

# technical data

RZQ200-250C7Y1B

air conditioning systems

# Split Sky Air

**R-410A**

# technical data

RZQ200-250C7Y1B

air conditioning systems

# Split Sky Air

**R-410A**

# TABLE OF CONTENTS

## RZQ200-250C7Y1B

1	Features .....	2
2	Specifications .....	3
	Nominal Capacity and Nominal Input .....	3
	Technical Specifications .....	3
	Electrical Specifications .....	4
3	Electrical data.....	5
4	Options .....	6
5	Capacity tables .....	7
	Combination table .....	7
	Cooling capacity tables .....	8
	Heating capacity tables .....	11
6	Dimensional drawing & centre of gravity .....	13
	Dimensional drawing .....	13
	Centre of gravity .....	14
7	Piping diagram.....	15
8	Wiring diagram.....	17
	Wiring diagram .....	17
9	Sound data.....	18
	Sound pressure spectrum .....	18
	Sound power spectrum .....	19
10	Installation.....	20
	Installation method .....	20
	Fixation and foundation of units .....	21
11	Operation range .....	22

# 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

1



## 2 Specifications

2-1 Nominal Capacity and Nominal Input				RZQ200C7Y1B	RZQ250C7Y1B
For combination indoor units + outdoor units	Indoor Units			FDQ200B8V3B	FDQ250B8V3B
Cooling capacity	Standard	kW		20.0	24.1
Heating capacity	Standard	kW		23.0	26.4
Power Input	Cooling	Standard	kW	6.23	8.58
	Heating	Standard	kW	6.74	8.22
For combination indoor units + outdoor units	EER	Nominal		3.21	2.81
	COP	Nominal		3.41	3.21

2

2-2 Technical Specifications				RZQ200C7Y1B	RZQ250C7Y1B	
Casing	Colour			Daikin White		
	Material			Painted galvanised steel		
Dimensions	Unit	Height	mm	1680	1680	
		Width	mm	930	930	
		Depth	mm	765	765	
	Packing	Height	mm	1855	1855	
		Width	mm	1055	1055	
		Depth	mm	860	860	
Weight	Unit		kg	183	184	
	Packed Unit		kg	217	218	
Packing	Material			Carton		
	Weight		kg	4.02	4.02	
	Material			Wood		
	Weight		kg	20.85	20.85	
	Material			Plastic		
Heat Exchanger	Dimensions	Length	mm	1778	1778	
		Nr of Rows			54	54
		Fin Pitch	mm	2.00	2.00	
		Nr of Passes			18	18
		Face Area	m <sup>2</sup>	2.112	2.112	
		Nr of Stages			2	2
	Tube type			Hi-XSS(8)		
	Fin	Type			Non-symmetric waffle louvre	
		Treatment			Hydrophilic and corrosion resistant	
	Fan	Type			Propeller	
Discharge direction			Vertical			
Quantity			1	1		
Air Flow Rate (nominal at 230V)		Cooling	m <sup>3</sup> /min	171	171	
		Heating	m <sup>3</sup> /min	171	171	
Max		Pa	78 Pa in high static pressure			
Motor		Quantity			1	1
	Model			Brushless DC		
	Output	W	750	750		
Compressor	Quantity			1	1	
	Motor	Model			Inverter	
		Type			Hermetically sealed scroll compressor	
		Speed	rpm	7980	7980	
		Motor Output	W	3.08	3.08	
		Crankcase Heater	W	33	33	
Operation Range	Cooling	Min	°CDB	-5.0	-5.0	
		Max	°CDB	46.0	46.0	
	Heating	Min	°CWB	-15.0	-15.0	
		Max	°CWB	15.0	15.0	
Sound Level (nominal)	Sound power		dBA	78	78	
	Sound pressure		dBA	57	57	

## 2 Specifications

2-2 Technical Specifications				RZQ200C7Y1B	RZQ250C7Y1B	
Refrigerant	Type			R-410A		
	Charge	kg		8.3	9.3	
	Control			Expansion valve (electronic type)		
	Nr of Circuits			1	1	
Refrigerant Oil	Type			Synthetic (ether) oil		
	Charged Volume	l		0,3		
Piping connections	Liquid (OD)	Quantity		1	1	
		Type			Braze connection	
		Diameter (OD)	mm	9.5	12.7	
	Gas	Quantity		1	1	
		Type			Braze connection	
		Diameter (OD)	mm	22,2		
	Piping Length	Maximum	m	100	100	
	Heat Insulation			Both liquid and gas pipes		
Defrost Method				Reversed cycle		
Defrost Control				Sensor for outdoor heat exchanger temperature		
Capacity Control Method				Inverter controlled		
Safety Devices				High pressure switch		
				Fan motor driver overload protector		
				Overcurrent relay		
				Inverter overload protector		
				PC board fuse		
Standard Accessories	Item			Installation manual		
	Quantity			1	1	
	Item			Connection pipes		
Quantity			4	4		
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 5m, level difference : 0m.		
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 5m, level difference : 0m		
				The sound power level is an absolute value indicating the power which a sound source generates.		
				Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings of this chapter.		
				Sound values are measured in a semi-anechoic room.		

2-3 Electrical Specifications				RZQ200C7Y1B	RZQ250C7Y1B
Power Supply	Name			Y1	
	Phase			3N~	
	Frequency	Hz		50	50
	Voltage			380-415	
	Voltage range	Minimum	V	-10%	
Maximum		V	+10%		
Current	Nominal running current (RLA)	Cooling (A)	A	Refer to electrical data indoor-outdoor combination	
		Heating (A)	A	Refer to electrical data indoor-outdoor combination	
	Starting current (cooling/heating)		A	Refer to electrical data indoor-outdoor combination	
	Maximum Running Current		A	Refer to electrical data indoor-outdoor combination	
	Recomended fuses		A	25	25
Wiring connections	For Power Supply	Quantity		5	5
		Remark			Earth wire included
	For connection with indoor	Quantity		4	4
		Remark			Earth wire included
Power Supply Intake				Outdoor unit only	
Notes				Power supply to the FDQ unit is separate	
				See separate drawings for electrical data	

### 3 Electrical data

RZQ200-250C			
Unit combination			Minimum Ssc value [kVA]
FCQ50C7VEB	x4	RZQ200C7Y1B	-
FCQ60C7VEB	x3	RZQ200C7Y1B	-
FCQ71C7VEB	x3	RZQ200C7Y1B	-
FCQ100C7VEB	x2	RZQ200C7Y1B	-
FFQ50BV1B	x4	RZQ200C7Y1B	1025
FFQ60BV1B	x3	RZQ200C7Y1B	1025
FBQ50B7V1	x4	RZQ200C7Y1B	1025
FBQ60B7V1	x3	RZQ200C7Y1B	1025
FBQ71B7V3B	x3	RZQ200C7Y1B	1025
FBQ100B7V3B	x2	RZQ200C7Y1B	-
FHQ50BUV1B	x4	RZQ200C7Y1B	1025
FHQ60BUV1B	x3	RZQ200C7Y1B	-
FHQ71BUV1B	x3	RZQ200C7Y1B	-
FHQ100BUV1B	x2	RZQ200C7Y1B	-
FUQ71BUV1B	x3	RZQ200C7Y1B	1025
FUQ100BUV1B	x2	RZQ200C7Y1B	1025
FAQ71BUV1B	x3	RZQ200C7Y1B	-
FAQ100BUV1B	x2	RZQ200C7Y1B	-
FDQ200B7V3B	x1	RZQ200C7Y1B	-
FCQ60C7VEB	x4	RZQ250C7Y1B	-
FCQ125C7VEB	x2	RZQ250C7Y1B	-
FFQ60BV1B	x4	RZQ250C7Y1B	1025
FBQ60B7V1	x4	RZQ250C7Y1B	1025
FBQ125B7V3B	x2	RZQ250C7Y1B	1025
FHQ60BUV1B	x4	RZQ250C7Y1B	1025
FHQ125BUV1B	x2	RZQ250C7Y1B	-
FUQ125BUV1B	x2	RZQ250C7Y1B	1025
FDQ125B7V3B	x2	RZQ250C7Y1B	-
FDQ250B7V3B	x1	RZQ250C7Y1B	-

4TW29041-2

**NOTES**

- In accordance with EN/IEC 61000-3-12\*, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with  $S_{sc}^{**} \geq$  minimum Ssc value.
- (\*) European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current  $> 16A$  and  $\leq 75A$  per phase.
- (\*\*) Short-circuit power

## 4 Options

### Available options for RZQ200,250C

Name of option		Kit name	
		RZQ200C7Y1B	RZQ250C7Y1B
Central drain pan kit		KWC26B280	
Refrigerant branch piping	Twin	KHRQ22M20TA	
	Triple	KHRQ250H7	
	Double twin	KHRQ22M20TA (3x)	
Demand adaptor		KRP58M51	

4TW29049-1

4



## 5 Capacity tables

### 5 - 1 Combination table

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

Outdoor models	Possible indoor combination		
	Simultaneous operation		
	Twin	Triple	Double twin
RZQ200C7Y1B	100-100 (KHRQ22M20TA)	60-60-60 71-71-71 (KHRQ250H)	50-50-50-50 (3x KHRQ22M20TA)
RZQ250C7Y1B	125-125 (KHRQ22M20TA)	---	60-60-60-60 (3x KHRQ22M20TA)

3TW29049-2A

#### NOTES

- 1 Possible indoor units: FCQ50-125, FFQ50,60, FHQ50-125, FBQ50-125, FAQ71,100, FUQ71-125, FDQ125
- 2 Individual indoor capacities are not given because the combinations are for simultaneous operation (=indoor units installed in same room).
- 3 No mix of different indoor types within the same installation is allowed.
- 4 Between brackets are the required Refnet kits mentioned, that are necessary to install the combination.

