



Air Conditioning

Technical Data



EEDEN13-100

RZQSG-L(8)Y1

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RZQSG-L(8)Y1

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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

2-1 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		-
		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
		Energy label	Cooling	A	C
		Heating		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		-
		Annual energy consumption	kWh	604	807
	Heating (Average climate)	Energy label	A+		-
		Pdesign	kW	7.60	-
		SCOP	4.01		-
		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
		Energy label	Cooling	A	-
		Heating		B	-

Notes

(1) EER/COP according to Eurovent 2012

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
	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.	m³/min	76		77		83		
			Super low	m³/min	-						
				cfm	-						
		Heating	Nom.	m³/min	83			62			
			Super low	m³/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		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)

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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	
FCQHG125FVEB				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	
FCQHG140FVEB	18,3			—	20	—	14,2	0,094+0,094	0,4+0,4	0,244	1,4		
FCQG35FVEB	x4			18,0	—	20	—	14,2	0,094+0,094	0,4+0,4	0,044x4	0,3x4	
FCQG50FVEB	x3			17,6	—	20	—	14,2	0,094+0,094	0,4+0,4	0,039x3	0,3x3	
FCQG71FVEB	x2			17,5	—	20	—	14,2	0,094+0,094	0,4+0,4	0,054x2	0,4x2	
FCQG140FVEB	17,8			—	20	—	14,2	0,094+0,094	0,4+0,4	0,168	1,0		
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

- 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
- 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)

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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		

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NOTES

- 1 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:

# = 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 depend on outdoor unit

SKY-AIR		H1 cassette				Thin cassette						H2 cassette		Duct (medium ESP)						Ceiling suspended						Away ceiling			Wall mounted		High Duct		Floor standing		
Model name		FCQHG71FVEB	FCQHG100FVEB	FCQHG125FVEB	FCQHG140FVEB	FCQGS35FVEB	FCQGS50FVEB	FCQGS60FVEB	FCQGS71FVEB	FCQGS100FVEB	FCQGS125FVEB	FCQGS140FVEB	FCQGS50V1B	FCQGS60V1B	FCQGS71V1B	FCQGS100V1B	FCQGS125V1B	FCQGS140V1B	FHQ35CAVEB	FHQ50CAVEB	FHQ60CAVEB	FHQ71CAVEB	FHQ100CAVEB	FHQ125CAVEB	FHQ140CAVEB	FUQ71C1EB	FUQ100C1EB	FUQ125C1EB	FAQ71C1EB	FAQ100C1EB	FDQ125C7VEB	FVQ71C1EB	FVQ100C1EB	FVQ125C1EB	FVQ140C1EB
RZQSG100L8Y1			P			3	2			P			3	2			P		3	2			P							P				P	
RZQSG125L8Y1				P		4	3	2			P		4	3	2			P		4	3	2		P							P			P	
RZQSG140L1Y1		2			P	4	3		2			P	4	3		2		P	4	3		2		P				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

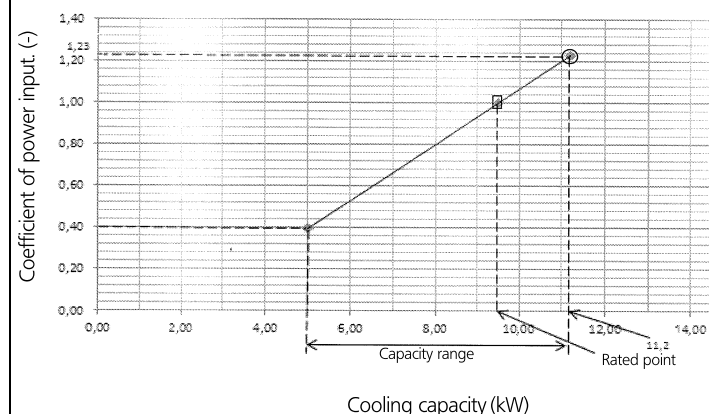
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6 Capacity tables

6 - 1 Cooling Capacity Tables

RZQSG100L8Y1

Cooling



Cooling

Indoor		Outdoor temperature (°CDB)											
		25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	-	kW	kW	-	kW	kW	-	kW	kW	-
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 (m³/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:

	FCQHG100F	FCQG100F	FBQ100C	FHQG100C	FAQ100C	FVQ100C	FHQ100CA
AFR	32.3	32.0	32.0	20.0	26.0	28.0	28.0
(BF)	(0.17)	(0.17)	(0.13)	(0.09)	(0.10)	(0.20)	(0.09)

	FCQG35Fx3	FFQ35B9x3	FBQ35Cx3	FHQ35BWx3	FHQ35CAx3
AFR	12.5x3	10.0x3	16.0x3	13.0x3	14.0x3
(BF)	(0.4x3)	(0.25x3)	(0.15x3)	(0.20x3)	(0.17x3)

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

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

	FCQG35Fx3	FFQ35B9x3	FBQ35Cx3	FHQ35BWx3	FHQ35CAx3
Cooling	2.82	2.86	2.93	3.39	3.33

SYMBOLS

- AFR: Air flow rate (m³/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)

	FCQGS0Fx2	FFQ50B9x2	FBQ50Cx2	FHQ50BWx2	FHQ50CAx2
AFR	12.6x2	12.0x2	16.0x2	13.0x2	15.0x2
(BF)	(0.22x2)	(0.16x2)	(0.16x2)	(0.10x2)	(0.18x2)

(Twin)

	FCQGS0Fx2	FFQ50B9x2	FBQ50Cx2	FHQ50BWx2	FHQ50CAx2
Cooling	2.76	2.86	2.93	3.39	3.35

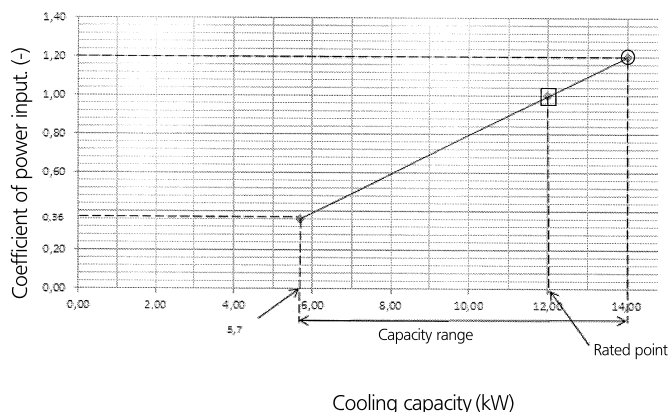
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6 Capacity tables

6 - 1 Cooling Capacity Tables

RZQSG125L8Y1

Cooling



Cooling

Indoor		Outdoor temperature (°CDB)											
		25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	-	kW	kW	-	kW	kW	-	kW	kW	-
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 (m³/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)

	FCQG125F	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	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)

	FCQG125F	FCQG125F	FBQ125C	FHQG125C	FDQ125C	FVQ125C	FHQ125CA
Cooling	3.71	3.74	3.74	4.15	3.74	4.27	4.15

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50Cx3	FHQ50B9x3	FHQ50CAx3
Cooling	3.69	4.08	3.95	4.39	4.33

SYMBOLS

- AFR: Air flow rate (m³/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	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	FHQ35B9x4	FHQ35CAx4
AFR	12.5x4	10x4	16x4	13x4	14x4
(BF)	(0.4x4)	(0.25x4)	(0.15x4)	(0.20x4)	(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

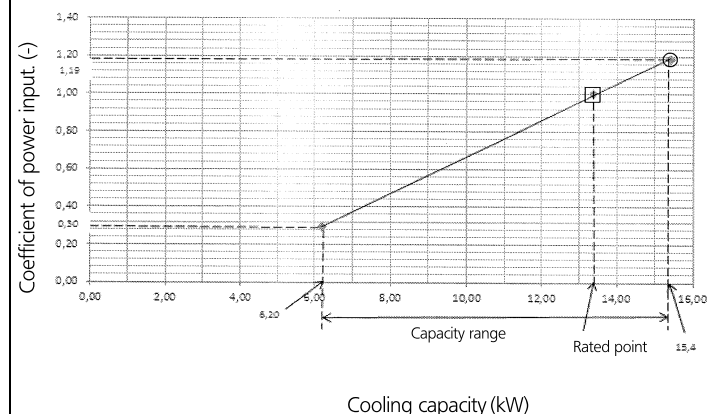
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6 Capacity tables

6 - 1 Cooling Capacity Tables

RZQSG140LY1

Cooling



Cooling

Indoor		Outdoor temperature (°CDB)											
		25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	-	kW	kW	-	kW	kW	-	kW	kW	-
16.0	22	15.5	10.47	0.98	14.9	10.25	1.08	14.4	10.03	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	15.4	9.98	1.19	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 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 (m³/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)

	FCQHG140F	FCQG140F	FBQ140C	FHQG140C	FVQ140C	FHQ140CA
AFR (BF)	33.5 (0.15)	33.0 (0.23)	39 (0.14)	34.0 (0.17)	30.0 (0.18)	34.0 (0.17)

(Triple)

	FCQG50Fv3	FFQ50Bv3	FBQ50Cv3	FHQ50Bv3	FHQ50CAv3
AFR (BF)	12.6v3 (0.22v3)	12.0v3 (0.16v3)	16.0v3 (0.16v3)	13.0v3 (0.10v3)	15.0v3 (0.18v3)

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

(Pair)

	FCQHG140F	FCQG140F	FBQ140C	FHQG140C	FVQ140C	FHQ140CA
Cooling	4.17	4.45	4.44	4.45	4.45	4.45

(Triple)

