DAIKIN

Air Conditioning

Technical Data

Replacement VRV

EEDEN15-202

RXYQQ-T

TABLE OF CONTENTS

RXYQQ-T

1 Features

Quick & quality replacement for R-22 and R-407C systems

- Cost effective and fast replacement as only the outdoor and indoor unit needs to be replaced, meaning almost no work has to be carried out inside the building
- Efficiency gains of more than 70% can be realized, by virtue of technological developments in heat pump technology and the more efficient R-410A refrigerant
- Less intrusive and time consuming installation compared to installing a new system, as the refrigerant piping can be maintained
- Unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and allows safe replacement of competitor replacement
- Automatic cleaning of refrigerant piping ensures a clean piping network, even when a compressor breakdown has occurred
- Accurate temperature control, fresh air provision, air handling units and Biddle air curtains all integrated in a single system requiring only one single point of contact
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- Customize your VRV for best seasonal efficiency & comfort with the weather dependant Variable Refrigerant Temperature function. Increased seasonal efficiency with up to 28%. No more cold draft by supply of high outblow temperatures
- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- Outdoor unit display for quick on-site settings and easy read out of errors together with the indication of service parameters for checking basic functions.
- Possibility to add indoor units and increase capacity without changing the refrigerant piping
- Possibility to spread the various stages of repclacement thanks to the modular design of the VRV system
- Free combination of outdoor units to meet installation space or efficiency requirements
- Keep your system in top condition via our ACNSS service: 24/7 monitoring for maximum efficiency, extended lifetime, immediate service support thanks to failure prediction and a clear understanding of operability and usage

Inverter

2 Specifications

2-1 Technical Specifications					RXYQQ8T	RXYQQ10T	RXYQQ12T	RXYQQ14T	RXYQQ16T	RXYQQ18T	RXYQQ20T
Capacity range				HP	8	10	12	14	16	18	20
Cooling capacity	Nom.			kW	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)	50.4 (1)	56.0 (1)
Heating capacity	Nom.			kW	22.4 (2)	28.0 (2)	33.5 (2)	40.00 (2)	45.0 (2)	50.4 (2)	56.0 (2)
	Max.			kW	25.00 (2)	31.50 (2)	37.50 (2)	45.00 (2)	50.00 (2)	56.50 (2)	63.00 (2)
Power input - 50Hz	Cooling	Nom.		kW	5.21	7.29	8.98	11.0	13.0	15.0	18.5
	Heating	Nom.		kW	4.75 (2)	6.29 (2)	7.77	9.52	11.1	12.6	14.50
		Max.		kW	5.5 (2)	7.38 (2)	9.1	11.2	12.8	14.6	17.0
Capacity control	Method				Inverter controlled						
EER					4.30	3.84	3.73	3.64	3.46	3.36	3.03
ESEER - Automatic					7.53	7.20	6.96	6.83	6.50	6.38	5.67
ESEER - Standard					6.37	5.67	5.50	5.31	5.05	4.97	4.42
COP - Max.					4.54	4.27	4.12	4.02	3.91	3.87	3.71
COP - Nom.					4.72	4.45	4.31	4.20	4.05	4.00	3.86
Maximum number of connectable indoor units					64 (3)						
Indoor index connection	Min.				100	125	150	175	200	225	250
	Nom.				200	250	300	350	400	450	500
	Max.				260	325	390	455	520	585	650
Dimensions	Unit	Height		mm	1,685						
		Width		mm	930			1,240			
		Depth		mm	765						
	Packed unit	Height		mm	1,820						
		Width		mm	1,000			1,310			
		Depth		mm	835						
Weight	Unit			kg	187	194		305		314	
	Packed unit			kg	205	212		325		334	
Packing	Material				Carton						
	Weight			kg	2.00			3.00			
Packing 2	Material				Wood						
	Weight			kg	17.00			18.50			
Packing 3	Material				Plastic						
	Weight			kg	0.50						
Casing	Colour				Daikin White						
	Material				Painted galvanized steel plate						
Heat exchanger	Type				Cross fin coil						
	Fin	Treatment			Anti-corrosion treatment						
Compressor	Quantity				1			2			
	Model				Inverter						
	Type				Hermetically sealed scroll compressor						
	Crankcase heater			W	33						
Compressor 2	Model				-			Inverter			
	Type				-			Hermetically sealed scroll compressor			
	Crankcase heater			W	-			33			
Fan	Type				Propeller fan						
	Quantity				1			2			
	Air flow rate	Cooling	Nom.	m³/min	162	175	185	223	260	251	261
	External static pressure	Max.		Pa	78						
	Discharge direction				Vertical						
Fan motor	Quantity				1			2			
	Model				Brushless DC motor						
	Output			W	750						
Fan motor 2	Model				-			Brushless DC motor			
	Output			W	-			750.00			
Sound power level	Cooling	Nom.		dBA	78	79	81		86		88
Sound pressure level	Cooling	Nom.		dBA	58		61		64	65	66
Operation range	Cooling	Min.~Max.		°CDB	-5~43						
	Heating	Min.~Max.		°CWB	-20~15.5						

2 Specifications

2-1 Technical Specifications					RXYQQ8T	RXYQQ10T	RXYQQ12T	RXYQQ14T	RXYQQ16T	RXYQQ18T	RXYQQ20T
Refrigerant	Type				R-410A						
	Charge			kg	5.9	6	6.3	10.3	10.4	11.7	11.8
Refrigerant oil	Type				Synthetic (ether) oil						
	Charged volume			l	1	1.2	1.4	2.4	3.3		
Piping connections	Liquid	Type			Braze connection						
		OD		mm	9.52		12.7			15.9	
	Gas	Type			Braze connection						
		OD		mm	19.1	22.2	28.6				
	Heat insulation				Both liquid and gas pipes						
	Piping length	OU - IU	Max.	m	120						
		After branch	Max.	m	90 (4)						
	Total piping length	System	Actual	m	300						
	Level difference	OU - IU	Outdoor unit in highest position	m	50						
			Indoor unit in highest position	m	40						
		IU - IU	Max.	m	15						
Defrost method					Reversed cycle						
Safety devices	Item	01			High pressure switch						
		02			Fan driver overload protector						
		03			Inverter overload protector						
		04			PC board fuse						
PED	Category				Category II						

Standard Accessories : Installation manual;

Standard Accessories : Connection pipes;

Standard Accessories : Operation manual;

2-2 Electrical Specifications				RXYQQ8T	RXYQQ10T	RXYQQ12T	RXYQQ14T	RXYQQ16T	RXYQQ18T	RXYQQ20T
Power supply	Name			Y1						
	Phase			3N~						
	Frequency		Hz	50						
	Voltage		V	380-415						
Voltage range	Min.		%	-10						
	Max.		%	10						
Current	Nominal running current (RLA) - 50Hz	Cooling	A	7.2	10.2	12.7	15.4	18.0	20.8	26.9
Current - 50Hz	Minimum Ssc value		kVa	1,216	564	615	917	924	873	970
	Minimum circuit amps (MCA)		A	16.1	22.0	24.0	27.0	31.0	35.0	39.0
	Maximum fuse amps (MFA)		A	20	25	32		40		50
	Total overcurrent amps (TOCA)		A	17.3	24.6		35.4		42.7	
	Full load amps (FLA)	Total	A	1.2	1.3	1.5	1.8	2.6		
Wiring connections - 50Hz	For power supply	Quantity		5G						
	For connection with indoor	Quantity		2						
		Remark		F1,F2						
Power supply intake				Both indoor and outdoor unit						

Notes

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20°CDB, outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m. High fan speed indoor unit

(3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% \<= CR \<= 130%)

(4) Refer to refrigerant pipe selection or installation manual

The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality

2 Specifications

The AUTOMATIC SEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature control operation)

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

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

Sound values are measured in a semi-anechoic room.

For more details on standard accessories refer to Installation/operation manual

RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB

MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always ≤ max. running current.

MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current.

MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

TOCA means the total value of each OC set.

FLA: nominal running current fan

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Maximum allowable voltage range variation between phases is 2%.

In accordance with EN/IEC 61000-3-11, respectively 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 Zsys ≤ Zmax, respectively Ssc ≥ minimum Ssc value.

EN/IEC 61000-3-11: European/international technical standard setting the limits for voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with rated ≤ 75A

EN/IEC 61000-3-12: 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

Ssc: Short-circuit power

system impedance

Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m

Multi combination (22~54HP) data is corresponding with the standard multi combination as mentioned on 3D079534

Soundpressure system [dBA] = 10*log[10^(A/10)+10^(B/10)+10^(C/10)] , with Unit A = A dBA, Unit B = B dBA, Unit C = C dBA

2-3 Technical Specifications				RXYQQ2 2T	RXYQQ2 4T	RXYQQ2 6T	RXYQQ2 8T	RXYQQ3 0T	RXYQQ3 2T	RXYQQ3 4T	RXYQQ3 6T	RXYQQ3 8T	RXYQQ4 0T
System	Outdoor unit module 1			RXYQQ 10T	RXYQQ 8T	RXYQQ12T			RXYQQ16T			RXYQQ 8T	RXYQQ 10T
	Outdoor unit module 2			RXYQQ 12T	RXYQQ 16T	RXYQQ 14T	RXYQQ 16T	RXYQQ 18T	RXYQQ 16T	RXYQQ 18T	RXYQQ 20T	RXYQQ 10T	RXYQQ 12T
	Outdoor unit module 3			-								RXYQQ 20T	RXYQQ 18T
Capacity range			HP	22	24	26	28	30	32	34	36	38	40
Cooling capacity	Nom.		kW	61.5	67.4	73.5	78.5	83.9	90.0	95.4	101.0	106.3	111.9
Heating capacity	Nom.		kW	69.0 (5)	75.0 (5)	82.5 (5)	87.5 (5)	83.9 (5)	100.0 (5)	95.4 (5)	113.0 (5)	106.3 (5)	111.9 (5)
	Max.		kW	-				94.0	-	106.5	-	119.0	125.5
Power input - 50Hz	Cooling	Nom.	kW	16.27	18.21	19.98	21.98	24.0	26.0	28.0	31.5	29.2	31.3
	Heating	Nom.	kW	16.48	18.31	20.30	21.90	20.4	25.6	23.7	29.8	25.1	26.7
		Max.	kW	-				23.7	-	27.4	-	29.2	31.1
EER				3.78	3.70	3.68	3.57	3.5		3.4	3.2	3.6	
ESEER - Automatic				7.07	6.81	6.89	6.69	6.60	6.50	6.44	6.02	6.36	6.74
ESEER - Standard				5.58	5.42	5.39	5.23	5.17	5.05	5.01	4.68	5.03	5.29
COP - Max.				4.19	4.10	4.06	4.00		3.91	3.90	3.79	4.1	4.0
COP - Nom.				4.37	4.25		4.16	4.10	4.05	4.00	3.95	4.2	
Maximum number of connectable indoor units				64									
Indoor index connection	Min.			275	300	325	350	375	400	425	450	475	500
	Nom.			550	600	650	700	750	800	850	900	950	1,000
	Max.			715	780	845	910	975	1,040	1,105	1,170	1,235	1,300

2 Specifications

2-3 Technical Specifications					RXYQQ2 2T	RXYQQ2 4T	RXYQQ2 6T	RXYQQ2 8T	RXYQQ3 0T	RXYQQ3 2T	RXYQQ3 4T	RXYQQ3 6T	RXYQQ3 8T	RXYQQ4 0T
Piping connections	Liquid	Type			Braze connection									
		OD		mm	15.9		19.1							
	Gas	Type			Braze connection									
		OD		mm	28.6	34.9						41.3		
	Piping length	OU - IU	Max.	m	120									
		After branch	Max.	m	90									
	Total piping length	System	Actual	m	300									
	Level difference	OU - IU	Outdoor unit in highest position	m	50									
			Indoor unit in highest position	m	40									
		IU - IU	Max.	m	15									
PED	Category				Category II									

Standard Accessories : Installation manual;

Standard Accessories : Connection pipes;

Standard Accessories : Operation manual;

2-4 Technical Specifications				RXYQQ42T
System	Outdoor unit module 1			RXYQQ10T
	Outdoor unit module 2			RXYQQ16T
	Outdoor unit module 3			RXYQQ16T
Capacity range			HP	42
Cooling capacity	Nom.		kW	118.0
Heating capacity	Nom.		kW	131.5 (5)
	Max.		kW	-
Power input - 50Hz	Cooling	Nom.	kW	33.29
	Heating	Nom.	kW	32.98
		Max.	kW	-
EER				3.54
ESEER - Automatic				6.65
ESEER - Standard				5.19
COP - Max.				3.99
COP - Nom.				4.14
Maximum number of connectable indoor units				64
Indoor index connection	Min.			525
	Nom.			1,050
	Max.			1,365

2 Specifications

2-4 Technical Specifications					RXYQQ42T
Piping connections	Liquid	Type			Braze connection
		OD		mm	19.1
	Gas	Type			Braze connection
		OD		mm	41.3
	Piping length	OU - IU	Max.	m	120
		After branch	Max.	m	90
	Total piping length	System	Actual	m	300
	Level difference	OU - IU	Outdoor unit in highest position	m	50
			Indoor unit in highest position	m	40
		IU - IU	Max.	m	15
PED	Category				Category II

Standard Accessories : Installation manual;

Standard Accessories : Connection pipes;

Standard Accessories : Operation manual;

2-5 Electrical Specifications				RXYQQ2 2T	RXYQQ2 4T	RXYQQ2 6T	RXYQQ2 8T	RXYQQ3 0T	RXYQQ3 2T	RXYQQ3 4T	RXYQQ3 6T	RXYQQ3 8T	RXYQQ4 0T
Current	Nominal running current (RLA) - 50Hz	Cooling	A	22.9	25.2	28.1	30.7	33.5	36.0	38.8	44.9	44.3	43.7
		Heating	A	22.9	25.2	28.1	30.7	33.5	36.0	38.8	44.9	44.3	43.7
Current - 50Hz	Minimum Ssc value		kVa	1,179	2,140	1,532	1,539	1,488	1,848	1,797	1,894	2,750	2,052
	Minimum circuit amps (MCA)		A	46.0		51.0	55.0	59.0	62.0	66.0	70.0	76.0	81.0
	Maximum fuse amps (MFA)		A	63				80				100	
Wiring connections - 50Hz	For power supply	Quantity		5G									
	For connection with indoor	Quantity		2									
		Remark		F1,F2									
Power supply intake				Both indoor and outdoor unit									

2-6 Electrical Specifications				RXYQQ42T
Current	Nominal running current (RLA) - 50Hz	Cooling	A	46.2
		Heating	A	46.2
Current - 50Hz	Minimum Ssc value		kVa	2,412
	Minimum circuit amps (MCA)		A	84.0
	Maximum fuse amps (MFA)		A	100
Wiring connections - 50Hz	For power supply	Quantity		5G
	For connection with indoor	Quantity		2
		Remark		F1,F2
Power supply intake				Both indoor and outdoor unit

Notes

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20°CDB, outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m. High fan speed indoor unit

(3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% \<= CR \<= 130%)

(4) Refer to refrigerant pipe selection or installation manual

(5) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m

The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality

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Sound values are measured in a semi-anechoic room.

For more details on standard accessories refer to Installation/operation manual

RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB

2 Specifications

MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always ≤ max. running current.

MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current.

MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

TOCA means the total value of each OC set.

FLA: nominal running current fan

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Maximum allowable voltage range variation between phases is 2%.

In accordance with EN/IEC 61000-3-11, respectively 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 Zsys ≤ Zmax, respectively Ssc ≥ minimum Ssc value.

