

# Engineering Data

## Design Manual RXYQ-XAYCA, 575 V

Heat Pump 60 Hz

**R-410A**





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# 1. Features and Benefits

- Adapting **VRV** to North American market needs
  - Industry's first 3-phase variable refrigerant flow system to integrate with communicating gas furnaces.
  - Design flexibility to enlarge system from single to dual module or dual to triple module without change to installed main pipe sizes\*\*.
  - Engineered to optimize capital on phased and tenant fit out commercial buildings.
  - Choice of gas furnace or heat pump heating for optimizing operational costs based on utility cost.
  - Year round comfort and energy savings with Variable Refrigerant Temperature (VRT) technology.
- Technology that matters
  - Engineered with 575 V inverter board and compressor to eliminate the need of additional transformer or voltage converters.
  - Designed with Daikin's K-type compressor to deliver heating down to  $-13^{\circ}\text{F}$  ( $-25^{\circ}\text{C}$ ) as standard.
  - Corrosion resistant up to 1000† hours Daikin Blue Fin coating as factory standard.
  - Heat exchanger engineered with a bottom refrigerant circuit that allows installation without base pan heater.
  - Refrigerant cooled inverter technology keeps PCB cool independent of ambient temperature.
  - Added peace of mind with ability of Auto changeover to back up (auxiliary) heat.
- Engineered for maintenance
  - New service window provides ease of access to the multi-functional display without removing the main electrical panel.
  - The built-in multi-functional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
  - Ease of commissioning with ability to program off site and upload using configurator tool.
  - Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
  - Seamless integration with M, P, and T-series indoor units.
  - Compatible with the full suite of Daikin **VRV** controls.
  - Outstanding 10-Year Parts Warranty\* as standard.



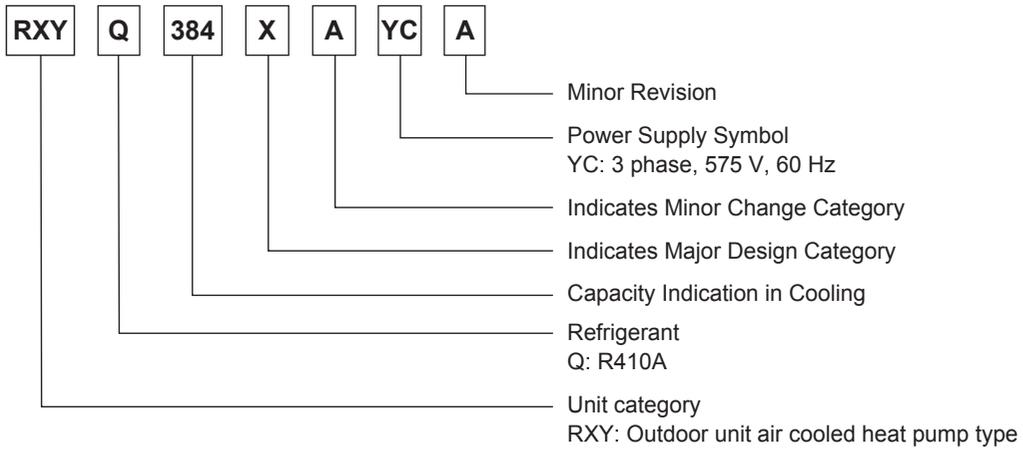
\* Complete commercial warranty details available from your local distributor or manufacturer's representative or at [www.daikincomfort.com](http://www.daikincomfort.com) or [www.daikinac.com](http://www.daikinac.com)

† When tested in accordance to ASTM B117 methodology.

\*\* Refer to engineering manuals for design rules and pipe sizes.

## 2. Nomenclature

### Outdoor Unit



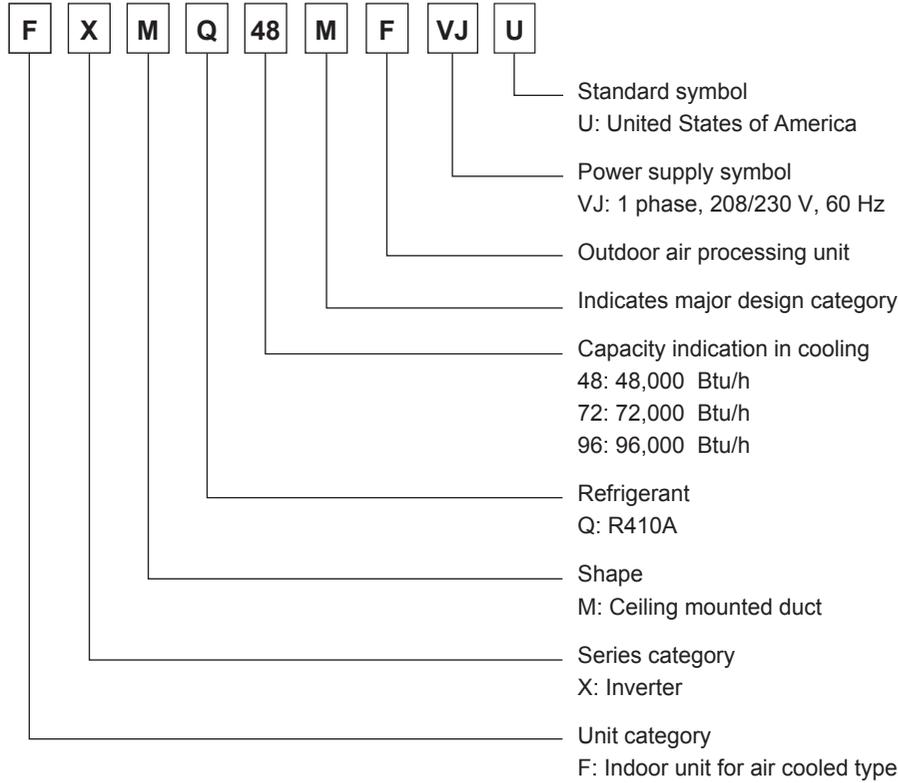
**Indoor Unit**

**F X M Q 54 PB VJ U**

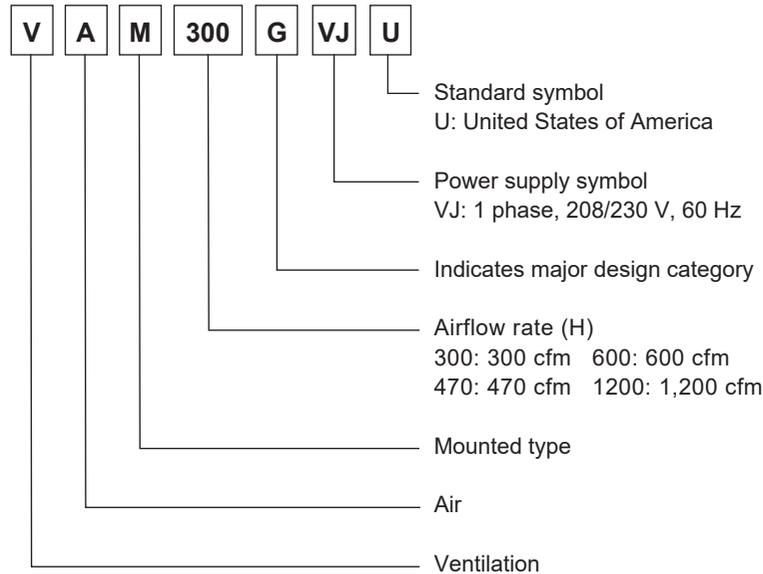
- Standard symbol  
U: United States of America
- Power supply symbol  
VJ: 1 phase, 208/230 V, 60 Hz  
SBL: 1 phase, 120 V, 60 Hz
- Indicates major design category
- Capacity indication in cooling  
05: 5,800 Btu/h      18: 18,000 Btu/h      48: 48,000 Btu/h  
07: 7,500 Btu/h      24: 24,000 Btu/h      54: 54,000 Btu/h  
09: 9,500 Btu/h      30: 30,000 Btu/h      60: 60,000 Btu/h  
12: 12,000 Btu/h     36: 36,000 Btu/h      72: 72,000 Btu/h  
15: 15,000 Btu/h     42: 42,000 Btu/h      96: 96,000 Btu/h
- Refrigerant  
Q: R410A
- Shape  
F: Ceiling mounted cassette (Round flow with sensing)  
Z: VISTA™ 2 × 2 cassette unit  
U: 4-way blow ceiling-suspended  
E: One way blow cassette  
D: Slim ceiling mounted duct  
S: MSP concealed ducted unit  
M: Ceiling mounted duct  
H: Ceiling suspended  
A: Wall mounted  
L: Floor standing  
N: Concealed floor standing  
T: Air handling unit (FXTQ)  
    Upflow/Downflow (CXTQ)
- Series category  
X: Inverter
- Unit category  
F: Indoor unit for air cooled type  
C: Cased coil unit

## Air Treatment Equipment

### Outdoor Air Processing Unit



### Energy Recovery Ventilator (VAM series)



### 3. Model Names

#### 3.1 Outdoor Units

Capacity Range			6 ton	8 ton	10 ton	12 ton	14 ton	16 ton	18 ton	Power Supply, Standard
Capacity Index			72	96	120	144	168	192	216	
Heat Pump	575 V	RXYQ-	72XA	96XA	120XA	144XA	168XA	192XA	216XA	YCA

Capacity Range			20 ton	22 ton	24 ton	26 ton	28 ton	30 ton	32 ton	Power Supply, Standard
Capacity Index			240	264	288	312	336	360	384	
Heat Pump	575 V	RXYQ-	240XA	264XA	288XA	312XA	336XA	360XA	384XA	YCA

**Note:**

YC: 3 phase, 575 V, 60 Hz

A: Minor Revision

#### Heat Pump 575 V

<b>Model name</b>	<b>RXYQ72XAYCA</b>	<b>RXYQ96XAYCA</b>	<b>RXYQ120XAYCA</b>	<b>RXYQ144XAYCA</b>	<b>RXYQ168XAYCA</b>
Outdoor unit 1	RXYQ72XAYCA	RXYQ96XAYCA	RXYQ120XAYCA	RXYQ144XAYCA	RXYQ168XAYCA

<b>Model name</b>	<b>RXYQ192XAYCA</b>	<b>RXYQ216XAYCA</b>	<b>RXYQ240XAYCA</b>	<b>RXYQ264XAYCA</b>
Outdoor unit 1	RXYQ96XAYCA	RXYQ96XAYCA	RXYQ120XAYCA	RXYQ120XAYCA
Outdoor unit 2	RXYQ96XAYCA	RXYQ120XAYCA	RXYQ120XAYCA	RXYQ144XAYCA

<b>Model name</b>	<b>RXYQ288XAYCA</b>	<b>RXYQ312XAYCA</b>	<b>RXYQ336XAYCA</b>
Outdoor unit 1	RXYQ144XAYCA	RXYQ144XAYCA	RXYQ168XAYCA
Outdoor unit 2	RXYQ144XAYCA	RXYQ168XAYCA	RXYQ168XAYCA

<b>Model name</b>	<b>RXYQ360XAYCA</b>	<b>RXYQ384XAYCA</b>
Outdoor unit 1	RXYQ120XAYCA	RXYQ120XAYCA
Outdoor unit 2	RXYQ120XAYCA	RXYQ120XAYCA
Outdoor unit 3	RXYQ120XAYCA	RXYQ144XAYCA

### 3.2 Indoor Units

Capacity Range		0.5 ton	0.6 ton	0.8 ton	1 ton	1.25 ton	1.5 ton	2 ton	2.5 ton	3 ton	3.5 ton	4 ton	4.5 ton	5 ton	6 ton	8 ton	Power Supply, Standard
Capacity Index		5.8	7.5	9.5	12	15	18	20	24	30	36	42	48	54	60	72	
Ceiling mounted cassette (Round flow with sensing) type	FXFQ	—	07T	09T	12T	15T	18T	—	24T	30T	36T	—	48T	—	—	—	VJU
VISTA™ 2 × 2 cassette unit	FXZQ	05TA	07TA	09TA	12TA	15TA	18TA	—	—	—	—	—	—	—	—	—	
4-way blow ceiling-suspended type	FXUQ	—	—	—	—	—	—	18P	24P	30P	36P	—	—	—	—	—	
One way blow cassette type	FXEQ	—	07P	09P	12P	15P	18P	—	24P	—	—	—	—	—	—	—	
Slim ceiling mounted duct type	FXDQ	—	07M	09M	12M	—	18M	—	24M	—	—	—	—	—	—	—	
MSP concealed ducted unit	FXSQ	05TA	07TA	09TA	12TA	15TA	18TA	—	24TA	30TA	36TA	—	48TA	54TA	—	—	
Ceiling mounted duct type (Middle and high static pressure)	FXMQ	—	07PB	09PB	12PB	15PB	18PB	—	24PB	30PB	36PB	—	48PB	54PB	—	—	
Ceiling mounted duct type	FXMQ	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72M 96M	
Ceiling suspended type	FXHQ	—	—	—	12M	—	—	—	24M	—	36M	—	—	—	—	—	
Wall mounted type	FXAQ	—	07P	09P	12P	—	18P	—	24P	—	—	—	—	—	—	—	
Floor standing type	FXLQ	—	07M	09M	12M	—	18M	—	24M	—	—	—	—	—	—	—	
Concealed floor standing type	FXNQ	—	07M	09M	12M	—	18M	—	24M	—	—	—	—	—	—	—	
Air handling unit	FXTQ	—	—	09TA	12TA	—	18TA	—	24TA	30TA	36TA	42TA	48TA	54TA	60TA	—	VJUA
		—	—	09TA	12TA	—	18TA	—	24TA	30TA	36TA	42TA	48TA	54TA	60TA	—	VJUD
Cased coil unit	CXTQ	—	—	—	—	—	—	—	24TA	—	36TA	—	48TA	—	60TA	—	SBLU

### 3.3 Air Treatment Equipment

#### Outdoor Air Processing Unit

Series	Model Name			Power Supply, Standard
FXMQ	48MF	72MF	96MF	VJU

#### Energy Recovery Ventilator (VAM series)

Series	Model Name				Power Supply, Standard
VAM	300G	470G	600G	1200G	VJU

## 4. External Appearance

### 4.1 Outdoor Units

#### Single Outdoor Units

RXYQ72XAYCA  
RXYQ96XAYCA  
RXYQ120XAYCA  
RXYQ144XAYCA  
RXYQ168XAYCA



6, 8, 10, 12, 14 ton

#### Double Outdoor Units

RXYQ192XAYCA      RXYQ288XAYCA  
RXYQ216XAYCA      RXYQ312XAYCA  
RXYQ240XAYCA      RXYQ336XAYCA  
RXYQ264XAYCA



16, 18, 20, 22, 24, 26, 28 ton

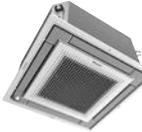
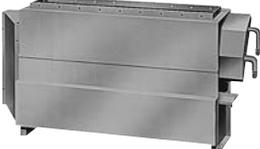
#### Triple Outdoor Units

RXYQ360XAYCA  
RXYQ384XAYCA



30, 32 ton

## 4.2 Indoor Units

<p>Ceiling mounted cassette (Round flow with sensing) type FXFQ-T</p>  <p>Shown with BYCQ125B-W1</p>	<p>Ceiling mounted duct type FXMQ-M</p> 
<p>VISTA™ 2 × 2 cassette unit FXZQ-TA</p>  <p>Shown with BYFQ60C3W1W</p>  <p>Shown with BYFQ60C3W1S</p>	<p>Ceiling suspended type FXHQ-M</p> 
<p>4-way blow ceiling-suspended type FXUQ-P</p> 	<p>Wall mounted type FXAQ-P</p> 
<p>One way blow cassette type FXEQ-P</p> 	<p>Floor standing type FXLQ-M</p> 
<p>Slim ceiling mounted duct type FXDQ-M</p> 	<p>Concealed floor standing type FXNQ-M</p> 
<p>MSP concealed ducted unit FXSQ-TA</p> 	<p>Air handling unit FXTQ-TA</p> 
<p>Ceiling mounted duct type (Middle and high static pressure) FXMQ-PB</p> 	<p>Cased coil unit CXTQ-TA</p> 

### 4.3 Air Treatment Equipment

Outdoor air processing unit

FXMQ-MF



Energy recovery ventilator  
(VAM series)

VAM-G



## 5. Outdoor Unit Combination

Model name	System capacity			Number of units	Module					Outdoor Unit Multi Connection Piping Kit ★1
	Ton	HP	kW		72	96	120	144	168	
RXYQ72XAYCA	6	7.5	21.1	1	●					—
RXYQ96XAYCA	8	10.0	28.1	1		●				
RXYQ120XAYCA	10	12.5	35.2	1			●			
RXYQ144XAYCA	12	15.0	42.2	1				●		
RXYQ168XAYCA	14	17.5	49.2	1					●	
RXYQ192XAYCA	16	20.0	56.3	2		●●				BHFP22P100U BHFP22P100UA
RXYQ216XAYCA	18	22.5	63.3	2		●	●			
RXYQ240XAYCA	20	25.0	70.3	2			●●			
RXYQ264XAYCA	22	27.5	77.4	2			●	●		
RXYQ288XAYCA	24	30.0	84.4	2				●●		
RXYQ312XAYCA	26	32.5	91.4	2				●	●	
RXYQ336XAYCA	28	35.0	98.5	2					●●	
RXYQ360XAYCA	30	37.5	105.5	3			●●●			BHFP22P151U BHFP22P151UA
RXYQ384XAYCA	32	40.0	112.5	3			●●	●		

**Note:**

★1. For multiple connection, the outdoor unit multi connection piping kit (separately sold) is required.

## 6. Capacity Range

### 6.1 Connection Ratio

$$\text{Connection ratio} = \frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

Type	Min. connection ratio	Max. connection ratio				
		Types of connected indoor units			Type of connected air treatment equipment	
		When using only FXDQ, FXMQ-PB, FXAQ, FXSQ07-54T	When using at least one FXFQ07/09, FXZQ05T, FXSQ05T	Other indoor unit models	FXMQ-MF	
			When FXMQ-MF is only connected	When FXMQ-MF and indoor units are connected		
Single outdoor units	50% *1	200% *2	180% *2	200% *2	100%	100% *3
Double outdoor units			160% *2	160% *2		
Triple outdoor units			130%	130%		

**Note:**

- \*1. 70%: RXYQ72X type
- \*2. If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units. This limitation can be deactivated through field setting. For cooling and heating mode – see below.
- \*3. When outdoor-air processing units (FXMQ-MF) and standard indoor units are connected, the total connection capacity of the outdoor-air processing units (FXMQ-MF) must not exceed 30% of the capacity index of the outdoor units. And the connection ratio must not exceed 100%.

### Indoor unit fan tap setting

Indoor units fan speed limitation related to connection capacity and outdoor air temperature for energy saving.

Default value = 0

Value	Indoor unit fan tap setting
0	Fan speed is limited to L tap when indoor units capacity ≥ 130%.
1	In heating mode, fan speed is limited to L tap when indoor units capacity ≥ 130%.
2	Fan speed follows the setting of the remote controllers (not limited by indoor units connection capacity).
3	Fan speed is limited to L tap when outdoor air temperature goes down to below 85.1°F (29.5°C) and indoor air temperature is in condition A (*1). It returns to remote controller setting when outdoor air temperature goes up to over 90.5 °F (32.5°C) or indoor air temperature is in condition B (*2).
4	Fan speed is limited to L tap when outdoor air temperature goes down to below 74.3°F (23.5°C) and indoor air temperature is in condition A (*1). It returns to remote controller setting when outdoor air temperature goes up to over 79.7°F (26.5°C) or indoor air temperature is in condition B (*2).
5	Fan speed is limited to L tap when outdoor air temperature goes down to below 66.7°F (19.3°C) and indoor air temperature is in condition A (*1). It returns to remote controller setting when outdoor air temperature goes up to over 72.1°F (22.3°C) or indoor air temperature is in condition B (*2).
6	Fan speed is limited to L tap when outdoor air temperature goes down to below 85.1°F (29.5°C). It returns to remote controller setting when outdoor air temperature goes up to over 90.5°F (32.5°C).
7	Fan speed is limited to L tap when outdoor air temperature goes down to below 74.3°F (23.5°C). It returns to remote controller setting when outdoor air temperature goes up to over 79.7°F (26.5°C).
8	Fan speed is limited to L tap when outdoor air temperature goes down to below 66.7°F (19.3°C). It returns to remote controller setting when outdoor air temperature goes up to over 72.1°F (22.3°C).

