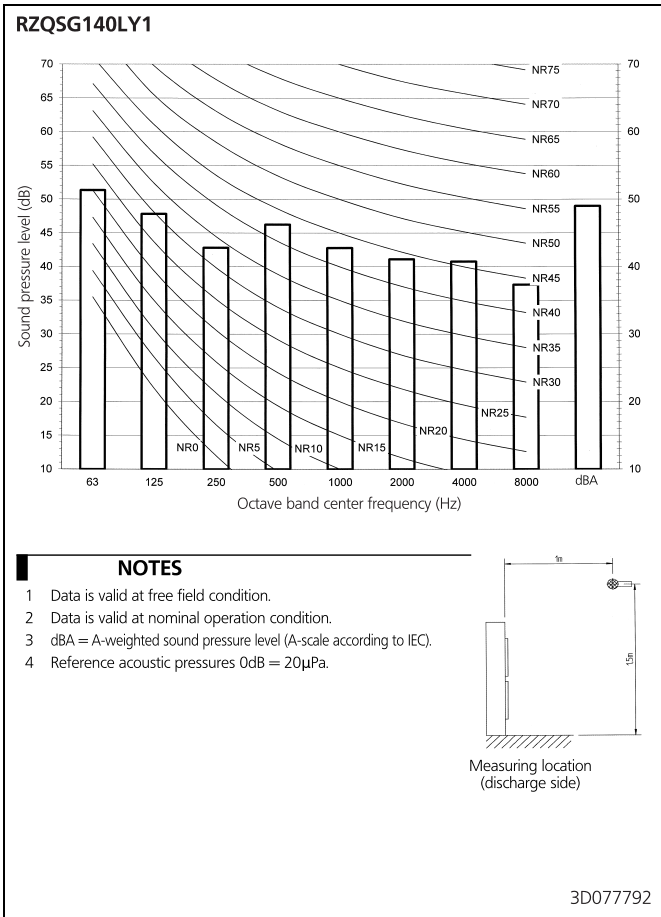
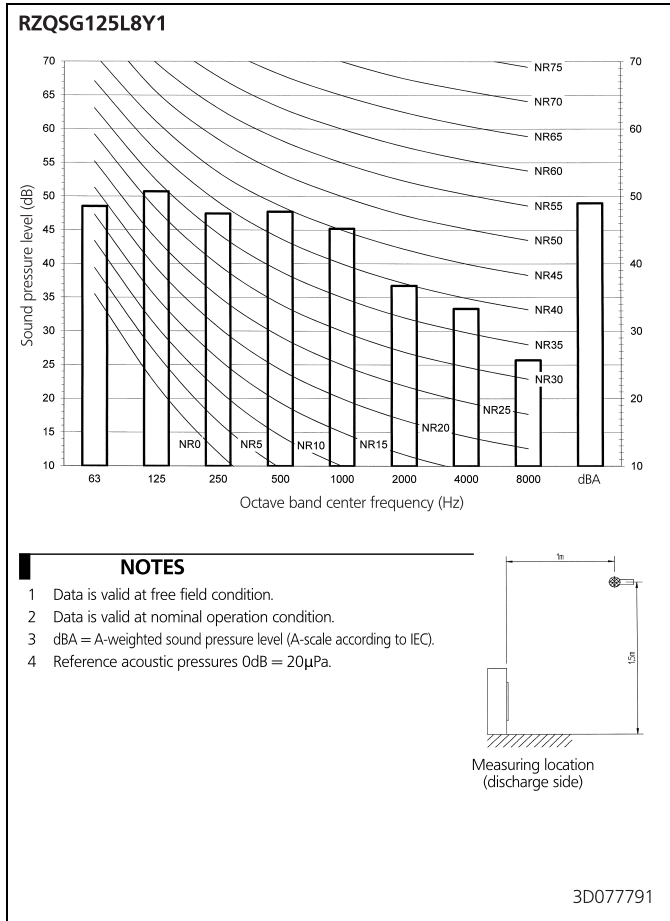
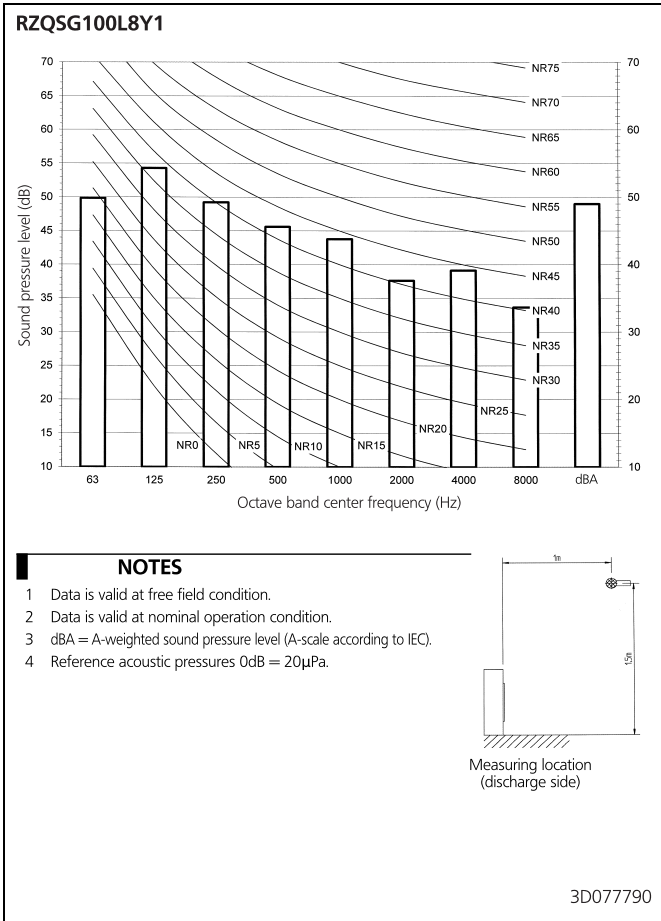
- 1 Data is valid at free field condition.
- 2 Data is valid at nominal operation condition.
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC).
- 4 Reference acoustic pressures 0dB = 20μPa.