EN/IEC 61000-3-11: European/international technical standard setting the limits for voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with rated ≤ 75A

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Ssc: Short-circuit power

system impedance

Multi combination (22~54HP) data is corresponding with the standard multi combination as mentioned on 3D079534

Soundpressure system [dBA] = 10*log[10^(A/10)+10^(B/10)+10^(C/10)] , with Unit A = A dBA, Unit B = B dBA, Unit C = C dBA

3 Options

3 - 1 Options

RYYQ-T
RYMQ-T
RXYQ-T
RXYQQ-T

VRV4 Heat Pump Option list

No	Item	RXYQ8T RYYQ8T RXYQQ8T	RXYQ10-12T RYYQ10-12T RXYQQ10-12T	RXYQ14-18T RYYQ14-18T RXYQQ14-18T	RXYQ20T RYYQ20T RXYQQ20T	RYYQ22~54T RXYQ22~54T RXYQQ22~42T
I.	REFNET HEADER	KHRQ22M29H				
		-	KHRQ22M64H			
		-	-	-	KHRQ22M75H	
II.	REFNET JOINT	KHRQ22M20T				
		KHRQ22M29T9				
		-	KHRQ22M64T			
		-	-	-	KHRQ22M75T	
III.	OUTDOOR MULTI CONNECTION KIT (see note 2)	-	-	-	-	BHFQ22P1007
IV.	OUTDOOR MULTI CONNECTION KIT (see note 2)	-	-	-	-	BHFQ22P1517

No	Item	8HP	10HP	12HP	14HP	16HP	18HP	20HP
1a	COOL/HEAT SELECTOR (SWITCH)	KRC19-26A						
1b	COOL/HEAT SELECTOR (PCB)	BRP2A81						
1c	COOL/HEAT SELECTOR (SWB MOUNTING PLATE)	-		KKSA26A560*				
1d	COOL/HEAT SELECTOR (FIXING BOX)	KJB111A						
2	VRV CONFIGURATOR	EKPCCAB*						
3	HEATER TAPE KIT (see note 6)	EKBPH012T*		EKBPH020T*				
4	HEATER TAPE KIT PCB	EKBPHPCBT*						
5	DEMAND PCB (see note 7)	DTA104A61/62*						
6	DEMAND PCB (MOUNTING PLATE)	-		KKSB26B1*				

NOTES

1. All options are kits
2. Only for multi units
3. Option **1a** and **1b** are both required to operate the COOL/HEAT SELECTOR function on a VRV4 Heat Pump System
4. Option **1d** is required to mount **1a**
5. **1c** is only required when combining **1b** with **3** on a VRV4 Heat Pump system
6. To install the HEATER TAPE KIT, a HEATER TAPE KIT PCB is required
7. To install the DEMAND PCB on the Large casing type, the DEMAND PCB (MOUNTING PLATE) is required

Medium casing type VRV4 Heat Pump: modules 8~12HP
Large casing type VRV4 Heat Pump: modules 14~20HP

3D079531F

4 Combination table

4 - 1 Combination Table

RXYQQ-T

VRV4 Heat Pump Indoor unit combination Restrictions

Indoor unit combination pattern	VRV* DX indoor	AHU
VRV* DX indoor	0	X
AHU	X	0

0: Allowed
X: Not allowed

NOTES

1) VRV* DX indoor
The non-R410A VRV DX indoor units that can be connected are mentioned in 3D085036

2) Connection of air handling unit through EKEQ* and EKEXV* kit to outdoor unit
Pair combination only

3D084966

RXYQQ-T

VRV4-Q Heat Pump non-R410A DX indoor unit compatibility list

Type of indoor unit	Unified models	R22 models
Conceiled Ceiling	FXYBP*K7V19	FXYB*K*
	FXYSP*KA7V19	FXYS*K*
	FXYMP*KV19	FXYM*K*
Ceiling Mounted - 2way blow	FXYCP*K7V19	FXYC*K*
Ceiling Mounted - 4way blow	FXYFP*KB7V19	FXYF*K*
Ceiling Mounted - corner cassette	FXYKP*KV19	FXYK*K*
Ceiling Suspended	FXYHP*KVE9	FXYH*K*
Floor Standing	FXYL(M)P*KV19	FXYL(M)*K*
Wall Mounted	FXYAP*KV19	FXYA*K*

NOTES

Restrictions towards indoor unit connection:
(1) Only possible to use VRV4-Q if all the indoor units are corresponding to one of the following model groups:
- All R410A DX models
- All Unified models: refer to the limited table above. For some models special setting is required. Please contact your dealer for more information.
- All R22 DX models only models → connection only allowed upon SPN request

(2) If the indoor units are non-R410A models, a special setting on the outdoor unit is required (explained in the installation manual)
(3) Combination of
- Unified models with R410A models is not allowed
- Unified models with R22 models is not allowed
- R410A models with R22 models is not allowed

(4) Replacement of non-R410A AHU systems is possible, only if below requirements are met:
- in case of an existing ERX* system
- if AHU coil and field piping can cope with a design pressure of 33bar
- replacement of control box (EKEQ*) and expansion valve kit (EKEXV*) to R410A type is done
- AHU-installation in pair (1 outdoor to 1 AHU) is used

(5) Limitations on use of DX indoor units with VRV4 -Q Heat Pump is subject to rules mentioned in 3D084965 and 3D084966.

3D085036

4 Combination table

4 - 1 Combination Table

RYYQ-T
RYMQ-T
RXYQ-T
RXYQQ-T

VRV4 Heat Pump Standard combination table (multi)

See **Note** concerning base model type

		8HP	10HP	12HP	14HP	16HP	18HP	20HP
Heat PUMP	RXYQ8* / RYYQ8* / RXYQQ8*	1						
	RXYQ10* / RYYQ10* / RXYQQ10*		1					
	RXYQ12* / RYYQ12* / RXYQQ12*			1				
	RXYQ14* / RYYQ14* / RXYQQ14*				1			
	RXYQ16* / RYYQ16* / RXYQQ16*					1		
	RXYQ18* / RYYQ18* / RXYQQ18*						1	
	RXYQ20* / RYYQ20* / RXYQQ20*							1
Multi combination with 2 outdoor units	RXYQ22* / RYYQ22* / RXYQQ22*		1	1				
	RXYQ24* / RYYQ24* / RXYQQ24*	1				1		
	RXYQ26* / RYYQ26* / RXYQQ26*			1	1			
	RXYQ28* / RYYQ28* / RXYQQ28*			1		1		
	RXYQ30* / RYYQ30* / RXYQQ30*			1			1	
	RXYQ32* / RYYQ32* / RXYQQ32*					2		
	RXYQ34* / RYYQ34* / RXYQQ34*					1	1	
	RXYQ36* / RYYQ36* / RXYQQ36*					1		1
Multi combination with 3 outdoor units	RXYQ38* / RYYQ38* / RXYQQ38*	1	1					1
	RXYQ40* / RYYQ40* / RXYQQ40*		1	1			1	
	RXYQ42* / RYYQ42* / RXYQQ42*		1			2		
	RXYQ46* / RYYQ46*				1	2		
	RXYQ48* / RYYQ48*					3		
	RXYQ50* / RYYQ50*					2	1	
	RXYQ52* / RYYQ52*					1	2	
	RXYQ54* / RYYQ54*						3	

NOTES

RYYQ8~20 = single continuous heating model
RYYQ22~54 = multi continuous heating model
RXYQ8~20 = single non-continuous heating model
RXYQ22~54 = multi non-continuous heating model
RXYQQ8~20 = single non-continuous heating replacement model (VRV4-Q)
RXYQQ22~42 = multi non-continuous heating replacement model (VRV4-Q)

1) Single unit can be chosen: RYYQ* model (continuous heating) and RXYQ* model (non-continuous heating)
2) Multi combinations “non-continuous heating” consist out of RXYQ8~20 modules. Eg RXYQ36* = RXYQ16* + RXYQ20*
3) Multi combinations “continuous heating” consist out of **RYMQ8~20** modules. Eg RYYQ36* = RYMQ16* + RYMQ20*
   -> multi modules RYMQ* cannot be used as stand alone units (RYMQ8~20HP)
4) Multi combinations can never contain RYYQ8~20 models
5) Multi “continuous heating” RYYQ* combinations can never contain RXYQ* models
6) Multi “non-continuous heating” RXYQ* combinations can never contain RYMQ* models
7) Multi “non-continuous heating” replacement models only consist out of RXYQQ8~20 modules. Eg RXYQQ36* = RXYQQ16* + RXYQQ20*
8) Replacement models can never be combined with other models

3D079534B

5 Capacity tables

5 - 1 Capacity Table Legend

In order to fulfill more your requirements on quick access of data in the format you require, we have developed a tool to consult capacity tables.

Below you can find the link to the capacity table database and an overview of all the tools we have to help you select the correct product:

- Capacity table database: lets you find back and export quickly the capacity information you are looking for based upon unit model, refrigerant temperature and connection ratio.
  → http://extranet.daikineurope.com/captab
- E-data app: gives a complete overview of the Daikin products available in your country, with all engineering data and commercial info in your own language. Download the app now!
  → https://itunes.apple.com/us/app/daikin-e-data/id565955746?mt=8
- Selection software: allows you to do load calculations, equipment selections and energy simulations for our VRV, Daikin Altherma, refrigeration and applied systems products.
  → http://extranet.daikineurope.com/en/software/downloads/default.jsp

5 Capacity tables

5 - 2 Integrated Heating Capacity Correction Factor

RYYQ-T
RXYQ-T
RXYQQ-T

The heating capacity tables do not take account of the reduction in capacity, when frost has accumulated or while the defrosting operation is in progress.
The capacity values, which take these factors into account, in other words, the integrated heating capacity values, can be calculated as follows:

Formula:
Integrated heating capacity = A
Value given in table of capacity characteristics = B
Integrating correction factor for frost accumulation (kW) = C
A = B x C

Inlet air temperature of heat exchanger

[°CDB/°CWB]	-7/-7.6	-5/-5.6	-3/-3.7	0/-0.7	3/2.2	5/4.1	7/6

Integrated correction factor for frost accumulation (C)

0.95	0.93	0.88	0.84	0.85	0.90	1.00

NOTES

1. The figure shows that the integrated heating capacity expresses the integrated capacity for a single cycle (from defrost operation to defrost operation) in terms or time.
2. Note that, when there is an accumulation of snow against the outside surface of the outdoor unit heat exchanger, there will always be a temporary reduction in capacity, although this will of course vary in degree in accordance with a number of other factors, such as the outdoor temperature (°CDB), relative humidity (RH) and the amount of frosting which occurs.
3. Multi combination (22~54HP) data is corresponding with the standard multi combination as mentioned on 3D079534

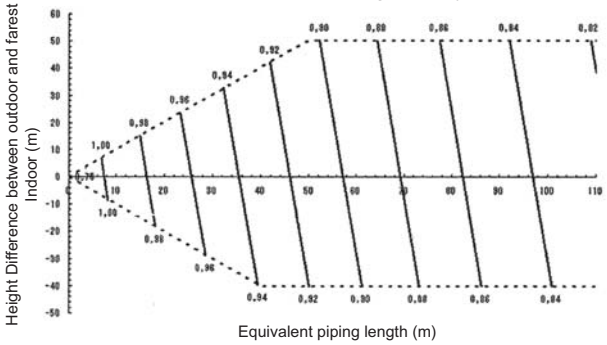
3D079898

5 Capacity tables

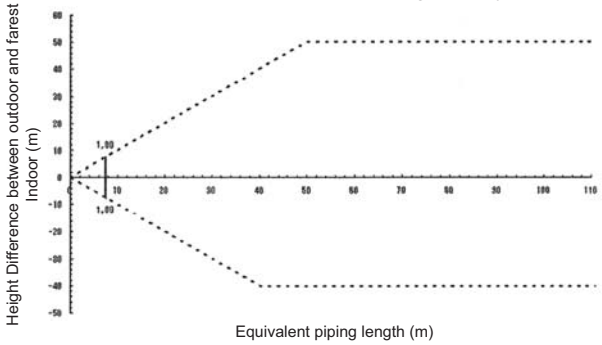
5 - 3 Capacity Correction Factor

RYYQ8T
RXYQ8T
RXYQQ8T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.

2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.

3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio
   x Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
8HP	22.2	12.7

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for deicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
8HP	19.1	9.5

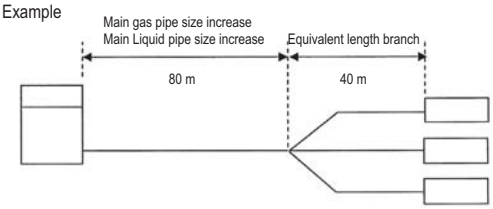
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



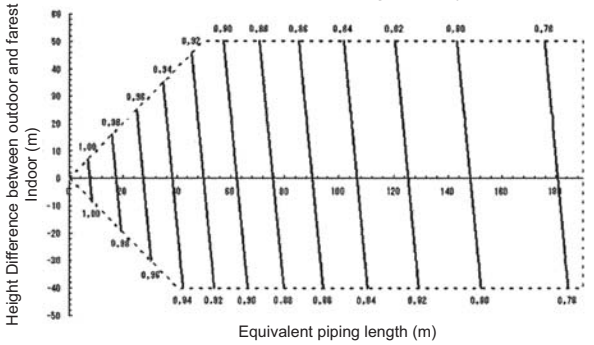
   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rete of change in cooling capacity when height difference = 0 is thus approximately 0.86
   heating capacity when height difference = 0 is thus approximately 1.0

5 Capacity tables

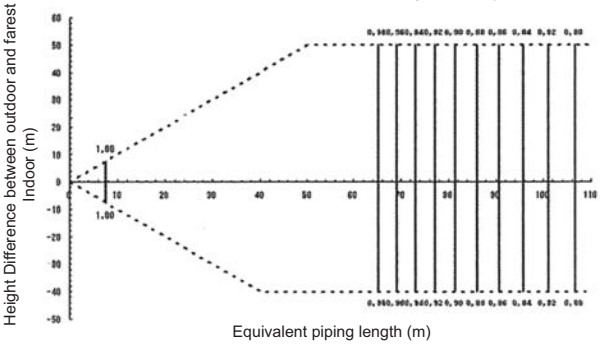
5 - 3 Capacity Correction Factor

RYYQ10T
RXYQ10T
RXYQQ10T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.

2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.

3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio
   x Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
RXYQ10P	25.4*	12.7

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
10 HP	22.2	9.5

6. Equivalent length used in the above figures is based upon the following equivalent length

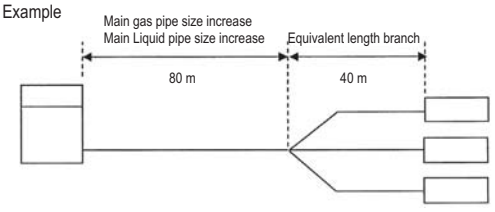
   Equivalent piping length =

   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



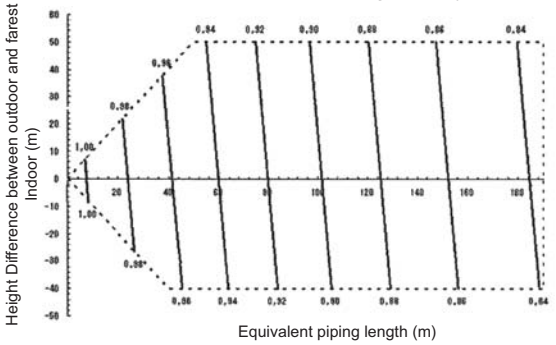
   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rete of change in cooling capacity when height difference = 0 is thus approximately 0.87
   heating capacity when height difference = 0 is thus approximately 0.90

5 Capacity tables

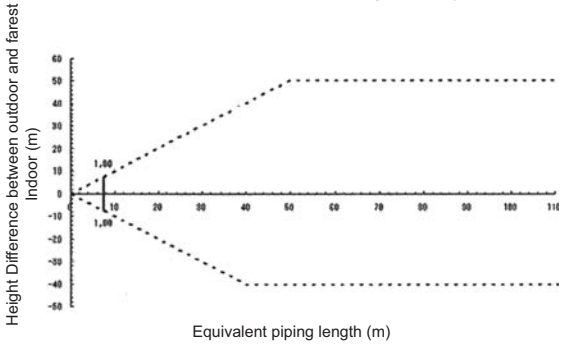
5 - 3 Capacity Correction Factor

RYYQ12,14,24,36T
RXYQ12,14,24,36T
RXYQQ12,14,24,36T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio
   x Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
12 HP	28.6	15.9
14 HP	28.6	15.9
24 HP	34.9	19.1
36 HP	41.3	22.2

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
12 HP	28.6	12.7
14 HP	28.6	12.7
24 HP	34.9	15.9
36 HP	41.3	19.1

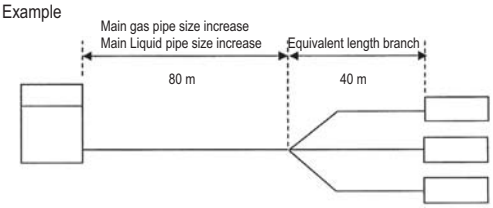
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	
Heating (liquid pipe)	1.0	0.5

   Example



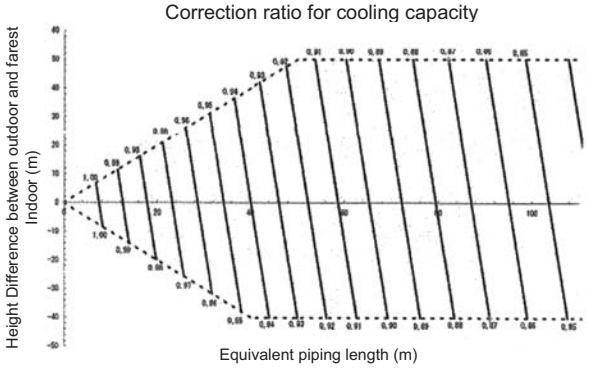
   In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.89
   heating capacity when height difference = 0 is thus approximately 1.0

5 Capacity tables

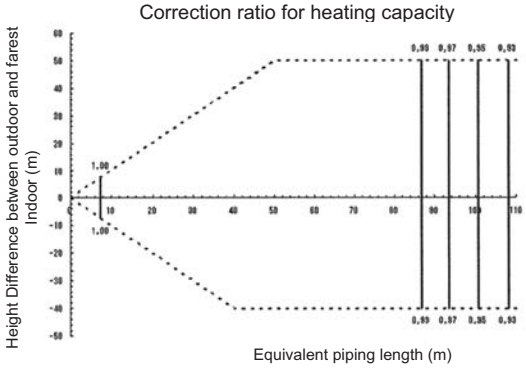
5 - 3 Capacity Correction Factor

RYYQ16T
RXYQ16T
RXYQQ16T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio
   x Correction ratio of piping to furthest indoor
4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. For new diameters, see below.