	FCQG50Fv3	FFQ50Bv3	FBQ50Cv3	FHQ50Bv3	FHQ50CAv3
Cooling	4.40	4.62	4.17	4.73	4.67

SYMBOLS

- AFR: Air flow rate (m³/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)

	FCQHG71Fv2	FCQG71Fv2	FBQ71Cv2	FHQG71Cv2	FAQ71Cv2	FHQ71CAv2
AFR (BF)	21.2v2 (0.2v2)	21.5v2 (0.14v2)	18.0v2 (0.08v2)	20.5v2 (0.13v2)	18.0v2 (0.16v2)	20.5v2 (0.13v2)

(Double twin)

	FCQG35Fv4	FFQ35Bv4	FBQ35Cv4	FHQ35Bv4	FHQ35CAv4
AFR (BF)	12.5v4 (0.4v4)	10.0v4 (0.25v4)	16.0v4 (0.15v4)	13.0v4 (0.20v4)	14.0v4 (0.20v4)

(Twin)

	FCQHG71Fv2	FCQG71Fv2	FBQ71Cv2	FHQG71Cv2	FAQ71Cv2	FHQ71CAv2
Cooling	4.11	4.39	4.17	4.01	4.23	4.01

(Double twin)

	FCQG35Fv4	FFQ35Bv4	FBQ35Cv4	FHQ35Bv4	FHQ35CAv4
Cooling	4.46	4.62	4.17	4.73	4.65

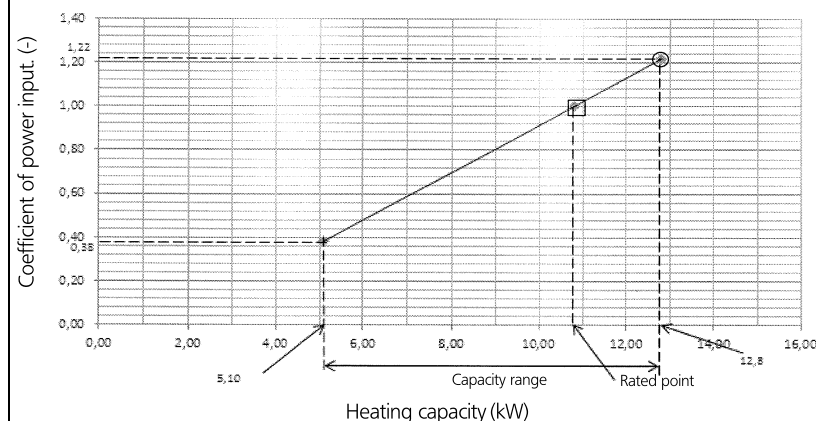
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6 Capacity tables

6 - 2 Heating Capacity Tables

RZQSG100L8Y1

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	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.
= $0.02 \times \text{AFR} (\text{m}^3/\text{min.}) \times (1 - \text{BF}) \times (\text{DB}^* - \text{EDB})$.
- 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	FHQ35B9x3	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
Heating	2.51	3.05	2.96	2.99	3.17	2.99	2.99

(Triple)

	FCQG35Fx3	FFQ35B9x3	FBQ35Cx3	FHQ35B9x3	FHQ35CAx3
Heating	2.66	2.79	2.86	3.32	3.26

SYMBOLS

- AFR: Air flow rate (m³/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	FFQ50B9x2	FBQ50Cx2	FHQ50B9x2	FHQ50CAx2
AFR (BF)	12.6x2 (0.22x2)	12.0x2 (0.16x2)	16.0x2 (0.16x2)	13.0x2 (0.10x2)	15.0x2 (0.18x2)

(Twin)

	FCQG50Fx2	FFQ50B9x2	FBQ50Cx2	FHQ50B9x2	FHQ50CAx2
Heating	2.61	2.79	2.86	3.32	3.28

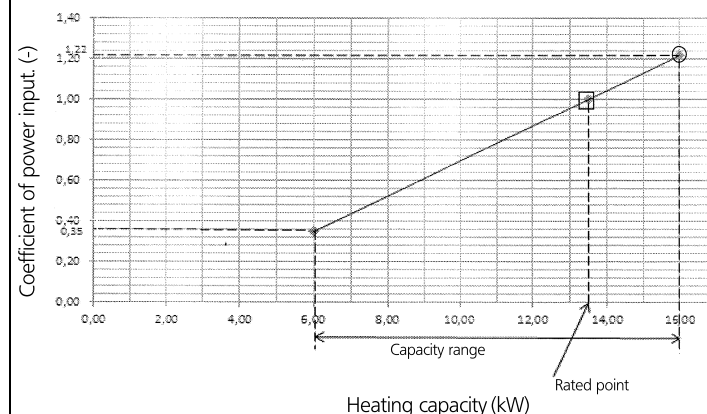
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6 Capacity tables

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 (m³/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)

	FCQG125F	FCQG125F	FBQ125C	FHQG125C	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)

	FCQG50Fx3	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)

	FCQG125F	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	FHQ50B9x3	FHQ50CAx3
Heating	3.90	4.15	4.06	4.48	4.42

SYMBOLS

- AFR: Air flow rate (m³/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
Heating	3.88	4.15	4.06	4.48	4.43

(Double twin)

	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
Heating	3.96	4.15	4.06	4.48	4.32

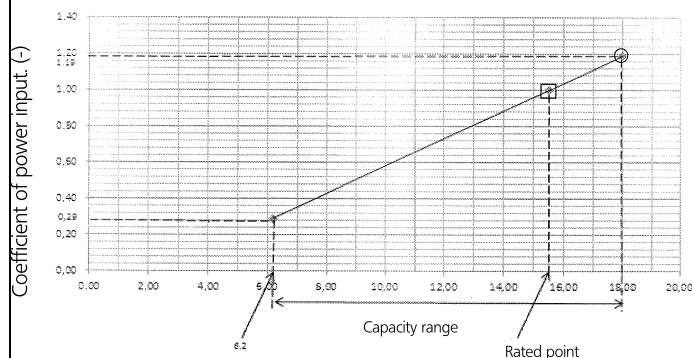
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6 Capacity tables

6 - 2 Heating Capacity Tables

RZQSG140LY1

Heating



Heating capacity (kW)

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 (m³/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 (m³/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 (BF)	33.5 (0.15)	33.0 (0.23)	41 (0.14)	34.0 (0.17)	30.0 (0.18)	34.0 (0.17)

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50C3	FHQ50B9x3	FHQ50CAx3
AFR (BF)	12.6x3 (0.22x3)	12.0x3 (0.16x3)	16.0x3 (0.16x3)	13.0x3 (0.10x3)	15.0x3 (0.18x3)

(Twin)

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

(Double twin)

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

(Triple)

	FCQG50Fx3	FFQ50B9x3	FBQ50C3	FHQ50B9x3	FHQ50CAx3
Heating	4.48	5.16	4.94	5.73	5.67

(Twin)

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

(Double twin)

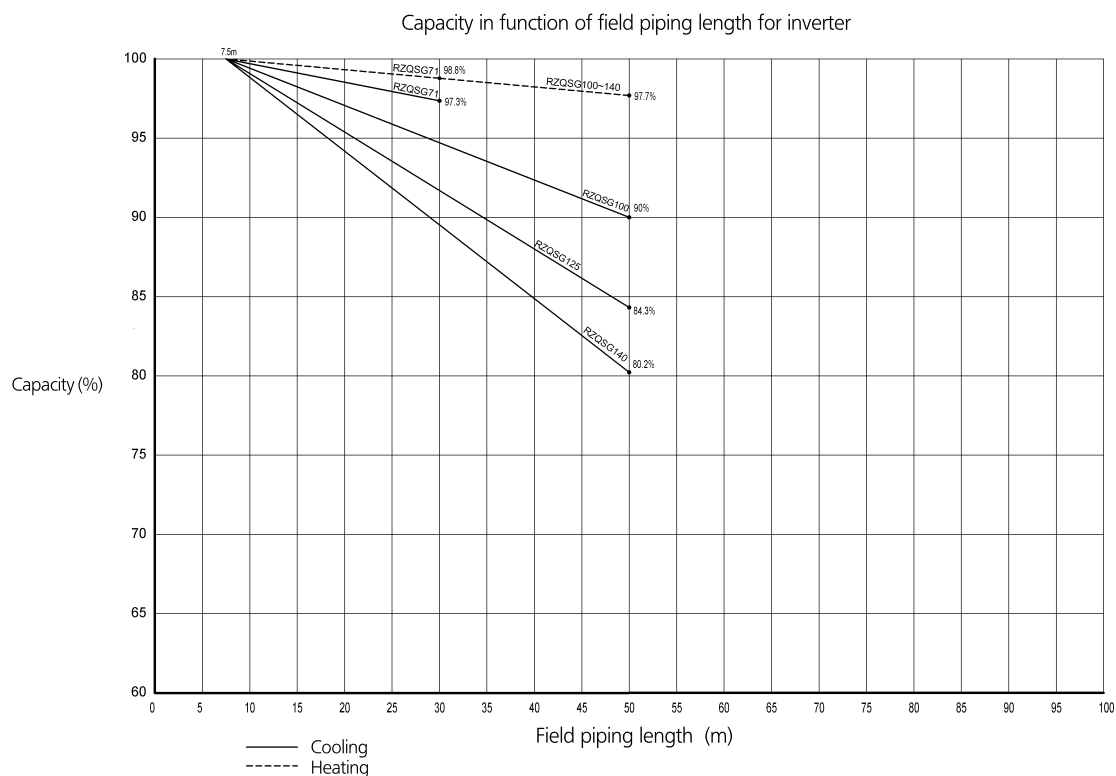
	FCQG35Fx4	FFQ35B9x4	FBQ35Cx4	FHQ35B9x4	FHQ35CAx4
Heating	4.54	5.16	4.94	5.73	5.57