- \*1. Indoor condition A: Temperature difference (indoor air temperature – set temperature) is more than –2.7°F (–1.5°C) and less than 5.4°F (3°C).
- \*2. Indoor condition B: Temperature difference (indoor air temperature – set temperature) is –2.7°F (–1.5°C) or less, or 5.4°F (3°C) or more.

## 6.2 Indoor Unit Connection Capacity

Type	Ton	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit *1	Total capacity index of connectable indoor units *2	Maximum number of connectable indoor units
Single outdoor units	6	72	RXYQ72XA	RXYQ72XA	—	51 to 93 (144)	12
	8	96	RXYQ96XA	RXYQ96XA		48 to 124 (192)	16
	10	120	RXYQ120XA	RXYQ120XA		60 to 156 (240)	20
	12	144	RXYQ144XA	RXYQ144XA		72 to 187 (288)	25
	14	168	RXYQ168XA	RXYQ168XA		84 to 218 (336)	29
Double outdoor units	16	192	RXYQ192XA	RXYQ96XA+ RXYQ96XA	BHFP22P100U BHFP22P100UA	96 to 249 (307)	33
	18	216	RXYQ216XA	RXYQ96XA+ RXYQ120XA		108 to 280 (345)	37
	20	240	RXYQ240XA	RXYQ120XA+ RXYQ120XA		120 to 312 (384)	41
	22	264	RXYQ264XA	RXYQ120XA+ RXYQ144XA		132 to 343 (422)	45
	24	288	RXYQ288XA	RXYQ144XA+ RXYQ144XA		144 to 374 (460)	49
	26	312	RXYQ312XA	RXYQ144XA+ RXYQ168XA		156 to 405 (499)	54
	28	336	RXYQ336XA	RXYQ168XA+ RXYQ168XA		168 to 436 (537)	58
Triple outdoor units	30	360	RXYQ360XA	RXYQ120XA+ RXYQ120XA+ RXYQ120XA	BHFP22P151U BHFP22P151UA	180 to 468 (468)	62
	32	384	RXYQ384XA	RXYQ120XA+ RXYQ120XA+ RXYQ144XA		192 to 499 (499)	64

**Note:**

\*1. For multiple connection, the outdoor unit multi connection piping kit (separately sold) is required.

\*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units.

## 7. Specifications

Model name			RXYQ72XAYCA	RXYQ96XAYCA	RXYQ120XAYCA
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz
★1 Cooling capacity	Nominal	Btu/h (kW)	72,000 (21.1)	96,000 (28.1)	120,000 (35.2)
	Rated		69,000 (20.2)	92,000 (27.0)	114,000 (33.4)
★2 Heating capacity	Nominal	Btu/h (kW)	81,000 (23.7)	108,000 (31.7)	135,000 (39.6)
	Rated		77,000 (22.6)	103,000 (30.2)	129,000 (37.8)
Casing color			Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)
Dimensions: (H × W × D)		in. (mm)	66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767)
Heat exchanger			Cross fin coil	Cross fin coil	Cross fin coil
Compressor	Type		Hermetically sealed scroll type	Hermetically sealed scroll type	Hermetically sealed scroll type
	Displacement	m <sup>3</sup> /h	12.7	17.4	23.4
	Number of revolutions	r/min	3,738	5,142	6,888
	Motor output × Number of units	kW	3.9 × 1	5.4 × 1	7.2 × 1
	Starting method		Soft start	Soft start	Soft start
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	0.7 × 2	0.7 × 2	0.7 × 2
	Airflow rate	cfm (m <sup>3</sup> /min)	7,283 (206)	7,989 (226)	7,989 (226)
	Drive		Direct drive	Direct drive	Direct drive
Connecting pipes	Liquid pipe	in. (mm)	ϕ3/8 (9.5) C1220T (Brazing connection)	ϕ3/8 (9.5) C1220T (Brazing connection)	ϕ1/2 (12.7) C1220T (Brazing connection)
	Gas pipe	in. (mm)	ϕ3/4 (19.1) C1220T (Brazing connection)	ϕ7/8 (22.2) C1220T (Brazing connection)	ϕ1-1/8 (28.6) C1220T (Brazing connection)
Weight		lbs (kg)	727 (330)	727 (330)	727 (330)
Sound pressure level (Reference data)		dB(A)	58 (63.5 ★3)	61 (64.5 ★3)	61 (65 ★3)
Sound power level (Reference data)		dB	79	80	80.5
Safety devices			High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device
Defrost method			Deicer	Deicer	Deicer
Capacity control		%	15-100	13-100	11-100
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 (11.7)	25.8 (11.7)	25.8 (11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

### Note:

- ★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Rated capacity is certified under AHRI standard 1230.
- ★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB) / Rated capacity is certified under AHRI standard 1230.
- ★3. Sound pressure level may increase during heating operation at ambient temps below 41°F (5°C) value in parenthesis is the max sound pressure at those conditions.

3D122726

Model name (Combination Unit)			RXYQ144XAYCA	RXYQ168XAYCA	RXYQ192XAYCA
Model name (Independent Unit)			—	—	RXYQ96XAYCA RXYQ96XAYCA
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz
★1 Cooling capacity	Nominal	Btu/h	144,000 (42.2)	158,000 (46.3)	192,000 (56.3)
	Rated	(kW)	138,000 (40.4)	150,000 (44.0)	184,000 (53.9)
★2 Heating capacity	Nominal	Btu/h	162,000 (47.5)	188,000 (55.1)	216,000 (63.3)
	Rated	(kW)	154,000 (45.1)	180,000 (52.8)	206,000 (60.4)
Casing color			Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)
Dimensions: (H × W × D)		in. (mm)	66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)
Heat exchanger			Cross fin coil	Cross fin coil	Cross fin coil
Compressor	Type		Hermetically sealed scroll type	Hermetically sealed scroll type	Hermetically sealed scroll type
	Displacement	m <sup>3</sup> /h	27.7	34.1	17.7 + 17.7
	Number of revolutions	r/min	5,214	6,420	5,214 + 5,214
	Motor output × Number of units	kW	8.0 × 1	9.8 × 1	5.4 × 1 + 5.4 × 1
	Starting method		Soft start	Soft start	Soft start
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	0.7 × 2	0.7 × 2	(0.7 × 2) × 2
	Airflow rate	cfm (m <sup>3</sup> /min)	9,480 (268)	9,480 (268)	7,989 + 7,989 (226 + 226)
	Drive		Direct drive	Direct drive	Direct drive
Connecting pipes	Liquid pipe	in. (mm)	φ1/2 (12.7) C1220T (Brazing connection)	φ5/8 (15.9) C1220T (Brazing connection)	φ5/8 (15.9) C1220T (Brazing connection)
	Gas pipe	in. (mm)	φ1-1/8 (28.6) C1220T (Brazing connection)	φ1-1/8 (28.6) C1220T (Brazing connection)	φ1-1/8 (28.6) C1220T (Brazing connection)
Weight		lbs (kg)	793 (360)	793 (360)	727 + 727 (330 + 330)
Sound pressure level (Reference data)		dB(A)	65	65 (65.5 ★3)	64 (67.5 ★3)
Sound power level (Reference data)		dB	87	88	83
Safety devices			High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device
Defrost method			Deicer	Deicer	Deicer
Capacity control		%	14-100	12-100	6-100
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 (11.7)	25.8 (11.7)	25.8 + 25.8 (11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

**Note:**

- ★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Rated capacity is certified under AHRI standard 1230.
- ★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB) / Rated capacity is certified under AHRI standard 1230.
- ★3. Sound pressure level may increase during heating operation at ambient temps below 41°F (5°C) value in parenthesis is the max sound pressure at those conditions.

3D122726, 3D122727

Model name (Combination Unit)			RXYQ216XAYCA	RXYQ240XAYCA	RXYQ264XAYCA
Model name (Independent Unit)			RXYQ96XAYCA RXYQ120XAYCA	RXYQ120XAYCA RXYQ120XAYCA	RXYQ120XAYCA RXYQ144XAYCA
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz
★1 Cooling capacity	Nominal	Btu/h	216,000 (63.3)	240,000 (70.3)	264,000 (77.4)
	Rated	(kW)	206,000 (60.4)	228,000 (66.8)	252,000 (73.9)
★2 Heating capacity	Nominal	Btu/h	243,000 (71.2)	270,000 (79.1)	297,000 (87.0)
	Rated	(kW)	232,000 (68.0)	256,000 (75.0)	282,000 (82.6)
Casing color			Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)
Dimensions: (H × W × D)		in. (mm)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)
Heat exchanger			Cross fin coil	Cross fin coil	Cross fin coil
Compressor	Type		Hermetically sealed scroll type	Hermetically sealed scroll type	Hermetically sealed scroll type
	Displacement	m <sup>3</sup> /h	20.3 + 20.3	22.7 + 22.7	22.4 + 27.7
	Number of revolutions	r/min	5,994 + 5,994	6,702 + 6,702	6,606 + 5,214
	Motor output × Number of units	kW	6.2 × 1 + 6.2 × 1	7.0 × 1 + 7.0 × 1	6.9 × 1 + 8.0 × 1
	Starting method		Soft start	Soft start	Soft start
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	(0.7 × 2) × 2	(0.7 × 2) × 2	(0.7 × 2) × 2
	Airflow rate	cfm (m <sup>3</sup> /min)	7,989 + 7,989 (226 + 226)	7,989 + 7,989 (226 + 226)	7,989 + 9,480 (226 + 268)
	Drive		Direct drive	Direct drive	Direct drive
Connecting pipes	Liquid pipe	in. (mm)	φ5/8 (15.9) C1220T (Brazing connection)	φ5/8 (15.9) C1220T (Brazing connection)	φ3/4 (19.1) C1220T (Brazing connection)
	Gas pipe	in. (mm)	φ1-1/8 (28.6) C1220T (Brazing connection)	φ1-3/8 (34.9) C1220T (Brazing connection)	φ1-3/8 (34.9) C1220T (Brazing connection)
Weight	lbs (kg)	727 + 727 (330 + 330)	727 + 727 (330 + 330)	727 + 793 (330 + 360)	
Sound pressure level (Reference data)	dB(A)	64 (68 ★3)	64 (68 ★3)	66.5 (68 ★3)	
Sound power level (Reference data)	dB	83.5	83.5	88	
Safety devices			High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device
Defrost method			Deicer	Deicer	Deicer
Capacity control	%	6-100	5-100	6-100	
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

**Note:**

- ★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Rated capacity is certified under AHRI standard 1230.
- ★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB) / Rated capacity is certified under AHRI standard 1230.
- ★3. Sound pressure level may increase during heating operation at ambient temps below 41°F (5°C) value in parenthesis is the max sound pressure at those conditions.

3D122727

Model name (Combination Unit)			RXYQ288XAYCA	RXYQ312XAYCA	RXYQ336XAYCA
Model name (Independent Unit)			RXYQ144XAYCA RXYQ144XAYCA	RXYQ144XAYCA RXYQ168XAYCA	RXYQ168XAYCA RXYQ168XAYCA
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz
★1 Cooling capacity	Nominal	Btu/h	288,000 (84.4)	306,000 (89.7)	324,000 (95.0)
	Rated	(kW)	274,000 (80.3)	292,000 (85.6)	308,000 (90.3)
★2 Heating capacity	Nominal	Btu/h	324,000 (95.0)	351,000 (102.9)	378,000 (110.8)
	Rated	(kW)	306,000 (89.7)	328,000 (96.1)	338,000 (99.1)
Casing color			Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)
Dimensions: (H × W × D)		in. (mm)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)
Heat exchanger			Cross fin coil	Cross fin coil	Cross fin coil
Compressor	Type		Hermetically sealed scroll type	Hermetically sealed scroll type	Hermetically sealed scroll type
	Displacement	m <sup>3</sup> /h	26.9 + 26.9	29.2 + 29.2	30.0 + 30.0
	Number of revolutions	r/min	5,070 + 5,070	5,508 + 5,508	5,664 + 5,664
	Motor output × Number of units	kW	7.7 × 1 + 7.7 × 1	8.4 × 1 + 8.4 × 1	8.7 × 1 + 8.7 × 1
	Starting method		Soft start	Soft start	Soft start
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	(0.7 × 2) × 2	(0.7 × 2) × 2	(0.7 × 2) × 2
	Airflow rate	cfm (m <sup>3</sup> /min)	9,480 + 9,480 (268 + 268)	9,480 + 9,480 (268 + 268)	9,480 + 9,480 (268 + 268)
	Drive		Direct drive	Direct drive	Direct drive
Connecting pipes	Liquid pipe	in. (mm)	φ3/4 (19.1) C1220T (Brazing connection)	φ3/4 (19.1) C1220T (Brazing connection)	φ3/4 (19.1) C1220T (Brazing connection)
	Gas pipe	in. (mm)	φ1-3/8 (34.9) C1220T (Brazing connection)	φ1-3/8 (34.9) C1220T (Brazing connection)	φ1-3/8 (34.9) C1220T (Brazing connection)
Weight		lbs (kg)	793 + 793 (360 + 360)	793 + 793 (360 + 360)	793 + 793 (360 + 360)
Sound pressure level (Reference data)		dB(A)	68	68 (68.5 ★3)	68 (68.5 ★3)
Sound power level (Reference data)		dB	90	90.5	91
Safety devices			High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device
Defrost method			Deicer	Deicer	Deicer
Capacity control		%	7-100	6-100	6-100
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

**Note:**

- ★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Rated capacity is certified under AHRI standard 1230.
- ★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB) / Rated capacity is certified under AHRI standard 1230.
- ★3. Sound pressure level may increase during heating operation at ambient temps below 41°F (5°C) value in parenthesis is the max sound pressure at those conditions.

3D122727

Model name (Combination Unit)			RXYQ360XAYCA	RXYQ384XAYCA	
Model name (Independent Unit)			RXYQ120XAYCA RXYQ120XAYCA RXYQ120XAYCA	RXYQ120XAYCA RXYQ120XAYCA RXYQ144XAYCA	
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz	
★1 Cooling capacity	Nominal	Btu/h	360,000 (105.5)	368,000 (107.9)	
	Rated	(kW)	342,000 (100.2)	352,000 (103.2)	
★2 Heating capacity	Nominal	Btu/h	405,000 (118.7)	432,000 (126.6)	
	Rated	(kW)	384,000 (112.5)	398,000 (116.6)	
Casing color			Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)	
Dimensions: (H × W × D)		in. (mm)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 48-7/8 × 30-3/16 (1,694 × 1,242 × 767 + 1,694 × 1,242 × 767 + 1,694 × 1,242 × 767)	
Heat exchanger			Cross fin coil	Cross fin coil	
Compressor	Type		Hermetically sealed scroll type	Hermetically sealed scroll type	
	Displacement	m <sup>3</sup> /h	22.4 + 22.4 + 22.4	21.8 + 21.8 + 26.9	
	Number of revolutions		r/min	6,606 + 6,606 + 6,606	6,426 + 6,426 + 5,070
	Motor output × Number of units		kW	6.9 × 1 + 6.9 × 1 + 6.9 × 1	6.7 × 1 + 6.7 × 1 + 7.7 × 1
	Starting method			Soft start	Soft start
Fan	Type		Propeller fan	Propeller fan	
	Motor output	kW	(0.7 × 2) × 3	(0.7 × 2) × 3	
	Airflow rate	cfm (m <sup>3</sup> /min)	7,989 + 7,989 + 7,989 (226 + 226 + 226)	7,989 + 7,989 + 9,480 (226 + 226 + 268)	
	Drive		Direct drive	Direct drive	
Connecting pipes	Liquid pipe	in. (mm)	ϕ3/4 (19.1) C1220T (Brazing connection)	ϕ3/4 (19.1) C1220T (Brazing connection)	
	Gas pipe	in. (mm)	ϕ1-5/8 (41.3) C1220T (Brazing connection)	ϕ1-5/8 (41.3) C1220T (Brazing connection)	
Weight		lbs (kg)	727 + 727 + 727 (330 + 330 + 330)	727 + 727 + 793 (330 + 330 + 360)	
Sound pressure level (Reference data)		dB(A)	66 (70 ★3)	67.5 (70 ★3)	
Sound power level (Reference data)		dB	85.5	88.5	
Safety devices			High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device	
Defrost method			Deicer	Deicer	
Capacity control		%	4-100	4-100	
Refrigerant	Refrigerant name		R410A	R410A	
	Charge	lbs (kg)	25.8 + 25.8 + 25.8 (11.7 + 11.7 + 11.7)	25.8 + 25.8 + 25.8 (11.7 + 11.7 + 11.7)	
	Control		Electronic expansion valve	Electronic expansion valve	
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	

**Note:**

- ★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Rated capacity is certified under AHRI standard 1230.
- ★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB) / Rated capacity is certified under AHRI standard 1230.
- ★3. Sound pressure level may increase during heating operation at ambient temps below 41°F (5°C) value in parenthesis is the max sound pressure at those conditions.

# 8. Dimensions

## RXYQ72 - 120XAYCA

Unit : in. (mm)

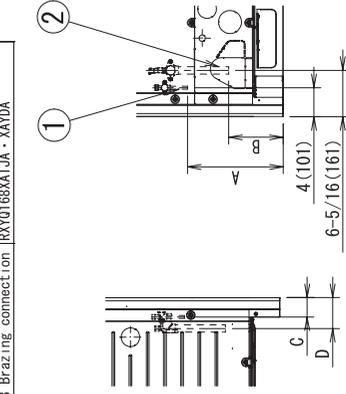
**Notes**

- For piping connection method (front and bottom sides), see the installation manual.
- Gas pipe

φ 7/8 Brazing connection	RXY096XATJA · XAYDA
φ 1 Brazing connection	RXY072_96_120XAYCA
φ 1-1/8 Brazing connection	RXY0120_144_168XATJA · XAYDA
	RXY0144_168XAYCA

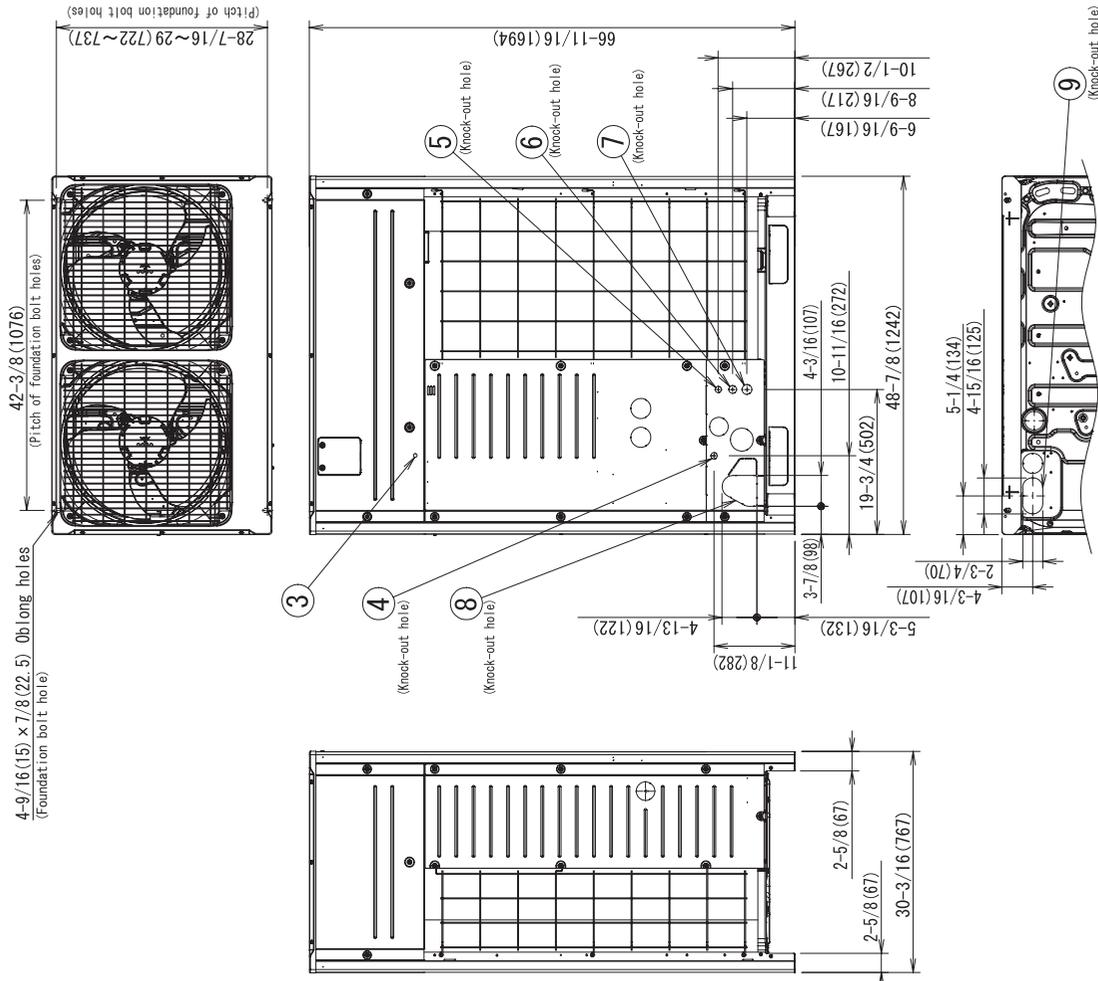
**Liquid pipe**

φ 3/8 Brazing connection	RXY096XATJA · XAYDA
φ 1/2 Brazing connection	RXY0120_144XATJA · XAYDA
φ 5/8 Brazing connection	RXY072_96_120_144_168XAYCA
	RXY0168XATJA · XAYDA



