

Air Conditioning  
Technical Data

RZQG-L9V1





# TABLE OF CONTENTS

## RZQG-L9V1

1	Features .....	2
2	Specifications .....	3
	Capacity and Power input .....	3
	Capacity and Power input .....	3
	Capacity and Power input .....	4
	Capacity and Power input .....	4
	Capacity and Power input .....	5
	Capacity and Power input .....	6
	Capacity and Power input .....	6
	Capacity and Power input .....	7
	Technical Specifications .....	7
	Electrical Specifications .....	9
3	Electrical data .....	10
4	Options .....	12
5	Combination table .....	13
6	Capacity tables .....	14
	Cooling/Heating Capacity Tables .....	14
	Capacity Correction Factor .....	16
7	Dimensional drawings .....	17
8	Centre of gravity .....	18
9	Piping diagrams .....	20
	Piping Diagrams .....	20
	Piping Diagram Twin Application .....	21
	Piping Diagram Triple Application .....	22
	Piping Diagram Double Twin Application .....	23
10	Wiring diagrams .....	24
	Wiring Diagrams - Single Phase .....	24
11	Sound data .....	25
	Sound Pressure Spectrum - Cooling .....	25
	Sound Pressure Spectrum - Heating .....	27
	Sound Pressure Spectrum Quiet Mode .....	29
12	Installation .....	31
	Installation Method .....	31
13	Operation range .....	33

# 1 Features

Industry leading technology for commercial applications and even for technical rooms

- Top efficiency: - energy labels up to A++ in both cooling and heating - compressor that offers substantial efficiency improvements - control logic that optimises efficiency at the most frequently encountered operating conditions and that optimises the auxiliary modes (when the unit is not active) - heat exchangers that optimise the refrigerant flow at the most frequent operating conditions (temperature and load) - via improved nominal performances
- The perfect balance in efficiency and comfort thanks to Variable Refrigerant Temperature: top seasonal efficiency throughout most of the year and quick reaction speed on the hottest days.
- Suits high sensible, infrastructure cooling applications
- Replace existing R-22 or R-407C systems without having to replace the piping
- Extended operation range down to -20°C in heating and down to -15°C in cooling
- With a gas cooled PCB reliable cooling is guaranteed as it is not influenced by ambient temperature
- Maximum piping length up to 75m, minimum piping length is 5m.
- Outdoor units for pair, twin, triple, double twin application
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- Units optimized for seasonal efficiency give an indication on how efficient an air conditioner operates over an entire heating or cooling season.



Infrastructure cooling



Inverter



Auto cooling-heating changeover

## 2 Specifications

2-1 Capacity and Power input				FAQ71C9/RZQG71L9V1	FAQ100C9/RZQG100L9V1	FAQ100C9/RZQG71L9V1	
Indoor unit				FAQ71C		-	
Outdoor unit				RZQG71L9V1		-	
Cooling capacity	Nom.		kW	6.8	9.5	-	
Heating capacity	Nom.		kW	7.5	10.8	-	
Power input	Cooling	Nom.	kW	2.00	2.63	-	
	Heating	Nom.	kW	2.03	3.00	-	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++			
		Pdesign	kW	6.80	9.50	6.80	
		SEER		6.43	6.11	6.51	
		Annual energy consumption	kWh	371	545	366	
	Heating (Average climate)	Energy label		A+			
		Pdesign	kW	6.33	10.20	6.33	
		SCOP/A		4.02	4.01	4.02	
		Annual energy consumption	kWh	2,205	3,562	2,205	
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	64	66	64
	Sound power level indoor	Cooling	Nom.	dBA	61	65	
Nominal efficiency	EER			3.40	3.62	-	
	COP			3.70	3.61	-	
	Annual energy consumption		kWh	1,000 (1)	1,315	-	
	Energy label	Cooling		A			
		Heating		A			

### Notes

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

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

SEER and SCOP are according to EN 14825

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

2-2 Capacity and Power input				FBQ71D/ RZQG71L9V1	FBQ100D/ RZQG100L9V1	FBQ125D/ RZQG125L9V1	FBQ140D/ RZQG140L9V1	FBQ100D/ RZQG71L9V1	FBQ140D/ RZQG100L9V1	FBQ140D/ RZQG125L9V1
Indoor unit				FBQ71D	FBQ100D	FBQ125D	FBQ140D	FBQ100D	FBQ140D	
Outdoor unit				RZQG71L9V1	RZQG100L9V1	RZQG125L9V1	RZQG140L9V1	RZQG71L9V1	RZQG100L9V1	RZQG125L9V1
Cooling capacity	Nom.		kW	6.8 (1)	9.5 (1)	12.0 (1)	13.4 (1)	-		
Heating capacity	Nom.		kW	7.50 (1)	10.80 (1)	13.50 (1)	15.50 (1)	-		
Power input	Cooling	Nom.	kW	1.89 (1)	2.49 (1)	3.63 (1)	4.00 (1)	-		
	Heating	Nom.	kW	1.87 (1)	2.45 (1)	3.46 (1)	4.31 (1)	-		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++	A+	A++	-	A++	A+	A++
		Pdesign	kW	6.80	9.50	12.00	-	6.80	9.50	12.00
		SEER		6.16	5.87	6.11	-	6.16	5.87	6.11
		Annual energy consumption	kWh	386	566	687	-	386	566	687
	Heating (Average climate)	Energy label		A+	A++	A+	-	A+	A++	A+
		Pdesign	kW	6.00	11.30	12.70	-	6.00	11.30	12.70
		SCOP/A		4.31	4.78	4.28	-	4.31	4.78	4.28
		Annual energy consumption	kWh	1,949	3,310	4,154	-	1,949	3,310	4,154
Nominal efficiency	EER			3.60 (2)	3.81 (2)	3.31 (2)	3.35 (2)	-		
	COP			4.01 (2)	4.41 (2)	3.90 (2)	3.60 (2)	-		
	Annual energy consumption		kWh	944	1,247	1,813	-			
	Energy label	Cooling		A			-			
		Heating		A			-			

## 2 Specifications

### Notes

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

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

2

2-3 Capacity and Power input				FCQG71F/ RZQG71L9V1	FCQG100F/ RZQG100L9V1	FCQG125F/ RZQG125L9V1	FCQG140F/ RZQG140L9V1	FCQG100F/ RZQG71L9V1	FCQG140F/ RZQG100L9V1	FCQG140F/ RZQG125L9V1	
Indoor unit				FCQG71F	FCQG100F	FCQG125F	-	FCQG100F	FCQG140F		
Outdoor unit				RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1	RZQG140L 9V1	RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1	
Cooling capacity	Nom.			kW	6.8	9.5	12.0	13.4	-		
Heating capacity	Nom.			kW	7.5	10.8	13.5	15.5	-		
Power input	Cooling	Nom.		kW	2.01	2.45	3.22	-			
	Heating	Nom.		kW	1.89	2.60	3.72	-			
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A++		A+	-	A++		A+
		Pdesign		kW	6.80	9.50	12.00	-	6.80	9.50	12.00
		SEER			6.72	6.80	6.00	-	6.80		6.00
		Annual energy consumption		kWh	355	489	700	-	350	489	700
	Heating (Average climate)	Energy label			A+	A++	A+	-	A+	A++	A+
		Pdesign		kW	6.33	11.30	12.66	-	6.33	11.30	12.66
		SCOP/A			4.20	4.61	4.10	-	4.20	4.61	4.10
		Annual energy consumption		kWh	2,110	3,432	4,323	-	2,110	3,432	4,323
Eurovent	Sound power level outdoor	Cooling	Nom.	dB(A)	64	-					
	Sound power level indoor	Cooling	Nom.	dB(A)	51	-					
Nominal efficiency	EER			3.39	3.87	3.73	-				
	COP			3.97	4.15	3.63	-				
	Annual energy consumption		kWh	1,005	1,225	1,610	-				
	Energy label	Cooling			A			-			
		Heating			A			-			

### Notes

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

SEER and SCOP are according to EN 14825

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

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

2-4 Capacity and Power input				FCQHG71F/ RZQG71L9V1	FCQHG100F/ RZQG100L9V1	FCQHG125F/ RZQG125L9V1	FCQHG140F/ RZQG140L9V1	FCQHG100F/ RZQG71L9V1	FCQHG140F/ RZQG100L9V1	FCQHG140F/ RZQG125L9V1
Indoor unit				FCQHG71F	FCQHG100 F	FCQHG125 F	FCQHG140 F	FCQHG100 F	FCQHG140F	
Outdoor unit				RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1	RZQG140L 9V1	RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1
Cooling capacity	Nom.			kW	6.8	9.5	12.0	13.4	-	
Heating capacity	Nom.			kW	7.5	10.8	13.5	15.5	-	
Power input	Cooling	Nom.		kW	1.66	2.15	3.00	4.00	-	
	Heating	Nom.		kW	1.56	2.16	3.07	3.77	-	

## 2 Specifications

2-4 Capacity and Power input				FCQHG71F/ RZQG71L9V1	FCQHG100F/ RZQG100L9V1	FCQHG125F/ RZQG125L9V1	FCQHG140F/ RZQG140L9V1	FCQHG100F/ RZQG71L9V1	FCQHG140F/ RZQG100L9V1	FCQHG140F/ RZQG125L9V1		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++			-		A++			
		Pdesign	kW	6.80	9.50	12.00	-		6.80	9.50	12.00	
		SEER		6.91	7.00	6.61	-		7.00		6.61	
		Annual energy consumption	kWh	345	475	636	-		340	475	636	
	Heating (Average climate)	Energy label		A+			A++		-		A++	
		Pdesign	kW	7.60	11.30	12.66	-		7.60	11.30	12.66	
		SCOP/A		4.54	4.80	4.63	-		4.54	4.80	4.63	
		Annual energy consumption	kWh	2,344	3,296	3,829	-		2,344	3,296	3,829	
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	64	-						
	Sound power level indoor	Cooling	Nom.	dBA	53	-						
Nominal efficiency	EER			4.09	4.42	4.00	3.35	-				
	COP			4.80	4.99	4.40	4.12	-				
	Annual energy consumption		kWh	830	1,075	1,500	-					
	Energy label	Cooling		A			-					
		Heating		A			-					

### Notes

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

SEER and SCOP are according to EN 14825

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

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

2-5 Capacity and Power input				FDQ125C/RZQG125L9V1			
Indoor unit				FDQ125C			
Outdoor unit				RZQG125L9V1			
Cooling capacity	Nom.	kW		12.0			
Heating capacity	Nom.	kW		13.5			
Power input	Cooling	Nom.	kW	3.20			
	Heating	Nom.	kW	3.53			
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+			
		Pdesign	kW	12.00			
		SEER		5.81			
		Annual energy consumption	kWh	723			
	Heating (Average climate)	Energy label		A+			
		Pdesign	kW	12.71			
		SCOP/A		4.21			
		Annual energy consumption	kWh	4,227			
Nominal efficiency	EER			3.75			
	COP			3.83			
	Annual energy consumption		kWh	1,600			
	Energy label	Cooling		A			
		Heating		A			

### Notes

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

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

## 2 Specifications

2-6 Capacity and Power input				FHQ71CB/ RZQG71L9V1	FHQ100CB/ RZQG100L9V1	FHQ125CB/ RZQG125L9V1	FHQ100CB/ RZQG71L9V1	FHQ140CB/ RZQG140L9V1	FHQ140CB/ RZQG100L9V1	FHQ140CB/ RZQG125L9V1	
Indoor unit				FHQ71C							
Outdoor unit				RZQG71L9V1							
Cooling capacity	Nom.			kW	6.8	9.5	12.0	-	13.4	-	
Heating capacity	Nom.			kW	7.5	10.8	13.5	-	15.5	-	
Power input	Cooling	Nom.		kW	1.78	2.49	3.58	-	4.05	-	
	Heating	Nom.		kW	1.82	2.61	3.48	-	4.27	-	
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A++						
		Pdesign	kW		6.80	9.50	12.00	6.80	-	9.50	12.00
		SEER			6.86	6.11	6.01	6.95	-	6.11	6.01
		Annual energy consumption	kWh		347	545	699	343	-	545	699
	Heating (Average climate)	Energy label			A+						
		Pdesign	kW		7.60	11.30	14.13	7.60	-	11.30	14.13
		SCOP/A			4.32	4.61	4.23	4.32	-	4.61	4.23
		Annual energy consumption	kWh		2,463	3,432	4,677	2,463	-	3,432	4,677
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	64	66	67	64	-	66	67
	Sound power level indoor	Cooling	Nom.	dBA	55	60	62	60	-	64	
Nominal efficiency	EER			3.82	3.81	3.35	-	3.31	-		
	COP			4.13	4.15	3.89	-	3.63	-		
	Annual energy consumption			kWh	890 (1)	1,245 (1)	1,790 (1)	-	2,025 (1)	-	
	Energy label	Cooling			A						
Heating			A								

### Notes

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

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

SEER and SCOP are according to EN 14825

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

2-7 Capacity and Power input				FUQ71C/RZQG71L9V1	FUQ100C/RZQG100L9V1	FUQ125C/RZQG125L9V1	FUQ100C/RZQG71L9V1	
Indoor unit				FUQ71C				FUQ100C
Outdoor unit				RZQG71L9V1				RZQG100L9V1
Cooling capacity	Nom.			kW	6.8	9.5	12.0	-
Heating capacity	Nom.			kW	7.5	10.8	13.5	-
Power input	Cooling	Nom.		kW	1.68	2.46	3.54	-
	Heating	Nom.		kW	1.84	2.73	3.95	-
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A++			
		Pdesign	kW		6.80	9.50	12.00	6.80
		SEER			6.42	6.11	5.61	6.50
		Annual energy consumption	kWh		371	545	749	367
	Heating (Average climate)	Energy label			A+			
		Pdesign	kW		7.60	11.30	14.13	7.60
		SCOP/A			4.20	4.50	4.44	4.20
		Annual energy consumption	kWh		2,534	3,516	4,456	2,534
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	64	-		
	Sound power level indoor	Cooling	Nom.	dBA	59	-		



## 2 Specifications

2-7 Capacity and Power input			FUQ71C/RZQG71L9V1	FUQ100C/RZQG100L9V1	FUQ125C/RZQG125L9V1	FUQ100C/RZQG71L9V1
Nominal efficiency	EER		4.05	3.86	3.39	-
	COP		4.08	3.95	3.42	-
	Annual energy consumption	kWh	840 (1)	1,230	1,770	-
	Energy label	Cooling	A			
Heating		A		B		-