3D077806

# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode



# 12 Installation

## 12 - 1 Installation Method

### RZQSG-L(8)Y1

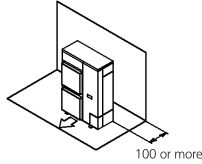
#### Installation service space

The measure of these values is "mm".

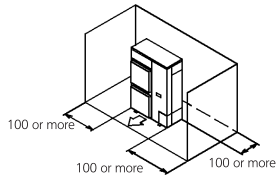
#### (A) When there are obstacles on suction sides.

##### • No obstacle above

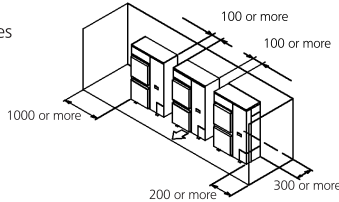
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

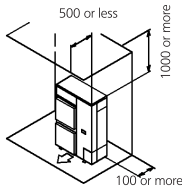


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides

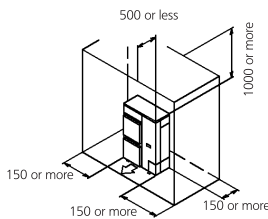


##### • Obstacle above, too.

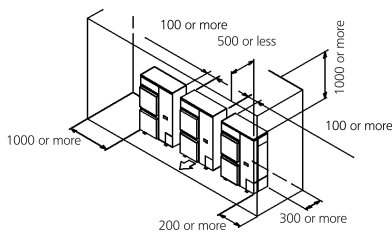
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



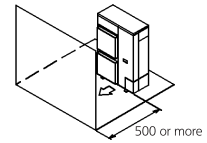
- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides



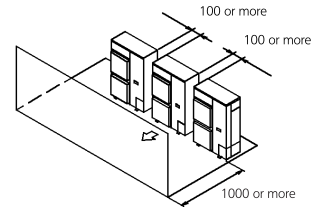
#### (B) When there are obstacles on discharge sides.

##### • No obstacle above

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

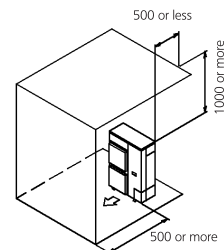


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side only

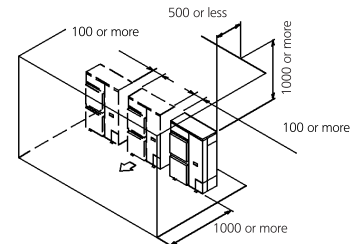


##### • Obstacle above, too

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



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



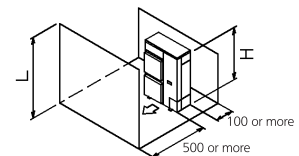
#### (C) When there are obstacles on both suction and discharge sides.:

##### Pattern 1

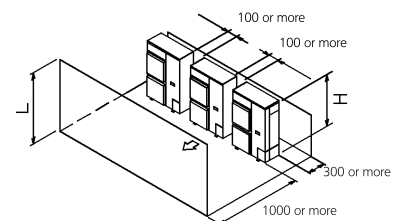
When the obstacles on the discharge side is higher than the unit. (L>H)  
(There is no limit for the height of obstructions on the suction side.)