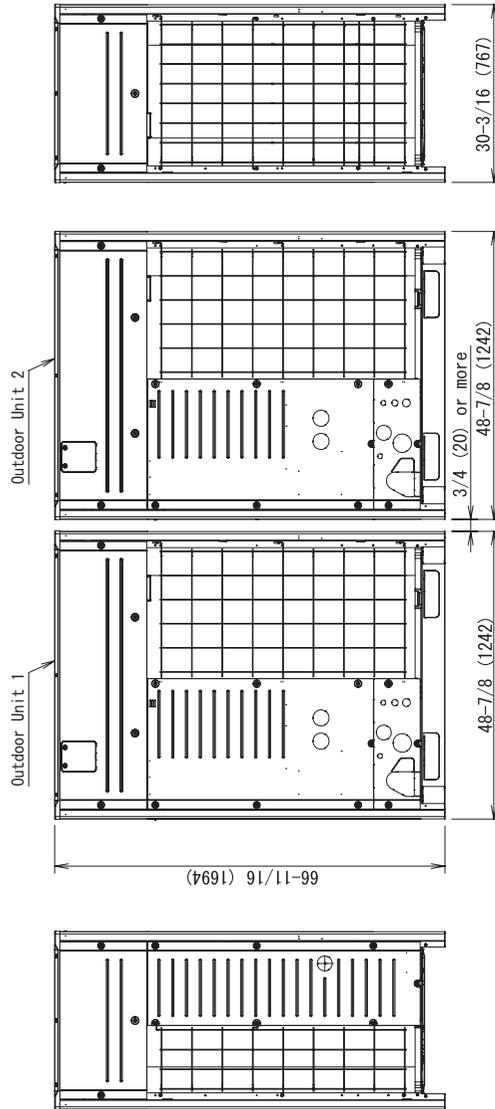
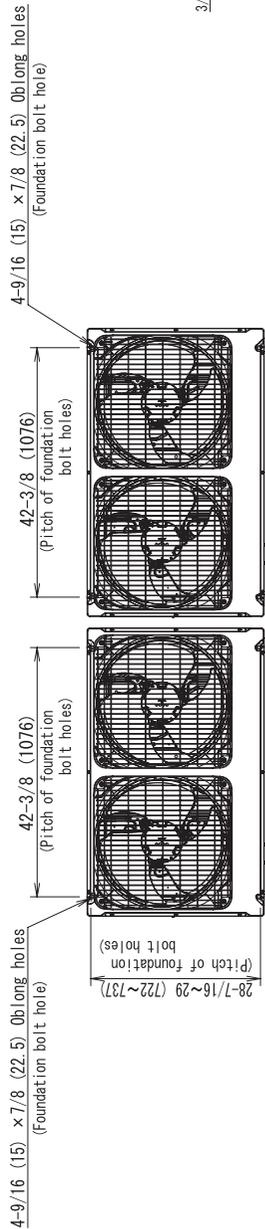
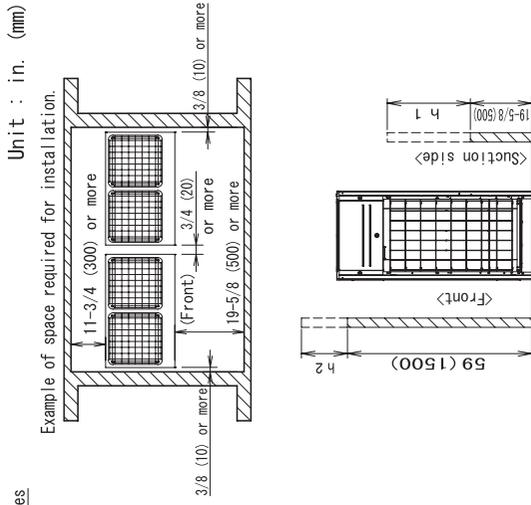
Model	A	B	C	D
RXY096XATJA, XAYDA	13-1/8 (333)	8-1/16 (204)	2-5/8 (67)	4-3/16 (107)
RXY0120XATJA, XAYDA		7-1/2 (190)		
RXY0144_168XATJA, XAYDA	12-1/8 (308)		2-13/16 (72)	
RXY072_96_120XAYCA			7-13/16 (196)	4 (102)
RXY0144_168XAYCA				

No.	Parts name	Remarks
9	Pipe routing hole (bottom)	See note 1.
8	Pipe routing hole (front)	See note 1.
7	Power cord routing hole	φ 1-3/8 (35)
6	Power cord routing hole	φ 1-1/8 (28.6)
5	Power cord routing hole	φ 7/8 (22.2)
4	Transmission wire routing hole	φ 7/8 (22.2)
3	Grounding terminal	Inside of el. compo. box (M8)
2	Gas pipe connection port	See note 2.
1	Liquid pipe connection port	See note 2.



3D121959A

RXYQ144 - 336XAYCA

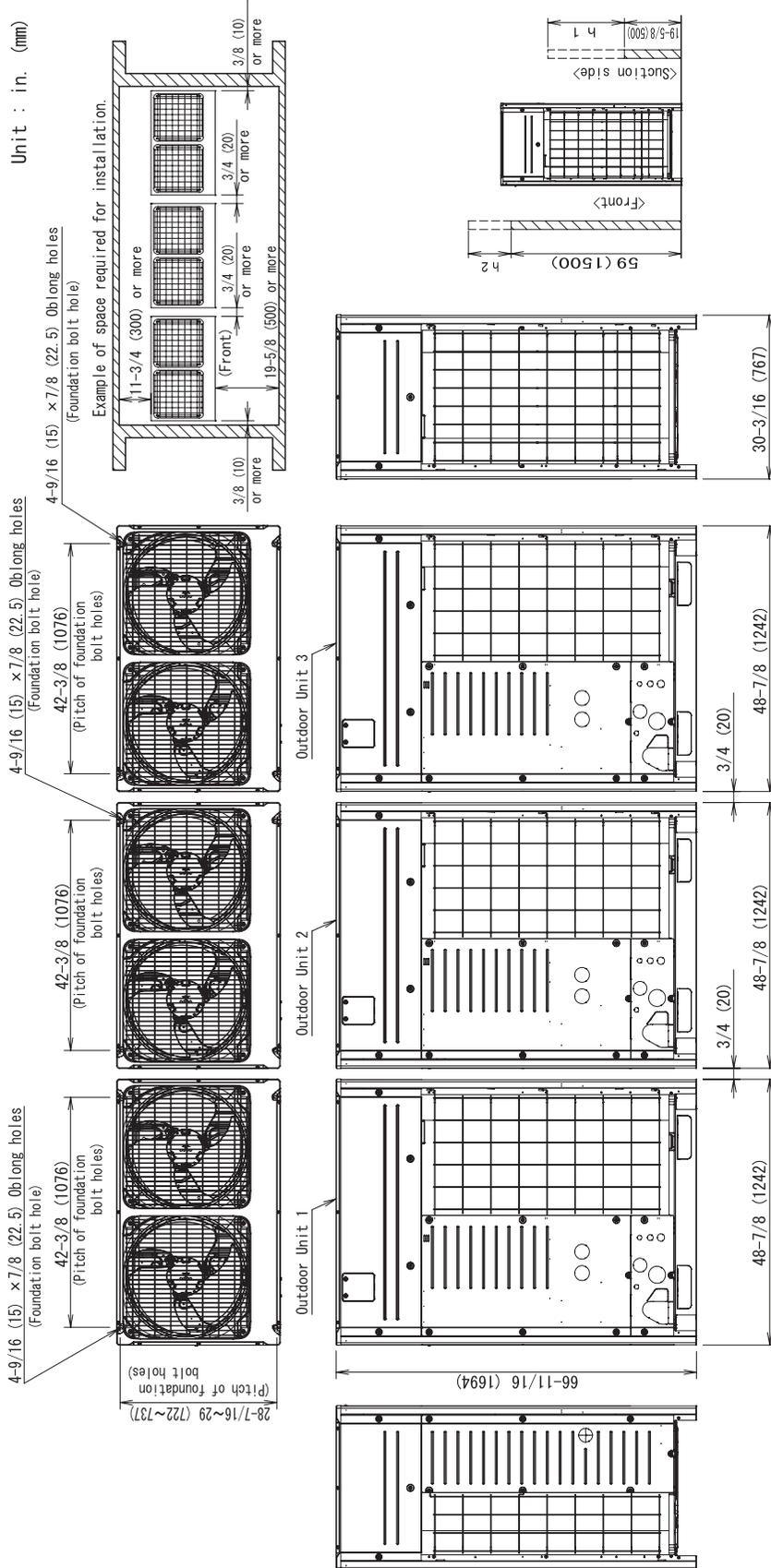


Model Name	Outdoor Unit 1	Outdoor Unit 2	Drawing No.
RXYQ216XATJA	RXYQ120XATJA	RXYQ96XATJA	3D121959
RXYQ240XATJA	RXYQ120XATJA	RXYQ120XATJA	3D121959
RXYQ264XATJA	RXYQ144XATJA	RXYQ120XATJA	3D121959
RXYQ288XATJA	RXYQ144XATJA	RXYQ144XATJA	3D121959
RXYQ312XATJA	RXYQ168XATJA	RXYQ144XATJA	3D121959
RXYQ336XATJA	RXYQ168XATJA	RXYQ168XATJA	3D121959
RXYQ216XAYDA	RXYQ120XAYDA	RXYQ96XAYDA	3D121959
RXYQ240XAYDA	RXYQ120XAYDA	RXYQ120XAYDA	3D121959
RXYQ264XAYDA	RXYQ144XAYDA	RXYQ120XAYDA	3D121959
RXYQ288XAYDA	RXYQ144XAYDA	RXYQ144XAYDA	3D121959
RXYQ312XAYDA	RXYQ168XAYDA	RXYQ144XAYDA	3D121959
RXYQ336XAYDA	RXYQ168XAYDA	RXYQ168XAYDA	3D121959
RXYQ192XAYCA	RXYQ96XAYCA	RXYQ96XAYCA	3D121959
RXYQ216XAYCA	RXYQ120XAYCA	RXYQ96XAYCA	3D121959
RXYQ240XAYCA	RXYQ120XAYCA	RXYQ120XAYCA	3D121959
RXYQ264XAYCA	RXYQ144XAYCA	RXYQ120XAYCA	3D121959
RXYQ288XAYCA	RXYQ144XAYCA	RXYQ144XAYCA	3D121959
RXYQ312XAYCA	RXYQ168XAYCA	RXYQ144XAYCA	3D121959
RXYQ336XAYCA	RXYQ168XAYCA	RXYQ168XAYCA	3D121959

- Notes :
1. Heights of walls of this example;  
 Front : 59 in. (1500 mm)  
 Suction side : 19-5/8 in. (500 mm)  
 Side : Height unrestricted  
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).  
 The installation space of suction side shown above must be expanded in the following case.
    - Design outdoor temperature becomes over 95°FDB (35°CDB).
    - Operating over max. operating load (in case of causing a heavy heating load at indoor unit side)
  2. If the above wall heights are exceeded then n2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
  3. When installing the units the most appropriate pattern should be selected from "Installation and repair space drawing" in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely.  
 (If more units are to be installed than are shown in "Installation and repair space drawing", your layout should take account of the possibility of short circuiting.)
  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.

RXYQ360 - 384XAYCA

Unit : in. (mm)



Model Name	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.
RXYQ360XATJA	RXYQ120XATJA	RXYQ120XATJA	RXYQ120XATJA	3D121959
RXYQ384XATJA	RXYQ168XATJA	RXYQ120XATJA	RXYQ96XATJA	3D121959
RXYQ408XATJA	RXYQ168XATJA	RXYQ144XATJA	RXYQ96XATJA	3D121959
RXYQ360XAYDA	RXYQ120XAYDA	RXYQ120XAYDA	RXYQ120XAYDA	3D121959
RXYQ384XAYDA	RXYQ168XAYDA	RXYQ120XAYDA	RXYQ96XAYDA	3D121959
RXYQ408XAYDA	RXYQ168XAYDA	RXYQ144XAYDA	RXYQ96XAYDA	3D121959
RXYQ360XAYCA	RXYQ120XAYCA	RXYQ120XAYCA	RXYQ120XAYCA	3D121959
RXYQ384XAYCA	RXYQ144XAYCA	RXYQ120XAYCA	RXYQ120XAYCA	3D121959

Notes :

- Heights of walls of this example;  
 Front : 59 in. (1500 mm)  
 Suction side : 19-5/8 in. (500 mm)  
 Side : Height unrestricted  
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).  
 The installation space of suction side shown above must be expanded in the following case.
  - Design outdoor temperature becomes over 95°FDB (35°CDB).
  - Operating over max. operating load (In case of causing a heavy heating load at indoor unit side)
- 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 following figure.
- When installing the units the most appropriate pattern should be selected from "Installation and repair space drawing" in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely.  
 (If more units are to be installed than are shown in "Installation and repair space drawing", your layout should take account of the possibility of short circuiting.)
- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

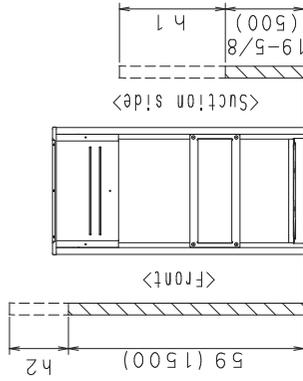
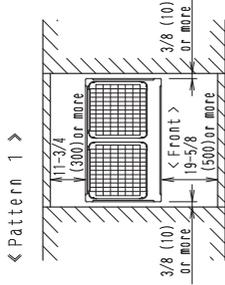
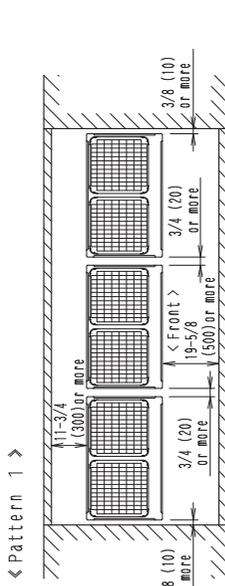
C: 3D121962A

# 9. Service Space

## RXYQ72 - 384XAYCA

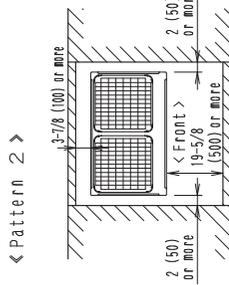
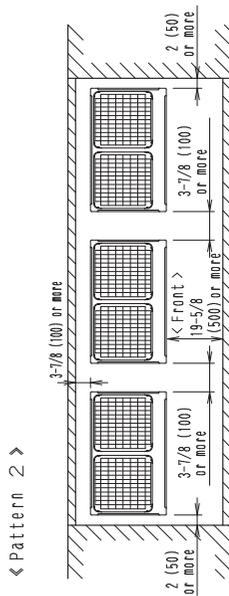
Unit : in. (mm)

For installation in rows



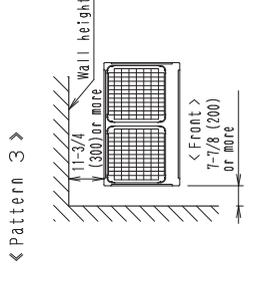
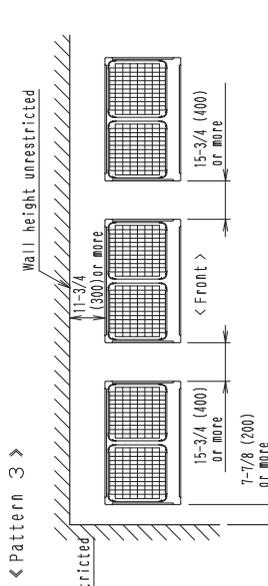
Pattern 1 >

Pattern 1 >



Pattern 2 >

Pattern 2 >



Pattern 3 >

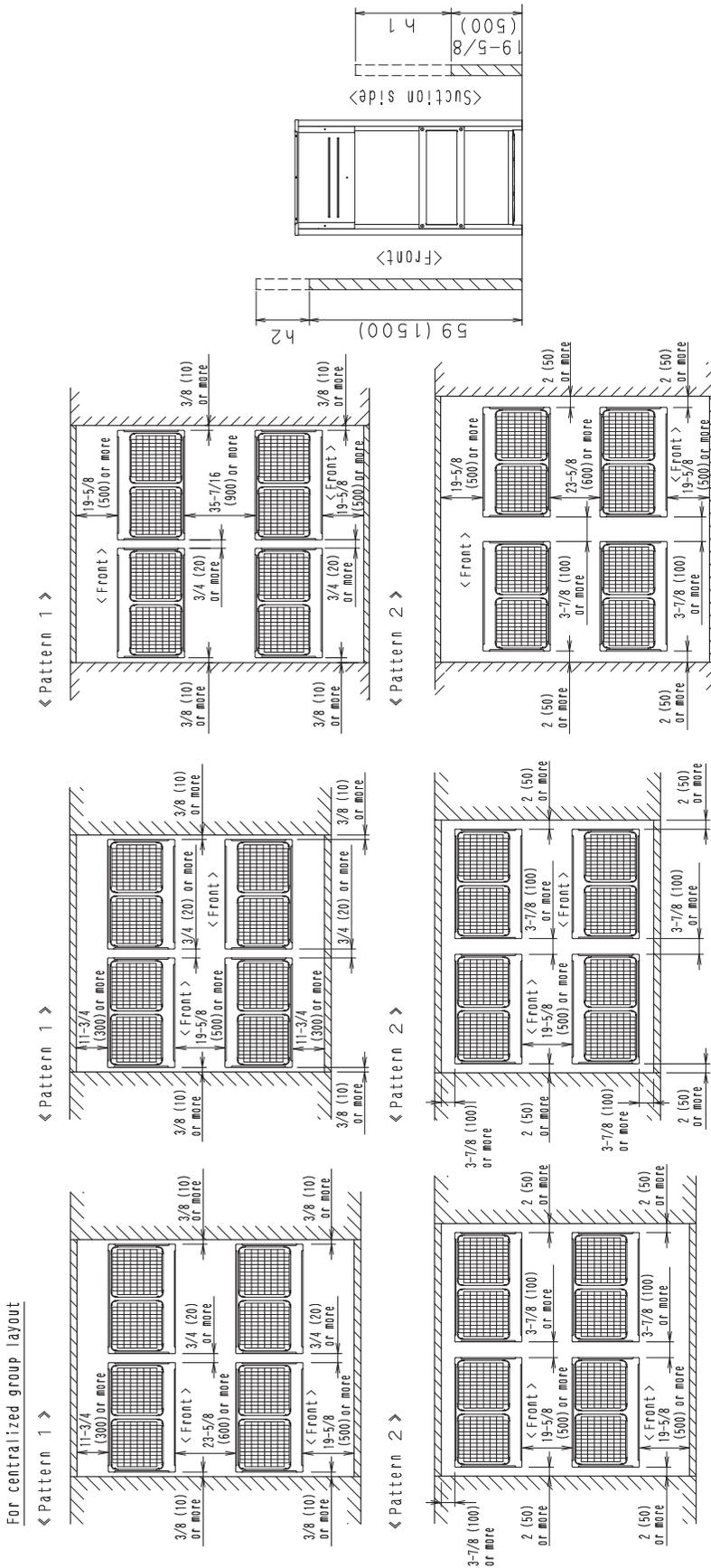
Pattern 3 >

**Notes:**

- Heights of walls in case of Patterns 1 and 2;  
 Front : 59 in. (1500 mm)  
 Suction side : 19-5/8 in. (500 mm)  
 Side : Height unrestricted  
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).  
 The installation space of suction side shown above must be expanded in the following case.
  - Design outdoor temperature becomes over 95°FDB (35°CDB).
  - Operating over max. operating load (In case of causing a heavy heating load at indoor unit side)
- 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 following figure.
- When installing the units the most appropriate pattern should be selected from "Installation and repair space drawing" in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are shown in "Installation and repair space drawing", your layout should take account of the possibility of short circuiting.)
- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