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6 Capacity tables

6 - 3 Capacity Correction Factor

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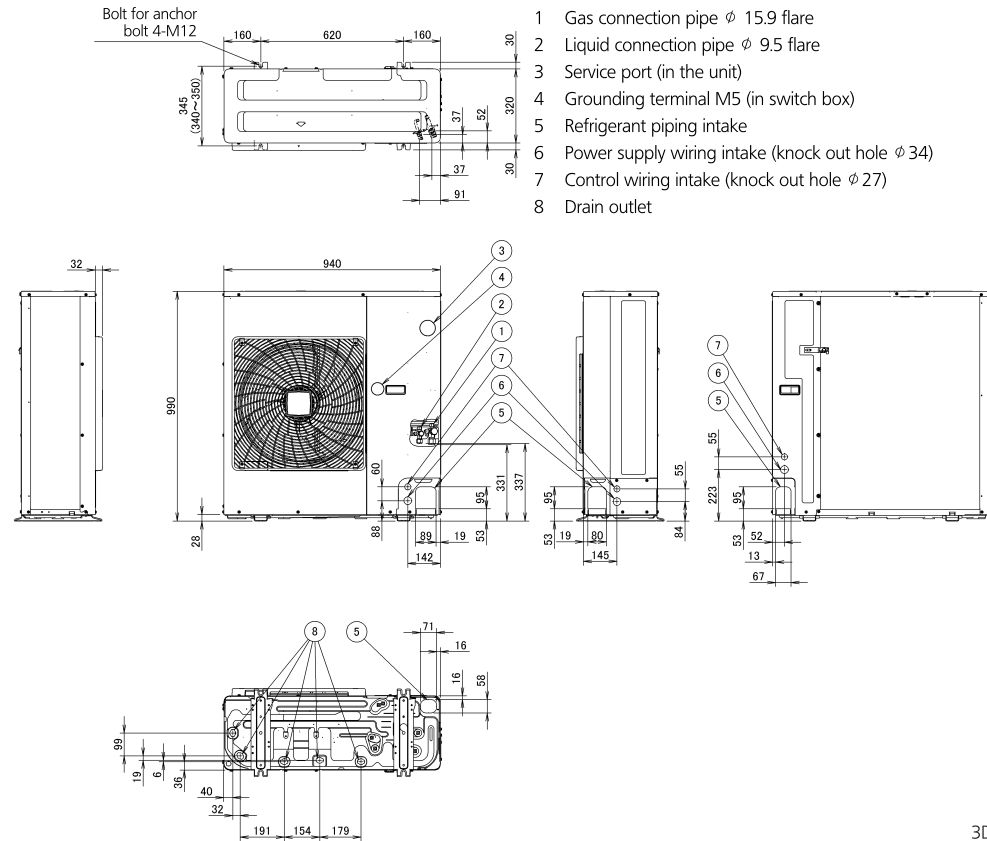


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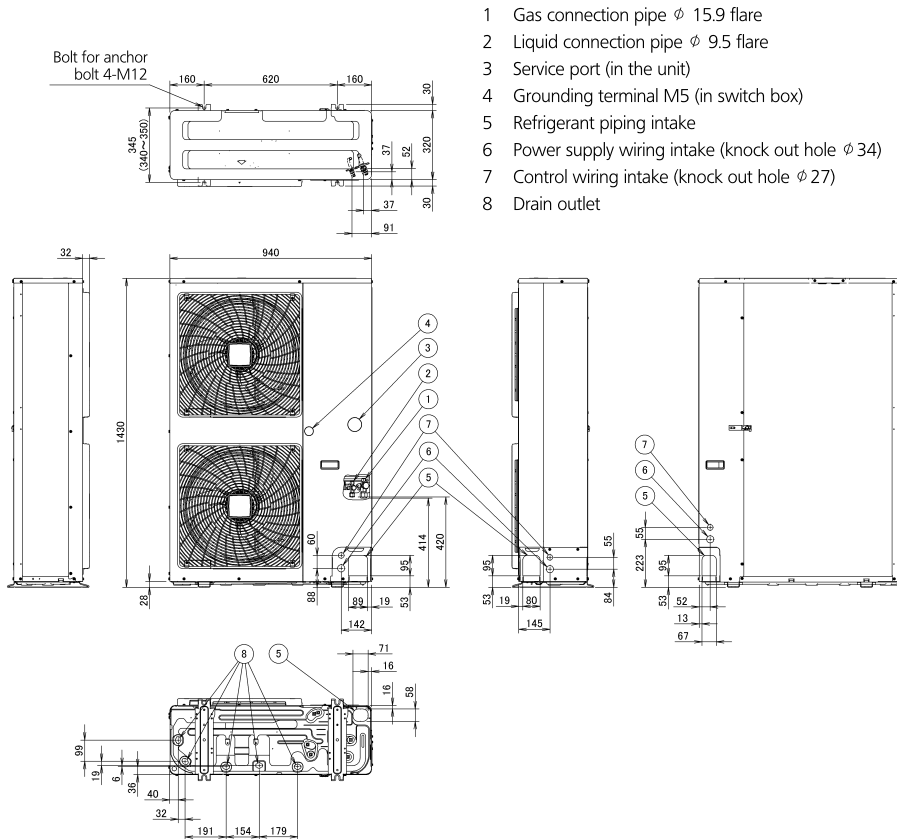
7 Dimensional drawings

