

# 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



47  
1

## 2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B
For combination indoor units + outdoor units	Indoor Units			FCHQ100C7VEB	FCHQ125C7VEB	FCHQ140C7VEB
Cooling capacity	Standard	kW		10.0	12.5	14.0
Heating capacity	Standard	kW		11.2	14.0	16.0
Power Input	Cooling	Standard	kW	2.66	3.70	4.64
	Heating	Standard	kW	2.55	3.57	4.43
For combination indoor units + outdoor units	EER	Nominal		3.76	3.38	3.02
	COP	Nominal		4.39	3.92	3.61
	Energy Label	Cooling		A	A	B
		Heating			A	
	Annual energy consumption		kWh	1330	1850	2320
	Indoor Units			FCQ100C7VEB	FCQ125C7VEB	FCQ140C7VEB
Cooling capacity	Standard	kW		10.0	12.5	14.0
Heating capacity	Standard	kW		11.2	14.0	16.0
Power Input	Cooling	Standard	kW	2.77	3.88	5.36
	Heating	Standard	kW	3.02	3.95	4.98
For combination indoor units + outdoor units	EER	Nominal		3.61	3.22	2.61
	COP	Nominal		3.71	3.54	3.21
	Energy Label	Cooling		A	A	D
		Heating		A	B	C
	Annual energy consumption		kWh	1385	1940	2680
	Indoor Units			FBQ100B8V3B	FBQ125B8V3B	FBQ140B8V3B
Cooling capacity	Standard	kW		10.0	12.5	13.4
Heating capacity	Standard	kW		11.2	14.0	15.5
Power Input	Cooling	Standard	kW	3.00	3.97	4.77
	Heating	Standard	kW	2.99	3.98	4.83
For combination indoor units + outdoor units	EER	Nominal		3.33	3.14	2.81
	COP	Nominal		3.75	3.52	3.21
	Energy Label	Cooling		A	B	C
		Heating		A	B	C
	Annual energy consumption		kWh	1500	1985	2385
	Indoor Units			FHQ100BVV1B	FHQ125BVV1B	
Cooling capacity	Standard	kW		10.0	12.5	
Heating capacity	Standard	kW		11.2	14.0	
Power Input	Cooling	Standard	kW	3.3	4.45	
	Heating	Standard	kW	3.49	4.36	
For combination indoor units + outdoor units	EER	Nominal		3.03	2.81	
	COP	Nominal		3.21	3.21	
	Energy Label	Cooling		B	C	
		Heating		C	C	
	Annual energy consumption		kWh	1650	2225	
	Indoor Units			FAQ100BUV1B	FDQ125B8V3B	
Cooling capacity	Standard	kW		10	12.5	
Heating capacity	Standard	kW		11.2	14.0	
Power Input	Cooling	Standard	kW	3.45	4.15	
	Heating	Standard	kW	3.27	3.67	

## 2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B
For combination indoor units + outdoor units	EER	Nominal		2.9	3.01	
	COP	Nominal		3.43	3.81	
	Energy Label	Cooling		C	B	
		Heating		B	A	
	Annual energy consumption	kWh		1725	2075	
Indoor Units			FUQ100BUV1B	FUQ125BUV1B		
Cooling capacity	Standard	kW		10	12.5	
Heating capacity	Standard	kW		11.2	14.0	
Power Input	Cooling	Standard	kW	3.12	4.15	
	Heating	Standard	kW	3.37	4.33	
For combination indoor units + outdoor units	EER	Nominal		3.21	3.01	
	COP	Nominal		3.32	3.23	
	Energy Label	Cooling		A	B	
		Heating		C	C	
Annual energy consumption	kWh		1560	2075		

2-2 TECHNICAL SPECIFICATIONS				RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B	
Casing	Colour			Ivory White			
	Material			Painted galvanised steel			
Dimensions	Unit	Height	mm	1170	1170	1170	
		Width	mm	900	900	900	
		Depth	mm	320	320	320	
	Packing	Height	mm	1349	1349	1349	
		Width	mm	980	980	980	
		Depth	mm	420	420	420	
Weight	Unit		kg	103	103	103	
	Packed Unit		kg	114	114	114	
Heat Exchanger	Dimensions	Length	mm	857	857	857	
		Nr of Rows			2	2	2
		Fin Pitch	mm	1.4	1.4	1.4	
		Nr of Passes			6	6	6
		Face Area	m <sup>2</sup>	0.98	0.98	0.98	
	Nr of Stages			52	52	52	
	Tube type			Hi-XSS(8)			
Fin	Type	WF fin					
	Treatment	Anti-corrosion treatment (PE)					
Fan	Type			Direct Drive Propeller			
	Discharge direction			Horizontal			
	Quantity			2	2	2	
	Air Flow Rate (nominal at 230V)	Cooling	m <sup>3</sup> /min	96	100	97	
		Heating	m <sup>3</sup> /min	75	88	88	
	Motor	Quantity		2	2	2	
Model		Brushless DC Motor					
Motor	Speed (nominal)	Steps		8	8	8	
		Cooling	rpm	800	850	830	
		Heating	rpm	640	740	740	
Fan	Motor	Output	W	70	70	70	

47

2

## 2 Specifications

2-2 TECHNICAL SPECIFICATIONS				RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B	
Compressor	Quantity			1	1	1	
	Motor	Model			JT100G-VD		
		Model			Inverter		
	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)	Sound power		dBA	65	66	67	
	Sound pressure		dBA	49	50	50	
	Cooling	Sound Power	dBA	65	66	66	
		Sound Pressure	dBA	49	50	50	
	Heating	Sound Power	dBA	51	52	52	
		Sound Pressure	dBA	51	52	52	
Sound Level (Night quiet)	Sound Pressure		dBA	45	45	46	
Refrigerant	Type			R-410A			
	Charge	kg		3.7	3.7	3.7	
	Control			Expansion valve (electronic type)			
	Nr of Circuits			1	1	1	
Refrigerant Oil	Type			Daphne FVC68D			
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	70	95	95	
		Chargeless	m	30	30	30	
	Additional Refrigerant Charge		kg/m	See installation manual 4PW34874-1			
	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			

## 2 Specifications

2-2 TECHNICAL SPECIFICATIONS			RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B
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				RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B
Power Supply	Name			V1		
	Phase			1	1	1
	Frequency		Hz	50	50	50
	Voltage		V	230	230	230
	Voltage range	Minimum	V	-10%		
		Maximum	V	+10%		
Current	Recommended fuses		A	32	32	
Wiring connections	For Power Supply	Remark	See installation manual 4PW34874-1			
	For connection with indoor	Remark	See installation manual 4PW34874-1			
Power Supply Intake				Outdoor unit only		
Notes				See separate drawings for electrical data		

47

2

### 3 Electrical data

Unit combination		Power supply			Comp.		OFM		IFM					
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA		
FCQH100C7VEB	RZQ100C7V1B	50-220 50-230 50-240	Max. 50Hz 264V Min. 50Hz 198V	25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	1.4		
FCQ100C7VEB	RZQ100C7V1B			24.7	24.7	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	0.7		
FCQ50C7VEBx2	RZQ100C7V1B			24.6	24.6	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x2	0.3x2		
FCQ35C7VEBx3	RZQ100C7V1B			24.9	24.9	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x3	0.3x3		
FFQ50BV1Bx2	RZQ100C7V1B			25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x2	0.7x2		
FFQ35BV1Bx3	RZQ100C7V1B			25.8	25.8	32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x3	0.6x3		
FBQ100B7V3B	RZQ100C7V1B			25.0	25.0	32	23.4	23.4	0.07+0.07	0.3+0.3	0.135	1.0		
FBQ50B7V1x2	RZQ100C7V1B			25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.085x2	0.7x2		
FBQ35B7V1x3	RZQ100C7V1B			25.5	25.5	32	23.4	23.4	0.07+0.07	0.3+0.3	0.065x3	0.5x3		
FHQ100BUV1B	RZQ100C7V1B			24.7	24.7	32	23.4	23.4	0.07+0.07	0.3+0.3	0.130	0.7		
FHQ50BUV1Bx2	RZQ100C7V1B			25.2	25.2	32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x2	0.6x2		
FHQ35BUV1Bx3	RZQ100C7V1B			25.8	25.8	32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x3	0.6x3		
FAQ100BUV1B	RZQ100C7V1B			24.4	24.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.049	0.4		
FUQ100BUV1B	RZQ100C7V1B			25.1	25.1	32	23.4	23.4	0.07+0.07	0.3+0.3	0.090	1.1		
FCQH125C7VEB	RZQ125C7V1B			50-220 50-230 50-240	Max. 50Hz 264V Min. 50Hz 198V	25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	1.4
FCQ125C7VEB	RZQ125C7V1B					25.0	25.0	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	1.0
FCQ60C7VEBx2	RZQ125C7V1B					24.8	24.8	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x2	0.4x2
FCQ50C7VEBx3	RZQ125C7V1B					24.9	24.9	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x3	0.3x3
FCQ35C7VEBx4	RZQ125C7V1B					25.2	25.2	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x4	0.3x4
FFQ60BV1Bx2	RZQ125C7V1B					25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x2	0.7x2
FFQ50BV1Bx3	RZQ125C7V1B	26.1	26.1			32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x3	0.7x3		
FFQ35BV1Bx4	RZQ125C7V1B	26.4	26.4			32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x4	0.6x4		
FBQ125B7V3B	RZQ125C7V1B	25.4	25.4			32	23.4	23.4	0.07+0.07	0.3+0.3	0.225	1.4		
FBQ60B7V1x2	RZQ125C7V1B	25.8	25.8			32	23.4	23.4	0.07+0.07	0.3+0.3	0.125x2	0.9x2		
FBQ50B7V1x3	RZQ125C7V1B	26.1	26.1			32	23.4	23.4	0.07+0.07	0.3+0.3	0.085x3	0.7x3		
FBQ35B7V1x4	RZQ125C7V1B	26.0	26.0			32	23.4	23.4	0.07+0.07	0.3+0.3	0.065x4	0.5x4		
FHQ125BUV1B	RZQ125C7V1B	24.7	24.7			32	23.4	23.4	0.07+0.07	0.3+0.3	0.130	0.7		
FHQ60BUV1Bx2	RZQ125C7V1B	25.2	25.2			32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x2	0.6x2		
FHQ50BUV1Bx3	RZQ125C7V1B	25.8	25.8			32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x3	0.6x3		
FHQ35BUV1Bx4	RZQ125C7V1B	26.4	26.4			32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x4	0.6x4		
FUQ125BUV1B	RZQ125C7V1B	25.1	25.1			32	23.4	23.4	0.07+0.07	0.3+0.3	0.090	1.1		
FDQ125B7V3B	RZQ125C7V1B	28.2	28.2			32	23.4	23.4	0.07+0.07	0.3+0.3	0.500	4.2		
FCQH140C7VEB	RZQ140C7V1B	50-220 50-230 50-240	Max. 50Hz 264V Min. 50Hz 198V			25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	1.4
FCQ140C7VEB	RZQ140C7V1B					25.0	25.0	32	23.4	23.4	0.07+0.07	0.3+0.3	0.120	1.0
FCQ71C7VEBx2	RZQ140C7V1B			25.0	25.0	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x2	0.5x2		
FCQ50C7VEBx3	RZQ140C7V1B			24.9	24.9	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x3	0.3x3		
FCQ35C7VEBx4	RZQ140C7V1B			25.2	25.2	32	23.4	23.4	0.07+0.07	0.3+0.3	0.056x4	0.3x4		
FFQ50BV1Bx3	RZQ140C7V1B			26.1	26.1	32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x3	0.7x3		
FFQ35BV1Bx4	RZQ140C7V1B			26.4	26.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.055x4	0.6x4		
FBQ71B7V3Bx2	RZQ140C7V1B			25.8	25.8	32	23.4	23.4	0.07+0.07	0.3+0.3	0.125x2	0.9x2		
FBQ50B7V1x3	RZQ140C7V1B			26.1	26.1	32	23.4	23.4	0.07+0.07	0.3+0.3	0.085x3	0.7x3		
FBQ35B7V1x4	RZQ140C7V1B			26.0	26.0	32	23.4	23.4	0.07+0.07	0.3+0.3	0.065x4	0.5x4		
FHQ71BUV1Bx2	RZQ140C7V1B			25.2	25.2	32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x2	0.6x2		
FHQ50BUV1Bx3	RZQ140C7V1B			25.8	25.8	32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x3	0.6x3		
FHQ35BUV1Bx4	RZQ140C7V1B			26.4	26.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.062x4	0.6x4		
FAQ71BUV1Bx2	RZQ140C7V1B			24.6	24.6	32	23.4	23.4	0.07+0.07	0.3+0.3	0.043x2	0.3x2		
FUQ71BUV1Bx2	RZQ140C7V1B			25.4	25.4	32	23.4	23.4	0.07+0.07	0.3+0.3	0.045x2	0.7x2		

3D057295

#### 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.daikin-europe.com>, select "E-Data Books". Finally, click on the document title of your choice.

## 4 Options

RZQ100-125-140C				
Name of option		Kit name		
		RZQ100C7V1B	RZQ125C7V1B	RZQ140C7V1B
Central drain plug		KKPJ5F180		
Refrigerant branch piping	Twin	KHRQ22M20TA		
	Triple	KHRQ127H		
	Double twin	-	KHRQ22M20TA (3x)	
Demand adapter kit		KRP58M51		

3TW26739-1E

47

4

# 5 Capacity tables

## 5 - 1 Combination table

Possible combinations and standard capacity for twin, triple and double twin application

Outdoor models	Possible indoor combination		
	Simultaneous operation		
	Twin	Triple	Double twin
RZQ100C7V1B	50-50 (KHRQ22M20TA)	35-35-35 (KHRQ127H)	
RZQ125C7V1B	60-60 (KHRQ22M20TA)	50-50-50 (KHRQ127H)	35-35-35-35 (3x KHRQ22M20TA)
RZQ140C7V1B	71-71 (KHRQ22M20TA)	50-50-50 (KHRQ127H)	35-35-35-35 (3x KHRQ22M20TA)

3TW29189-1

### NOTES

- Possible indoor units: FCQH71C, FCQ35-71C, FFQ35-60BV, FHQ35-71B, FBQ35-71B, FAQ71B, FUQ71B
- Individual indoor capacities are not given because the combinations are for simultaneous operation (=indoor units installed in same room).
- When different indoor models are used in combination, designate the infrared remote controller that is equipped with the most functions as the main unit.  
In note 1 are the indoor units mentioned in order of the possible function (most functions are on FCQ, less functions are on FAQ).
- Between brackets are the required Refnet kits mentioned, that are necessary to install the combination.

### EDP room specifications

Possible combinations and standard capacity for twin, triple and double twin application

Outdoor unit	Heat pump (H COP)	P = Pair 2 = Twin 3 = Triple 4 = Double twin	Model name	Hi cassette				Thin cassette						2x2 cassette						Duct (medium ESP)						Ceiling suspended					4way ceiling					Wall mounted			High ESP duct		
				3	4	5	6	1.5	2	2.5	3	4	5	6	1.5	2	2.5	1.5	2	2.5	3	4	5	6	1.5	2	2.5	3	4	5	3	4	5	3	4	5					
				FCQH71C7VEB	FCQH100C7VEB	FCQH125C7VEB	FCQH140C7VEB	FCQ35C7VEB	FCQ50C7VEB	FCQ60C7VEB	FCQ71C7VEB	FCQ100C7VEB	FCQ125C7VEB	FCQ140C7VEB	FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B	FBQ35B8V1	FBQ50B8V1	FBQ60B8V1	FBQ71B8V3B	FBQ100B8V3B	FBQ125B8V3B	FBQ140B8V3B	FHQ35B8V1B	FHQ50B8V1B	FHQ60B8V1B	FHQ71B8V1B	FHQ100B8V1B	FHQ125B8V1B	FHQ140B8V1B	FUQ71B8V1B	FUQ100B8V1B	FUQ125B8V1B	FAQ71B8V1B	FAQ100B8V1B	FAQ125B8V3B				
	4	<b>RZQ100C7V1B</b>	2		P	4	3		2			P	4	3		4	3		2			P	4	3		2			2			2									
	5	<b>RZQ125C7V1B</b>	2		P	4	3		2			P	4	3		4	3		2			P	4	3		2			2			2									
	6	<b>RZQ140C7V1B</b>	2																																						

3TW29189-2

### NOTES

- Individual indoor capacities are not given because the combinations are for simultaneous operation (=indoor units installed in same room).
- When different indoor models are used in combination, designate the infrared remote controller that is equipped with the most functions as the main unit.  
In note 1 are the indoor units mentioned in order of the possible function (most functions are on FCQ, less functions are on FAQ).
- Refnet kits that are necessary to install the combinations:  
Twin: **KHRQ22M20TA**  
Triple: **KHRQ127H**  
Double twin: **KHRQ22M20TA**

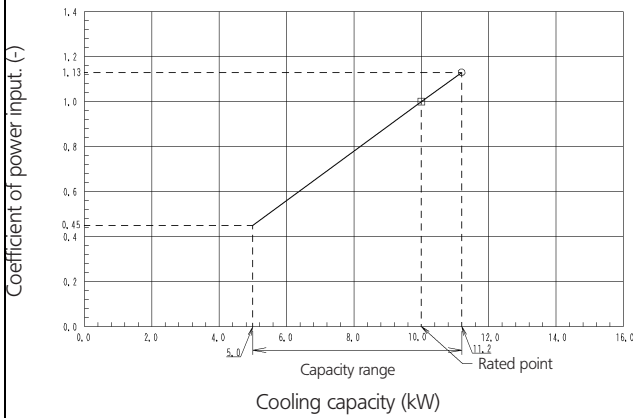


# 5 Capacity tables

## 5 - 2 Cooling capacity tables

### RZQ100C (Pair + Twin/triple)

#### 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	9.12	6.19	0.76	9.10	6.25	0.89	9.38	6.51	0.99	9.00	6.32	1.09
18.0	25	10.5	6.78	0.83	10.1	6.65	0.91	9.79	6.49	1.00	9.40	6.30	1.10
19.0	27	10.7	6.76	0.84	10.4	6.63	0.91	10.0	6.48	1.00	9.60	6.29	1.10
19.5	27	10.8	6.75	0.84	10.5	6.62	0.91	10.1	6.47	1.00	9.71	6.28	1.10
22.0	30	11.3	6.66	0.85	11.0	6.54	0.92	10.6	6.39	1.01	10.2	6.21	1.11
24.0	32	11.8	6.57	0.85	11.4	6.45	0.93	11.1	6.30	1.02	10.6	6.13	1.12

3D057297

#### NOTES

- 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 : 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.

#### SYMBOLS

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

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

Pair

Model	FCQH100C	FCQ100C	FBQ100	FHQ100	FAQ100	FUQ100
AFR	32.5	23.5	27	24	23	29
(BF)	(0.17)	(0.16)	(0.20)	(0.14)	(0.10)	(0.07)

Triple

Model	FCQ35Cx3	FFQ35x3	FBQ35x3	FHQ35x3
AFR	14x3	10x3	11.5x3	13x3
(BF)	(0.28x3)	(0.25x3)	(0.15x3)	(0.2x3)

Twin

Model	FCQ50Cx2	FFQ50x2	FBQ50x2	FHQ50x2
AFR	12.5x2	12x2	14x2	13x2
(BF)	(0.21x2)	(0.16x2)	(0.15x2)	(0.1x2)

- Rated power input of each model is tabulated below.

Pair

Model	FCQH100C	FCQ100C	FBQ100	FHQ100	FAQ100	FUQ100
Cooling	2.66	2.77	3.00	3.30	3.45	3.12
Heating	2.55	3.02	2.99	3.49	3.27	3.37

Triple

Model	FCQ35Cx3	FFQ35x3	FBQ35x3	FHQ35x3
Cooling	2.92	2.93	3.16	3.48
Heating	3.18	3.20	3.15	3.67

Twin

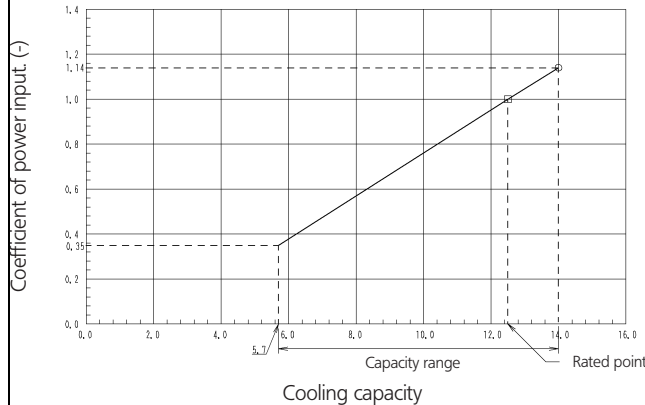
Model	FCQ50Cx2	FFQ50x2	FBQ50x2	FHQ50x2
Cooling	2.92	2.93	3.16	3.48
Heating	3.18	3.20	3.15	3.67

# 5 Capacity tables

## 5 - 2 Cooling capacity tables

### RZQ125C (Pair + Twin / triple / double twin)

#### 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	11.4	7.73	0.76	11.4	7.81	0.89	11.7	8.14	0.99	11.3	7.90	1.09
18.0	25	13.1	8.48	0.83	12.7	8.32	0.91	12.2	8.12	1.00	11.8	7.88	1.10
19.0	27	13.3	8.45	0.84	12.9	8.29	0.91	12.5	8.09	1.00	12.0	7.86	1.10
19.5	27	13.5	8.44	0.84	13.1	8.28	0.91	12.6	8.08	1.00	12.1	7.85	1.10
22.0	30	14.2	8.33	0.85	13.8	8.18	0.92	13.3	7.99	1.01	12.8	7.76	1.11
24.0	32	14.7	8.21	0.85	14.3	8.06	0.93	13.8	7.88	1.02	13.3	7.67	1.12

3D057298

#### NOTES

- 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 (m<sup>3</sup>/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 : 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.

#### SYMBOLS

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

#### Caution: TC and SHC are shown by kW

##### Triple

Model	FCQ50Cx3	FFQ50x3	FBQ35x3	FHQ50x3
AFR	12.5x3	12x3	14x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.15x3)	(0.1x3)

##### Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
AFR	10.5x4	10x4	11.5x4	13x4
(BF)	(0.28x4)	(0.25x4)	(0.15x4)	(0.2x4)

##### Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

##### Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

#### Twin

Model	FCQ60C2	FFQ60x2	FBQ60x2	FHQ60x2
AFR	13.5x2	15x2	19x2	17x2
(BF)	(0.21x2)	(0.11x2)	(0.11x2)	(0.2x2)

#### 10. Rated power input of each model is tabulated below.

Model	FCQH125C	FCQ125C	FBQ125	FHQ125	FUQ125	FDQ125
Cooling	3.70	3.88	3.97	4.45	4.15	4.15
Heating	3.57	3.95	3.98	4.36	4.33	3.67

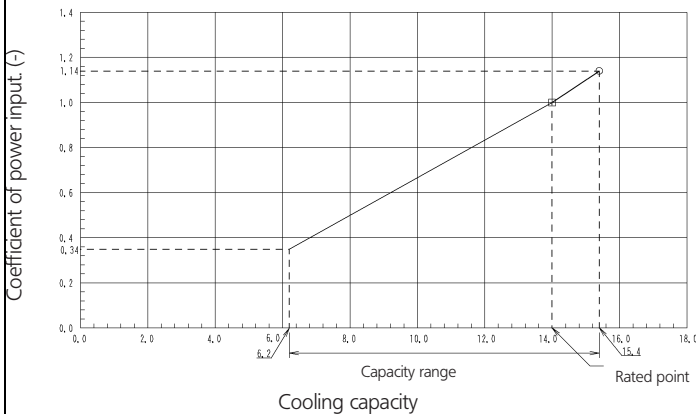
Model	FCQ60C2	FFQ60x2	FBQ60x2	FHQ60x2
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

# 5 Capacity tables

## 5 - 2 Cooling capacity tables

### RZQ140C (Pair + Twin / triple / double twin)

#### 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	12.8	8.66	0.76	12.7	8.74	0.89	13.1	9.12	0.99	12.6	8.84	1.09
18.0	25	14.6	9.50	0.83	14.2	9.31	0.91	13.7	9.09	1.00	13.2	8.82	1.10
19.0	27	15.0	9.47	0.84	14.5	9.29	0.91	14.0	9.07	1.00	13.4	8.80	1.10
19.5	27	15.1	9.45	0.84	14.7	9.27	0.91	14.1	9.05	1.00	13.6	8.79	1.10
22.0	30	15.9	9.33	0.85	15.4	9.16	0.92	14.9	8.95	1.01	14.3	8.69	1.11
24.0	32	16.5	9.20	0.85	16.0	9.03	0.93	15.5	8.83	1.02	14.9	8.59	1.12

3D057299

#### NOTES

- 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 : 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	FCQH140V	FCQ140C
AFR	32.5	27.5
(BF)	(0.20)	(0.22)

Twin

Model	FCQ71Cx2	FBQ71x2	FHQ71x2	FUQ71x2	FAQ71x2
AFR	15.5x2	19x2	17x2	19x2	19x2
(BF)	(0.19x2)	(0.11x2)	(0.1x2)	(0.07x2)	(0.08x2)

- Rated power input of each model is tabulated below.

Pair

Model	FCQH140C	FCQ140C
Cooling	4.64	5.36
Heating	4.43	4.98

Twin

Model	FCQ71Cx2	FBQ71x2	FHQ71x2	FUQ71x2	FAQ71x2
Cooling	5.09	4.95	4.99	4.99	4.92
Heating	4.98	5.06	5.69	5.05	5.22

#### SYMBOLS

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

#### Caution: TC and SHC are shown by kW

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
AFR	12.5x3	12x3	14x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.15x3)	(0.1x3)

Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
AFR	10.5x4	10x4	11.5x4	13x4
(BF)	(0.28x4)	(0.25x4)	(0.15x4)	(0.2x4)

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
Cooling	5.09	4.86	4.95	4.99
Heating	4.98	5.11	5.06	5.69

Double twin

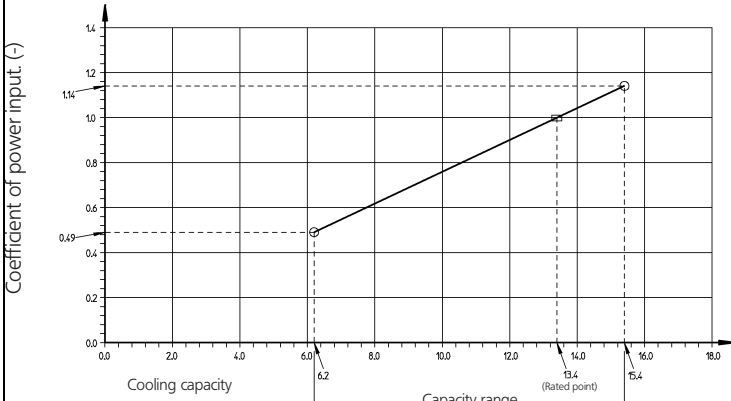
Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
Cooling	5.09	4.86	4.95	4.99
Heating	4.98	5.11	5.06	5.69

# 5 Capacity tables

## 5 - 2 Cooling capacity tables

### RZQ140C (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	13.5	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 (m<sup>3</sup>/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.

Model	FBQ140
AFR	35
(BF)	(0.14)

- Rated power input of each model is tabulated below.

Outdoor	RZQ140C7
Indoor	RZQ140C7
Cooling	4.76kW
Heating	4.82kW

#### SYMBOLS

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

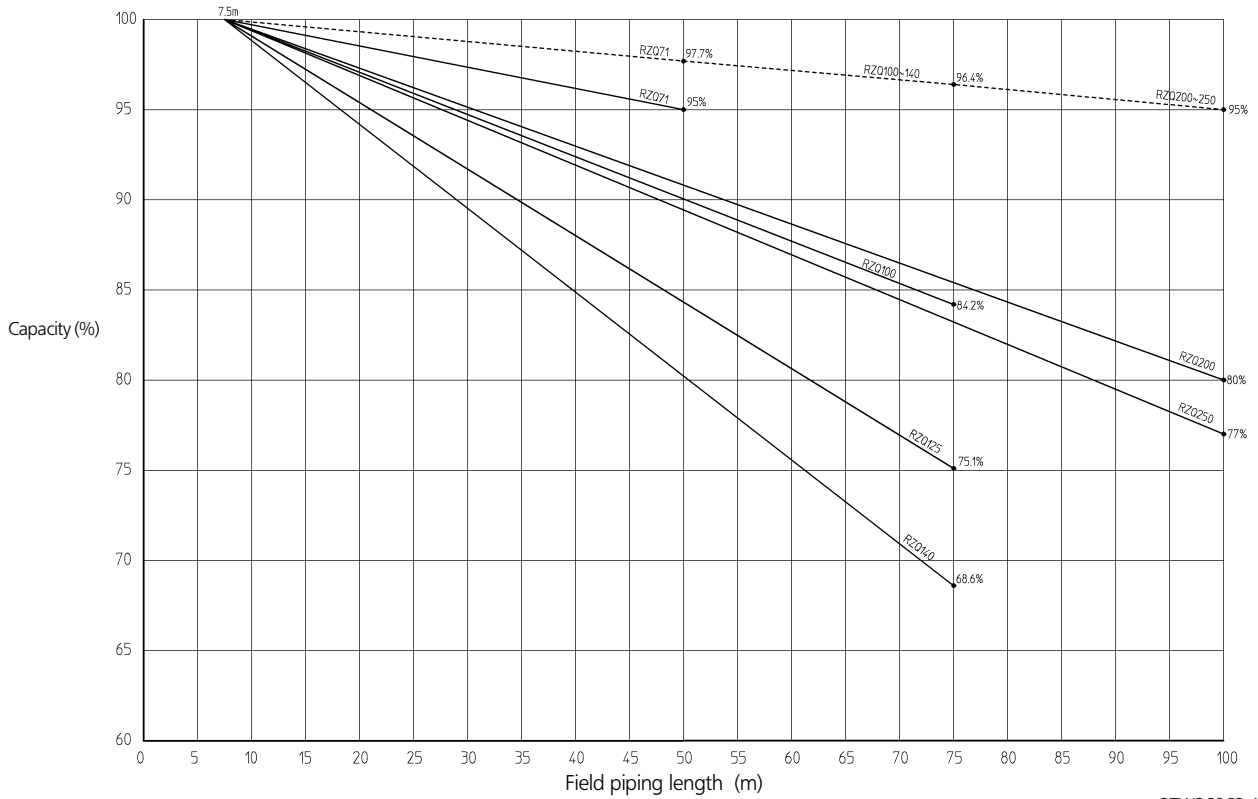
**Caution:**  
TC and SHC are shown by kW

# 5 Capacity tables

## 5 - 2 Cooling capacity tables

RZQ-B/C

Capacity in function of field piping length for non-inverter



3TW26062-1

— Cooling  
 - - - Heating

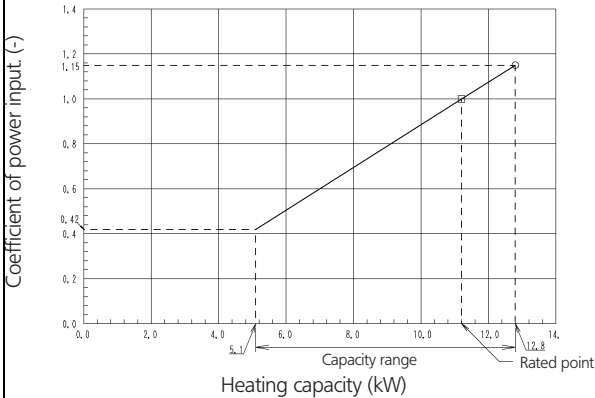
47  
5

# 5 Capacity tables

## 5 - 3 Heating capacity tables

### RZQ100C (Pair + Twin/triple)

#### 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	7.16	1.01	7.91	1.07	8.66	1.12	9.41	1.17	11.2	0.92	12.1	0.97
18.0	7.15	1.05	7.90	1.11	8.65	1.16	9.39	1.22	11.2	0.96	12.1	1.01
20.0	7.15	1.09	7.89	1.15	8.64	1.21	9.38	1.27	11.2	1.00	12.1	1.05
21.0	7.14	1.12	7.89	1.17	8.63	1.23	9.38	1.29	11.2	1.02	12.1	1.07
22.0	7.14	1.14	7.88	1.20	8.63	1.26	9.37	1.32	11.2	1.04	12.0	1.09
24.0	7.13	1.18	7.87	1.24	8.62	1.30	9.36	1.36	11.2	1.08	12.0	1.13

3D057297

#### NOTES

- 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 (m<sup>3</sup>/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 : 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	FCQH100C	FCQ100C	FBQ100	FHQ100	FAQ100	FUQ100
AFR	32.5	23.5	27	24	23	29
(BF)	(0.17)	(0.16)	(0.20)	(0.14)	(0.10)	(0.07)

Twin

Model	FCQ50Cx2	FFQ50x2	FBQ50x2	FHQ50x2
AFR	12.5x2	12x2	14x2	13x2
(BF)	(0.21x2)	(0.16x2)	(0.15x2)	(0.1x2)

- Rated power input of each model is tabulated below.

Pair

Model	FCQH100C	FCQ100C	FBQ100	FHQ100	FAQ100	FUQ100
Cooling	2.66	2.77	3.00	3.30	3.45	3.12
Heating	2.55	3.02	2.99	3.49	3.27	3.37

Twin

Model	FCQ50Cx2	FFQ50x2	FBQ50x2	FHQ50x2
Cooling	2.92	2.93	3.16	3.48
Heating	3.18	3.20	3.15	3.67

#### SYMBOLS

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

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

Triple

Model	FCQ35Cx3	FFQ35x3	FBQ35x3	FHQ35x3
AFR	14x3	10x3	11.5x3	13x3
(BF)	(0.28x3)	(0.25x3)	(0.15x3)	(0.2x3)

Triple

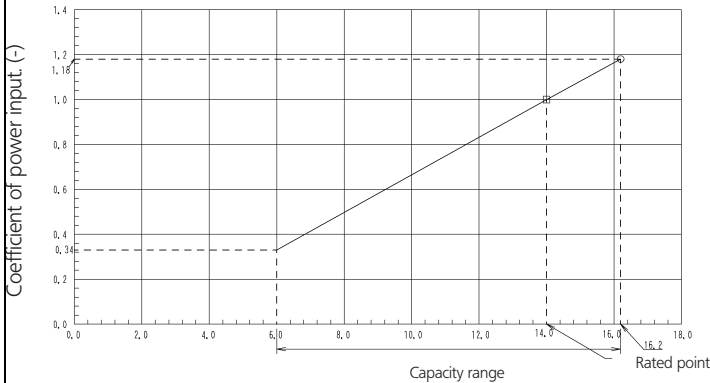
Model	FCQ35Cx3	FFQ35x3	FBQ35x3	FHQ35x3
Cooling	2.92	2.93	3.16	3.48
Heating	3.18	3.20	3.15	3.67

# 5 Capacity tables

## 5 - 3 Heating capacity tables

### RZQ125C (Pair + Twin / triple / double twin)

#### Heating



#### Heating capacity 230V [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	8.83	1.05	9.76	1.11	10.7	1.16	11.6	1.22	14.0	0.92	15.1	0.97
18.0	8.82	1.10	9.74	1.15	10.7	1.21	11.6	1.27	14.0	0.96	15.1	1.01
20.0	8.81	1.14	9.73	1.20	10.7	1.26	11.6	1.32	14.0	1.00	15.1	1.05
21.0	8.81	1.16	9.73	1.22	10.6	1.28	11.6	1.34	14.0	1.02	15.1	1.07
22.0	8.80	1.18	9.72	1.24	10.6	1.31	11.6	1.37	14.0	1.04	15.1	1.09
24.0	8.79	1.22	9.71	1.29	10.6	1.35	11.5	1.42	14.0	1.08	15.0	1.13

3D057298

#### NOTES

- 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 : 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	FCQH125C	FCQ125C	FBQ125	FHQ125	FUQ125	FDQ125
AFR	32.5	27.5	35	30	32	45
(BF)	(0.19)	(0.19)	(0.14)	(0.13)	(0.07)	(0.25)

Twin

Model	FCQ60Cx2	FFQ60x2	FBQ60x2	FHQ60x2
AFR	13.5x2	15x2	19x2	17x2
(BF)	(0.21x2)	(0.11x2)	(0.11x2)	(0.2x2)

- Rated power input of each model is tabulated below.

Pair

Model	FCQH125C	FCQ125C	FBQ125	FHQ125	FUQ125	FDQ125
Cooling	3.70	3.88	3.97	4.45	4.15	4.15
Heating	3.57	3.95	3.98	4.36	4.33	3.67

Twin

Model	FCQ60Cx2	FFQ60x2	FBQ60x2	FHQ60x2
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

#### SYMBOLS

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

#### Caution: TC and SHC are shown by kW

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ35x3	FHQ50x3
AFR	12.5x3	12x3	14x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.15x3)	(0.1x3)

Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
AFR	10.5x4	10x4	11.5x4	13x4
(BF)	(0.28x4)	(0.25x4)	(0.15x4)	(0.2x4)

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

Double twin

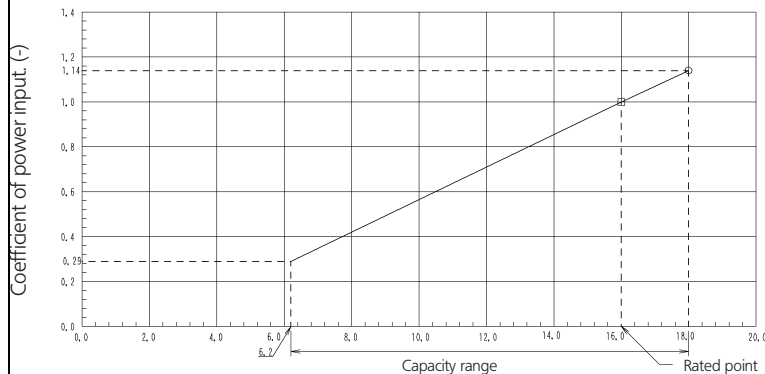
Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
Cooling	4.08	4.12	4.18	4.45
Heating	4.16	4.25	4.19	4.59

# 5 Capacity tables

## 5 - 3 Heating capacity tables

### RZQ140C (Pair + Twin / triple / double twin)

#### Heating



#### Heating capacity 400V [50Hz]

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	9.82	1.05	9.80	1.11	11.9	1.16	12.9	1.22	16.0	0.92	17.3	0.97
18.0	9.80	1.10	10.8	1.15	11.8	1.21	12.9	1.27	16.0	0.96	17.2	1.01
20.0	9.79	1.14	10.8	1.20	11.8	1.26	12.9	1.32	16.0	1.00	17.2	1.05
21.0	9.79	1.16	10.8	1.22	11.8	1.28	12.8	1.34	16.0	1.02	17.2	1.07
22.0	9.78	1.18	10.8	1.24	11.8	1.31	12.8	1.37	16.0	1.04	17.2	1.09
24.0	9.77	1.22	10.8	1.29	11.8	1.35	12.8	1.42	16.0	1.08	17.2	1.13

3D057299

#### NOTES

- 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 (m<sup>3</sup>/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 : 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.

#### SYMBOLS

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

#### Caution: TC and SHC are shown by kW

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
AFR	12.5x3	12x3	14x3	13x3
(BF)	(0.21x3)	(0.16x3)	(0.15x3)	(0.1x3)

Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
AFR	10.5x4	10x4	11.5x4	13x4
(BF)	(0.28x4)	(0.25x4)	(0.15x4)	(0.2x4)

Triple

Model	FCQ50Cx3	FFQ50x3	FBQ50x3	FHQ50x3
Cooling	5.09	4.86	4.95	4.99
Heating	4.98	5.11	5.06	5.69

Double twin

Model	FCQ35Cx4	FFQ35x4	FBQ35x4	FHQ35x4
Cooling	5.09	4.86	4.95	4.99
Heating	4.98	5.11	5.06	5.69

- Rated power input of each model is tabulated below.

Pair

Model	FCQH140C	FCQ140C
Cooling	4.64	5.36
Heating	4.43	4.98

Twin

Model	FCQ71Cx2	FBQ71x2	FHQ71x2	FUQ71x2	FAQ71x2
Cooling	5.09	4.95	4.99	4.99	4.92
Heating	4.98	5.06	5.69	5.05	5.22

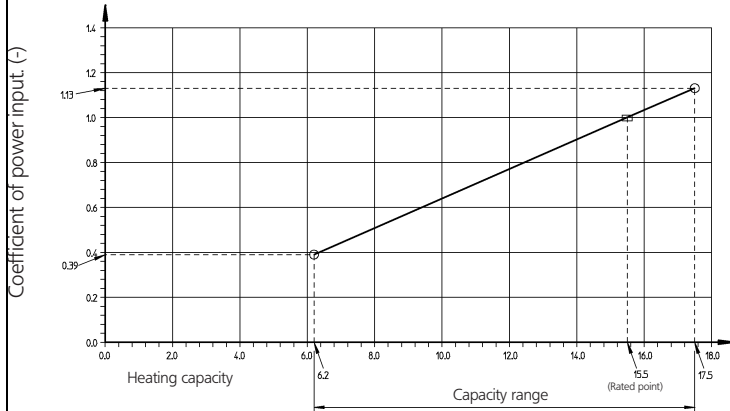


# 5 Capacity tables

## 5 - 3 Heating capacity tables

### RZQ140C (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		

3TW28149-1

#### 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 (m<sup>3</sup>/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

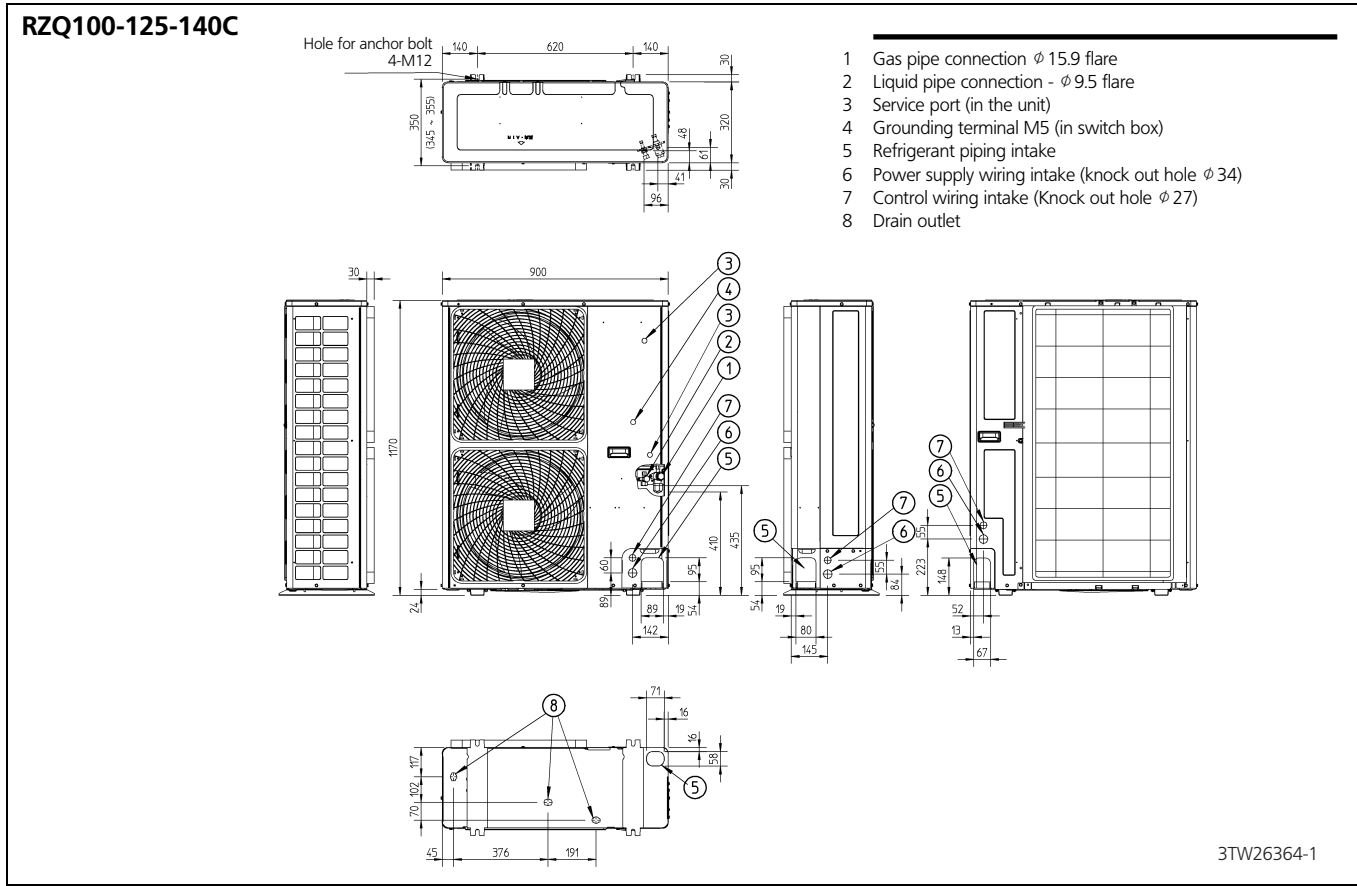
#### SYMBOLS

AFR:	Air flow rate	(m <sup>3</sup> /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