RXYQ72 - 384XAYCA

Unit : in. (mm)



Notes:

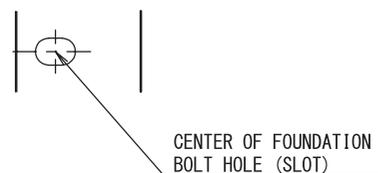
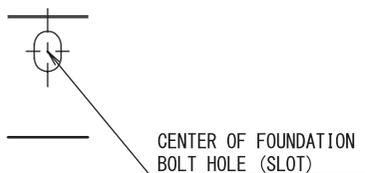
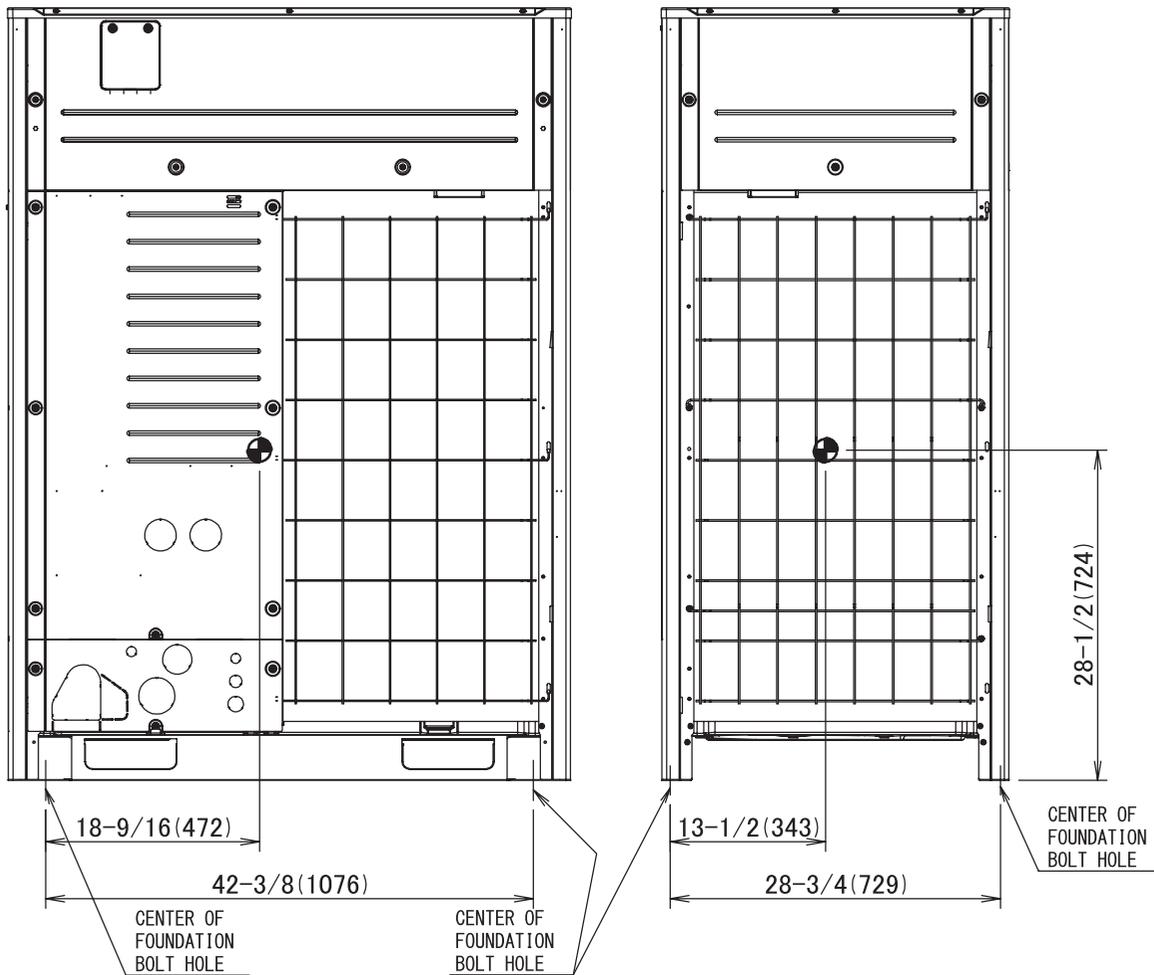
- Heights of walls in case of Patterns 1 and 2;  
 Front : 59 in. (1500 mm)  
 Suction side : 19-5/8 in. (500 mm)  
 Side : Height unrestricted
- The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB). The installation space of suction side shown above must be expanded in the following case.
  - Design outdoor temperature becomes over 95°FDB (35°CDB).
  - Operating over max. operating load (In case of causing a heavy heating load at indoor unit side)
- 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 following figure.
- When installing the units the most appropriate pattern should be selected from "Installation and repair space drawing" in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are shown in "Installation and repair space drawing", your layout should take account of the possibility of short circuiting.)
- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

C: 3D085503H

# 10.Center of Gravity

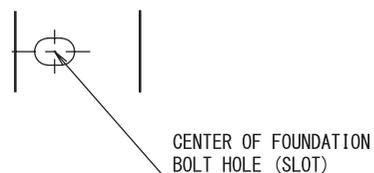
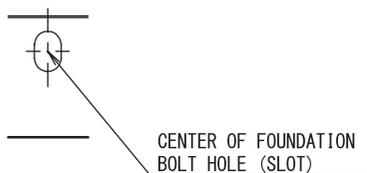
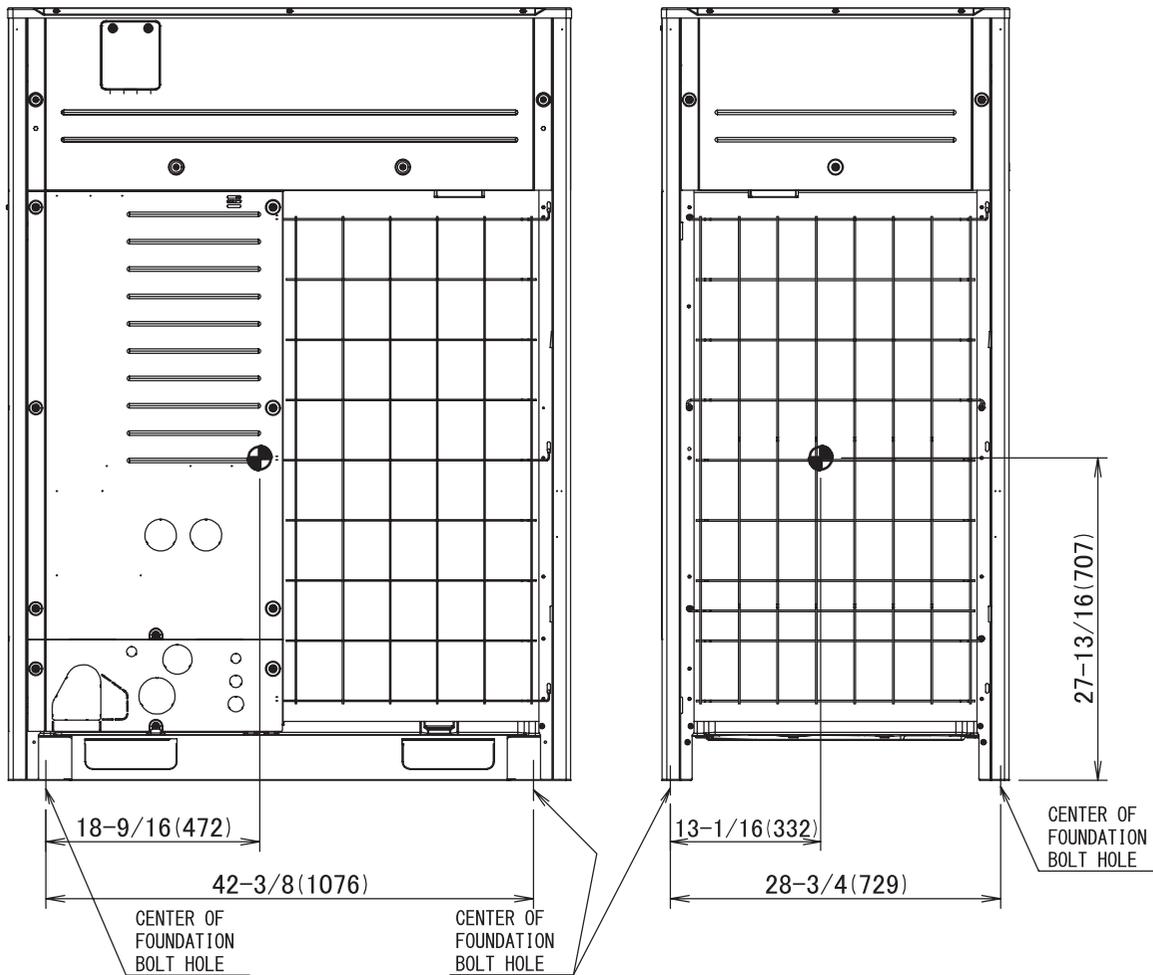
RXYQ72 - 120XAYCA

Unit : in. (mm)



RXYQ144 - 168XAYCA

Unit : in. (mm)

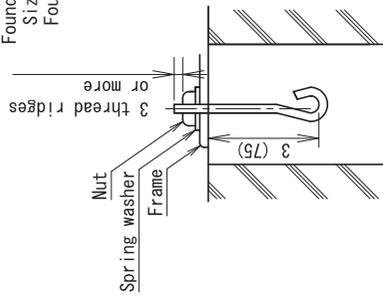


# 11.Foundation Drawing

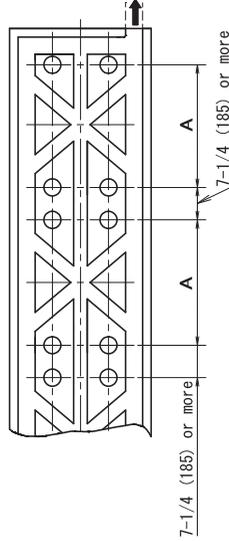
## RXYQ72 - 384XAYCA

Unit : in. (mm)

Foundation bolt type:JA  
Size:M12  
Four bolts are required

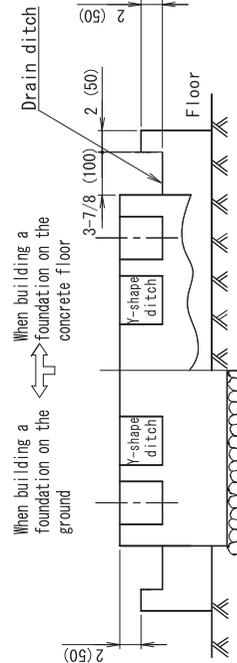
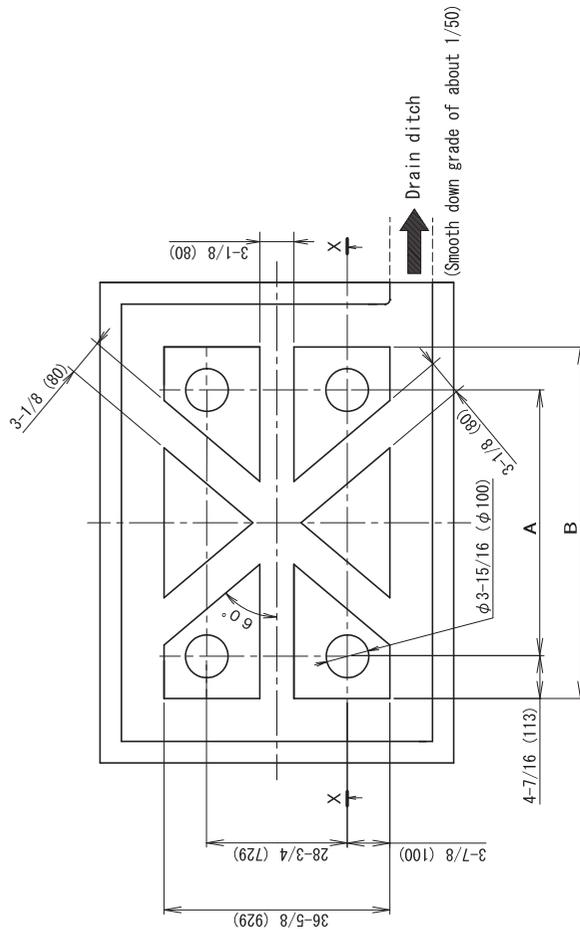


Foundation bolt executing method



When installing multiple units in connection

Model	A	B
RXYQ72TTJU · REY072TATJU · RXY072TATJU · REY072TATJU RXYQ72TYDN · REY072TYDN · RXY072TAYDU · REY072TAYDU RXY072XATJA · RXY072XAYDA	30-3/16 (766)	39-1/16 (992)
RXYQ96 120, 144, 168TTJU · REY096 120, 144, 168TTJU RXYQ96 120, 144, 168TYDN · REY096 120, 144, 168TYDN RXYQ96 120, 144, 168TATJU · REY096 120, 144, 168TATJU RXYQ96 120, 144, 168TAYDU · REY096 120, 144, 168TAYDU REY072 96, 120, 144, 168TAYGU · RXY072 96, 120, 144, 168TAYGU REL072 96, 120TAYGU · RXL072 96, 120TAYGU REL072 96, 120TATJU · RXL072 96, 120TATJU REY072 96, 120TAYDU · RXL072 96, 120TAYDU RXYQ96 120, 144, 168XATJA · XAYDU · XAYGU RXYQ96 120, 144, 168XATJA RXY072, 96, 120, 144, 168XAYCA	42-3/8 (1076)	51-1/4 (1302)

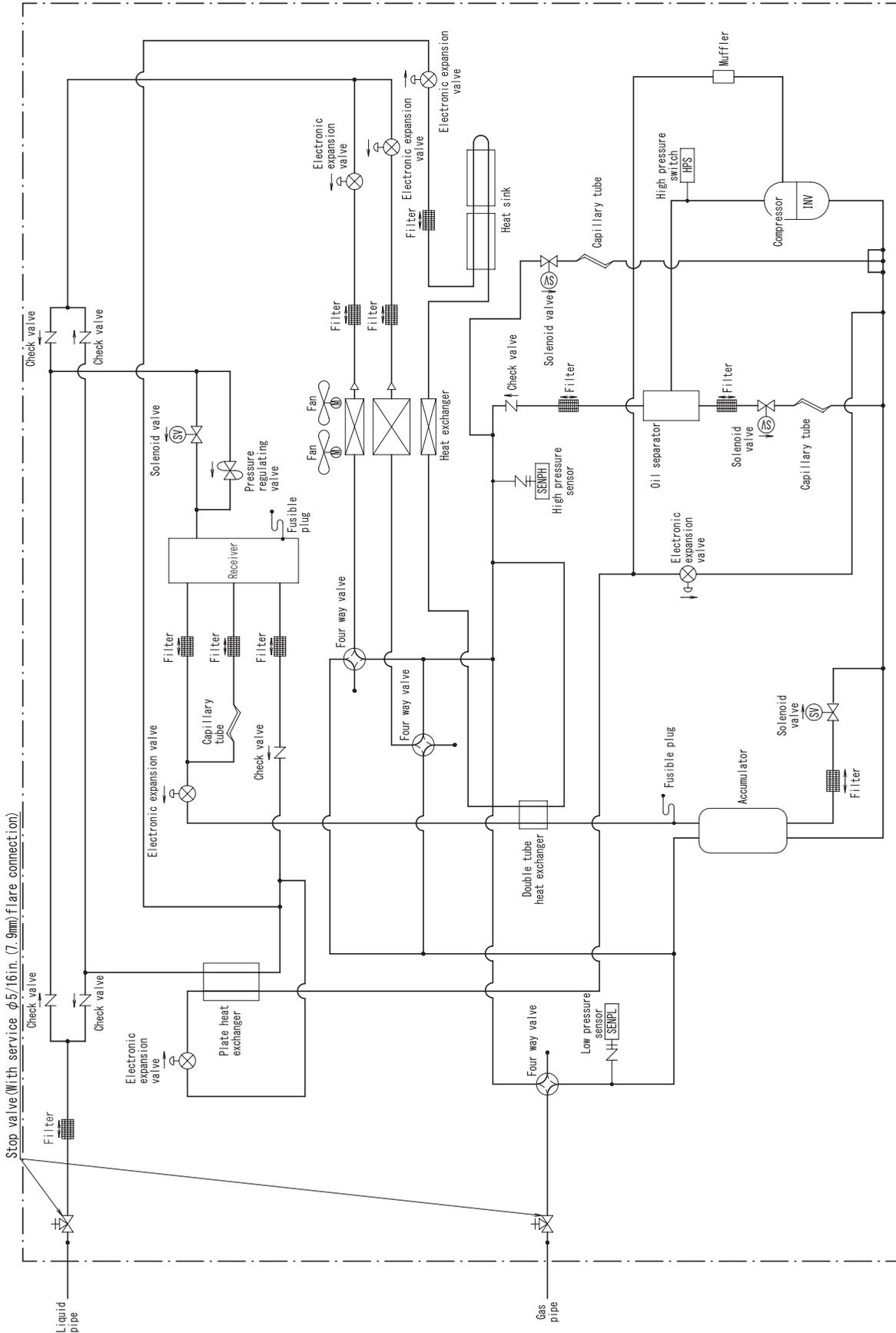


X-X cross section

- Note:
1. The proportions of cement:sand:gravel for the concrete shall be 1:2:4, and the reinforcement bars that their diameter are 3/8 in (10 mm), (approx. 11-3/4 in. (300 mm) intervals) shall be placed.
  2. The surface shall be finished with mortar. The corner edges shall be chamfered.
  3. When the foundation is built on a concrete floor, rubble is not necessary. However, the surface of the section on which the foundation is built shall have rough finish.
  4. A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
  5. When installing the equipment on a roof, the floor strength shall be checked, and water-proofing measures shall be taken.