7 - 1 Dimensional Drawings

RZQSG100-125L8Y1



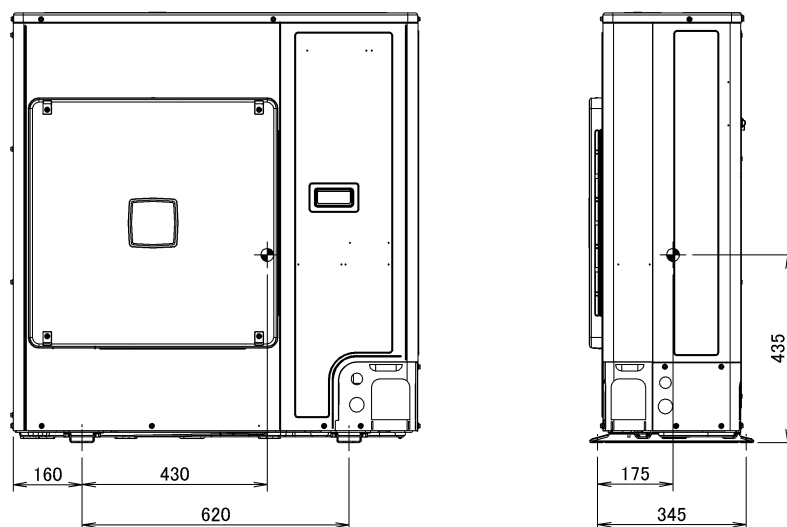
RZQSG140LY1



8 Centre of gravity

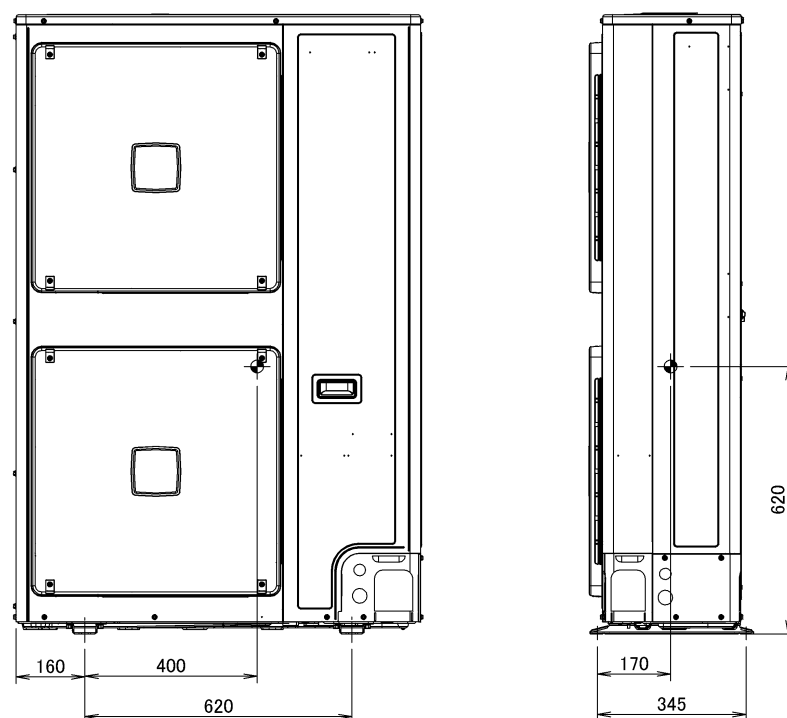
8 - 1 Centre of Gravity

RZQSG100-125L8Y1



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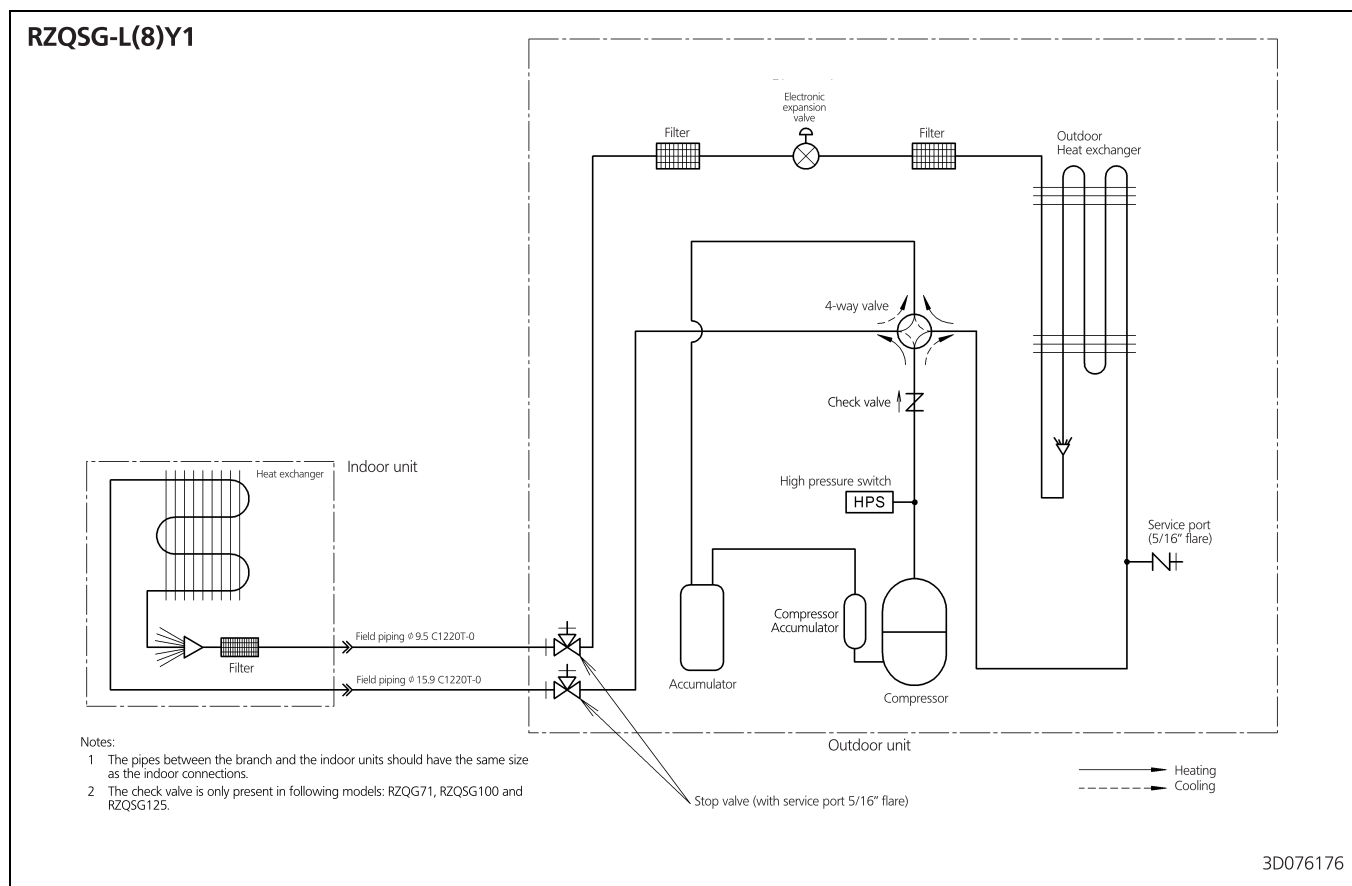
RZQSG140LY1



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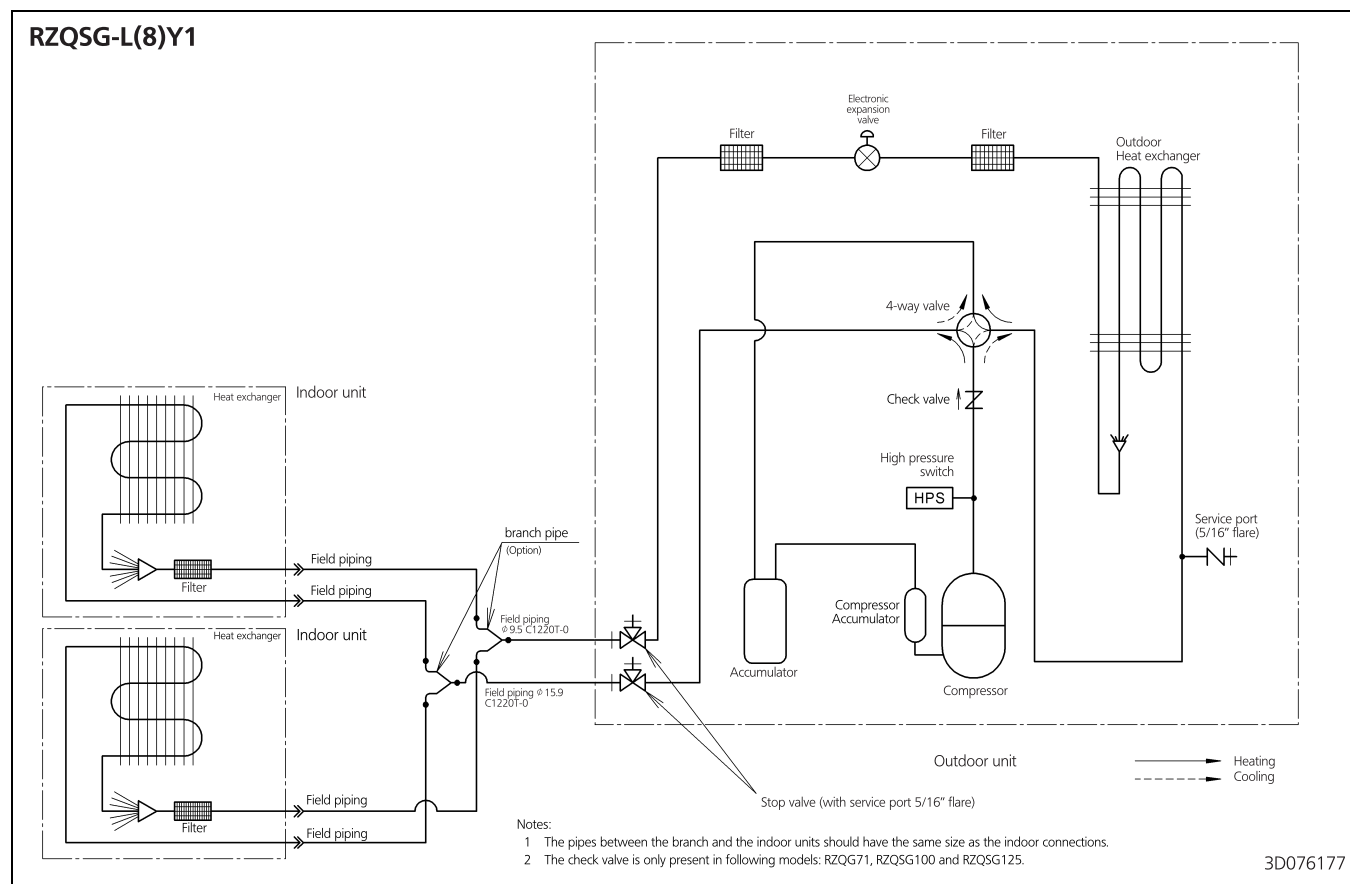
9 Piping diagrams

9 - 1 Piping Diagrams



9 Piping diagrams

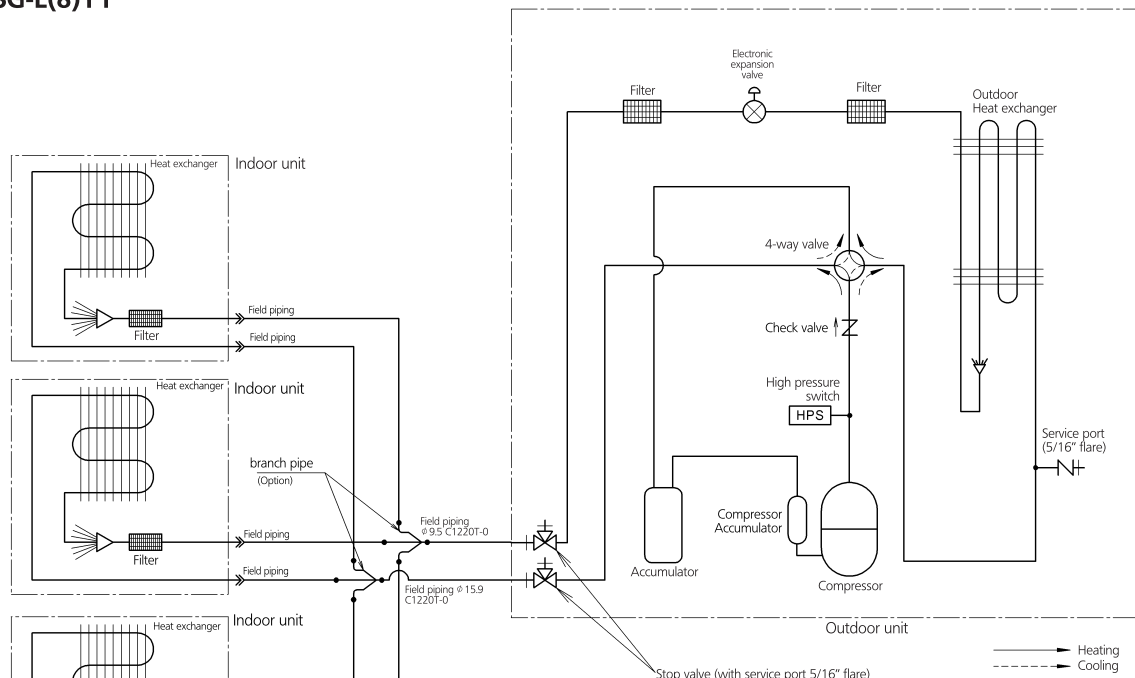
9 - 2 Piping Diagram Twin Application



9 Piping diagrams

9 - 3 Piping Diagram Triple Application

RZQSG-L(8)Y1



Notes:

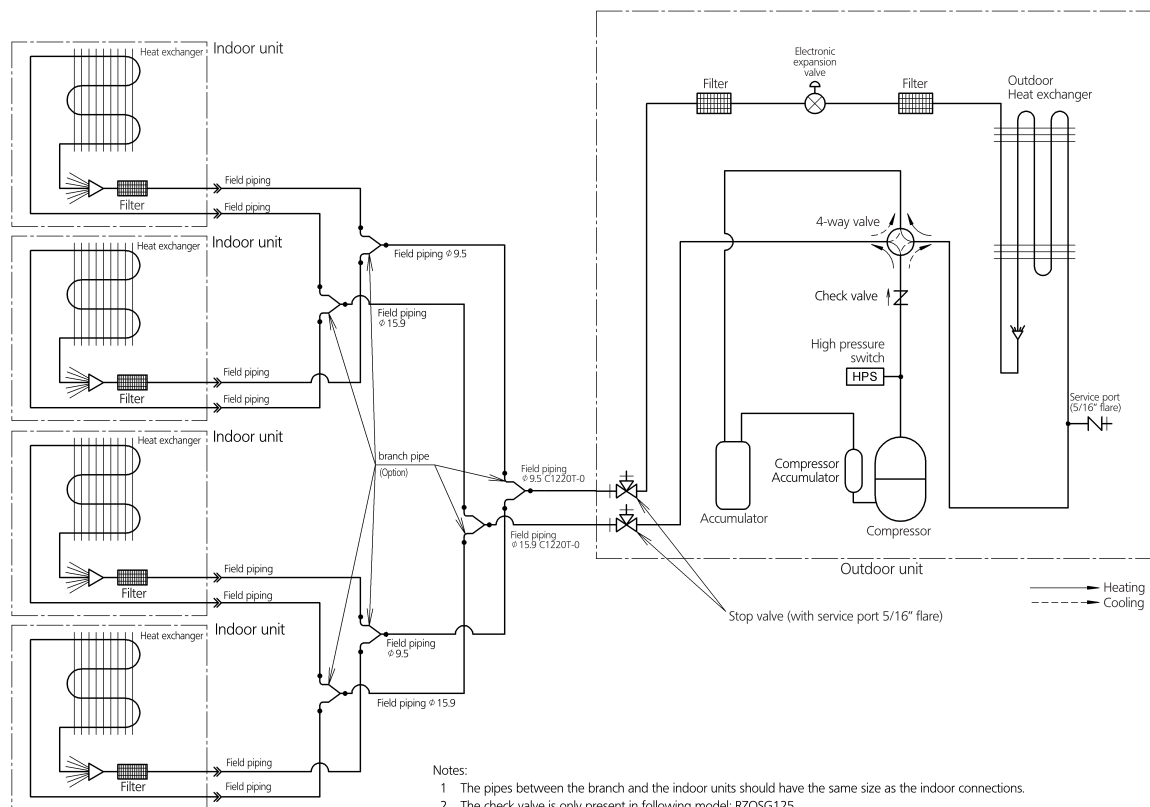
- 1 The pipes between the branch and the indoor units should have the same size as the indoor connections.
- 2 The check valve is only present in following models: RZQSG100 and RZQSG125.

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9 Piping diagrams

9 - 4 Piping Diagram Double Twin Application

RZQSG125-140L(8)Y1



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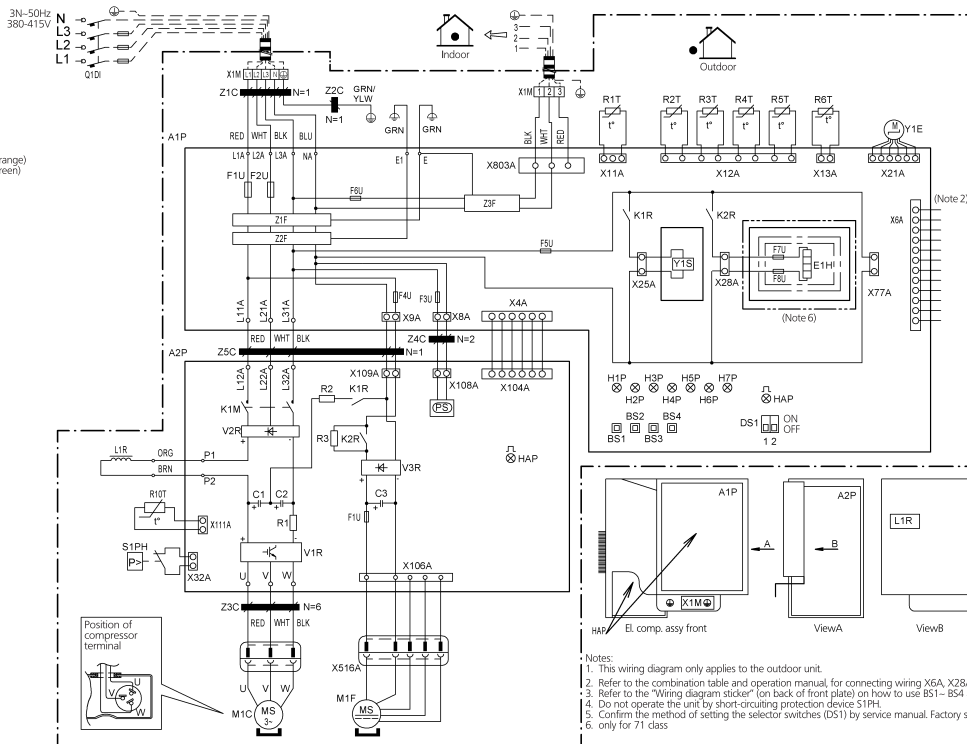
10 Wiring diagrams

10 - 1 Wiring Diagrams - Three Phase

RZQSG100-125L8Y1

- A1P : Printed circuit board
A2P : Printed circuit board (Inverter)
BS1-BS2 : Push button switch
C1-C3 : Capacitor
DS1 : Dip switch
E1H : Bottomplate heater (Option)
F1U : Fuse (31.5A / 250V)
F2U : Fuse (31.5A / 250V)
F3U-F6U : Fuse (T 6.3A / 250V)
F7U-F8U : Fuse (T 1.0A / 250V)
F1U (A2P) : Fuse (T 5.0A / 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 (Y1S)
K1R (A2P) : Magnetic relay
K2R (A1P) : Magnetic relay (E1H Option)
K2R (A2P) : Magnetic relay
L1R : Reactor
M1C : Motor (compressor)
M1F : Motor (fan) (upper)
M2F : Motor (fan) (lower)
PS : Switching power supply
Q1DI : Earth leakage breaker (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 : IGBT Power module
V2R, 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-Z3F : Noise filter

- L: Live
N: Neutral
PE: Protective earth (screw)
NE: Noiseless earth
T: Terminal
C: Connection
TS: Terminal strip
C: Connector
RC: Relay connector
O: Option
BLK: Black
BLU: Blue
BRN: Brown
GRN: Green
ORG: Orange
RED: Red
WHT: White
YLW: Yellow



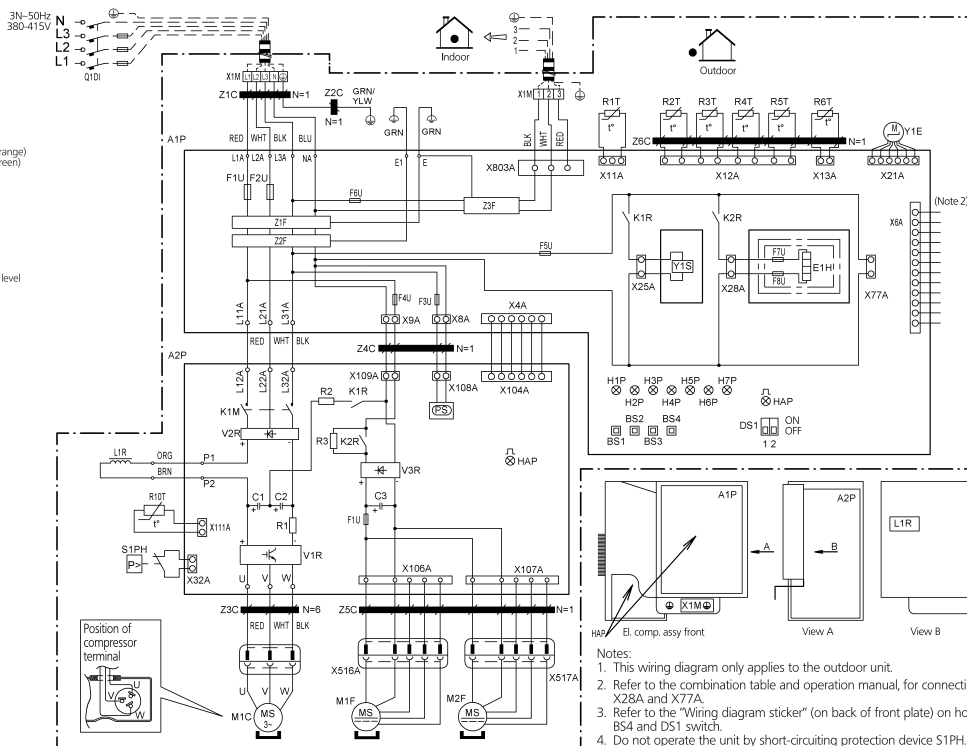
- Notes:
1. This wiring diagram only applies to the outdoor unit.
2. Refer to the combination table and operation manual, for connecting wiring X6A, X28A and X77A.
3. Refer to the "Wiring diagram sticker" (on back of front plate) on how to use BS1-BS4 and DS1 switch.
4. Do not operate the unit by short-circuiting protection device S1PH.
5. Confirm the method of setting the selector switches (DS1) by service manual. Factory setting of all switches: "OFF".
6. only for 71 class