### Notes

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

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

SEER and SCOP are according to EN 14825

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

2-8 Capacity and Power input				FVQ71C/ RZQG71L9V1	FVQ100C/ RZQG100L9V 1	FVQ125C/ RZQG125L9V 1	FVQ140C/ RZQG140L9V 1	FVQ100C/ RZQG71L9V1	FVQ140C/ RZQG100L9V 1	FVQ140C/ RZQG125L9V 1
Indoor unit				FVQ71C	FVQ100C	FVQ125C	FVQ140C	FVQ100C	FVQ140C	
Outdoor unit				RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1	RZQG140L 9V1	RZQG71L9 V1	RZQG100L 9V1	RZQG125L 9V1
Cooling capacity	Nom.	kW	6.8	9.5	12.0	13.4	-			
Heating capacity	Nom.	kW	7.5	10.8	13.5	15.5	-			
Power input	Cooling	Nom.	kW	2.02	2.49	3.74	4.17	-		
	Heating	Nom.	kW	2.06	2.61	3.65	4.30	-		
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A++	A+		-	A++	A+	
		Pdesign	kW	6.80	9.50	12.00	-	6.80	9.50	12.00
		SEER		6.23	5.61		-	6.31	5.61	
		Annual energy consumption	kWh	383	593	749	-	378	593	749
	Heating (Average climate)	Energy label		A+		A	-	A+		A
		Pdesign	kW	6.33	11.30		-	6.33	11.30	
		SCOP/A		4.05	4.20	3.87	-	4.05	4.20	3.87
		Annual energy consumption	kWh	2,189	3,767	4,088	-	2,189	3,767	4,088
Eurovent	Sound power level outdoor	Cooling	Nom.	dBA	64	-				
	Sound power level indoor	Cooling	Nom.	dBA	55	-				
Nominal efficiency	EER		3.37	3.81	3.21		-			
	COP		3.64	4.14	3.70	3.61	-			
	Annual energy consumption	kWh	1,010 (1)	1,245	1,870	2,085	-			
	Energy label	Cooling	A				-			
Heating		A				-				

### Notes

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

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

SEER and SCOP are according to EN 14825

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

2-9 Technical Specifications		RZQG71L9V1	RZQG100L9V1	RZQG125L9V1	RZQG140L9V1
Capacity control	Method	Inverter controlled			
Casing	Colour	Ivory white			
	Material	Painted galvanized steel plate			

## 2 Specifications

2

2-9 Technical Specifications					RZQG71L9V1	RZQG100L9V1	RZQG125L9V1	RZQG140L9V1
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		69	95		
	Packed unit		kg		78	104		
Heat exchanger	Fin	Type			WF fin			
		Treatment			Anti-corrosion treatment (PE)			
Compressor	Quantity				1			
	Type				Hermetically sealed swing compressor			
	Starting method				Inverter driven			
Fan	Type				Propeller fan			
	Discharge direction				Horizontal			
	Quantity				1	2		
	Air flow rate	Cooling	Nom.	m <sup>3</sup> /min	59	70	84	
		Heating	Nom.	m <sup>3</sup> /min	49	62		
Fan motor	Quantity				1	2		
	Model				Brushless DC motor			
	Output			W	94			
	Drive				Direct drive			
	Speed	Cooling	Super low	rpm	-			
		Heating	Super low	rpm	-			
Sound power level	Cooling			dBA	64	66	67	69
	Heating			dBA	-			
Sound pressure level	Cooling	Nom.	dBA	48	50	51	52	
	Heating	Nom.	dBA	50	52	53		
	Night quiet mode	Level 1	dBA	43	45			
Operation range	Cooling	Ambient	Min.	°CDB	-15			
			Max.	°CDB	50			
	Heating	Ambient	Min.	°CWB	-20			
			Max.	°CWB	15.5			
Refrigerant	Type				R-410A			
	Charge			kg	2.9	4.0		
				TCO <sub>2eq</sub>	6.1	8.4		
	Control				Expansion valve (electronic type)			
	GWP				2,087.5			
	Circuits	Quantity			1			

## 2 Specifications

2-9 Technical Specifications				RZQG71L9V1	RZQG100L9V1	RZQG125L9V1	RZQG140L9V1
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 (1)		
			Max.	m	50	75	
		System	Equivalent	m	70	90	
			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				
Refrigerant oil	Type		FVC50K				
	Charged volume		l	0.9	1.35		
Defrost method			Reversed cycle				
Defrost control			Sensor for outdoor heat exchanger temperature				
Safety devices	Item	01	High pressure switch				
		02	Low pressure switch				
		03	Fan driver overload protector				
		04	Fuse				

Standard Accessories : Tie-wraps; Quantity : 2;

Standard Accessories : Installation manual; Quantity : 1;

2-10 Electrical Specifications				RZQG71L9V1	RZQG100L9V1	RZQG125L9V1	RZQG140L9V1
Power supply	Name		V1				
	Phase		1~				
	Frequency		Hz	50			
	Voltage		V	220-240			
	Voltage range	Min.	%	-10			
		Max.	%	10			
Current - 50Hz	Maximum fuse amps (MFA)		A	25	40		
Current	Zmax	List	Complies to EN61000-3-11				
	Recommended fuses		A	25	40		
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) 3 with re-charging

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

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

See separate drawing for electrical data

Contains fluorinated greenhouse gases

MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical data drawing.

### 3 Electrical data

#### 3 - 1 Electrical Data

3

#### RZQG-L9V1

Unit combination restrictions		Power supply			COMP		OFM		IFM			
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
2xFNQ35A2VEB	RZQG71L9V1B	50	220-240V	MAX. 50Hz 264V MIN. 50Hz 198V	17.2	20	-	15.6	0.094	0.4	2x0.034	2x0.3
2xFNQ50A2VEB	RZQG100L9V1B				28.9	32	-	24.2	0.094 + 0.094	0.4 + 0.4	2x0.06	2x0.5
3xFNQ35A2VEB	RZQG100L9V1B				28.8	32	-	24.2	0.094 + 0.094	0.4 + 0.4	3x0.034	3x0.3
2xFNQ60A2VEB	RZQG125L9V1B				29	32	-	24.2	0.094 + 0.094	0.4 + 0.4	2x0.06	2x0.5
3xFNQ50A2VEB	RZQG125L9V1B				29.5	32	-	24.2	0.094 + 0.094	0.4 + 0.4	3x0.06	3x0.5
4xFNQ35A2VEB	RZQG125L9V1B				29.2	32	-	24.2	0.094 + 0.094	0.4 + 0.4	4x0.034	4x0.3
3xFNQ50A2VEB	RZQG140L9V1B				29.5	32	-	24.2	0.094 + 0.094	0.4 + 0.4	3x0.06	3x0.5

Notes

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

Symbols

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

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

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#### RZQG71-125L9V1

Unit combination restrictions		Power supply			COMP		OFM		IFM			
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
FBQ71D2VEB	RZQG71L9V1B	50	220-240V	MAX. 50Hz 264V MIN. 50Hz 198V	16.4	20	51	15.6	0.094	0.4	0.07	0.5
2xFBQ35D2VEB	RZQG71L9V1B				17.1	20	-	15.6	0.094	0.4	2x0.089	2x0.6
FBQ100D2VEB	RZQG100L9V1B				28.9	32	49	24.2	0.094 + 0.094	0.4 + 0.4	0.127	1.0
2xFBQ50D2VEB	RZQG100L9V1B				29.1	32	-	24.2	0.094 + 0.094	0.4 + 0.4	2x0.089	2x0.6
3xFBQ35D2VEB	RZQG100L9V1B				29.7	32	-	24.2	0.094 + 0.094	0.4 + 0.4	3x0.089	3x0.6
FBQ125D2VEB	RZQG125L9V1B				29.5	32	64	24.2	0.094 + 0.094	0.4 + 0.4	0.187	1.5
2xFBQ60D2VEB	RZQG125L9V1B				29	32	-	24.2	0.094 + 0.094	0.4 + 0.4	2x0.070	2x0.5
3xFBQ50D2VEB	RZQG125L9V1B				29.8	32	-	24.2	0.094 + 0.094	0.4 + 0.4	3x0.089	3x0.6

Notes

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

Symbols

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

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

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### 3 Electrical data

#### 3 - 1 Electrical Data

##### RZQG125-140L9V1

Unit combination restrictions		Power supply			COMP		OFM		IFM					
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA		
4xFBQ35D2VEB	RZQG125L9V1B	50	220-240V	MAX. 50Hz 264V MIN. 50Hz 198V	30,4	32	-	24,2	0,094 + 0,094	0,4 + 0,4	4x0,089	4x0,6		
FBQ140D2VEB	RZQG140L9V1B				29,5	32	68	24,2	0,094 + 0,094	0,4 + 0,4	0,187	1,5		
2xFBQ71D2VEB	RZQG140L9V1B				29	32	-	24,2	0,094 + 0,094	0,4 + 0,4	2x0,07	2x0,5		
3xFBQ50D2VEB	RZQG140L9V1B				29,8	32	-	24,2	0,094 + 0,094	0,4 + 0,4	3x0,089	3x0,6		
4xFBQ35D2VEB	RZQG140L9V1B				30,4	32	-	24,2	0,094 + 0,094	0,4 + 0,4	4x0,089	4x0,6		

Notes

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

Symbols

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

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

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##### RZQG140L9V1

Unit combination restrictions		Power supply			COMP		OFM		IFM			
Indoor	Outdoor	①	②	③	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
4xFNQ35A2VEB	RZQG140L9V1B	50	220-240V	MAX. 50Hz 264V MIN. 50Hz 198V	29,2	32	-	24,2	0,094 + 0,094	0,4 + 0,4	4x0,034	4x0,3

Notes

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

Symbols

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

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

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# 4 Options

## 4 - 1 Options

### RZQG-L9V1

Available options for RZQG models

Option	Option kit			
	RZQG71L9V1B	RZQG100L9V1B	RZQG125L9V1B	RZQG140L9V1B
Bottom plate heater	EKBP140L7			
Refrigerant branch piping	Twin	KHRQ22M20TA		
	Triple	-	KHRQ127H	
	Double twin	-	-	KHRQ22M20TA (3x)
Demand adaptor kit	SB.KRP58M51			

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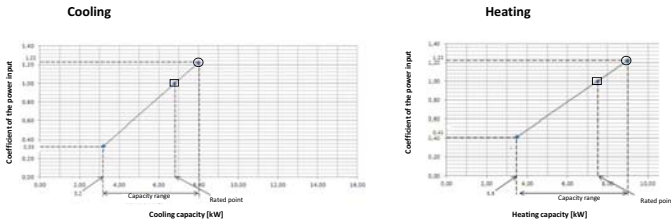


# 6 Capacity tables

## 6 - 1 Cooling/Heating Capacity Tables

6

### RZQG71L9V1 RZQG71L8Y1



Indoor	Outdoor temperature (°C DB)												
	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	8.03	5.45	1.00	7.76	5.32	1.11	7.48	5.20	1.21	7.21	5.06	1.32
18.0	25	8.40	5.45	1.00	8.11	5.32	1.11	7.83	5.19	1.22	7.54	5.05	1.33
19.0	27	8.59	5.44	1.01	8.30	5.32	1.12	8.00	5.18	1.22	7.70	5.05	1.33
19.5	27	8.68	5.43	1.01	8.39	5.31	1.12	8.09	5.17	1.22	7.79	5.05	1.33
22.0	30	9.15	5.38	1.01	8.84	5.25	1.12	8.52	5.13	1.23	8.21	4.99	1.34
24.0	32	9.53	5.31	1.03	9.20	5.19	1.13	8.87	5.06	1.25	8.54	4.92	1.35

Indoor	Outdoor temperature (°C WB)																								
	-15.0			-10.0			-5.0			0.0			6.0			10.0									
	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI									
°CDB	°CWB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—								
16	6.44	0.92	7.09	0.99	7.50	1.02	7.79	1.06	9.00	1.12	9.71	1.19	18	6.43	0.98	7.08	1.03	7.54	1.07	7.78	1.10	9.00	1.17	9.71	1.24
20	6.42	1.01	7.07	1.07	7.50	1.12	7.77	1.14	9.00	1.22	9.71	1.29	21	6.42	1.00	7.07	1.09	7.50	1.13	7.77	1.16	9.00	1.24	9.71	1.31
22	6.42	1.05	7.06	1.11	7.50	1.15	7.76	1.19	9.00	1.27	9.71	1.33	24	6.41	1.09	7.05	1.15	7.51	1.20	7.76	1.22	9.00	1.32	9.67	1.38

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

Pair	FCQ071F	FCQ071F	FRQ71C	FRQ071C	FRQ071C	FRQ071C	FRQ071C	FRQ071C	FRQ071C
AFR	21.2	21.5	18.0	20.5	18.0	18.0	20.5	23.0	18.0
(BF)	(0.2)	(0.14)	(0.08)	(0.13)	(0.16)	(0.16)	(0.13)	(0.24)	(0.13)

Pair	FCQ05F x 2	FRQ5C x 2	FRQ5CA x 2	FRQ5C x 2	FRQ5SF x 2	FRQ5D x 2	FRQ5SA x 2
AFR	12.5 x 2	16 x 2	14 x 2	10 x 2	8.7 x 2	15 x 2	8.7 x 2
(BF)	(0.4 x 2)	(0.15 x 2)	(0.17 x 2)	(0.25 x 2)	(0.17 x 2)	(0.08 x 2)	(0.17 x 2)

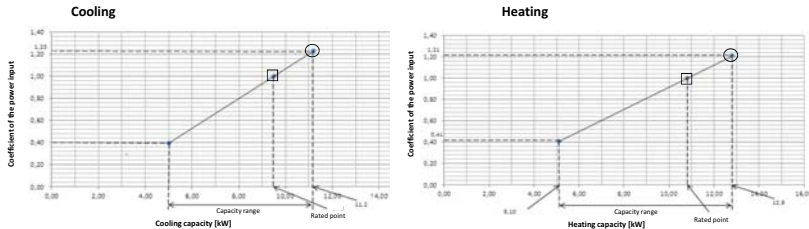
9. The rated power input for each model is mentioned in the table below.