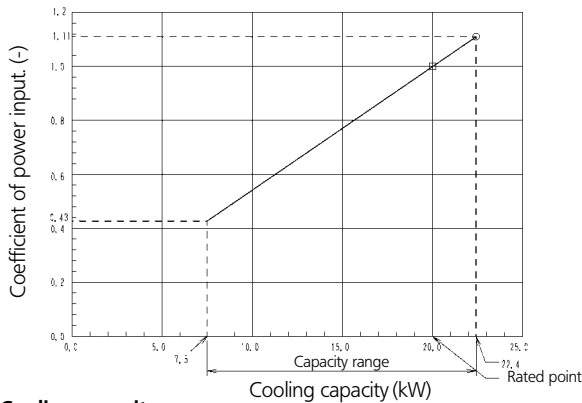
# 5 Capacity tables

## 5 - 2 Cooling capacity tables

5

### RZQ200C (Pair + Twin / triple / double twin)

#### Cooling



#### Cooling capacity

#### 400V [50Hz]

Indoor °CWB	Outdoor temp. (°CDB)											
	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	20.2	17.0	0.82	19.4	16.3	0.90	18.6	15.5	0.98	17.7	14.8	1.06
18	21.3	17.1	0.83	20.4	16.4	0.91	19.5	15.7	0.99	18.6	14.9	1.07
19	21.8	17.1	0.84	20.9	16.4	0.92	20.0	15.6	1.00	19.1	14.9	1.08
20	22.3	17.1	0.84	21.4	16.4	0.92	20.5	15.6	1.01	19.6	14.9	1.09
22	23.4	17.0	0.85	22.4	16.3	0.94	21.4	15.6	1.02	20.5	14.9	1.10
24	24.4	16.8	0.86	23.4	16.1	0.95	22.4	15.4	1.03	21.4	14.7	1.12

3D056854B

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat
- On the figure the mark  $\square$  show the max. at standard conditions.  
On the figure the mark  $\square$  show rated capacity and rated coefficient of power input.  
However, only rated capacity & CPI are guaranteed (maximal values NOT).
- On the tables  $\square$  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.
- Rated values are guaranteed. Other values are accurate within an error of 5%.
- Heating capacity includes capacity drop due to defrost operation.
- 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.	(°CDB)
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

(Pair) (Twin)

Model	FDQ200	Model	FCQ100Cx2	FCQ100Bx2	FBQ100x2	FHQ100x2	FUQ100x2	FAQ100x2
AFR	69	AFR	23.5x2	28x2	27x2	24x2	29x2	23x2
(BF)	(0.31)	(BF)	(0.16x2)	(0.16x2)	(0.2x2)	(0.14x2)	(0.07x2)	(0.1x2)

(Triple)

Model	FCQ60Cx3	FCQ71Cx3	FCQ60Bx3	FCQ71Bx3	FFQ60x3	FBQ60x3	FBQ71x3	FHQ60x3	FHQ71x3	FUQ71x3	FAQ71x3
AFR	13.5x3	15.5x3	18x3	18x3	15x3	19x3	19x3	17x3	17x3	19x3	19x3
(BF)	(0.21x3)	(0.19x3)	(0.1x3)	(0.1x3)	(0.11x3)	(0.11x3)	(0.11x3)	(0.2x2)	(0.1x3)	(0.07x3)	(0.08x3)

(Double twin)

Model	FCQ50Cx4	FCQ50Bx4	FFQ50x4	FBQ50x4	FHQ50x4
AFR	12.5x4	15x4	12x4	14x4	14x4
(BF)	(0.21x4)	(0.16x4)	(0.16x4)	(0.15x4)	(0.1x4)

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

(Pair) (Twin)

Model	FDQ200	Model	FCQ100Cx2	FCQ100Bx2	FBQ100x2	FHQ100x2	FUQ100x2	FAQ100x2
Cooling	6.23	Cooling	5.69	5.69	6.16	6.78	6.71	5.99
Heating	6.74	Heating	6.40	6.40	6.12	7.34	6.69	6.92

(Triple)

Model	FCQ60Cx3	FCQ71Cx3	FCQ60Bx3	FCQ71Bx3	FFQ60x3	FBQ60x3	FBQ71x3	FHQ60x3	FHQ71x3	FUQ71x3	FAQ71x3
Cooling	5.99	5.99	5.99	5.99	6.01	6.48	6.48	7.14	7.14	7.07	6.30
Heating	6.74	6.74	6.74	6.74	6.54	6.45	6.45	7.73	7.73	7.04	7.28

(Double twin)

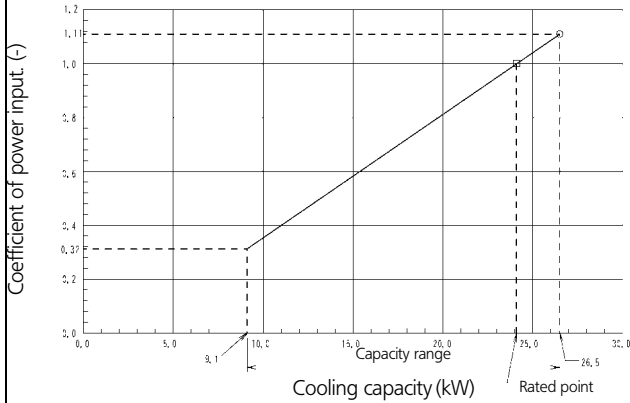
Model	FCQ50Cx4	FCQ50Bx4	FFQ50x4	FBQ50x4	FHQ50x4
Cooling	5.99	5.99	6.01	6.48	7.14
Heating	6.74	6.74	6.54	6.45	7.73

# 5 Capacity tables

## 5 - 2 Cooling capacity tables

### RZQ250C (Pair + Twin / Double twin)

#### Cooling



#### Cooling capacity

400V [50Hz]

Indoor °CWB	Outdoor temp. (°CDB)											
	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	24.5	21.5	0.79	23.5	20.7	0.88	22.5	19.8	0.98	21.5	19.0	1.08
18	25.7	21.5	0.80	24.6	20.6	0.89	23.6	19.8	0.99	22.5	18.9	1.09
19	26.2	21.5	0.80	25.2	20.6	0.90	24.1	19.8	1.00	23.0	19.0	1.10
20	26.8	21.4	0.81	25.7	20.5	0.91	24.6	19.7	1.01	23.5	18.9	1.11
22	28.0	21.2	0.81	26.8	20.3	0.92	25.7	19.5	1.02	24.5	18.7	1.12
24	29.1	20.9	0.82	27.9	20.1	0.93	26.7	19.3	1.03	25.6	18.4	1.13

3D056855A

#### 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, only rated capacity & CPI are guaranteed (maximal values NOT).
- 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.
- Rated values are guaranteed. Other values are accurate within an error of 5%.
- Heating capacity includes capacity drop due to defrost operation.
- 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.	(°CDB)
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)		(Twin)						
Model	FDQ250	Model	FCQ125Cx2	FCQ125Bx2	FBQ125x2	FHQ125x2	FUQ125x2	FAQ125x2
AFR	89	AFR	27.5x2	31x2	35x2	30x2	32x2	45x2
(BF)	(0.34)	(BF)	(0.19x2)	(0.07x2)	(0.14x2)	(0.13x2)	(0.07x2)	(0.25x2)

(Double twin)					
Model	FCQ60Cx4	FCQ60Bx4	FFQ60x4	FBQ60x4	FHQ60x4
AFR	13.5x4	18x4	15x4	19x4	17x4
(BF)	(0.21x4)	(0.1x4)	(0.11x4)	(0.11x4)	(0.2x4)

- Rated power input of each model is tabulated below.

(Pair)		(Twin)						
Model	FDQ250	Model	FCQ125Cx2	FCQ125Bx2	FBQ125x2	FHQ125x2	FUQ125x2	FAQ125x2
Cooling	8.58	Cooling	8.91	8.91	9.14	10.22	9.30	9.53
Heating	8.22	Heating	8.68	8.68	7.94	8.95	8.68	7.35

(Double twin)					
Model	FCQ60Cx4	FCQ60Bx4	FFQ60x4	FBQ60x4	FHQ60x4
Cooling	9.39	9.39	9.49	9.62	10.76
Heating	9.13	9.13	8.48	8.36	9.43