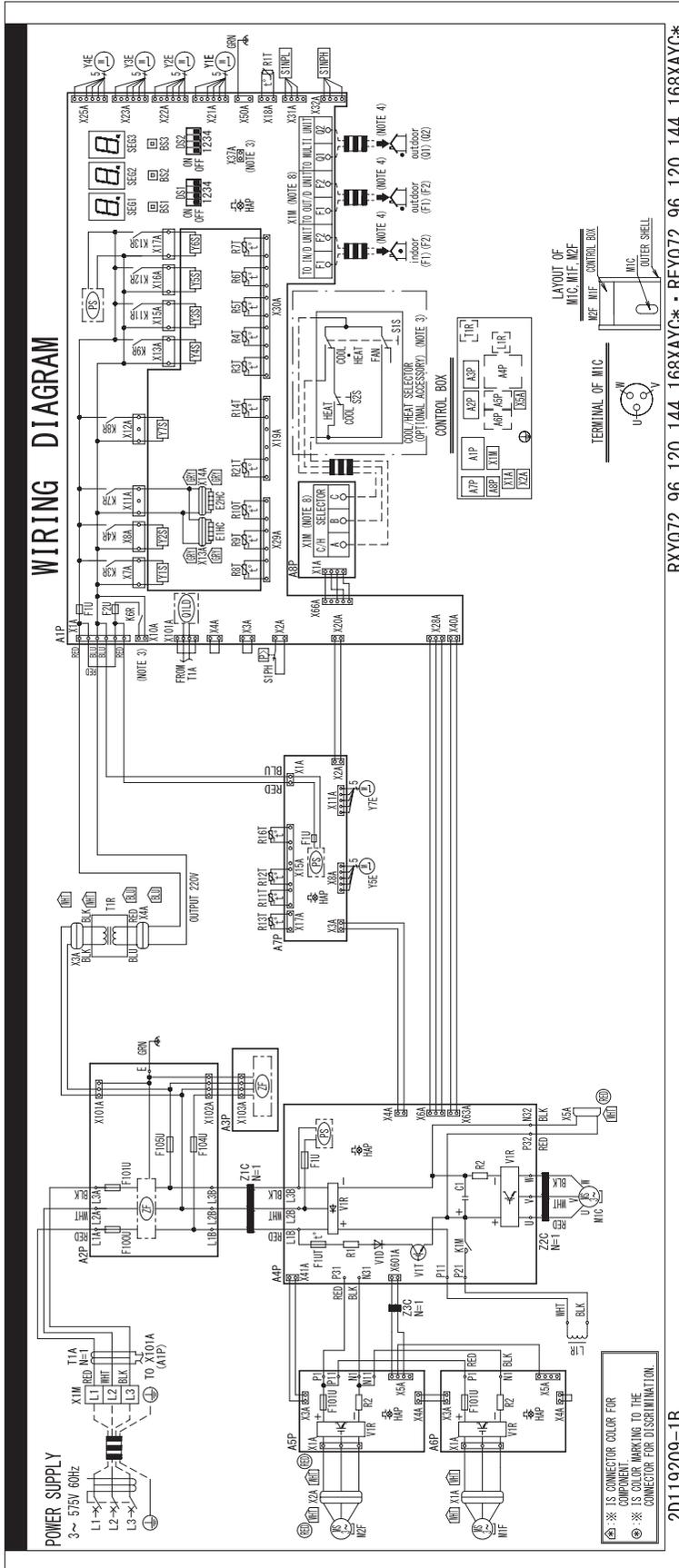
RXYQ144 - 168XAYCA



3D122253

# 13. Wiring Diagrams

## RXYQ72 - 168XAYCA



RXYQ72, 96, 120, 144, 168XAYC\* - REYQ72, 96, 120, 144, 168XAYC\*

2D119209-1B

**NOTES**

1. THIS WIRING DIAGRAM APPLIES ONLY TO THE OUTDOOR UNIT.
2. : FIELD WIRING, : TERMINAL BLOCK, : CONNECTOR, : TERMINAL, : PROTECTIVE GROUND (SCREW), : NOISELESS GROUND.
3. WHEN USING THE OPTIONAL ADAPTOR, REFER TO THE INSTALLATION MANUAL OF THE OPTIONAL ADAPTOR.
4. FOR CONNECTION WIRING TO INDOOR-OUTDOOR TRANSMISSION F1·F2, OUTDOOR-OUTDOOR TRANSMISSION F1·F2 OUTDOOR-MULTI TRANSMISSION Q1·Q2, REFER TO THE INSTALLATION MANUAL CONTROL BOX COVER.
5. HOW TO USE BS1~3 SWITCH, REFER TO "SERVICE PRECAUTION LABEL ON CONTROL BOX COVER.
6. WHEN OPERATING, DO NOT SHORTCIRCUIT THE PROTECTION DEVICE(S1PH).
7. COLORS BLK : BLACK ; RED : RED ; BLU : BLUE ; WHT : WHITE ; GRN : GREEN ; GRY : GRAY ; YLW : YELLOW.
8. CLASS 2 WIRE

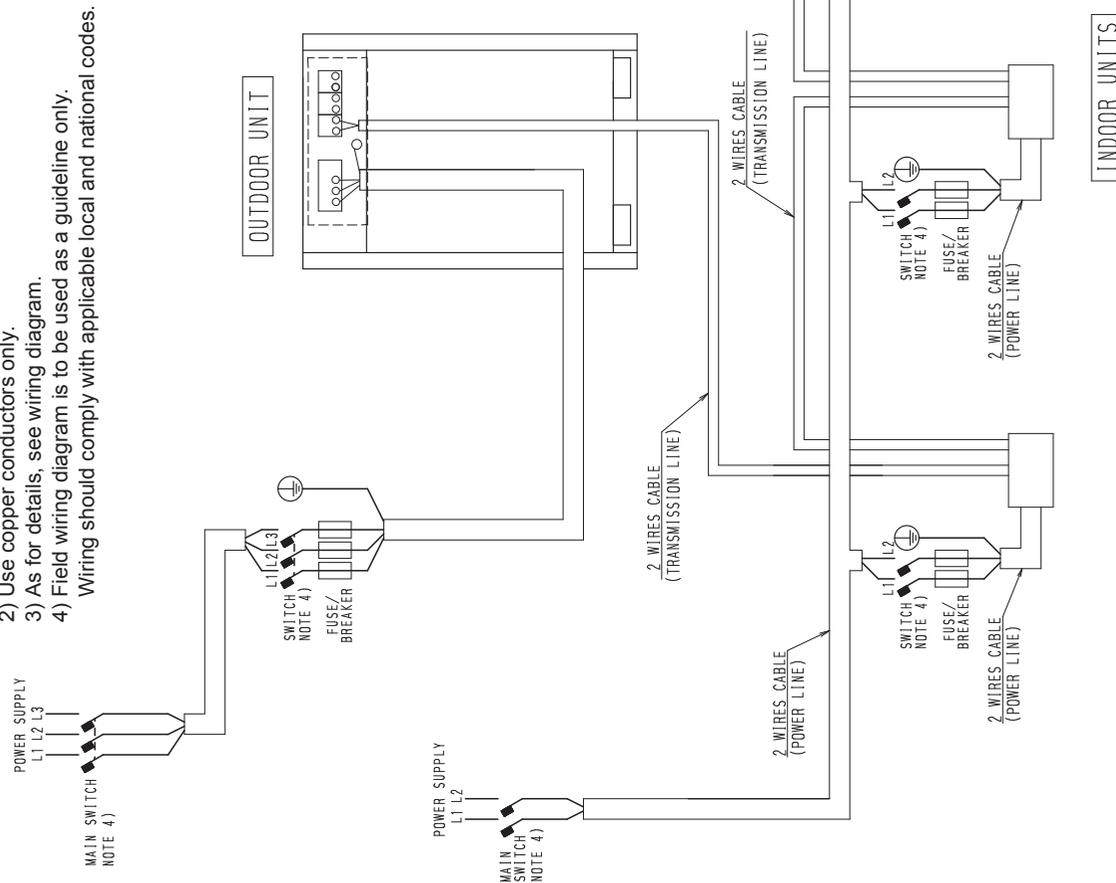
## RXYQ72 - 168XAYCA

A1P	PRINTED CIRCUIT BOARD (MAIN)	R12T	THERMISTOR (COMP.SUCTION)
A2P, A3P	PRINTED CIRCUIT BOARD (NOISE FILTER)	R13T	THERMISTOR (RECEIVER GAS PURGE)
A4P	PRINTED CIRCUIT BOARD (INV)	R14T	THERMISTOR (M1C BODY)
A5P, A6P	PRINTED CIRCUIT BOARD (FAN)	R16T	THERMISTOR (EVT)
A7P	PRINTED CIRCUIT BOARD (SUB)	R21T	THERMISTOR (M1C DISCHARGE)
A8P	PRINTED CIRCUIT BOARD (ABC I/P)	S1NPH	PRESSURE SENSOR (HIGH)
BS1~BS3	PUSH BUTTON SWITCH (A1P) (MODE, SET, RETURN)	S1NPL	PRESSURE SENSOR (LOW)
		S1PH	PRESSURE SWITCH (HIGH)
C1	CAPACITOR (A4P)	SEG1~SEG3	7-SEGMENT DISPLAY (A1P)
DS1, DS2	DIP SWITCH (A1P)	T1A	CURRENT SENSOR
E1HC, E2HC	CRANKCASE HEATER	T1R	TRANSFORMER (575 V/220 V)
F1U	FUSE (A1P, A4P, A7P)	V1D	DIODE (A4P)
F2U	FUSE (A1P)	V1R	POWER MODULE (A4P)
F101U	FUSE (A2P, A5P, A6P)	V1R	POWER MODULE (A5P, A6P)
F100U, F104U, F105U	FUSE (A2P)	V1T	TRANSISTOR (A4P)
F1UT	THERMAL FUSE (A4P)	X1A, X2A	CONNECTOR (M1F, M2F)
HAP	PILOTLAMP (A1P, A4P~A7P) (SERVICE MONITOR-GREEN)	X5A	CONNECTOR (CHECK THE RESIDUAL CHARGE)
K1M	MAGNETIC CONTACTOR (A4P)	X3A, X4A	CONNECTOR (T1R)
K3R	MAGNETIC RELAY (Y1S) (A1P)	X13A, X14A	CONNECTOR (E1HC, E2HC)
K4R	MAGNETIC RELAY (Y2S) (A1P)	X1M	TERMINAL BLOCK (POWER SUPPLY)
K6R	MAGNETIC RELAY (OPTION) (A1P)	X1M	TERMINAL BLOCK (CONTROL) (A1P)
K7R	MAGNETIC RELAY (E1HC, E2HC) (A1P)	X1M	TERMINAL BLOCK (ABC I/P) (A8P)
K8R	MAGNETIC RELAY (Y7S) (A1P)	Y1E	ELECTRIC EXPANSION VALVE (HEAT EXC.UPPER)
K9R	MAGNETIC RELAY (Y4S) (A1P)	Y2E	ELECTRIC EXPANSION VALVE (SUBCOOL HEAT EXC.)
K11R	MAGNETIC RELAY (Y3S) (A1P)	Y3E	ELECTRIC EXPANSION VALVE (HEAT EXC.LOWER)
K12R	MAGNETIC RELAY (Y5S) (A1P)	Y4E	ELECTRIC EXPANSION VALVE (INJECTION)
K13R	MAGNETIC RELAY (Y6S) (A1P)	Y5E	ELECTRIC EXPANSION VALVE (REFRIGERAT COOLING)
L1R	REACTOR	Y6E	ELECTRIC EXPANSION VALVE (LEAK DETECTION)
M1C	MOTOR (COMPRESSOR)	Y1S	SOLENOID VALVE (OS OIL RETURN 1)
M1F, M2F	MOTOR (FAN)	Y2S	SOLENOID VALVE (HOT GAS BYPASS)
PS	SWITCHING POWER SUPPLY (A1P, A4P, A7P)	Y3S	SOLENOID VALVE (LIQUID SHUT OFF)
Q1LD	LEAKAGE DETECTION CIRCUIT (A1P)	Y4S	4WAY VALVE (HP/LP GAS)
R1	RESISTOR (CURRENT LIMITING) (A4P)	Y5S	4WAY VALVE (HEAT EXC.LOWER)
R2	RESISTOR (CURRENT SENSOR) (A4P, A5P, A6P)	Y6S	4WAY VALVE (HEAT EXC.UPPER)
R1T	THERMISTOR (AIR)	Y7S	SOLENOID VALVE (ACCUMU OIL RETURN)
R3T	THERMISTOR (RECEIVER INLET)	Z1C~Z3C	NOISE FILTER (FERRITE CORE)
R4T	THERMISTOR (HEAT EXC.LIQUID UPPER)	ZF	NOISE FILTER (A2P, A3P) (WITH SURGE ABSORBER)
R5T	THERMISTOR (HEAT EXC.LIQUID LOWER)		
R6T	THERMISTOR (SUBCOOL GAS)		
R7T	THERMISTOR (SUBCOOL LIQUID)		CONNECTOR FOR OPTIONAL ACCESSORIES
R8T	THERMISTOR (HEAT EXC.GAS UPPER)	X37A	CONNECTOR (POWER ADAPTOR) (A1P)
R9T	THERMISTOR (HEAT EXC.GAS LOWER)		COOL/HEAT SELECTOR
R10T	THERMISTOR (SUCTION)	S1S	SELECTOR SWITCH (FAN/COOL · HEAT)
R11T	THERMISTOR (DEICER)	S2S	SELECTOR SWITCH (COOL/HEAT)

# 14. Field Wiring

## RXYQ72 - 168XAYCA

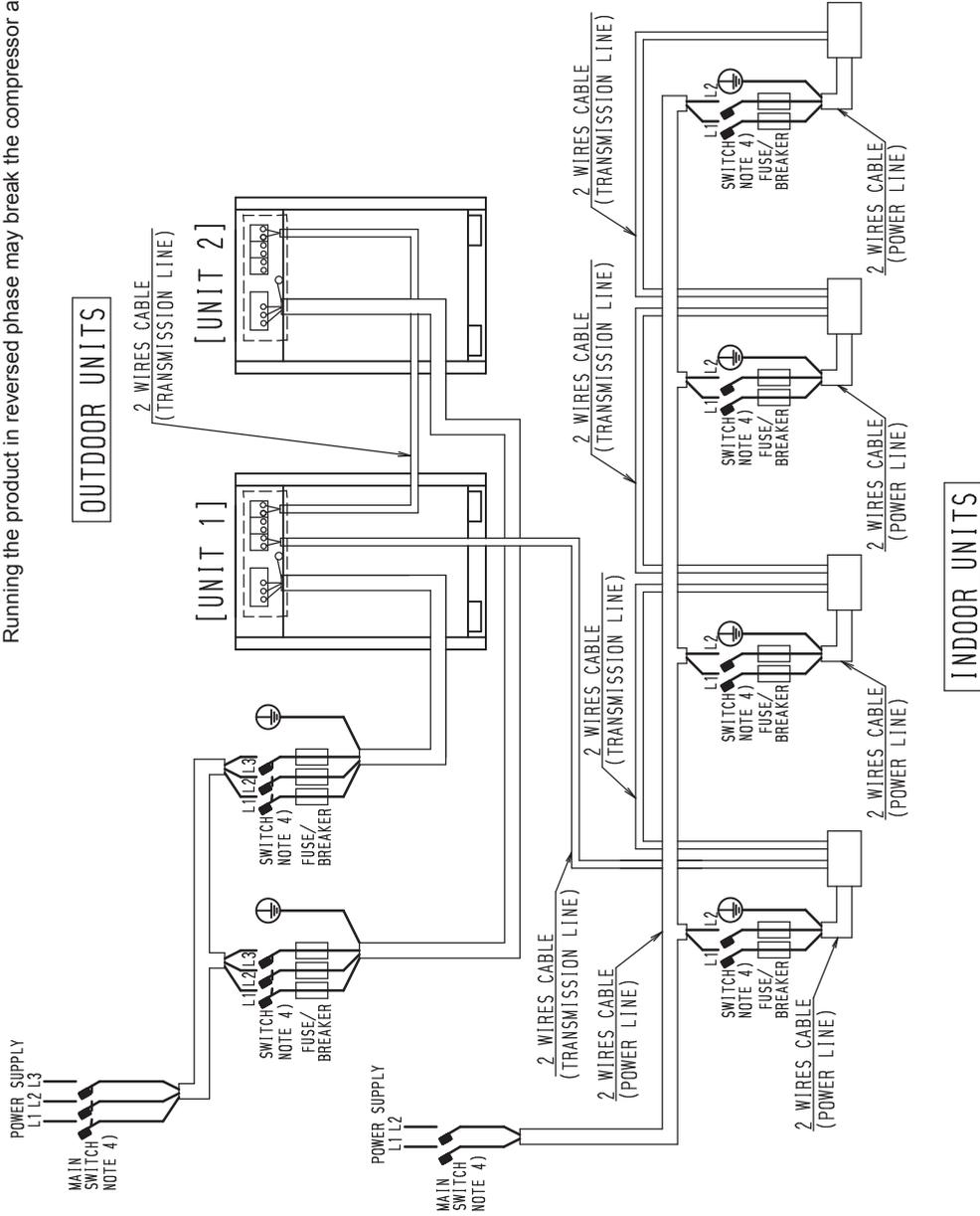
- Note:**
- 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
  - 2) Use copper conductors only.
  - 3) As for details, see wiring diagram.
  - 4) Field wiring diagram is to be used as a guideline only. Wiring should comply with applicable local and national codes.
- 5) Unit shall be grounded in compliance with the applicable local and national codes.
  - 6) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
  - 7) Be sure to install the switch and the fuse/breaker to the power line of each piece of equipment.
  - 8) 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.
  - 9) If there exists the possibility of reversed phase, lost 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.



C: 3D087054C

RXYQ192 - 336XAYCA

- Note:
- 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) Field wiring diagram is to be used as a guideline only. Wiring should comply with applicable local and national codes.
- 5) Unit shall be grounded in compliance with the applicable local and national codes.
  - 6) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
  - 7) Be sure to install the switch and the fuse/breaker to the power line of each piece of equipment.
  - 8) 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.
  - 9) If there exists the possibility of reversed phase, lost 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.



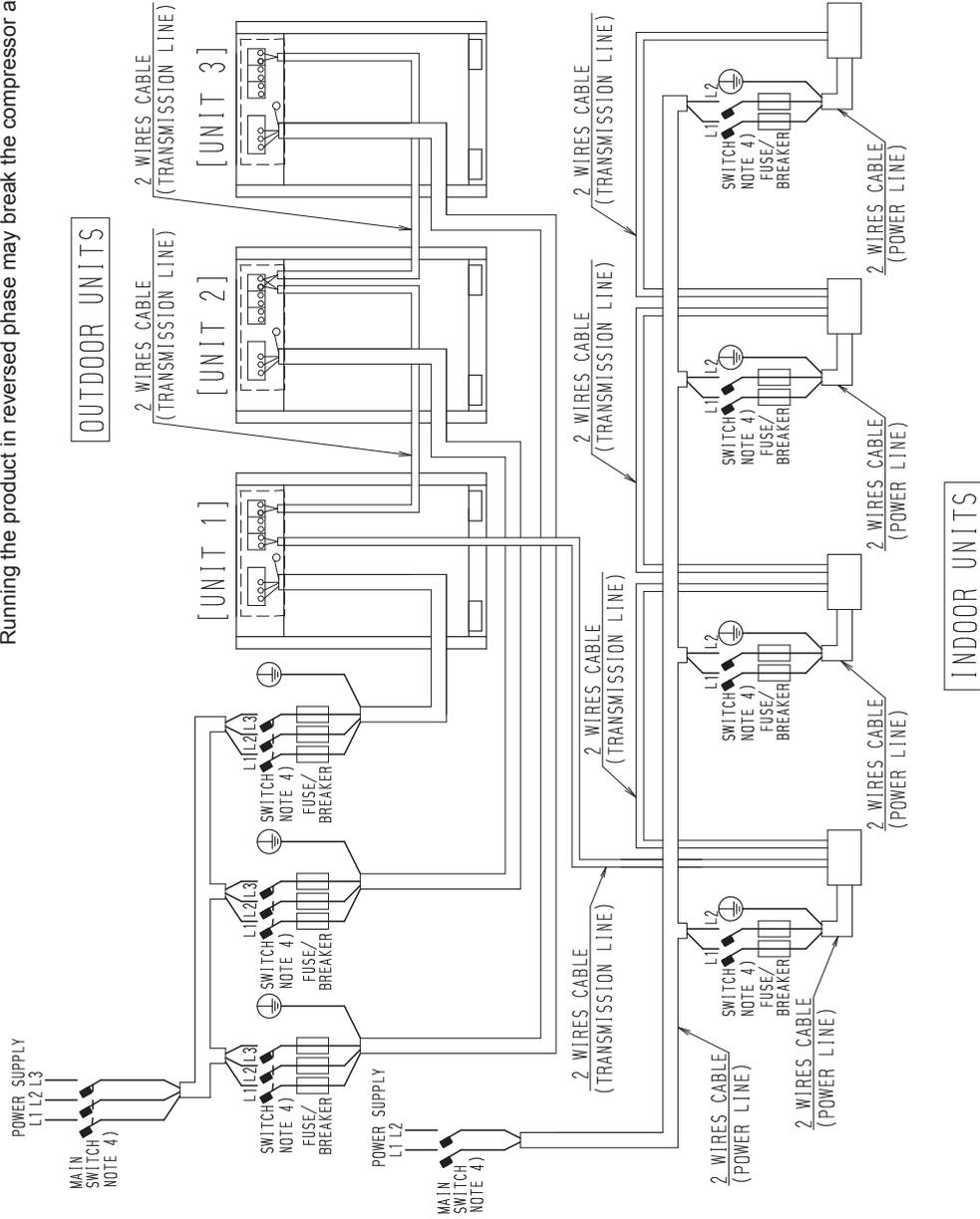
C: 3D087055C

RXYQ360 - 384XAYCA

Note:

- 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) Field wiring diagram is to be used as a guideline only.