Model	Gas	Liquid
16 HP	31.8*	15.9

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.

   Diameter of main pipes (standard size)

Model	Gas	Liquid
16 HP	28.6	12.7

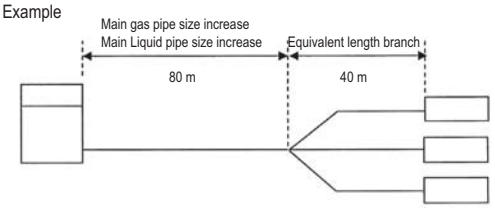
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



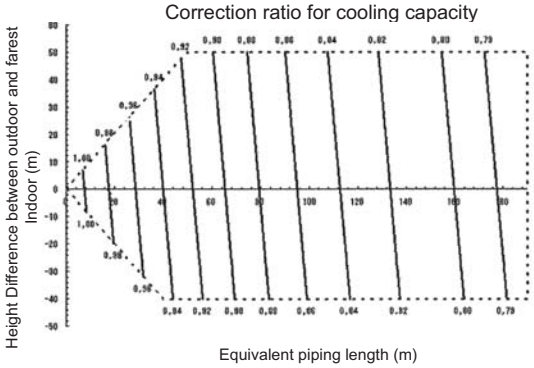
   In the above case (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 0.99

5 Capacity tables

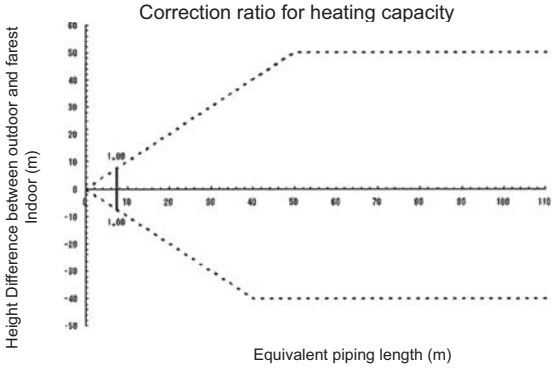
5 - 3 Capacity Correction Factor

RYYQ18,26,28,30,38,40,42,44T
RXYQ18,26,28,30,38,40,42,44T
RXYQQ18,26,28,30,38,40,42T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio
	x	Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
18 HP	31.8*	19.1
26~30 HP	38.1*	22.2
38~44 HP	41.3	22.2

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
18 HP	28.6	15.9
26~30 HP	34.9	19.1
38~44 HP	41.3	19.1

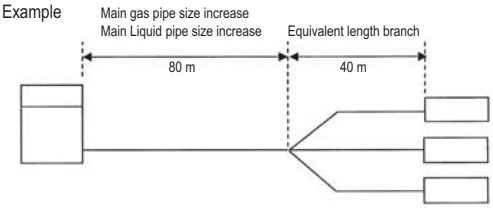
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose the correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



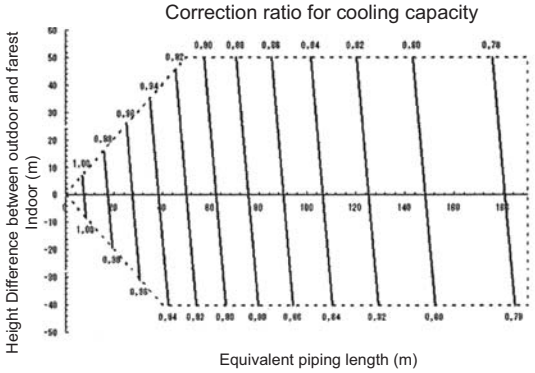
   In the above case (for RXYQ38-44) (Cooling) Overall equivalent length = 80 m x 1.0 + 40 m = 120 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.83
   heating capacity when height difference = 0 is thus approximately 1.0

5 Capacity tables

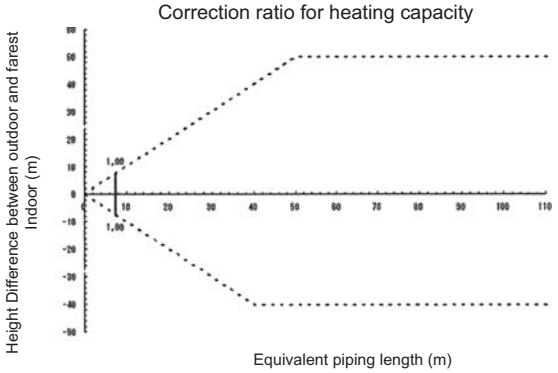
5 - 3 Capacity Correction Factor

RYYQ20,32,34T
RXYQ20,32,34T
RXYQQ20,32,34T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at the 100% connection ratio
   x Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

   Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio
   x Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
20 HP	31.8*	19.1
32/34 HP	38.1*	22.2

   *If not available on site, do not increase. If not increased correction factor should be applied to the equivalent length (see note 6).
5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
20 HP	28.6	15.9
32/34 HP	34.9	19.1

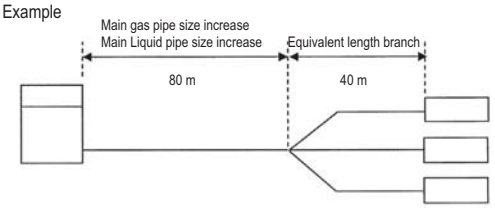
6. Equivalent length used in the above figures is based upon the following equivalent length

   Equivalent piping length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example



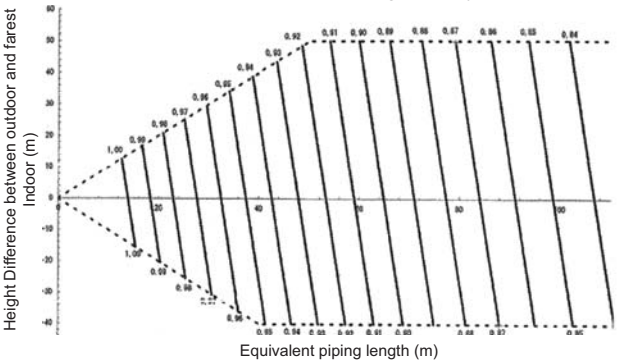
   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 1.0

5 Capacity tables

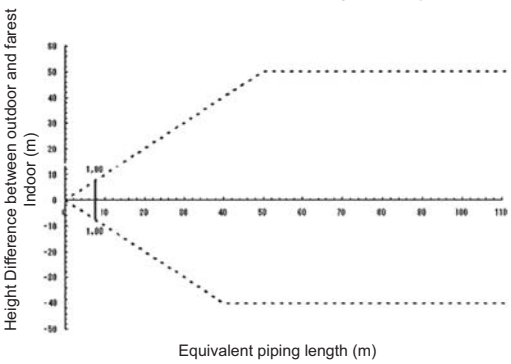
5 - 3 Capacity Correction Factor

RYYQ22T
RXYQ22T
RXYQQ22T

Correction ratio for cooling capacity



Correction ratio for heating capacity



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NOTES

1. These figures illustrate the correction ratio for piping length in capacity for a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, shown it the above figures.
2. With this outdoor unit, constant evaporating pressure control when cooling and constant condensing pressure control when heating is carried out.
3. Method of calculating the capacity of the outdoor units
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is smaller.

   Condition: Indoor connection ratio does not exceed 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at the 100% connection ratio
	x	Correction ratio of piping to furthest indoor

   Condition: Indoor connection ratio exceeds 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio
	x	Correction ratio of piping to furthest indoor

4. When level difference is 50 m or more (see installation manual and 3D079540 / 3D079543) and equivalent pipe length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   For new diameters, see below.

Model	Gas	Liquid
22 HP	31.8*	19.1

   * If not available on site, do not increase, if not increased, no correction factor should be applied to the equivalent length (see note 6).

5. When the pipe length after the first refrigerant branch kit is more than 40 m, pipe size between first and final branch kit must be increased (only for VRV DX indoor units; details see installation manual).
   *Refer to the installation manual for allowed system setups and rules for dedicated indoor connection types.
   Diameter of main pipes (standard size)

Model	Gas	Liquid
22 HP	28.6	15.9

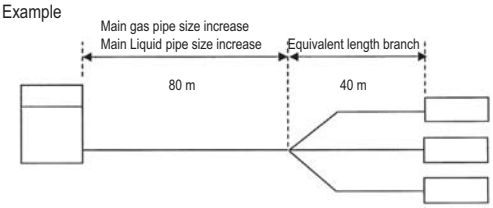
6. Equivalent length used in the above figures is based upon the following equivalent length

   Overal equivalent length =
   Equivalent length of main pipe x Correction factor
   +
   Equivalent length of branch pipes

   Choose a correction factor from the following table. When cooling capacity is calculated: gas pipe size When heating capacity is calculated: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

   Example

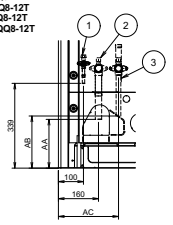
   

   In the above case (Cooling) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   (Heating) Overall equivalent length = 80 m x 0.5 + 40 m = 80 m
   The rate of change in cooling capacity when height difference = 0 is thus approximately 0.88
   heating capacity when height difference = 0 is thus approximately 1.0

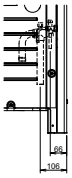
6 Dimensional drawings

6 - 1 Dimensional Drawings

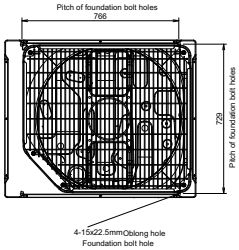
RYYQ8-12T
RYMQ8-12T
RXYQ8-12T
RXYQQ8-12T

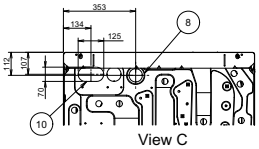


Detail A

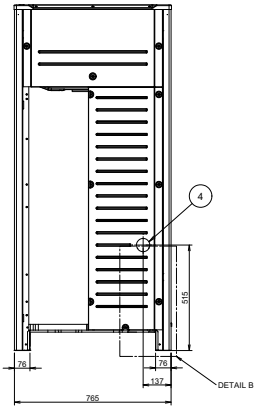


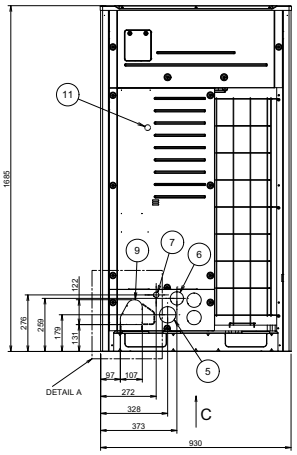
Detail B

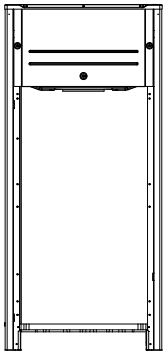




View C







Model	AA	AB	AC
RYYQ8T, RXYQ8T, RXYQQ8T	248	-	-
RYYQ10-12T, RXYQ10-12T, RXYQQ10-12T	195	-	-
RYMQ8T	248	208	240
REMQ5T, RYMQ10-12T, REYQ8-12T	195	208	240

Notes

1. Detail A and detail B indicate the dimensions after fixing the attached piping.
2. Items 4 - 10: Knockout hole.
3. Gas pipe

RYYQ8T, RYMQ8T, RXYQ8T, RXYQQ8T	:	Ø 19.1 brazing connection
RYYQ10T, RYMQ10T, RXYQ10T, RXYQQ10T	:	Ø 22.2 brazing connection
REMQ5T, REYQ8-12T	:	Ø 25.4 brazing connection
RYYQ12T, RYMQ12T, RXYQ12T, RXYQQ12T	:	Ø 28.6 brazing connection
Liquid pipe		
RYYQ8-10T, RYMQ8-10T, RXYQ8-10T, RXYQ Q8-10T, REMQ5T, REYQ8-12T		Ø 9.5 brazing connection
RYYQ12T, RYMQ12T, RXYQ12T, RXYQQ12T	:	Ø 12.7 brazing connection
Equalising pipe		
RYMQ8-10T	:	Ø 19.1 brazing connection
RYMQ12T	:	Ø 22.2 brazing connection
High pressure/low pressure gas pipe		
REMQ5T, REYQ8-12T	:	Ø 19.1 brazing connection

No.	Name	Remark
11	Grounding terminal	Inside of the switch box (M8)
10	Pipe routing hole (bottom)	
9	Pipe routing hole (front)	
8	Power cord routing hole (bottom)	Ø65
7	Power cord routing hole (front)	Ø27
6	Power cord routing hole (front)	Ø65
5	Power cord routing hole (front)	Ø80
4	Power cord routing hole (side)	Ø65
3	Equalising pipe connection port High pressure/low pressure gas pipe	See note 3.
2	Gas pipe connection port	See note 3.
1	Liquid pipe connection port	See note 3.