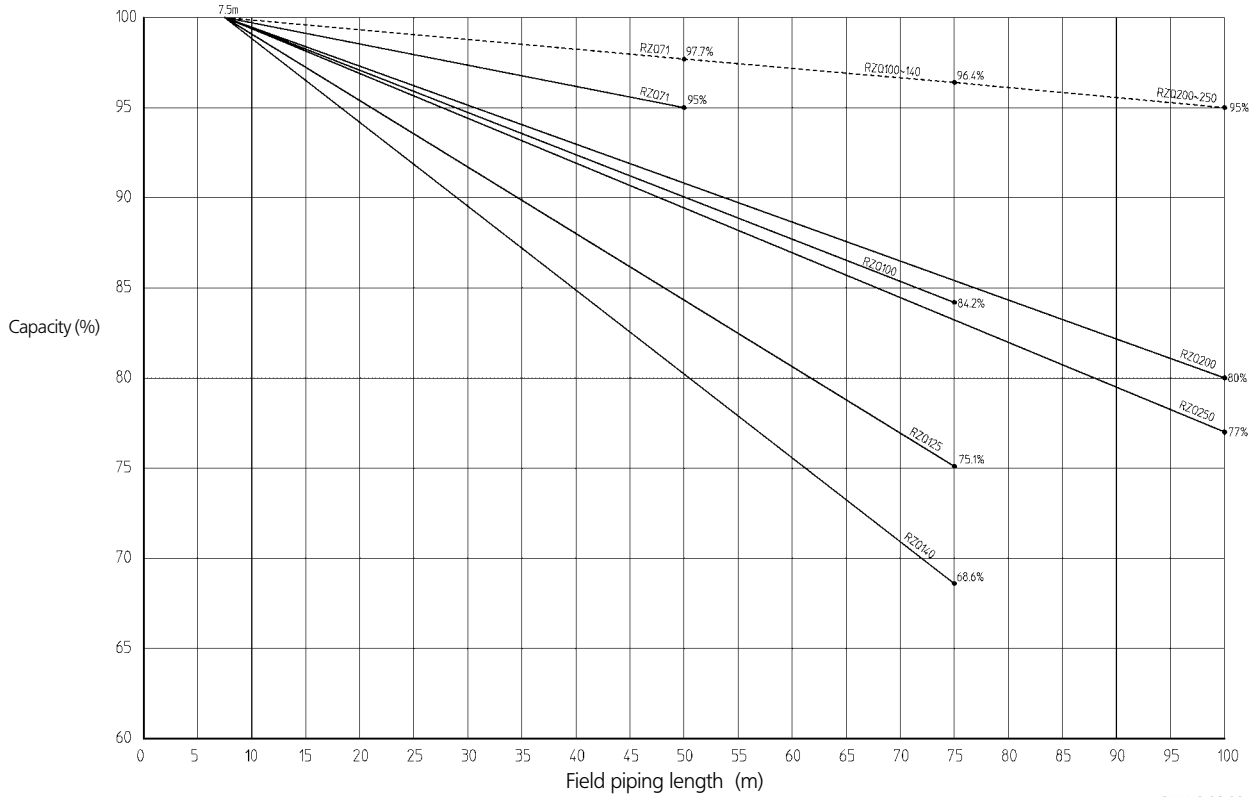
# 5 Capacity tables

## 5 - 2 Cooling capacity tables

5

RZQ-B/C

Capacity in function of field piping length for non-inverter



3TW26062-1

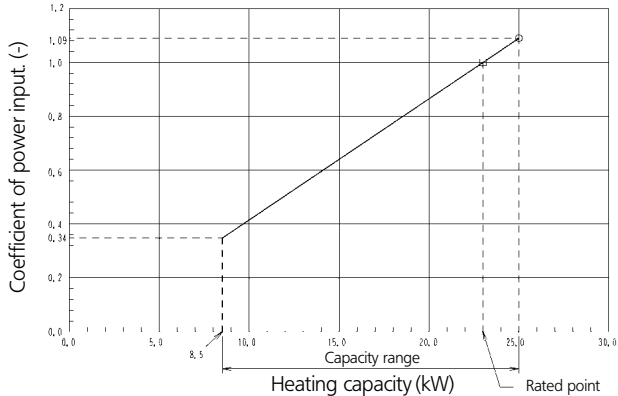
— Cooling  
 - - - - Heating

# 5 Capacity tables

## 5 - 3 Heating capacity tables

### RZQ200C (Pair + Twin / triple / double twin)

#### Heating



#### Heating capacity

#### 230V [50Hz]

Indoor °CDB	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	10.8	0.83	12.2	0.87	13.9	0.91	15.5	0.96	23.3	0.97	25.4	1.01
18	10.8	0.84	12.2	0.88	13.8	0.93	15.4	0.97	23.2	0.98	25.3	1.03
20	10.7	0.85	12.1	0.90	13.7	0.94	15.3	0.99	23.0	1.00	25.1	1.04
22	10.6	0.87	12.0	0.91	13.6	0.96	15.2	1.01	22.8	1.02	24.9	1.06
24	10.5	0.88	11.9	0.93	13.5	0.98	15.1	1.02	22.7	1.03	24.7	1.08

3D056854B

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat
- On the figure the mark  $\square$  show the max. at standard conditions.  
On the figure the mark  $\square$  show rated capacity and rated coefficient of power input.  
However, only rated capacity & CPI are guaranteed (maximal values NOT).
- On the tables  $\square$  show rated capacity and rated coefficient of power input.
- SHC is based on each EWB and EDB  
 $SHC^* = SHC$  correction for other dry bulb  
 $SHC^* = 0.02 \times AFR (m^3/min) \times (1-BF) \times (DB^*-EDB)$   
 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.
- Rated values are guaranteed. Other values are accurate within an error of 5%.
- Heating capacity includes capacity drop due to defrost operation.
- 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 (kW)  
 CPI: Coefficient of power input (-)

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

(Pair)		(Twin)						
Model	FDQ200	Model	FCQ100Cx2	FCQ100Bx2	FBQ100x2	FHQ100x2	FUQ100x2	FAQ100x2
AFR	69	AFR	23.5x2	28x2	27x2	24x2	29x2	23x2
(BF)	(0.31)	(BF)	(0.16x2)	(0.16x2)	(0.2x2)	(0.14x2)	(0.07x2)	(0.1x2)

(Triple)											
Model	FCQ60Cx3	FCQ71Cx3	FCQ60Bx3	FCQ71Bx3	FFQ60x3	FBQ60x3	FBQ71x3	FHQ60x3	FHQ71x3	FUQ71x3	FAQ71x3
AFR	13.5x3	15.5x3	18x3	18x3	15x3	19x3	19x3	17x3	17x3	19x3	19x3
(BF)	(0.21x3)	(0.19x3)	(0.1x3)	(0.1x3)	(0.11x3)	(0.11x3)	(0.11x3)	(0.2x2)	(0.1x3)	(0.07x3)	(0.08x3)

(Double twin)					
Model	FCQ50Cx4	FCQ50Bx4	FFQ50x4	FBQ50x4	FHQ50x4
AFR	12.5x4	15x4	12x4	14x4	14x4
(BF)	(0.21x4)	(0.16x4)	(0.16x4)	(0.15x4)	(0.1x4)

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

(Pair)		(Twin)						
Model	FDQ200	Model	FCQ100Cx2	FCQ100Bx2	FBQ100x2	FHQ100x2	FUQ100x2	FAQ100x2
Cooling	6.23	Cooling	5.69	5.69	6.16	6.78	6.71	5.99
Heating	6.74	Heating	6.40	6.40	6.12	7.34	6.69	6.92

(Triple)											
Model	FCQ60Cx3	FCQ71Cx3	FCQ60Bx3	FCQ71Bx3	FFQ60x3	FBQ60x3	FBQ71x3	FHQ60x3	FHQ71x3	FUQ71x3	FAQ71x3
Cooling	5.99	5.99	5.99	5.99	6.01	6.48	6.48	7.14	7.14	7.07	6.30
Heating	6.74	6.74	6.74	6.74	6.54	6.45	6.45	7.73	7.73	7.04	7.28

(Double twin)					
Model	FCQ50Cx4	FCQ50Bx4	FFQ50x4	FBQ50x4	FHQ50x4
Cooling	5.99	5.99	6.01	6.48	7.14
Heating	6.74	6.74	6.54	6.45	7.73

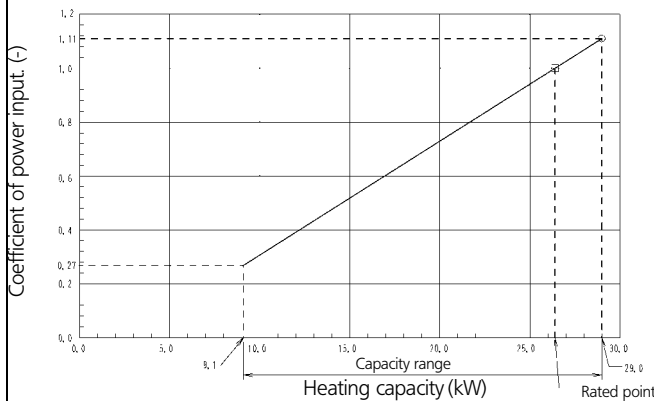
# 5 Capacity tables

## 5 - 3 Heating capacity tables

5

### RZQ250C (Pair + Twin / Double twin)

#### Heating



#### Heating capacity 230V [50Hz]

Indoor °CDB	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	13.2	0.77	14.7	0.82	16.6	0.87	18.4	0.91	26.9	0.92	29.2	0.98
18	13.1	0.80	14.6	0.85	16.4	0.90	18.2	0.95	26.6	0.96	28.9	1.02
20	12.9	0.84	14.5	0.88	16.3	0.94	18.0	0.99	26.4	1.00	28.7	1.06
22	12.8	0.87	14.3	0.92	16.1	0.97	17.9	1.03	26.2	1.04	28.4	1.10
24	12.7	0.90	14.2	0.95	16.0	1.01	17.7	1.06	25.9	1.08	28.2	1.14

3D056855A

#### 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, only rated capacity & CPI are guaranteed (maximal values NOT).
- 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.
- Rated values are guaranteed. Other values are accurate within an error of 5%.
- Heating capacity includes capacity drop due to defrost operation.
- 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) (Twin)

Model	FDQ250	Model	FCQ125Cx2	FCQ125Bx2	FBQ125x2	FHQ125x2	FUQ125x2	FAQ125x2
AFR	89	AFR	27.5x2	31x2	35x2	30x2	32x2	45x2
(BF)	(0.34)	(BF)	(0.19x2)	(0.07x2)	(0.14x2)	(0.13x2)	(0.07x2)	(0.25x2)

(Double twin)

Model	FCQ60Cx4	FCQ60x4	FFQ60x4	FBQ60x4	FHQ60x4
AFR	13.5x4	18x4	15x4	19x4	17x4
(BF)	(0.21x4)	(0.1x4)	(0.11x4)	(0.11x4)	(0.2x4)