- 5) Unit shall be grounded in compliance with the applicable local and national codes.
  - 6) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
  - 7) Be sure to install the switch and the fuse/breaker to the power line of each piece of equipment.
  - 8) 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.
  - 9) If there exists the possibility of reversed phase, lost 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.



## 15. Electrical Characteristics

### RXYQ72 - 168XAYCA

Model name	Units				Power supply		Comp.	OFM		SCCR
	Hz	Volts	Min.	Max.	MCA	MOP	RLA	kW	FLA	
RXYQ72XAYCA	60	575	518	632	15.1	20	8.3	0.7 × 2	1.0 × 2	SCCR kA rms, Symmetrical @600V MAX: 5
RXYQ96XAYCA	60	575	518	632	16.8	20	10.2	0.7 × 2	1.0 × 2	
RXYQ120XAYCA	60	575	518	632	18.2	25	11.9	0.7 × 2	1.0 × 2	
RXYQ144XAYCA	60	575	518	632	22.3	30	16.0	0.7 × 2	1.0 × 2	
RXYQ168XAYCA	60	575	518	632	24.9	30	16.8	0.7 × 2	1.0 × 2	

### RXYQ192 - 384XAYCA

Model name		Units				Power supply		Comp.	OFM	
		Hz	Volts	Min.	Max.	MCA	MOP	RLA	kW	FLA
RXYQ192XAYCA	RXYQ96XAYCA	60	575	518	632	16.8 + 16.8	20 + 20	10.0 + 10.0	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ96XAYCA									
RXYQ216XAYCA	RXYQ96XAYCA	60	575	518	632	16.8 + 18.2	20 + 25	11.0 + 11.0	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ120XAYCA									
RXYQ240XAYCA	RXYQ120XAYCA	60	575	518	632	18.2 + 18.2	25 + 25	12.2 + 12.2	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ120XAYCA									
RXYQ264XAYCA	RXYQ120XAYCA	60	575	518	632	18.2 + 22.3	25 + 30	13.2 + 16.3	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ144XAYCA									
RXYQ288XAYCA	RXYQ144XAYCA	60	575	518	632	22.3 + 22.3	30 + 30	16.4 + 16.4	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ144XAYCA									
RXYQ312XAYCA	RXYQ144XAYCA	60	575	518	632	22.3 + 24.9	30 + 30	17.1 + 17.1	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ168XAYCA									
RXYQ336XAYCA	RXYQ168XAYCA	60	575	518	632	24.9 + 24.9	30 + 30	18.2 + 18.2	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ168XAYCA									
RXYQ360XAYCA	RXYQ120XAYCA	60	575	518	632	18.2 + 18.2 + 18.2	25 + 25 + 25	12.8 + 12.8 + 12.8	(0.7 × 2) × 3	(1.0 × 2) × 3
	RXYQ120XAYCA									
	RXYQ120XAYCA									
RXYQ384XAYCA	RXYQ120XAYCA	60	575	518	632	18.2 + 18.2 + 22.3	25 + 25 + 30	12.7 + 12.7 + 16.1	(0.7 × 2) × 3	(1.0 × 2) × 3
	RXYQ120XAYCA									
	RXYQ144XAYCA									

**Symbols:**

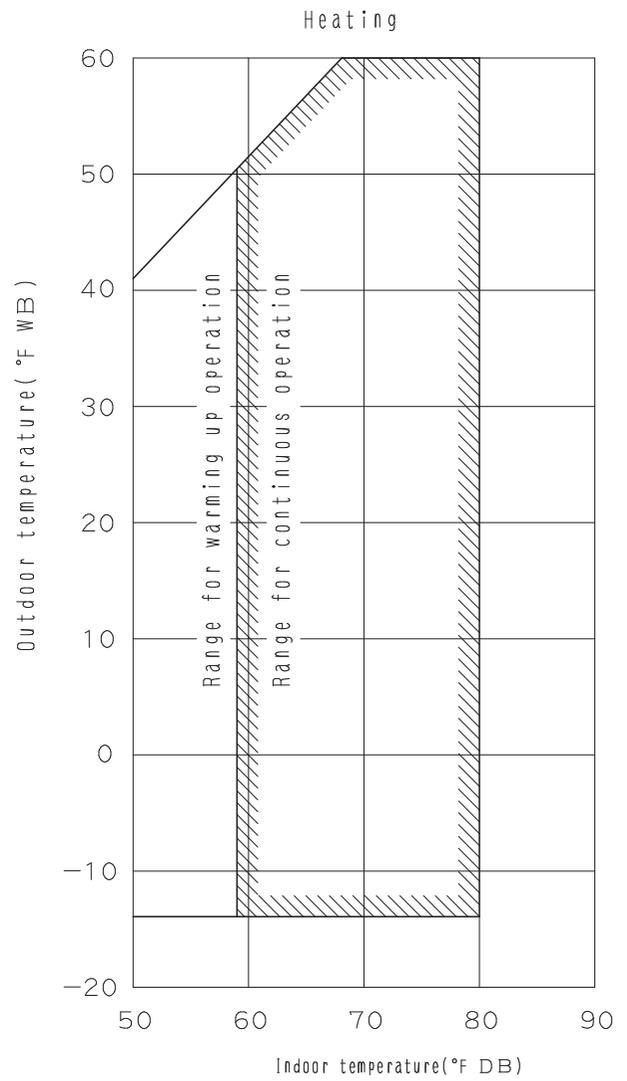
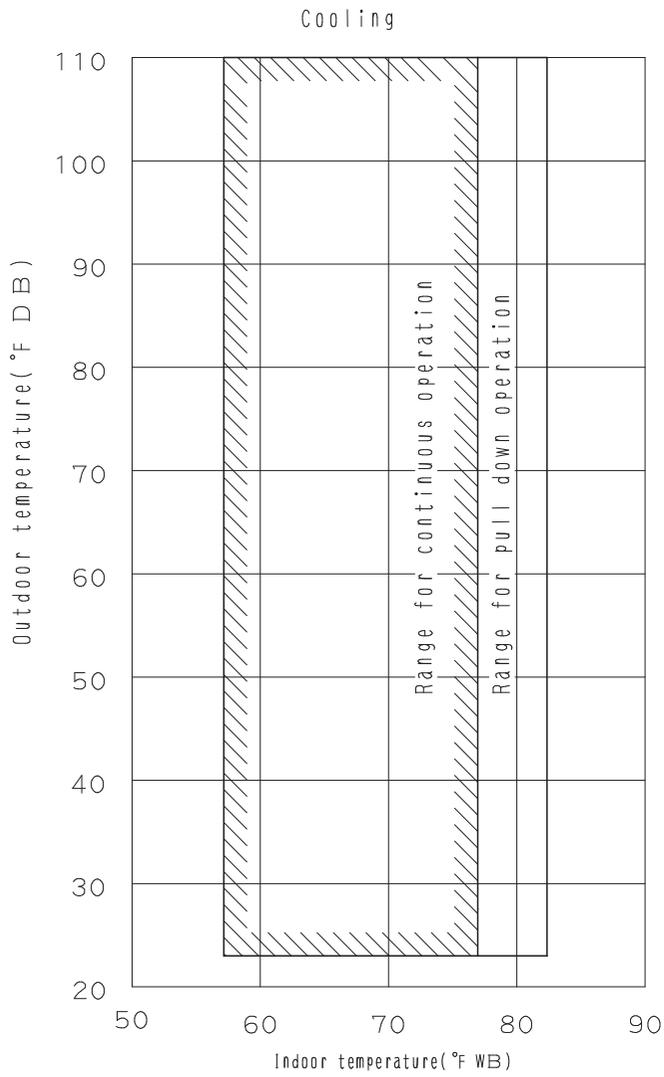
MCA: Min. Circuit Amps. (A)  
MOP: Max. Overcurrent Protector (A)  
RLA: Rated Load Amps. (A)  
OFM: Outdoor Fan Motor  
kW: Rated Motor Output (kW)  
FLA: Full Load Amps. (A)  
SCCR: Short-Circuit Current Rating

**Note:**

1. RLA is based on the following conditions.  
Indoor temp. 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)  
Outdoor temp. 95°FDB (35.0°CDB)
2. Voltage range  
Units are designed to operate only at the rated voltage provided in the table above.
3. The maximum percent unbalance of phase voltage shall be 2%.
4. Select wire size based on the value of MCA.
5. MOP is used to select the circuit breaker.
6. Refer to electrical characteristics of each independent unit for SCCR.

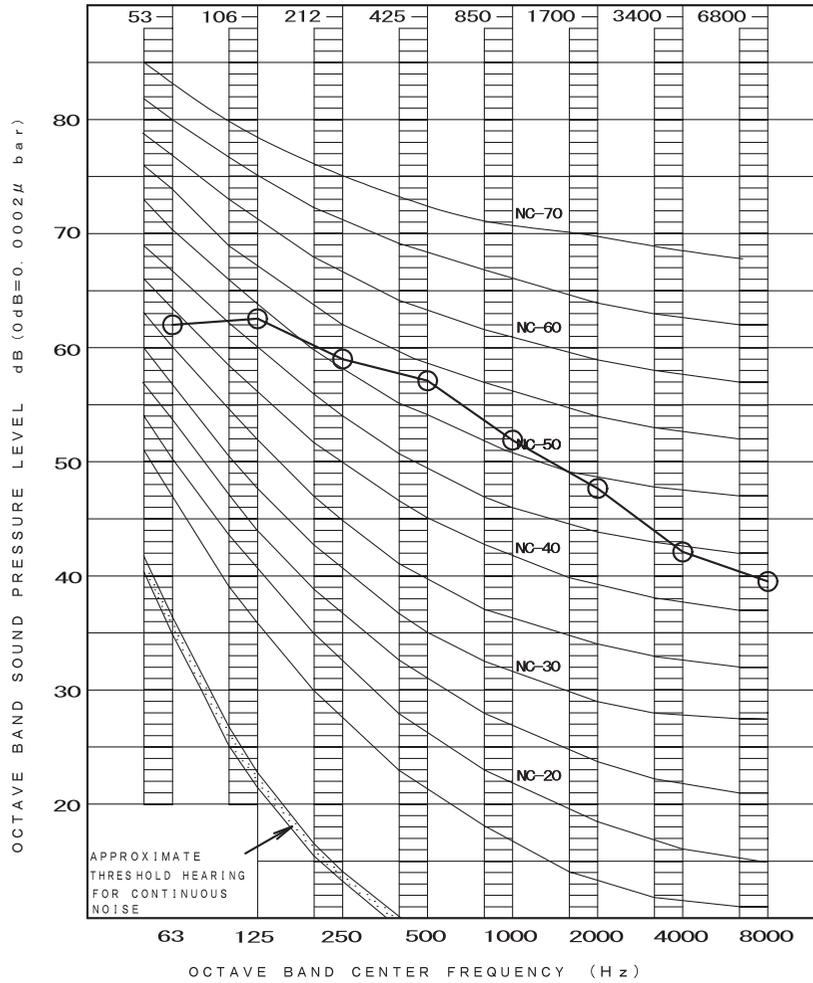
# 16. Operation Limits

## RXYQ72 - 384XAYCA



# 17.Sound Levels (Reference Data)

RXYQ72XAYCA



OVER ALL (dB)

SCALE	60Hz
A	58

(B. G. N IS ALREADY RECTIFIED)

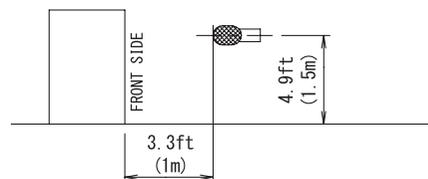
OPERATING CONDITIONS

POWER SOURCE	208/230V	60Hz
	460V	60Hz
	575V	60Hz

MEASURING PLACE

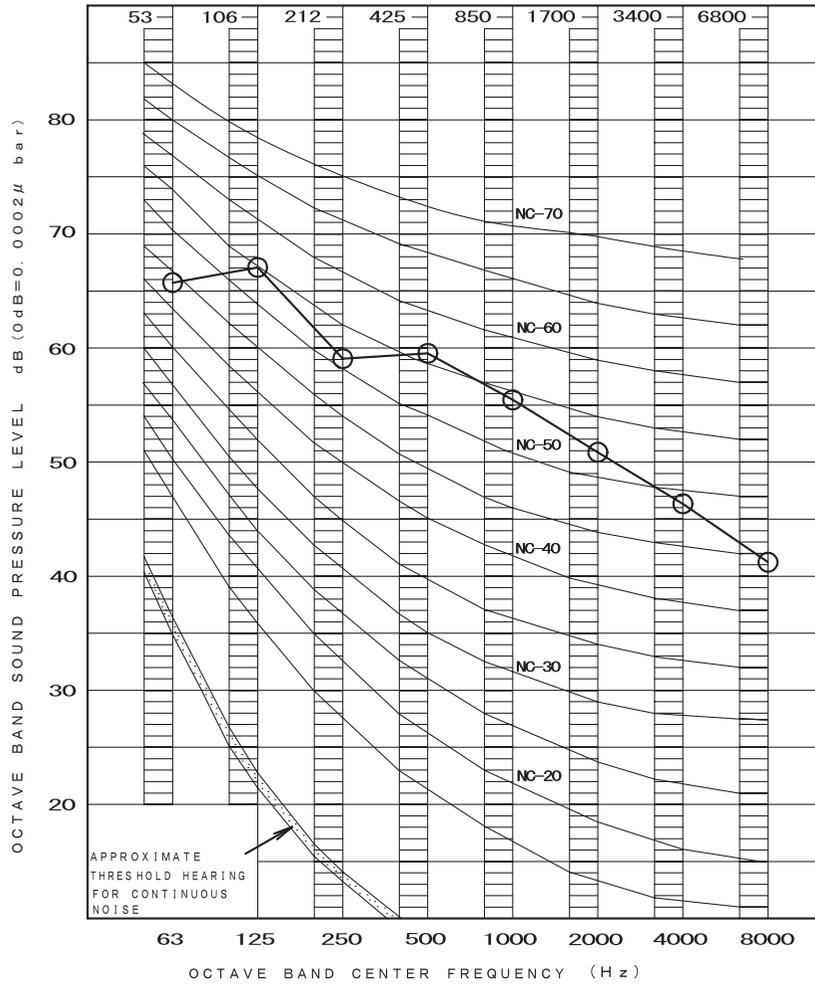
ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER, IF IT IS MEASURED UNDER THE ACTUAL INSTALLATION CONDITIONS, IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIRONMENTAL NOISE AND SOUND REFLECTION.

RXYQ96XAYCA



OVER ALL (dB)

SCALE	60Hz
A	61

(B. G. N IS ALREADY RECTIFIED)

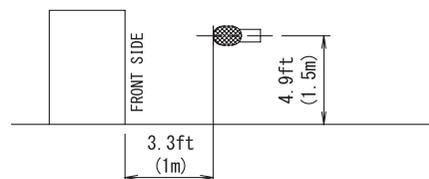
OPERATING CONDITIONS

POWER SOURCE	208/230V	60Hz
	460V	60Hz
	575V	60Hz

MEASURING PLACE

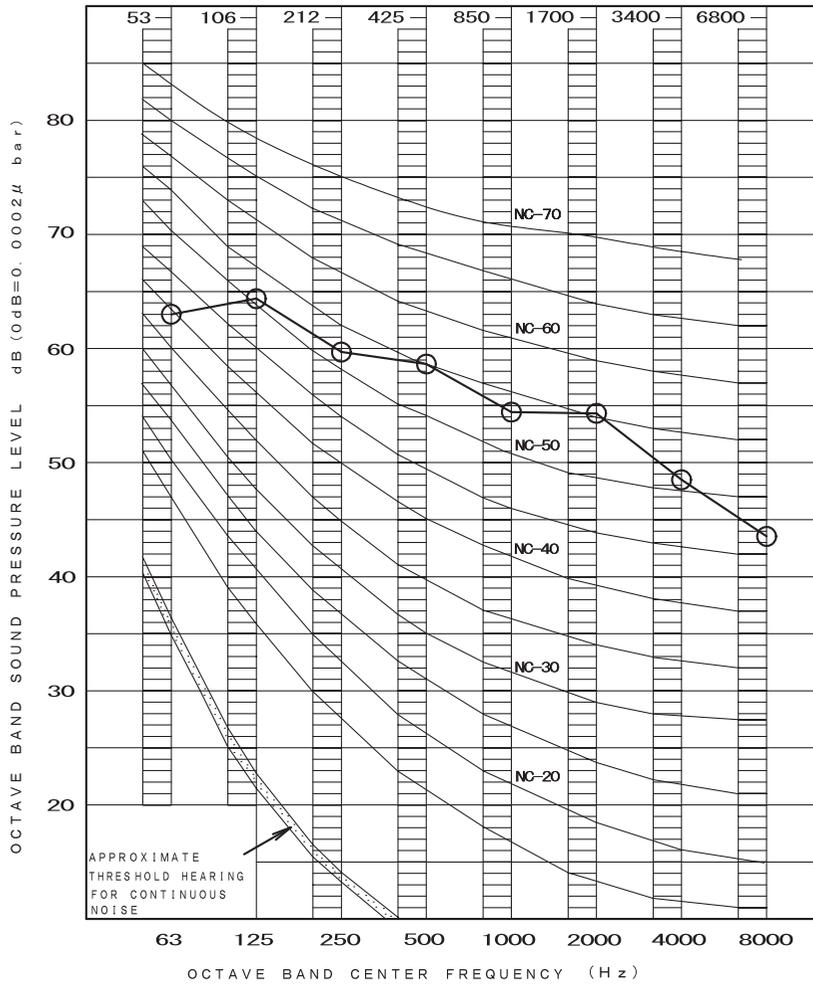
ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER,  
IF IT IS MEASURED UNDER THE ACTUAL INSTALLATION CONDITIONS,  
IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIRONMENTAL NOISE  
AND SOUND REFLECTION.

RXYQ120XAYCA



OVER ALL (dB)

SCALE	60Hz
A	61

(B. G. N IS ALREADY RECTIFIED)

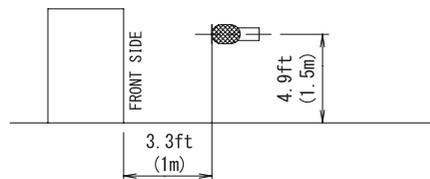
OPERATING CONDITIONS

POWER SOURCE	208/230V	60Hz
	460V	60Hz
	575V	60Hz

MEASURING PLACE

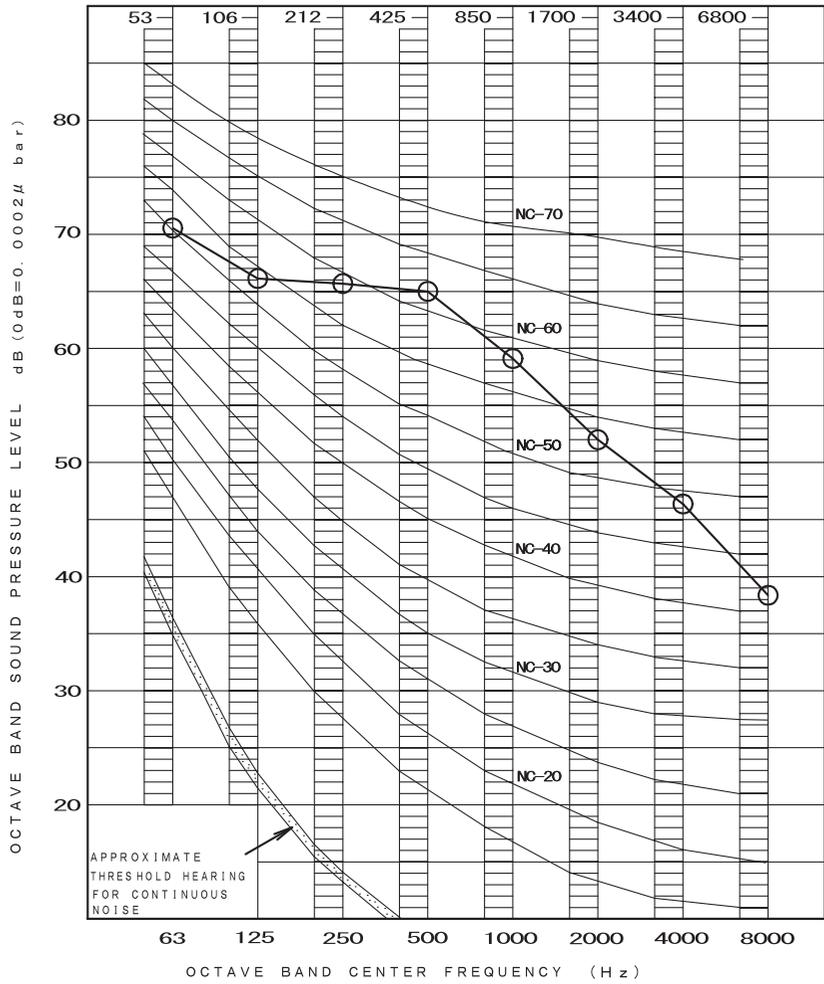
ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER, IF IT IS MEASURED UNDER THE ACTUAL INSTALLATION CONDITIONS, IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIRONMENTAL NOISE AND SOUND REFLECTION.

RXYQ144XAYCA



OVER ALL (dB)

SCALE	60Hz
A	65

(B. G. N IS ALREADY RECTIFIED)

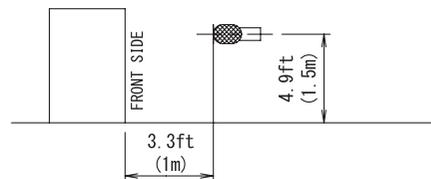
OPERATING CONDITIONS

POWER SOURCE	208/230V	60Hz
	460V	60Hz
	575V	60Hz

MEASURING PLACE

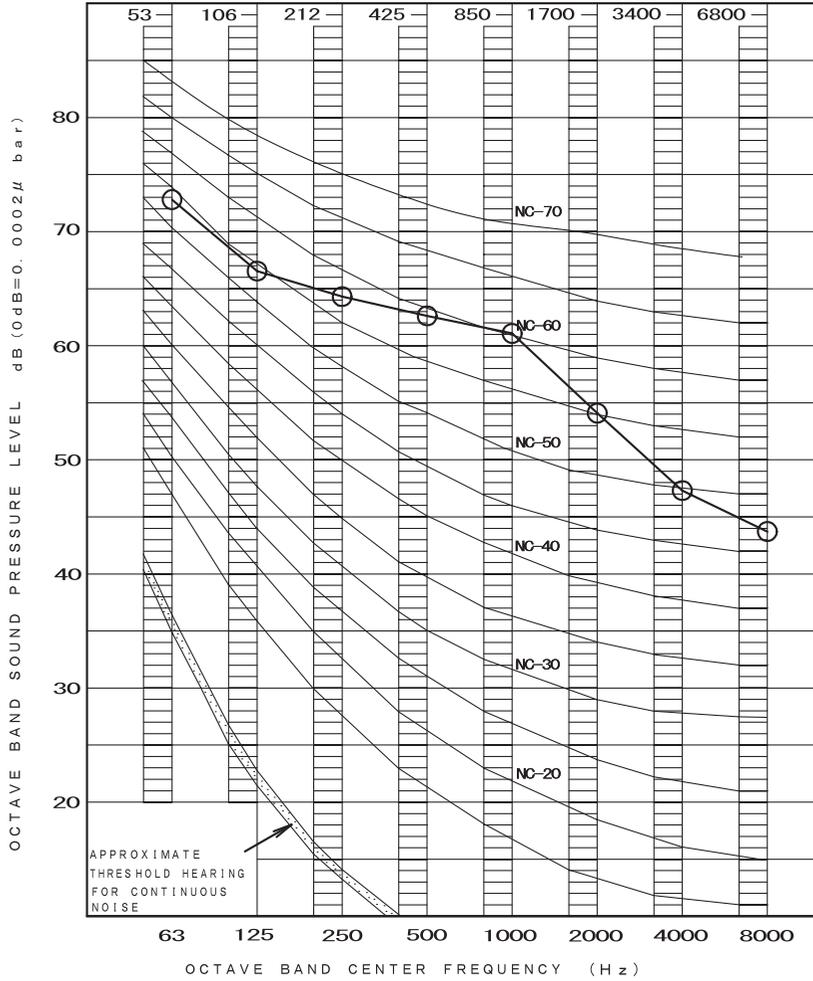
ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER, IF IT IS MEASURED UNDER THE ACTUAL INSTALLATION CONDITIONS, IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIRONMENTAL NOISE AND SOUND REFLECTION.

RXYQ168XAYCA



OVER ALL (dB)

SCALE	60Hz
A	65

(B. G. N IS ALREADY RECTIFIED)

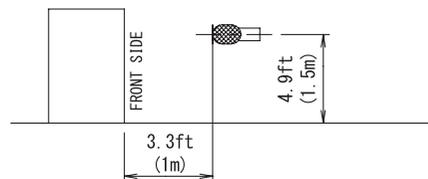
OPERATING CONDITIONS

POWER SOURCE	208/230V	60Hz
	460V	60Hz
	575V	60Hz

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER, IF IT IS MEASURED UNDER THE ACTUAL INSTALLATION CONDITIONS, IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIRONMENTAL NOISE AND SOUND REFLECTION.

## 18. Accessories

### 18.1 Optional Accessories

#### RXYQ72 - 384XAYCA

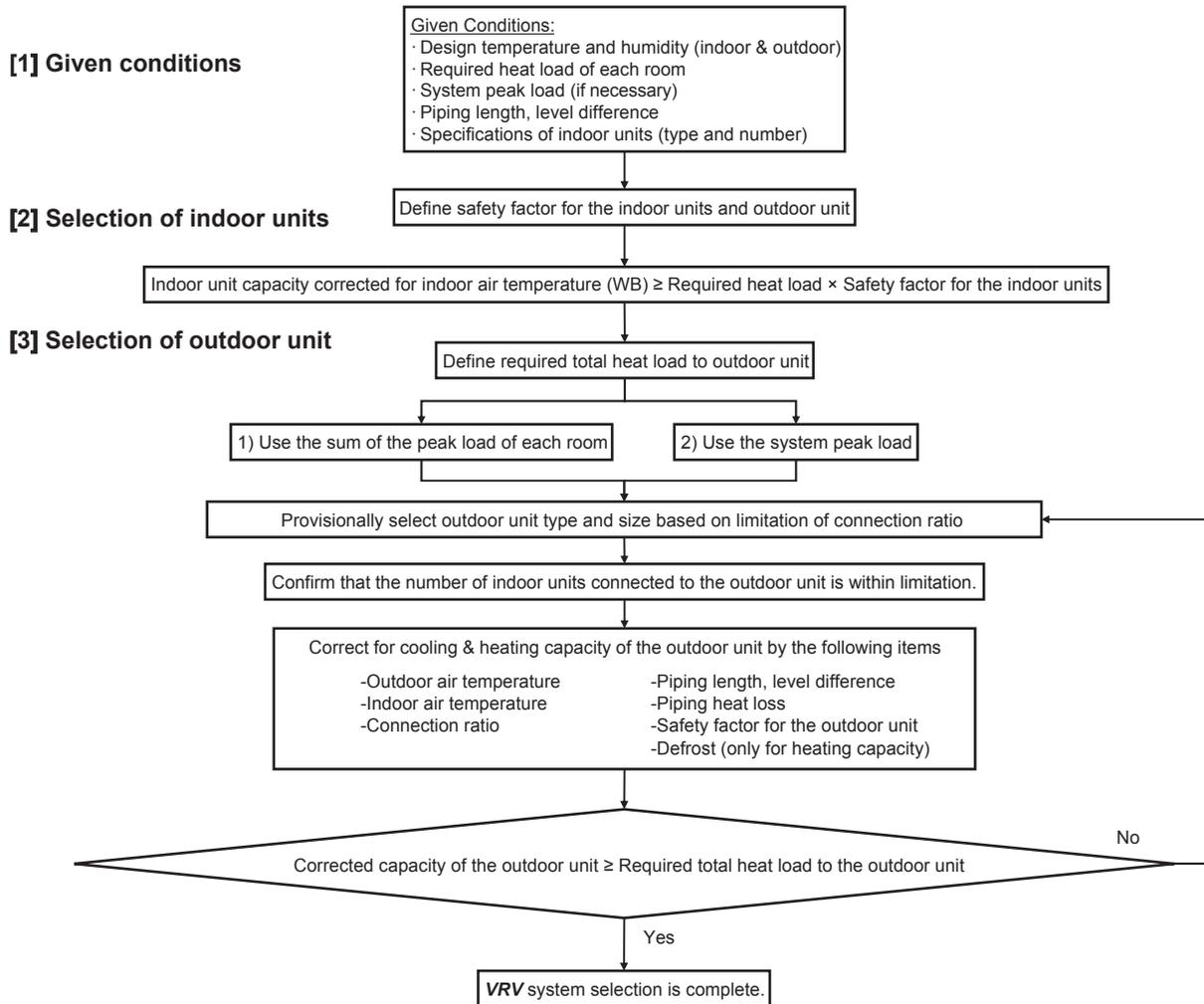
Optional accessories		RXYQ72XAYCA RXYQ96XAYCA	RXYQ120XAYCA RXYQ144XAYCA RXYQ168XAYCA	RXYQ192XAYCA RXYQ216XAYCA RXYQ240XAYCA RXYQ264XAYCA RXYQ288XAYCA RXYQ312XAYCA RXYQ336XAYCA	RXYQ360XAYCA RXYQ384XAYCA
Distributive piping	REFNET header	(Max. 4 branch) KHRP26M22H9 KHRP26M22HA  (Max. 8 branch) KHRP26M33H9 KHRP26M33HA	(Max. 4 branch) KHRP26M22H9 KHRP26M22HA  (Max. 8 branch) KHRP26M33H9 KHRP26M33HA KHRP26M72H9 KHRP26M72HA	(Max. 4 branch) KHRP26M22H9 KHRP26M22HA  (Max. 8 branch) KHRP26M33H9 KHRP26M33HA KHRP26M72H9 KHRP26M72HA KHRP26M73HU9 KHRP26M73HUA	
	REFNET joint	KHRP26A22T9 KHRP26A22TA KHRP26A33T9 KHRP26A33TA	KHRP26A22T9 KHRP26A22TA KHRP26A33T9 KHRP26A33TA KHRP26M72TU9 KHRP26M72TUA	KHRP26A22T9 KHRP26A33T9 KHRP26M72TU9 KHRP26M73TU9	KHRP26A22TA KHRP26A33TA KHRP26M72TUA KHRP26M73TUA
Outdoor unit multi connection piping kit		—		BHFP22P100U BHFP22P100UA	BHFP22P151U BHFP22P151UA

C: 3D087057E

# 19. Selection Procedure

## 19.1 Selection Procedure

### 19.1.1 Flowchart



### 19.1.2 Selection Example

The following is a selection example based on total heat load for cooling.

Room A	Room H	Room G	Room F
Room B	Room C	Room D	

Floor plan

**[1] Given conditions**

-Design conditions

Indoor air temperature: 67°F<sub>WB</sub> / 80°F<sub>DB</sub>, Outdoor air temperature: 93°F<sub>DB</sub>

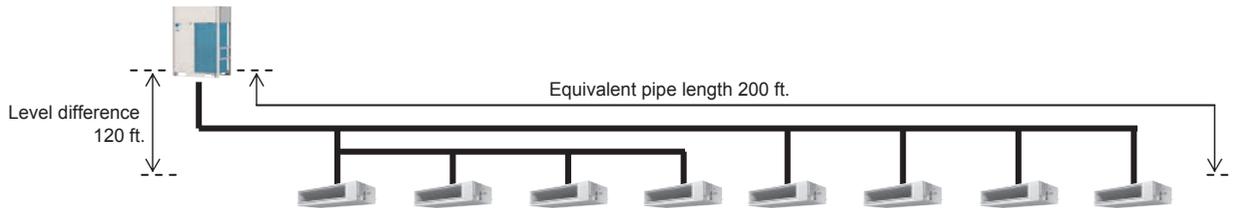
-Determine peak load of each room (and system peak load if necessary)

-Required heat load of each room

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H	Total
9:00	16.4	16.5	10.4	10.4	30.9	30.8	10.0	10.0	135.4
12:00	22.4	24.4	17.3	17.3	25.1	23.2	13.7	13.7	157.1
14:00	30.7	32.2	16.8	16.8	24.9	23.4	14.1	14.1	173.0
16:00	36.1	36.4	13.3	13.3	21.5	21.2	13.0	13.0	167.8

Total heat load (MBH)

From the above heat load calculation, the maximum heat load for the system (system peak load) is 173.0 MBH.



Select **VRV** indoor units FXMQ-PB series for each room.

-Safety factor

In this example, safety factor is not used. (i. e., safety factor = 1.0)

**[2] Selection of indoor units**

Calculate total heat capacity of indoor units corrected for indoor air temperature.

In case design temperature of the indoor air falls between temperatures listed in the table, calculate the capacity by interpolation.

The corrected total heat capacity of indoor units shall satisfy the maximum heat load of each room.

Capacity table of indoor unit  
Cooling Capacity

Model	Indoor air temp. °FWB (Te: 43°F (6°C))											
	61		64		67		70		72		75	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
FXMQ07PBVJU	5.7	5.5	6.4	5.9	7.2	6.1	7.3	6.5	7.4	5.8	7.6	5.8
FXMQ09PBVJU	7.5	6.9	8.5	7.3	9.5	7.8	9.7	8.1	9.8	7.1	10.0	7.2
FXMQ12PBVJU	9.5	8.5	10.7	9.1	12.0	9.7	12.2	10.0	12.4	9.2	12.6	9.2
FXMQ15PBVJU	11.2	10.2	12.7	10.7	14.2	11.4	14.5	11.6	14.7	11.5	14.9	9.6
FXMQ18PBVJU	14.2	13.9	16.1	14.7	18.0	15.6	18.4	16.1	18.6	14.6	18.9	12.1
FXMQ24PBVJU	19.0	16.5	21.5	17.7	24.0	18.8	24.5	19.2	24.8	17.9	25.3	20.1
FXMQ30PBVJU	23.7	20.8	26.8	22.3	30.0	23.8	30.6	24.4	31.0	22.5	31.6	22.5
FXMQ36PBVJU	28.4	25.0	32.2	26.9	36.0	28.8	36.7	30.0	37.2	27.7	37.9	27.7
FXMQ48PBVJU	37.9	31.3	43.0	33.6	48.0	35.8	49.0	36.9	49.6	34.7	50.5	33.2
FXMQ54PBVJU	42.6	35.2	48.3	37.8	54.0	40.3	55.1	41.5	55.8	39.0	56.8	37.4

TC : Total capacity: MBH  
SHC : Sensible heat capacity: MBH

Selection results of indoor units

	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
Max. heat load (MBH)	36.1	36.4	17.3	17.3	30.9	30.8	14.1	14.1
Selected IDU	FXMQ48PBVJU	FXMQ48PBVJU	FXMQ18PBVJU	FXMQ18PBVJU	FXMQ36PBVJU	FXMQ36PBVJU	FXMQ15PBVJU	FXMQ15PBVJU
Corrected TC (MBH)	48.0	48.0	18.0	18.0	36.0	36.0	14.2	14.2

\*In case of selection based on Total Heat Load and Sensible Heat Load, select indoor units which satisfy not only the Total Heat Load but also the Sensible Heat Load of each room. The sensible heat capacity of indoor units is to be corrected for indoor air temperature. If the design temperature of indoor air falls between temperatures listed in table, calculate sensible heat capacity by using the bypass factor calculated by interpolation for each indoor air temperature.

**[3] Selection of outdoor unit**

**[3] -1 Define the required total heat load from the indoor units to the outdoor unit**

Define the required total heat load (A) based on (1) the sum of the peak load of each room or (2) the system peak load.

In this example, select an outdoor unit by (2).

Therefore, (A) = 173.0 MBH

**[3] –2 Provisionally select outdoor unit**

**(1) Calculate CI (Capacity Index) of the selected indoor units.**

- CI of VRV indoor units
- CI of FXMQ15PBVJU = 15
- CI of FXMQ18PBVJU = 18
- CI of FXMQ36PBVJU = 36
- CI of FXMQ48PBVJU = 48

Capacity Range		0.5 ton	0.6 ton	0.8 ton	1 ton	1.25 ton	1.5 ton	2 ton	2.5 ton	3 ton	3.5 ton	4 ton	4.5 ton	5 ton	6 ton	8 ton	Power Supply, Standard
Capacity Index		5.8	7.5	9.5	12	15	18	20	24	30	36	42	48	54	60	72	96
Ceiling mounted duct type (Middle and high static pressure)	FXMQ	—	07PB	09PB	12PB	15PB	18PB	—	24PB	30PB	36PB	—	48PB	54PB	—	—	VJU

Calculate the total CI of the indoor units.  
 Total CI = 15 × 2 + 18 × 2 + 36 × 2 + 48 × 2 = 234

**(2) Provisionally select an outdoor unit based on the total CI of the indoor units**

The connection ratio of RXYQ-XA shall be between 50% (70%: RXYQ72XA type) and 130%.  
 As the total CI of the indoor units is 234, outdoor units from 16 ton to 32 ton are connectable.  
 Start from 16 ton which is the smallest outdoor unit.

Type	Ton	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit *1	Total capacity index of connectable indoor units *2	Maximum number of connectable indoor units
Single outdoor units	6	72	RXYQ72XA	RXYQ72XA	—	51 to 93 (144)	12
	8	96	RXYQ96XA	RXYQ96XA		48 to 124 (192)	16
	10	120	RXYQ120XA	RXYQ120XA		60 to 156 (240)	20
	12	144	RXYQ144XA	RXYQ144XA		72 to 187 (288)	25
	14	168	RXYQ168XA	RXYQ168XA		84 to 218 (336)	29
Double outdoor units	16	192	RXYQ192XA	RXYQ96XA+RXYQ96XA	BHFP22P100U BHFP22P100UA	96 to 249 (307)	33
	18	216	RXYQ216XA	RXYQ96XA+RXYQ120XA		108 to 280 (345)	37
	20	240	RXYQ240XA	RXYQ120XA+RXYQ120XA		120 to 312 (384)	41
	22	264	RXYQ264XA	RXYQ120XA+RXYQ144XA		132 to 343 (422)	45
	24	288	RXYQ288XA	RXYQ144XA+RXYQ144XA		144 to 374 (460)	49
	26	312	RXYQ312XA	RXYQ144XA+RXYQ168XA		156 to 405 (499)	54
	28	336	RXYQ336XA	RXYQ168XA+RXYQ168XA		168 to 436 (537)	58
Triple outdoor units	30	360	RXYQ360XA	RXYQ120XA+RXYQ120XA+RXYQ120XA	BHFP22P151U BHFP22P151UA	180 to 468 (468)	62
	32	384	RXYQ384XA	RXYQ120XA+RXYQ120XA+RXYQ144XA		192 to 499 (499)	64

**(3) Confirm that the number of the connected indoor units is within the limitation.**

The number of the connected indoor units = 8  
 The max. number of connectable indoor units of 16 ton outdoor unit = 33

**[3] –3 Calculate the corrected capacity of the outdoor unit.**

-Calculate the combination ratio of the system.

Total CI = 234, CI of RXYQ192XAYCA = 192

Combination ratio = 234 / 192 = 122%

-Using the capacity table of the outdoor unit, calculate the capacity (B) corrected for outdoor air temperature, indoor air temperature, and combination ratio.

\* In case the outdoor air temperature, the indoor air temperature, or the combination ratio falls between temperatures listed in the table, calculate the capacity by interpolation.