##### • No obstacle above

- ① Stand-alone installation
  - No obstacle above



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



3D069554



# 12 Installation

## 12 - 1 Installation Method

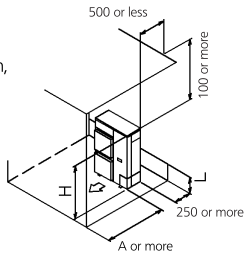
### RZQSG-L(8)Y1

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



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

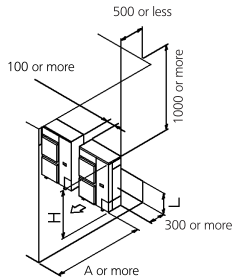
The relations between H, A and L are as follows.

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

Limit of series installation is 2 units.

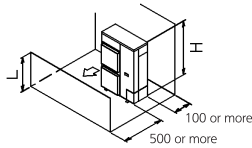
**Pattern 2**

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**

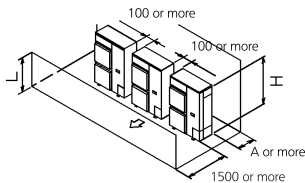
- ① Stand-alone installation
  - No obstacle above



- 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	300 or more
$L > H$	$1/2 H < L \leq H$ 300 or more	300 or more

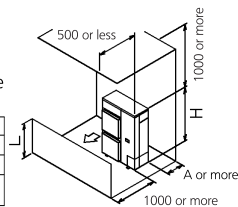


**• Obstacle above, too**

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

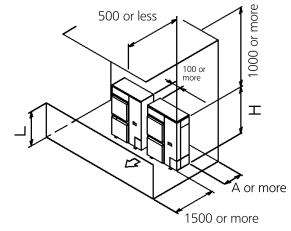


- ② Series installation (2 or more) (Note 1, 2)
  - When there are obstacles on suction, discharge and top sides.

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

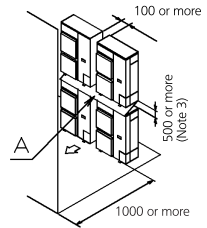
	L	A
$L \leq H$	$L \leq 1/2 H$ 250 or more	300 or more
$L > H$	$1/2 H < L \leq H$ Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	300 or more

Limit of series installation is 2 units.

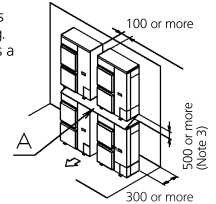


**(D) Double-decker installation**

- 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.

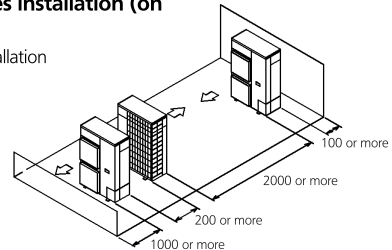


- ② Obstacle on the suction side. (Note 1)
  - Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient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

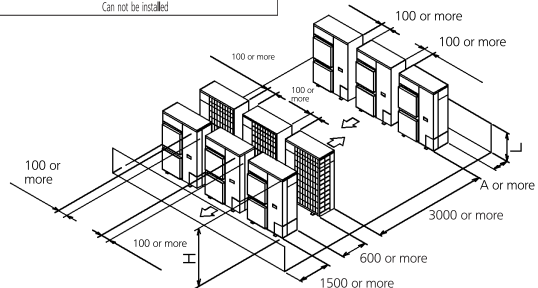
- ① One row of stand-alone installation



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



**NOTES**

- In case of the sideways's 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 reintake of discharged air.)

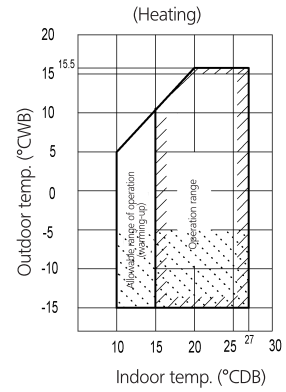
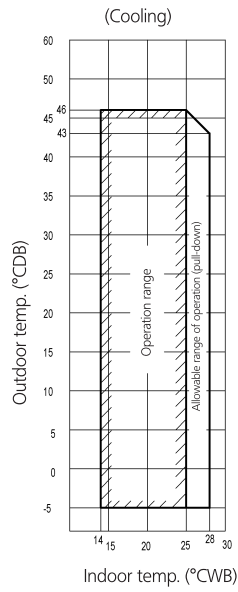
3D069554

# 13 Operation range


## 13 - 1 Operation Range

13

RZQSG-L(8)Y1



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.

3D076504



Daikin Europe N.V. participates in the Eurovent Certification programme for Air conditioners (AC), Liquid Chilling Packages (LCP), Air handling units (AHU) and Fan coil units (FCU). Check ongoing validity of certificate online: [www.eurovent-certification.com](http://www.eurovent-certification.com) or using: [www.certiflash.com](http://www.certiflash.com)

The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V.. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.

BARCODE

Daikin products are distributed by: