

technical data

RZQ100-140BW1

air conditioning systems

Split
Sky Air

R-410A

Split - Sky Air

In all of us,
a green heart



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



Het ISO14001 assures an effective environmental management system in order to help protect human health and the environment from potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



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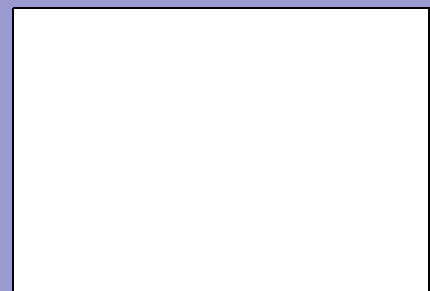


Daikin units comply with the European regulations that guarantee the safety of the product.



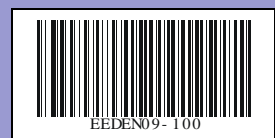
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RZQ100-140B8W1B

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1 Features

- Outdoor units for pair, twin, triple, double twin application
- The Sky Air Inverter is developed for use in shops, restaurants and small offices. This innovative Daikin unit provides a more comfortable environment and offers great savings in energy consumption to shop and office owners.
- The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- An inverter driven compressor allows the capacity to be adjusted precisely to match variations in room and outside temperatures.
- During start up, the room can be cooled down or heated very quickly. Once the temperature in the room has reached its set point, the low power operation starts to save energy.
- Daikin outdoor units are neat and sturdy and can be mounted easily on a roof or terrace or simply placed against an outside wall.
- Outdoor units are fitted with either a swing or scroll compressor, renowned for low noise and high energy efficiency
- A special acryl precoated fin for anti-corrosion treatment on the heat exchanger ensures greater resistance against severe weather conditions



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2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B
For combination indoor units + outdoor units	Indoor Units			FCQ100C7VEB	FCQ125C7VEB	FCQ140C7VEB
Cooling capacity	Standard	kW		10.0	12.50	14.00
Heating capacity	Standard	kW		11.20	14.00	16.00
Power Input	Cooling	Standard	kW	2.640	3.880	5.36
	Heating	Standard	kW	3.140	4.360	5.69
For combination indoor units + outdoor units	EER	Nominal		3.79	3.22	2.61
	COP	Nominal		3.57	3.21	2.81
	Energy Label	Cooling		A	A	D
		Heating		B	C	D
	Annual energy consumption		kWh	1320	1940	2680
Indoor Units				FBQ100C7VEB	FBQ125C7VEB	FBQ140C7VEB
Cooling capacity	Standard	kW		10.00	12.50	14.00
Heating capacity	Standard	kW		11.20	14.00	16.00
Power Input	Cooling	Standard	kW	2.78	3.91	4.70
	Heating	Standard	kW	2.79	3.69	4.40
For combination indoor units + outdoor units	EER	Nominal		3.60	3.20	2.98
	COP	Nominal		4.01	3.79	3.64
	Energy Label	Cooling		A	B	C
		Heating		A		
	Annual energy consumption		kWh	1,390	1,955	2,350
Indoor Units				FHQ100BVV1B	FHQ125BVV1B	FCQH140D7VEB
Cooling capacity	Standard	kW		10.00	12.50	14.00
Heating capacity	Standard	kW		11.20	14.00	16.00
Power Input	Cooling	Standard	kW	3.150	4.450	4.640
	Heating	Standard	kW	3.600	4.500	4.480
For combination indoor units + outdoor units	EER	Nominal		3.17	2.81	3.02
	COP	Nominal		3.11	3.11	3.57
	Energy Label	Cooling		B	C	B
		Heating		D	D	B
	Annual energy consumption		kWh	1575	2225	2,325
Indoor Units				FUQ100BVV1B	FUQ125BVV1B	
Cooling capacity	Standard	kW		10.00	12.50	
Heating capacity	Standard	kW		11.20	14.00	
Power Input	Cooling	Standard	kW	3.120	4.050	
	Heating	Standard	kW	3.280	4.360	
For combination indoor units + outdoor units	EER	Nominal		3.21	3.09	
	COP	Nominal		3.41	3.21	
	Energy Label	Cooling		A	B	
		Heating		B	C	
	Annual energy consumption		kWh	1560	2025	
Indoor Units				FAQ100BVV1B	FDQ125B8V3B9	
Cooling capacity	Standard	kW		10.00	12.50	
Heating capacity	Standard	kW		11.20	14.00	
Power Input	Cooling	Standard	kW	2.780	4.150	
	Heating	Standard	kW	3.390	3.690	
For combination indoor units + outdoor units	EER	Nominal		3.60	3.01	
	COP	Nominal		3.30	3.79	
	Energy Label	Cooling		A	B	
		Heating		C	A	
	Annual energy consumption		kWh	1390	2075	
Indoor Units				FCQH100D7VEB	FCQH125D7VEB	
Cooling capacity	Standard	kW		10.00	12.50	
Heating capacity	Standard	kW		11.20	14.00	
Power Input	Cooling	Standard	kW	2.430	3.530	
	Heating	Standard	kW	2.530	3.570	

2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT			RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B
For combination indoor units + outdoor units	EER	Nominal	4.12	3.54	
	COP	Nominal	4.43	3.92	
	Energy Label	Cooling	A	A	
		Heating	A	A	
Annual energy consumption		kWh	1,220	1,770	

2-2 TECHNICAL SPECIFICATIONS				RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B	
Casing	Colour		Ivory White				
	Material		Painted galvanised steel				
Dimensions	Unit	Height	mm	1345	1345	1345	
		Width	mm	900	900	900	
		Depth	mm	320	320	320	
	Packing	Height	mm	1524	1524	1524	
		Width	mm	980	980	980	
		Depth	mm	420	420	420	
Weight	Unit		kg	106	106	106	
	Packed Unit		kg	112	112	112	
Heat Exchanger	Dimensions	Length	mm	857	857	857	
		Nr of Rows			2	2	2
		Fin Pitch	mm	1.40	1.40	1.40	
		Nr of Passes			5	5	5
		Face Area	m ²	1.131	1.131	1.131	
		Nr of Stages			60	60	60
	Tube type		Hi-XSS(8)				
	Fin	Type		WF fin			
		Treatment		Anti-corrosion treatment (PE)			
Fan	Type		Propeller				
	Discharge direction		Horizontal				
	Quantity			2	2	2	
	Air Flow Rate (nominal at 230V)	Cooling	m ³ /min	103.0	99.0	99.0	
		Heating	m ³ /min	101.0	100.0	100.0	
	Motor	Quantity		2	2	2	
Model		KFD-325-70-8A					
Motor	Speed (nominal)	Steps		8	8	8	
		Cooling (Standard)	rpm	789	782	782	
		Heating (Standard)	rpm	775	767	767	
Fan	Motor	Output	W	70	70	70	
Compressor	Quantity		1	1	1		
	Motor	Model		JT1G-VDYR@T			
		Type		Hermetically sealed scroll compressor			
		Motor Output	W	2200	2200	2200	
	Crankcase Heater	W	33	33	33		
Operation Range	Cooling	Min	°CDB	-15.0	-15.0	-15.0	
		Max	°CDB	50.0	50.0	50.0	
	Heating	Min	°CWB	-20.0	-20.0	-20.0	
		Max	°CWB	15.5	15.5	15.5	
Sound Level (nominal)	Cooling	Sound Power	dBA	65.0	66.0	66.0	
		Sound Pressure (Standard)	dBA	49.0	50.0	50.0	
	Heating	Sound Pressure (Standard)	dBA	51.0	52.0	52.0	
Sound Level (Night quiet)	Sound Pressure		dBA	45.0	45.0	45.0	

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B	
Refrigerant	Type			R-410A			
	Charge	kg		4.30	4.30	4.30	
	Control			Expansion valve (electronic type)			
	Nr of Circuits			1	1	1	
Refrigerant Oil	Type			Daphne FVC68D			
	Charged Volume	l		1.0	1.0	1.0	
Piping connections	Liquid (OD)	Quantity		1	1	1	
		Type			Flare connection		
		Diameter (OD)	mm	9.52	9.52	9.52	
	Gas	Quantity		1	1	1	
		Type			Flare connection		
		Diameter (OD)	mm	15.9	15.9	15.9	
	Drain	Quantity		3	3	3	
		Type			Hole		
		Diameter (OD)	mm	26	26	26	
	Piping Length	Minimum	m	5	5	5	
		Maximum	m	75	75	75	
		Equivalent	m	95	95	95	
		Chargeless	m	30	30	30	
	Additional Refrigerant Charge		kg/m	see installation manual 4PW21412-1			
	Installation height difference	Maximum	m	30.0	30.0	30.0	
Max. internunit level difference		m	0.5	0.5	0.5		
Heat Insulation			Both liquid and gas pipes				
Defrost Method				Pressure equalising			
Defrost Control				Sensor for outdoor heat exchanger temperature			
Capacity Control Method				Inverter controlled			
Safety Devices				High pressure switch			
				Fan motor thermal protector			
				Fuse			
Standard Accessories	Item			Tie-wraps			
	Quantity			2	2	2	
	Item			Installation manual			
	Quantity			1	1	1	
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.			
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m			

2-3 ELECTRICAL SPECIFICATIONS				RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B
Power Supply	Name			W1B		
	Phase			3N-		
	Frequency	Hz		50	50	50
	Voltage	V		400	400	400
	Voltage range	Minimum	V	-10%		
		Maximum	V	+10%		
Current	Recomended fuses		A	20	20	20
Wiring connections	For Power Supply	Remark	see installation manual 4PW21412-1			
	For connection with indoor	Remark	see installation manual 4PW21412-1			
Power Supply Intake				Outdoor unit only		
Notes				See separate drawings for electrical data		
				Power supply intake for FDO is outdoor and indoor unit		

3 Electrical data

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RZQ-BW1

Unit combination		Power supply				Comp.		OFM		IFM		
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA
FCQ100C7VEB	RZQ100B8W1B	50-400		14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	1.4
FCQ100C7VEB	RZQ100B8W1B	50-400		14.2	14.2	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	0.7
FCQ50C7VEBx2	RZQ100B8W1B	50-400		14.1	14.1	20	12.9	12.9	0.07+0.07	0.3+0.3	0.056x2	0.3x2
FCQ35C7VEBx3	RZQ100B8W1B	50-400		14.4	14.4	20	12.9	12.9	0.07+0.07	0.3+0.3	0.056x3	0.3x3
FCQ100DV3B	RZQ100B7W1B	50-400		14.2	14.2	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	0.7
FCQ100B7V3B	RZQ100B7W1B	50-400		14.5	14.5	20	12.9	12.9	0.07+0.07	0.3+0.3	0.090	1.0
FCQ50B7V1x2	RZQ100B7W1B	50-400		14.7	14.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.045x2	0.6x2
FCQ35B7V1x3	RZQ100B7W1B	50-400		15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.045x3	0.6x3
FFQ50BV1Bx2	RZQ100B7W1B	50-400	Max. 50Hz440V	14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.055x2	0.7x2
FFQ35BV1Bx3	RZQ100B7W1B	50-400	Min. 50Hz360V	15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.055x3	0.6x3
FBQ100B7V3B	RZQ100B7W1B	50-400		14.5	14.5	20	12.9	12.9	0.07+0.07	0.3+0.3	0.135	1.0
FBQ50B7V1x2	RZQ100B7W1B	50-400		14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.085x2	0.7x2
FBQ35B7V1x3	RZQ100B7W1B	50-400		15.0	15.0	20	12.9	12.9	0.07+0.07	0.3+0.3	0.065x3	0.5x3
FHQ100BUV1B	RZQ100B7W1B	50-400		14.2	14.2	20	12.9	12.9	0.07+0.07	0.3+0.3	0.130	0.7
FHQ50BUV1Bx2	RZQ100B7W1B	50-400		14.7	14.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.062x2	0.6x2
FHQ35BUV1Bx3	RZQ100B7W1B	50-400		15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.062x3	0.6x3
FAQ100BUV1B	RZQ100B7W1B	50-400		13.9	13.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.049	0.4
FUQ100BUV1B	RZQ100B7W1B	50-400		14.6	14.6	20	12.9	12.9	0.07+0.07	0.3+0.3	0.090	1.1
FCQ125C7VEB	RZQ125B8W1B	50-400		14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	1.4
FCQ125C7VEB	RZQ125B8W1B	50-400		14.5	14.5	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	1.0
FCQ50C7VEBx2	RZQ125B8W1B	50-400		14.3	14.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.056x2	0.4x2
FCQ50C7VEBx3	RZQ125B8W1B	50-400		14.4	14.4	20	12.9	12.9	0.07+0.07	0.3+0.3	0.056x3	0.3x3
FCQ35C7VEBx4	RZQ125B8W1B	50-400		14.7	14.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.056x4	0.3x4
FCQ125DV3B	RZQ125B7W1B	50-400		14.2	14.2	20	12.9	12.9	0.07+0.07	0.3+0.3	0.120	0.7
FCQ125B7V3B	RZQ125B7W1B	50-400		14.5	14.5	20	12.9	12.9	0.07+0.07	0.3+0.3	0.090	1.0
FCQ60B7V1x2	RZQ125B7W1B	50-400		14.7	14.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.045x2	0.6x2
FCQ50B7V1x3	RZQ125B7W1B	50-400		15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.045x3	0.6x3
FCQ35B7V1x4	RZQ125B7W1B	50-400		15.9	15.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.045x4	0.6x4
FFQ60BV1Bx2	RZQ125B7W1B	50-400	Max. 50Hz440V	14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.055x2	0.7x2
FFQ50BV1Bx3	RZQ125B7W1B	50-400	Min. 50Hz360V	15.6	15.6	20	12.9	12.9	0.07+0.07	0.3+0.3	0.055x3	0.7x3
FFQ35BV1Bx4	RZQ125B7W1B	50-400		15.9	15.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.055x4	0.6x4
FBQ125B7V3B	RZQ125B7W1B	50-400		14.9	14.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.225	1.4
FBQ60B7V1x2	RZQ125B7W1B	50-400		15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.125x2	0.9x2
FBQ50B7V1x3	RZQ125B7W1B	50-400		15.6	15.6	20	12.9	12.9	0.07+0.07	0.3+0.3	0.085x3	0.7x3
FBQ35B7V1x4	RZQ125B7W1B	50-400		15.5	15.5	20	12.9	12.9	0.07+0.07	0.3+0.3	0.065x4	0.5x4
FHQ125BUV1B	RZQ125B7W1B	50-400		14.2	14.2	20	12.9	12.9	0.07+0.07	0.3+0.3	0.130	0.7
FHQ60BUV1Bx2	RZQ125B7W1B	50-400		14.7	14.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.062x2	0.6x2
FHQ50BUV1Bx3	RZQ125B7W1B	50-400		15.3	15.3	20	12.9	12.9	0.07+0.07	0.3+0.3	0.062x3	0.6x3
FHQ35BUV1Bx4	RZQ125B7W1B	50-400		15.9	15.9	20	12.9	12.9	0.07+0.07	0.3+0.3	0.062x4	0.6x4
FUQ125BUV1B	RZQ125B7W1B	50-400		14.6	14.6	20	12.9	12.9	0.07+0.07	0.3+0.3	0.090	1.1
FDQ125B7V3B	RZQ125B7W1B	50-400		17.7	17.7	20	12.9	12.9	0.07+0.07	0.3+0.3	0.500	4.2

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SYMBOLS

MCA	: Min. Circuit Amps (A)
TOCA	: Total Over Current Amps (A)
MFA	: Max. Fuse Amps (See note 7) (A)
MSC	: MSC means the max. current during the starting of 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°CDB/19°CWB Outdoor temperature 35°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 above listed operation range limits
- Maximum allowable voltage unbalance 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)
- For more details concerning conditional connections, see <http://extranet.daikin-europe.com>, select "E-Data Books". Finally, click on the document title of your choice.

3 Electrical data

RZQ-BW1

Unit combination		Power supply				Comp.		OFM		IFM		
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA
FCQH140C7VEB	RZQ140B8W1B	50-400		14,9	14,9	20	12,9	12,9	0,07+0,07	0,3+0,3	0,120	1,4
FCQ140C7VEB	RZQ140B8W1B	50-400		14,5	14,5	20	12,9	12,9	0,07+0,07	0,3+0,3	0,120	1,0
FCQ71C7VEBx2	RZQ140B8W1B	50-400		14,5	14,5	20	12,9	12,9	0,07+0,07	0,3+0,3	0,056x2	0,5x2
FCQ50C7VEBx3	RZQ140B8W1B	50-400		14,4	14,4	20	12,9	12,9	0,07+0,07	0,3+0,3	0,056x3	0,3x3
FCQ35C7VEBx4	RZQ140B8W1B	50-400		14,7	14,7	20	12,9	12,9	0,07+0,07	0,3+0,3	0,056x4	0,3x4
FCQ140DV3B	RZQ140B7W1B	50-400		14,2	14,2	20	12,9	12,9	0,07+0,07	0,3+0,3	0,120	0,7
FCQ71B7V3Bx2	RZQ140B7W1B	50-400		14,7	14,7	20	12,9	12,9	0,07+0,07	0,3+0,3	0,045x2	0,6x2
FCQ50B7V1x3	RZQ140B7W1B	50-400		14,7	14,7	20	12,9	12,9	0,07+0,07	0,3+0,3	0,045x3	0,6x3
FCQ35B7V1x4	RZQ140B7W1B	50-400		15,9	15,9	20	12,9	12,9	0,07+0,07	0,3+0,3	0,045x4	0,6x4
FFQ50BV1Bx3	RZQ140B7W1B	50-400		15,6	15,6	20	12,9	12,9	0,07+0,07	0,3+0,3	0,055x3	0,7x3
FFQ35BV1Bx4	RZQ140B7W1B	50-400		15,9	15,9	20	12,9	12,9	0,07+0,07	0,3+0,3	0,055x4	0,6x4
FBQ71B7V3Bx2	RZQ140B7W1B	50-400		15,3	15,3	20	12,9	12,9	0,07+0,07	0,3+0,3	0,125x2	0,9x2
FBQ50B7V1x3	RZQ140B7W1B	50-400		15,6	15,6	20	12,9	12,9	0,07+0,07	0,3+0,3	0,085x3	0,7x3
FBQ35B7V1x4	RZQ140B7W1B	50-400		15,5	15,5	20	12,9	12,9	0,07+0,07	0,3+0,3	0,065x4	0,5x4
FHQ71BUV1Bx2	RZQ140B7W1B	50-400		14,7	14,7	20	12,9	12,9	0,07+0,07	0,3+0,3	0,062x2	0,6x2
FHQ50BUV1Bx3	RZQ140B7W1B	50-400		15,3	15,3	20	12,9	12,9	0,07+0,07	0,3+0,3	0,062x3	0,6x3
FHQ35BUV1Bx4	RZQ140B7W1B	50-400		15,9	15,9	20	12,9	12,9	0,07+0,07	0,3+0,3	0,062x4	0,6x4
FAQ71BUV1Bx2	RZQ140B7W1B	50-400		14,1	14,1	20	12,9	12,9	0,07+0,07	0,3+0,3	0,043x2	0,3x2
FUQ71BUV1Bx2	RZQ140B7W1B	50-400		14,9	14,9	20	12,9	12,9	0,07+0,07	0,3+0,3	0,045x2	0,7x2

3D048638C

SYMBOLS

- MCA : Min. Circuit Amps (A)
- TOCA : Total Over Current Amps (A)
- MFA : Max. Fuse Amps (See note 7) (A)
- MSC : MSC means the max. current during the starting of 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°CDB/19°CWB
 Outdoor temperature 35°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 operation range limits
- 4 Maximum allowable voltage unbalance 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)
- 8 For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books". Finally, click on the document title of your choice.

4 Options

4

RZQ-B8

Name of option		Kit name			
		RZQ71D7V1B	RZQ100D7V1B	RZQ125D7V1B	RZQ140D7V1B
		RZQS71D7V1B	RZQS100D7V1B	RZQS125D7V1B	RZQS140D7V1B
		-	RZQ100B8W1B	RZQ125B8W1B	RZQ140B8W1B
Central drain plug		EKDK04			
Refrigerant branch piping	Twin	KHRQ22M20TA (KHRQ58T): see note			
	Triple	-	KHRQ127H (KHRQ58H): see note		
	Double-twin	-	-	KHRQ22M20TA (KHRQ58T): see note (3x)	
Demand adapter kit		KRP58M51			

NOTE

1 For RZQ100-140B8W1B in combination with FCQ35-71C, FCQH71C or FCQH71D use the refrigerant branch piping mentioned between brackets.

3TW26739-1F

5 Capacity tables

5 - 1 Combination table

RZQ-B

Multi Combination Possibilities:

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

(*) Max capacity depend on outdoor unit

Model name	HH Cassette	Thin cassette						2x2 cassette			New Duct (medium ESP)				Ceiling suspended				4way ceiling	Wall mounted	High ESP Duct	Floor standing																
Model name	FCQH100D7VEB	FCQH125D7VEB	FCQH140D7VEB	FCQ36C7VEB	FCQ60C7VEB	FCQ80C7VEB	FCQ100C7VEB	FCQ125C7VEB	FCQ140C7VEB	FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B	FBQ35C7VEB	FBQ50C7VEB	FBQ60C7VEB	FBQ71C7VEB	FBQ100C7VEB	FBQ125C7VEB	FBQ140C7VEB	FHQ35BV1B	FHQ50BV1B	FHQ60BV1B	FHQ71BV1B	FHQ100BV1B	FHQ125BV1B	FHQ140BV1B	FUQ71BV1B	FUQ100BV1B	FUQ125BV1B	FAQ71BV1B	FAQ100BV1B	FDO125B8V8B	FVQ71BV1B	FVQ100BV1B	FVQ125BV1B			
RZQ100D7V1B	P																																					
RZQ125D7V1B		P																																				
RZQ140D7V1B			P																																			

Model name	HH Cassette	Thin cassette						2x2 cassette			New Duct (medium ESP)				Ceiling suspended				4way ceiling	Wall mounted	High ESP Duct	Floor standing																	
Model name	FCQH100D7VEB	FCQH125D7VEB	FCQH140D7VEB	FCQ36C7VEB	FCQ60C7VEB	FCQ80C7VEB	FCQ100C7VEB	FCQ125C7VEB	FCQ140C7VEB	FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B	FBQ35C7VEB	FBQ50C7VEB	FBQ60C7VEB	FBQ71C7VEB	FBQ100C7VEB	FBQ125C7VEB	FBQ140C7VEB	FHQ35BV1B	FHQ50BV1B	FHQ60BV1B	FHQ71BV1B	FHQ100BV1B	FHQ125BV1B	FHQ140BV1B	FUQ71BV1B	FUQ100BV1B	FUQ125BV1B	FAQ71BV1B	FAQ100BV1B	FDO125B8V8B	FVQ71BV1B	FVQ100BV1B	FVQ125BV1B				
RZQ100D7V1B	P																																						
RZQ125D7V1B		P																																					
RZQ140D7V1B			P																																				

NOTES

- Individual indoor capacities are not given because the combinations are for simultaneous operation (= indoor units installed in the same room)
- When different indoor models are used in combination, designate the remote control that is equipped with the most function as the main unit.

3TW26739-2C

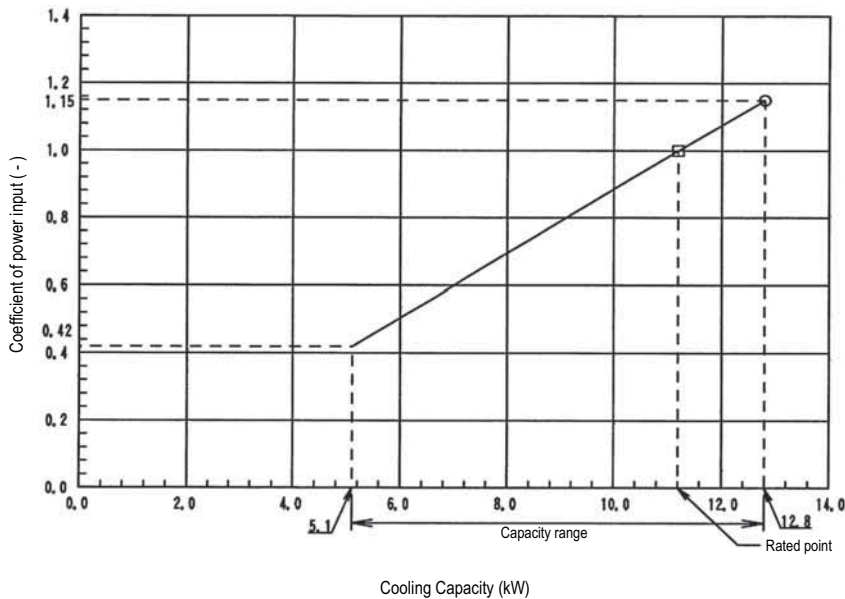
5 Capacity tables

5 - 2 Cooling capacity tables

5

RZQ100B (Pair + Twin / triple)

Cooling



Cooling

Indoor		Outdoor temperature (°C DB)											
EWB °C	EDB °C	25			30			35			40		
		TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)
16.0	22	10.2	6.93	0.86	10.2	7.00	1.01	10.5	7.29	1.12	10.1	7.08	1.23
18.0	25	11.8	7.59	0.94	11.3	7.45	1.03	11.0	7.27	1.13	10.5	7.06	1.24
19.0	27	12.0	7.57	0.95	11.6	7.43	1.03	11.2	7.26	1.13	10.8	7.04	1.24
19.5	27	12.1	7.56	0.95	11.8	7.41	1.03	11.3	7.25	1.13	10.9	7.03	1.24
22.0	30	12.7	7.46	0.96	12.3	7.32	1.04	11.9	7.16	1.14	11.4	6.96	1.25
24.0	32	13.2	7.36	0.96	12.8	7.22	1.05	12.4	7.06	1.15	11.9	6.87	1.27

3TW28121-1A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max, once at standard conditions.
On the figure the mark with □ show rated capacity and rated coefficient of power input. However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= 0.02 x AFR (m³/min.) x (1-BF) x (DB* - EDB)
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- 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.
- 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. (°C WB)
 EDB : Entering dry bulb temp. (°C DB)
 TC : Total cooling capacity (kW)
 SHC : Sensible heat capacity (kW)
 PI : Power input (Comp.+indoor+outdoor fan motor).
 CPI : Coefficient of power input (-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH100D	FCQ100C	FCQ100D	FCQ100B	FBQ100B	FBQ100C	FHQ100	FAQ100	FUQ100
AFR	34	23.5	30	28	27	32	24	23	29
(BF)	(0.17)	(0.16)	(0.11)	(0.16)	(0.20)	(0.14)	(0.14)	(0.10)	(0.07)

(Triple)

	FCQ35Cx3	FCQ35Bx3	FFQ35x3	FBQ35Bx3	FBQ35Cx3	FHQ35x3
AFR	10.5x3	14x3	10x3	11.5x3	16x3	13x3
(BF)	(0.28x3)	(0.16x3)	(0.25x3)	(0.15x3)	(0.15x3)	(0.2x3)

8 Rated power input of each model is tabulated below.

(Pair)

	FCQH100C	FCQ100C	FCQ100D	FCQ100B	FBQ100B	FBQ100C	FHQ100	FAQ100	FUQ100
Cooling	2.43	2.64	2.44	2.64	2.86	2.78	3.15	2.78	3.12

(Triple)

	FCQ35Cx3	FCQ35Bx3	FFQ35x3	FBQ35x3	FBQ35Cx3	FHQ35x3
Cooling	2.78	2.78	2.79	3.01	2.91	3.32

(Twin)

	FCQ50Cx2	FCQ50Bx2	FFQ50x2	FBQ50Bx2	FBQ50Cx2	FHQ50x2
AFR	12.5x2	15x2	12x2	14x2	16x2	13x2
(BF)	(0.21x2)	(0.16x2)	(0.16x2)	(0.15x2)	(0.16x2)	(0.1x2)

(Twin)

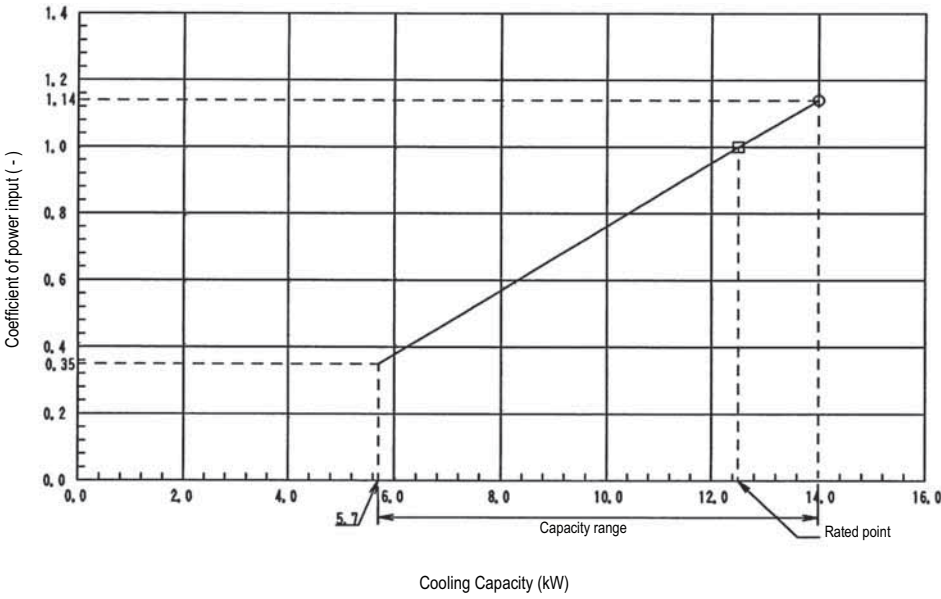
	FCQ50Cx2	FCQ50Bx2	FFQ50x2	FBQ50Cx2	FBQ50x2	FHQ50x2
Cooling	2.78	2.78	2.79	3.01	2.91	3.32

5 Capacity tables

5 - 2 Cooling capacity tables

RZQ125B (Pair + Twin / triple / double twin)

Cooling



Cooling

Indoor		Outdoor temperature (°C DB)											
EWB °C	EDB °C	25			30			35			40		
		TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)
16.0	22	12.8	8.66	0.87	12.8	8.75	1.01	13.1	9.12	1.13	12.7	8.85	1.24
18.0	25	14.7	9.50	0.95	14.2	9.32	1.04	13.7	9.09	1.14	13.2	8.83	1.25
19.0	27	14.9	9.46	0.96	14.4	9.28	1.04	14.0	9.06	1.14	13.4	8.80	1.25
19.5	27	15.1	9.45	0.96	14.7	9.27	1.04	14.1	9.05	1.14	13.6	8.79	1.25
22.0	30	15.9	9.33	0.97	15.5	9.16	1.05	14.9	8.95	1.15	14.3	8.69	1.27
24.0	32	16.5	9.20	0.97	16.0	9.03	1.06	15.5	8.83	1.16	14.9	8.59	1.28

3TW28131-1A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. ones at standard conditions.
On the figure the mark with □ show guaranteed capacity and rated coefficient of power input.
However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= 0.02 x AFR (m³/min.) x (1-BF) x (DB*-EDB)
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- 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.
- 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. (°C WB)
- EDB : Entering dry bulb temp. (°C DB)
- TC : Total cooling capacity (kW)
- SHC : Sensible heat capacity (kW)
- PI : Power input (Comp.+indoor+outdoor fan motor).
- CPI : Coefficient of power input (-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH125D	FCQ125C	FCQ125D	FCQ125B	FBQ125B	FBQ125C	FHQ125	FUQ125	FDQ125
AFR	34	27.5	30	31	35	39	30	32	45
(BF)	(0.19)	(0.19)	(0.13)	(0.07)	(0.14)	(0.16)	(0.13)	(0.07)	(0.25)

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
AFR	12.5x3	15x3	12x3	14x3	16x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.16x3)	(0.15x3)	(0.16x3)	(0.1x3)

8 Rated power input of each model is tabulated below.

(Pair)

	FCQH125D	FCQ125C	FCQ125D	FCQ125B	FBQ125B	FBQ125C	FHQ125	FUQ125	FDQ125
Cooling	3.53	3.88	3.54	3.88	3.98	3.91	4.45	4.05	4.15

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
Cooling	4.08	4.08	4.13	4.19	4.12	4.45

(Twin)

	FCQ60Cx2	FCQ60Bx2	FFQ60x2	FBQ60Bx2	FBQ60Cx2	FHQ60x2
AFR	13.5x2	18x2	15x2	19x2	18x2	17x2
(BF)	(0.21x2)	(0.1x2)	(0.11x2)	(0.11x2)	(0.15x2)	(0.2x2)

(Double Twin)

	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
AFR	10.5x4	14x4	10x4	11.5x4	16x4	13x4
(BF)	(0.28x4)	(0.16x4)	(0.25x4)	(0.11x4)	(0.15x4)	(0.2x4)

(Twin)

	FCQ60Cx2	FCQ60Bx2	FFQ60x2	FBQ60Cx2	FBQ60Cx2	FHQ60x2
Cooling	4.08	4.08	4.13	4.19	4.12	4.45

(Double twin)

	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
Cooling	4.08	4.08	4.13	4.19	4.12	4.45

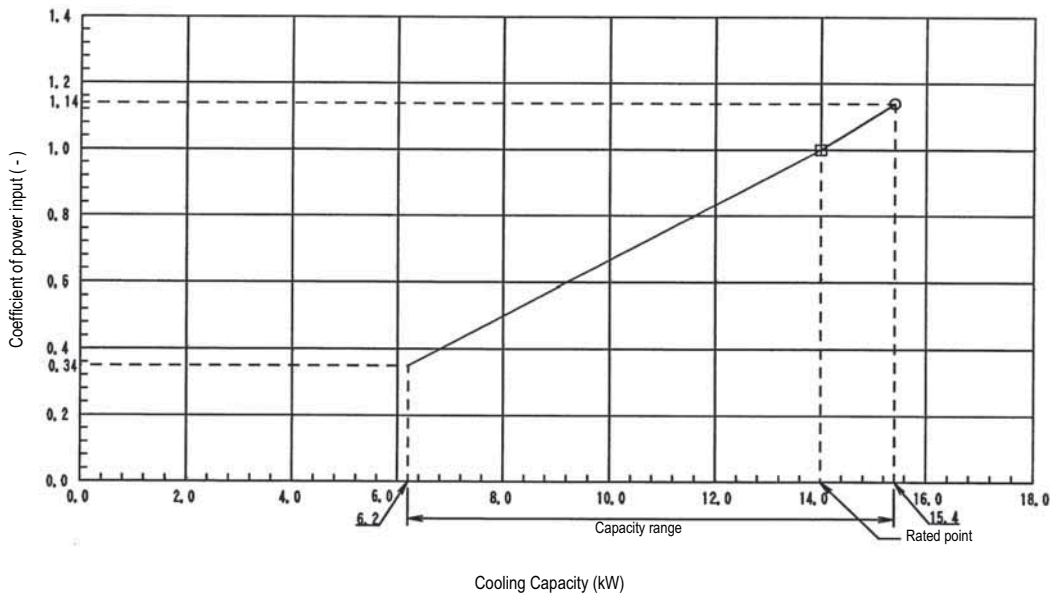
5 Capacity tables

5 - 2 Cooling capacity tables

5

RZQ140B (Pair + Twin / triple / double twin)

Cooling



Cooling

Indoor		Outdoor temperature (°C DB)											
EWB °C	EDB °C	25			30			35			40		
		TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)
16.0	22	14.1	9.53	0.87	14.0	9.61	1.01	14.4	10.0	1.13	13.9	9.72	1.24
18.0	25	16.1	10.5	0.95	15.6	10.2	1.04	15.1	10.0	1.14	14.5	9.70	1.25
19.0	27	16.5	10.4	0.96	16.0	10.2	1.04	15.4	9.98	1.14	14.7	9.68	1.25
19.5	27	16.6	10.4	0.96	16.2	10.2	1.04	15.5	9.96	1.14	15.0	9.67	1.25
22.0	30	17.5	10.3	0.97	16.9	10.1	1.05	16.4	9.85	1.15	15.7	9.56	1.27
24.0	32	18.2	10.1	0.97	17.6	9.93	1.06	17.1	9.71	1.16	16.4	9.45	1.28

3TW28141-3A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max, once at standard conditions. On the figure the mark with □ show rated capacity and rated coefficient of power input. However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= 0.02 x AFR (m³/min.) x (1-BF) x (DB*-EDB)
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- 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.
- 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. (°C WB)
- EDB : Entering dry bulb temp. (°C DB)
- TC : Total cooling capacity (kW)
- SHC : Sensible heat capacity (kW)
- PI : Power input (Comp.+indoor+outdoor fan motor).
- CPI : Coefficient of power input (-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH140D	FCQ140C	FCQ140D	FBQ-C
AFR	34	27.5	30	39
(BF)	(0.20)	(0.19)	(0.13)	(0.16)

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
AFR	12.5x3	15x3	12x3	14x3	16x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.16x3)	(0.15x3)	(0.16x3)	(0.1x3)

8 Rated power input of each model is tabulated below.

(Pair)

	FCQH140D	FCQ140C	FCQ140D	FCQ140B
Cooling	4.64	5.36	4.65	4.70

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
Cooling	4.81	4.81	4.86	4.95	4.96	4.99

(Twin)

	FCQ71Cx2	FCQ71Bx2	FFQ71x2	FBQ71Bx2	FBQ71Cx2	FHQ71x2	FAQ71x2	FCQH140Dx2
AFR	15.5x2	18x2	19x2	18x2	17x2	19x2	19x2	21x2
(BF)	(0.19x2)	(0.1x2)	(0.11x2)	(0.08x2)	(0.1x2)	(0.07x2)	(0.08x2)	(0.17x2)

(Double Twin)

	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
AFR	10.5x4	14x4	10x4	11.5x4	16x4	13x4
(BF)	(0.28x4)	(0.16x4)	(0.25x4)	(0.15x4)	(0.15x4)	(0.2x4)

(Twin)

	FCQ71Cx2	FCQ71Bx2	FBQ71Bx2	FBQ71Cx2	FHQ71x2	FUQ71x2	FAQ71x2	FCQH250Dx2
Cooling	4.81	4.81	4.95	4.96	4.99	4.99	4.92	4.90

(Double twin)

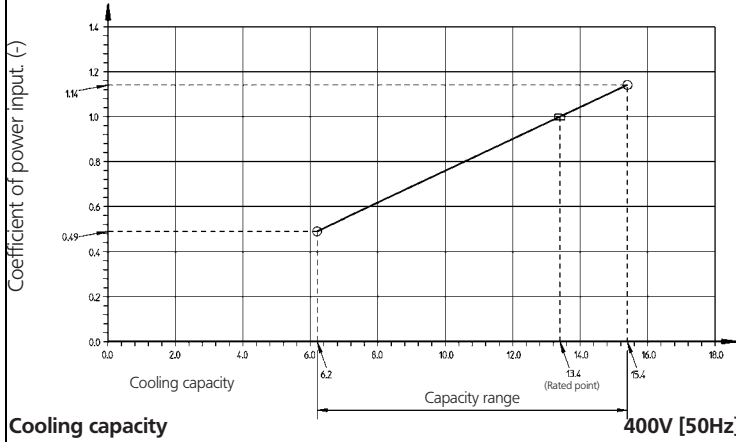
	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
Cooling	4.81	4.81	4.86	4.95	4.96	4.99

5 Capacity tables

5 - 2 Cooling capacity tables

RZQ140B8W1 (Pair)

Cooling



Cooling capacity

400V [50Hz]

Indoor		Outdoor temp. (°CDB)											
EWB (°C)	EDB (°C)	25			30			35			40		
		TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)
16.0	22	12.3	8.29	0.76	12.2	8.37	0.89	12.5	8.73	0.99	12.1	8.46	1.09
18.0	25	14.0	9.09	0.83	13.6	8.91	0.91	13.1	8.70	1.00	12.6	8.44	1.10
19.0	27	14.4	9.06	0.84	13.9	8.89	0.91	13.4	8.68	1.00	12.8	8.42	1.10
19.5	27	14.5	9.05	0.84	14.1	8.87	0.91	13.5	8.66	1.00	13.0	8.41	1.10
22.0	30	15.2	8.93	0.85	14.7	8.77	0.92	14.3	8.57	1.01	13.7	8.32	1.11
24.0	32	15.8	8.81	0.85	15.3	8.64	0.93	14.8	8.45	1.02	14.3	8.22	1.12

3TW28149

NOTES

- This capacity table is only valid for pair combination with FBQ140
- Ratings shown are net capacities which include a deduction for indoor fan motor heat
- On the figure the mark ○ show the max. at standard conditions.
On the figure the mark □ show rated capacity and rated coefficient of power input. However the max. capacity is not guaranteed, except at standard condition.
- On the tables □ show rated capacity and rated coefficient of power input.
- SHC is based on each EWB and EDB
SHC* = SHC correction for other dry bulb
SHC* = 0.02 x AFR (m³/min.) x (1-BF) x (DB*-EDB)
Add SHC* to SHC.
- Capacities are based on following conditions:
Outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB (heating)
Corresponding refrigerant piping length : 7.5 m
Level difference : 0 m
- Coefficient of power input is the percentage when the rated valve is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating capacity include the drop of frost formation.
- Air flow rate and BF are tabulated below.

Pair	
Model	FBQ140
AFR	35
(BF)	(0.14)

- Rated power input of each model is tabulated below.

Pair	
Outdoor	RZQ140C7
Indoor	RZQ140C7
Cooling	4.76kW
Heating	4.82kW

SYMBOLS

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

Caution:
TC and SHC are shown by kW

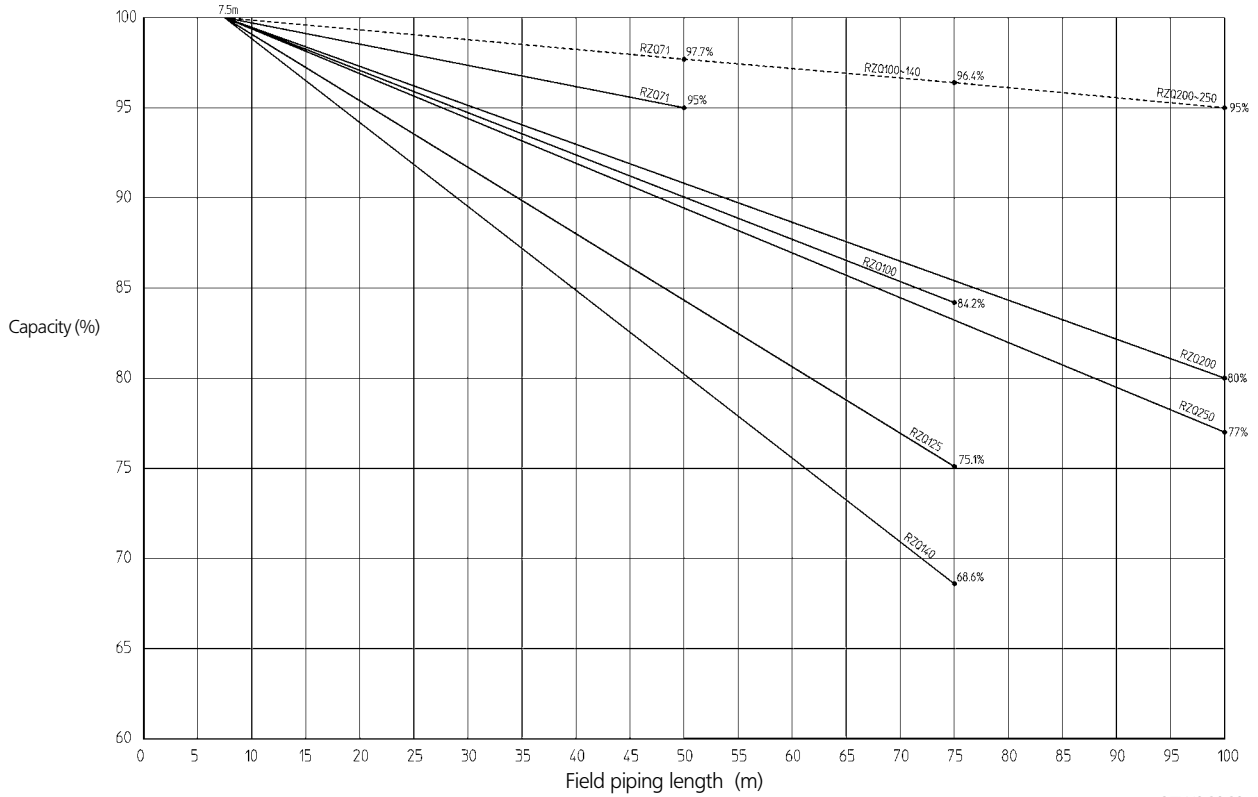
5 Capacity tables

5 - 2 Cooling capacity tables

5

RZQ-B/C

Capacity in function of field piping length for non-inverter



3TW26062-1

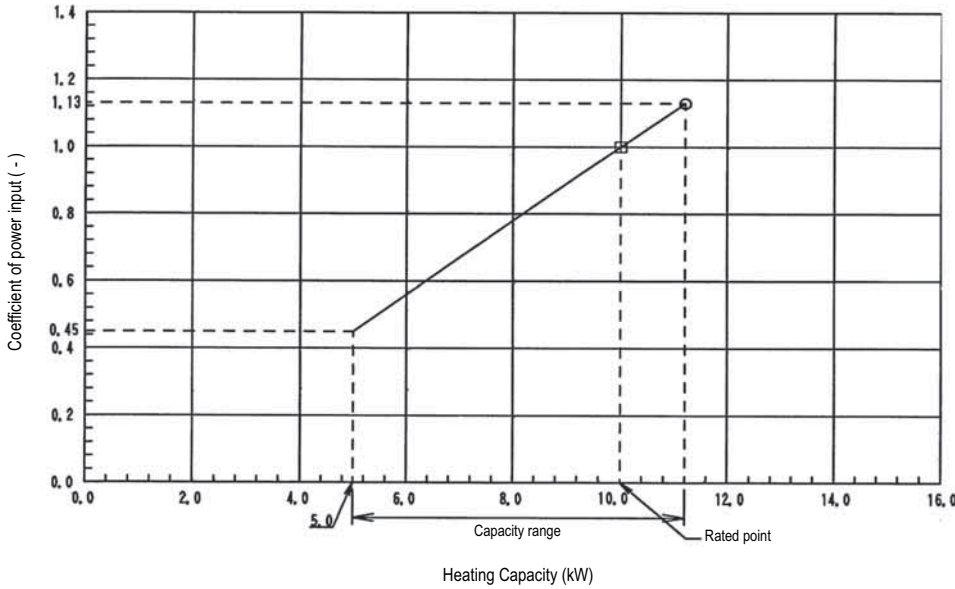
— Cooling
 - - - - Heating

5 Capacity tables

5 - 3 Heating capacity tables

RZQ100B (Pair + Twin / triple)

Heating



Heating

Indoor EDB °C	Outdoor temperature (°C WB)											
	-15		-10		-5		0		6		10	
	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)
16.0	7.16	0.87	7.91	0.92	8.66	0.96	9.41	1.01	12.8	1.06	13.8	1.12
18.0	7.15	0.90	7.90	0.95	8.65	1.00	9.39	1.05	12.8	1.10	13.8	1.16
20.0	7.15	0.94	7.89	0.99	8.64	1.04	9.38	1.09	12.8	1.15	13.8	1.21
21.0	7.14	0.96	7.89	1.01	8.63	1.06	9.38	1.11	12.8	1.17	13.8	1.23
22.0	7.14	0.98	7.88	1.03	8.63	1.08	9.37	1.14	12.8	1.20	13.7	1.25
24.0	7.13	1.02	7.87	1.07	8.62	1.12	9.36	1.17	12.8	1.24	13.7	1.30

3TW28121-1A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with ○ show the max. ones at standard conditions.
On the figure the mark with □ show rated capacity and rated coefficient of power input.
However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= 0.02 x AFR (m³/min.) x (1-BF) x (DB*-EDB)
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- 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.	(°C WB)
EDB	:	Entering dry bulb temp.	(°C DB)
TC	:	Total heating capacity	(kW)
SHC	:	Sensible heat capacity	(kW)
PI	:	Power input (Comp.+indoor+outdoor fan motor).	
CPI	:	Coefficient of power input	(-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH100D	FCQ100C	FCQ100D	FCQ100B	FBQ100B	FBQ100C	FHQ100	FAQ100	FUQ100
AFR	34	23.5	30	28	27	32	24	23	29
(BF)	(0.17)	(0.16)	(0.11)	(0.16)	(0.20)	(0.14)	(0.14)	(0.10)	(0.07)

(Triple)

	FCQ35Cx3	FCQ35Bx3	FFQ35x3	FBQ35Bx3	FBQ35Cx3	FHQ35x3
AFR	10.5x3	14x3	10x3	11.5x3	16x3	13x3
(BF)	(0.28x3)	(0.16x3)	(0.25x3)	(0.15x3)	(0.15x3)	(0.2x3)

9 Rated power input of each model is tabulated below.

(Pair)

	FCQ100C	FCQ100C	FCQ100D	FCQ100B	FBQ100B	FBQ100C	FHQ100	FAQ100	FUQ100
Heating	2.53	3.14	2.56	3.14	3.00	2.79	3.60	3.39	3.28

(Triple)

	FCQ35Cx3	FCQ35Bx3	FFQ35x3	FBQ35x3	FBQ35Cx3	FHQ35x3
Heating	3.31	3.31	3.21	3.16	2.95	3.79

(Twin)

	FCQ50Cx2	FCQ50Bx2	FFQ50x2	FBQ50Bx2	FBQ50Cx2	FHQ50x2
AFR	12.5x2	15x2	12x2	14x2	16x2	13x2
(BF)	(0.21x2)	(0.16x2)	(0.16x2)	(0.15x2)	(0.16x2)	(0.1x2)

(Twin)

	FCQ50Cx2	FCQ50Bx2	FFQ50x2	FBQ50Cx2	FBQ50x2	FHQ50x2
Heating	3.31	3.31	3.21	3.16	2.95	3.79

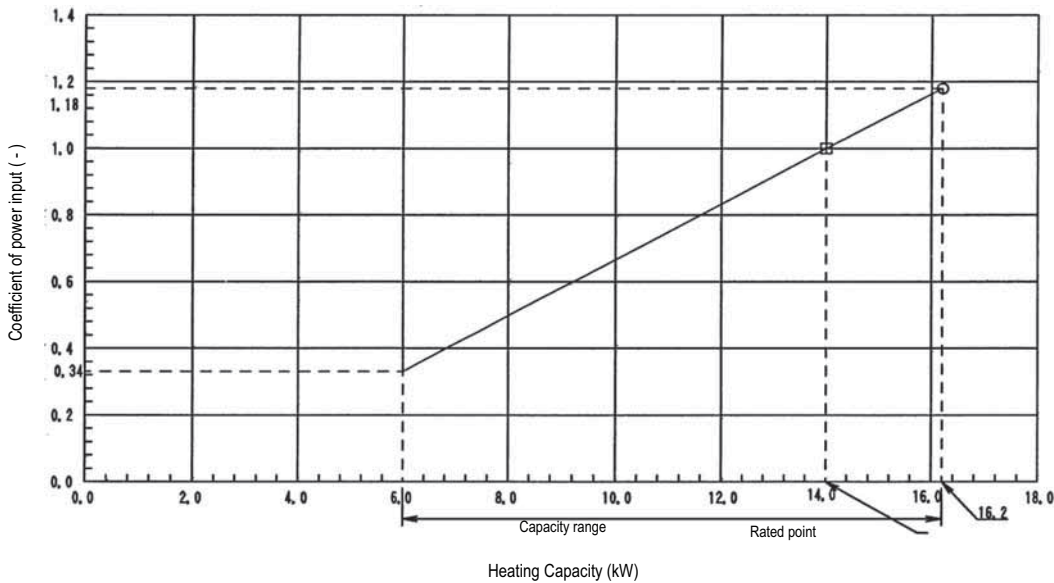
5 Capacity tables

5 - 3 Heating capacity tables

5

RZQ125B (Pair + Twin / triple / double twin)

Heating



Heating

Indoor EDB °C	Outdoor temperature (°C WB)											
	-15		-10		-5		0		6		10	
	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)
16.0	8.83	0.89	9.76	0.94	10.7	0.99	11.6	1.04	16.2	1.09	17.5	1.14
18.0	8.82	0.93	9.74	0.98	10.7	1.03	11.6	1.08	16.2	1.13	17.5	1.19
20.0	8.81	0.97	9.73	1.02	10.7	1.07	11.6	1.12	16.2	1.18	17.5	1.24
21.0	8.81	0.99	9.73	1.04	10.6	1.09	11.6	1.14	16.2	1.20	17.5	1.26
22.0	8.80	1.00	9.72	1.05	10.6	1.11	11.6	1.16	16.2	1.23	17.5	1.29
24.0	8.79	1.04	9.71	1.10	10.6	1.15	11.5	1.21	16.2	1.27	17.4	1.33

3TW28131-1A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark with \bigcirc show the max, once at standard conditions.
On the figure the mark with \square show rated capacity and rated coefficient of power input. However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= $0.02 \times \text{AFR (m}^3/\text{min.)} \times (1-\text{BF}) \times (\text{DB}^* - \text{EDB})$
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- 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. (°C WB)
- EDB : Entering dry bulb temp. (°C DB)
- TC : Total heating capacity (kW)
- SHC : Sensible heat capacity (kW)
- PI : Power input (Comp.+indoor+outdoor fan motor).
- CPI : Coefficient of power input (-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH125D	FCQ125C	FCQ125D	FCQ125B	FBQ125B	FBQ125C	FHQ125	FUQ125	FDQ125
AFR	34	27.5	30	31	35	39	30	32	45
(BF)	(0.19)	(0.19)	(0.13)	(0.07)	(0.14)	(0.16)	(0.13)	(0.07)	(0.25)

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50x3	FBQ50Cx3	FHQ50x3
AFR	10.5x3	14x3	10x3	11.5x3	16x3	13x3
(BF)	(0.28x3)	(0.16x3)	(0.25x3)	(0.15x3)	(0.15x3)	(0.2x3)

9 Rated power input of each model is tabulated below.

(Pair)

	FCQH125C	FCQ125C	FCQ125D	FCQ125B	FBQ125B	FBQ125C	FHQ125	FUQ125	FDQ125
Heating	3.57	4.36	3.59	4.36	3.99	3.69	4.50	4.36	3.69

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50x3	FBQ50Cx3	FHQ50x3
Heating	4.59	4.59	4.26	4.20	3.90	4.74

(Twin)

	FCQ60Cx2	FCQ60Bx2	FFQ60x2	FBQ60Bx2	FBQ60Cx2	FHQ60x2
AFR	13.5x2	18x2	15x2	19x2	18x2	17x2
(BF)	(0.21x2)	(0.1x2)	(0.11x2)	(0.11x2)	(0.15x2)	(0.2x2)

(Twin)

	FCQ60Cx2	FCQ60Bx2	FFQ60x2	FBQ60Cx2	FBQ60x2	FHQ60x2
Heating	4.59	4.59	4.26	4.20	3.90	4.74

(Double twin)

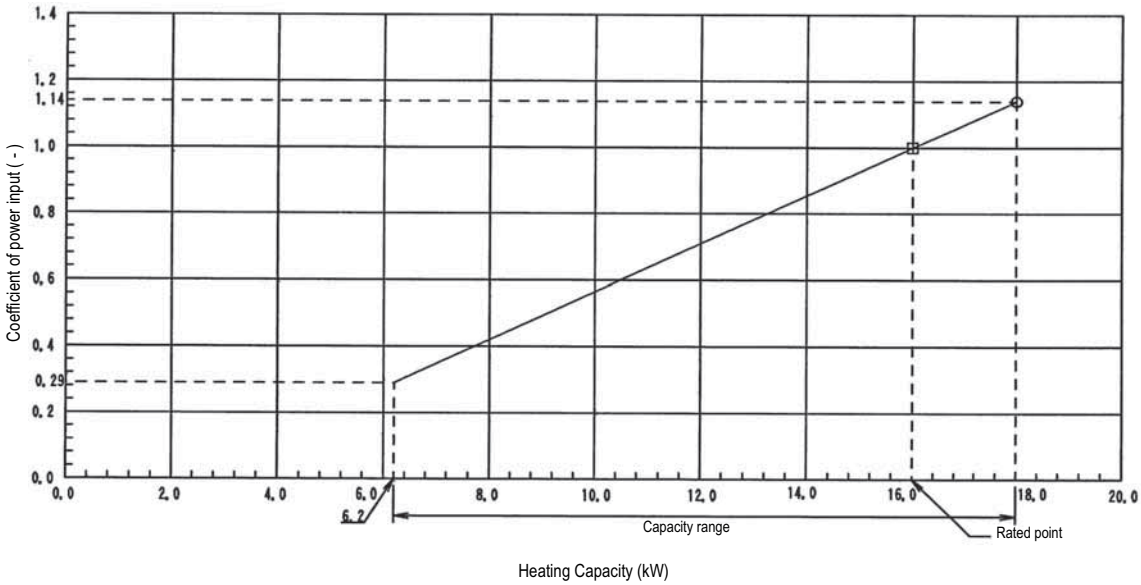
	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
Heating	4.59	4.59	4.26	4.20	3.90	4.74

5 Capacity tables

5 - 3 Heating capacity tables

RZQ140B (Pair + Twin / triple / double twin)

Heating



Heating

Indoor EDB °C	Outdoor temperature (°C WB)											
	-15		-10		-5		0		6		10	
	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)
16.0	9.82	0.86	10.8	0.91	11.9	0.95	12.9	1.00	18.0	1.05	19.5	1.11
18.0	9.80	0.90	10.8	0.94	11.8	0.99	12.9	1.04	18.0	1.09	19.4	1.15
20.0	9.79	0.94	10.8	0.98	11.8	1.03	12.9	1.08	18.0	1.14	19.4	1.20
21.0	9.79	0.95	10.8	1.00	11.8	1.05	12.8	1.10	18.0	1.16	19.4	1.22
22.0	9.78	0.97	10.8	1.02	11.8	1.07	12.8	1.12	18.0	1.19	19.4	1.24
24.0	9.77	1.00	10.8	1.06	11.8	1.11	12.8	1.17	18.0	1.23	19.4	1.29

3TW28141-3A

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat. On the figure the mark with ○ show the max. ones at standard conditions.
- On the figure the mark with □ show rated capacity and rated coefficient of power input. However the max. Capacity is not guaranteed except at standard condition.
- SHC is based on each EWB and EDB.
SHC for other dry bulb temperature = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
= 0.02 x AFR (m³/min.) x (1-BF) x (DB* - EDB)
Add SHC to SHC*.
- Capacities are based on the following conditions.
Outdoor air: 85% RH.
However, the condition rated capacity is 7°C DB / 6°C WB. (heating)
Corresponding refrigerant piping length : 5.0m
Level difference : 0m
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are given in table below:

SYMBOLS

AFR	: Air flow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C WB)
EDB	: Entering dry bulb temp.	(°C DB)
TC	: Total heating capacity	(kW)
SHC	: Sensible heat capacity	(kW)
PI	: Power input (Comp.+indoor+outdoor fan motor).	
CPI	: Coefficient of power input	(-)

Caution TC and SHC are shown by kW.

(Pair)

	FCQH140D	FCQ140C	FCQ140D	FBQ140C
AFR	34	27.5	30	39
(BF)	(0.20)	(0.19)	(0.13)	(0.16)

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
AFR	12.5x3	15x3	12x3	14x3	16x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.16x3)	(0.15x3)	(0.16x3)	(0.1x3)

9 Rated power input of each model is tabulated below.

(Pair)

	FCQH140D	FCQ140C	FCQ140D	FBQ-C
Heating	4.48	5.69	4.52	4.40

(Triple)

	FCQ50Cx3	FCQ50Bx3	FFQ50x3	FBQ50Bx3	FBQ50Cx3	FHQ50x3
Heating	5.52	5.52	5.11	5.06	4.64	5.69

(Twin)

	FCQ71Cx2	FCQ71Bx2	FFQ71x2	FBQ71Bx2	FBQ71Cx2	FHQ71x2	FAQ71x2	FCQH140Dx2
AFR	15.5x2	18x2	19x2	18x2	17x2	19x2	19x2	21x2
(BF)	(0.19x2)	(0.1x2)	(0.11x2)	(0.08x2)	(0.1x2)	(0.07x2)	(0.08x2)	(0.17x2)

(Double Twin)

	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
AFR	10.5x4	14x4	10x4	11.5x4	16x4	13x4
(BF)	(0.28x4)	(0.16x4)	(0.25x4)	(0.15x4)	(0.15x4)	(0.2x4)

(Twin)

	FCQ71Cx2	FCQ71Bx2	FBQ71Bx2	FBQ71Cx2	FHQ71x2	FUQ71x2	FAQ71x2	FCQH140Dx2
Heating	5.52	5.52	5.06	4.64	5.69	5.05	5.22	4.80

(Double twin)

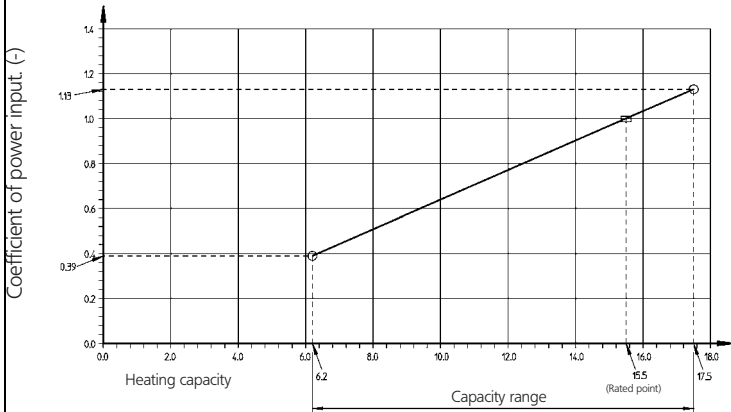
	FCQ35Cx4	FCQ35Bx4	FFQ35x4	FBQ35Bx4	FBQ35Cx4	FHQ35x4
Heating	5.52	5.52	5.11	5.06	4.64	5.69

5 Capacity tables

5 - 3 Heating capacity tables

RZQ140BW1 (Pair)

Heating



Heating capacity 400V [50Hz]

EDB (°C)	Outdoor temp. (°CWB)											
	-15		-10		-5		0		6		10	
	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)
16.0	9.51	1.05	10.5	1.11	11.5	1.16	12.5	1.22	15.5	0.92	16.8	0.97
18.0	9.49	1.10	10.5	1.15	11.4	1.21	12.5	1.27	15.5	0.96	16.7	1.01
20.0	9.48	1.14	10.5	1.20	11.4	1.26	12.5	1.32	15.5	1.00	16.7	1.05
21.0	9.48	1.16	10.5	1.22	11.4	1.28	12.4	1.34	15.5	1.02	16.7	1.07
22.0	9.47	1.18	10.5	1.24	11.4	1.31	12.4	1.37	15.5	1.04	16.7	1.09
24.0	9.46	1.22	10.5	1.29	11.4	1.35	12.4	1.42	15.5	1.08	16.7	1.13

3TW28149

NOTES

- This capacity table is only valid for pair combination with FBQ140
- Ratings shown are net capacities which include a deduction for indoor fan motor heat
- On the figure the mark ○ show the max. at standard conditions.
On the figure the mark □ show rated capacity and rated coefficient of power input. However the max. capacity is not guaranteed, except at standard condition.
- On the tables □ show rated capacity and rated coefficient of power input.
- SHC is based on each EWB and EDB
 $SHC^* = SHC \text{ correction for other dry bulb}$
 $SHC^* = 0.02 \times AFR (m^3/min.) \times (1 - BF) \times (DB^* - EDB)$
 Add SHC* to SHC.
- Capacities are based on following conditions:
 Outdoor air : 85 % RH. however, the condition on nominal capacity is 7° CDB/6° CWB (heating)
 Corresponding refrigerant piping length : 7.5 m
 Level difference : 0 m
- Coefficient of power input is the percentage when the rated valve is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating capacity include the drop of frost formation.
- Air flow rate and BF are tabulated below.

Pair	
Model	FBQ140
AFR	35
(BF)	(0.14)

- Rated power input of each model is tabulated below.

Pair	
Outdoor	RZQ140C7
Indoor	RZQ140C7
Cooling	4.76kW
Heating	4.82kW

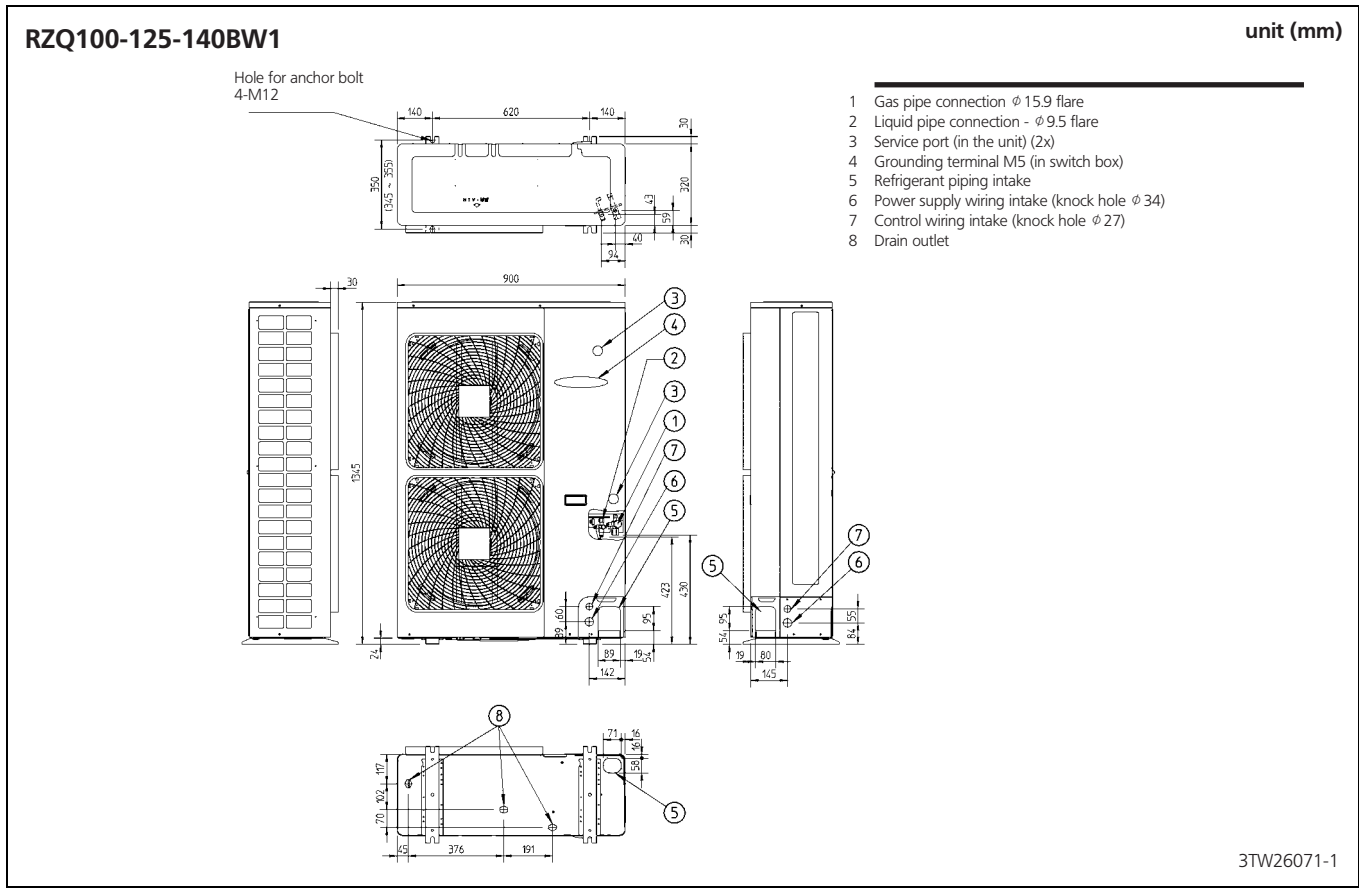
SYMBOLS

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

Caution:
TC and SHC are shown by kW

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

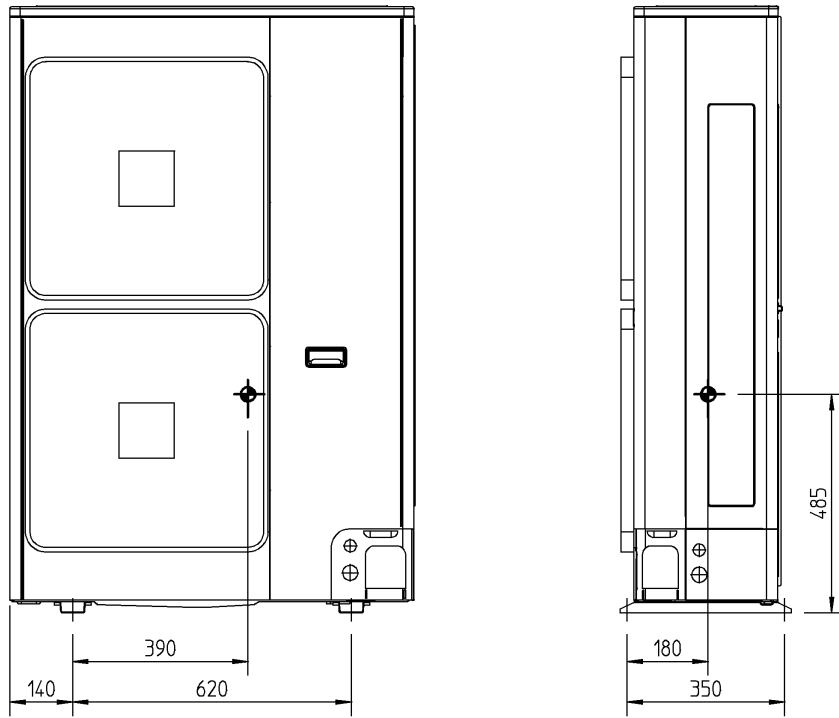


6 Dimensional drawing & centre of gravity

6 - 2 Centre of gravity

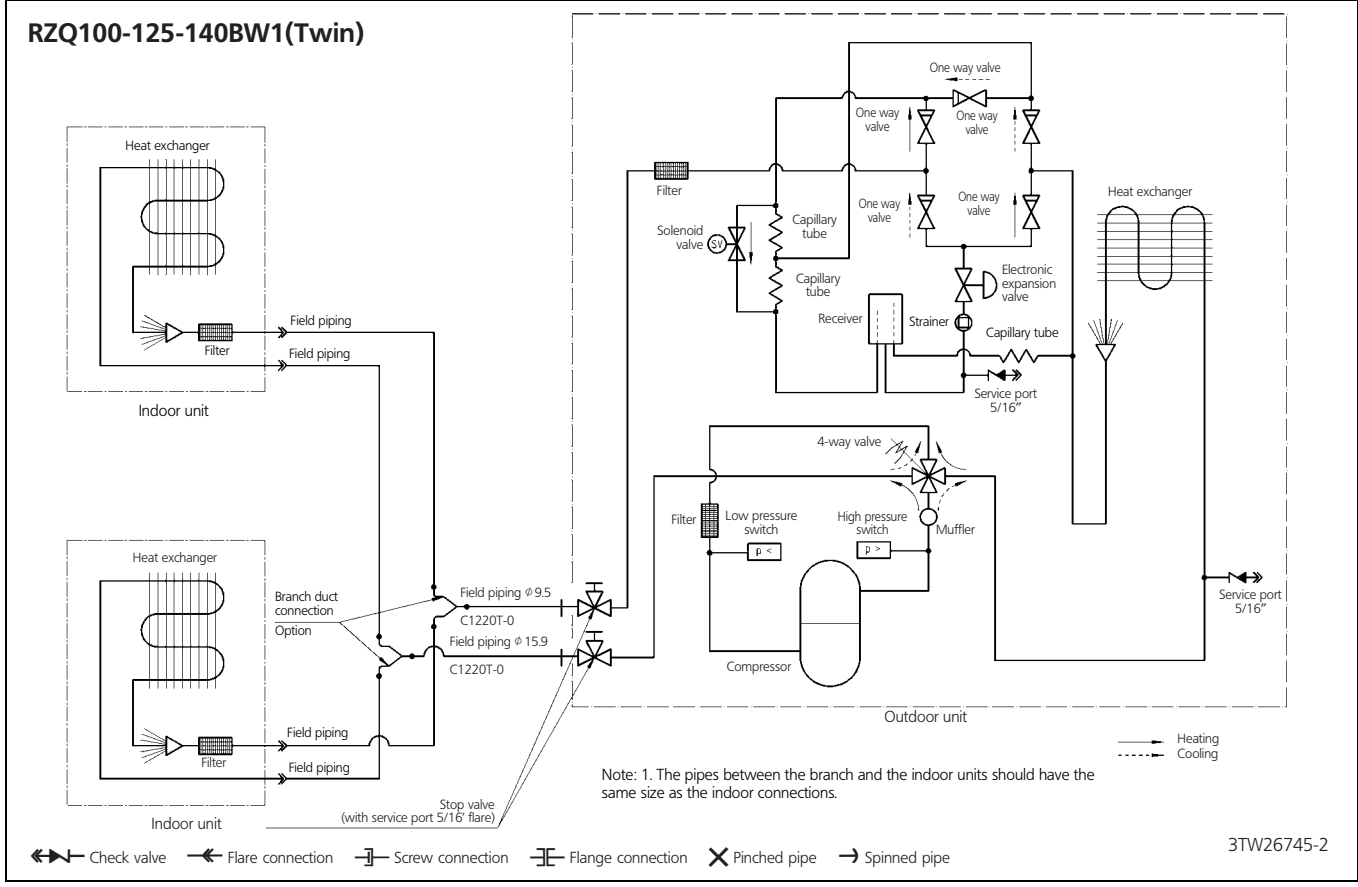
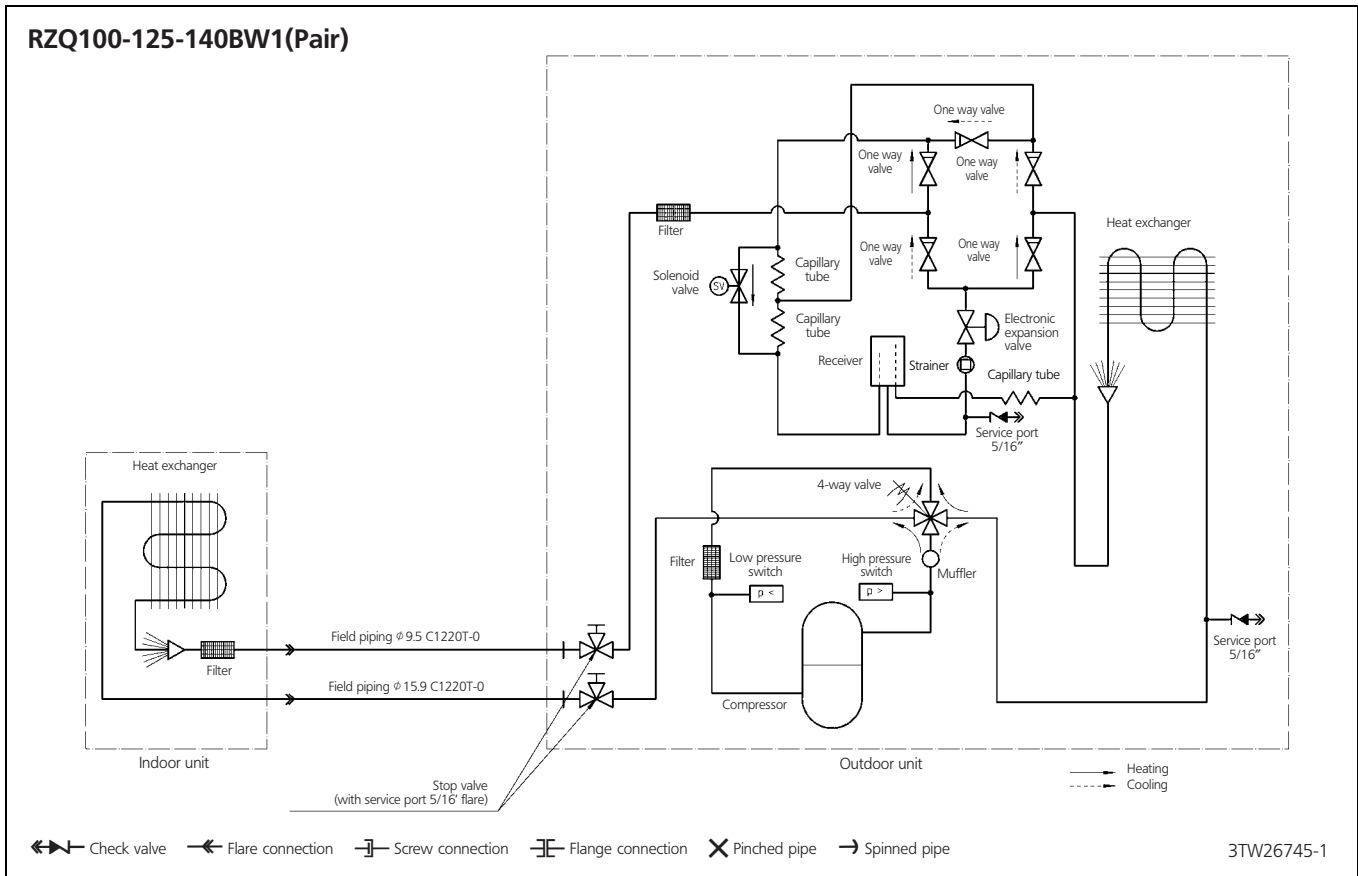
6

RZQ-BW1



4TW26079-3

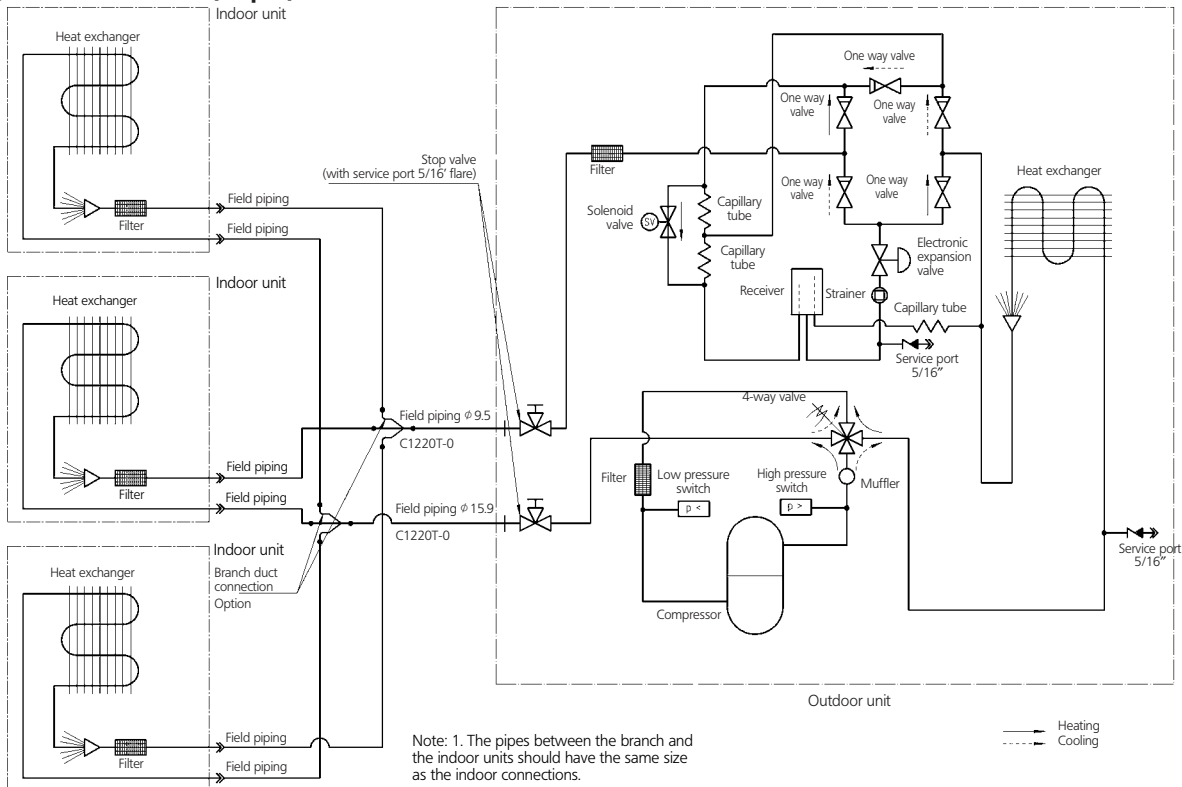
7 Piping diagram



7 Piping diagram

7

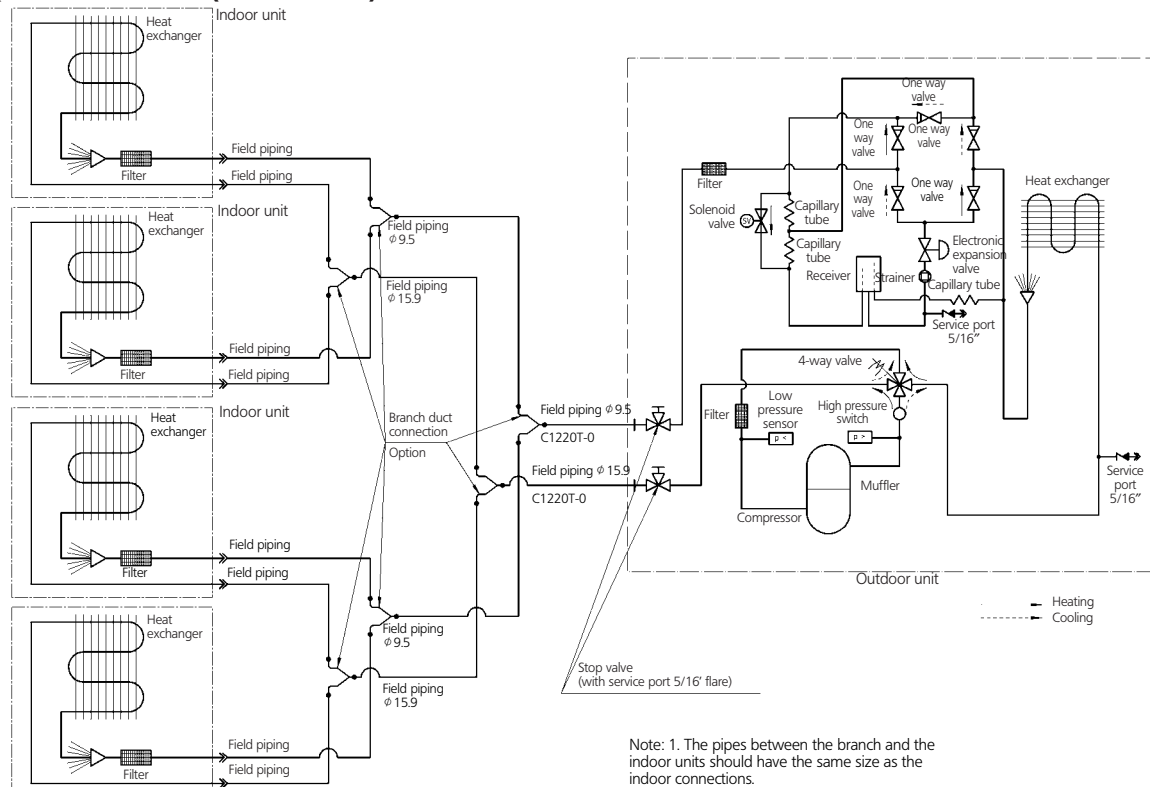
RZQ100-125-140BW1(Triple)



3TW26745-3

Check valve Flare connection Screw connection Flange connection Pinched pipe Spinned pipe

RZQ100-125-140BW1(Double twin)



3TW26755-4

Check valve Flare connection Screw connection Flange connection Pinched pipe Spinned pipe

8 Wiring diagram

8 - 1 Wiring diagram

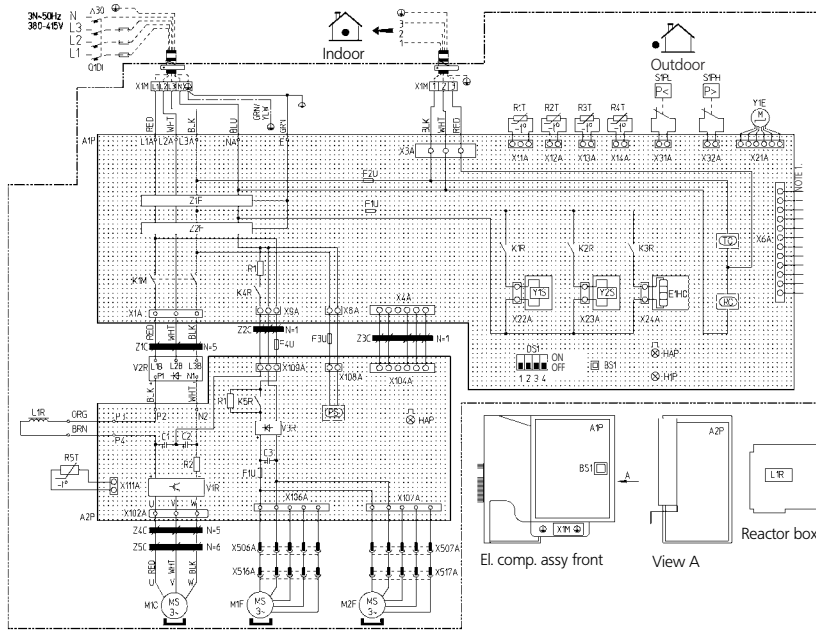
RZQ100-125-140BW1

- L : Live
- N : Neutral
- ⊞ : Field wiring
- ⊞ : Protective earth (screw)
- ⊞ : Wire clamp
- : Terminal
- ⊞ : Connector
- ↑ : Relay connector

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

NOTES:

1. Refer to the optional manual, for connection wiring to X6A.
2. Confirm the method of setting the selector switches (DS1) by service manual. When the unit is shipped by factory all switches are set to be off.



A1P	Printed circuit board
A2P	Printed circuit board (IM)
B51	Push button switch (forced defrost / pump down)
C1-C2-C3	Capacitor
DS1	Dip switch
F1U (A2P)	Fuse (T 6.3A/250V)
F2U	Fuse (T 6.3A/250V)
F3U	Fuse (B 10A/250V)
F4U	Fuse (B 10A/250V)
HAP (A1P)	Light emitting diode (service monitor green)
HAP (A2P)	Light emitting diode (service monitor green)
H1P (A1P)	Light emitting diode (service monitor red)

K1M(A2P)	Magnetic contactor
K1R(A1P)	Magnetic relay (Y1S)
K2R(A1P)	Magnetic relay (Y2S)
K3R(A1P)	Magnetic relay (E1HC)
K4R, K5R	Magnetic relay
L1R	Reactor
M1C	Motor compressor
M1F	Motor fan
PS	Power circuit
Q1D1	Earth leakage breaker (30mA)
R1-R2	Resistor

R1T	Thermistor (air)
R2T	Thermistor (coil)
R3T	Thermistor (discharge pipe)
R4T	Thermistor (suction pipe)
R5T	Thermistor (power module)
S1PH	Pressure switch (high)
S1NPL	Pressure sensor (low)
RC	Signal receiver circuit
TC	Signal transmission circuit
V1R	Power module

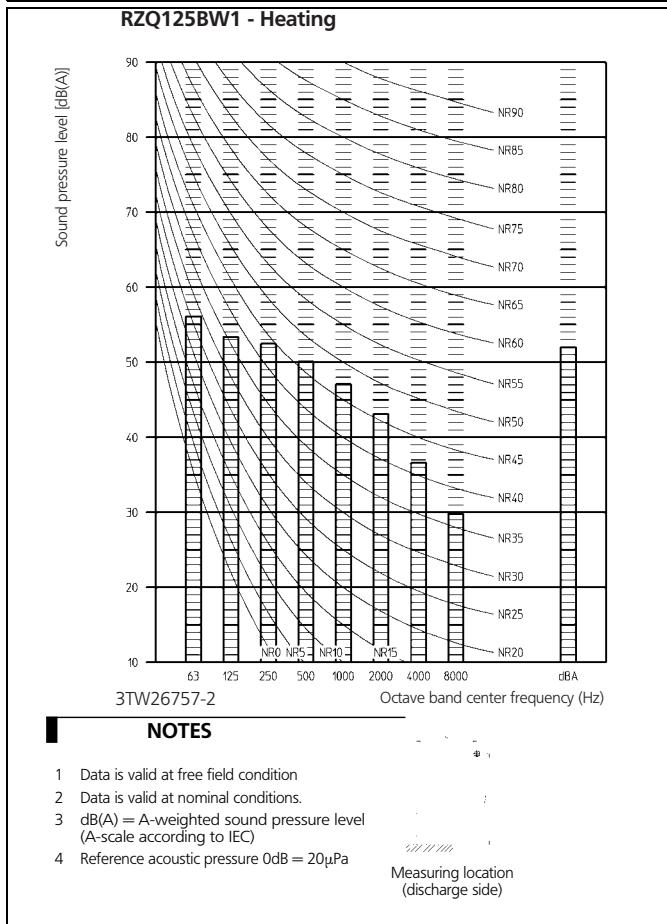
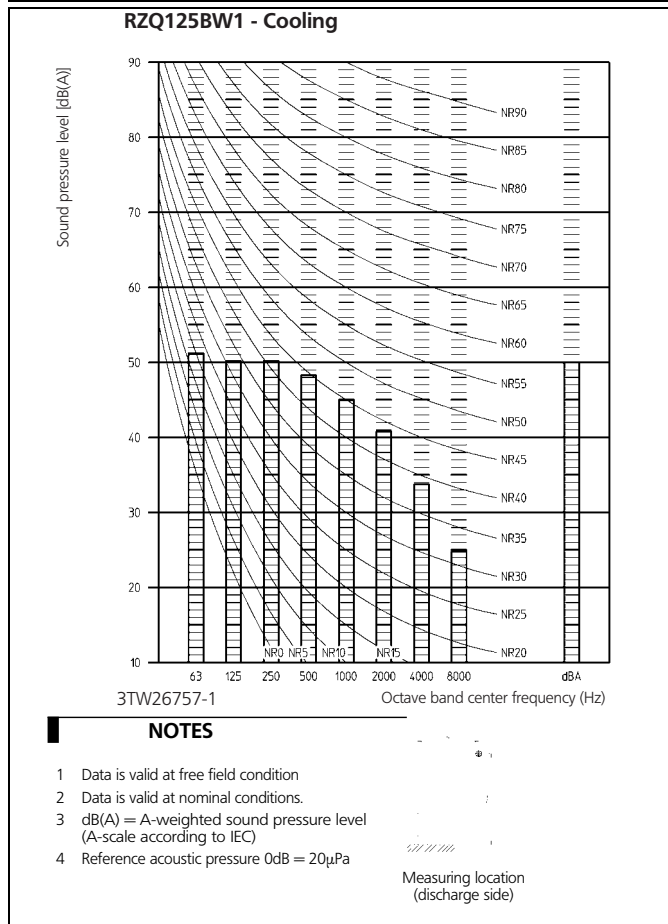
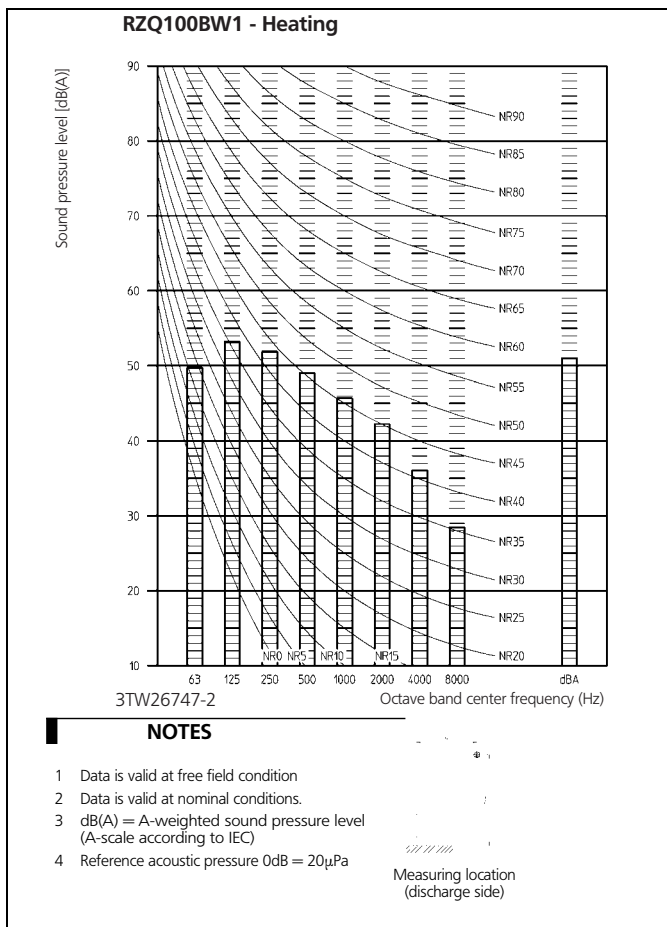
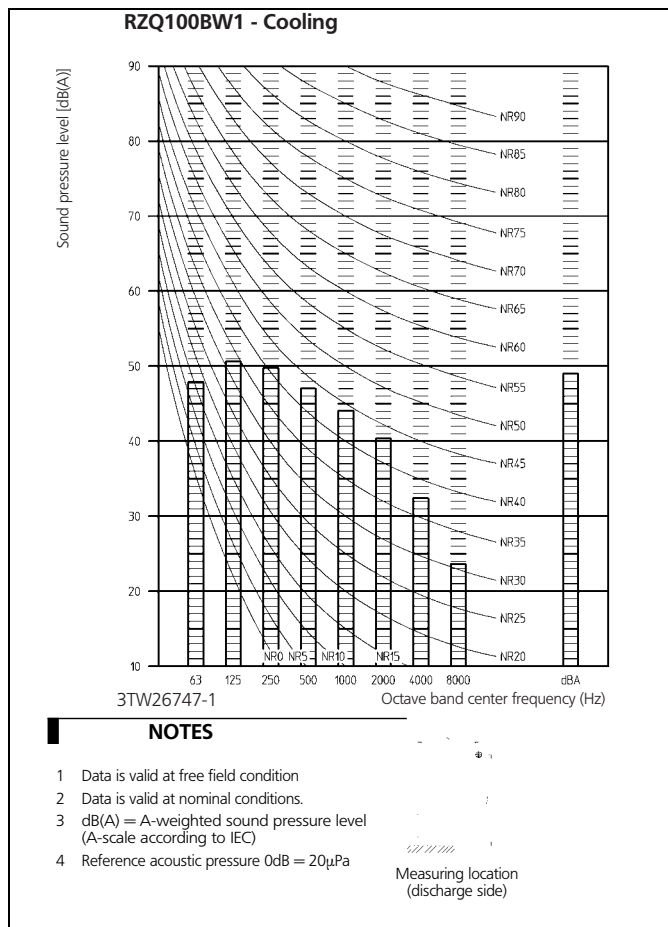
V2R-V3R	Diode module
V1T	IGBT
X6A	Connector (Option)
X1M	Terminal strip
Y1E	Expansion valve
Y1S	4-way valve
Y2S	Solenoid valve
Z1C, Z2C	Noise filter
Z3C, Z4C	Noise filter
Z1F	Noise filter
Z1F	Noise filter (with surge absorber)

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9 Sound data

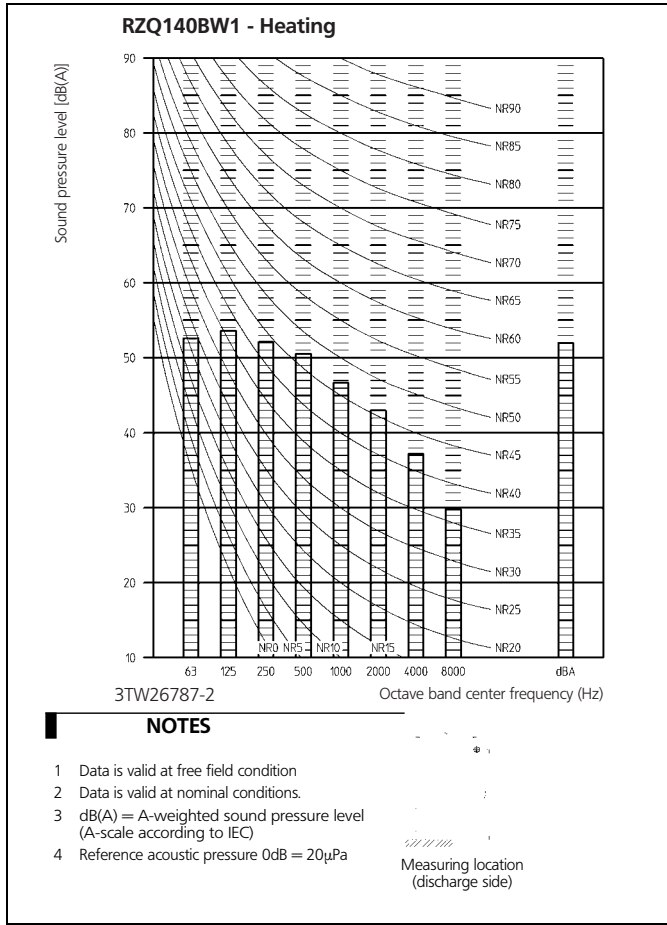
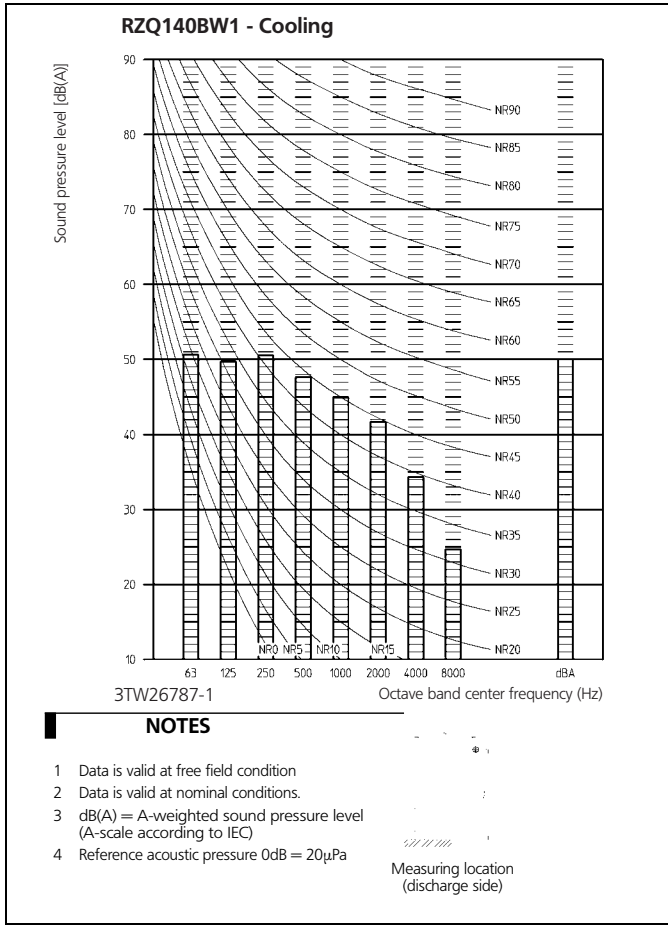
9 - 1 Sound pressure spectrum

9



9 Sound data

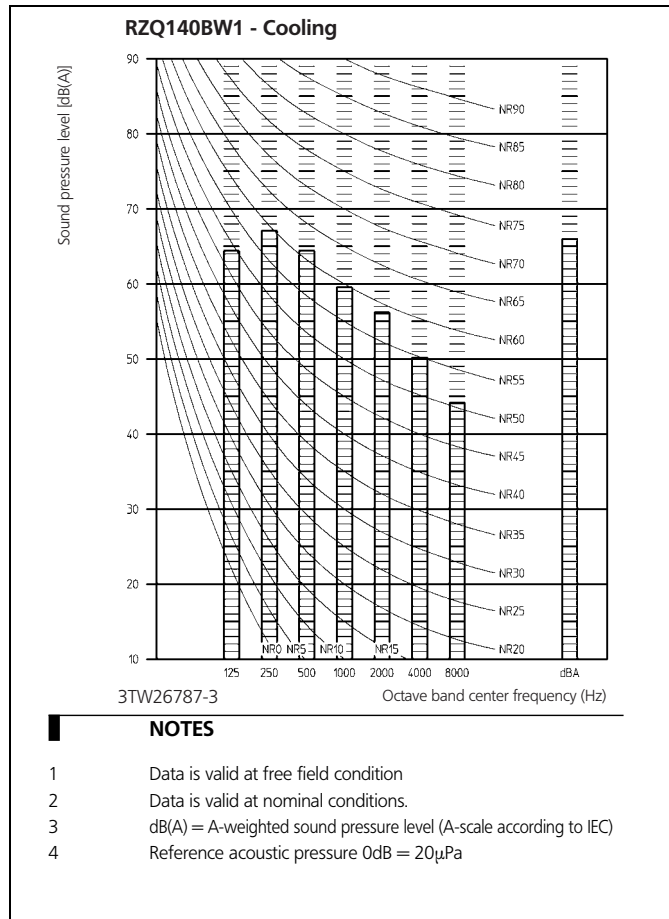
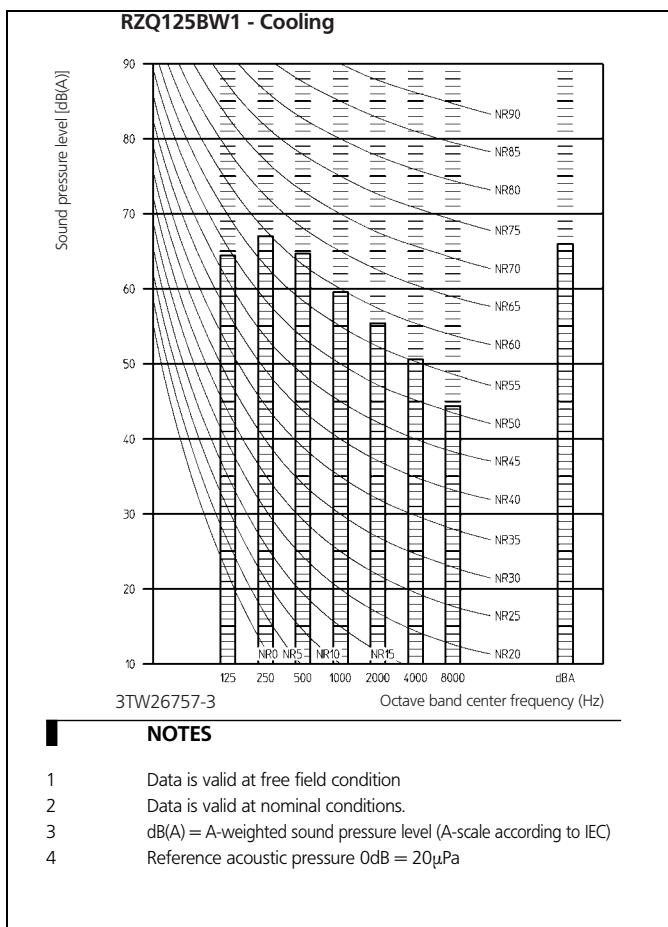
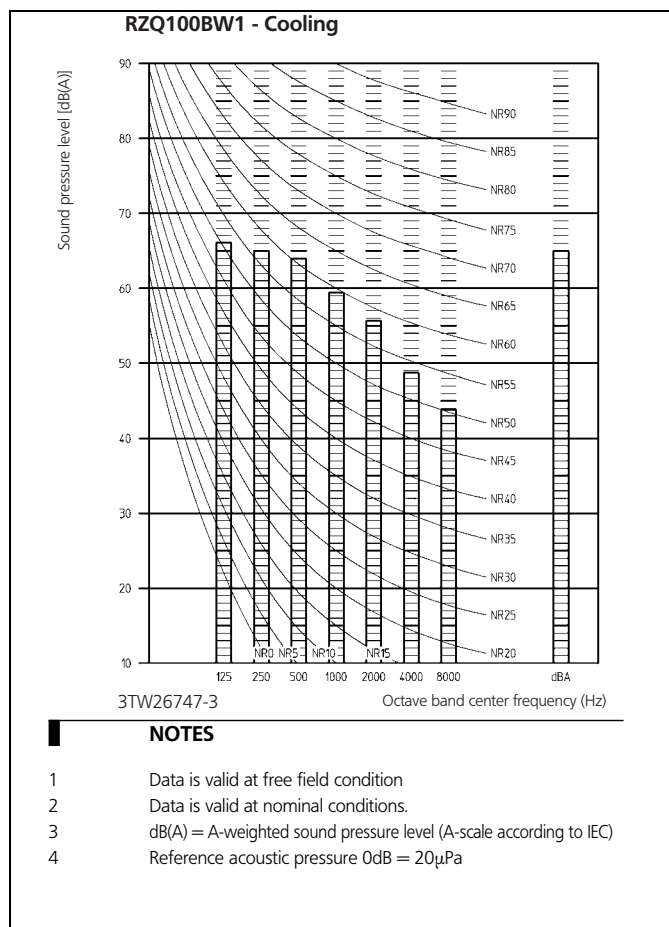
9 - 1 Sound pressure spectrum



9 Sound data

9 - 2 Sound power spectrum

9

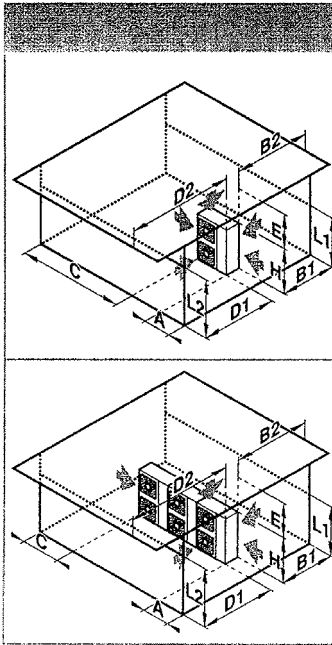


10 Installation

10 - 1 Installation method

RZQ100-125-140BW1

A. Non stacked installation



	↖	↗	↘	↙	↕	A	B1	B2	C	D1	D2	E	L1/L2
✓						≥50(100)							
✓		✓	✓			≥100	≥100	≥100					
✓				✓		≥100					≤500	≥1000	
✓	✓	✓	✓	✓		≥150	≥150	≥150			≤500	≥1000	
✓		✓									≤500		
✓				✓				≤500		≥500		≥1000	
✓	✓					L1<L2	≥50(100)				≥500		
						L2<L1	≥50(100)				≥500		
✓						L1<L2	L1≤H	≥150(250)	≤500		≥750	≥1000	0<L1≤1/2H
						L2<L1	L2≤H	≥50(100)		≥500	≥500	≥1000	0<L1≤1/2H
						L1<L2	L1≤H	≥100(200)		≥500	≥500	≥1000	0<L2≤1/2H
						L2<L1	L2≤H	≥100(200)		≥500	≥500	≥1000	1/2H<L2≤H
✓	✓					L1<L2	L1≤H	≥200(300)	≤500	≥1000	≥1000	≥1000	0<L1≤1/2H
						L2<L1	L2≤H	≥200(300)		≥1000	≥1000	≥1000	0<L2≤1/2H
						L1<L2	L1≤H	≥150(250)		≥1000	≥1000	≥1000	1/2H<L2≤H
						L2<L1	L2≤H	≥150(250)		≥1000	≥1000	≥1000	1/2H<L2≤H
✓	✓					L1<L2	L1≤H	≥200(300)	≤500	≥1000	≥1000	≥1000	0<L1≤1/2H
						L2<L1	L2≤H	≥200(300)		≥1000	≥1000	≥1000	0<L2≤1/2H
						L1<L2	L1≤H	≥150(250)		≥1000	≥1000	≥1000	1/2H<L1≤H
						L2<L1	L2≤H	≥150(250)		≥1000	≥1000	≥1000	1/2H<L2≤H

Legend

- ↖ Suction side obstacle
- ↗ Discharge side obstacle
- ↘ Left side obstacle
- ↙ Right side obstacle
- ↕ Top side obstacle
- ✓ Obstacle is present

In these cases, close the bottom of the installation frame to prevent discharged air from being bypassed.

In these cases, only 2 units can be installed.

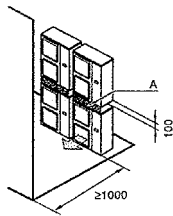


This situation is not allowed.

Figures between () indicate the dimensions only for the 100-125-140 class models.

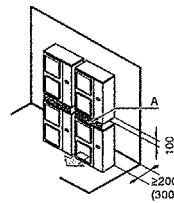
B. Stacked installation

1. Obstacles exist in front of the outlet side



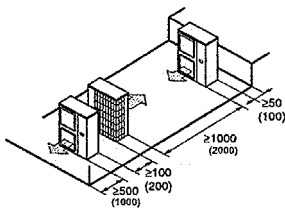
Do not stack more than one unit.
About 100mm is required as the dimension for laying the upper outdoor unit's drain pipe.
Get the portion A sealed so that air from the outlet does not bypass.

2. Obstacles exist in front of the air inlet

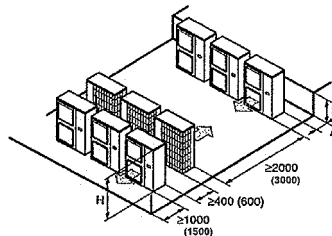


C. Multiple-row installation

1. Installation of one unit per row



2. Installing multiple units (2 units or more) in lateral connection per row



Relation of dimensions of H, A, and L are shown in the table below.

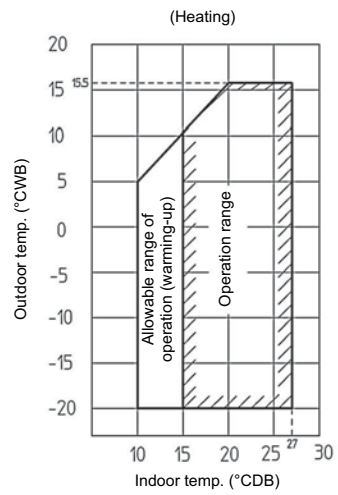
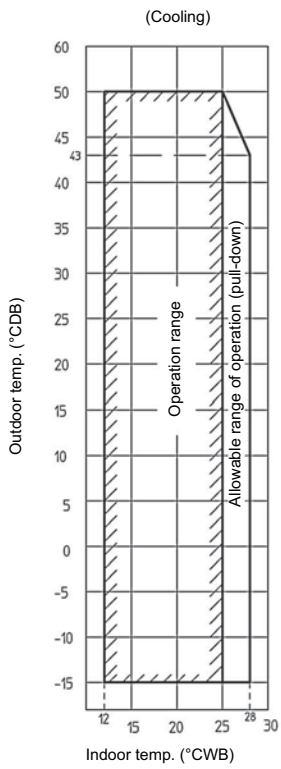
	L	A
L ≤ H	0 < L ≤ 1/2 H	150 (250)
	1/2 H < L	200 (300)
H < L	Installation impossible	

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11 Operation range

11

RZQ-B



NOTE

- 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.

3TW26733-1B