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

(Pair) (Twin)

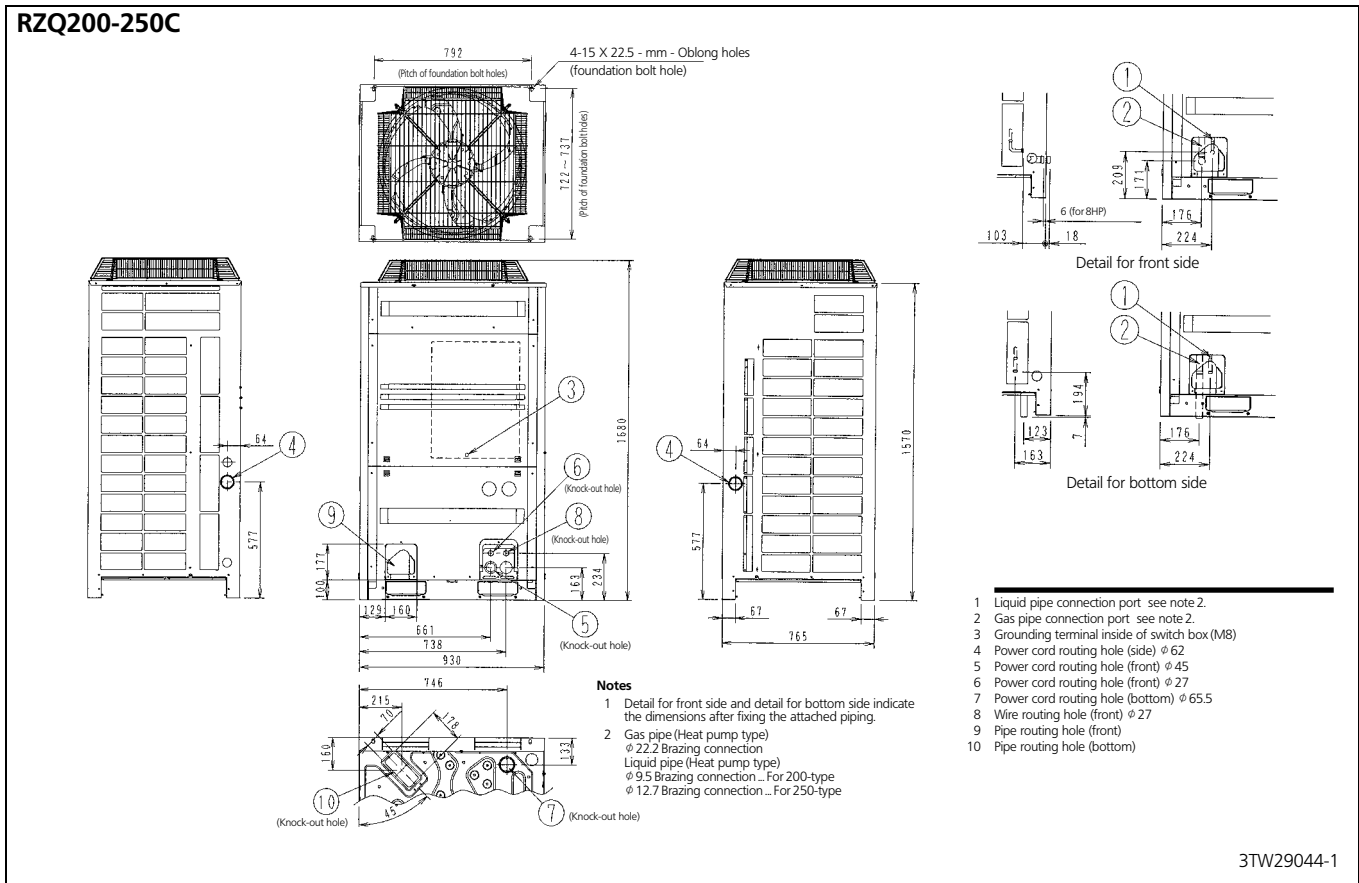
Model	FDQ250	Model	FCQ125Cx2	FCQ125Bx2	FBQ125x2	FHQ125x2	FUQ125x2	FAQ125x2
Cooling	8.58	Cooling	8.91	8.91	9.14	10.22	9.30	9.53
Heating	8.22	Heating	8.68	8.68	7.94	8.95	8.68	7.35

(Double twin)

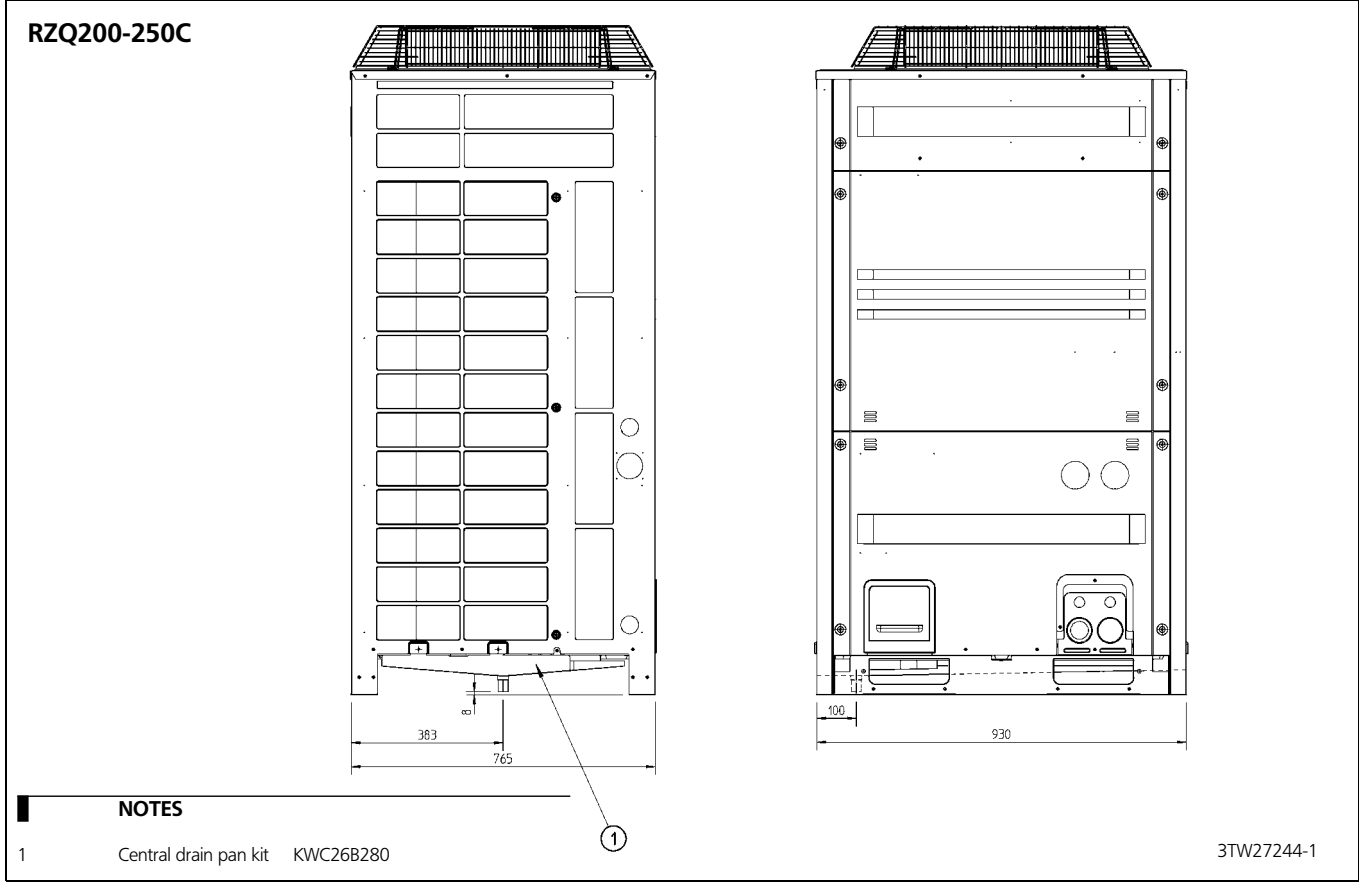
Model	FCQ60Cx4	FCQ60Bx4	FFQ60x4	FBQ60x4	FHQ60x4
Cooling	9.39	9.39	9.49	9.62	10.76
Heating	9.13	9.13	8.48	8.36	9.43

# 6 Dimensional drawing & centre of gravity

## 6 - 1 Dimensional drawing



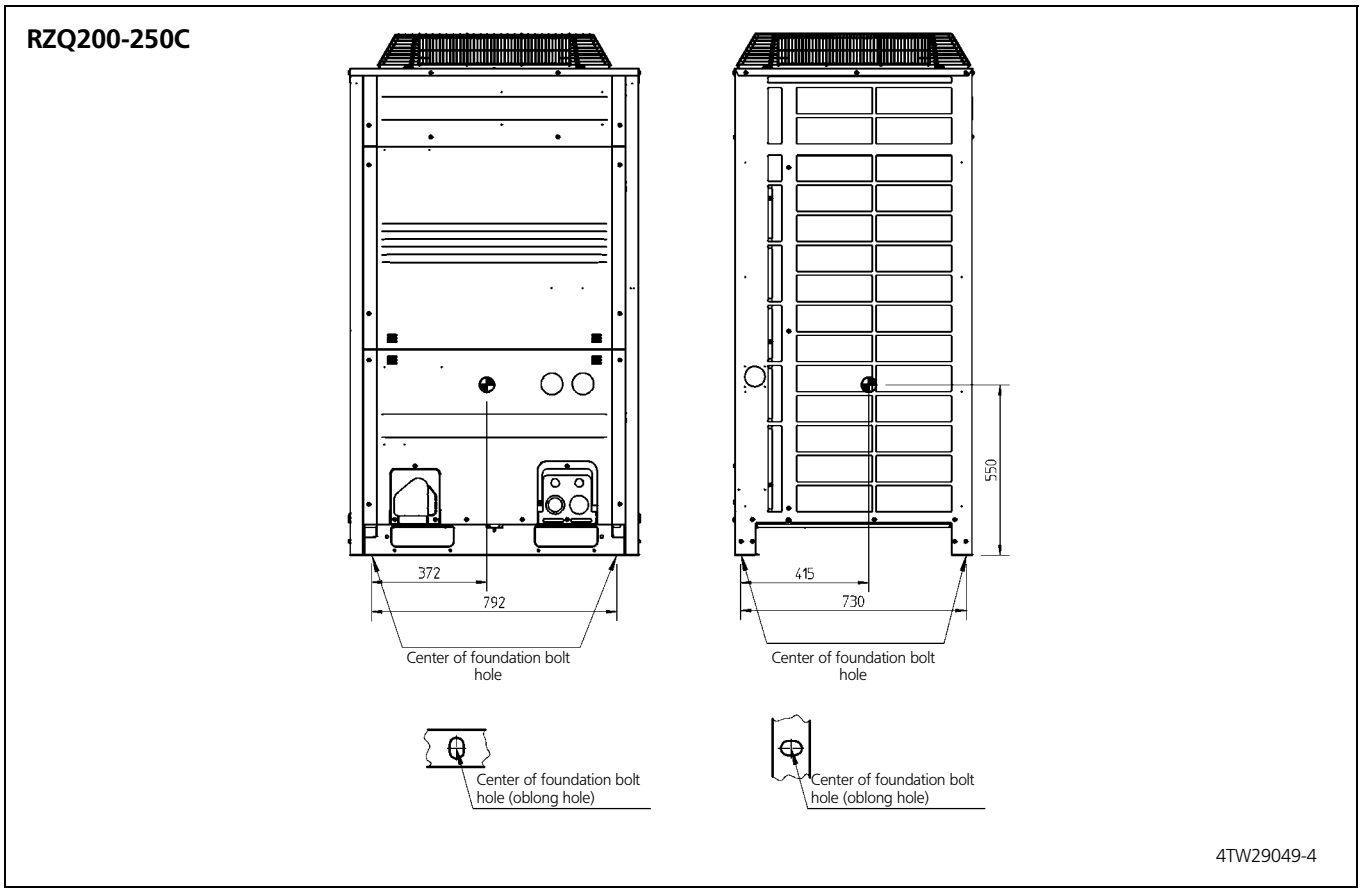
6



## 6 Dimensional drawing & centre of gravity

### 6 - 2 Centre of gravity

6

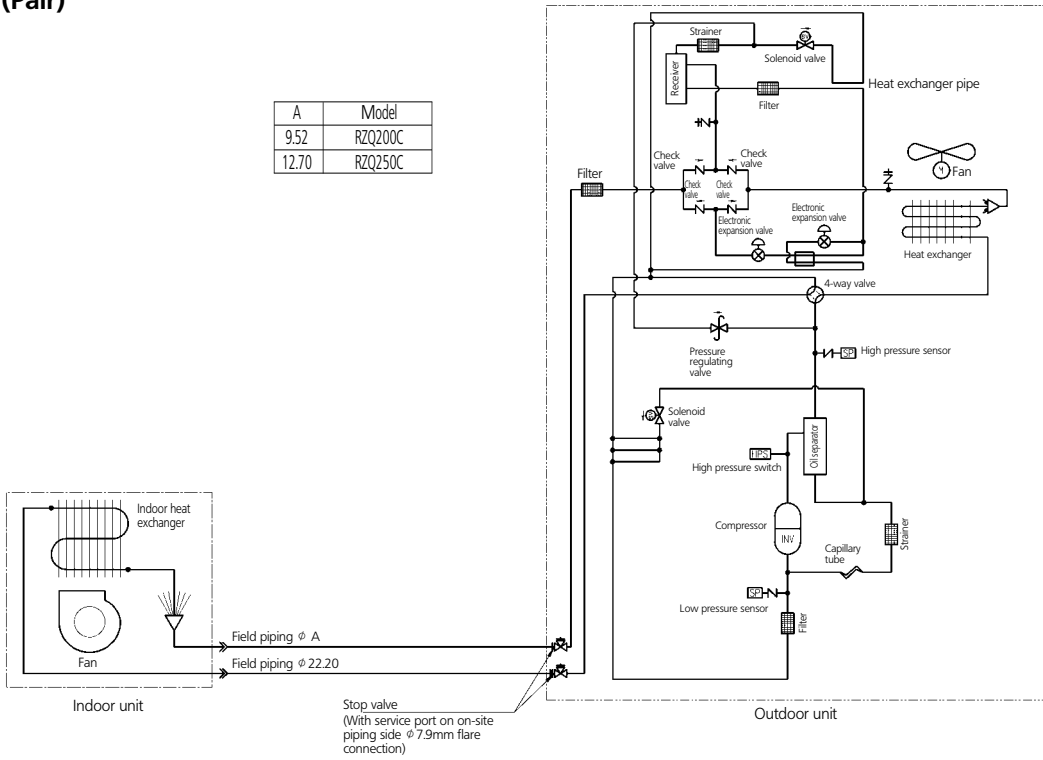




# 7 Piping diagram

## RZQ200-250C (Pair)

A	Model
9.52	RZQ200C
12.70	RZQ250C

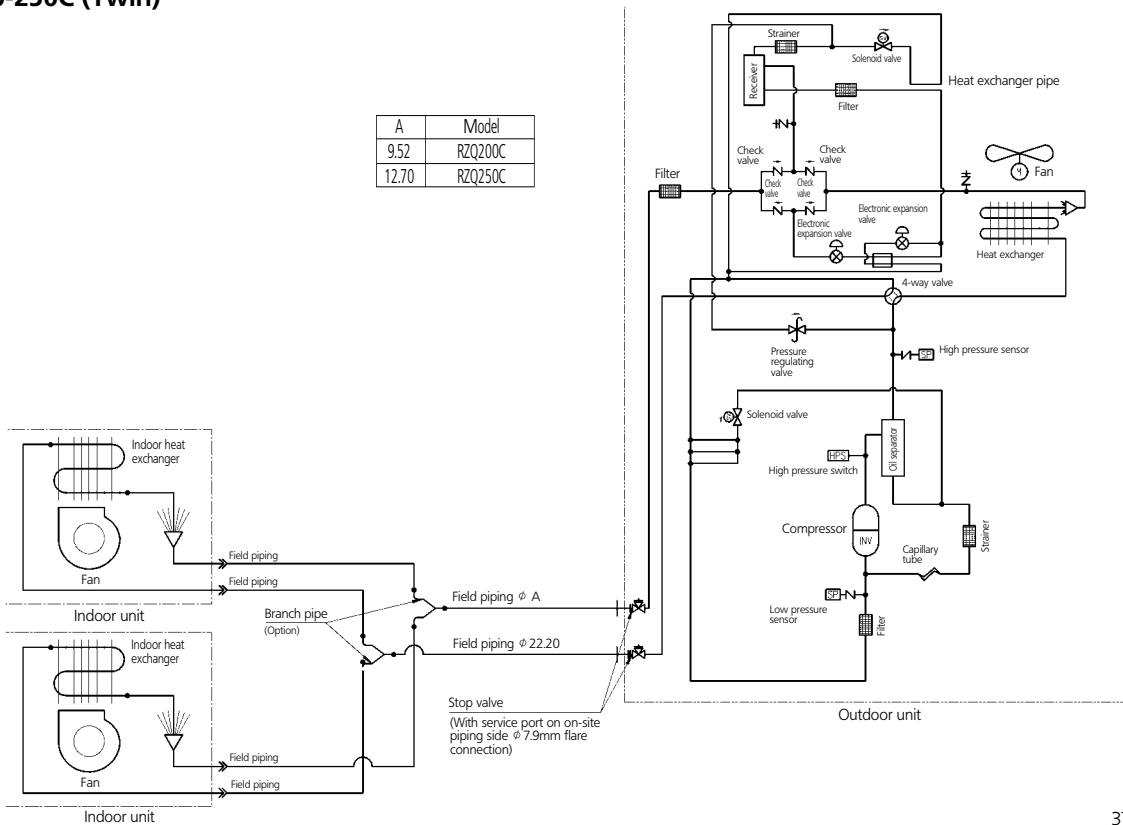


Check valve  
 Flare connection  
 Screw connection  
 Flange connection  
 Pinched pipe  
 Spinned pipe