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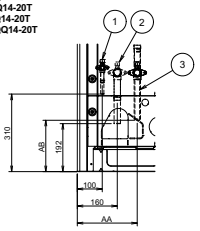
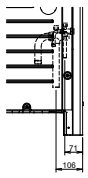
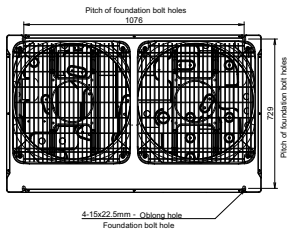
RYYQ14-20T
RYMQ14-20T
RXYQ14-20T
RXYQQ14-20T

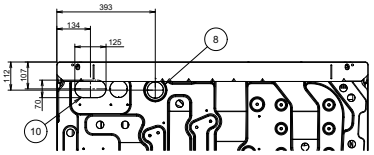


Detail A

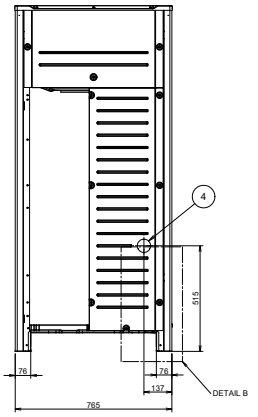


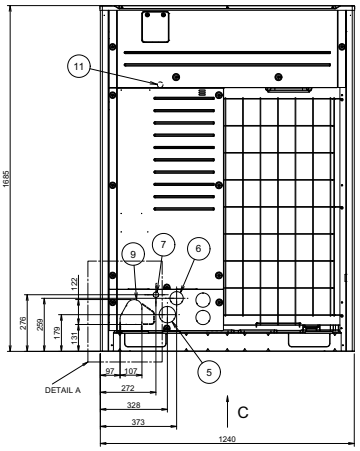
Detail B

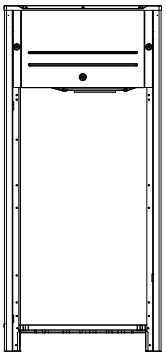




View C







Model	AA	AB
RYMQ14-16T, RXYQQ14-16T, REYQ14-20T	240	205
RYMQ18-20T, RXYQQ18-20T	240	210

Notes

1. Detail A and detail B indicate the dimensions after fixing the attached piping.
2. Items 4 - 10: Knockout hole.
3. Gas pipe

REYQ14-20T	:	Ø 25.4 brazing connection
RYYQ14-20T, RYMQ14-20T, RXYQ14-20T, RXYQQ14-20T	:	Ø 28.6 brazing connection
Liquid pipe		
RYYQ14-16T, RYMQ14-16T, RXYQ14-16T, RXYQQ14-16T, REYQ14-20T	:	Ø 12.7 brazing connection
RYYQ18-20T, RYMQ18-20T, RXYQ18-20T, RXYQQ18-20T	:	Ø 15.9 brazing connection
Equalising pipe		
RYMQ14-16T	:	Ø 22.2 brazing connection
RYMQ18-20T	:	Ø 28.6 brazing connection
High pressure/low pressure gas pipe		
REYQ14-20T	:	Ø 22.2 brazing connection

No.	Name	Remark
11	Grounding terminal	Inside of the switch box (M8)
10	Pipe routing hole (bottom)	
9	Pipe routing hole (front)	
8	Power cord routing hole (bottom)	Ø65
7	Power cord routing hole (front)	Ø27
6	Power cord routing hole (front)	Ø65
5	Power cord routing hole (front)	Ø80
4	Power cord routing hole (side)	Ø65
3	Equalising pipe connection port High pressure/low pressure gas pipe	See note 3.
2	Gas pipe connection port	See note 3.
1	Liquid pipe connection port	See note 3.

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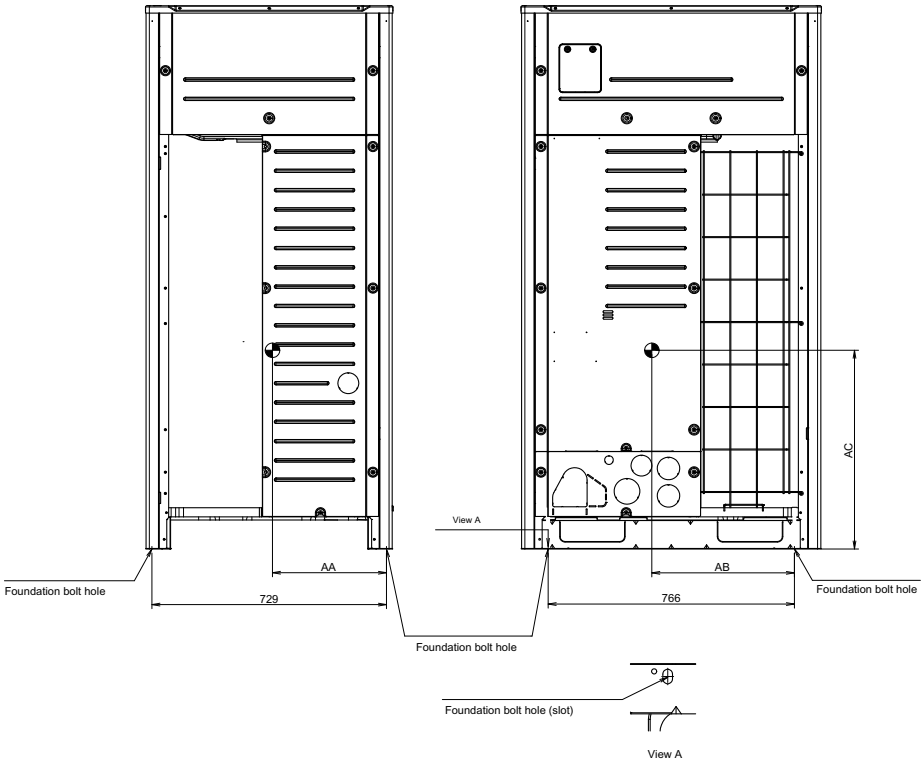
7 Centre of gravity

7 - 1 Centre of Gravity

RYYQ8-12T
RYMQ8-12T
RXYQ8-12T
RXYQQ8-12T



Unit	AA	AB	AC
RYYQ8-12T	328	366	565
REMQ5T / REYQ8-12T			
RYMQ8-12T	354	443	565
RXYQ8-12T	339	448	565
RXYQQ8-12T			

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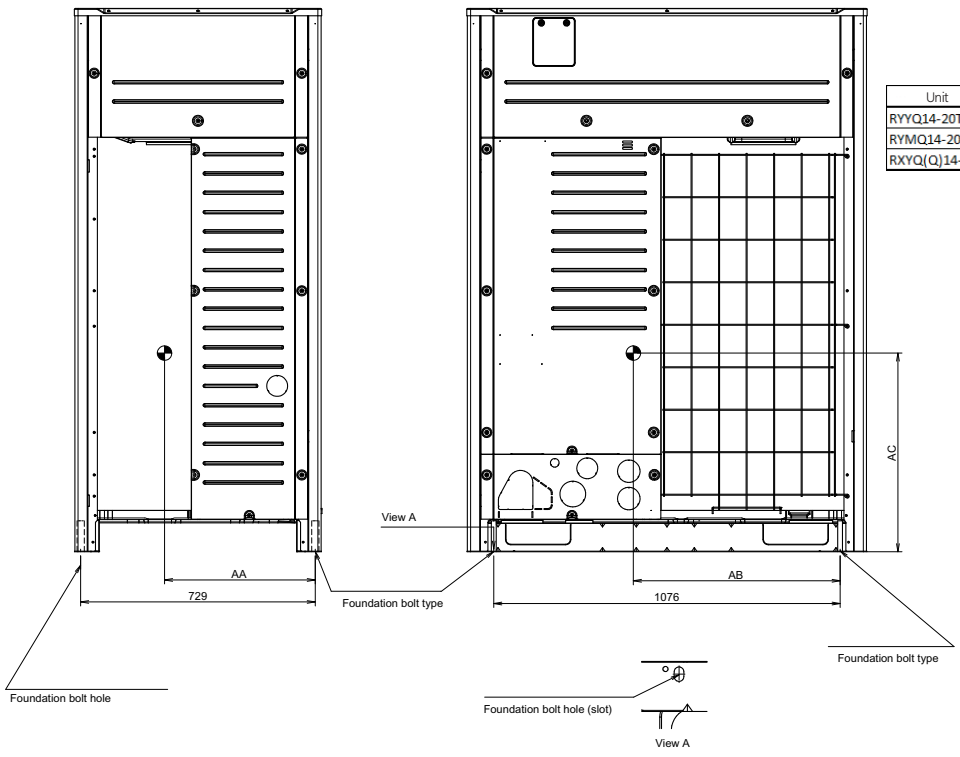
RYYQ14-20T
RYMQ14-20T
RXYQ14-20T
RXYQQ14-20T



Unit	AA	AB	AC
RYYQ14-20T	334	470	610
RYMQ14-20T	360	569	610
RXYQ(Q)14-20T	345	575	610

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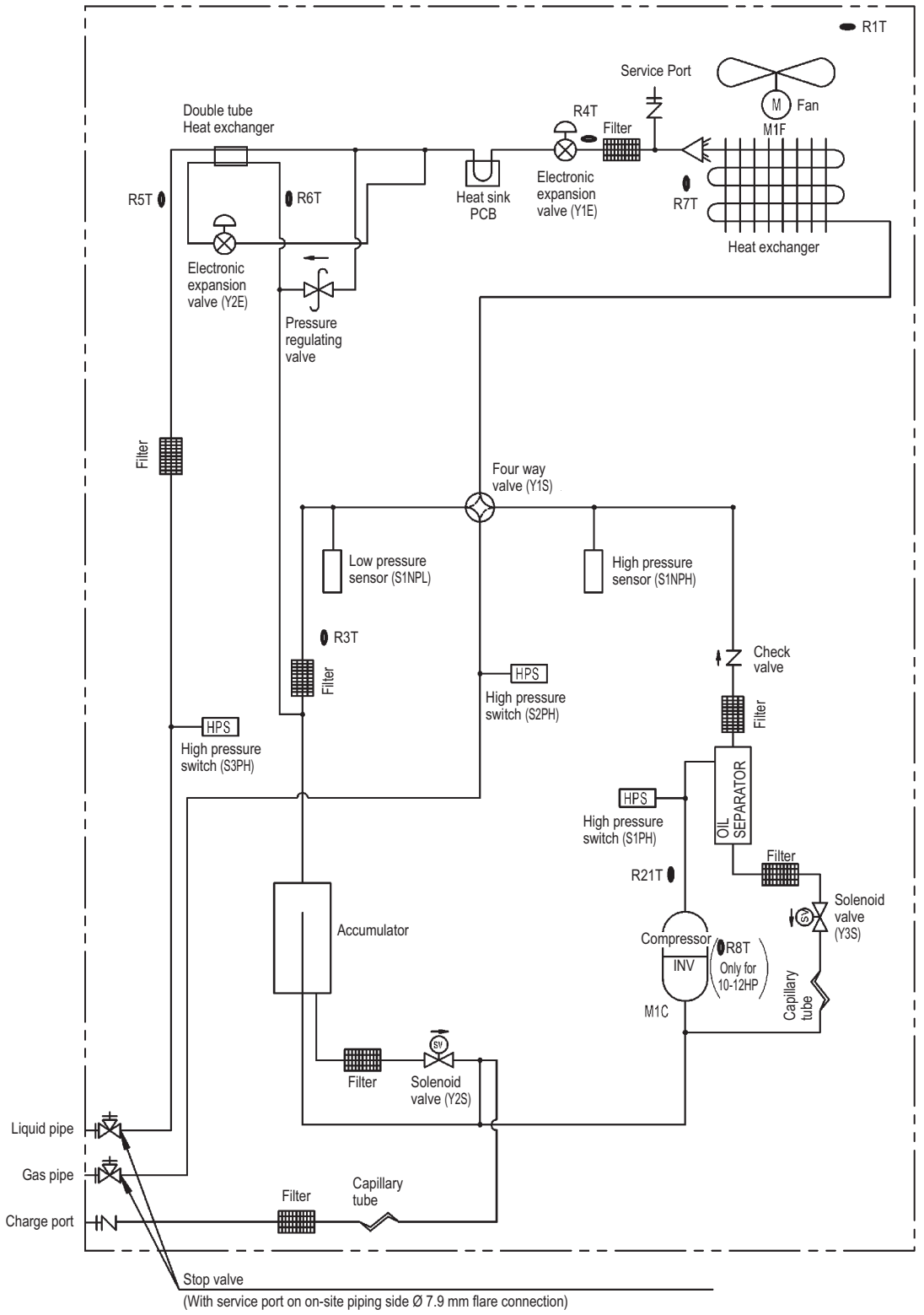
8 Piping diagrams

8 - 1 Piping Diagrams

RXYQQ8-12T



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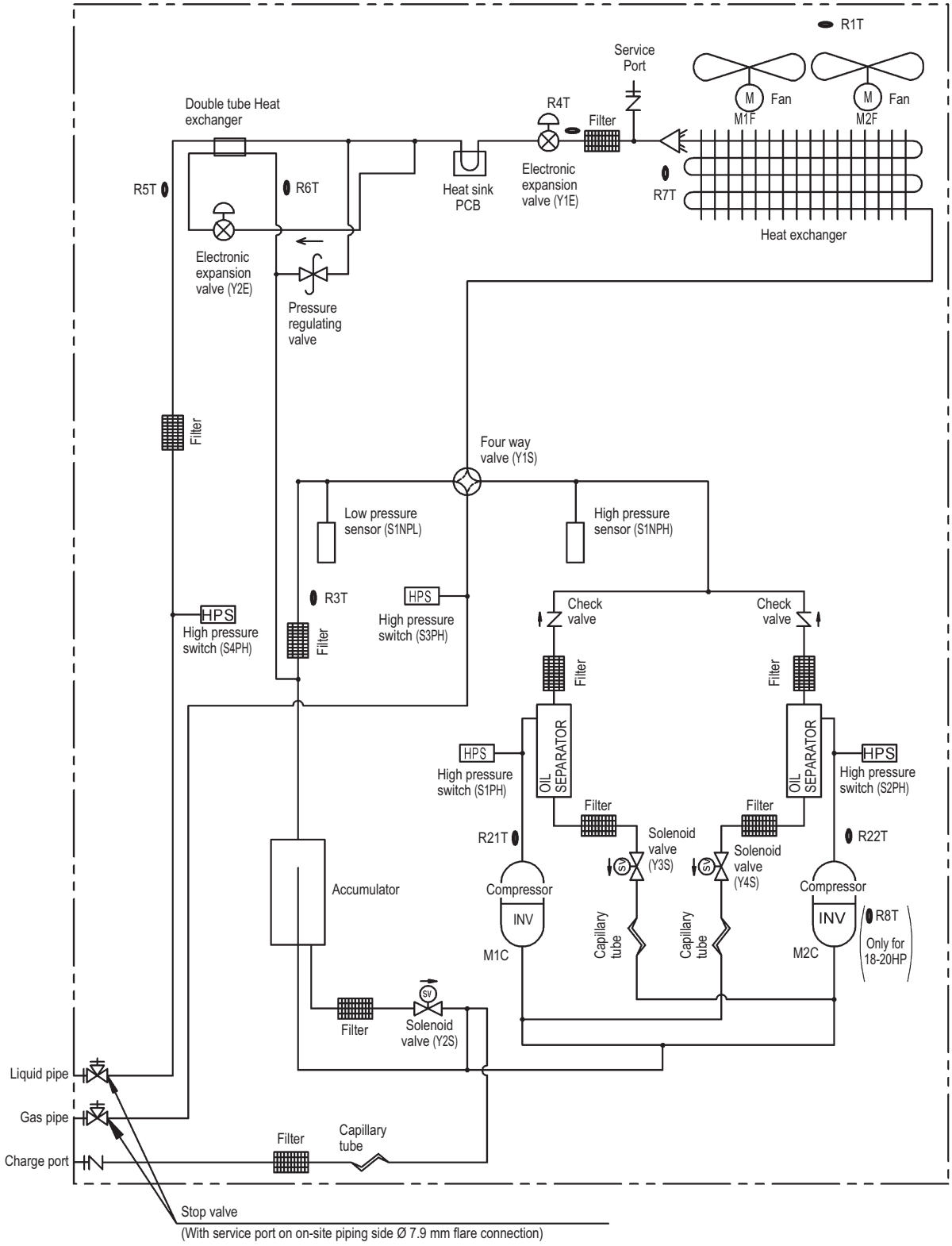
8 Piping diagrams