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RZQSG140LY1

- A1P : Printed circuit board
A2P : Printed circuit board (Inverter)
BS1-BS2 : Push button switch
C1-C3 : Capacitor
DS1 : Dip switch
E1H : Bottomplate heater (Option)
F1U : Fuse (31.5A / 250V)
F2U : Fuse (31.5A / 250V)
F3U-F6U : Fuse (T 6.3A / 250V)
F7U-F8U : Fuse (T 1.0A / 250V)
F1U (A2P) : Fuse (T 5.0A / 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 (Y1S)
K1R (A2P) : Magnetic relay
K2R (A1P) : Magnetic relay (E1H Option)
K2R (A2P) : Magnetic relay
L1R : Reactor
M1C : Motor (compressor)
M1F : Motor (fan) (upper)
M2F : Motor (fan) (lower)
PS : Switching power supply
Q1DI : Maximum allowable piping length and level difference (30m)
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 : IGBT 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
PE: Protective earth (screw)
NE: Noiseless earth
T: Terminal
C: Connection
TS: Terminal strip
C: Connector
RC: Relay connector
O: 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".

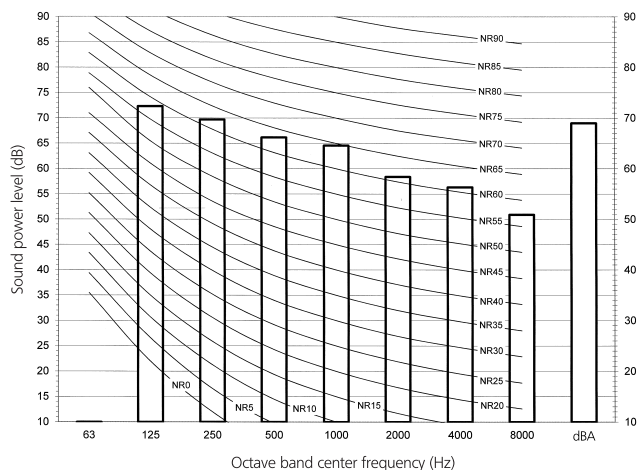
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11 Sound data

11 - 1 Sound Power Spectrum

11

RZQSG100L8Y1

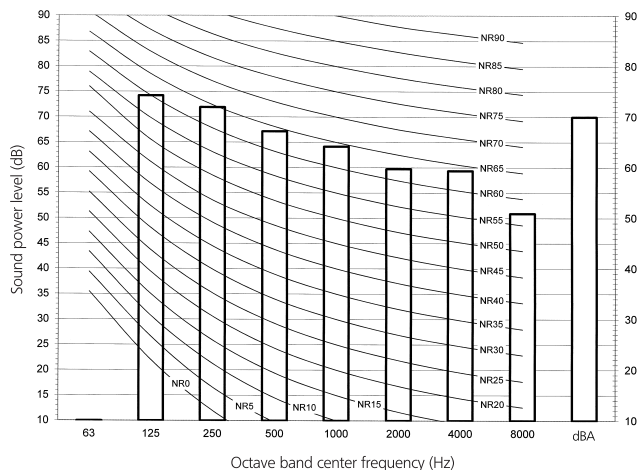


NOTES

- 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

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RZQSG125L8Y1

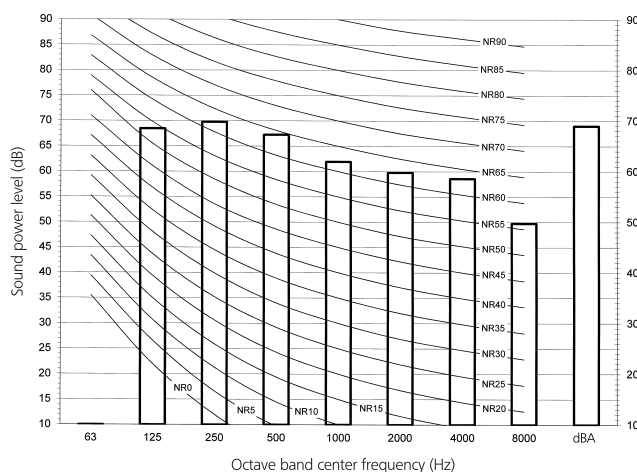


NOTES

- 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

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RZQSG140LY1



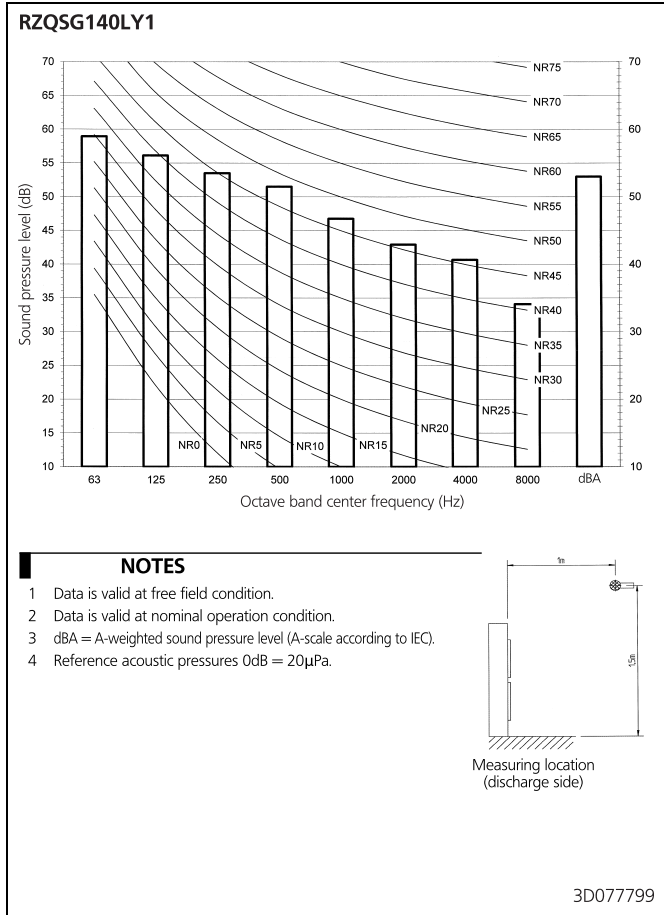
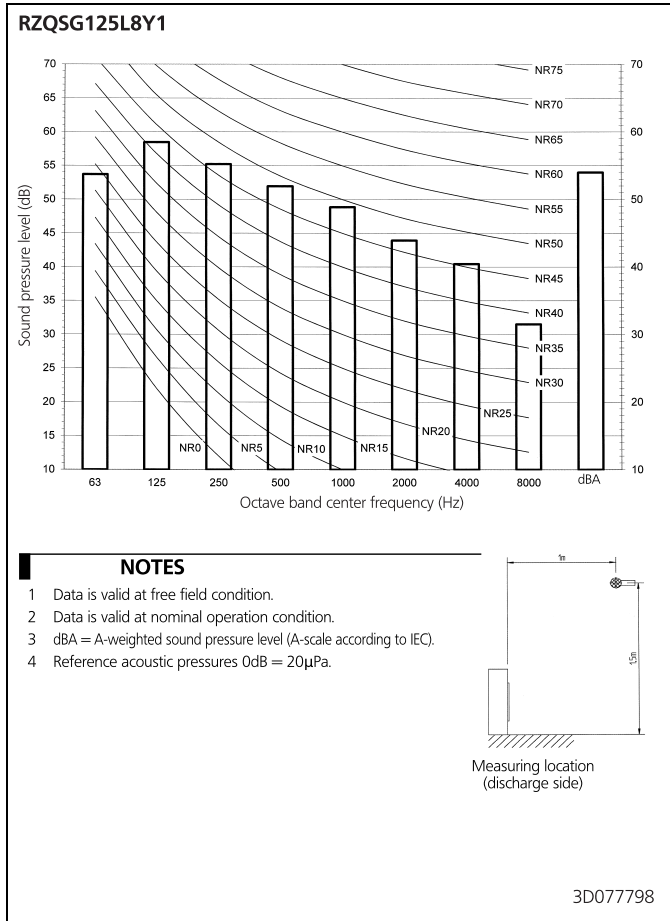
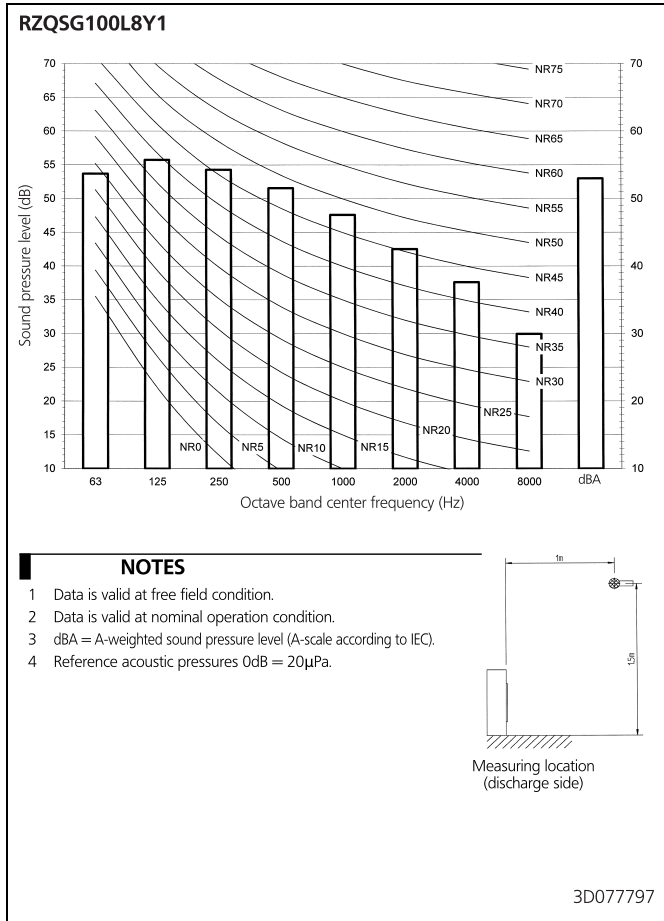
NOTES

