DAIKIN

Air Conditioners

Technical Data

SkyAir®

Super Inverter

EEDEN12-100

RZQ-C

TABLE OF CONTENTS

RZQ-C

1 Features

- Outdoor units for pair, twin, triple, double twin application
- The Sky Air® inverter is developed for use in light commercial applications, provides a more comfortable environment and offers great savings in energy consumption to shop, restaurant 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, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- Outdoor units are fitted with a scroll compressor, renowned for its 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					FDQ200B8V3B9 / RZQ200C7Y1B	FDQ250B8V3B9 / RZQ250C7Y1B
Cooling capacity	Nom.			kW	20.0 (1)	24.1 (1)
Heating capacity	Nom.			kW	23.0 (2)	26.4 (2)
Power input	Cooling	Nom.		kW	6.23	8.58
	Heating	Nom.		kW	6.74	8.22
EER					3.21	2.81
COP					3.41	3.21
Piping connections	Liquid	Quantity			1	
		Type			Braze connection	
		OD		mm	9.52	12.7
	Gas	Quantity			1	
		Type			Braze connection	
		OD		mm	22.2	
	Heat insulation				Both liquid and gas pipes	

Notes

(1) Cooling: indoor temp. 27ºCDB, 19.0ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20ºCDB; outdoor temp. 7ºCDB, 6ºCWB; equivalent refrigerant piping: 5m; level difference: 0m

2-2 Technical Specifications						RZQ200C7Y1B	RZQ250C7Y1B
Capacity control	Method					Inverter controlled	
Casing	Colour					Daikin White	
	Material					Painted galvanized steel plate	
Dimensions	Unit	Height			mm	1,680	
		Width			mm	930	
		Depth			mm	765	
	Packed unit	Height			mm	1,855	
		Width			mm	1,055	
		Depth			mm	860	
Weight	Unit				kg	183	184
	Packed unit				kg	217	218
Packing	Material					Carton	
	Weight				kg	4.02	
Packing 2	Material					Wood	
	Weight				kg	20.85	
Packing 3	Material					Plastic	
	Weight				kg	0.265	
Heat exchanger	Length				mm	1,778	
	Rows	Quantity				54	
	Fin pitch				mm	2.00	
	Passes	Quantity				18	
	Face area				m²	2.112	
	Stages	Quantity				2	
	Empty tubeplate hole	Quantity				0	
	Tube type					ø8 Hi-XSS	
	Fin	Type				Non-symmetric waffle louvre	
		Treatment				Hydrophilic and corrosion resistant	
Fan	Type					Propeller fan	
	Discharge direction					Vertical	
	Quantity					1	
	Air flow rate	Cooling	Nom.		m³/min	171	
			Super low		m³/min	-	
					cfm	-	
		Heating	Nom.		m³/min	171	
			Super low		m³/min	-	
					cfm	-	
	External static pressure	Max.			Pa	78	

2 Specifications

2-2 Technical Specifications					RZQ200C7Y1B	RZQ250C7Y1B
Fan motor	Quantity				1	
	Model				Brushless DC motor	
	Output			W	750.00	
	Speed	Cooling	Super low	rpm	-	
		Heating	Super low	rpm	-	
Sound power level	Nom.			dBA	78	
Sound pressure level	Nom.			dBA	57	
Compressor	Quantity				1	
	Model				Inverter	
	Type				Hermetically sealed scroll compressor	
	Speed			rpm	7,980	
	Output			W	3.08	
	Crankcase heater			W	33	
Operation range	Cooling	Ambient	Min.	°CDB	-5.0	
			Max.	°CDB	46.0	
	Heating	Ambient	Min.	°CWB	-15.0	
			Max.	°CWB	15.0	
Refrigerant	Type				R-410A	
	Charge			kg	8.3	9.3
	Control				Electronic expansion valve	
	Circuits	Quantity			1	
Refrigerant oil	Type				Synthetic (ether) oil	
	Charged volume			l	2.0	
Piping connections	Drain	ID		mm	-	
	Piping length	OU - IU	Max.	m	100	
Defrost method					Reversed cycle	
Defrost control					Sensor for outdoor heat exchanger temperature	
Safety devices	Item	01			High pressure switch	
		02			Fan driver overload protector	
		03			Overcurrent relay	
		04			Inverter overload protector	
		05			PC board fuse	

2-3 Electrical Specifications				RZQ200C7Y1B	RZQ250C7Y1B
Power supply	Name			Y1	
	Phase			3N~	
	Frequency		Hz	50	
	Voltage		V	380-415	
	Voltage range	Min.	%	-10	
		Max.	%	10	
Current	Zmax	List		No requirements	
	Recommended fuses		A	25	
Wiring connections	For power supply	Quantity		5	
		Remark		Earth wire included	
	For connection with indoor	Quantity		4	
		Remark		Earth wire included	
Power supply intake				Outdoor unit only	

Notes

(1) Sound power level is an absolute value that a sound source generates.

(2) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.

(3) Sound values are measured in a semi-anechoic room.

(4) Power supply to the FDQ indoor unit is separate

(5) See separate drawing for electrical data

3 Electrical data

3 - 1 Electrical Data

RZQ200-250C

Unit combination		Power supply					Comp.		OFM		IFM	
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA
FCQ50B8V1 ×4	RZQ200C7Y1B	50 - 400		17.8	-	20	-	14.7	0.75	0.7	0.045×4	0.6×4
FCQ60B8V1 ×3	RZQ200C7Y1B	50 - 400		17.2	-	20	-	14.7	0.75	0.7	0.045×3	0.6×3
FCQ71B8V3B ×3	RZQ200C7Y1B	50 - 400		17.2	-	20	-	14.7	0.75	0.7	0.045×3	0.6×3
FCQ100B8V3B ×2	RZQ200C7Y1B	50 - 400		17.4	-	20	-	14.7	0.75	0.7	0.090×2	1.0×2
FCQ50C7VEB ×4	RZQ200C7Y1B	50 - 400		15.2	-	20	-	13.3	0.75	0.7	0.056×4	0.3×4
FCQ60C7VEB ×3	RZQ200C7Y1B	50 - 400		15.2	-	20	-	13.3	0.75	0.7	0.056×3	0.4×3
FCQ71C7VEB ×3	RZQ200C7Y1B	50 - 400		15.5	-	20	-	13.3	0.75	0.7	0.056×3	0.5×3
FCQ100C7VEB ×2	RZQ200C7Y1B	50 - 400		15.4	-	20	-	13.3	0.75	0.7	0.120×2	0.7×2
FFQ50BV1B ×4	RZQ200C7Y1B	50 - 400		16.8	-	25	-	13.3	0.75	0.7	0.055×4	0.7×4
FFQ60BV1B ×3	RZQ200C7Y1B	50 - 400		16.1	-	20	-	13.3	0.75	0.7	0.055×3	0.7×3
FBQ50B7V1 ×4	RZQ200C7Y1B	50 - 400	Max.50Hz 415V	16.8	-	25	-	13.3	0.75	0.7	0.085×4	0.7×4
FBQ60B7V1 ×3	RZQ200C7Y1B	50 - 400	Min.50Hz 380V	16.7	-	25	-	13.3	0.75	0.7	0.125×3	0.9×3
FBQ71B7V3B ×3	RZQ200C7Y1B	50 - 400		16.7	-	25	-	13.3	0.75	0.7	0.125×3	0.9×3
FBQ100B7V3B ×2	RZQ200C7Y1B	50 - 400		16.0	-	20	-	13.3	0.75	0.7	0.135×2	1.0×2
FHQ50BUV1B ×4	RZQ200C7Y1B	50 - 400		16.4	-	20	-	13.3	0.75	0.7	0.062×4	0.6×4
FHQ60BUV1B ×3	RZQ200C7Y1B	50 - 400		15.8	-	20	-	13.3	0.75	0.7	0.062×3	0.6×3
FHQ71BUV1B ×3	RZQ200C7Y1B	50 - 400		15.8	-	20	-	13.3	0.75	0.7	0.062×3	0.6×3
FHQ100BUV1B ×2	RZQ200C7Y1B	50 - 400		15.4	-	20	-	13.3	0.75	0.7	0.130×2	0.7×2
FUQ71BUV1B ×3	RZQ200C7Y1B	50 - 400		16.1	-	20	-	13.3	0.75	0.7	0.045×3	0.7×3
FUQ100BUV1B ×2	RZQ200C7Y1B	50 - 400		16.2	-	20	-	13.3	0.75	0.7	0.090×2	1.1×2
FAQ71BUV1B ×3	RZQ200C7Y1B	50 - 400		14.9	-	20	-	13.3	0.75	0.7	0.043×3	0.3×3
FAQ100BUV1B ×2	RZQ200C7Y1B	50 - 400		14.8	-	20	-	13.3	0.75	0.7	0.049×2	0.4×2
FDQ200B7V3B	RZQ200C7Y1B	50 - 400		14.0	-	20	-	13.3	0.75	0.7	0.650	6.8
FCQ60B8V1 ×4	RZQ250C7Y1B	50 - 400		17.8	-	20	-	14.7	0.75	0.7	0.045×4	0.6×4
FCQ125B8V3B ×2	RZQ250C7Y1B	50 - 400		17.4	-	20	-	14.7	0.75	0.7	0.090×2	1.0×2
FCQ60C7VEB ×4	RZQ250C7Y1B	50 - 400		15.6	-	20	-	13.3	0.75	0.7	0.056×4	0.4×4
FCQ125C7VEB ×2	RZQ250C7Y1B	50 - 400		16.0	-	20	-	13.3	0.75	0.7	0.120×2	1.0×2
FFQ60BV1B ×4	RZQ250C7Y1B	50 - 400		16.8	-	25	-	13.3	0.75	0.7	0.055×4	0.7×4
FBQ60B7V1 ×4	RZQ250C7Y1B	50 - 400	Max.50Hz 415V	17.6	-	25	-	13.3	0.75	0.7	0.125×4	0.9×4
FBQ125B7V3B ×2	RZQ250C7Y1B	50 - 400	Min.50Hz 380V	16.8	-	25	-	13.3	0.75	0.7	0.225×2	1.4×2
FHQ60BUV1B ×4	RZQ250C7Y1B	50 - 400		16.4	-	20	-	13.3	0.75	0.7	0.062×4	0.6×4
FHQ125BUV1B ×2	RZQ250C7Y1B	50 - 400		15.4	-	20	-	13.3	0.75	0.7	0.130×2	0.7×2
FUQ125BUV1B ×2	RZQ250C7Y1B	50 - 400		16.2	-	20	-	13.3	0.75	0.7	0.090×2	1.1×2
FDQ125B7V3B ×2	RZQ250C7Y1B	50 - 400		14.0	-	20	-	13.3	0.75	0.7	0.500×2	4.2×2
FDQ250B7V3B	RZQ250C7Y1B	50 - 400		14.0	-	20	-	13.3	0.75	0.7	1.000	7.6

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SYMBOLS

MCA : Min. Circuit Amps (A)
TOCA : Total Over Current Amps (A)
MFA : Max. Fuse Amps (A) (See note 7)
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 - 400V
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)

3 Electrical data

3 - 1 Electrical Data

RZQ200-250C

Unit combination		Power supply				Comp.	OFM		IFM	
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	MFA	RLA	W	FLA	W	FLA
FBQ100C7VEB x 2	RZQ200C7Y1B	50 - 400	Max. 50Hz 440V Min. 50Hz 360V	17.2	20	13.3	750	0,7	350x2	1,6x2
FBQ71C7VEB x 3				17.3					350x3	1,1x3
FBQ60C7VEB x 3				17.3					350x3	1,1x3
FBQ50C7VEB x 4				18.4					140x4	1,1x4
FBQ125C7VEB x 2	RZQ250C7Y1B			18.2					350x2	2,1x2
FBQ60C7VEB x 4				18.4					350x4	1,1x4

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SYMBOLS

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps (See note 4) (A)
RLA : Rated Load Amps (A)
OFM : Outdoor Fan Motor (A)
IFM : Indoor Fan Motor
FLA : Full Load Amps
kW : Fan Motor Rated Output (W)

NOTES

1 RLA is based on the following conditions:
Indoor temperature 27°CDB/19°CWB
Outdoor temperature 35°CDB
2 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
3 Maximum allowable voltage unbalance between phases is 2%
4 MCA represents maximum input current., MFA represents capacity which may accept MCA (next lower standard fuse rating, min.15A)
5 Select wire size based on the larger value of MCA.
6 MFA is used to select the circuit breaker and earth leakage circuit breaker

3 Electrical data

3 - 1 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	-

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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 Ssc** ≧ 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 ≦ 75A per phase.

- (**) Short-circuit power

4 Options

4 - 1 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	

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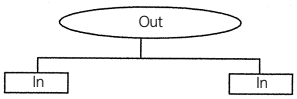
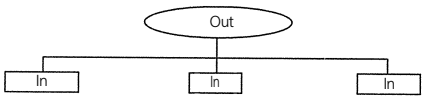
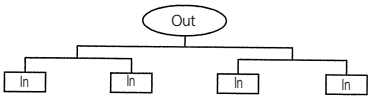
5 Combination table

5 - 1 Combination Table

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

	Possible indoor combination		
	Simultaneous operation		
Outdoor models	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)

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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.

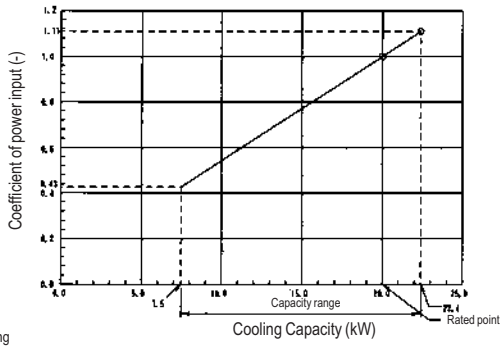
4 Between brackets are the required Refnet kits mentioned, that are necessary to install the combination.

6 Capacity tables

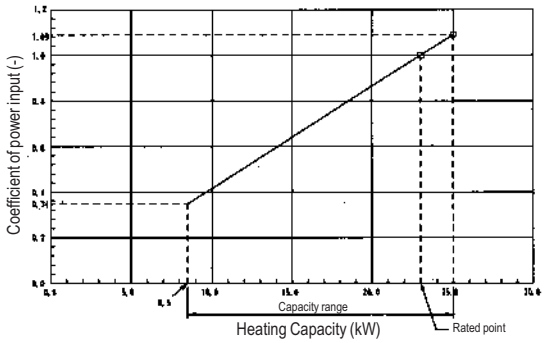
6 - 1 Cooling/Heating Capacity Tables

RZQ200C7Y1B

Cooling



Heating



Cooling

Indoor	Outdoor temperature (°C DB)											
	25			30			35			40		
	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	(KW)	(KW)	-	(KW)	(KW)	-	(KW)	(KW)	-	(KW)	(KW)	-
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

Heating

Indoor	Outdoor temperature (°C WB)											
	-15		-10		-5		0		6		10	
	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
°C WB	(KW)	-	(KW)	-	(KW)	-	(KW)	-	(KW)	-	(KW)	-
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

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)
Caution:
TC and SHC are shown by kW.

TC : Total cooling (heating) capacity (kW)
SHC : Sensible heat capacity (kW)
PI : Power input (comp. + indoor and outdoor fan motors)
CPI : Coefficient of power input (-)

NOTES

1. Ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. On the figure the mark with O show the max. capacity at standard conditions.
   On the figure the mark with ▭ show the rated capacity and rated coefficient of power input. However the max. capacity is not guaranteed except at standard condition.
3. SHC is based on indoor EWB and EDB.
   SHC for other dry bulb temp. = SHC + SHC*.
   SHC* = SHC correction for other dry bulb
   = 0.02 x AFR (m^3/min.) x (1-BF) x (DB*-EDB)
   Add SHC to SHC*.

(Pair)

	FDQ200
AFR	69
(BF)	(0.31)

(Twin)

	FCQ100C x 2	FCQ100B x 2	FBQ100B x 2	FBQ100C x 2	FHQ100 x 2	FUQ100 x 2	FAQ100 x 2
AFR	23.5 x 2	28 x 2	27 x 2	32 x 2	24 x 2	29 x 2	23 x 2
(BF)	(0.16 x 2)	(0.16 x 2)	(0.2 x 2)	(0.13 x 2)	(0.14 x 2)	(0.07 x 2)	(0.1 x 2)

(Triple)

	FCQ60C x 3	FCQ71C x 3	FCQ60B x 3	FCQ71B x 3	FFQ60 x 3	FBQ60B x 3	FBQ71B x 3	FBQ60C x 3	FBQ71C x 3	FHQ60 x 3	FHQ71 x 3	FUQ71 x 3	FAQ71 x 3
AFR	13.5 x 3	15.5 x 3	18 x 3	18 x 3	15 x 3	19 x 3	19 x 3	18 x 3	18 x 3	17 x 3	17 x 3	19 x 3	19 x 3
(BF)	(0.21 x 3)	(0.19 x 3)	(0.1 x 3)	(0.1 x 3)	(0.11 x 3)	(0.11 x 3)	(0.11 x 3)	(0.15 x 3)	(0.08 x 3)	(0.2 x 3)	(0.1 x 3)	(0.07 x 3)	(0.08 x 3)

(Double Twin)

	FCQ50C x 4	FCQ50B x 4	FFQ50 x 4	FBQ50B x 4	FBQ50C x 4	FHQ50 x 4
AFR	12.5 x 4	15 x 4	12 x 4	14 x 4	16 x 4	14 x 4
(BF)	(0.21 x 4)	(0.16 x 4)	(0.16 x 4)	(0.15 x 4)	(0.16 x 4)	(0.1 x 4)

4. Capacities are based on the following conditions.
   Outdoor air: 85% RH
   However, the condition rated capacity in heating is 7°C DB / 6°C WB.
   Corresponding refrigerant piping length: 5.0 m.
   Level difference: 0m
5. Coefficient of power input is the percantage when the rated value is defined as 1.00.
6. The value contains less than 5% error according to indoor unit type.
7. Heating performance include the drop of frost formation.
8. Air flow rate and (BF) are given in table below.
9. Rated power input of each model is given in table below:

(Pair)

	FDQ200
Cooling	6.23
Heating	6.74

(Twin)

	FCQ100C x 2	FCQ100B x 2	FBQ100B x 2	FBQ100C x 2	FHQ100 x 2	FUQ100 x 2	FAQ100 x 2
Cooling	5.69	5.69	6.16	5.99	6.78	6.71	5.99
Heating	6.40	6.40	6.12	5.72	7.34	6.69	6.92

(Triple)

	FCQ60C x 3	FCQ71C x 3	FCQ60B x 3	FCQ71B x 3	FFQ60 x 3	FBQ60B x 3	FBQ71B x 3	FBQ60C x 3	FBQ71C x 3	FHQ60 x 3	FHQ71 x 3	FUQ71 x 3	FAQ71 x 3
Cooling	5.99	5.99	5.99	5.99	6.01	6.48	6.48	6.31	6.31	7.14	7.14	7.07	6.30
Heating	6.74	6.74	6.74	6.74	6.54	6.45	6.45	6.05	6.05	7.73	7.73	7.04	7.28

(Double Twin)

	FCQ50C x 4	FCQ50B x 4	FFQ50 x 4	FBQ50B x 4	FBQ50C x 4	FHQ50 x 4
Cooling	5.99	5.99	6.01	6.48	6.31	7.14
Heating	6.74	6.74	6.54	6.45	6.05	7.73

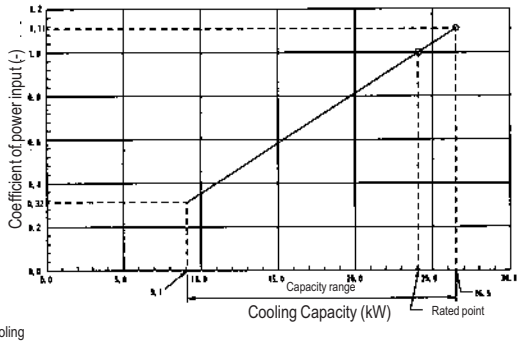
3TW29041-4

6 Capacity tables

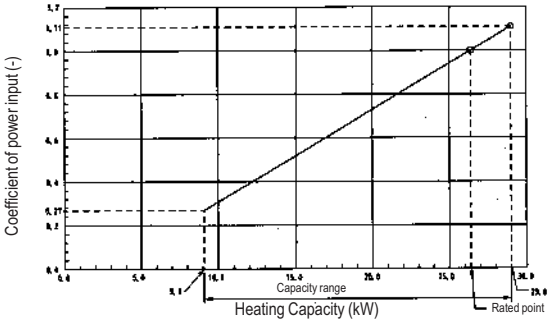
6 - 1 Cooling/Heating Capacity Tables

RZQ250C7Y1B

Cooling



Heating



Cooling

Indoor	Outdoor temperature (°C DB)											
	25			30			35			40		
	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	(KW)	(KW)	-	(KW)	(KW)	-	(KW)	(KW)	-	(KW)	(KW)	-
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	29.0	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

Heating

Indoor	Outdoor temperature (°C WB)											
	-15		-10		-5		0		6		10	
	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
°C WB	(KW)	-	(KW)	-	(KW)	-	(KW)	-	(KW)	-	(KW)	-
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

SYMBOLS

AFR : Air flow rate (m³/min)
BF : Bypass factor
EWB : Entering wet bulb temp. (°C WB)
EDB : Entering dry bulb temp. (°C DB)
Caution:
TC and SHC are shown by kW.

TC : Total cooling (heating) capacity (kW)
SHC : Sensible heat capacity (kW)
PI : Power input (comp. + indoor and outdoor fan motors)
CPI : Coefficient of power input (-)

NOTES

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

(Triple)

	FDQ250
AFR	89
(BF)	(0.34)

(Twin)

	FCQ125C x 2	FCQ125B x 2	FBQ125B x 2	FBQ125C x 2	FHQ125 x 2	FUQ125 x 2	FDQ125 x 2
AFR	27.5 x 2	31 x 2	35 x 2	39 x 2	30 x 2	32 x 2	45 x 2
(BF)	(0.19 x 2)	(0.07 x 2)	(0.14 x 2)	(0.16 x 2)	(0.13 x 2)	(0.07 x 2)	(0.25 x 2)

(Double Twin)

	FCQ60C x 4	FCQ60B x 4	FFQ60 x 4	FBQ60B x 4	FBQ60C x 4	FHQ60 x 4
AFR	13.5 x 4	18 x 4	15 x 4	19 x 4	18 x 4	17 x 4
(BF)	(0.21 x 4)	(0.1 x 4)	(0.11 x 4)	(0.11 x 4)	(0.15 x 4)	(0.2 x 4)

9. Rated power input of each model is given in table below:

(Pair)

	FDQ250
Cooling	8.58
Heating	8.22

(Twin)

	FCQ125C x 2	FCQ125B x 2	FBQ125B x 2	FBQ125C x 2	FHQ125 x 2	FUQ125 x 2	FDQ125 x 2
Cooling	8.91	8.91	9.14	8.98	10.22	9.30	9.53
Heating	8.68	8.68	7.94	7.38	8.95	8.68	7.35

(Dounle Twin)

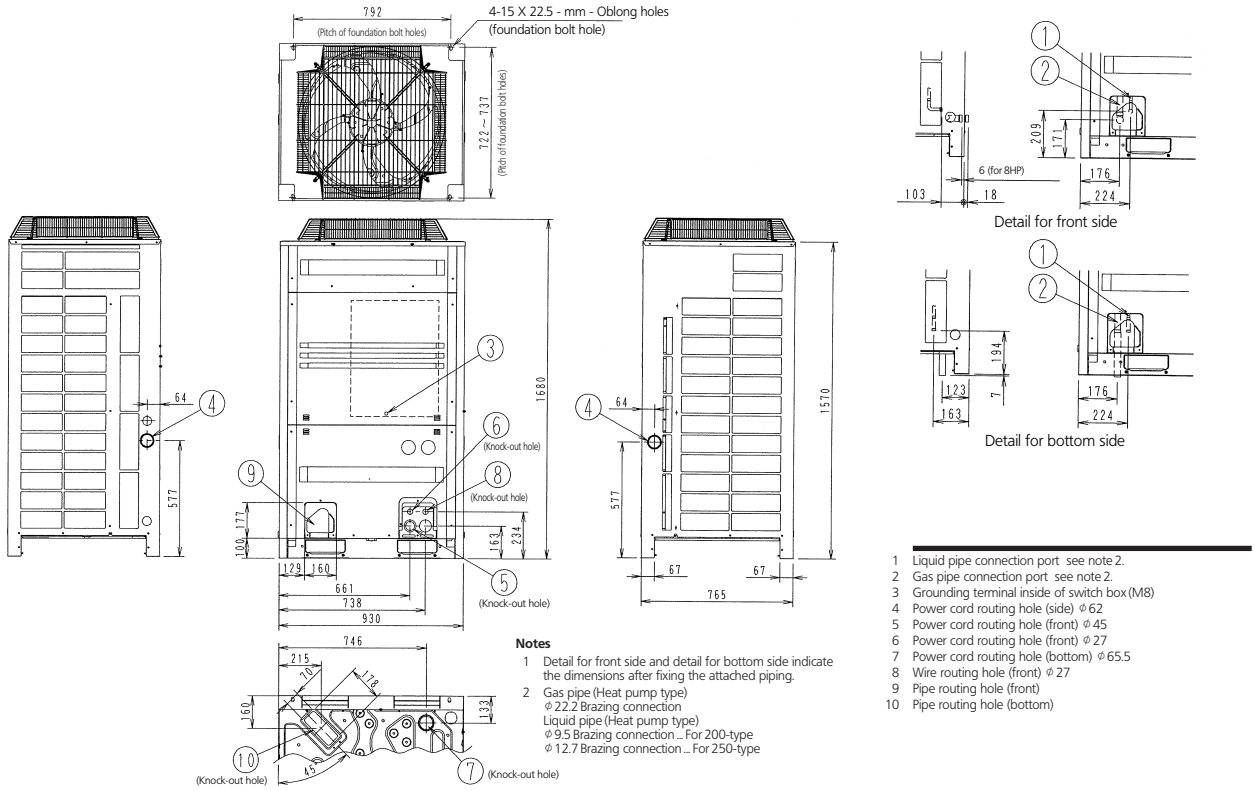
	FCQ60C x 3	FCQ71C x 3	FCQ60B x 3	FCQ71B x 3	FFQ60 x 3	FBQ60B x 3
Cooling	9.39	9.39	9.49	9.62	9.46	10.76
Heating	9.13	9.13	8.48	8.36	7.80	9.43

3TW29051-4

7 Dimensional drawings

7 - 1 Dimensional Drawings

RZQ200-250C



Notes

1. Detail for front side and detail for bottom side indicate the dimensions after fixing the attached piping.
2. Gas pipe (Heat pump type)
   Φ22.2 Brazing connection
   Liquid pipe (Heat pump type)
   Φ9.5 Brazing connection ... For 200-type
   Φ12.7 Brazing connection ... For 250-type

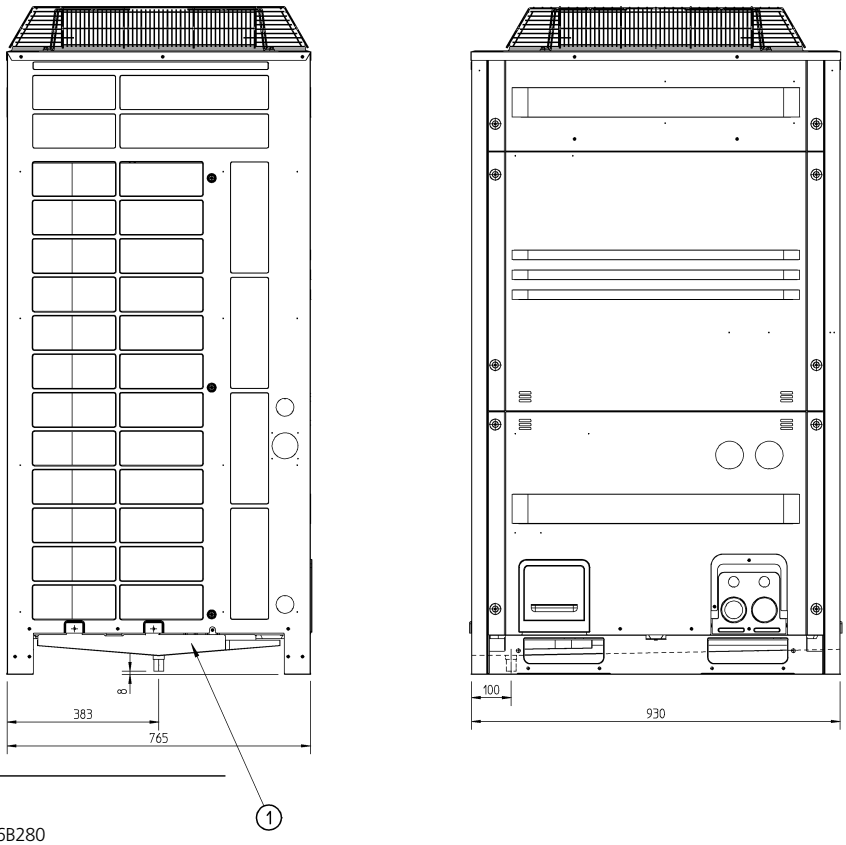
1 Liquid pipe connection port see note 2.
2 Gas pipe connection port see note 2.
3 Grounding terminal inside of switch box (M8)
4 Power cord routing hole (side) Φ62
5 Power cord routing hole (front) Φ45
6 Power cord routing hole (front) Φ27
7 Power cord routing hole (bottom) Φ65.5
8 Wire routing hole (front) Φ27
9 Pipe routing hole (front)
10 Pipe routing hole (bottom)

3TW29044-1

7 Dimensional drawings

7 - 2 Dimensional Drawings with Accessories

RZQ200-250C



NOTES

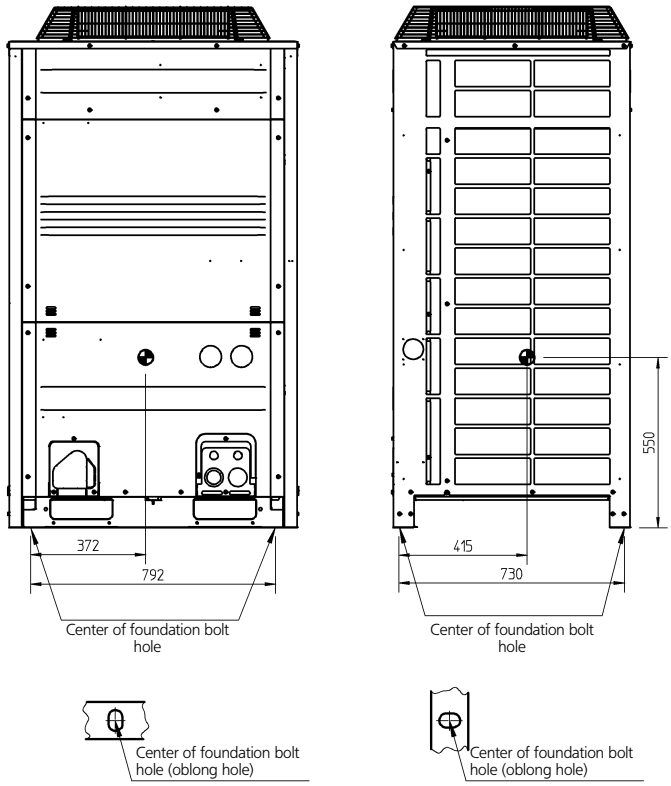
1 Central drain pan kit KWC26B280

3TW27244-1

8 Centre of gravity

8 - 1 Centre of Gravity

RZQ200-250C



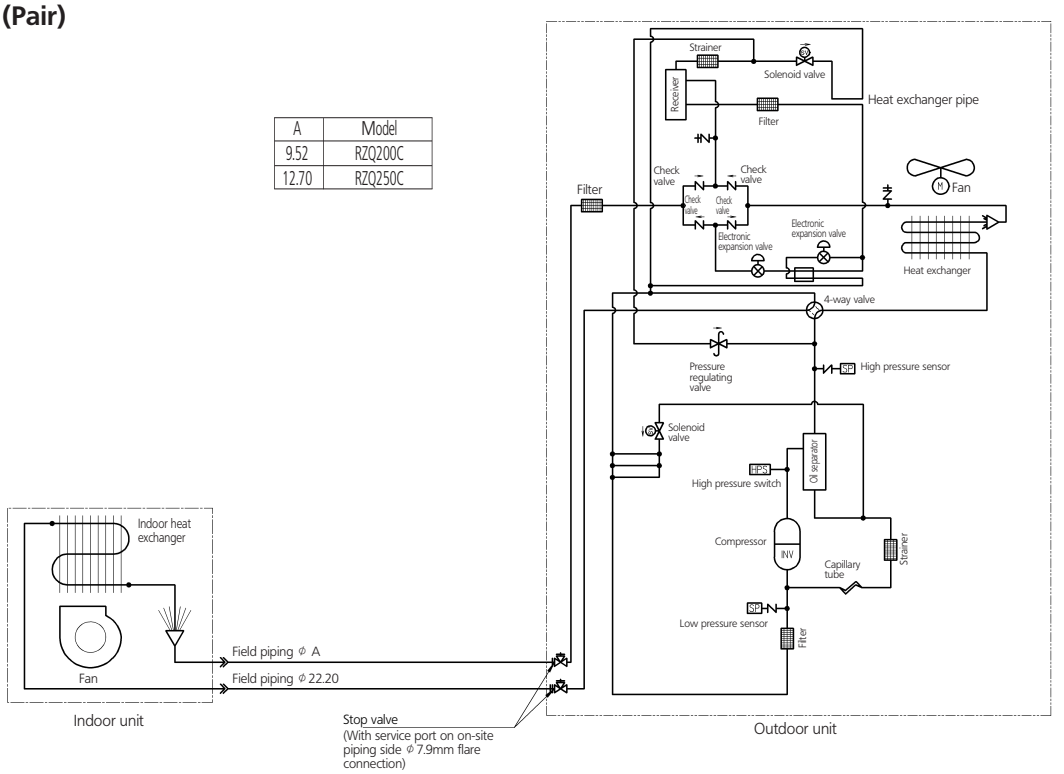
4TW29049-4

9 Piping diagrams

9 - 1 Piping Diagrams

RZQ200-250C (Pair)

A	Model
9.52	RZQ200C
12.70	RZQ250C



3TW29045-1

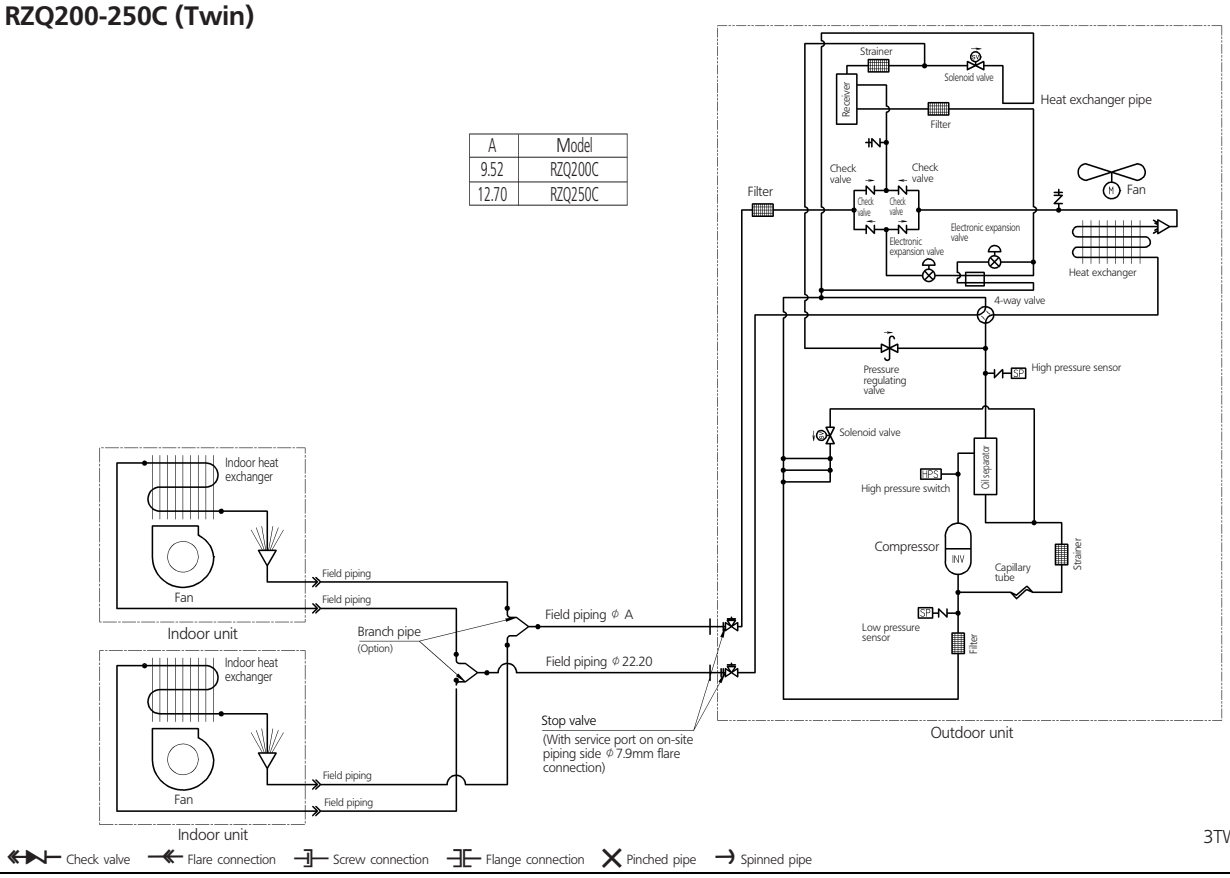
Check valve Flare connection Screw connection Flange connection Pinched pipe Spinned pipe

9 Piping diagrams

9 - 2 Piping Diagram Twin Application

RZQ200-250C (Twin)

A	Model
9.52	RZQ200C
12.70	RZQ250C

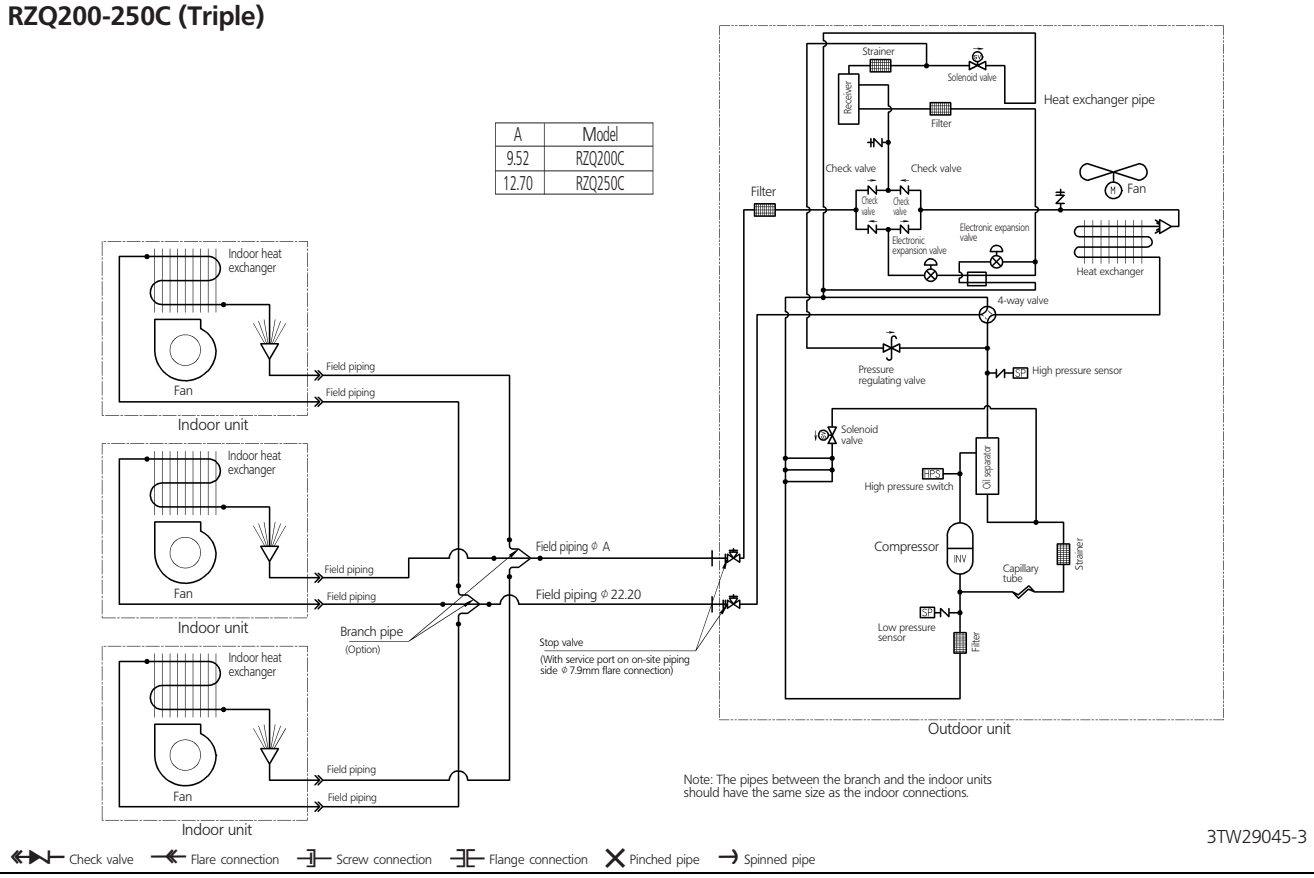


9 Piping diagrams

9 - 3 Piping Diagram Triple Application

RZQ200-250C (Triple)