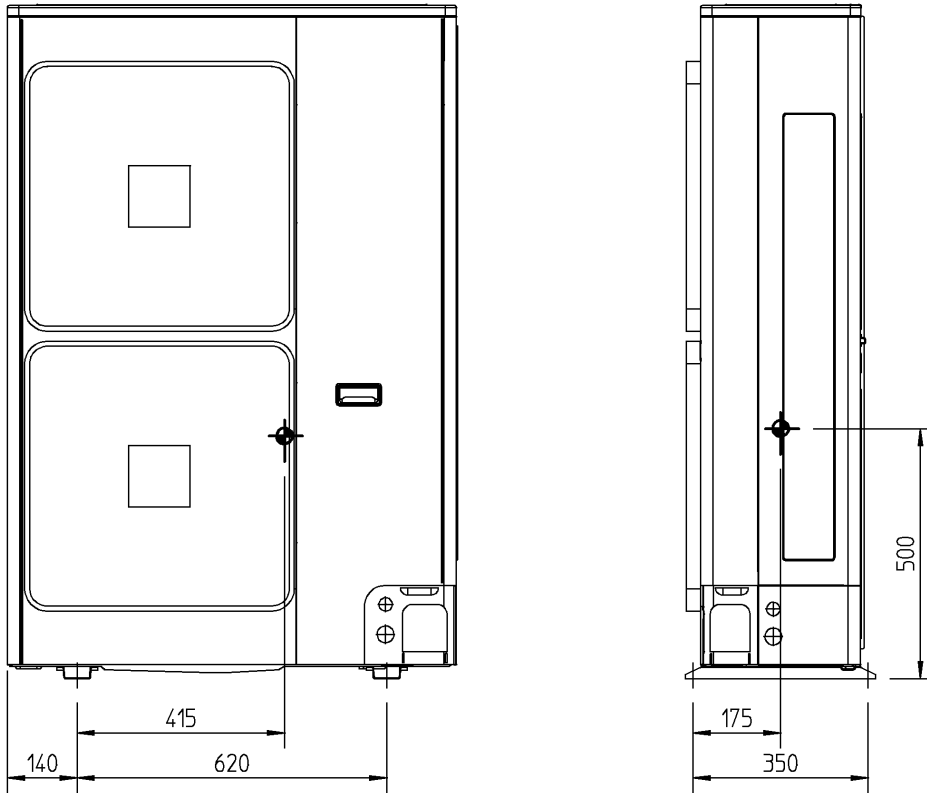
## 6 - 1 Dimensional drawing



## 6 Dimensional drawing & centre of gravity

### 6 - 2 Centre of gravity

RZQ100-125-140C

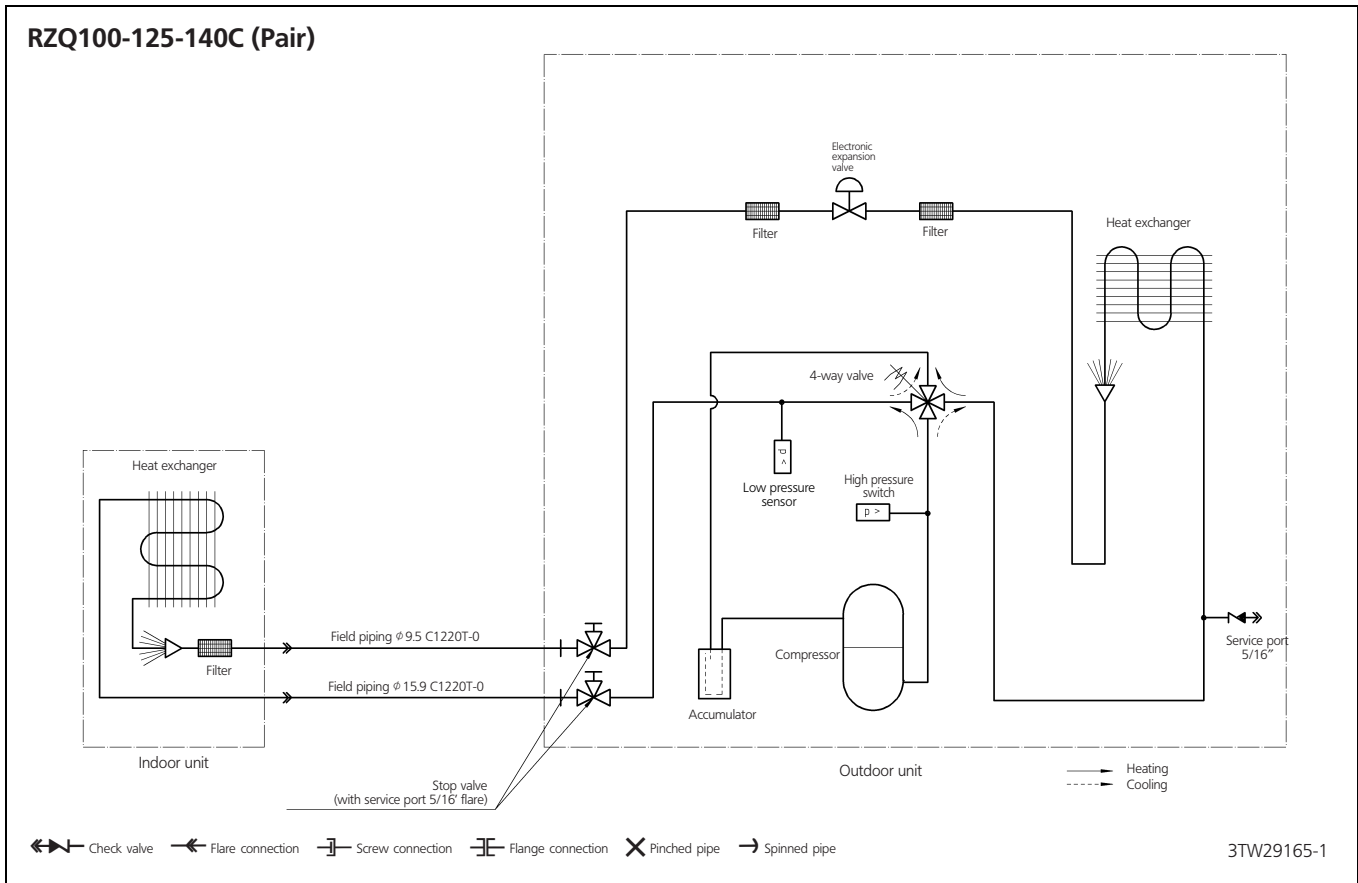


4TW29169-4

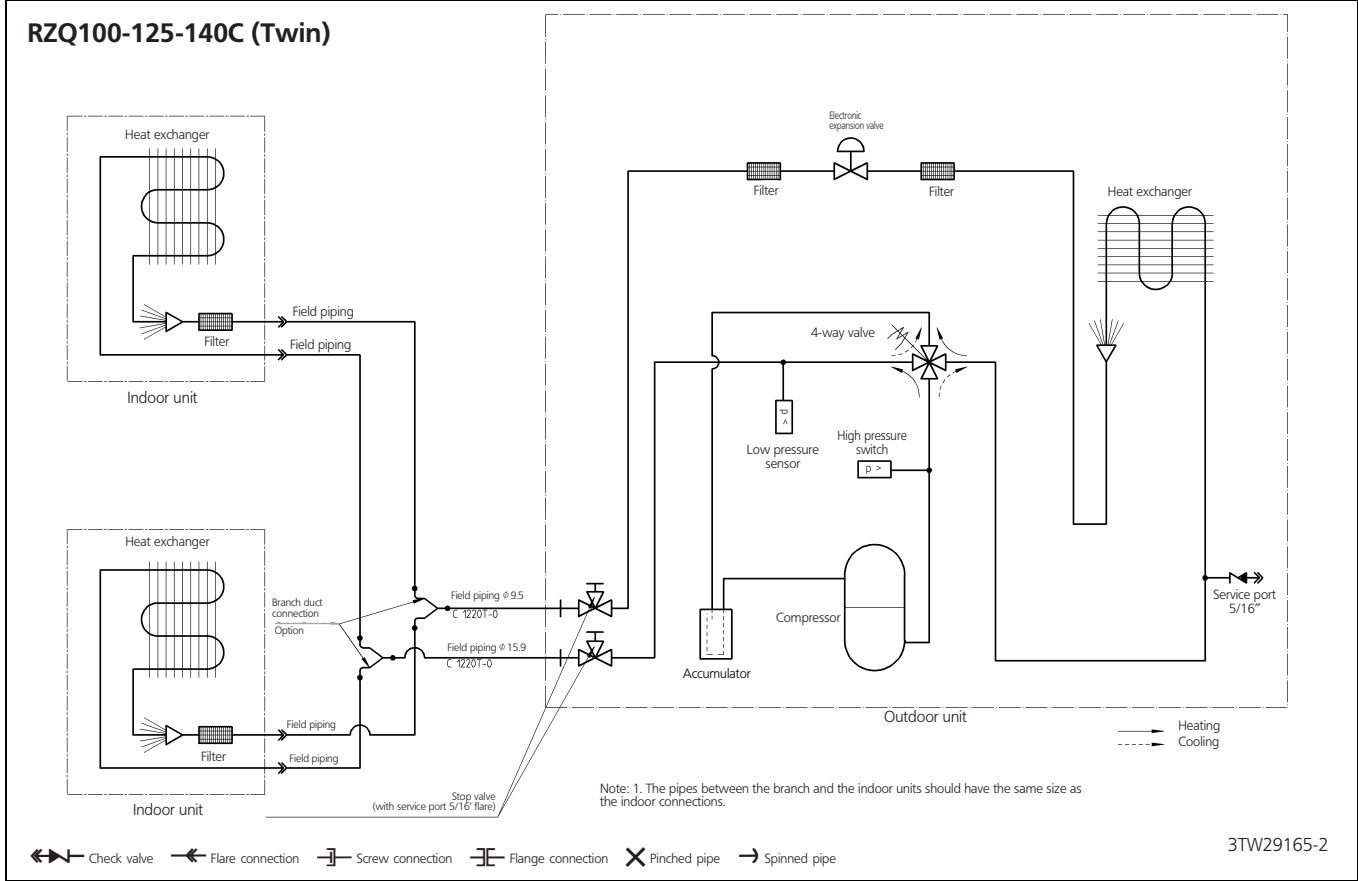
47

6

# 7 Piping diagram



47  
7



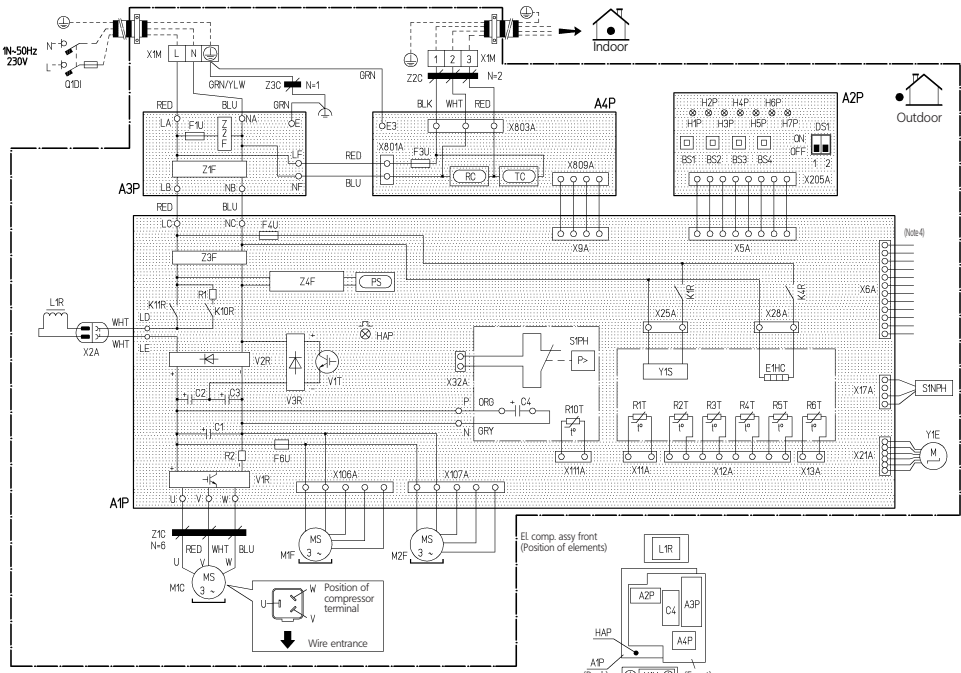


# 8 Wiring diagram

## 8 - 1 Wiring diagram

### RZQ100-125-140C

- A1P : Printed circuit board (Main)
- A2P : Printed circuit board (INV.)
- A3P : Printed circuit board (Noise filter)
- A4P : Printed circuit board
- BS1-BS4 : Push button switch
- C1-C4 : Capacitor
- DS1 : Dip switch
- E1HC : Crankcase heater
- F1U/F3U/F4U : Fuse (T 6.3A/250V)
- F6U : Fuse (T 5.0A/250V)
- H1P-H7P : Light emitting diode (service monitor orange)
- [H2P] : Prepare test — Flickering
- HAP : Malfunction detection— Light up  
Light emitting diode (service monitor green)
- (A1P) : Magnetic relay (Y1S)
- K1R : Magnetic relay (E1HC)
- K10R : Magnetic relay
- K11R : Magnetic relay
- L1R : Reactor
- M1C : Motor (compressor)
- M1F : Motor (fan) (upper)
- M2F : Motor (fan) (lower)
- PS : Switching power supply
- Q1DI : Field earth leak detector (30mA)
- R1 : Resistor
- R2 : Resistor
- R1T : Thermistor (Air)
- R2T : Thermistor (Discharge)
- R3T : Thermistor (Suction)
- R4T : Thermistor (Heat exchanger)
- R5T : Thermistor (heat exchanger middle)
- R6T : Thermistor (Liquid)
- RC : Signal receiver circuit
- R10T : Thermistor (fin)
- S1NPH : Pressure sensor(High)
- S1PH : Pressure switch (High)
- T1C : Signal transmission circuit
- V1R : Power module
- V2R/V3R : Diode module
- V1T : IGBT
- X1M : Terminal strip (Power supply)
- Y1E : Electronic expansion valve
- Y1S : Solenoid valve (4 way valve)
- Z1C-Z3C : Noise filter (ferrite core)
- Z1F-Z4F : Noise filter



Notes:

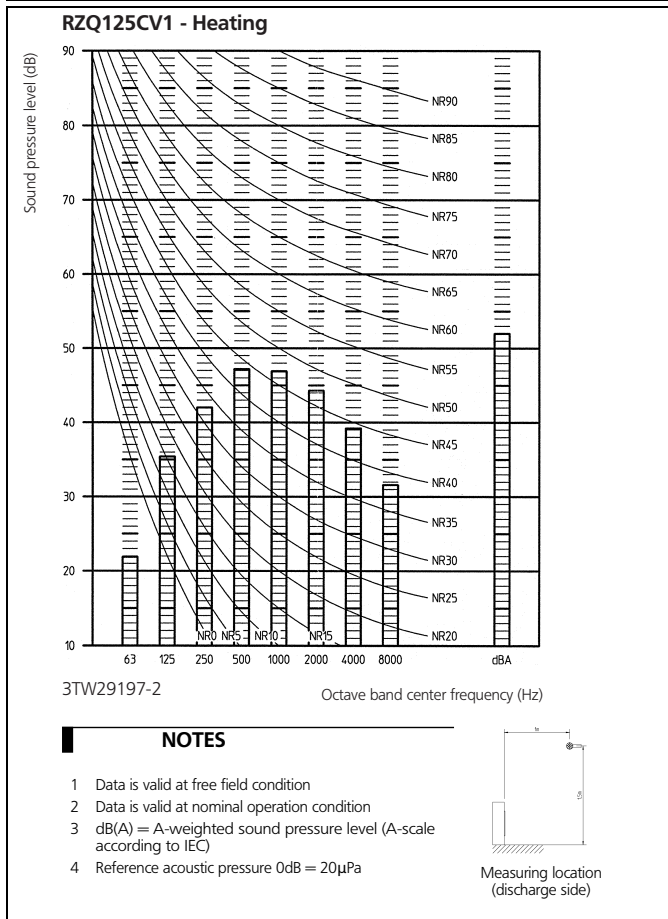
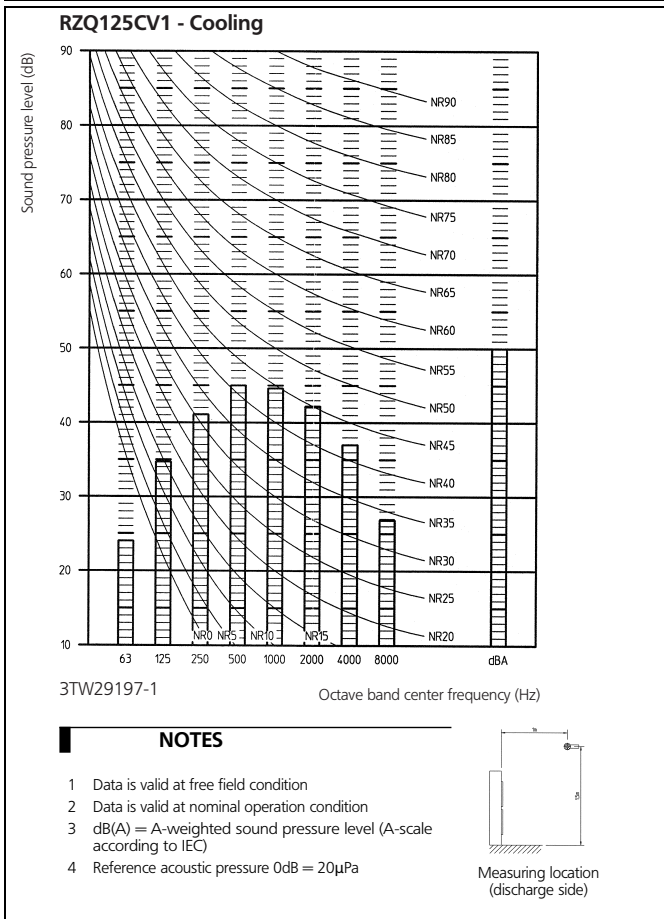
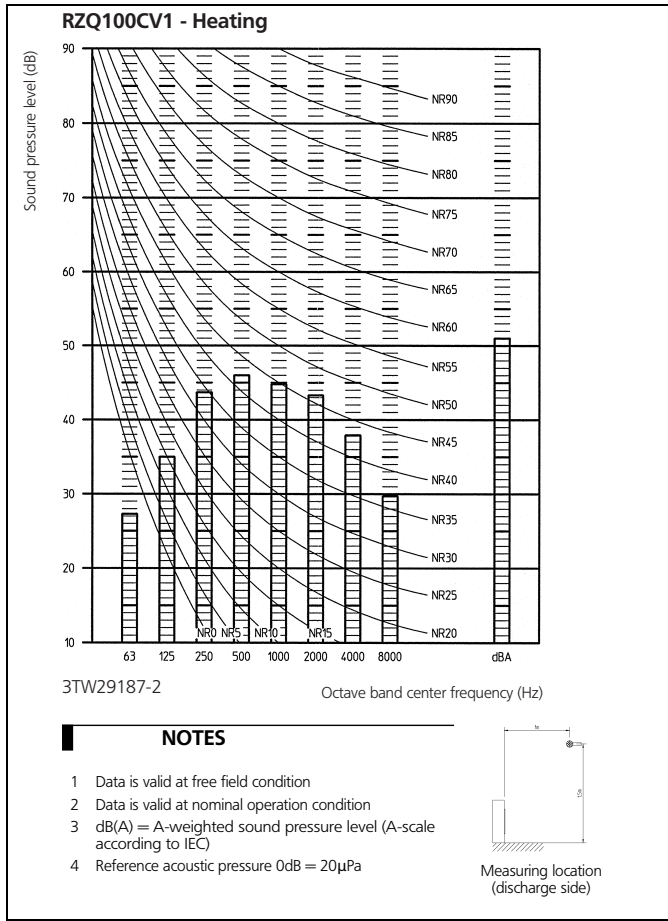
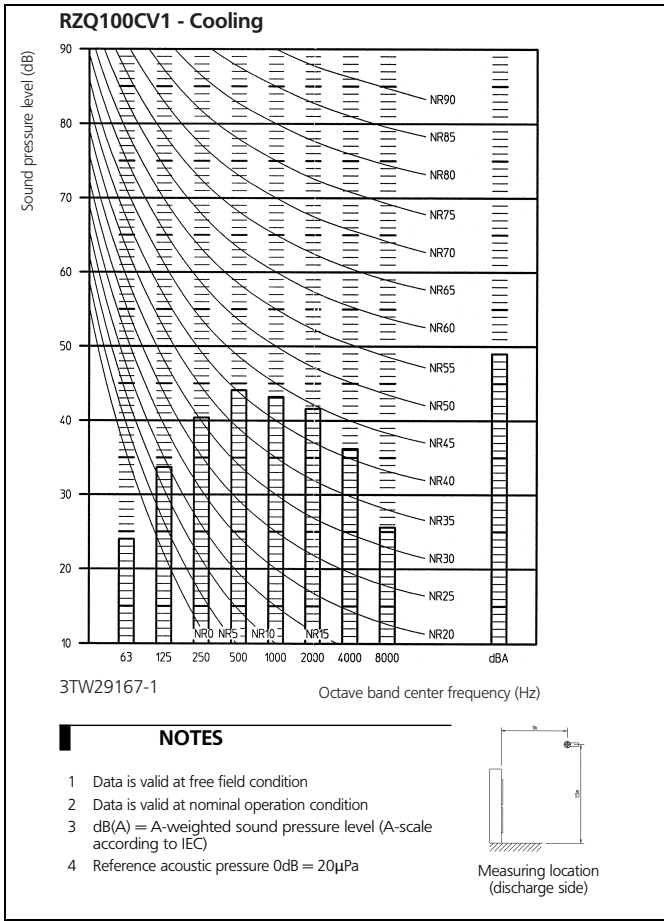
1. This wiring diagram only applies to the outdoor unit
2. L: Live, N: Neutral, : Field wiring
3. : Terminal strip : Connector : Connection
- : Protective earth (screw) : Relay connector
- : Noiseless earth : Terminal
4. Refer to the optional manual, for connection wiring to X6A
5. Refer to the 'wiring diagram sticker' (on back of front plate) on how to use BS1-BS4 and DS1 switch
6. Do not operate the unit by short-circuiting protection device S1PH
7. Colours: WHT: White / RED: Red / BLU: Blue / BRN: Brown / GRN: Green / YLW: Yellow / ORG: Orange / BLK: Black
8. 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.

2TW29166-1

# 9 Sound data

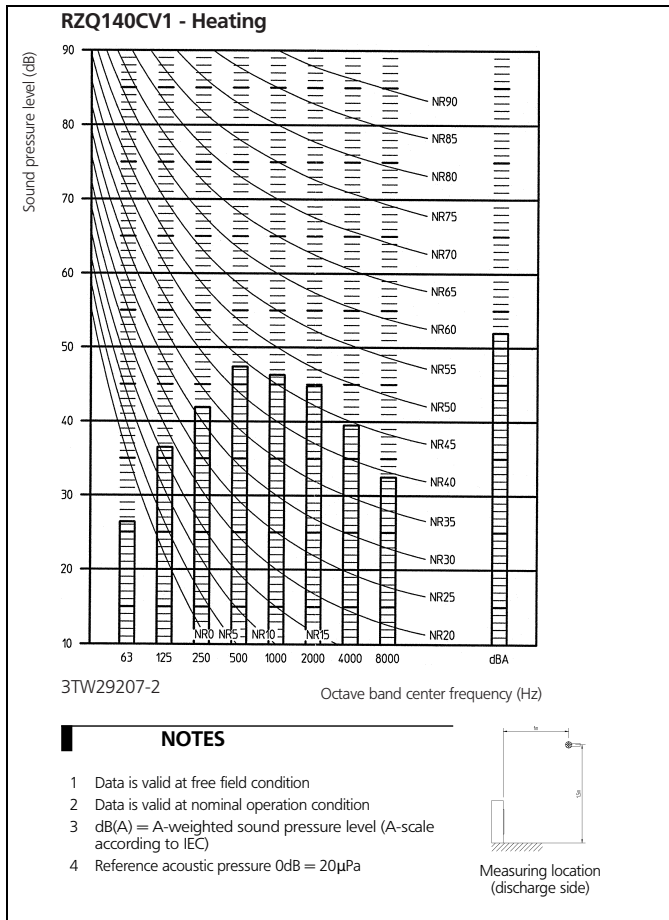
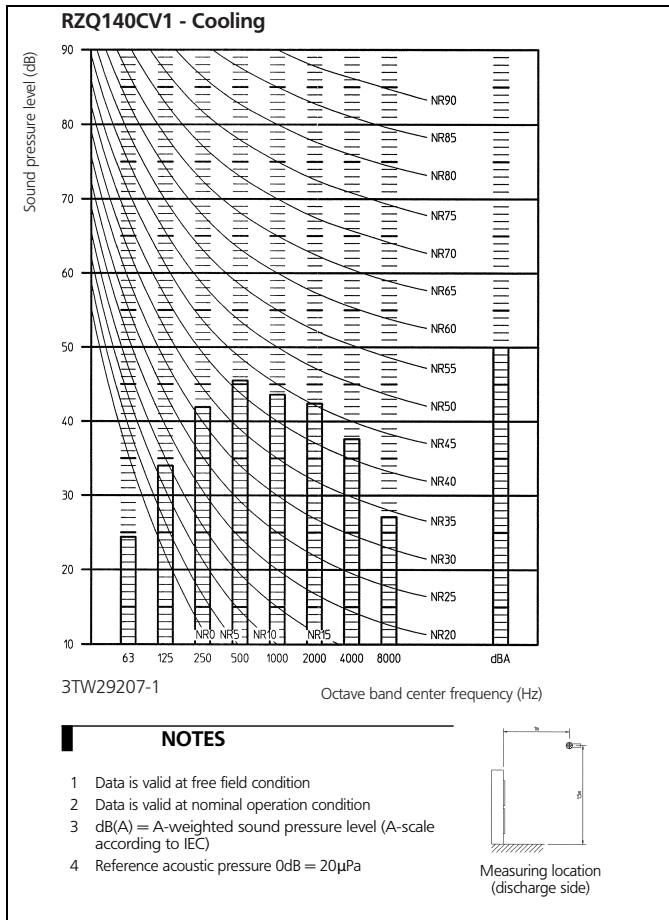
## 9 - 1 Sound pressure spectrum