Pair	FCQ071F	FCQ071F	FRQ71C	FRQ071C	FRQ071C	FRQ071C	FRQ071C	FRQ071C	FRQ071C
Cooling	1.66	2.01	1.94	1.78	2.00	2.02	1.78	1.67	1.89
Heating	1.56	1.89	2.05	1.82	2.03	2.06	1.82	1.68	1.87

Pair	FCQ05F x 2	FRQ5C x 2	FRQ5CA x 2	FRQ5C x 2	FRQ5SF x 2	FRQ5D x 2	FRQ5SA x 2
Cooling	2.04	1.98	2.24	2.02	2.23	2.01	2.23
Heating	1.92	2.16	2.70	1.88	2.55	2.08	2.55

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### RZQG100L9V1 RZQG100L8Y1



Indoor	Outdoor temperature (°C DB)												
	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	11.20	7.61	1.01	10.85	7.44	1.11	10.50	7.29	1.22	10.11	7.09	1.32
18.0	25	11.80	7.59	1.01	11.37	7.49	1.12	11.00	7.27	1.23	10.55	7.09	1.33
19.0	27	12.00	7.57	1.02	11.62	7.44	1.12	11.20	7.26	1.23	10.80	7.04	1.33
19.5	27	12.15	7.50	1.02	11.74	7.37	1.13	11.43	7.24	1.23	10.91	7.04	1.34
22.0	30	12.80	7.52	1.02	12.37	7.36	1.13	11.90	7.16	1.24	11.52	7.03	1.35
24.0	32	13.30	7.42	1.03	12.88	7.27	1.14	12.40	7.06	1.25	11.97	6.91	1.36

Indoor	Outdoor temperature (°C WB)																								
	-15.0			-10.0			-5.0			0.0			6.0			10.0									
	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI									
°CDB	°CWB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—								
16	8.96	0.92	9.45	0.96	10.1	1.02	10.4	1.06	12.6	1.11	13.6	1.18	18	8.67	0.97	9.44	1.02	10.0	1.06	10.3	1.09	12.8	1.16	13.8	1.23
20	8.56	1.00	9.43	1.06	10.0	1.11	10.3	1.13	12.8	1.21	13.8	1.27	21	8.56	1.02	9.42	1.08	10.0	1.12	10.3	1.15	12.9	1.22	13.8	1.30
22	8.65	1.04	9.42	1.10	10.0	1.14	10.3	1.18	12.8	1.26	13.8	1.32	24	8.64	1.08	9.41	1.14	10.0	1.19	10.3	1.22	12.8	1.21	13.8	1.27

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

Pair	FCQ100F	FCQ100F	FRQ100C	FRQ100C	FRQ100C	FRQ100C	FRQ100C	FRQ100C
AFR	32.3	32.0	20.0	26.0	28.0	31.0	29.0	28.0
(BF)	(0.17)	(0.17)	(0.13)	(0.09)	(0.10)	(0.09)	(0.20)	(0.08)

Pair	FCQ05F x 2	FRQ5C x 2	FRQ5CA x 2	FRQ5C x 2	FRQ5SF x 2	FRQ5D x 2	FRQ5SA x 2
AFR	12.5 x 2	16 x 2	15 x 2	12 x 2	16 x 2	15 x 2	16 x 2
(BF)	(0.22 x 2)	(0.16 x 2)	(0.18 x 2)	(0.16 x 2)	(0.11 x 2)	(0.13 x 2)	(0.11 x 2)

Pair	FCQ03F x 3	FRQ3C x 3	FRQ3CA x 3	FRQ3C x 3	FRQ3SF x 3	FRQ3D x 3	FRQ3SA x 3
AFR	12.5 x 3	16 x 3	14 x 3	10 x 3	8.7 x 3	15 x 3	8.7 x 3
(BF)	(0.4 x 3)	(0.15 x 3)	(0.17 x 3)	(0.25 x 3)	(0.17 x 3)	(0.08 x 3)	(0.17 x 3)

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

Pair	FCQ100F	FCQ100F	FRQ100C	FRQ100C	FRQ100C	FRQ100C	FRQ100C	FRQ100C	
Cooling	2.15	2.45	2.44	2.49	2.63	2.49	2.49	2.33	2.49
Heating	2.16	2.60	2.57	2.60	3.00	2.61	2.60	2.62	2.45

Pair	FCQ05F x 2	FRQ5C x 2	FRQ5CA x 2	FRQ5C x 2	FRQ5SF x 2	FRQ5D x 2	FRQ5SA x 2
Cooling	2.32	2.51	2.93	2.65	2.51	2.87	2.51
Heating	2.46	2.86	3.28	2.89	2.96	2.73	2.96

Pair	FCQ03F x 3	FRQ3C x 3	FRQ3CA x 3	FRQ3C x 3	FRQ3SF x 3	FRQ3D x 3	FRQ3SA x 3
Cooling	2.38	2.51	2.91	2.45	2.81	2.68	2.81
Heating	2.51	2.86	3.20	2.59	3.68	2.70	3.68

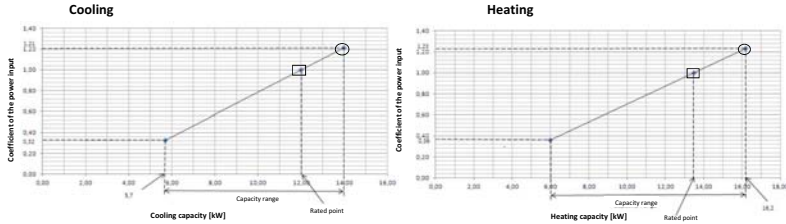
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# 6 Capacity tables

## 6 - 1 Cooling/Heating Capacity Tables

### RZQG125L9V1 RZQG125L8Y1



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

Indoor	Outdoor temperature (°C DB)												
	25			30			35			40			
TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI		
16.0	22	14.10	9.54	1.00	13.60	9.30	1.10	13.10	9.12	1.20	12.60	8.78	1.31
18.0	25	14.70	9.50	1.00	14.20	9.32	1.10	13.70	9.09	1.21	13.20	8.83	1.32
19.0	27	15.00	9.52	1.01	14.50	9.34	1.11	14.00	9.06	1.21	13.50	8.87	1.32
19.5	27	15.21	9.52	1.01	14.68	9.26	1.12	14.15	9.08	1.21	13.64	8.91	1.32
22.0	30	16.00	9.39	1.01	15.47	9.14	1.12	14.90	8.95	1.23	14.38	8.74	1.33
24.0	32	16.70	9.31	1.02	16.10	9.09	1.13	15.50	8.83	1.24	14.97	8.63	1.34

Indoor	Outdoor temperature (°C WB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	
16	11.0	0.94	12.1	1.00	12.9	1.00	13.2	1.06	16.2	1.13	17.5	1.20
18	11.0	0.98	12.1	1.00	12.9	1.00	13.2	1.11	16.2	1.18	17.5	1.26
20	11.0	1.02	12.0	1.08	12.9	1.12	13.2	1.15	16.2	1.23	17.5	1.30
21	11.0	1.04	12.0	1.10	12.8	1.14	13.2	1.17	16.2	1.26	17.5	1.32
22	11.0	1.06	12.0	1.12	12.8	1.16	13.2	1.20	16.2	1.28	17.4	1.34
24	11.0	1.10	12.0	1.16	12.8	1.21	13.2	1.24	16.2	1.30	17.4	1.36

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

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

Pair	FCQ0125H	FCQ0125F	FDQ125C	FDQ125C	FDQ125C	FDQ125C	FDQ125C	FDQ125C
Cooling	33.5	33.0	39.0	31.0	39.0	28.0	31.0	32.5
Heating	3.07	3.72	3.53	3.48	3.53	3.65	3.48	3.86

Pair	FCQ060F X 2	FBQ060 X 2	FBQ060 X 2	FBQ060 X 2	FDX060F X 2	FBQ060 X 2	FBQ060 X 2
Cooling	13.6 x 2	18 x 2	19.5 x 2	14.5 x 2	16 x 2	18 x 2	16 x 2
Heating	3.64	3.74	4.11	4.10	4.20	3.85	4.20

Pair	FCQ090F X 3	FBQ090 X 3	FBQ090 X 3	FBQ090 X 3	FDX090F X 3	FBQ090 X 3	FBQ090 X 3
Cooling	12.6 x 3	16 x 3	15 x 3	12 x 3	16 x 3	15 x 3	16 x 3
Heating	3.66	3.74	4.10	3.55	3.61	3.81	3.61

Pair	FCQ090F X 4	FBQ090 X 4	FBQ090 X 4	FBQ090 X 4	FDX090F X 4	FBQ090 X 4	FBQ090 X 4
Cooling	12.5 x 4	16 x 4	14 x 4	10 x 4	16 x 4	15 x 4	16 x 4
Heating	3.72	3.74	4.00	3.30	3.45	3.78	4.45

Pair	FCQ0125H	FCQ0125F	FDQ125C	FDQ125C	FDQ125C	FDQ125C	FDQ125C
Cooling	3.00	3.22	3.15	3.58	3.20	3.74	3.58
Heating	3.07	3.72	3.53	3.48	3.53	3.65	3.48

Pair	FCQ060F X 2	FBQ060 X 2	FBQ060 X 2	FBQ060 X 2	FDX060F X 2	FBQ060 X 2	FBQ060 X 2
Cooling	3.14	3.28	3.67	3.61	3.75	4.10	3.75
Heating	3.64	3.74	4.11	4.10	4.20	3.85	4.20

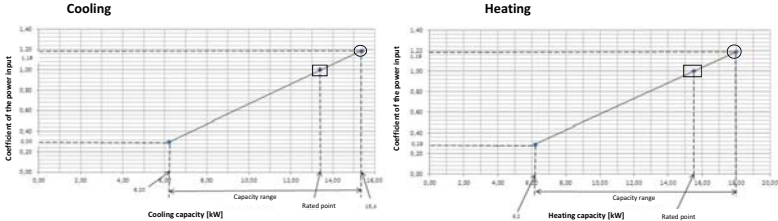
Pair	FCQ090F X 3	FBQ090 X 3	FBQ090 X 3	FBQ090 X 3	FDX090F X 3	FBQ090 X 3	FBQ090 X 3
Cooling	3.17	3.28	3.66	3.23	3.45	3.97	3.45
Heating	3.66	3.74	4.10	3.55	3.61	3.81	3.61

Pair	FCQ090F X 4	FBQ090 X 4	FBQ090 X 4	FBQ090 X 4	FDX090F X 4	FBQ090 X 4	FBQ090 X 4
Cooling	3.23	3.28	3.64	3.01	3.94	3.74	3.94
Heating	3.72	3.74	4.00	3.30	4.05	3.78	4.45

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### RZQG140L9V1 RZQG140L1Y1



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

Indoor	Outdoor temperature (°C DB)											
	25			30			35			40		
TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	
16.0	22	15.50	10.47	0.98	14.93	10.25	1.08	14.44	10.03	1.18	13.86	9.69
18.0	25	16.17	10.55	0.98	15.62	10.21	1.09	15.11	10.01	1.19	14.52	9.71
19.0	27	16.56	10.43	0.99	15.96	10.18	1.09	15.40	9.98	1.19	14.83	9.76
19.5	27	16.74	10.49	0.99	16.14	10.16	1.10	15.57	10.00	1.19	14.98	9.86
22.0	30	17.61	10.37	0.99	17.01	10.16	1.10	16.36	9.83	1.21	15.76	9.60
24.0	32	18.38	10.20	1.00	17.72	10.00	1.11	17.04	9.67	1.22	16.43	9.47

Indoor	Outdoor temperature (°C WB)											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	
16	11.6	0.91	12.7	0.97	13.6	1.00	13.9	1.03	18.0	1.09	19.4	1.16
18	11.6	0.95	12.7	1.00	13.6	1.04	13.9	1.07	18.0	1.14	19.4	1.21
20	11.6	0.99	12.7	1.05	13.5	1.09	13.9	1.11	18.0	1.19	19.4	1.26
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**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
  - = Maximum at standard conditions  
□ = Rated capacity and rated coefficient of the power input  
The maximum capacity is not guaranteed except at standard conditions.
  - SHC is based on indoor units EWB & EDB.  
SHC for other dry-bulb temperatures = SHC + SHC\*  
SHC\* = SHC correction for other dry-bulb temperatures  
= 0.02 x AFR (m<sup>3</sup>/min) x (1-BF) x (DB\* - EDB)
  - The capacities are based on the following conditions:  
Outdoor air: 85% RH  
However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
Corresponding refrigerant piping length: 5.0 m  
Level difference: 0m
  - CPI is a percentage value compared to the rated value which is 1.00.
  - The error rate for this value is less than 5% and depends on the indoor unit type.
  - The heating performance takes into account the drop that occurs during defrost operation.
  - The air flow rate and bypass factor are mentioned in the table.

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

Pair	FCQ0140H	FCQ0140F	FDQ140C	FDQ140C	FDQ140C	FDQ140C	FDQ140C
Cooling	33.5	33.0	39.0	31.0	39.0	34.0	34.0
Heating	3.77	4.30	4.30	4.27	4.30	4.27	4.31

Pair	FCQ070F X 2	FBQ070 X 2	FBQ070 X 2	FBQ070 X 2	FDX070F X 2	FBQ070 X 2	FBQ070 X 2
Cooling	21.2 x 2	21.5 x 2	18.0 x 2	20.5 x 2	18.0 x 2	23.0 x 2	18.0 x 2
Heating	3.71	4.34	4.70	4.47	4.68	4.47	4.36

Pair	FCQ090F X 3	FBQ090 X 3	FBQ090 X 3	FBQ090 X 3	FDX090F X 3	FBQ090 X 3	FBQ090 X 3
Cooling	12.6 x 3	16 x 3	15 x 3	12 x 3	16 x 3	15 x 3	16 x 3
Heating	3.24	3.70	4.10	3.53	3.61	3.70	3.61

Pair	FCQ090F X 4	FBQ090 X 4	FBQ090 X 4	FBQ090 X 4	FDX090F X 4	FBQ090 X 4	FBQ090 X 4
Cooling	12.5 x 4	16 x 4	14 x 4	10 x 4	16 x 4	15 x 4	16 x 4
Heating	4.30	4.70	5.33	3.81	5.85	4.70	5.85

Pair	FCQ0140H	FCQ0140F	FDQ140C	FDQ140C	FDQ140C	FDQ140C
Cooling	4.00	4.17	4.02	4.05	4.17	4.05
Heating	3.77	4.30	4.30	4.27	4.30	4.27

Pair	FCQ070F X 2	FBQ070 X 2	FBQ070 X 2	FBQ070 X 2	FDX070F X 2	FBQ070 X 2	FBQ070 X 2
Cooling	3.94	4.11	3.75	3.58	3.81	3.59	3.75
Heating	3.71	4.34	4.70	4.47	4.68	4.47	4.36

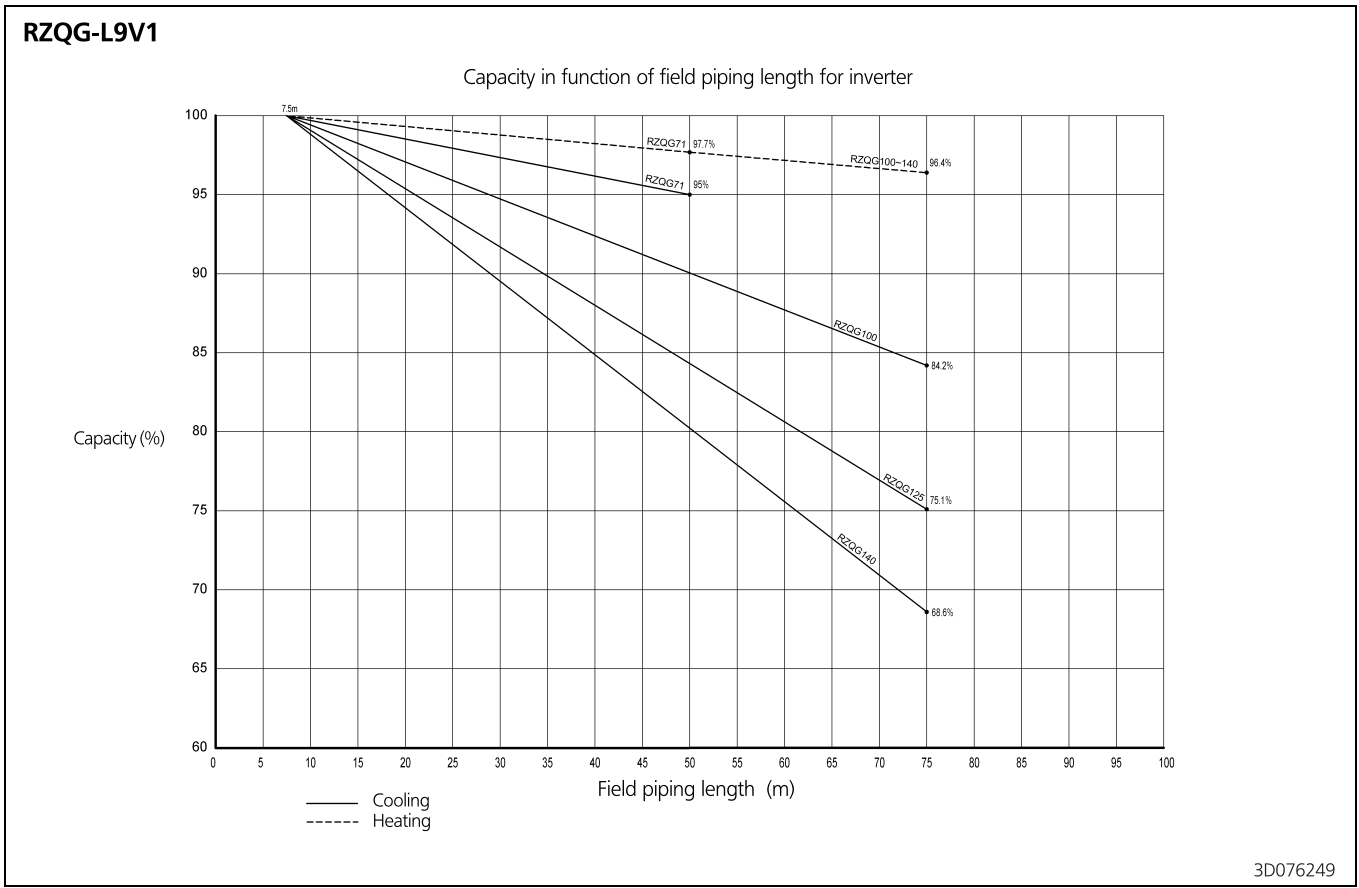
Pair	FCQ090F X 3	FBQ090 X 3	FBQ090 X 3	FBQ090 X 3	FDX090F X 3	FBQ090 X 3	FBQ090 X 3
Cooling	3.24	3.70	4.23	3.83	3.81	4.30	3.81
Heating	4.30	4.70	5.33	3.81	5.85	4.70	5.85

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# 6 Capacity tables

## 6 - 2 Capacity Correction Factor

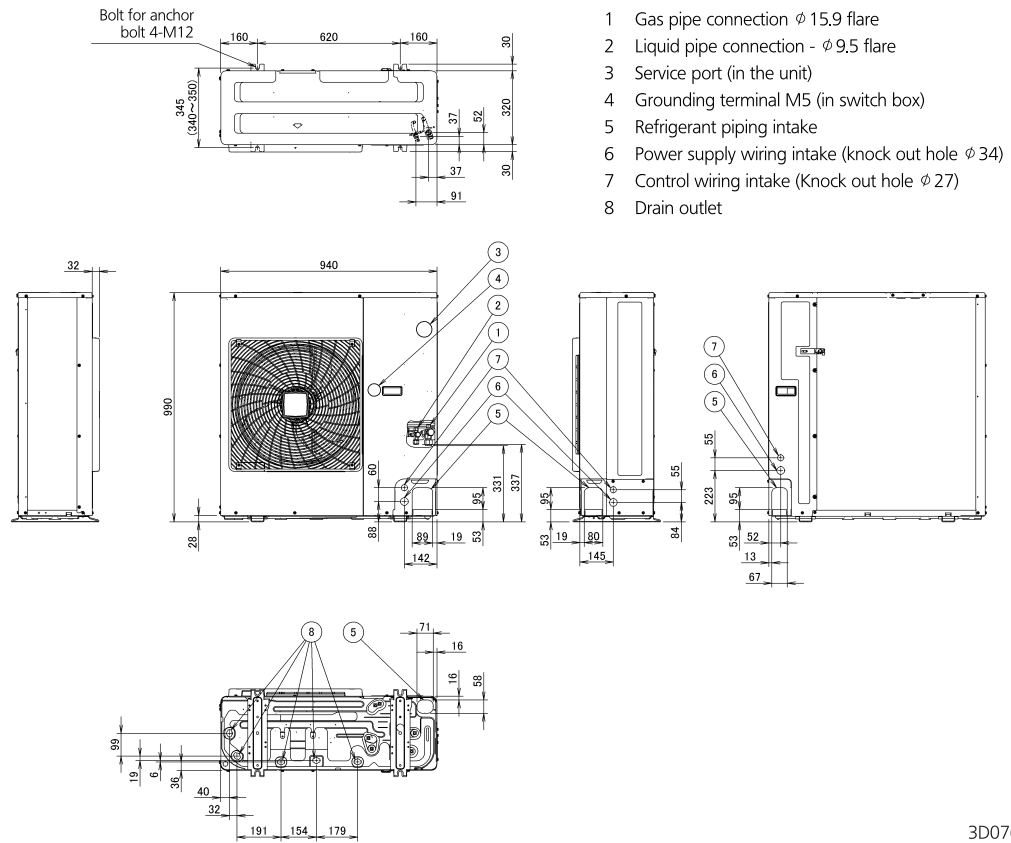
6



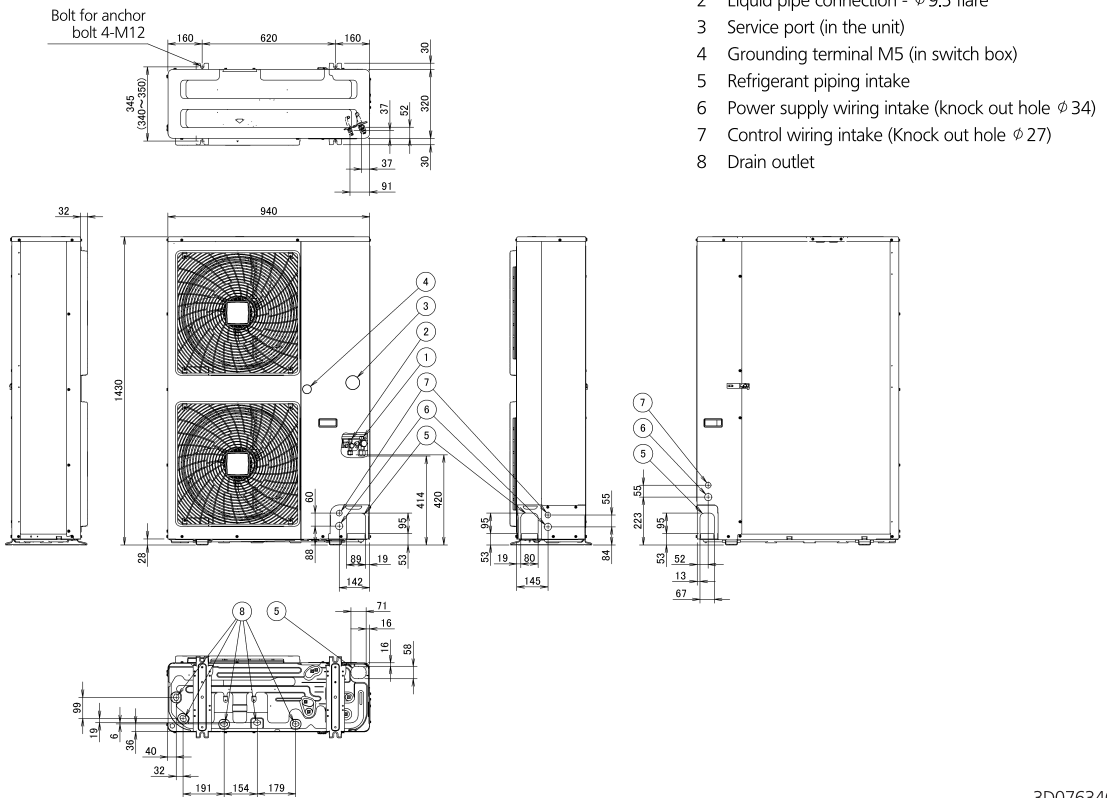
# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

### RZQG71L9V1



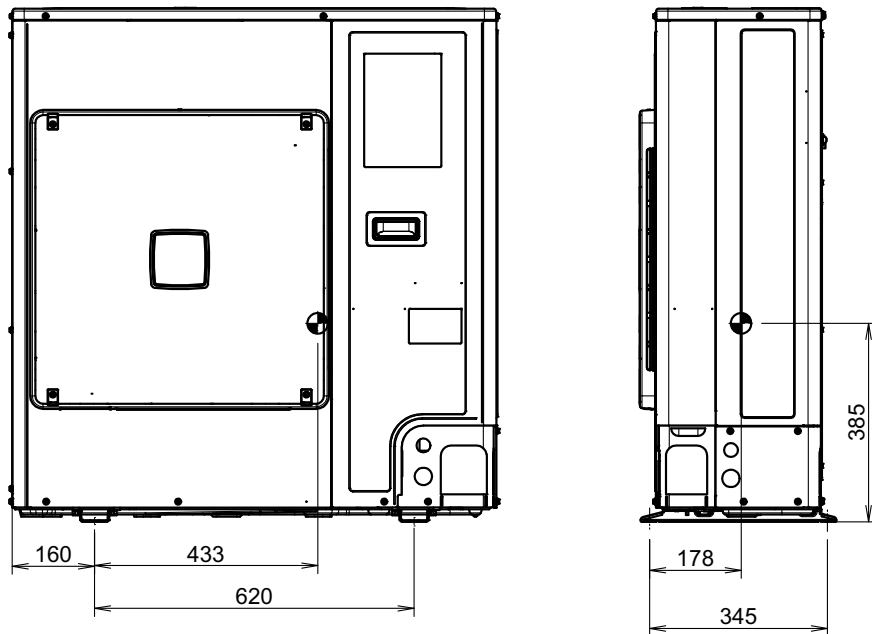
### RZQG100-140L9V1



## 8 Centre of gravity

### 8 - 1 Centre of Gravity

RZQG71L9V1

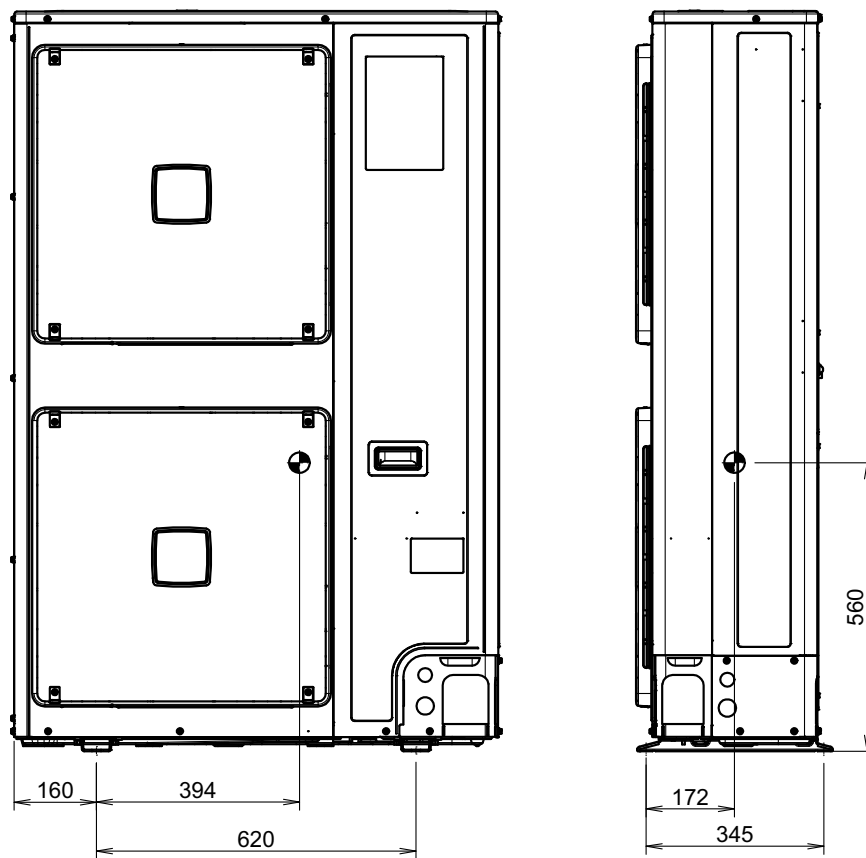


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# 8 Centre of gravity

## 8 - 1 Centre of Gravity

RZQG100-140L9V1



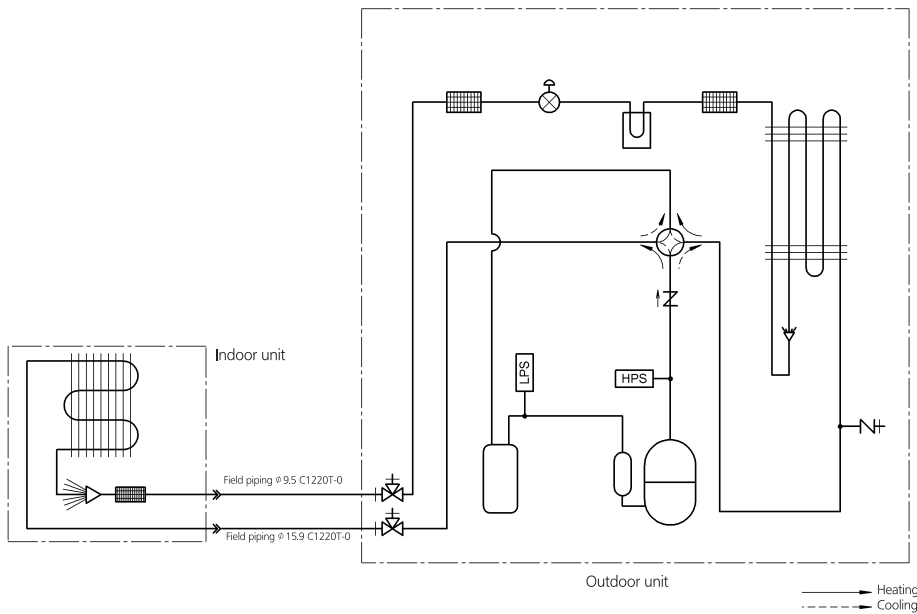
4D090897

# 9 Piping diagrams

## 9 - 1 Piping Diagrams

9

### RZQG-L9V1 Pair application



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: RZQG71L, RZQSG100L and RZQSG125L.

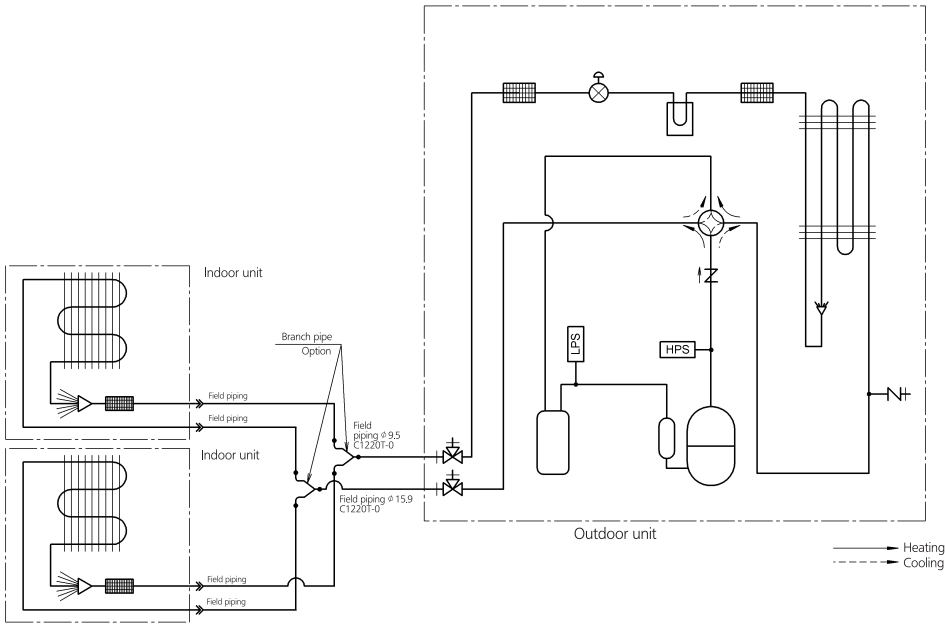
- Accumulator
- Heat exchanger
- Electronic expansion valve
- 4-way valve
- 
- High pressure switch
- Low pressure switch
- Compressor
- Compressor Accumulator
- Stop valve
- Distributor
- PCB Cooling
- Check valve
- Filter

3D090340

# 9 Piping diagrams

## 9 - 2 Piping Diagram Twin Application

### RZQG-L9V1 Twin application



- Accumulator
- Heat exchanger
- Electronic expansion valve
- 4-way valve
- Service port 5/16" (flare)
- High pressure switch
- Low pressure switch
- Compressor
- Compressor Accumulator
- Stop valve
- Distributor
- PCB Cooling
- Check valve
- Filter

- 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: RZQG71L, RZQSG100L and RZQSG125L.

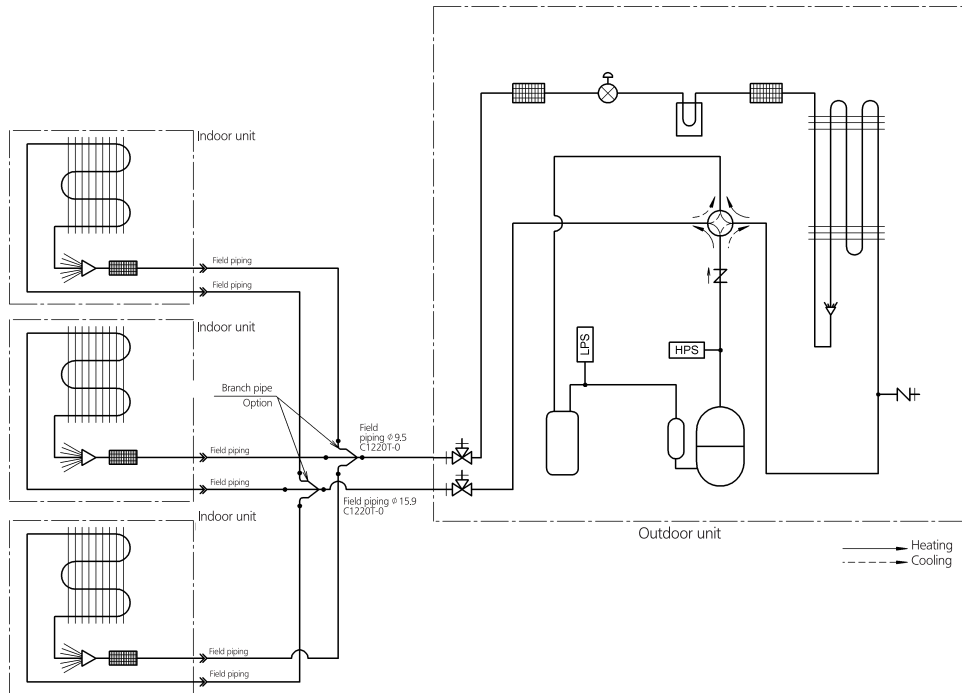
3D090341

# 9 Piping diagrams

## 9 - 3 Piping Diagram Triple Application

9

### RZQG100-140L9V1 Triple application



Notes:

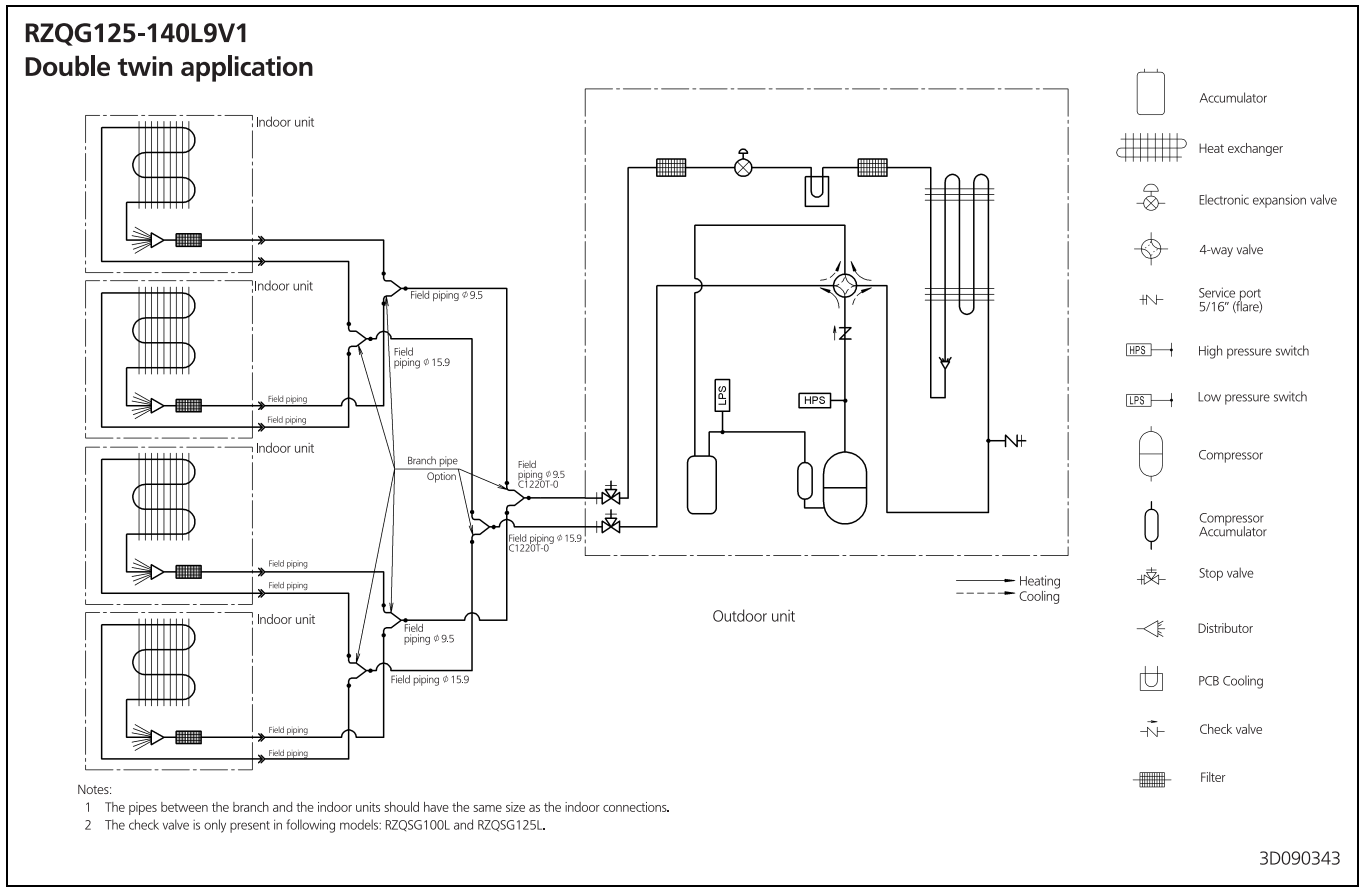
- 1 The pipes between the branch and the indoor units should have the same size as the indoor connections.
- 2 The check valve is only present in following models: RZQSG100L and RZQSG125L.

3D090342



# 9 Piping diagrams

## 9 - 4 Piping Diagram Double Twin Application

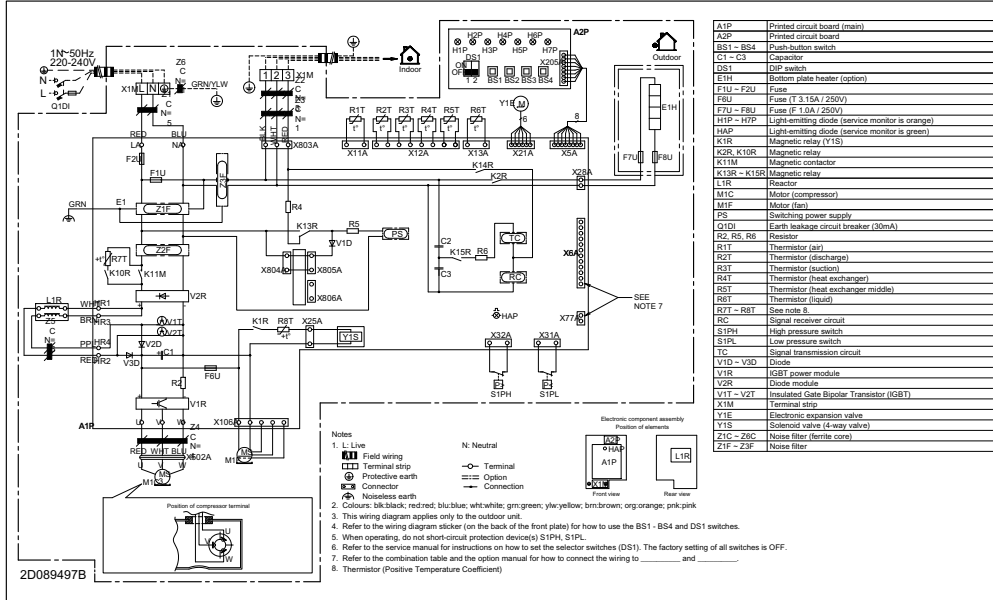


# 10 Wiring diagrams

## 10 - 1 Wiring Diagrams - Single Phase

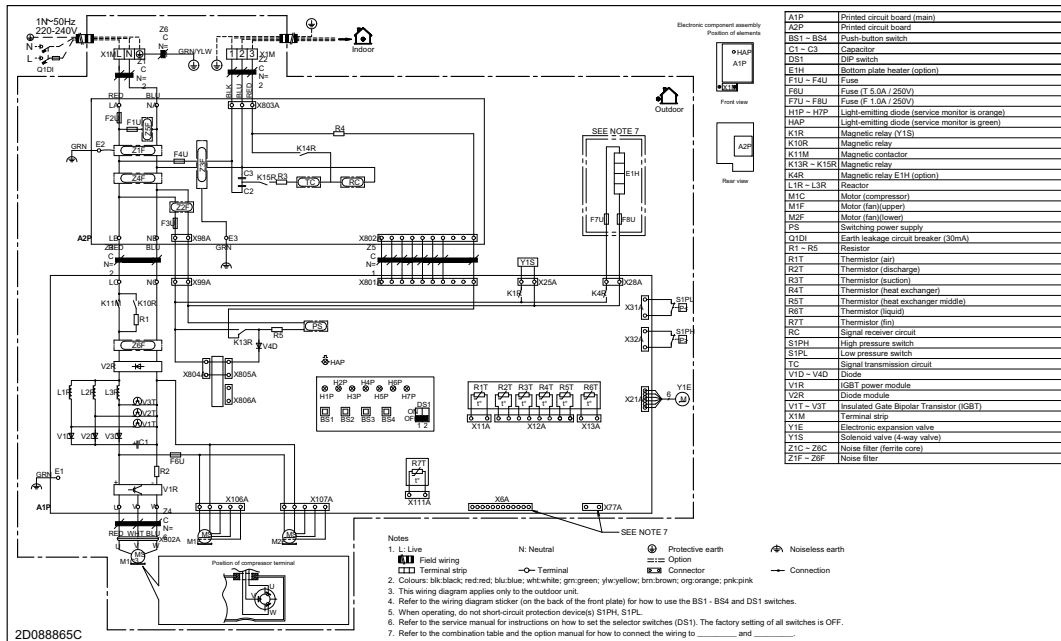
10

RZQG71L9V1



2D089497B

RZQG100-140L9V1

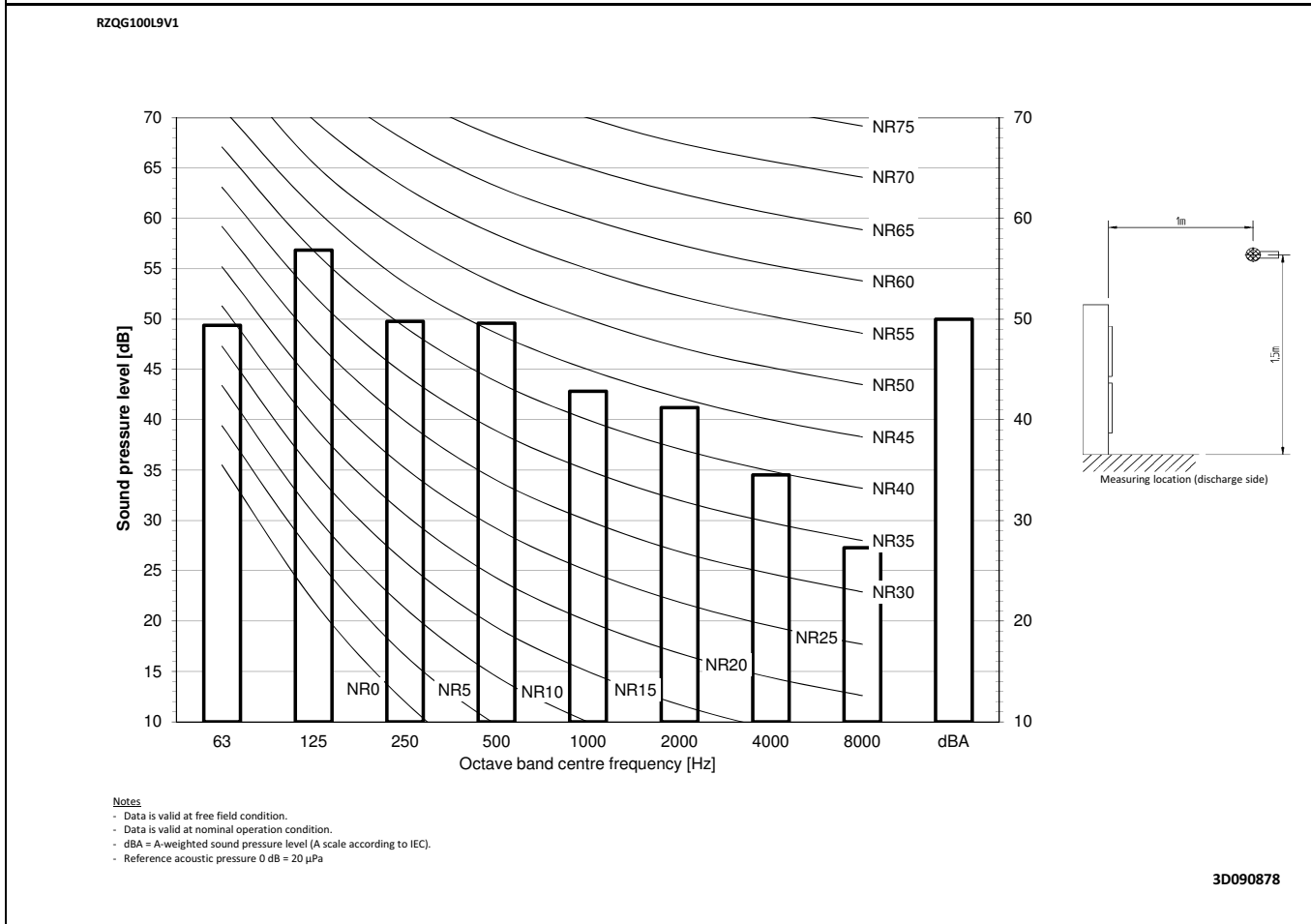
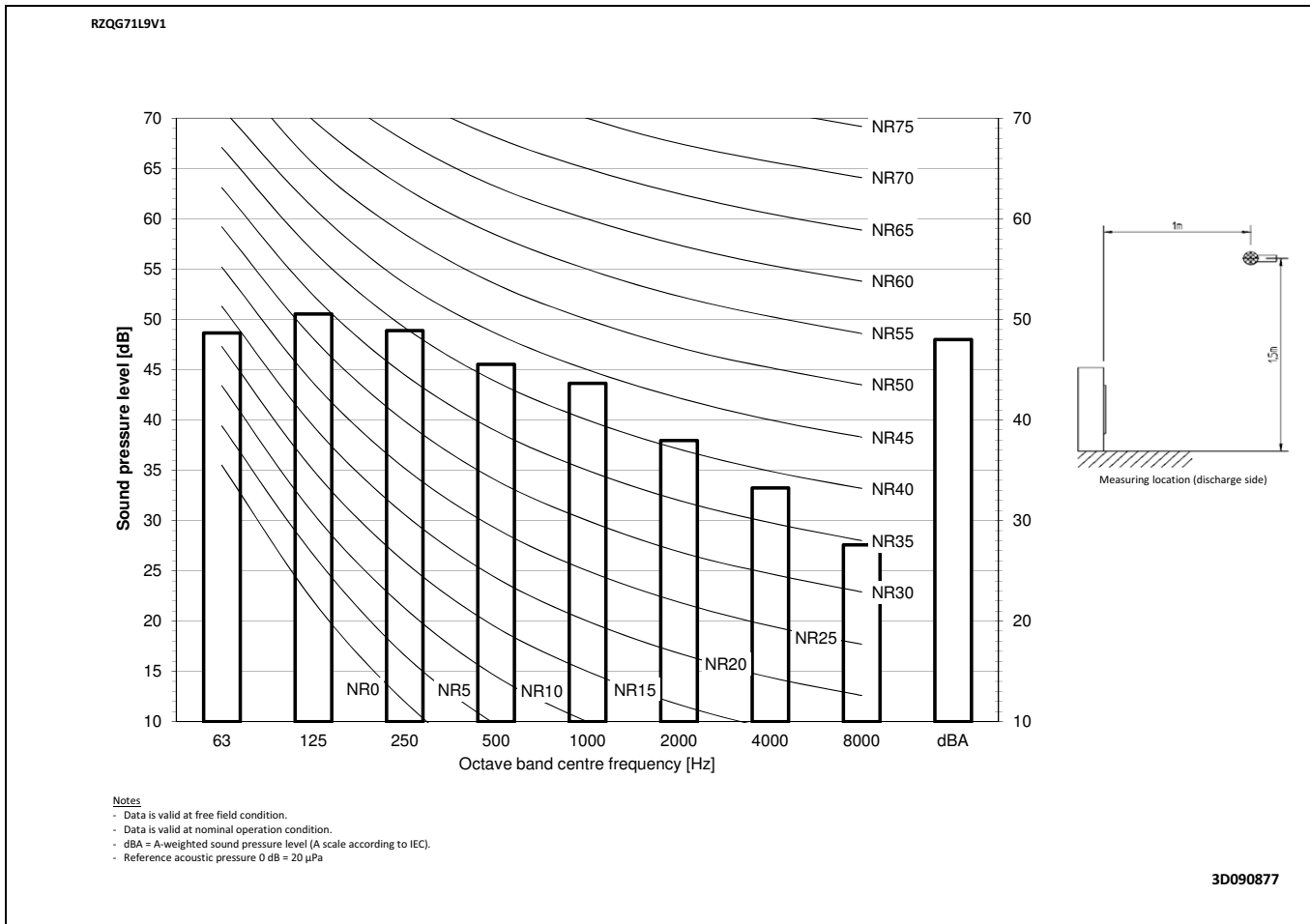


2D088865C

24

# 11 Sound data

## 11 - 1 Sound Pressure Spectrum - Cooling

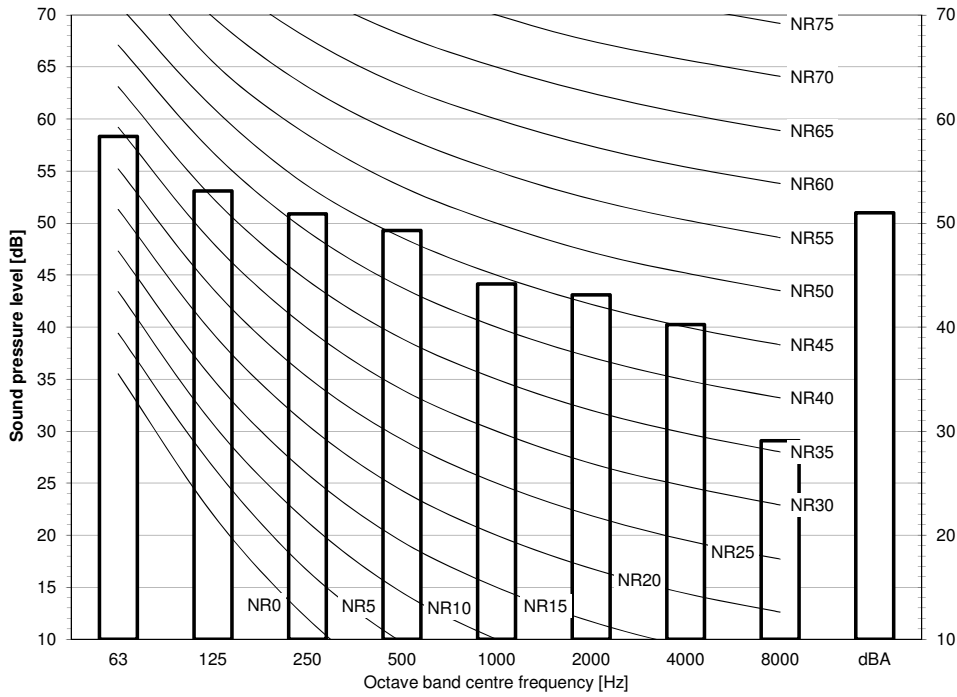


# 11 Sound data

## 11 - 1 Sound Pressure Spectrum - Cooling

11

RZQG125L9V1

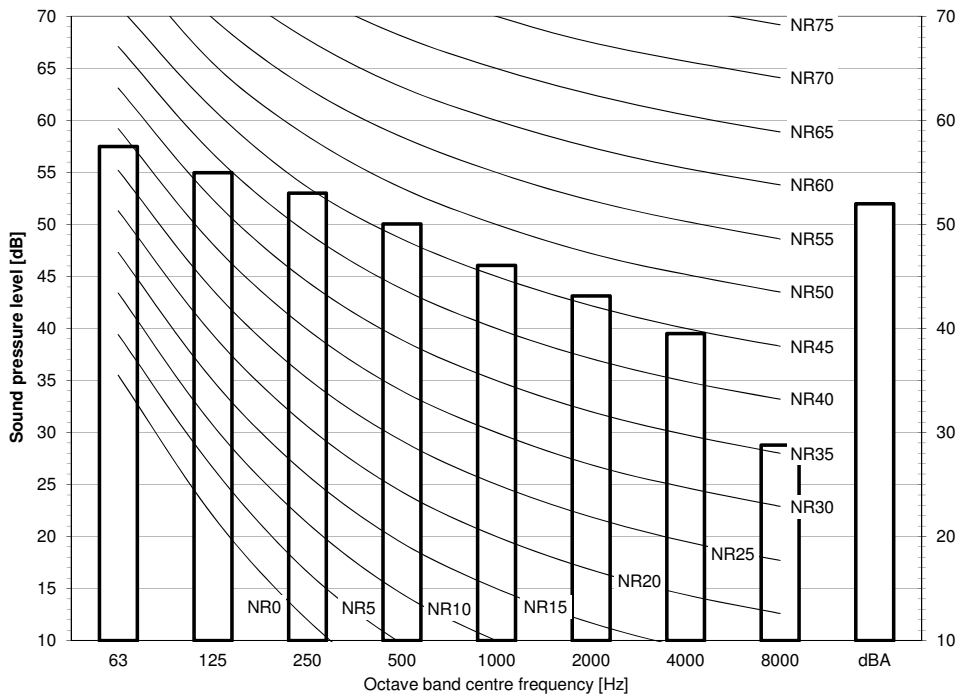


**Notes**

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

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RZQG140L9V1



**Notes**

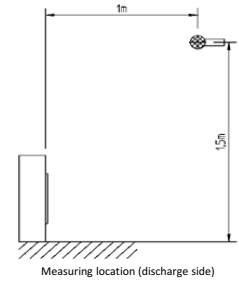
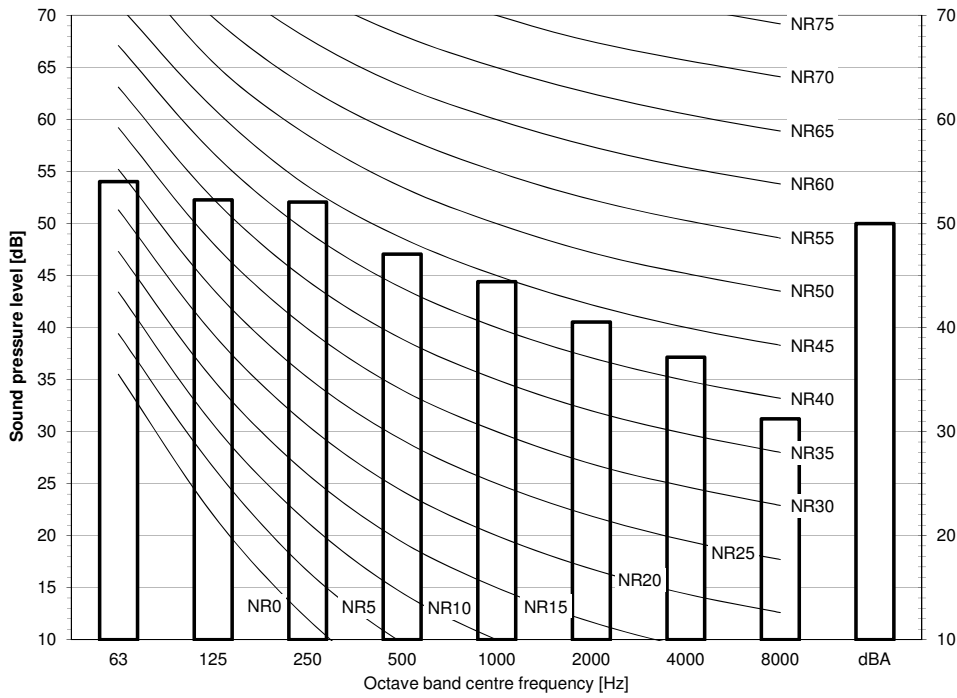
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μPa

3D090880

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Heating

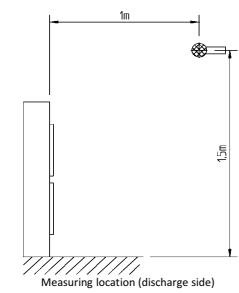
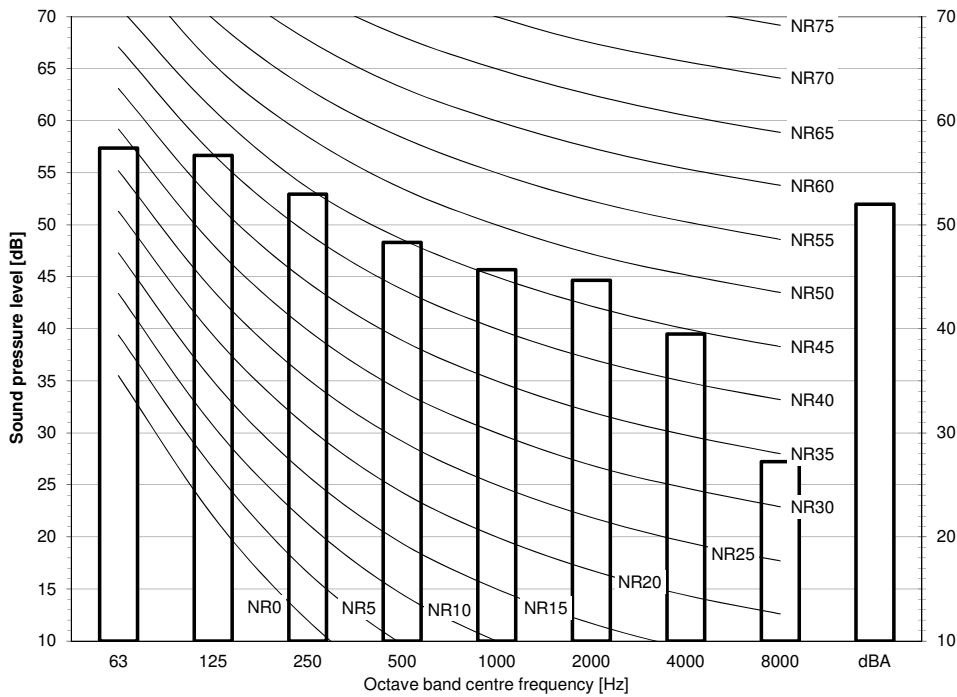
RZQG71L9V1



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

3D090867

RZQG100L9V1



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

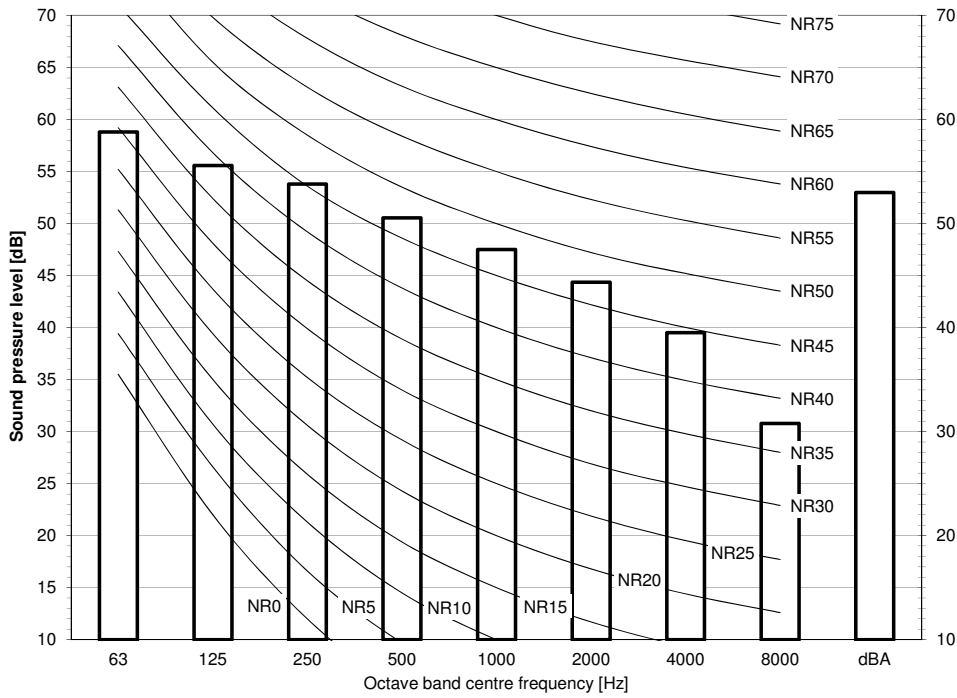
3D090868

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Heating

11

RZQG125L9V1

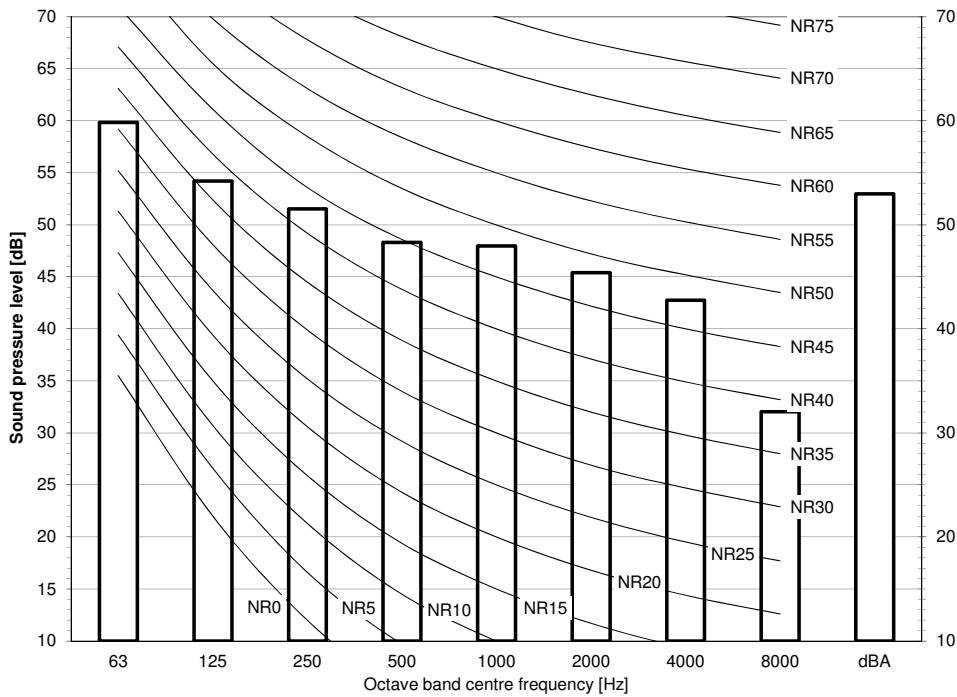


**Notes**

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

3D090869

RZQG140L9V1



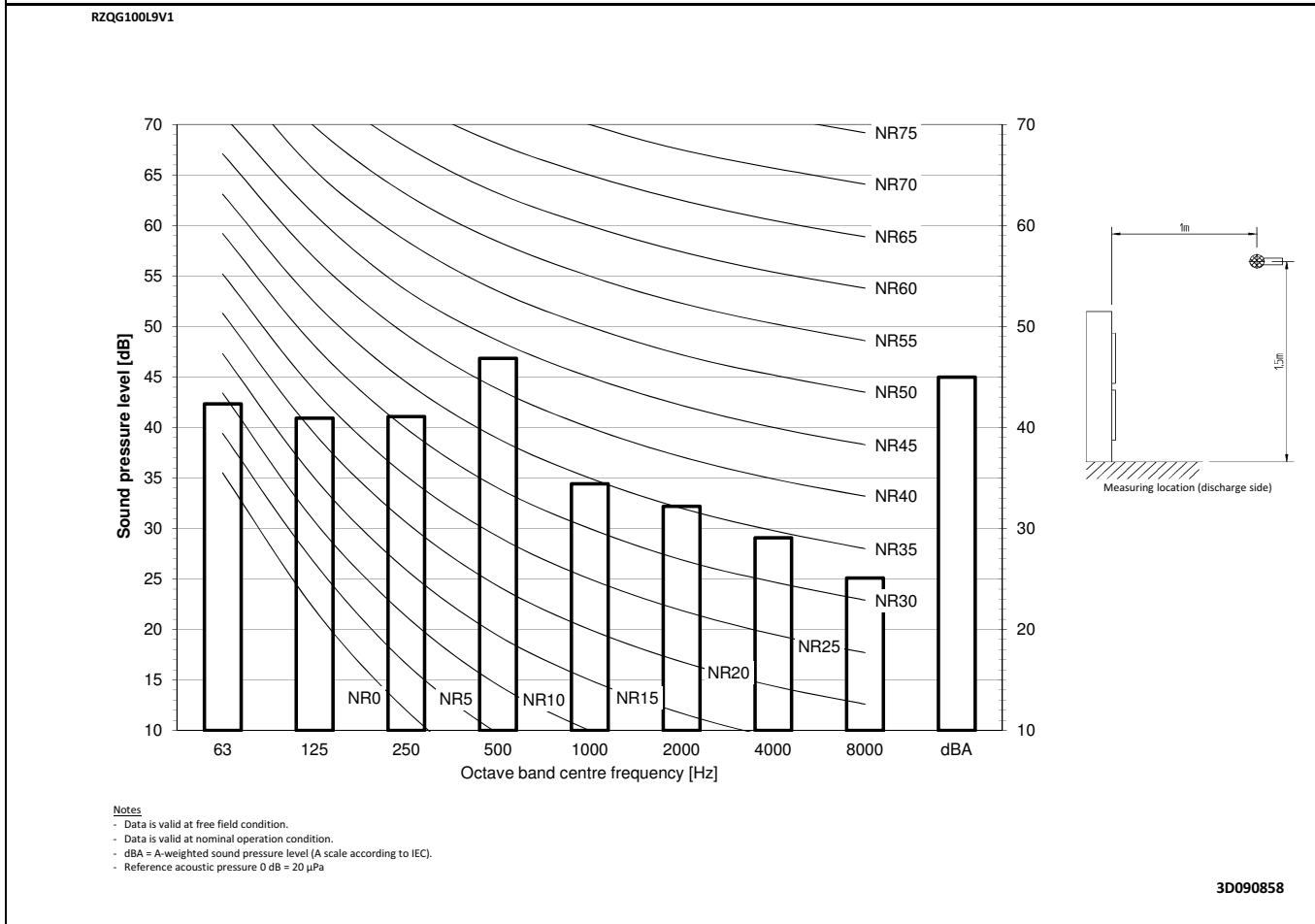
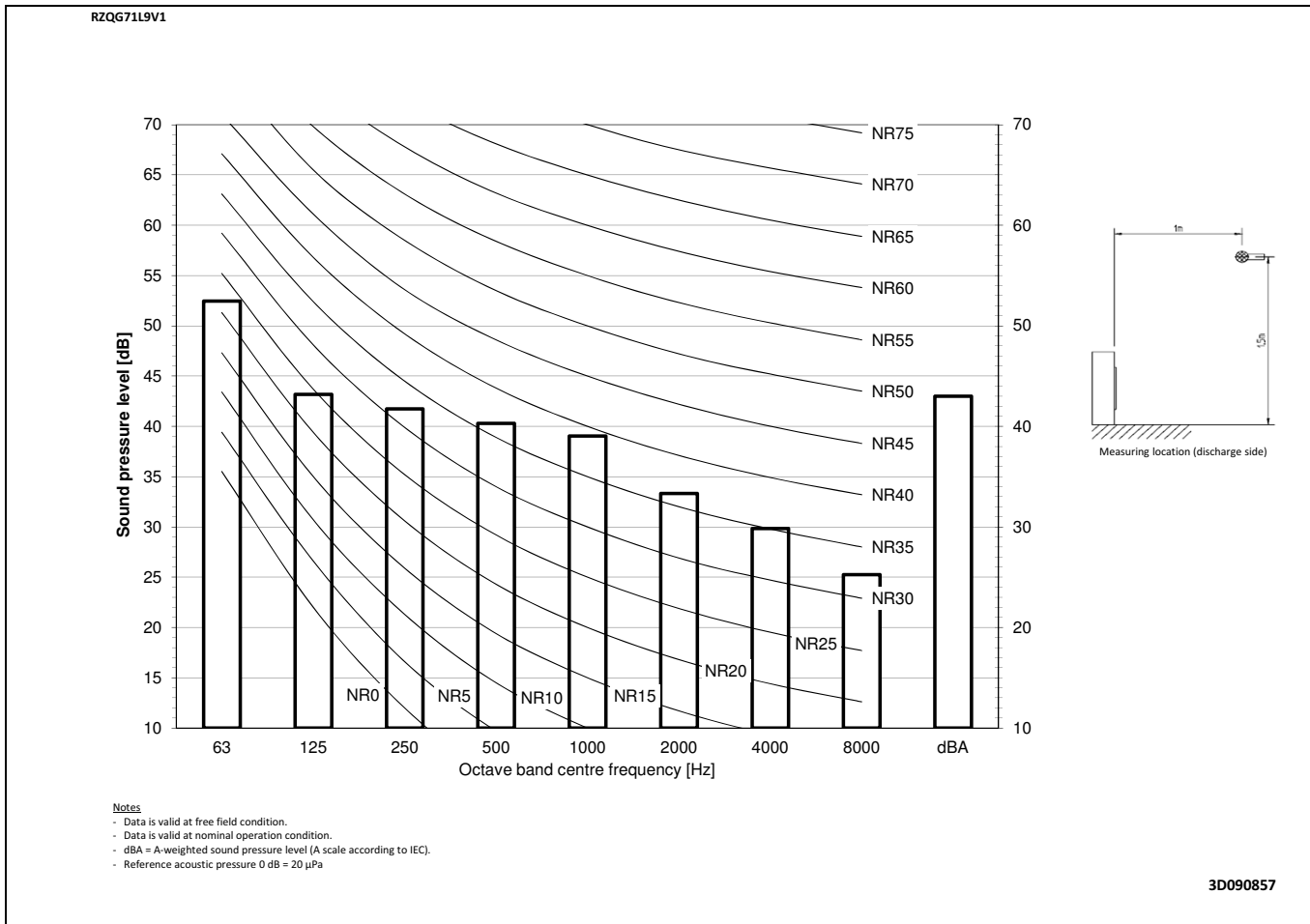
**Notes**