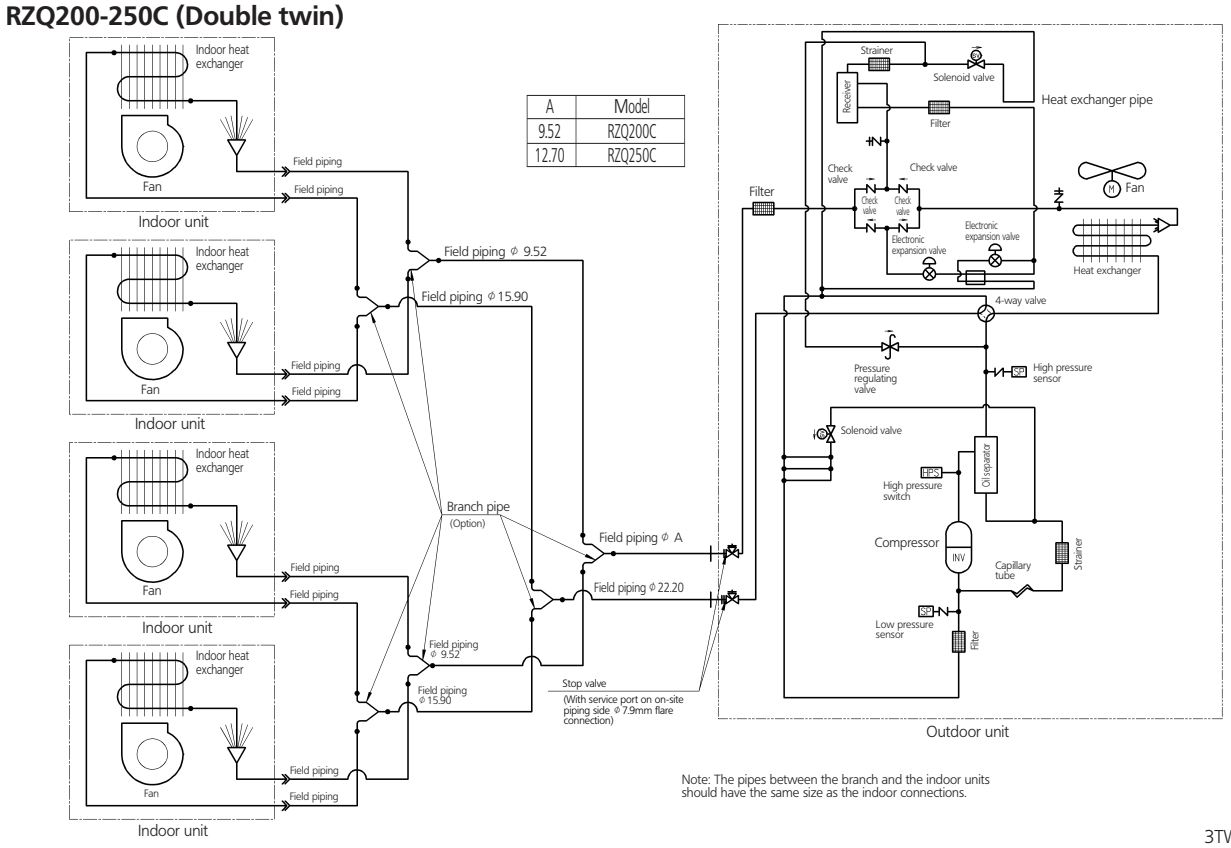
A	Model
9.52	RZQ200C
12.70	RZQ250C



9 Piping diagrams

9 - 4 Piping Diagram Double Twin Application

RZQ200-250C (Double twin)

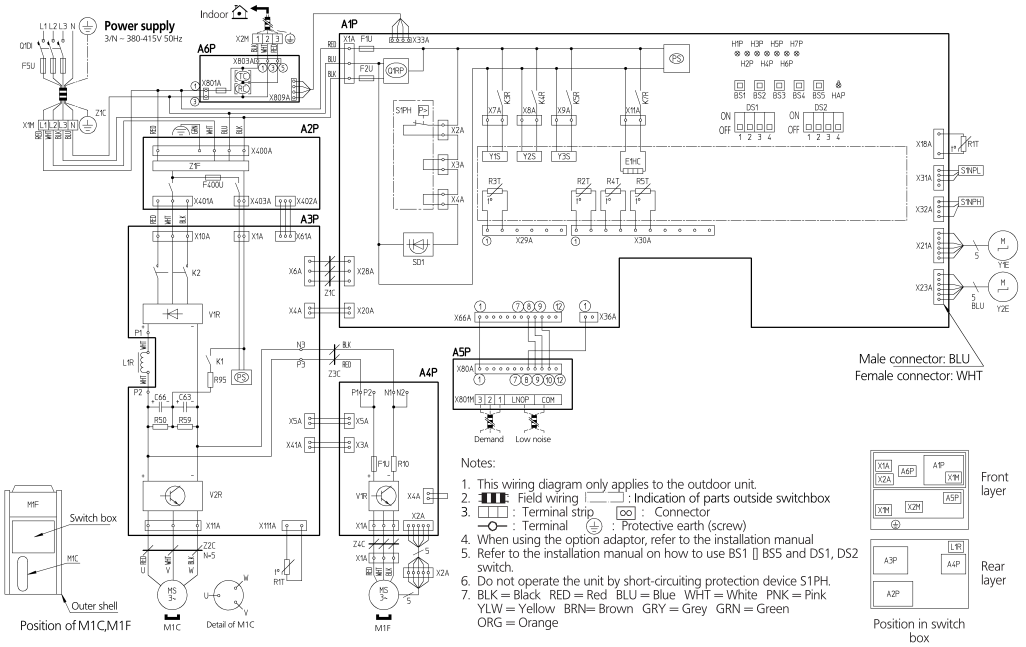


A	Model
9.52	RZQ200C
12.70	RZQ250C

10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

RZQ-C



A1P–A6P	Printed circuit board
A1P	Main
A2P	Noise filter
A3P	Inverter
A4P	Fan
A6P	QA Transmission
BS1–BS5	Push button switch (Mode, set, return, test, reset)
C1	Capacitor
C63,C66	Capacitor
DS1,DS2	Dip switch
E1HC	Crankcase heater
F1U	Fuse (DC650V, 8A) (A4P)
F1U, F2U	Fuse (250V, 3.15A ⓣ) (A1P)
F400U	Fuse (250V, 6.3A ⓣ) (A2P)
H1P–H8P	Pilot lamp (service monitor-orange) [H2P] Prepare test---------flickering Malfunction detection---Light up
HAP	Pilotlamp (service monitor - green)
K1	Magnetic relay
K2	Magnetic contactor (M1C)
K3R–K7R	Magnetic relay
K3R	Y1S
K4R	Y2S
K5R	Y3S
K7R	E1HC
L1R	Reactor
M1C	Motor (Compressor)
M1F	Motor (Fan)
PS	Switching power supply (A1P, A3P)
Q1RP	Phase reversal detect circuit
Q1DI	Earth leakage breaker
R10	Resistor (current sensor) (A4P)
R50, R59	Resistor
R95	Resistor (current limiting)
R1T–R5T	Thermistor
R1T	Air (A1P)
R1T	Fin (A3P)
R2T	Suction
R3T	M1C Discharge
R4T	Heat exch. deicer
R5T	Sub cool outlet
RC	Receiver
S1NPH	Pressure sensor (high)
S1NPL	Pressure sensor (low)
S1PH	Pressure switch (high)
SD1	Safety devices input
TC	Transmitter
V1R	Power module (A4P)
V1R, V2R	Power module (A3P)
X1A, X2A	M1C Connector (M1F)
X1M	Terminal strip (Power supply)
X2M	Terminal strip QA (Transmission)
Y1E	Electronic expansion valve (Main)
Y2E	Electronic expansion valve (Subcool)
Y1S–Y3S	Solenoid valve
Y1S	Hot gas
Y2S	receiver gas purge
Y3S	4-way valve
Z1C–4C	Noise filter (ferrite core)
Z1F	Noise filter (with surge absorber)
Option	
A5P	Printed circuit board (for demand)

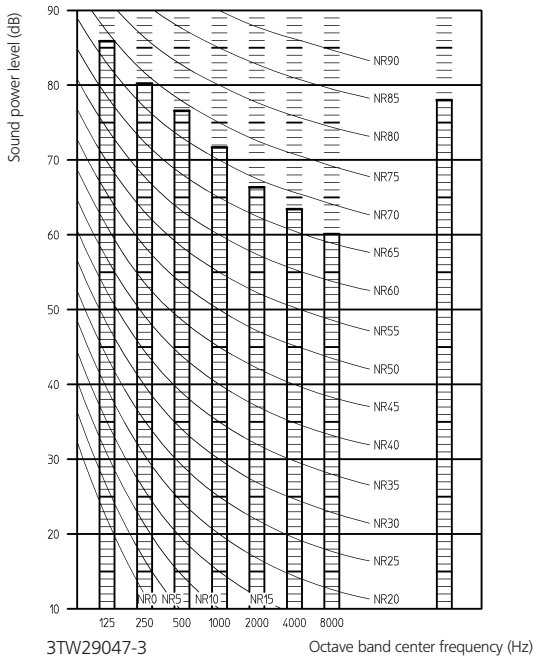
Notes:
1. This wiring diagram only applies to the outdoor unit.
2. ▮▮▮ Field wiring | ——— | : Indication of parts outside switchbox
3. ▭▭▭ : Terminal strip ⊙⊙ : Connector —○— : Terminal ⏚ : Protective earth (screw)
4. When using the option adaptor, refer to the installation manual
5. Refer to the installation manual on how to use BS1 [] BS5 and DS1, DS2 switch.
6. Do not operate the unit by short-circuiting protection device S1PH.
7. BLK = Black RED = Red BLU = Blue WHT = White PNK = Pink YLW = Yellow BRN= Brown GRY = Grey GRN = Green ORG = Orange