8 - 1 Piping Diagrams

RXYQQ14-20T



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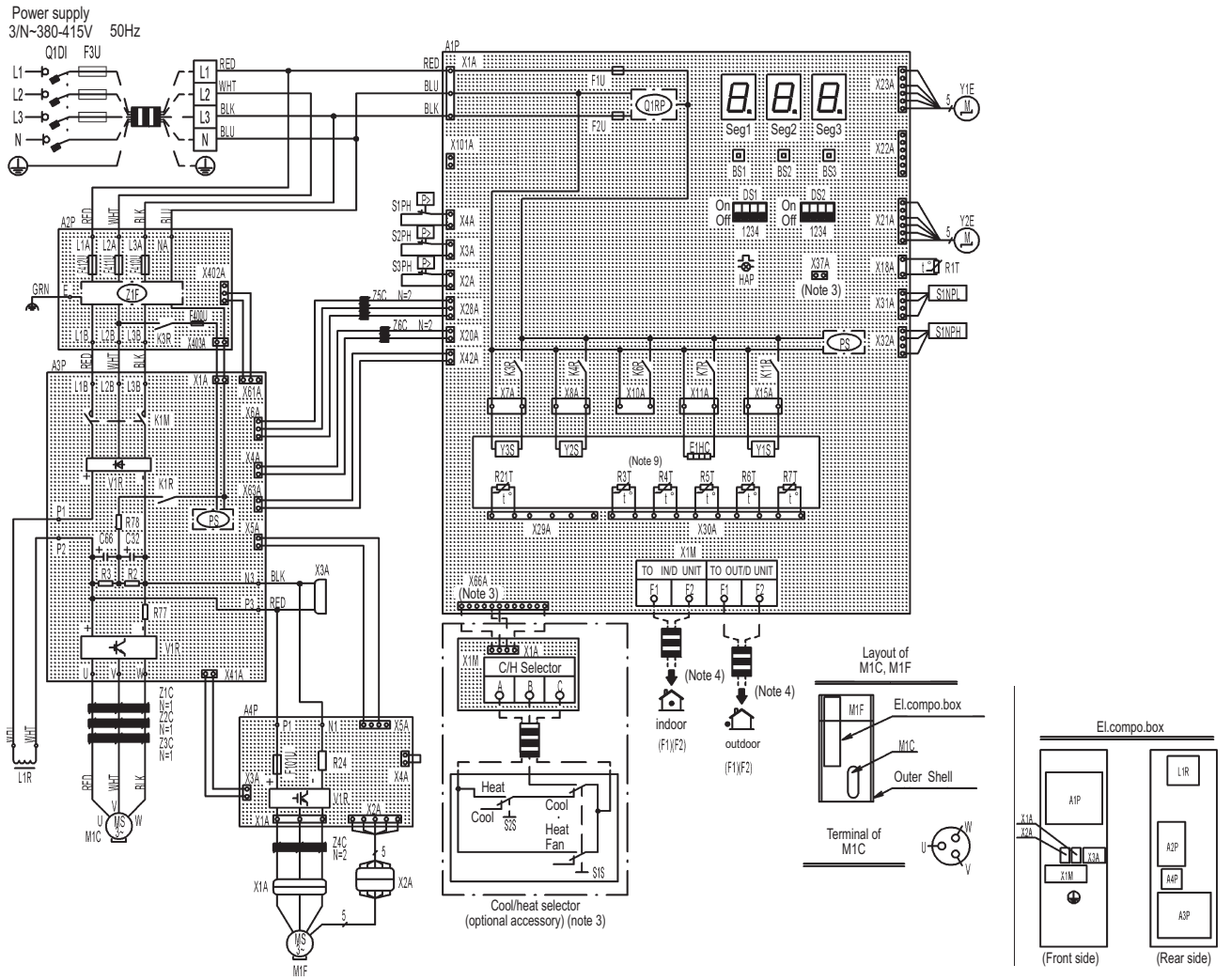
9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RYYQQ8T



A1P	Printed circuit board (main)	M1C	Motor (compressor)	V1R	Power module (A3P) (A4P)
A2P	Printed circuit board (noise filter)	M1F	Motor (fan)	X1A, X2A	Connector (M1F)
A3P	Printed circuit board (inv)	PS	Switching power supply (A1P, A3P)	X3A	Connector (check the residual charge)
A4P	Printed circuit board (fan)	Q1DI	Field earth leakage breaker	X1M	Terminal block (power supply)
BS1~3	Push button, switch (A1P) (mode, set, return)	QR1P	Phase reversal detect circuit (A1P)	X1M	Terminal block (control) (A1P)
C32, C66	Capacitor (A3P)	R1T	Thermistor (AIR) (A1P)	Y1E	Electronic expansion valve (main)
DS1, DS2	Dip switch (A1P)	R21T	Thermistor (M1C discharge)	Y2E	Electronic expansion valve (injection)
E1HC	Crankcase heater	R3T	Thermistor (accumulator)	Y1S	Solenoid valve (main)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R4T	Thermistor (heat exc, liq, pipe)	Y2S	Solenoid valve (accumulator oil return)
F3U	Field fuse	R5T	Thermistor (subcool liq, pipe)	Y3S	Solenoid valve (OIL1)
F101U	Fuse (A4P)	R6T	Thermistor (heat exc, gas pipe)	Z1C~Z6C	Noise filter (ferrite core)
F400U	Fuse (A2P)	R7T	Thermistor (heat exc, deicer)	Z1F	Noise filter (A2P) (with surge absorber)
F410U ~ F412U	Fuse (A2P)	R2, R3	Resistor (A3P)		
HAP	Pilotlamp (service monitor-green)	R24	Resistor (current sensor) (A4P)		
K1M	Magnetic relay (A3P)	R77	Resistor (current sensor) (A3P)		
K1R	Magnetic relay (A3P)	R78	Resistor (current limiting) (A3P)		
K3R	Magnetic relay (A2P)	S1NPH	Pressure sensor (high)		
K3R	Magnetic relay (Y3S) (A1P)	S1NPL	Pressure sensor (low)		
K4R	Magnetic relay (Y2S) (A1P)	S1PH	Pressure switch (disch)	Connector for optional accessories	
K7R	Magnetic relay (E1HC) (A1P)	S2PH	Pressure switch (gas)	X37A	Connector (power adapter)
K11R	Magnetic relay (Y1S) (A1P)	S3PH	Pressure switch (liquid)	X66A	Connector (remote switching cool/heat selector)
L1R	Reactor	SEG1~SEG3	7-segment display (A1P)		

NOTES

1. This wiring diagram applies only to the outdoor unit.
2. --▮▮▮--:field wiring, ☐☐☐☐: terminal block, ⊙⊙: connector, –○–: terminal, ⏚: Protective earth (SREW)
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to “service precaution” label on el. compo. box cover.
6. When operating, don’t shortcircuit the protection devices (S1PH~S3PH)
7. Colors blk: black, red: red, blu: blue, wht: white, grn: green.

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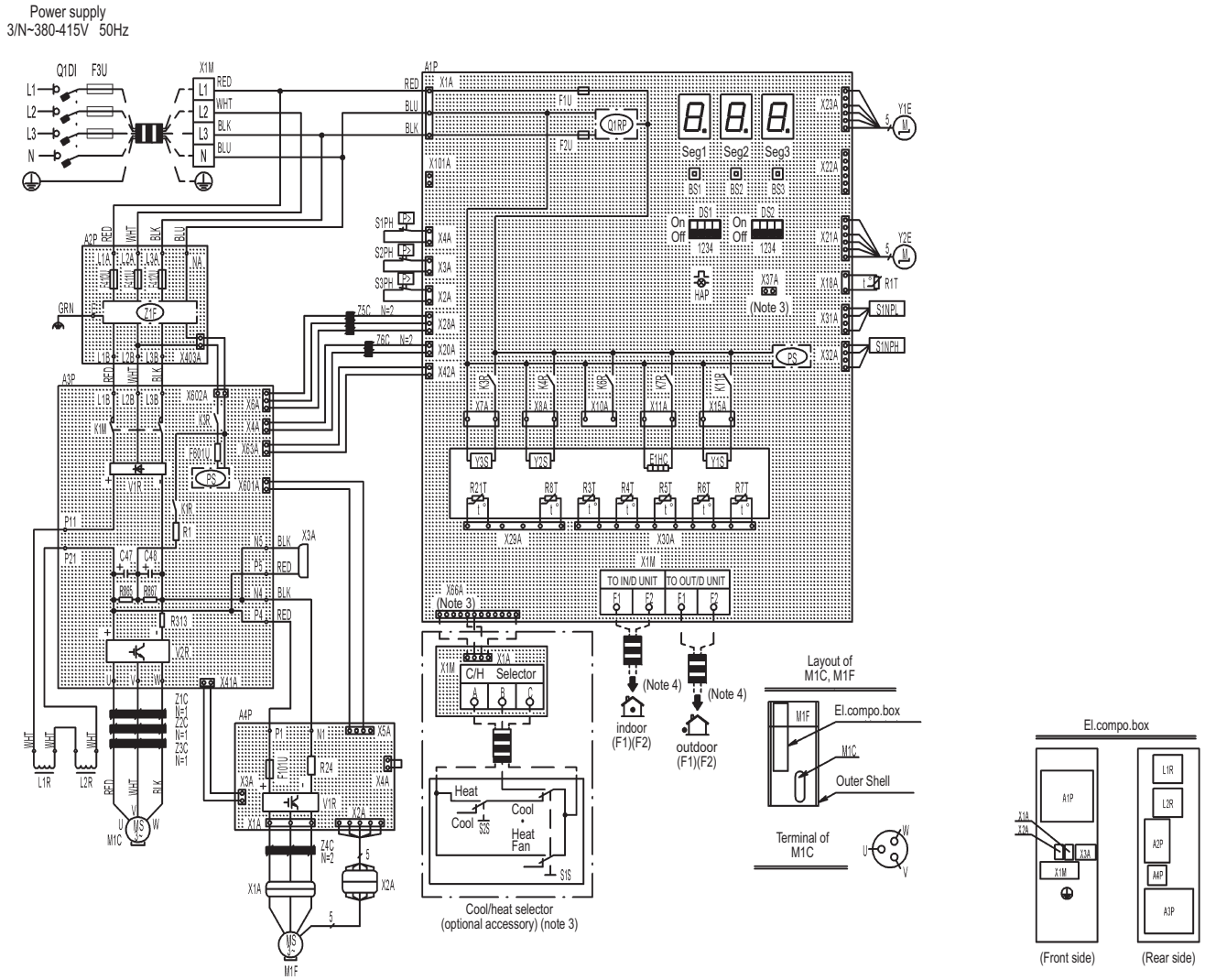
9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ10-12T



A1P	Printed circuit board (main)	L1R, L2R	Reactor	S2PH	Pressure switch (gas)
A2P	Printed circuit board (noise filter)	M1C	Motor (compressor)	S3PH	Pressure switch (liquid)
A3P	Printed circuit board (inv)	M1F	Motor (fan)	SEG1~SEG3	7-segment display (A1P)
A4P	Printed circuit board (fan)	PS	Switching power supply (A1P, A3P)	V1R	Power module (A3P) (A4P)
BS1~3	Push button, switch (A1P) (mode, set, return)	Q1DI	Field earth leakage breaker	V2R	Power module (A3P)
C47, C48	Capacitor (A3P)	Q1RP	Phase reversal detect circuit (A1P)	X1A, X2A	Connector (M1F)
DS1, DS2	Dip switch (A1P)	R1T	Thermistor (AIR) (A1P)	X3a	Connector (check the residual charge)
E1HC	Crankcase heater	R21T	Thermistor (M1C discharge)	X1M	Terminal block (power supply)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R3T	Thermistor (accumulator)	X1M	Terminal block (control) (A1P)
F3U	Field fuse	R4T	Thermistor (heat exc, liq, pipe)	Y1E	Electronic expansion valve (main)
F101U	Fuse (A4P)	R5T	Thermistor (subcool liq, pipe)	Y2E	Electronic expansion valve (injection)
F410U ~ F412U	Fuse (A2P)	R6T	Thermistor (heat exc, gas pipe)	Y1S	Solenoid valve (main)
F601U	Fuse (A3P)	R7T	Thermistor (heat exc, deicer)	Y2S	Solenoid valve (accumulator oil return)
HAP	Pilotlamp (service monitor-green) (A1P)	R8T	Thermistor (M1C body)	Y3S	Solenoid valve (OIL1)
K1M	Magnetic contactor (A3P)	R1	Resistor (current limiting) (A3P)	Z1C~Z6C	Noise filter (ferrite core)
K1R	Magnetic relay (A3P)	R24	Resistor (current sensor) (A4P)	Z1F	Noise filter (A2P) (with surge absorber)
K3R	Magnetic relay (A3P)	R313	Resistor (current sensor) (A3P)		
K3R	Magnetic relay (Y3S) (A1P)	R865, R867	Resistor (A3P)		
K4R	Magnetic relay (Y2S) (A1P)	S1NPH	Pressure sensor (high)	Connector for optional accessories	
K7R	Magnetic relay (E1HC) (A1P)	S1NPL	Pressure sensor (low)	X37A	Connector (power adapter)
K11R	Magnetic relay (Y1S) (A1P)	S1PH	Pressure switch (disch)	X66A	Connector (remote switching cool/heat selector)

NOTES

1. This wiring diagram applies only to the outdoor unit.
2. ▬▮▮▬ :field wiring, ☐☐☐ : terminal block, ⊡ : connector, –○– : terminal, ⏚ : Protective earth (SREW)
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to “service precaution” label on el. compo. box cover.
6. When operating, don’t shortcircuit the protection devices (S1PH ~ S3PH).
7. Colors BLK: Black; RED: Red; BLU: Blue, WHT: White; GRN: Green.

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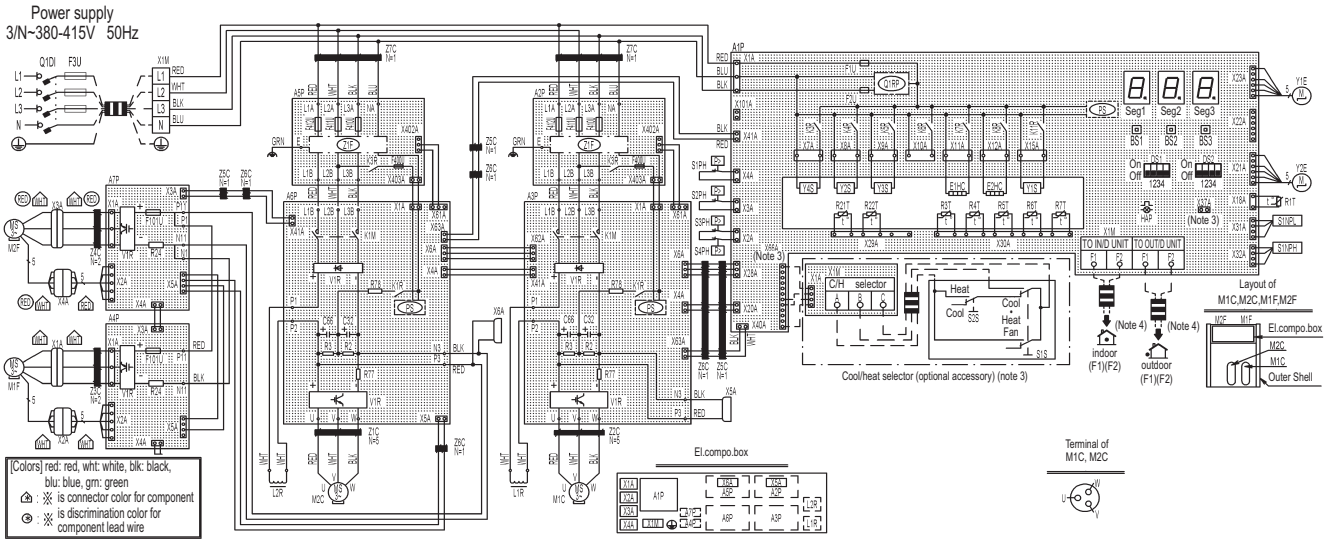
9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ14-16T



A1P	Printed circuit board (main)	K11R	Magnetic relay (Y1S) (A1P)	S4PH	Pressure switch (liquid)
A2P, A5P	Printed circuit board (noise filter)	L1R, L2R	Reactor	SEG1~SEG3	7-segment display (A1P)
A3P, A6P	Printed circuit board (inv)	M1C, M2C	Motor (compressor)	V1R	Power module (A3P, A6P)
A4P, A7P	Printed circuit board (fan)	M1F, M2F	Motor (fan)	V1R	Power module (A4P, A7P)
BS1~3	Push button, switch (A1P) (mode, set, return)	PS	Switching power supply (A1P, A3P, A6P)	X1A~4A	Connector (M1F, M2F)
C32, C66	Capacitor (A3P), (A6P)	Q1DI	Field earth leakage breaker	X5A~X6A	Connector (check the residual charge)
DS1, DS2	Dip switch (A1P)	Q1RP	Phase reversal detect circuit (A1P)	X1M	Terminal block (power supply)
E1HC, E2HC	Crankcase heater	R2, R3	Resistor (A3P, A6P)	X1M	Terminal block (control) (A1P)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R24	Resistor (current sensor) (A4P, A7P)	Y1E	Electronic expansion valve (main)
F3U	Field fuse	R77	Resistor (current sensor) (A3P, A6P)	Y2E	Electronic expansion valve (injection)
F101U	Fuse (A4P, A7P)	R78	Resistor (current limiting) (A3P, A6P)	Y1S	Solenoid valve (main)
F400U	Fuse (A2P, A5P)	R1T	Thermistor (AIR) (A1P)	Y2S	Solenoid valve (accumulator oil return)
F410U ~ F412U	Fuse (A2P, A5P)	R21T, R22T	Thermistor (M1C, MC2 discharge)	Y3S	Solenoid valve (OIL1)
HAP	Pilotlamp (service monitor-green)	R3T	Thermistor (accumulator)	Y4S	Solenoid valve (OIL2)
K1M	Magnetic contactor (A3P, A6P)	R4T	Thermistor (heat exc, liq, pipe)	Z1C~Z7C	Noise filter (ferrite core)
K1R	Magnetic relay (A3P, A6P)	R5T	Thermistor (subcool liq, pipe)	Z1F	Noise filter (A2P, A5P) (with surge absorber)
K3R	Magnetic relay (A2P, A5P)	R6T	Thermistor (heat exc, gas pipe)		
K3R	Magnetic relay (Y4S) (A1P)	R7T	Thermistor (heat exc, deicer)		
K4R	Magnetic relay (Y2S) (A1P)	S1NPH	Pressure sensor (high)		
K5R	Magnetic relay (Y3S) (A1P)	S1NPL	Pressure sensor (low)	Connector for optional accessories	
K7R	Magnetic relay (E1HC) (A1P)	S1PH, S2PH	Pressure switch (disch)	X37A	Connector (power adapter)
K8R	Magnetic relay (E2HC) (A1P)	S3PH	Pressure switch (gas)	X66A	Connector (remote switching cool/heat selector)

NOTES

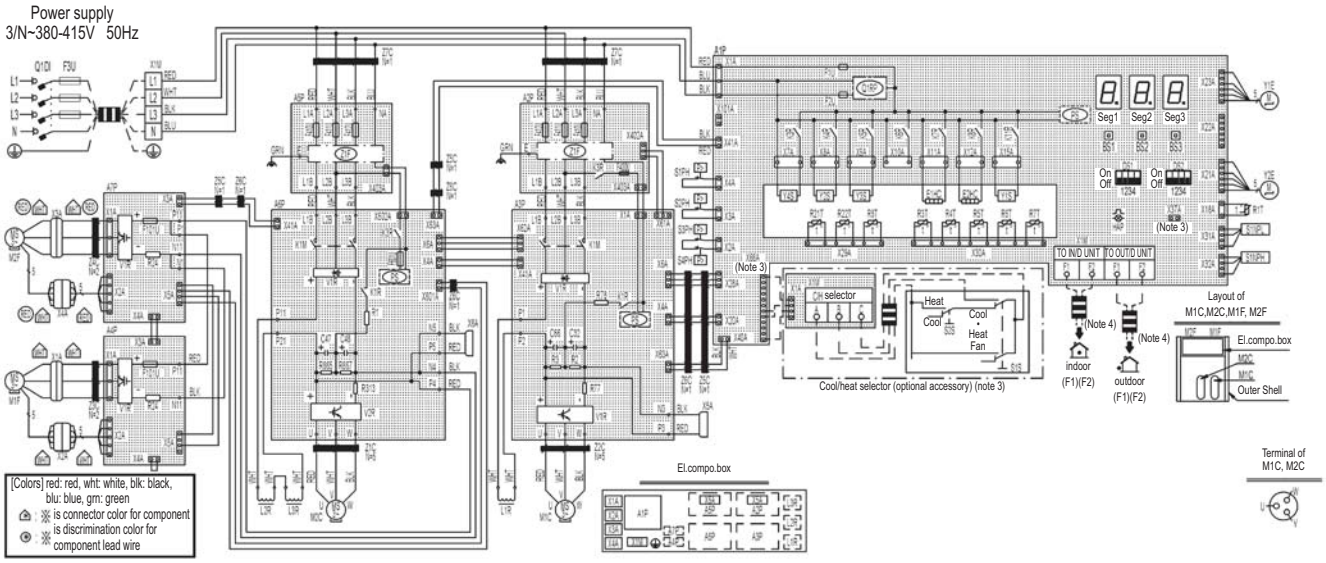
1. This wiring diagram applies only to the outdoor unit.
2. : field wiring, : terminal block, : connector, : terminal, : Protective earth (SREW)
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to "service precaution" label on el, compo, box cover.
6. When operating, don't shortcircuit the protection devices (S1PH ~ S4PH).

2D082296A

9 Wiring diagrams

9 - 1 Wiring Diagrams - Three Phase

RXYQQ18-20T



A1P	Printed circuit board (main)	L1R ~ L3R	Reactor	S4PH	Pressure switch (liquid)
A2P, A5P	Printed circuit board (noise filter)	M1C, M2C	Motor (compressor)	SEG1~SEG3	7-segment display (A1P)
A3P, A6P	Printed circuit board (inv)	M1F, M2F	Motor (fan)	V1R	Power module (A3P, A6P)
A4P, A7P	Printed circuit board (fan)	PS	Switching power supply (A1P, A3P, A6P)	V1R	Power module (A4P, A7P)
BS1~3	Push button, switch (A1P) (mode, set, return)	Q1DI	Field earth leakage breaker	V2R	Power module (A6P)
C32, C66	Capacitor (A3P)	Q1RP	Phase reversal detect circuit (A1P)	X1A~4A	Connector (M1F, M2F)
C47, C48	Capacitor (A6P)	R1	Resistor (current limiting) (A6P)	X5A~X6A	Connector (check the residual charge)
DS1, DS2	Dip switch (A1P)	R2, R3	Resistor (A3P)	X1M	Terminal block (power supply)
E1HC, E2HC	Crankcase heater	R24	Resistor (current sensor) (A4P, A7P)	X1M	Terminal block (control) (A1P)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R77	Resistor (current sensor) (A3P)	Y1E	Electronic expansion valve (main)
F101U	Fuse (A4P, A7P)	R78	Resistor (current limiting) (A3P)	Y2E	Electronic expansion valve (injection)
F3U	Field fuse	R313	Resistor (current censor) (A6P)	Y1S	Solenoid valve (main)
F400U	Fuse (A2P)	R865, R867	Resistor (A6P)	Y2S	Solenoid valve (accumulator oil return)
F410U ~ F412U	Fuse (A2P, A5P)	R1T	Thermistor (AIR) (A1P)	Y3S	Solenoid valve (OIL1)
F601U	Fuse (A6P)	R21T, R22T	Thermistor (M1C, MC2 discharge)	Y4S	Solenoid valve (OIL2)
HAP	Pilotlamp (A1P) (service monitor-green)	R3T	Thermistor (accumulator)	Z1C~Z7C	Noise filter (ferrite core)
K1M	Magnetic contactor (A3P, A6P)	R4T	Thermistor (heat exc, liq, pipe)	Z1F	Noise filter (A2P, A5P) (with surge absorber)
K1R	Magnetic relay (A3P, A6P)	R5T	Thermistor (subcool liq, pipe)		
K3R	Magnetic relay (A2P, A6P)	R6T	Thermistor (heat exc, gas pipe)		
K3R	Magnetic relay (Y4S) (A1P)	R7T	Thermistor (heat exc, deicer)		
K4R	Magnetic relay (Y2S) (A1P)	R8T	Thermistor (M2C, body)		
K5R	Magnetic relay (Y3S) (A1P)	S1NPH	Pressure sensor (high)		
K7R	Magnetic relay (E1HC) (A1P)	S1NPL	Pressure sensor (low)	Connector for optional accessories	
K8R	Magnetic relay (E2HC) (A1P)	S1PH, S2PH	Pressure switch (disch)	X37A	Connector (power adapter)
K11R	Magnetic relay (Y1S) (A1P)	S3PH	Pressure switch (gas)	X66A	Connector (remote switching cool/heat selector)

NOTES

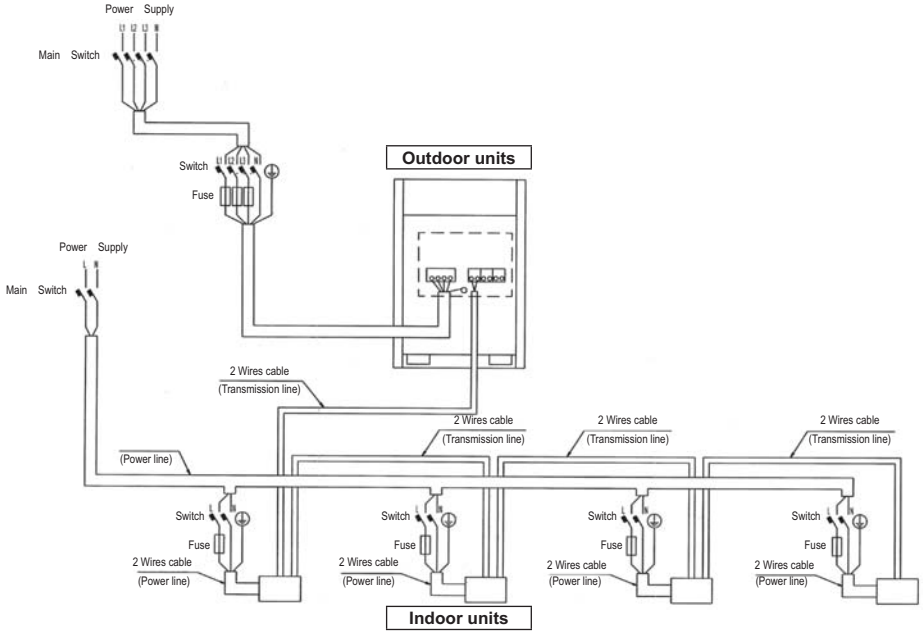
1. This wiring diagram applies only to the outdoor unit.
2. : field wiring, : terminal block, : connector, : terminal, : Protective earth (SREW)
3. When using the optional adapter, refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1-F2, outdoor-outdoor transmission F1-F2, refer to the installation manual.
5. How to use BS1~3 switch. Refer to “service precaution” label on el. compo. box cover.
6. When operating, don’t shortcircuit the protection devices (S1PH ~ S4PH).

2D082295A

10 External connection diagrams

10 - 1 External Connection Diagrams

RYYQ8-20T
RXYQ8-20T
RXYQQ8-20T

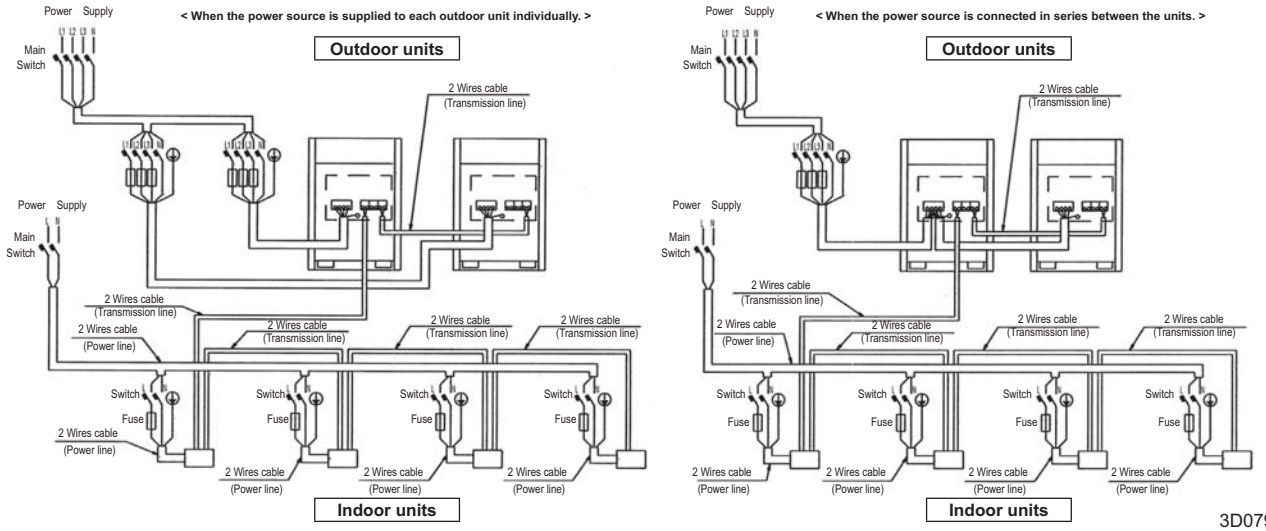


3D079576

NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
11. Must install earth leakage circuit breaker.

RYYQ22-36T
RXYQ22-36T
RXYQQ22-36T



3D079577

NOTES

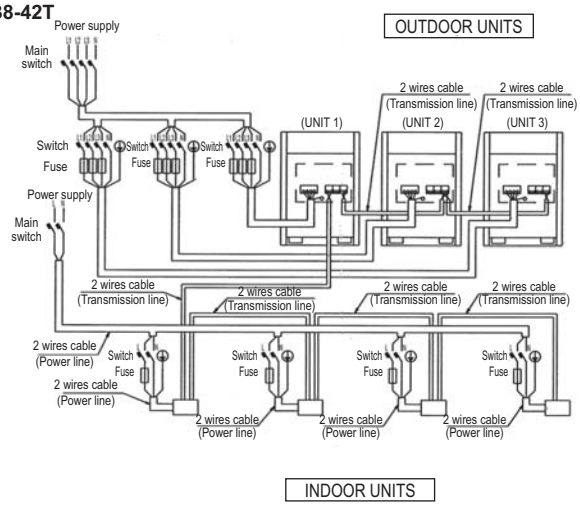
1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. the capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

10 External connection diagrams

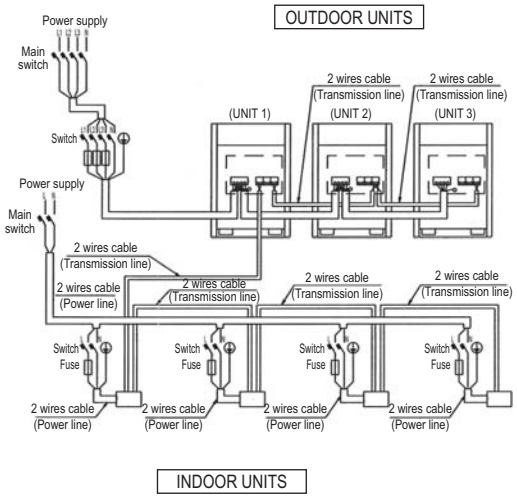
10 - 1 External Connection Diagrams

RYYQ38-54T
RXYQ38-54T
RXYQQ38-42T

<When the power source is supplied to each outdoor unit individually>



<When the power sourse is connected in series between the units>



3D079578

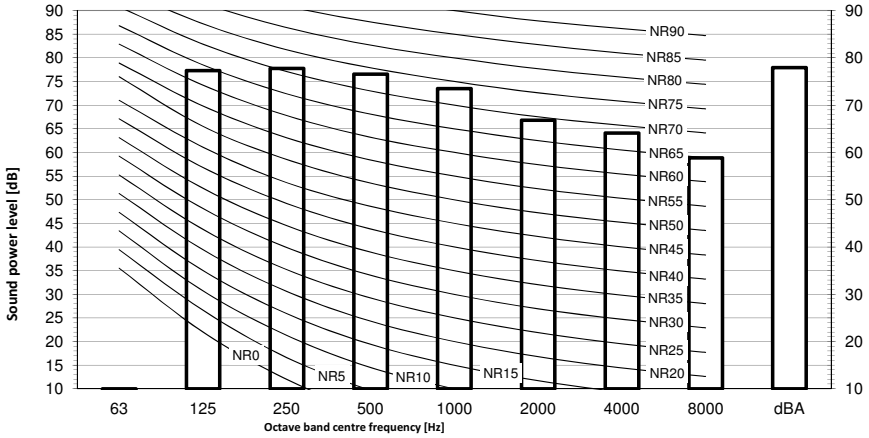
NOTES

1. All wiring, components and materials to be produced on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

11 Sound data

11 - 1 Sound Power Spectrum

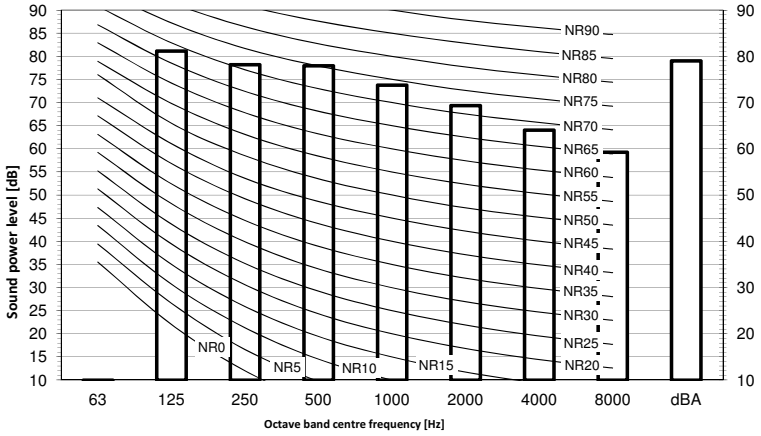
RYYQ8T
RYMQ8T
RXYQ8T
RXYQQ8T



Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = ·10E-6µW/m²·
3. Measured according to ISO 3744

3D079537-B

RYYQ10T
RYMQ10T
RXYQ10T
RXYQQ10T



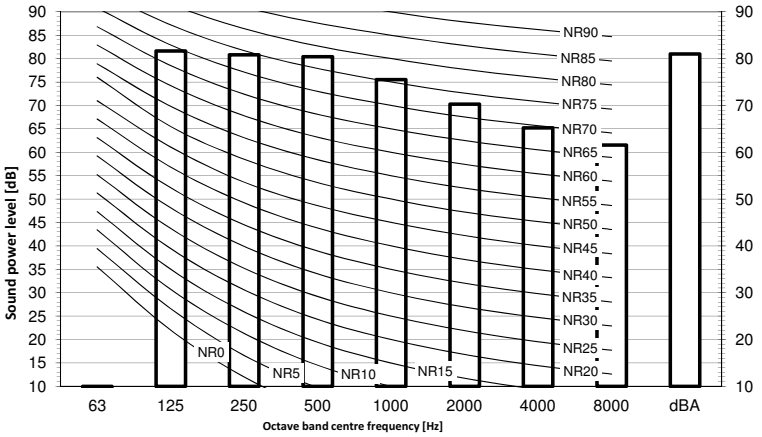
Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = ·10E-6µW/m²·
3. Measured according to ISO 3744

3D079908-B

11 Sound data

11 - 1 Sound Power Spectrum

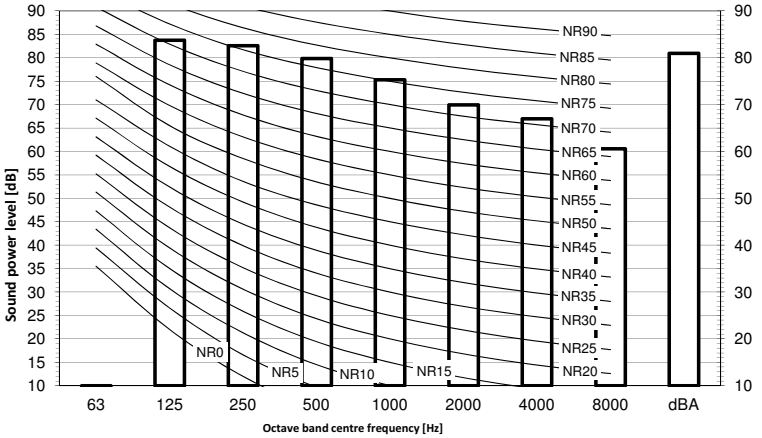
RYYQ12T
RYMQ12T
RXYQ12T
RXYQQ12T



Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = ·10E-6µW/m²·
3. Measured according to ISO 3744

3D079909-B

RYYQ14T
RYMQ14T
RXYQ14T
RXYQQ14T



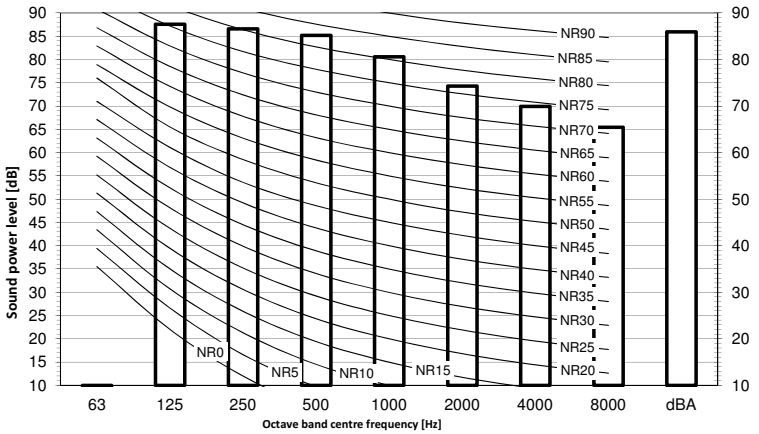
Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = ·10E-6µW/m²·
3. Measured according to ISO 3744

3D079910-B

11 Sound data

11 - 1 Sound Power Spectrum

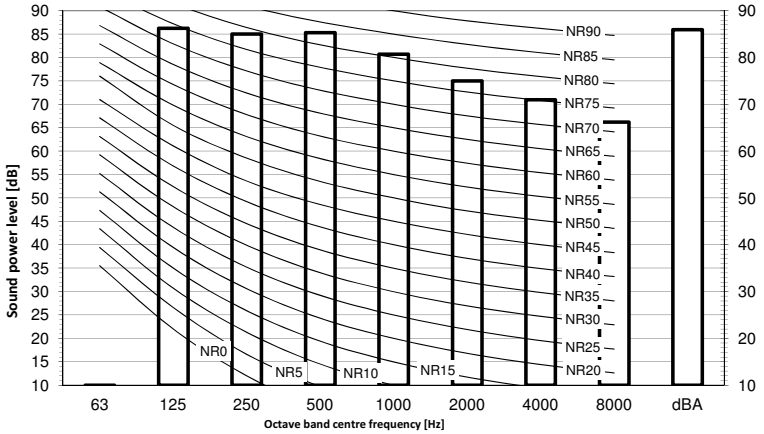
RYYQ16T
RYMQ16T
RXYQ16T
RXYQQ16T



Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = $10E-6\mu W/m^2$.
3. Measured according to ISO 3744

3D079911-B

RYYQ18T
RYMQ18T
RXYQ18T
RXYQQ18T



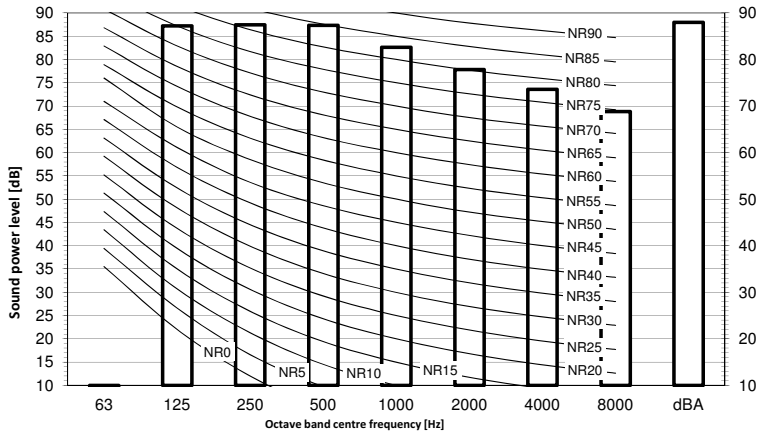
Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = $10E-6\mu W/m^2$.
3. Measured according to ISO 3744

3D079912-B

11 Sound data

11 - 1 Sound Power Spectrum

RYYQ20T
RYMQ20T
RXYQ20T
RXYQQ20T



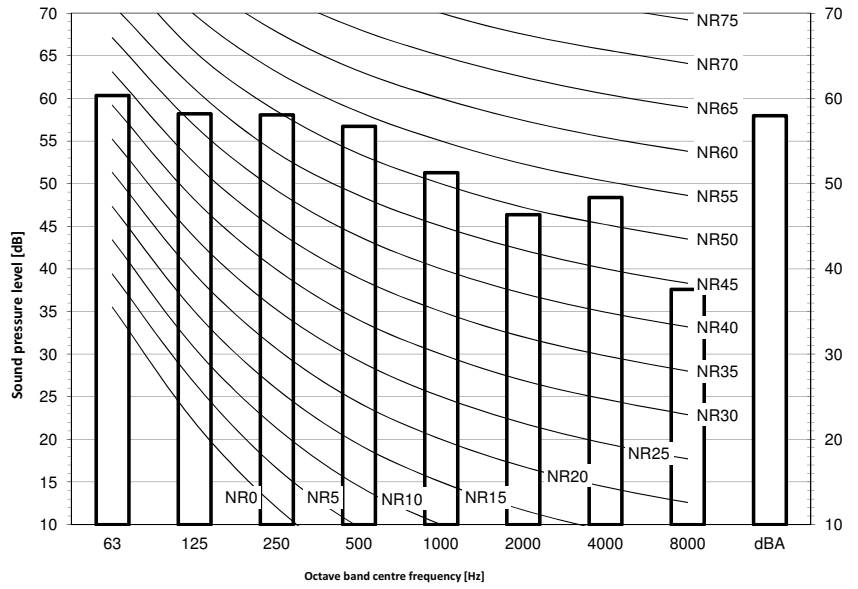
Notes
1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = ·10E-6µW/m²·
3. Measured according to ISO 3744

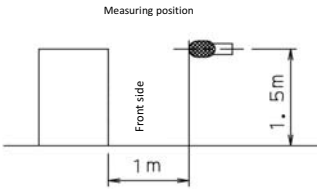
3D079913-B

11 Sound data

11 - 2 Sound Pressure Spectrum

RYYQ8T
RYMQ8T
RXYQ8T
RXYQQ8T

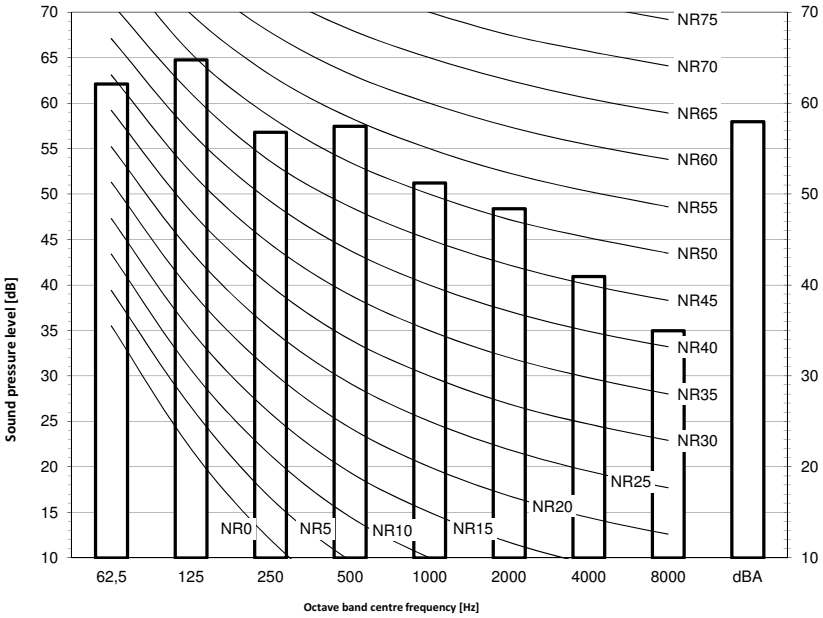


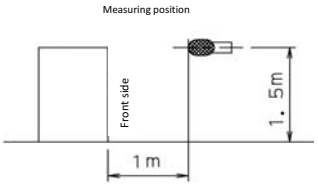


Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

3D079536-B

RYYQ10T
RYMQ10T
RXYQ10T
RXYQQ10T





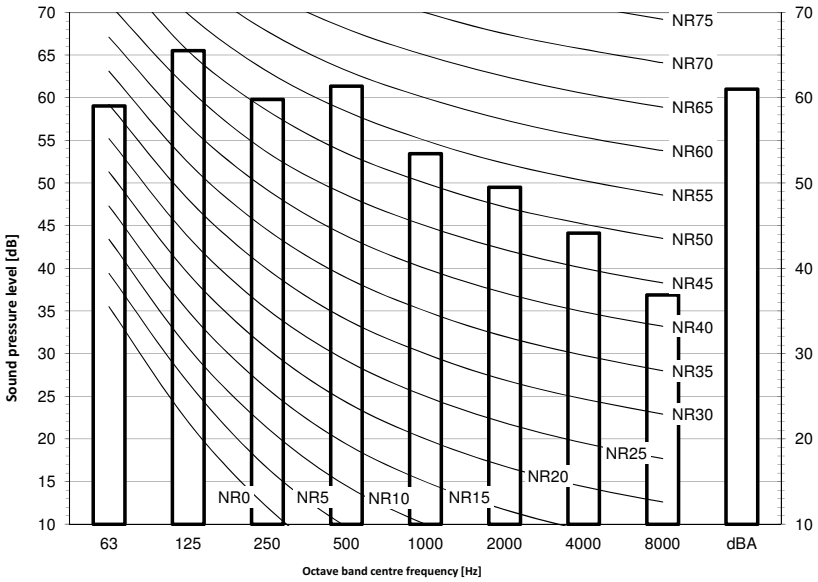
Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

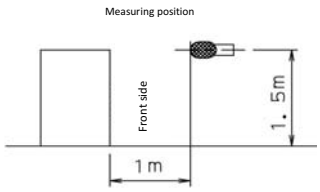
3D079902-B

11 Sound data

11 - 2 Sound Pressure Spectrum

RYYQ12T
RYMQ12T
RXYQ12T
RXYQQ12T

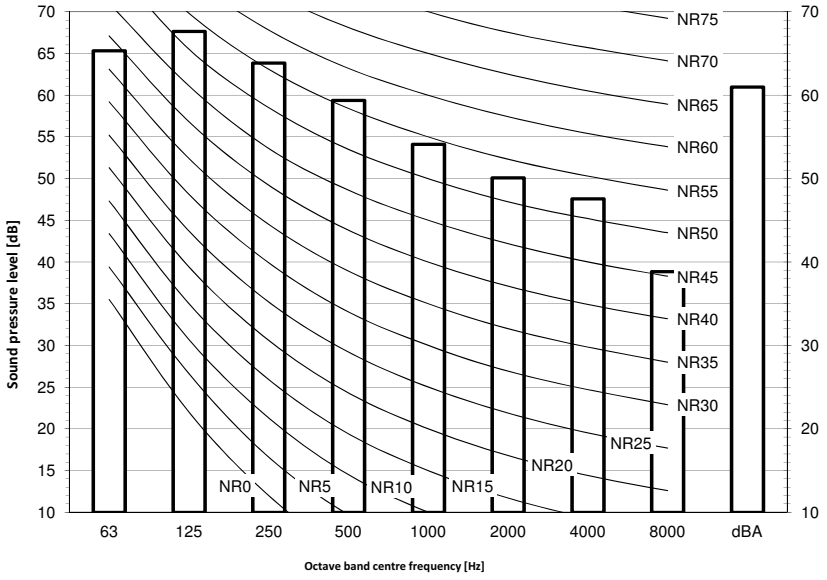


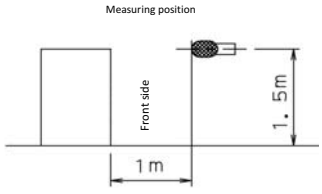


Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

3D079903-B

RYYQ14T
RYMQ14T
RXYQ14T
RXYQQ14T





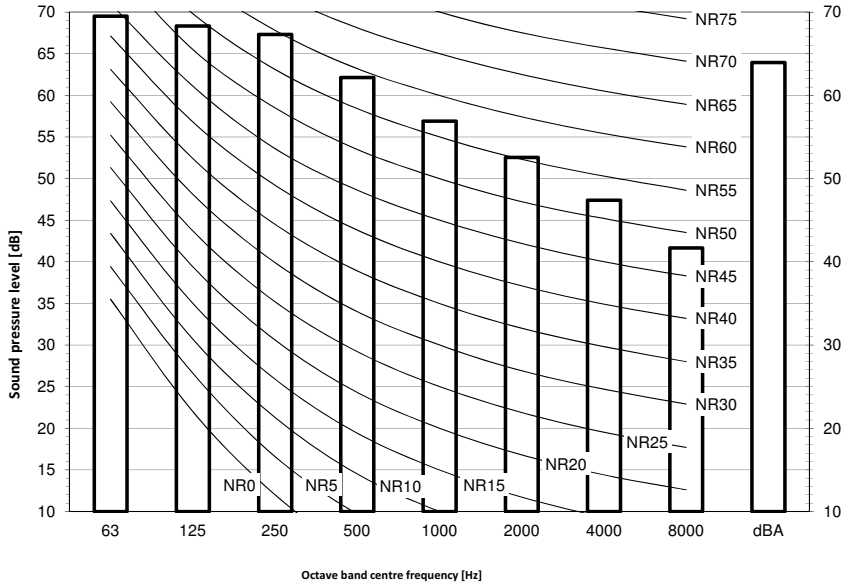
Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