3TW29045-1

## RZQ200-250C (Twin)

A	Model
9.52	RZQ200C
12.70	RZQ250C



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

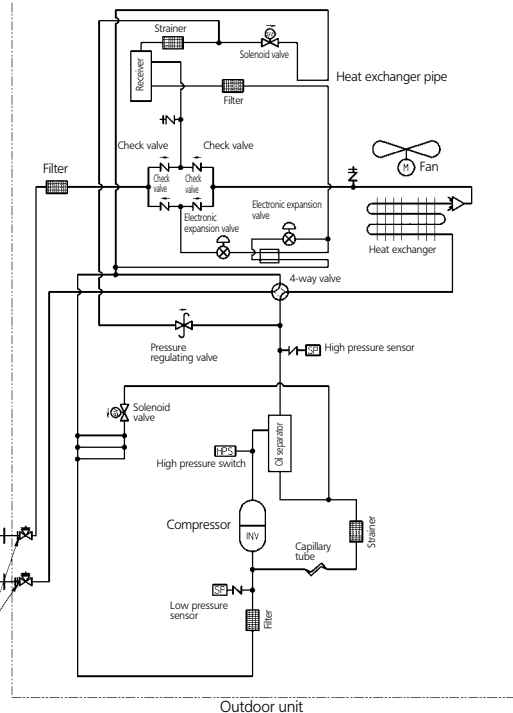
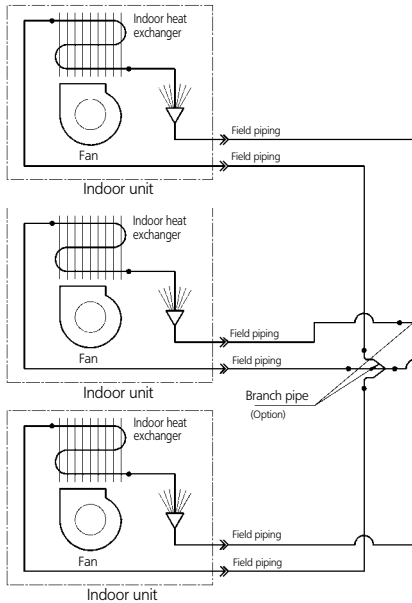
3TW29045-2

# 7 Piping diagram

7

## RZQ200-250C (Triple)

A	Model
9.52	RZQ200C
12.70	RZQ250C



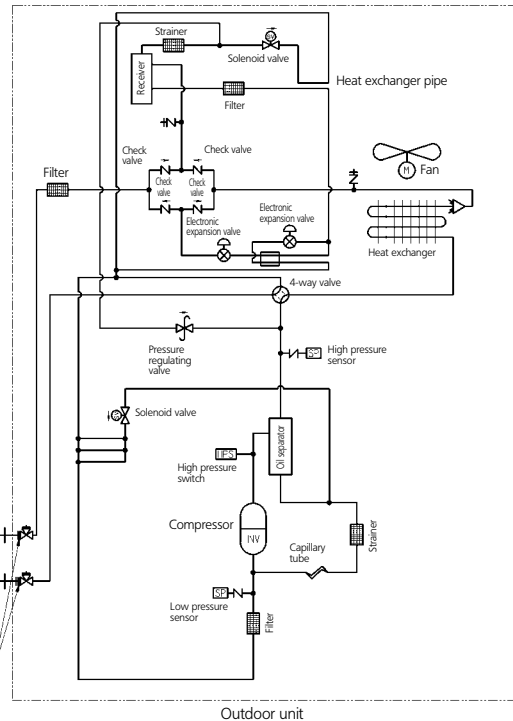
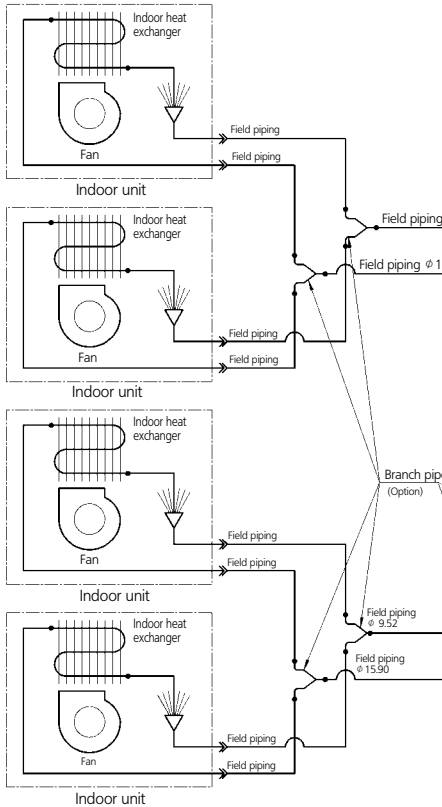
Note: The pipes between the branch and the indoor units should have the same size as the indoor connections.

3TW29045-3

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

## RZQ200-250C (Double twin)

A	Model
9.52	RZQ200C
12.70	RZQ250C



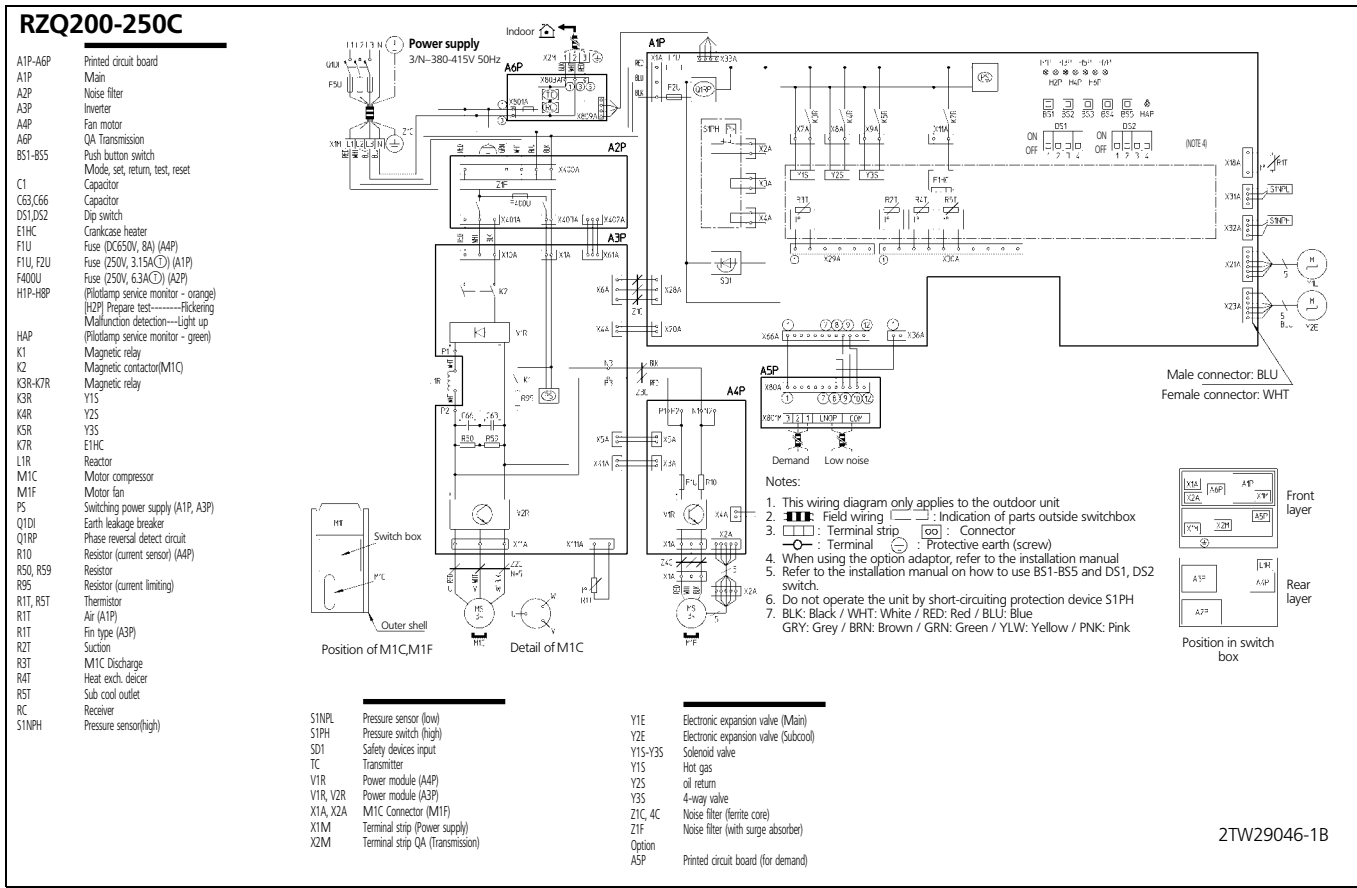
Note: The pipes between the branch and the indoor units should have the same size as the indoor connections.