- 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

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11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

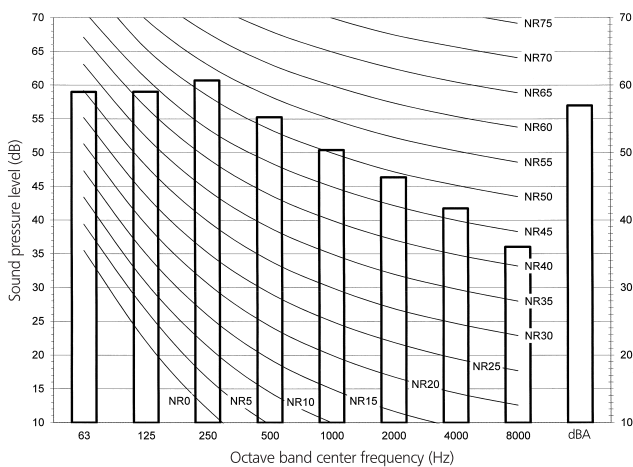


11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

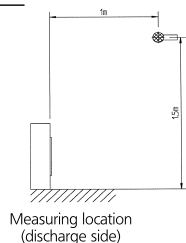
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RZQSG100L8Y1



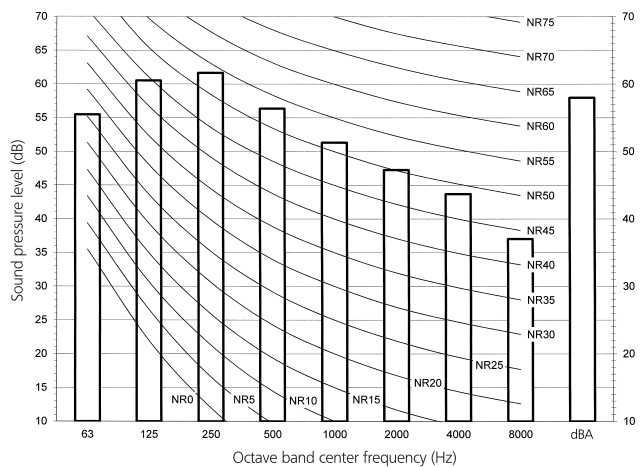
NOTES

- 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.



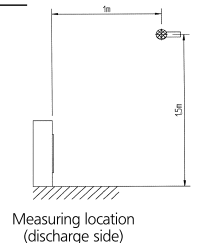
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RZQSG125L8Y1



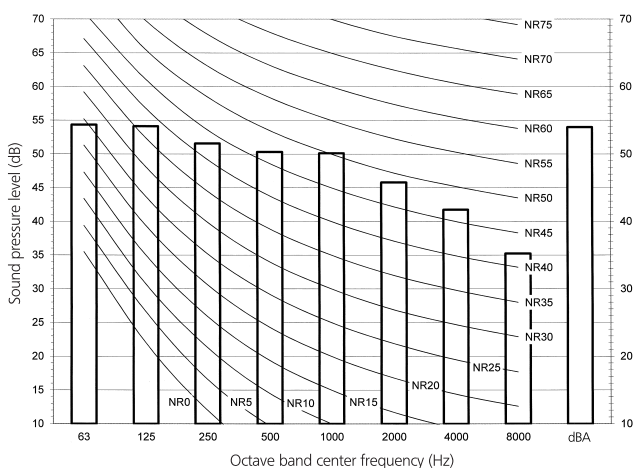
NOTES

- 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.



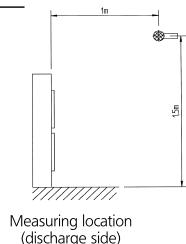
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RZQSG140LY1



NOTES

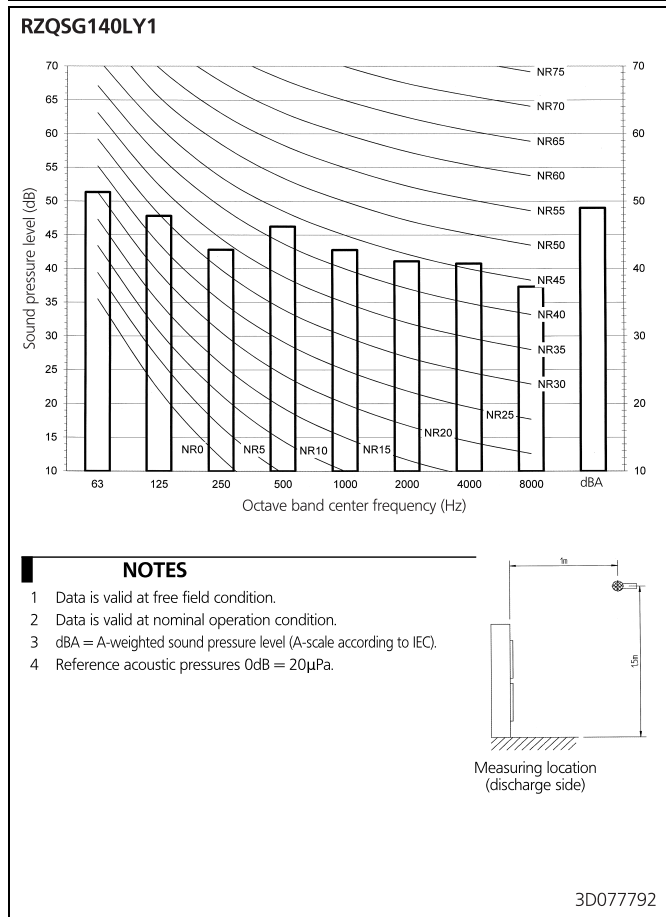
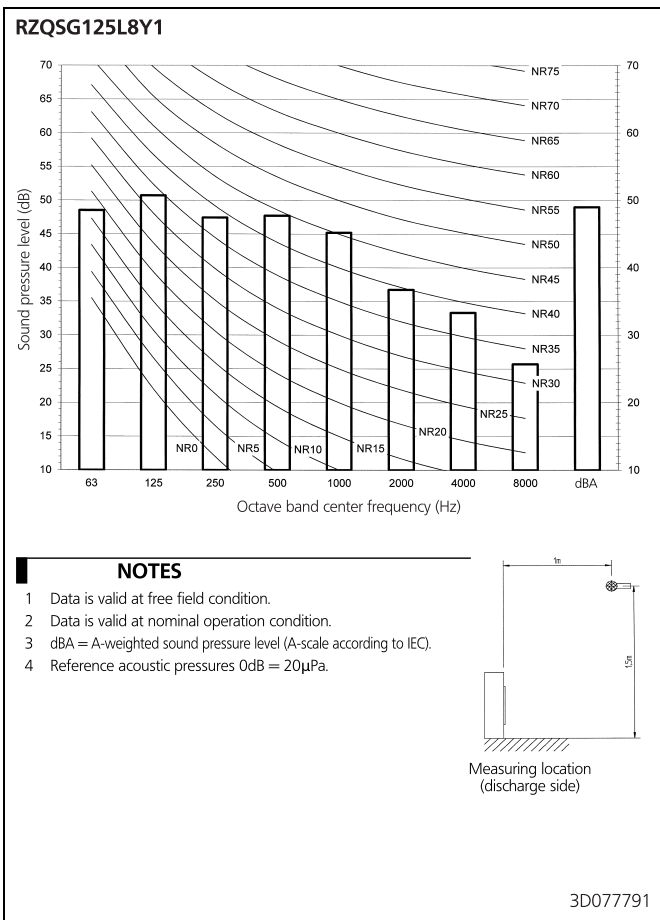
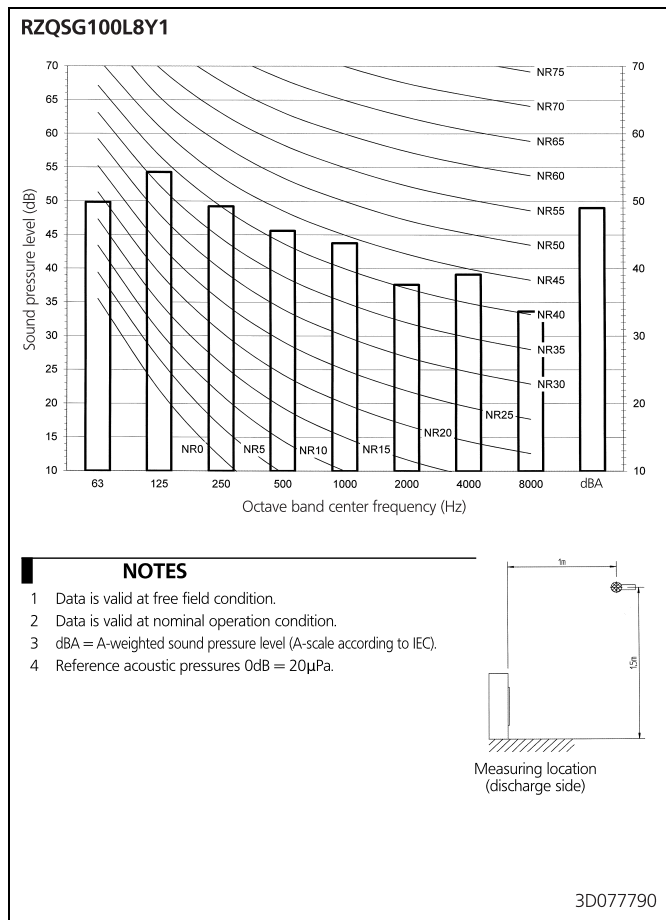
- 1 Data is valid at free field condition.
- 2 Data is valid at nominal operation condition.
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC).
- 4 Reference acoustic pressures 0dB = 20μPa.