47  
9



# 9 Sound data

## 9 - 1 Sound pressure spectrum

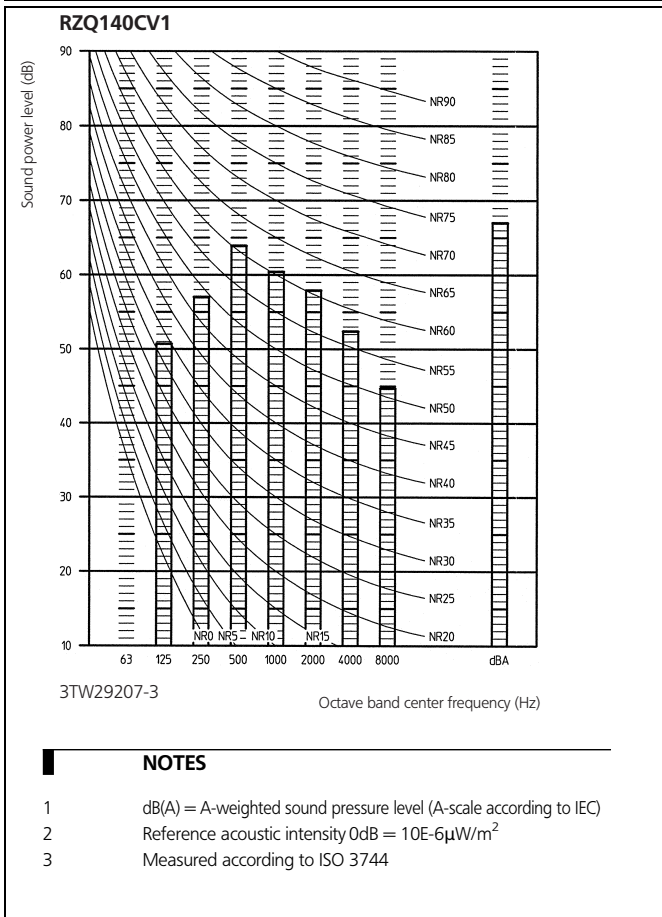
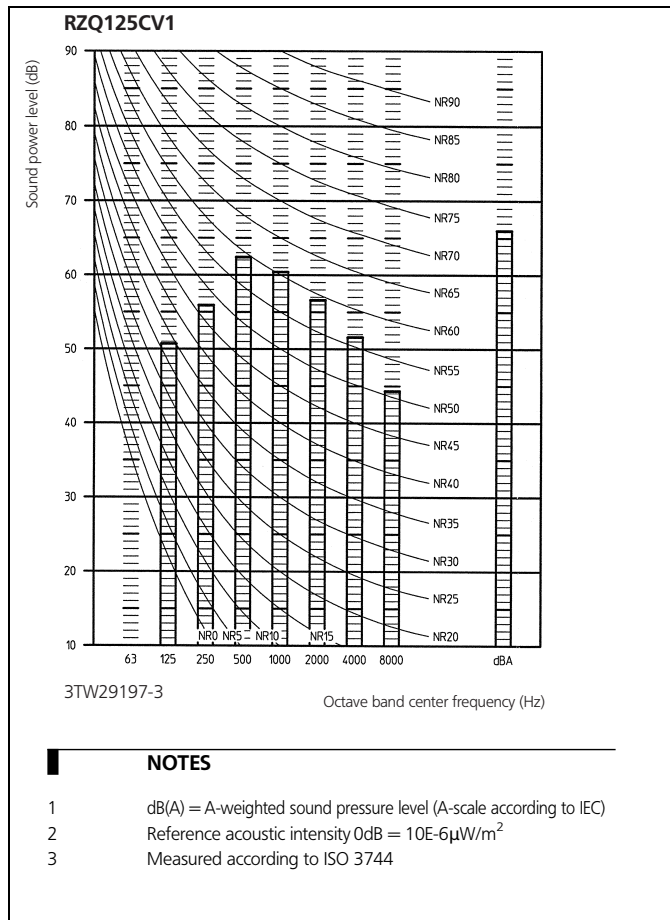
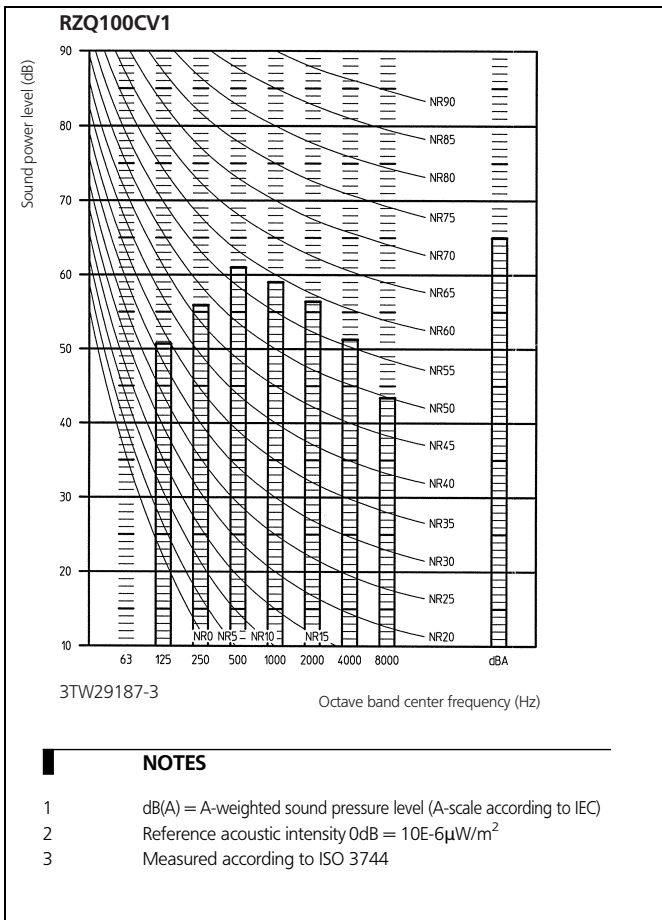




# 9 Sound data

## 9 - 2 Sound power spectrum

47  
9



# 10 Installation

## 10 - 1 Installation method

### RZQ100-125-140C

#### A. Non stacked installation

		↖	↗	↘	↙	↕	A	B1	B2	C	D1	D2	E	L1/L2
	✓						≥100	≥100		≥100				
	✓						≥150	≥150		≥150		≤500	≥1000	
	✓	✓	✓	✓	✓							≤500	≥1000	
	✓	✓							≤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	≥1000	0<L2≤1/2H
	✓	✓					L1<L2	L1≤H	≥100(200)			≥500	≥1000	1/2H<L2≤H
	✓	✓					L2<L1	L2≤H	≥200(300)			≥1000	≥1000	1/2H<L2≤H
	✓						≥200	≥200(300)		≥1000				
	✓						≥200	≥200(300)		≥1000		≤500	≥1000	
	✓	✓	✓	✓	✓							≥1000	≥1000	
	✓	✓							≤500				≥1000	
	✓	✓					L1<L2	≥200(300)			≥1000			
	✓	✓					L2<L1	≥150(250)			≥1000			0<L2≤1/2H
	✓	✓					L1<L2	L1≤H	≥200(300)	≤500		≥1000	≥1000	0<L1≤1/2H
	✓	✓					L2<L1	L2≤H	≥150(250)			≥1000	≥1000	1/2H<L2≤H
	✓	✓					L1<L2	L1≤H	≥200(300)	≤500		≥1250	≥1000	1/2H<L1≤H
	✓	✓					L2<L1	L2≤H	≥200(300)			≥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.

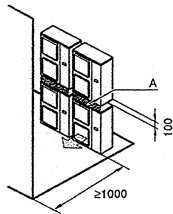
In these cases, only 2 units can be installed.

This situation is not allowed.

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

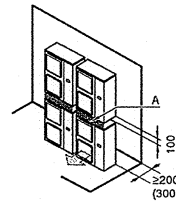
#### B. Stacked installation

##### 1. Obstacles exist in front of the outlet side



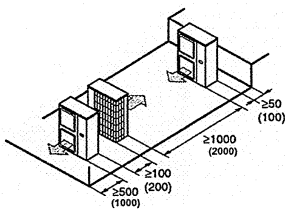
Do not stack more than one unit.  
About 100mm is required as the dimension for laying the upper outdoor unit's drain pipe.  
Get the portion A sealed so that air from the outlet does not bypass.

##### 2. Obstacles exist in front of the air inlet

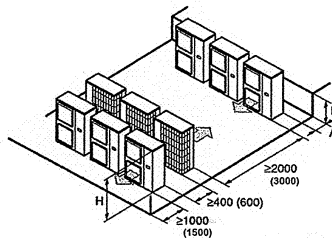


#### C. Multiple-row installation

##### 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	

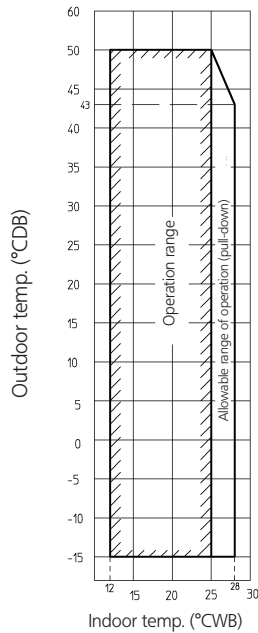
3TW26739-4

# 11 Operation range

47  
11

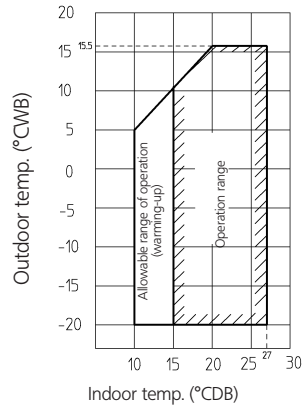
## RZQ100-125-140C

### Cooling



Model name
RZQ100C7V1B
RZQ125C7V1B
RZQ140C7V1B

### Heating



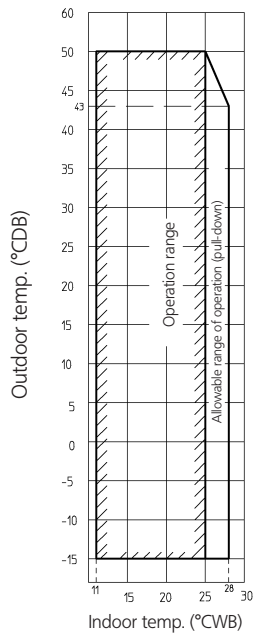
**Notes:**

- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 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.

3TW26733-1A

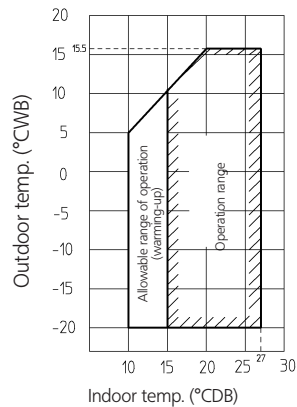
## RZQ100-125-140C (EDP ROOM)

### Cooling



Model name
RZQ100C7V1B
RZQ125C7V1B
RZQ140C7V1B

### Heating



**Notes:**

- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 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.

3TW29163-2