3TW29045-4

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

# 8 Wiring diagram

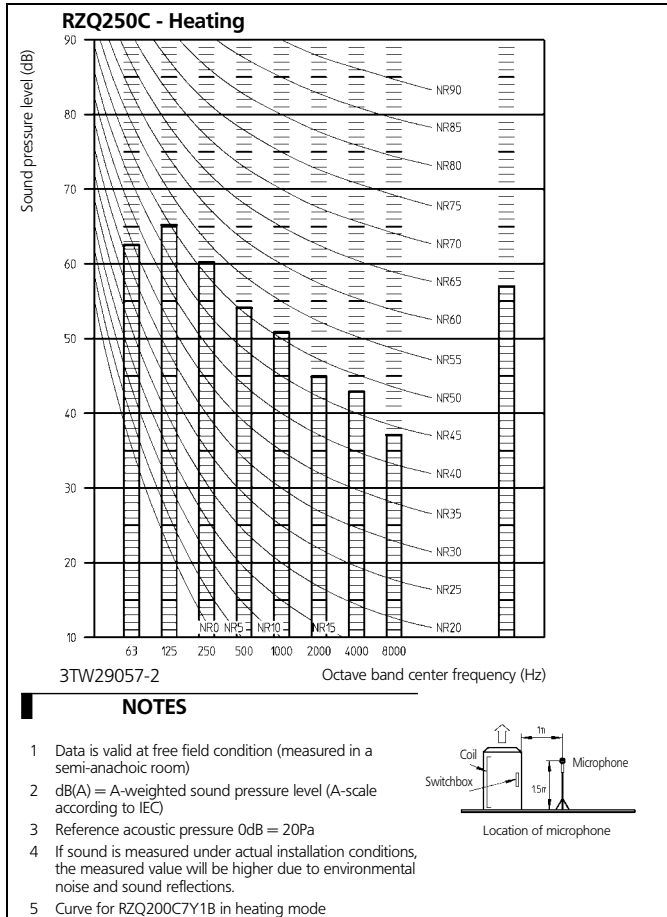
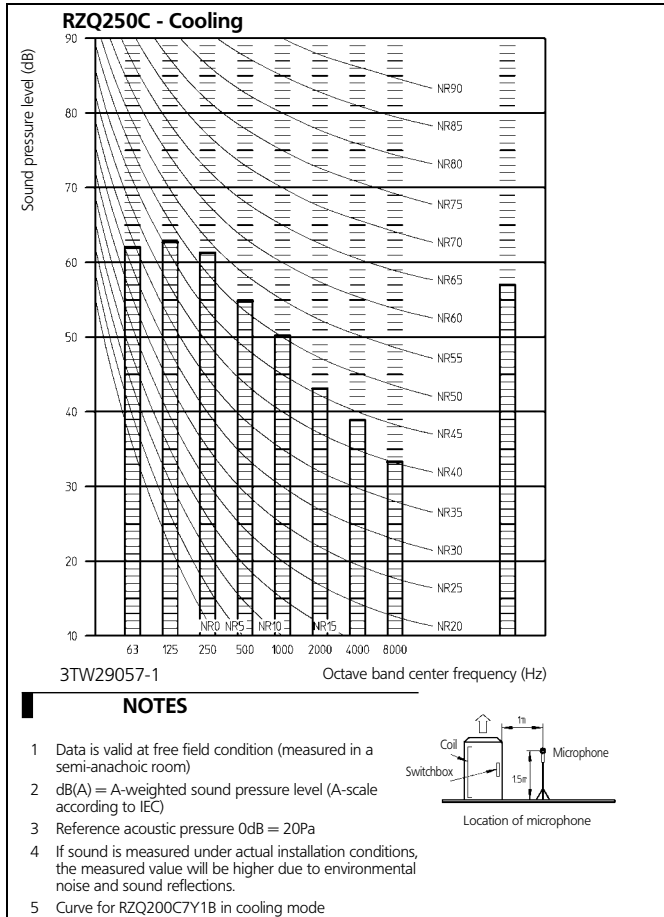
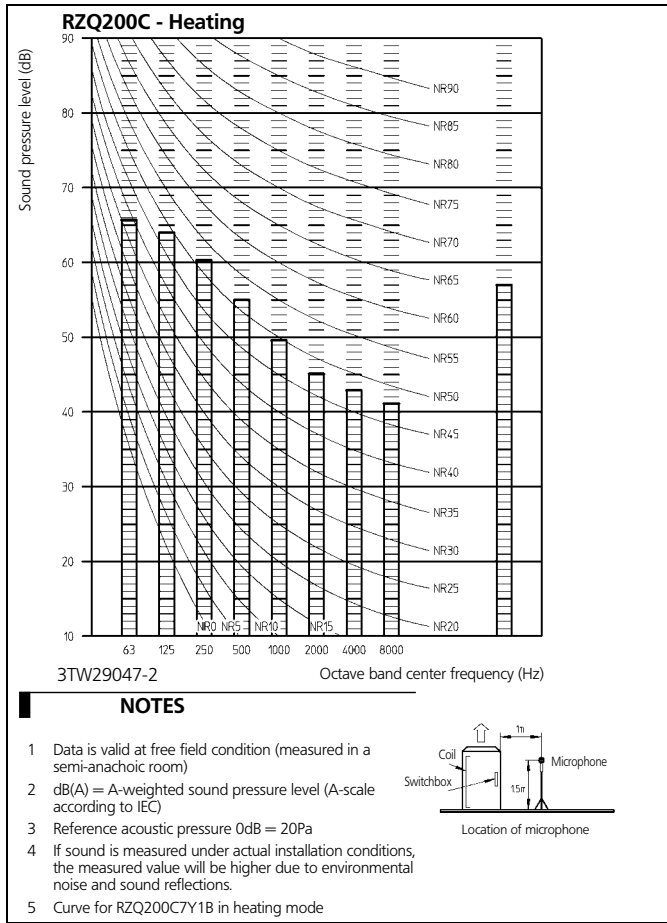
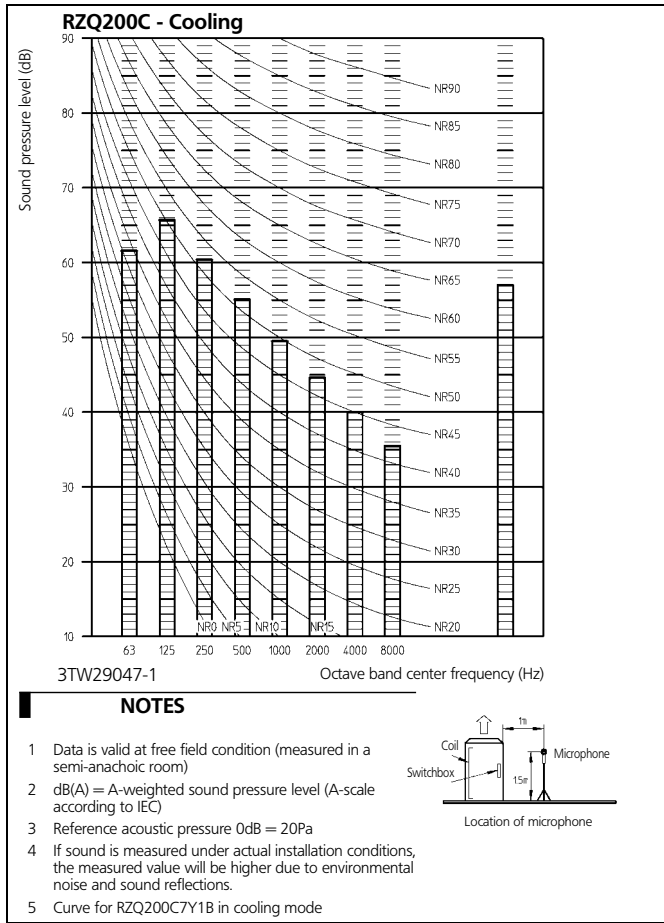
## 8 - 1 Wiring diagram



# 9 Sound data

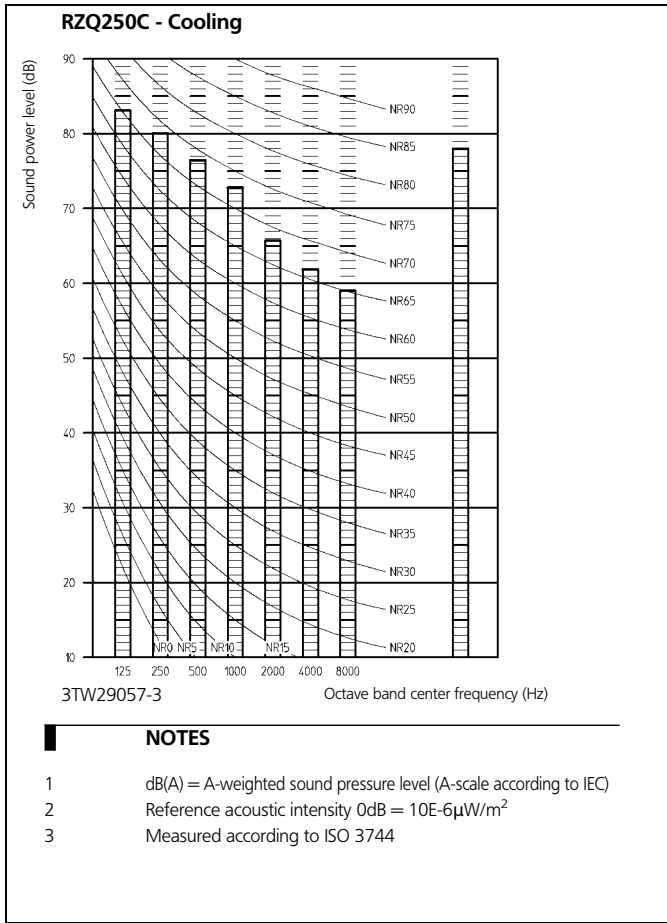
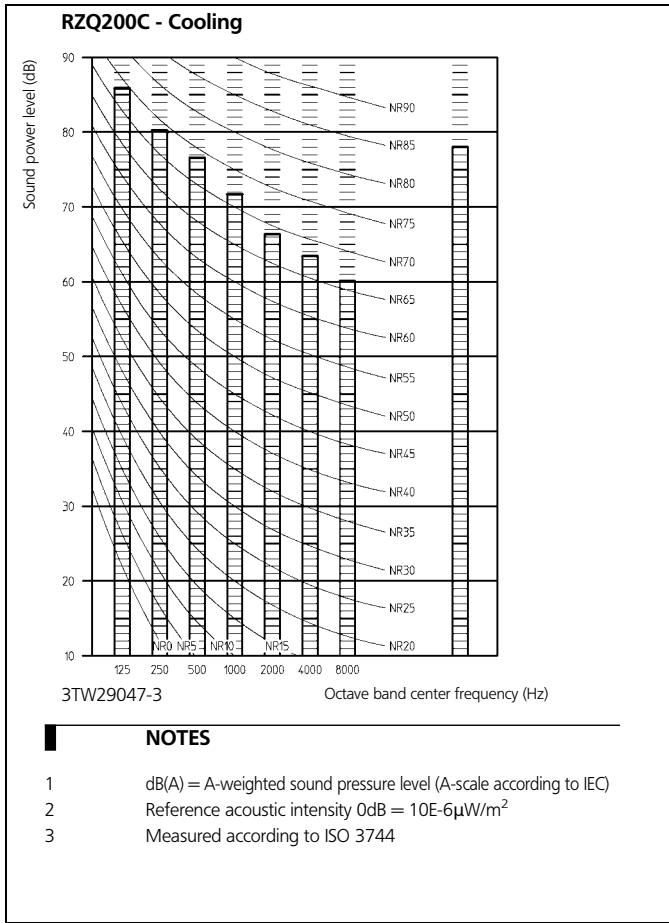
## 9 - 1 Sound pressure spectrum