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

3D090870

# 11 Sound data

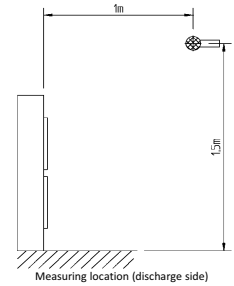
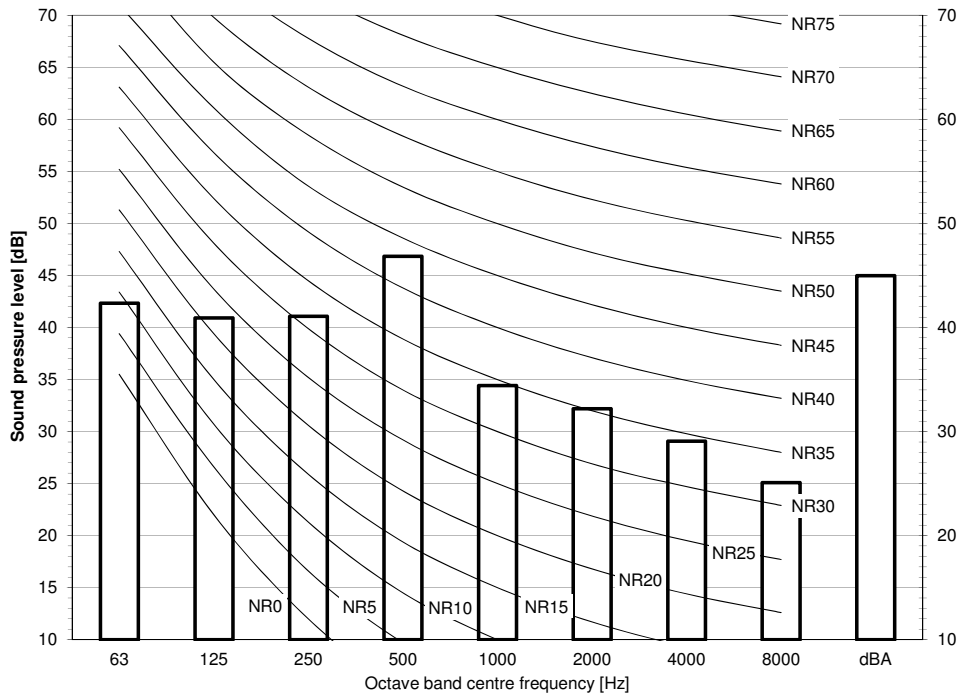
## 11 - 3 Sound Pressure Spectrum Quiet Mode



# 11 Sound data

## 11 - 3 Sound Pressure Spectrum Quiet Mode

RZQG125L9V1

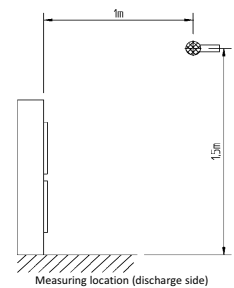
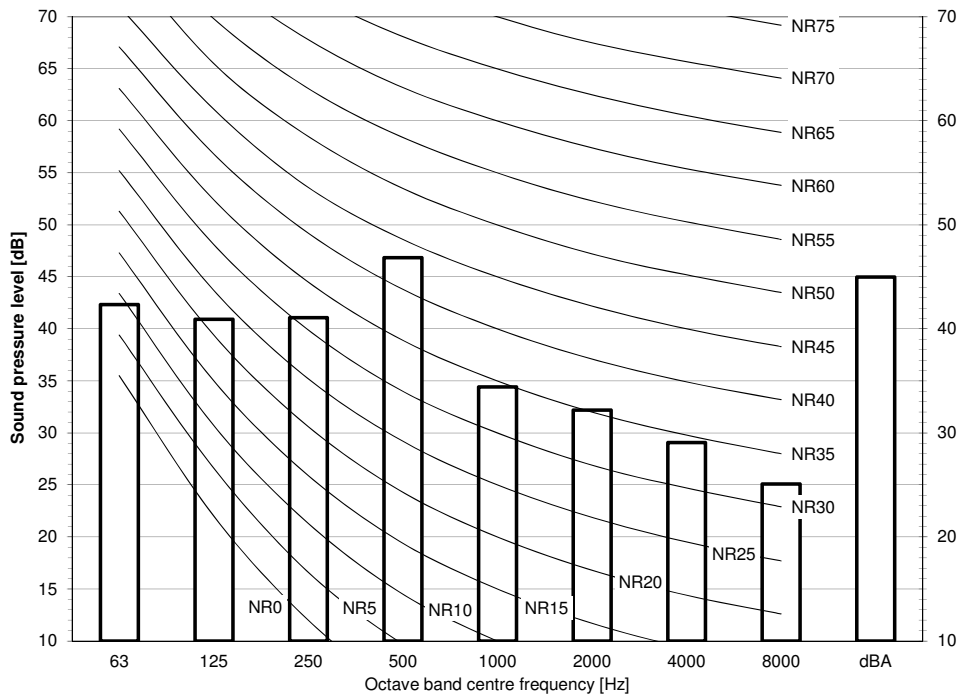


**Notes**

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

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RZQG140L9V1



**Notes**

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

3D090860



# 12 Installation

## 12 - 1 Installation Method

### RZQG-L9V1

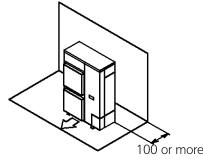
#### Installation service space

The measure of these values is "mm".

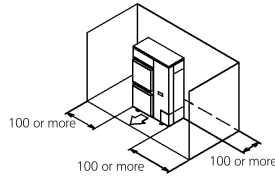
#### (A) When there are obstacles on suction sides.

##### • No obstacle above

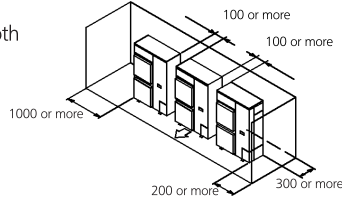
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

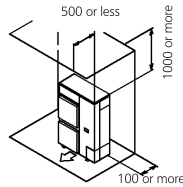


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides

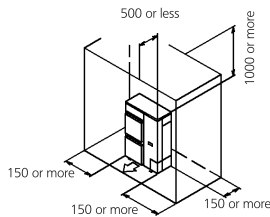


##### • Obstacle above, too.

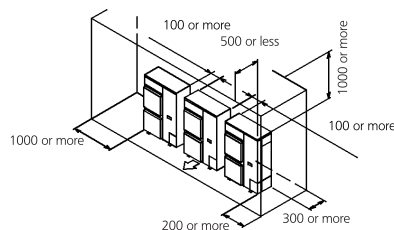
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



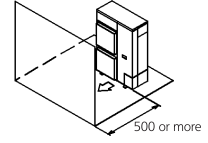
- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides



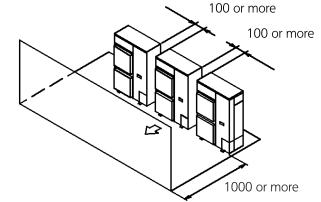
#### (B) When there are obstacles on discharge sides.

##### • No obstacle above

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

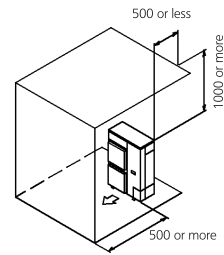


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side only

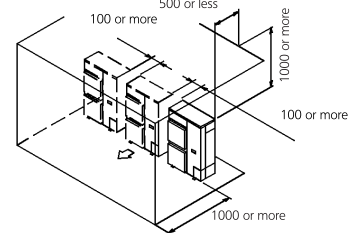


##### • Obstacle above, too

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



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



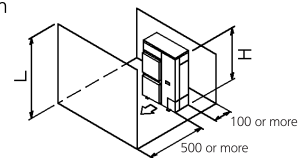
#### (C) When there are obstacles on both suction and discharge sides.:

##### Pattern 1

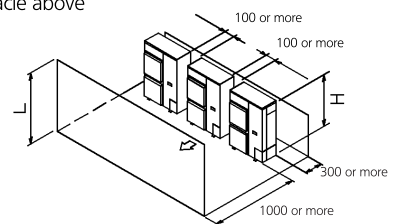
When the obstacles on the discharge side is higher than the unit. (L>H)  
(There is no limit for the height of obstructions on the suction side.)

##### • 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

### RZQG-L9V1

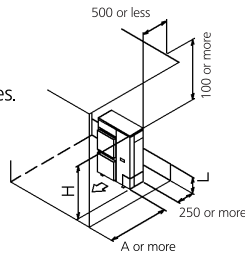
**• Obstacle above, too**

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.

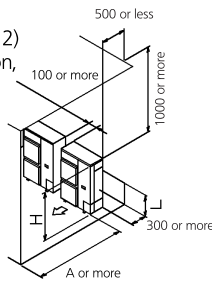
The relations between H, A and L are as follows.

	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**

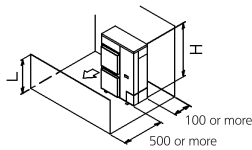
When the obstacle on the discharge side is lower than the unit ( $L \leq H$ ) (There is no limit for the height of obstructions on the suction side.)



**• No obstacle above**

① Stand-alone installation

- No obstacle above

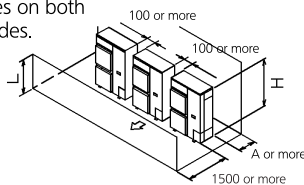


② Series installation (2 or more) (Note 1, 2)

- When there are obstacles on both suction and discharge sides.

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

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



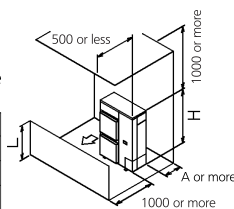
**• obstacle above**

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	



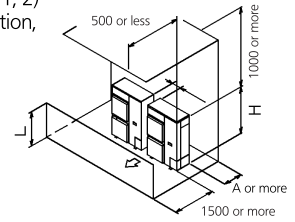
② Series installation (2 or more) (Note 1, 2)

- 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	

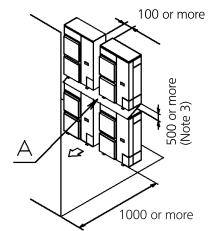
Limit of series installation is 2 units.



**(D) Double-decker installation**

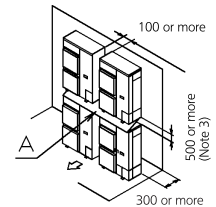
① Obstacle on the discharge side. ( 1 )

- 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.



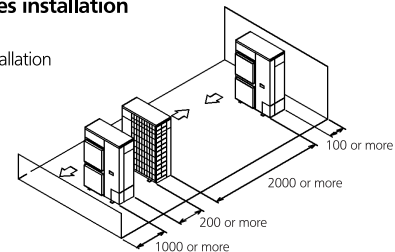
② Obstacle on the suction side. ( 1 )

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



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

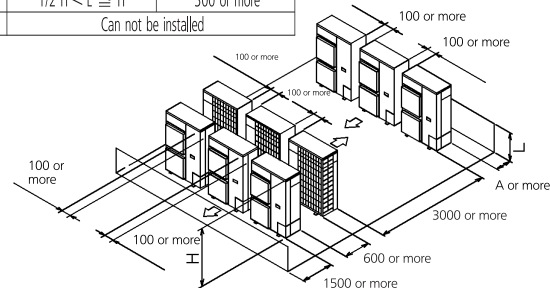
① One row of stand-alone installation



② Rows of series installation (2 or more)

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

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



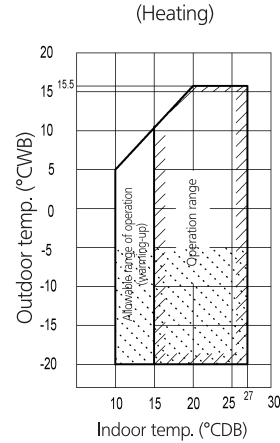
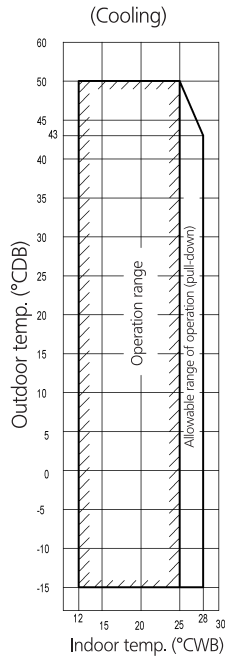
**NOTES**

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

# 13 Operation range

## 13 - 1 Operation Range

### RZQG-L9V1

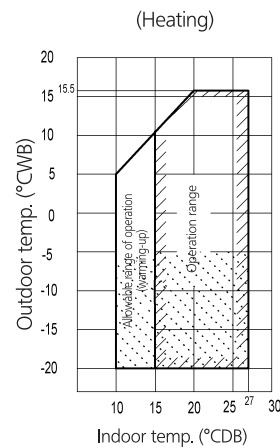
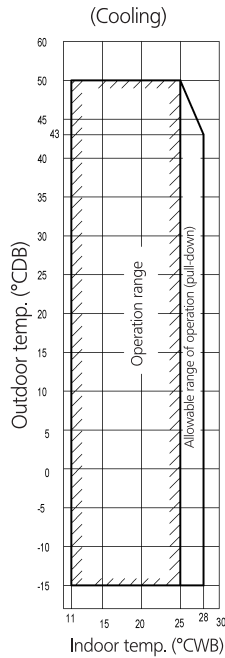


**Notes:**

- 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 If the unit has to operate for 5 days in this operation range with 100% humidity, it is advisable to install the optional bottom plate heater.

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### RZQG-L9V1 - EDP Room



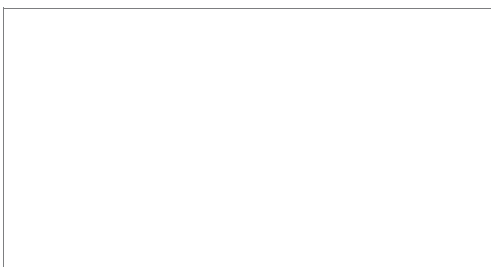
**Notes:**

- 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 If the unit has to operate for 5 days in this operation range with 100% humidity, it is advisable to install the optional bottom plate heater.

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



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