2TW29046-1C

11 Sound data

11 - 1 Sound Power Spectrum

RZQ200C - Cooling

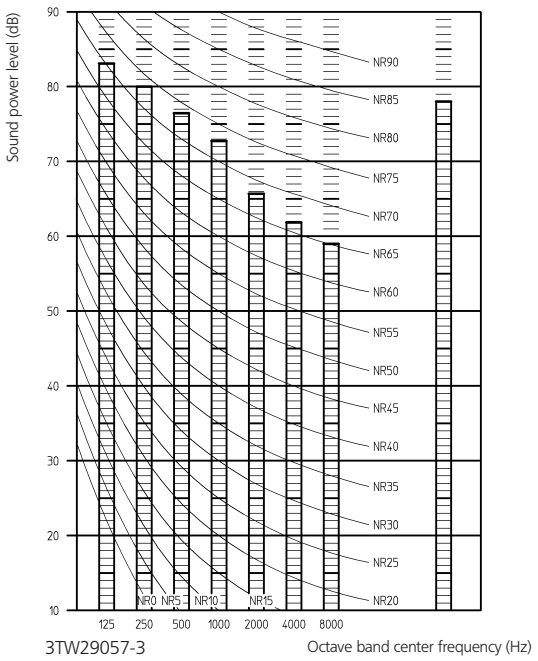


3TW29047-3

NOTES

1 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
2 Reference acoustic intensity 0dB = 10E-6μW/m^2
3 Measured according to ISO 3744

RZQ250C - Cooling



3TW29057-3

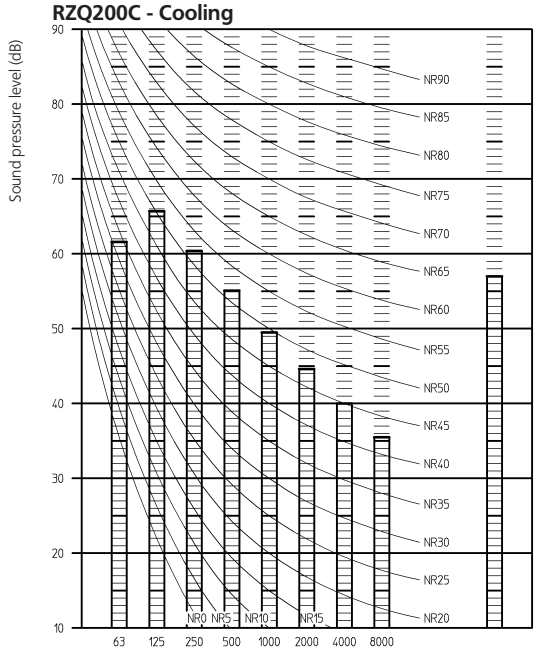
NOTES

1 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
2 Reference acoustic intensity 0dB = 10E-6μW/m^2
3 Measured according to ISO 3744

11 Sound data

11 - 2 Sound Pressure Spectrum

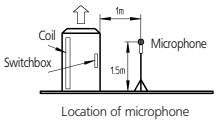
RZQ200C - Cooling



3TW29047-1

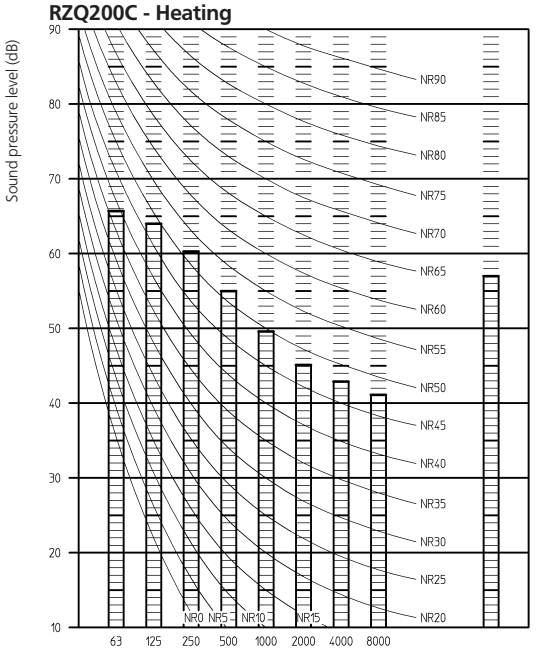
NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room)
2 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20Pa
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Curve for RZQ200C7Y1B in cooling mode



Location of microphone

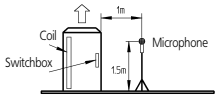
RZQ200C - Heating



3TW29047-2

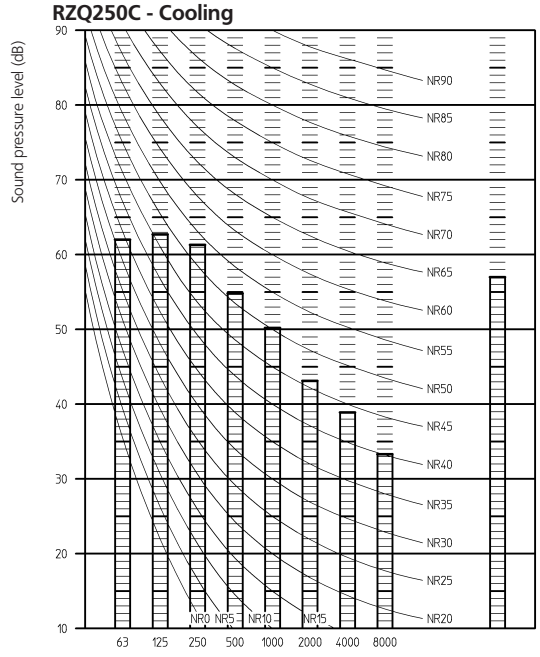
NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room)
2 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20Pa
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Curve for RZQ200C7Y1B in heating mode



Location of microphone

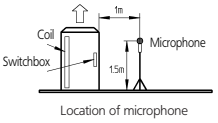
RZQ250C - Cooling



3TW29057-1

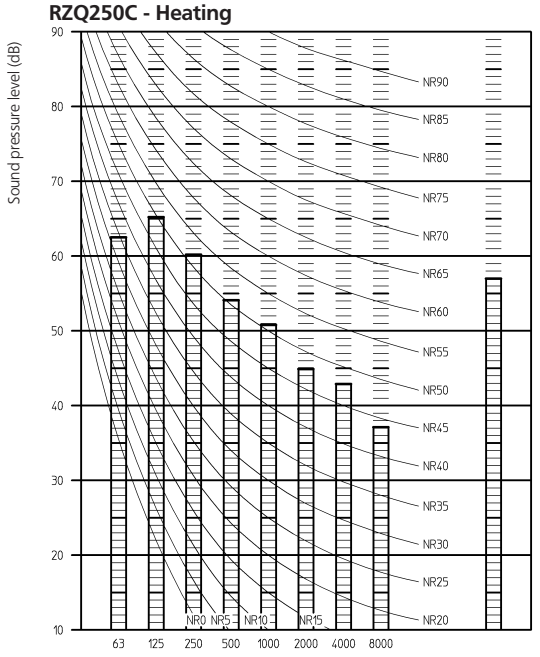
NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room)
2 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20Pa
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Curve for RZQ200C7Y1B in cooling mode



Location of microphone

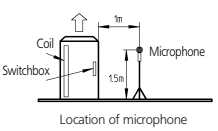
RZQ250C - Heating



3TW29057-2

NOTES

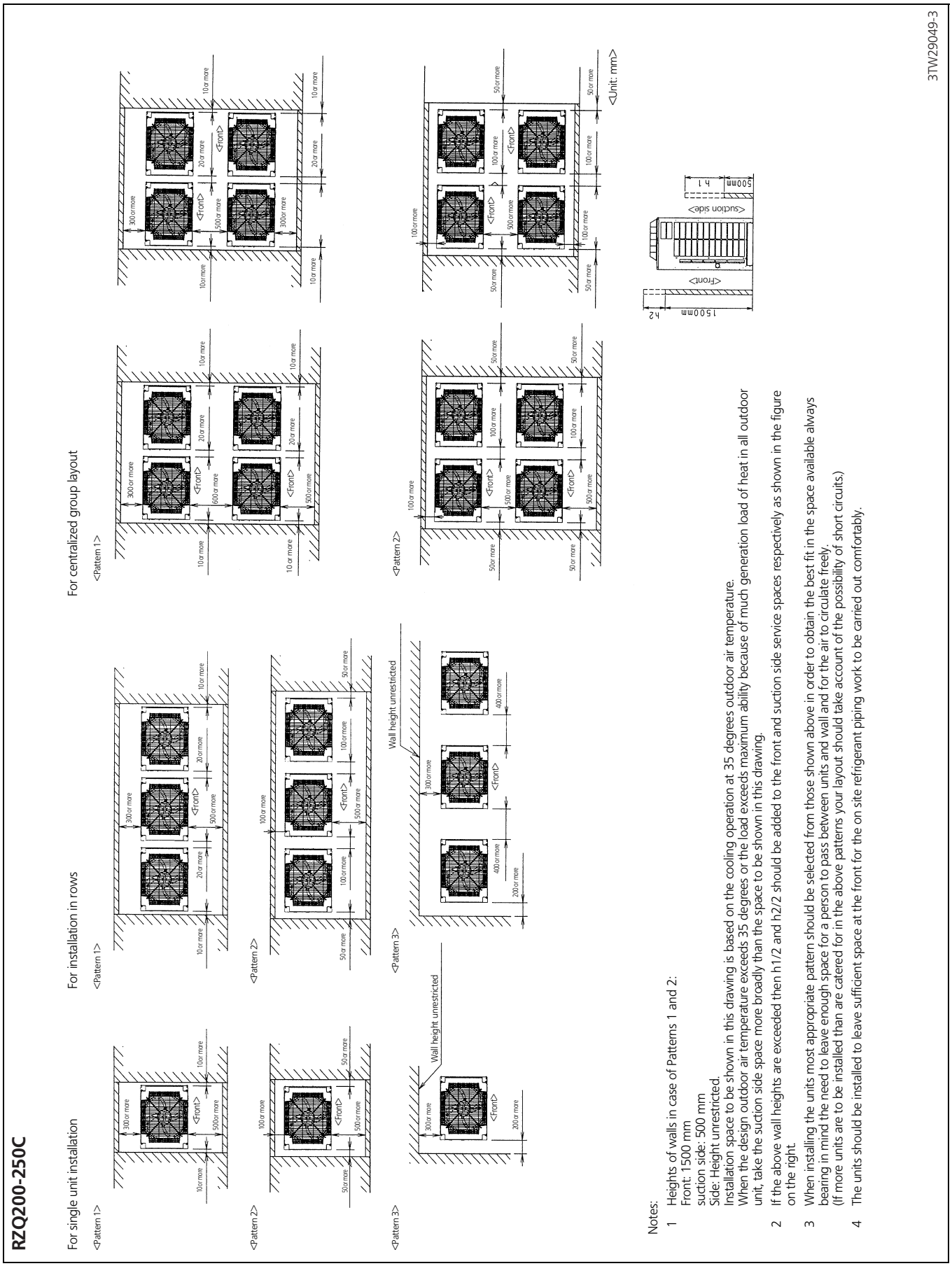
1 Data is valid at free field condition (measured in a semi-anachoic room)
2 dB(A) = A-weighted sound pressure level (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20Pa
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.
5 Curve for RZQ200C7Y1B in heating mode



Location of microphone

12 Installation

12 - 1 Installation Method



Notes:

1 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.

2 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.

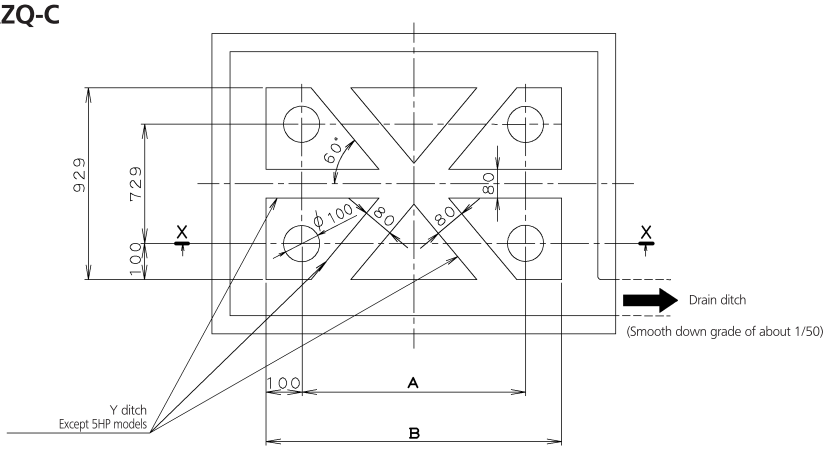
3 When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough space for a person to pass between units and wall and for the air to circulate freely.
(If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)

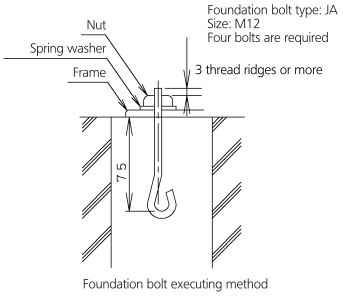
4 The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

12 Installation

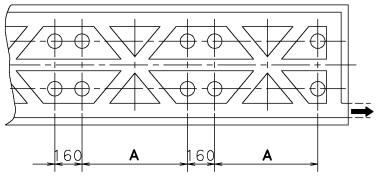
12 - 2 Fixation and Foundation of Units

RZQ-C

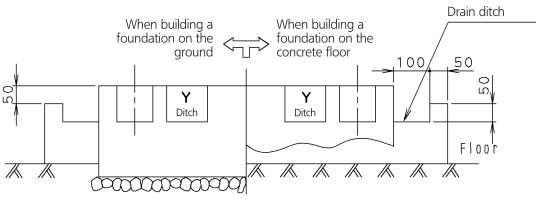




Foundation bolt executing method



When installing multiple units in connection



X - X Cross section

Model		A	B
RXYQ5MY1B RXY5MY1, YL, TL RXS5MY1 RXYQ5AAY1, YL, TL RXYQ5PY1(B)	RXYQ5PYL	497	697
RXYB-10MY1B REQB-10MY1B RXYB-10MY1, YLTL RXB-10MY1 RXYQ8-10MAY1, YL, TL RHXY8-10MY1 RHXYQ8-10MAY1 RCXYQ8-10MAY1 RXJYQ8-10PY1 RZP250MAY1	RXM8MMY1 RHXYQ8-10PY1 RCXYQ8-10PY1 RZP250PY1 RXYQ8-10PY1C RXYQ8-10PYL RYCP250PY1	792	992
RXYQ12-14-16MY1B REYQ12-14-16MY1B RXY12-14-16MY1, YL, TL RX12-14-16MY1 RXYQ12-14-16MAY1, YL, TL RHXY12-14-16MY1 RHXYQ12-14-16MAY1 RCXYQ12-14-16MAY1 RXYQ8-10MY1K RXYQ8-10MY1JK RXYQ12-14-16-18PY1 RZP350MAY1	RXM10MY1 RHXYQ12-14-16PY1 RCXYQ12-14-16PY1 RXYQ12-14-16PY1C RXYQ12-14-16-18PYL RZP350-450PY1 RYCP400PY1	1102	1302

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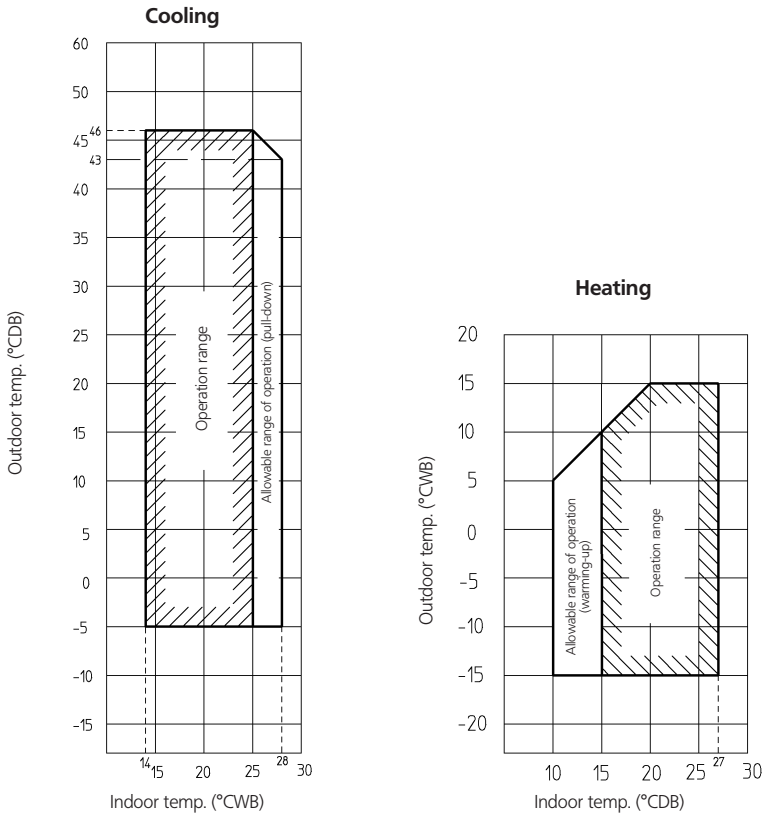
NOTES

1 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.
2 The surface shall be finished with mortar. The corner edges shall be chamfered.
3 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.
4 A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
5 When installing the equipment on a roof, the floor strength shall be checked, and water-proofing measures shall be taken.
6 Y ditch is not necessary for 5HP models.

13 Operation range

13 - 1 Operation Range

RZQ200-250C



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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.

Daikin Europe N.V. participates in the Eurovent Certification programme for Air conditioners (AC), Liquid Chilling Packages (LCP), Air handling units (AHU) and Fan coil units (FCU), Check ongoing validity of certificate online: www.eurovent-certification.com or using: www.certiflash.com"

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EEDEN12-100 • 04/12 • Copyright © Daikin
The present publication supersedes EEDEN11-100
Printed on non-chlorinated paper. Prepared by Goekint Graphics NV, Belgium
Responsible Editor: Daikin Europe N.V., Zandvoordestraat 300, B-8400 Oostende