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11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode



12 Installation

12 - 1 Installation Method

RZQSG-L(8)Y1

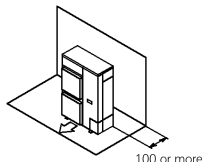
Installation service space

The measure of these values is "mm".

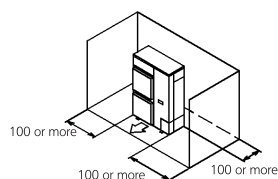
(A) When there are obstacles on suction sides.

• No obstacle above

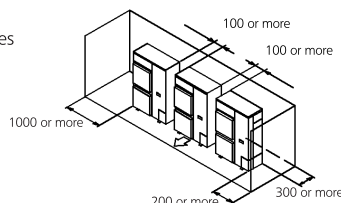
- ① Stand-alone installation
- Obstacle on the suction side only



- Obstacle on both sides and suction side, too

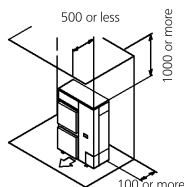


- ② Series installation (2 or more) (Note 1)
- Obstacle on the suction side and both sides

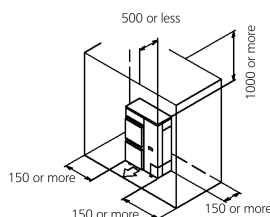


• Obstacle above, too.

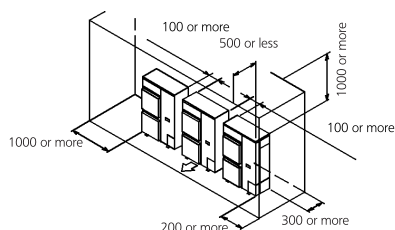
- ① Stand-alone installation
- Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



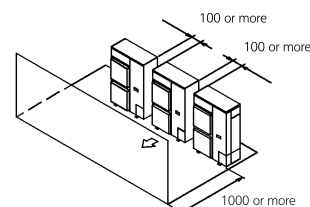
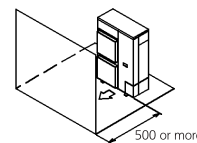
- ② Series installation (2 or more) (Note 1)
- Obstacle on the suction side and both sides



(B) When there are obstacles on discharge sides.

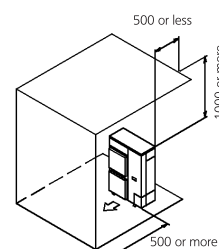
• No obstacle above

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

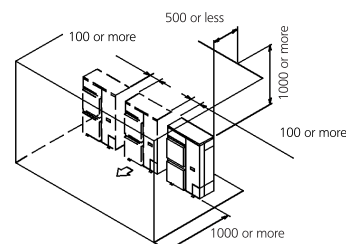


• Obstacle above, too

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



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



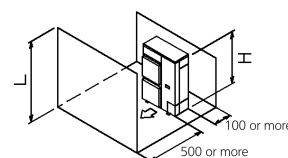
(C) When there are obstacles on both suction and discharge sides.:

Pattern 1

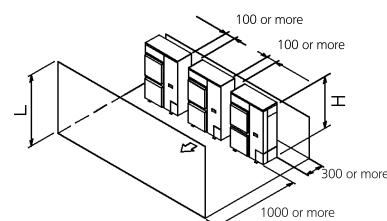
When the obstacles on the discharge side is higher than the unit. ($L > H$)
(There is no limit for the height of obstructions on the suction side.)

• No obstacle above

- ① Stand-alone installation
- No obstacle above



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



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12 Installation

12 - 1 Installation Method

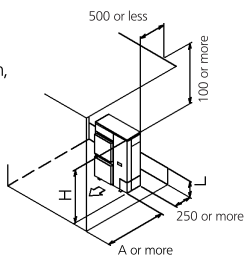
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● Obstacle above, too

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

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

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



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

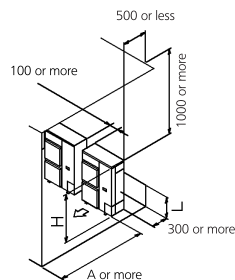
The relations between H, A and L are as follows.

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

Limit of series installation is 2 units.

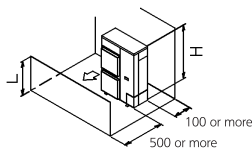
Pattern 2

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



● No obstacle above

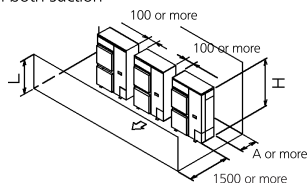
- ① Stand-alone installation
- No obstacle above



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

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

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

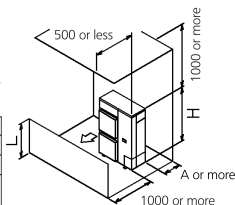


● Obstacle above, too

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

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

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

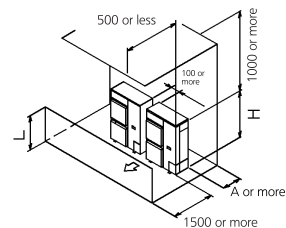


- ② Series installation (2 or more) (Note 1, 2)
- When there are obstacles on suction, discharge and top sides.

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

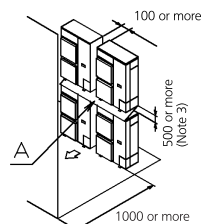
	L	A
$L \leq H$	$L \leq 1/2 H$	250 or more
	$1/2 H < L \leq H$	300 or more
$L > H$	Set the stand as: $L \leq H$ Refer to the column of $L \leq H$ for A	

Limit of series installation is 2 units.

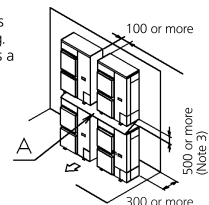


(D) Double-decker installation

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

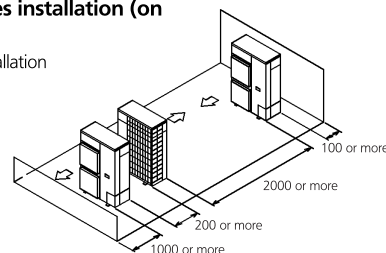


- ② Obstacle on the suction side. (Note 1)
- Do not exceed two levels for stacked installation.
 - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
 - Install the upper-level outdoor unit so that its bottom plate is a sufficient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



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

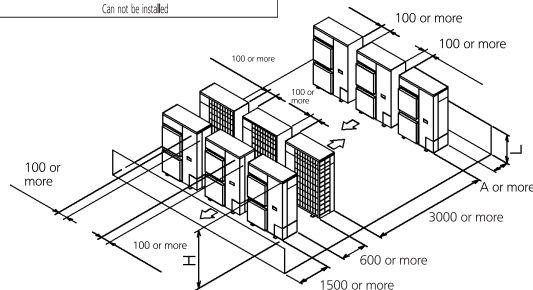
- ① One row of stand-alone installation



- ② Rows of series installation (2 or more)

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

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



NOTES

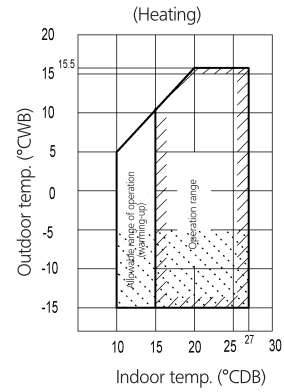
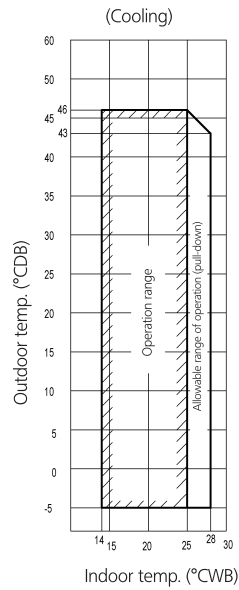
- In case of the sideways's piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between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

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13 Operation range

13 - 1 Operation Range

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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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