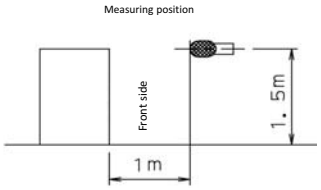
3D079904-B

11 Sound data

11 - 2 Sound Pressure Spectrum

RYYQ16T
RYMQ16T
RXYQ16T
RXYQQ16T

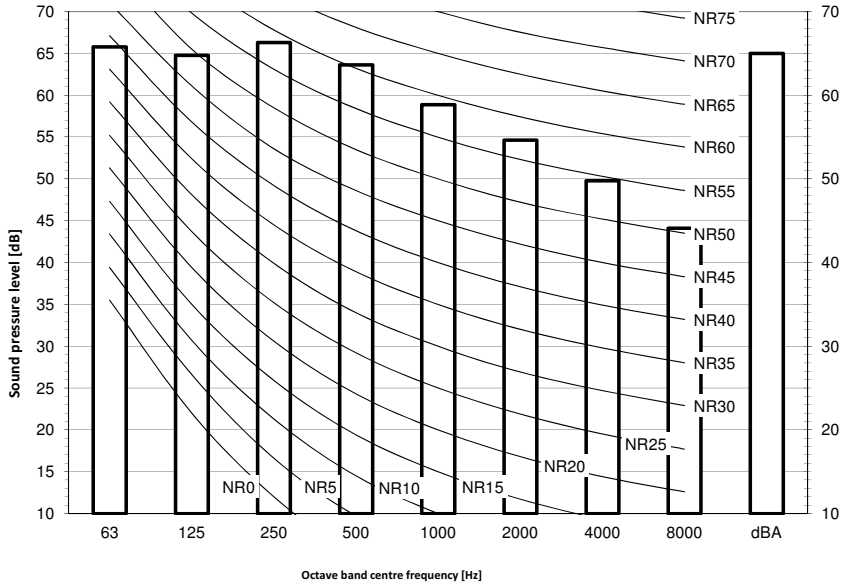


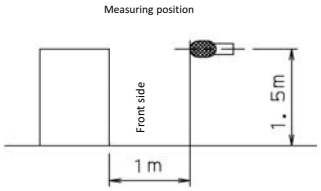


Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

3D079905-B

RYYQ18T
RYMQ18T
RXYQ18T
RXYQQ18T





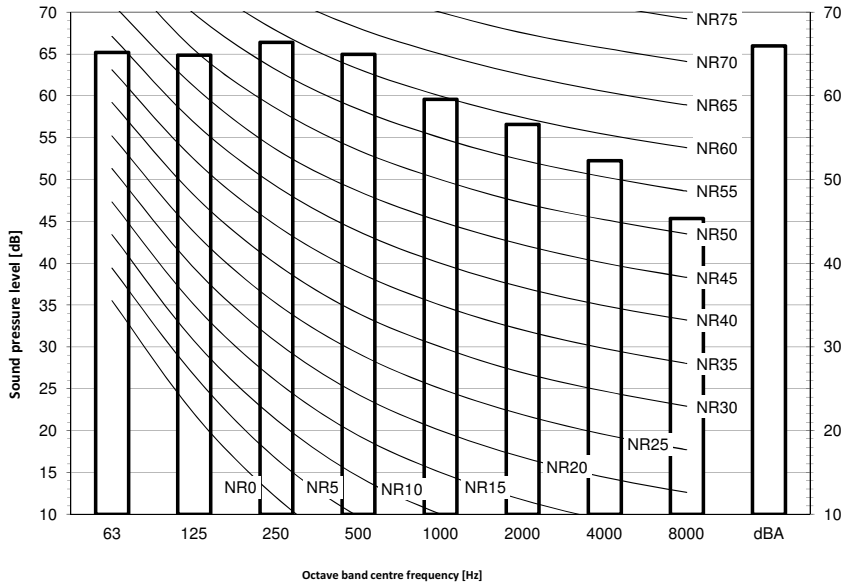
Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

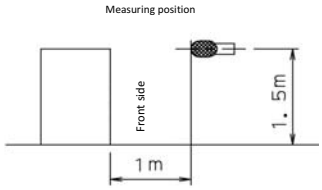
3D079906-B

11 Sound data

11 - 2 Sound Pressure Spectrum

RYYQ20T
RYMQ20T
RXYQ20T
RXYQQ20T





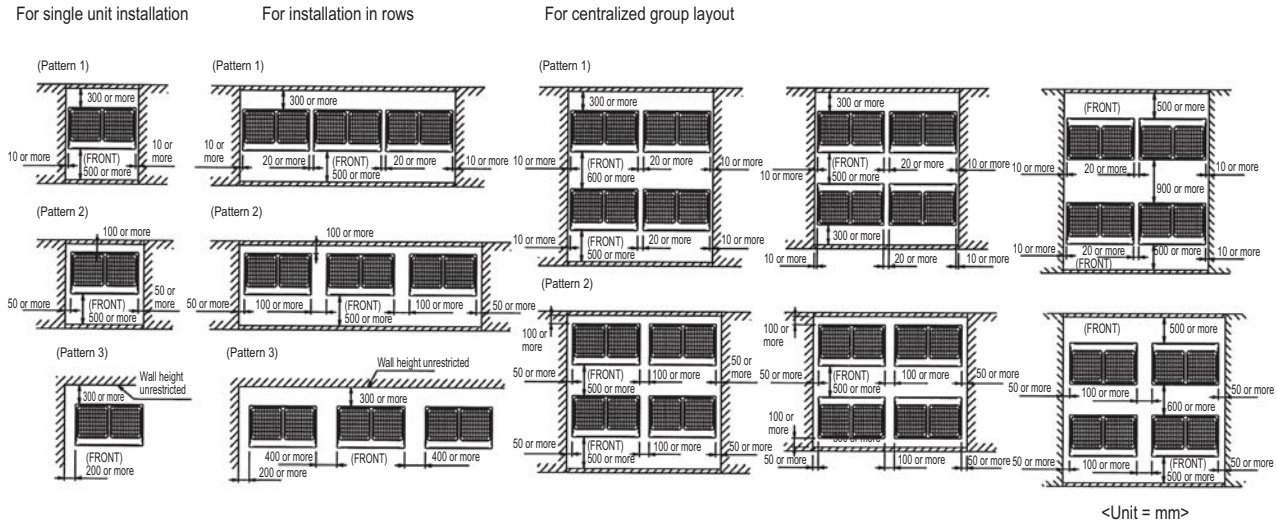
Notes
1. Data is valid at free field condition.
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa

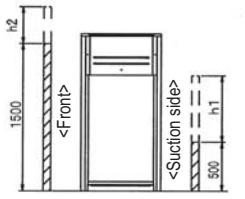
3D079907-B

12 Installation

12 - 1 Installation Method

RYYQ-T
RYMQ-T
RXYQ-T
RXYQQ-T





NOTES

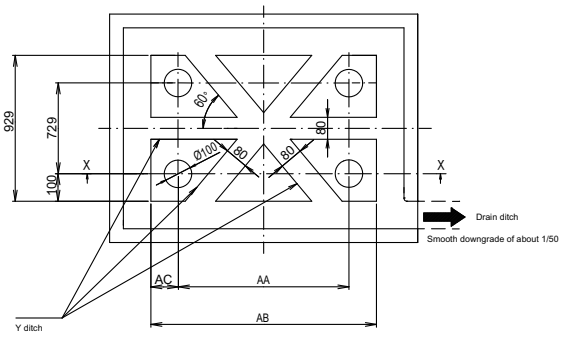
1. Heights of walls in case of patterns 1 and 2:
   Front: 1500mm
   Suction side: 500mm
   Side: Height unrestricted
   Installation space as shown on this drawing is based on the cooling operation at 35 degrees outdoor air temperature.
   When the design outdoor air temperature exceeds 35 degrees or the load exceeds maximum ability of much generation load of heat in all outdoor unit, take the suction side space more broadly than the space as shown on this drawing.
2. If the above wall heights are exceeded then h2/2 and h1/2 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 keep in mind the need to leave enough space for a person to pass between units and wall and also 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.

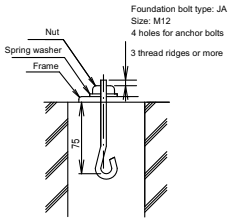
3D079542

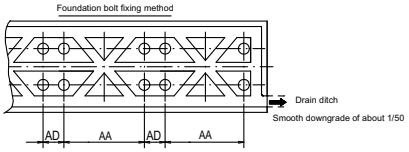
12 Installation

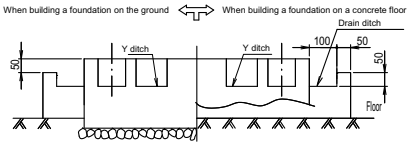
12 - 2 Fixation and Foundation of Units

RYYQ-T
RYMQ-T
RXYQ-T
RXYQQ-T









Cross section X - X

For multi-unit installation

Model	AA	AB	AC	AD
RYYQ8-12T RYMQ8-12T RXYQ8-12T RXYQQ8-12T REMQ5T / REYQ8-12T	766	992	113	185
RYYQ14-20T RYMQ14-20T RXYQ14-20T RXYQQ14-20T REYQ14-20T	1076	1302		
RXYCQ8	497	697	100	160
RXYCQ10-14	792	992		
RXYCQ16-20	1102	1302		

Notes

1. Provide a drain ditch around the foundation to drain water from the installation area.
2. The surface has to be finished with mortar. The corner edges have to be chamfered.
3. Build the foundation on a concrete floor or, if not possible, make sure the foundation surface has a rough finish.
4. Use a cement/sand/gravel ratio of 1/2/4 for the concrete, and a diameter of 10 mm for the reinforcement bars (approximately, 300mm intervals).
5. When installing the equipment on a roof, make sure to check the strength of the floor and take adequate water proofing measures.

3D079547D

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQQ-T

VRV4-Q Heat Pump Field Piping Restrictions (1/3)

Reference drawing see Page 2/3		Maximum piping length			Maximum height difference			Total Piping Length
		Longest pipe (A+[B,J]) Actual / (Equivalent)	After first branch (B,J) Actual	After first branch for outdoor multi (D) Actual / (Equivalent)	Indoor to outdoor (H1) outdoor above indoor / (indoor above outdoor)	Indoor to indoor (H2)	Outdoor to outdoor (H3)	
Standard Only VRV DX indoor connected Standard multi combination		120/(150)m	FXYS*K*	10/(13)m	50/(40)m	15m	5m	300m
AHU connection	Pair	50/(55)m(2)	-	-	40/(40)m	-	-	-

NOTES

For standard multi combinations; see 3D079534

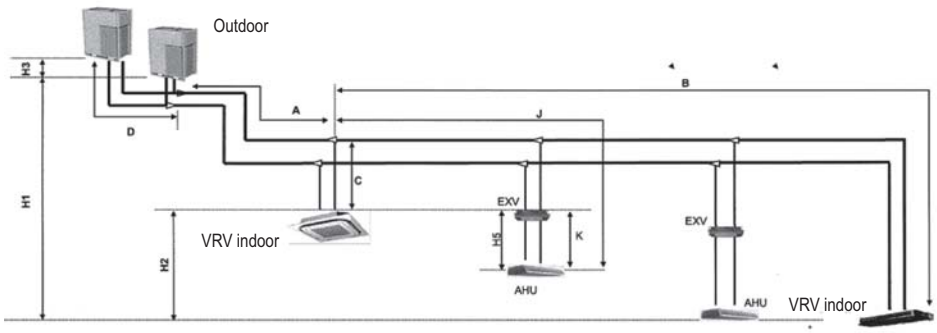
(1) Extension is possible if all below conditions are met (limitation can be extended up to 90m)
   a. The piping length between all indoor to the nearest branch kit is ≤ 40m.
   b. It is necessary to increase the pipe size of the gas and liquid piping if the pipe length between the first and the final branch kit is over 40m
      If the increased pipe size is larger than the pipe size of the main pipe, then the pipe size of the main pipe has to be increased as well
   c. When the piping size is increased (b), the piping length has to be counted as double. The total piping length has to be within limitations (see table above).
   d. The piping length difference between the nearest indoor from first branch to the outdoor unit and farthest indoor to the outdoor unit is ≤ 40m

(2) The allowable minimum length is 5 m.

3D084965(1/3)

RXYQQ-T

VRV4-Q Heat Pump Field Piping Restrictions (2/3)



NOTES

1. Schematic indication: illustrations may vary from real unit outlook.
2. Displayed system is only to illustrate piping length limitations ! Combination of displayed indoor unit types is not allowed. See 3D084966 for allowed combinations.

		Allowable piping length	Max. height difference
		EXV to AHU (K)	EXV to AHU (H5)
AHU connection	**Pair**	≤5m	5m

3D084965(2/3)

12 Installation

12 - 3 Refrigerant Pipe Selection

RXYQQ-T

VRV4-Q Heat Pump Field Piping Restrictions (3/3)

System pattern Allowed connection ratio (CR) * Other combinations are N.A.	Total		Allowable capacity	
	capacity	Indoor unit quantity (VRV, RA, AHU, Hydrobox) (excl. BP box and EXV kits)	VRV DX indoor	AHU
Only VRV DX indoor	50~130%	Max. 64	50~130%	-
Only AHU (pair AHU)[3]	90~110%	1	-	90~110%

NOTES

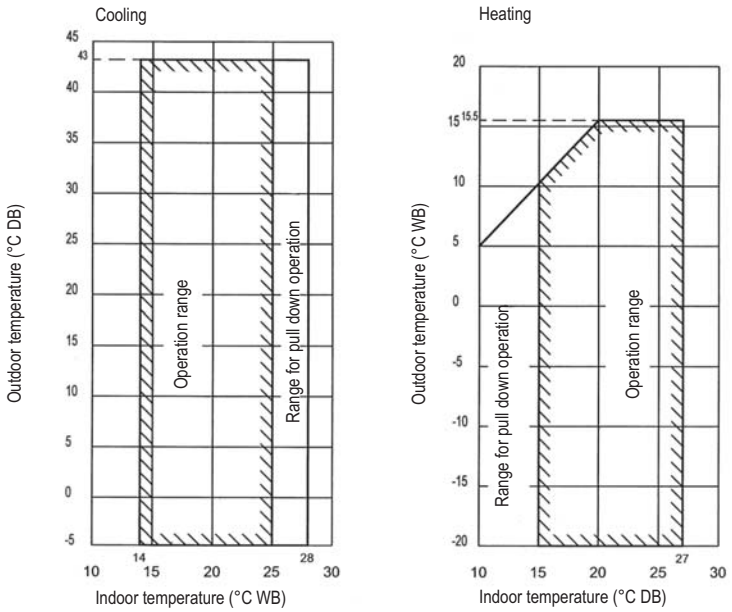
1. When using AHU connection: see EKEXV kit as an indoor unit for counting the total number of indoor units
2. Restrictions by air handling unit capacity
3. Pair AHU = system with 1 AHU connected to one outdoor unit

3D084965(3/3)

13 Operation range

13 - 1 Operation Range

RYYQ-T
RYMQ-T
RXYQ-T
RXYQQ-T



NOTES

1. These figures assume the following operation conditions:
   Indoor and outdoor units:
   Equivalent pipe length: 5m
   Level difference: 0m
2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
3. 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.
4. Operation range is valid in case direct expansion indoor units are used. In case special indoor units are used, (eg. Hydrobox), refer to technical specs of dedicaded unit.

3D079544

These products are not within the scope of the Eurovent certification program

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