9



# 9 Sound data

## 9 - 2 Sound power spectrum

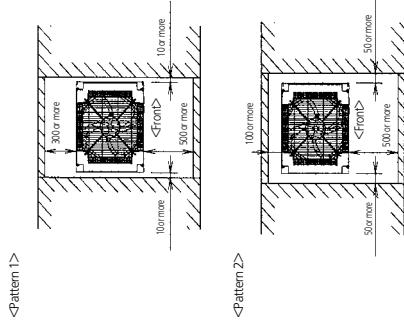


# 10 Installation

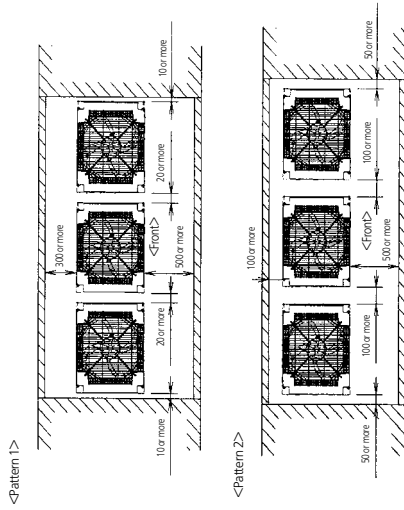
## 10 - 1 Installation method

### RZQ200-250C

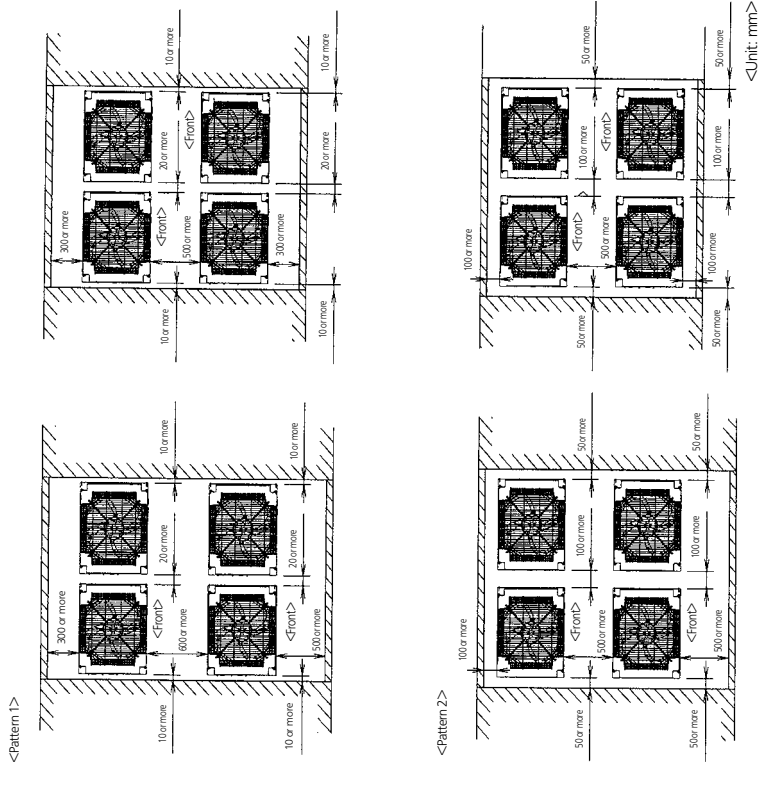
For single unit installation



For installation in rows

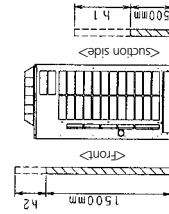


For centralized group layout



Notes:

- Heights of walls in case of Patterns 1 and 2:  
Front: 1500 mm  
suction side: 500 mm  
Side: Height unrestricted.  
Installation space to be shown in this drawing is based on the cooling operation at 35 degrees outdoor air temperature. When the design outdoor air temperature exceeds 35 degrees or the load exceeds maximum ability because of much generation load of heat in all outdoor unit, take the suction side space more broadly than the space to be shown in this drawing.
- If the above wall heights are exceeded then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the figure on the right.
- When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough space for a person to pass between units and wall and for the air to circulate freely. (if more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)
- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.



# 10 Installation

## 10 - 2 Fixation and foundation of units

**RZQ200-250C**

**Foundation bolt executing method**

Nut  
Spring washer  
Frame  
Foundation bolt  
Type: JA  
Size: M12  
Four bolts are required  
3 thread ridges or more

**When installing multiple units in connection**

Model	A	B	
RXV25MY1B RXV25MY1, VL, TL RXV25MY1 RXV25MAY1, VL, TL RXV25SPY1(B)	RXV25PYL	497	697
RXV8-10MY1B RXV8-10MY1B RXV8-10MY1, VL, TL RXV8-10MY1 RXV8-10MAY1, VL, TL RXV8-10MAY1 RXV8-10MAY1 RXV8-10MAY1 RXV8-10PY1 RZP250MAY1	RXV8MY1 RXV8-10PY1 RXV8-10PY1 RZP250PY1 RXV8-10PYL RXV8-10PYL RZP250PY1	792	992
RXV12-14-16MY1B RXV12-14-16MY1B RXV12-14-16MY1, VL, TL RXV12-14-16MY1 RXV12-14-16MAY1, VL, TL RXV12-14-16MAY1 RXV12-14-16PY1 RZP350-450PY1 RYC400PY1	RXV12MY1 RXV12-14-16PY1 RXV12-14-16PY1 RXV12-14-16PYL RXV12-14-16-18PYL RZP350-450PY1 RYC400PY1	1102	1302

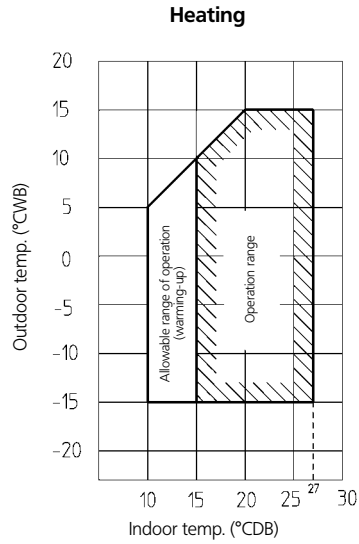
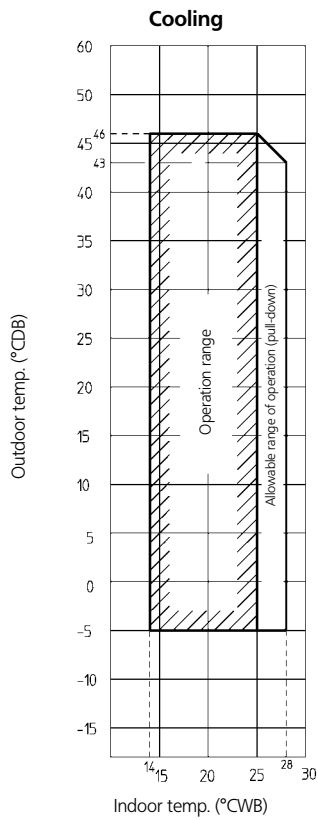
**NOTES**

- The proportions of cement: sand: gravel for the concrete shall be 1:2:4, and the reinforcement bars that their diameter are 10mm, (approx. 300mm intervals) shall be placed.
- The surface shall be finished with mortar. The corner edges shall be chamfered.
- When the foundation is built on a concrete floor, rubble is not necessary. However, the surface of the section on which the foundation is built shall have rough finish.
- A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
- When installing the equipment on a roof, the floor strength shall be checked, and water-proofing measures shall be taken.
- Y ditch is not necessary for SHP models.

# 11 Operation range

11

## RZQ200-250C



4TW26566-1



# Split - Sky Air



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 intension 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.

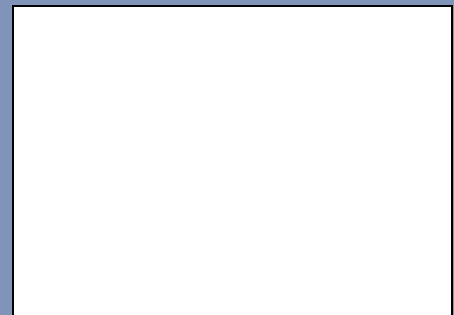


Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

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



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



## DAIKIN EUROPE N.V.

Naamloze Vennoetschap  
Zandvoordestraat 300  
B-8400 Oostende, Belgium  
www.daikin.eu  
BTW: BE 0412 120 336  
RPR Oostende



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



Daikin Europe N.V. is participating in the EUROVENT Certification Programme. Products are as listed in the EUROVENT Directory of Certified Products.



EEDEN08-100 • 10/2008 • Copyright © Daikin  
The present publication supersedes EEDEN07-100  
Prepared in Belgium by Lamcoo (www.lamcooprint.be), a company whose concern for the environment is set in the EMAS and ISO 14001 systems.  
Responsible Editor: Daikin Europe N.V., Zandvoordestraat 300, B-8400 Oostende