**RXYQ192XAYCA Cooling Capacity for Standard Condition (Te: 43°F)**

Combi- nation	Outdoor air temp.	Indoor air temp. (°FWB)															
		57		61		64		67		70		72		75			
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
%	*FDB	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW		
130	23	146	5.71	188	7.52	219	8.95	250	10.4	271	11.5	275	11.6	281	11.7		
	30	146	5.89	188	7.76	219	9.25	250	10.8	265	11.7	269	11.7	275	11.8		
	40	146	6.16	188	8.14	219	9.71	250	11.7	256	11.9	260	12.0	266	12.1		
	50	146	6.46	188	8.56	219	10.4	242	12.0	248	12.1	251	12.2	257	12.3		
	54	146	6.59	188	8.74	219	10.8	238	12.1	244	12.2	248	12.3	254	12.4		
	58	146	6.73	188	8.92	219	11.1	235	12.2	241	12.3	245	12.4	250	12.5		
	62	146	6.87	188	9.21	219	11.5	231	12.3	237	12.4	241	12.5	247	12.6		
	66	146	7.02	188	9.52	219	11.9	228	12.4	234	12.5	238	12.6	243	12.7		
	70	146	7.17	188	10.0	219	12.6	224	12.7	230	12.8	234	12.9	240	13.0		
	72	146	7.35	188	10.4	217	12.9	223	13.0	229	13.1	232	13.2	238	13.3		
	75	146	7.77	188	11.0	214	13.4	220	13.5	226	13.6	230	13.7	236	13.8		
	79	146	8.36	188	11.9	211	14.0	217	14.1	222	14.3	226	14.4	232	14.5		
	83	146	8.97	188	12.8	207	14.6	213	14.8	219	14.9	223	15.0	229	15.2		
	87	146	9.63	188	13.8	204	15.3	210	15.4	216	15.6	219	15.7	225	15.9		
	91	146	10.3	188	14.8	200	15.9	206	16.1	212	16.3	216	16.4	219	16.5		
	93	146	10.7	188	15.3	199	16.3	205	16.4	210	16.6	214	16.7	215	16.7		
	95	146	11.1	188	15.9	197	16.6	203	16.8	209	16.9	210	17.0	210	17.0		
	99	146	11.8	188	17.0	194	17.2	199	17.4	202	17.5	202	17.5	202	17.5		
103	146	12.7	184	17.7	190	17.9	193	18.0	193	18.0	193	18.0	193	18.0			
106	146	13.5	182	18.4	187	18.6	187	18.6	187	18.6	187	18.6	187	18.6			
110	146	14.8	178	19.4	178	19.4	178	19.4	178	19.5	178	19.5	178	19.5			
115	146	16.4	154	19.6	154	19.6	155	19.7	155	19.7	155	19.7	155	19.7			
118	133	16.6	134	16.6	134	16.6	134	16.7	135	16.7	135	16.7	135	16.7			
122	107	12.6	107	12.6	107	12.6	108	12.6	108	12.7	108	12.7	108	12.7			
120	23	135	5.25	173	6.87	202	8.17	230	9.51	259	10.9	271	11.5	276	11.6		
	30	135	5.41	173	7.09	202	8.43	230	9.83	259	11.5	264	11.7	270	11.8		
	40	135	5.65	173	7.43	202	8.85	230	10.4	252	11.8	256	11.9	261	12.0		
	50	135	5.92	173	7.81	202	9.31	230	11.3	244	12.1	247	12.1	252	12.2		
	54	135	6.04	173	7.97	202	9.58	230	11.6	240	12.1	244	12.2	249	12.3		
	58	135	6.16	173	8.14	202	9.90	230	12.0	237	12.2	240	12.3	246	12.4		
	62	135	6.29	173	8.31	202	10.2	228	12.2	233	12.3	237	12.4	242	12.5		
	66	135	6.42	173	8.50	202	10.6	224	12.3	230	12.4	233	12.5	239	12.6		
	70	135	6.56	173	8.83	202	11.1	221	12.6	226	12.7	230	12.8	235	12.9		
	72	135	6.63	173	9.28	202	11.6	219	12.9	224	13.0	228	13.1	233	13.2		
	75	135	6.98	173	9.82	202	12.3	217	13.4	222	13.5	225	13.6	231	13.7		
	79	135	7.50	173	10.6	202	13.2	213	14.1	218	14.2	222	14.3	227	14.4		
	83	135	8.05	173	11.4	202	14.3	210	14.7	215	14.8	219	14.9	224	15.1		
	87	135	8.63	173	12.2	201	15.2	206	15.3	211	15.5	215	15.6	220	15.7		
	91	135	9.25	173	13.1	197	15.8	203	16.0	208	16.1	212	16.3	217	16.4		
	93	135	9.57	173	13.6	196	16.2	201	16.3	206	16.5	210	16.6	215	16.7		
	95	135	9.90	173	14.1	194	16.5	199	16.6	205	16.8	208	16.9	210	17.0		
	99	135	10.6	173	15.1	190	17.1	196	17.3	201	17.5	202	17.5	202	17.5		
103	135	11.3	173	16.2	187	17.8	192	18.0	193	18.0	193	18.0	193	18.0			
106	135	12.1	173	17.3	184	18.5	187	18.6	187	18.6	187	18.6	187	18.6			
110	135	13.2	173	18.9	178	19.4	178	19.4	178	19.5	178	19.5	178	19.5			
115	135	14.6	154	19.6	154	19.6	155	19.7	155	19.7	155	19.7	155	19.7			
118	133	16.6	134	16.6	134	16.6	134	16.7	135	16.7	135	16.7	135	16.7			
122	107	12.6	107	12.6	107	12.6	108	12.6	108	12.7	108	12.7	108	12.7			

Connection ratio	120%	122%	130%
Cooling capacity	201	(B)	205

$$(B) = 201 + (205 - 201) \times (122 - 120) / (130 - 120) = 201.8$$

-Confirm capacity correction factor by piping length and level difference (K1)

(K1) = 0.94

**1. Rate of change of cooling capacity**

200
0.94

	Vertical pipe length (ft.)	Equivalent Length (ft.)																			
		25	66	98	131	164	197	230	262	295	328	361	394	427	460	493	526	559	592	623	
Indoor Lower than Outdoor	295	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.81	
	262	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.81	
	230	-	-	-	-	-	-	-	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	
	197	-	-	-	-	-	-	0.94	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	
	164	-	-	-	-	-	0.96	0.94	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	
	131	-	-	-	-	0.98	0.96	0.94	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	
	98	-	-	1.00	0.98	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.82	0.81	
66	-	1.00	1.00	0.98	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.82	0.81		
25	1.00	1.00	1.00	0.98	0.96	0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.85	0.84	0.84	0.83	0.82	0.82	0.81		
FL±	0	1.00	1.00	1.00	0.98	0.96	0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.85	0.85	0.84	0.83	0.82	0.82		
Indoor Higher than Outdoor	25	1.00	1.00	1.00	0.98	0.97	0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82		
	66	-	1.00	1.00	0.99	0.97	0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82		
	98	-	-	1.00	0.99	0.97	0.95	0.94	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82		
	131	-	-	-	0.99	0.97	0.95	0.94	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82		
	164	-	-	-	-	0.97	0.96	0.94	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82		
	195	-	-	-	-	-	0.96	0.94	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82		

-Calculate capacity correction factor by piping heat loss (K2)

(K2) = 1 + (heat loss factor per feet of piping × (equivalent piping length – 25 ft.)) / 100

In cooling mode, heat loss factor per feet at 93°F is calculated as below.

(R) Heat loss factor per feet =  $0.072^{*2} + (0.098^{*1} - 0.072^{*2}) \times (93^{*3} - 86^{*4}) / (95^{*5} - 86^{*4}) = 0.0922$

Using “Equivalent piping length = 200 ft.” and “Heat loss factor per feet = 0.0922”,

(K2) = 1 + (0.0922 × (200 – 25)) / 100 = 1.161

Cooling	Ambient temperature								
	41°F	50°F	59°F	68°F	77°F	86°F <sup>4</sup>	93°F <sup>3</sup>	95°F <sup>5</sup>	104°F
Heat loss factor per feet of piping (%)	0.000	0.000	0.013	0.030	0.046	0.072 <sup>2</sup>	(R)	0.098 <sup>1</sup>	0.125

Heating	Ambient temperature							
	5°F	14°F	23°F	32°F	41°F	50°F	59°F	68°F
Heat loss factor per feet of piping (%)	0.328	0.305	0.282	0.256	0.233	0.210	0.187	0.161

-Calculate the corrected capacity of RXYQ192XAYCA(C) by using (K1) and (K2).

Corrected capacity of RXYQ192XAYCA (C) = (B) × (K1) / (K2) (add defrost correction factor for heating capacity)

Therefore (C) = 201.8 × 0.94 / 1.161 = 163.4 MBH

If the corrected capacity (C) is the same or greater than the required total heat load (A), selection is complete.

If (C) < (A), return to Procedure [3]–2 and provisionally select a larger outdoor unit.

In this example, 163.4 MBH (C) < 173.0 MBH (A), so need to select a larger outdoor unit.

The capacity of RXYQ216XAYCA at the same condition is 178.8 MBH, which is more than the heat load (A): 173.0 MBH.

So the selection is complete.

# 20. Caution Label

## 20.1 RXYQ72 - 120XAYCA

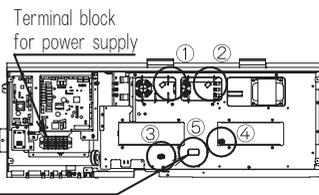
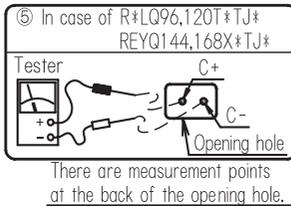
### Service Precautions (1/2) (Touch the noncoated metal part to eliminate static electricity before performing service) (e.g. the control box cover).

#### CAUTION when performing service inside the control box

**⚠ WARNING ⚠ Caution for electric shock**

1. Make sure to turn off the power supply before remove the control box cover. (Touching electric parts may cause electric shock.)
2. Do not open the control box cover for 10 minutes after the power supply is turned off.
3. Measure the voltage between terminals on the terminal block for power supply with a tester and confirm that the power supply is turned off. In addition, measure the points shown below with a tester and confirm that the voltage of the capacitor in the main circuit is less than DC 50V.
4. To prevent a damage of the printed circuit boards, touch the noncoated metal part and make sure to eliminate static electricity before pulling out or plugging in the connector.
5. The work must be started after pulling out the junction connector X1A · X2A · X3A · X4A(X3A X4A are nothing according to the model. Please see wiring diagram for details.) for the fan motor in the outdoor unit and be careful not to touch the energized parts. (If the fan rotates by strong wind, it may cause storage of electricity in the capacitor in the main circuit and electric shock.)
6. After the service is finished, plug in the junction connector.

- For details, see the wiring diagram label on the back of the control box cover.
- Otherwise, malfunction code "E7" will be displayed on 7 segment display of outdoor unit printed circuit board (A1P) and in the remote controller due to wrong connection, and normal operation will not be performed.



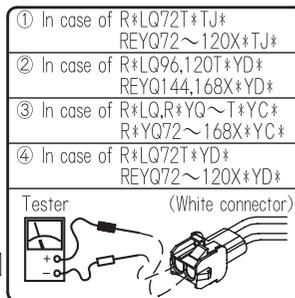
**❗** After service is complete, make sure to close the control box cover. (Water soaking or foreign object may cause failure.)

#### CAUTION for pi piping work and additional refrigerant charge

- Use the charging hose and gauge manifold designed for R410A in order to withstand the pressure and prevent impurities (such as SUNISO oil) from mixing into.
- Carry out a nitrogen blow when brazing.
- Perform the air tightness and the vacuum drying certainly. (The air tightness test pressure: 550 psi, make sure to use nitrogen gas.)
- Charge the additional refrigerant in liquid state.

#### CAUTION while check operation

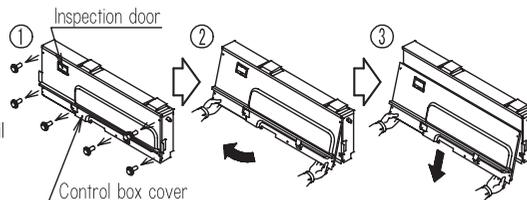
- Make sure to turn on the power supply of all connected units (indoor · BS · outdoor) before operation.
- Make sure to close all outer panels when operating. Otherwise, the system cannot be checked properly.



#### CAUTION for removing and installing the control box cover

##### [Method of removal]

- ① Remove the 6 screws fixing the cover.
- ② Pull the cover forward.
- ③ Slide the cover downward until the upper tip appears.



##### [Method of installation]

For installing the cover, follow the [Method of removal] in the reverse order.

##### [CAUTION]

- Do not remove the cover by force, if the cover is deformed, water may enter inside, which may cause failure.



#### ELECTRIC SHOCK HAZARD!

DISCONNECT ALL REMOTE POWER SUPPLIES BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

Failure to do so could lead to serious injury or death. Only a qualified service technician should install or service this equipment.



#### DANGER D' ELECTROCUTION!

DÉCONNECTER TOUTES LES ALIMENTATIONS ÉLECTRIQUES ÉLOIGNÉES AVANT D'INSTALLER OU DE RÉPARER CET APPAREIL.

Le non respect de cette recommandation peut entraîner des blessures graves ou la mort. Seul un technicien de service qualifié peut installer ou réparer cet appareil.

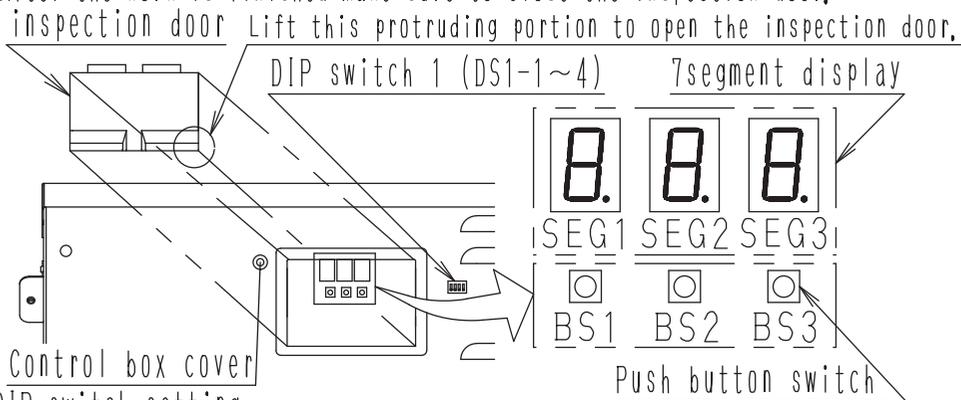
# Service precautions (2/2)

## Field setting

If required, carry out the field setting according to the following instructions. For details, see the service manual.

### 1. How to operate

- When setting the DIP switch, make sure to turn off the power supply and open the control box cover.
- For operating the push button switch, open the inspection door as shown in the below figure with the power supply turned on, and use a resin ballpoint or non-conducting object.
- After the work is finished make sure to close the inspection door.



### 2. DIP switch setting

No.	Setting item	Setting value
DS1-1	Cool/Heat switching setting (Note)	ON (when connecting COOL/HEAT selector) OFF (factory setting)
DS1-2~4		Not change from factory setting (OFF)

(Note) COOL/HEAT selector (optional accessory) installing in the outdoor unit is enable to switch operation mode (cooling/heating).  
For details of COOL/HEAT selector (optional accessory) installation method, see its installation manual.

3. Setting by the push button switch(BS1~3)

●Function of the push switch

Push button	Button types	Use
BS1	New page button	For changing setting mode
BS2	Operation button	For changing field setting
BS3	Confirmation button	
BS2 long push	Operation button	For check operation
BS3 long push	Confirmation button	For resetting the address when the wiring is changed or additional indoor unit is installed

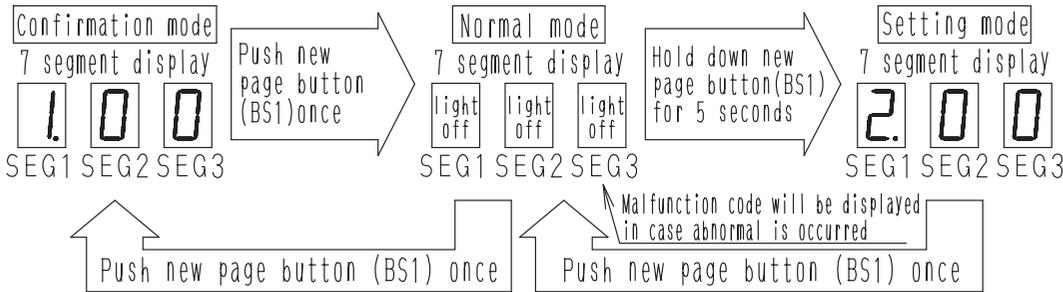
●Normal Mode, Setting Mode, Confirmation mode change method

Push new page button(BS1). It can switch confirmation mode, normal mode and setting mode.

**Setting mode** can use for setting (A) ~ (H) as shown in right table,

**Confirmation mode** can use for confirmation of (J) • (K) items as shown in right table.

(Note) About other settings and malfunction code, see the service manual.



**!**  
If you get confused in the setting process, push new page button(BS1), then the system return to initial state (Normal mode).

- For each type setting, make sure to set the master unit, Sub unit setting is invalid,
- Outdoor unit which connect with indoor units by transmission wiring is master unit, other are sub units.
- Master unit and sub unit can be distinguished by 7 segment display according to operation below,

		7 Segment display			
		SEG1	SEG2	SEG3	
(1)	In <b>Normal mode</b> , push new page button (BS1) and charge to <b>Confirmation mode</b> . Confirm 7 segment display show right description.	SEG1	SEG2	SEG3	
		1	0	0	
(2)	Push confirmation button(BS3) and confirm the unit master or sub. (see right)	Master unit	light off	light off	0
		Sub unit 1	light off	light off	1
		Sub unit 2	light off	light off	2

Set [Setting mode] or [Confirmation mode] first, then perform procedure below.		Details of setting		7 Segment display															
				SEG1	SEG2	SEG3													
Setting procedure	① Push operation button (BS2) and adjust the 7 segment display to require mode shown in right. (*1) For selecting low noise operation or demand operation from outside, or performing cool/heat setting by cool/heat central remote control, external control adapter for outdoor unit (optional accessory) is required. For details, see the instruction attached to the adapter.	Ⓐ Cool/Heat selection setting (*1)	2	0	0														
		Ⓑ Additional refrigerant charge operation setting	2	2	0														
		Ⓒ Refrigerant recovery operation/Evacuation mode setting.	2	2	1														
		Ⓓ Night time low noise setting	2	2	2														
		Ⓔ External low noise level setting(*1)	2	2	5														
		Ⓕ Demand level setting(*1)	2	3	0														
		Ⓖ External low noise demand setting (*1)	2	1	2														
		Ⓗ High static pressure setting	2	1	8														
	② Push confirmation button (BS3), (The present setting is indicated.)	Either of ③																	
	③ Push operation button (BS2) and adjust the 7 segment display to required mode shown in right. (*2) Setting level efficiency	For Ⓐ	For perform individual cool/heat switching	light off	light off	0													
			For cool/heat switching by master unit	light off	light off	1													
			For cool/heat switching by sub unit	light off	light off	2													
		<table border="1"> <tr> <td>For Ⓓ and Ⓔ</td> <td>Setting value</td> <td>level 1 ~ level 3</td> </tr> <tr> <td>Ⓔ</td> <td>Noise value</td> <td>→ low noise</td> </tr> <tr> <td>For Ⓕ</td> <td>Setting value</td> <td>level 1 ~ level 8</td> </tr> <tr> <td></td> <td>Power consumption</td> <td>less power ←</td> </tr> </table> For details, see the service manual.	For Ⓓ and Ⓔ	Setting value	level 1 ~ level 3	Ⓔ	Noise value	→ low noise	For Ⓕ	Setting value	level 1 ~ level 8		Power consumption	less power ←	For Ⓔ Ⓖ Ⓗ	ON	light off	light off	1
			For Ⓓ and Ⓔ	Setting value	level 1 ~ level 3														
Ⓔ			Noise value	→ low noise															
For Ⓕ	Setting value	level 1 ~ level 8																	
	Power consumption	less power ←																	
OFF (Factory setting)	light off	light off	0																
OFF (Factory setting)	light off	light off	0																
For Ⓓ (*2)	level A(*3) (*3) A is a number of 1~3	light off	light off	A(*3)															
	level A(*3) (*3) A is a number of 1~3 (Factory setting :2)	light off	light off	A(*3)															
	level B(*4) (*4) B is number of 1~8 (Factory setting :3)	light off	light off	B(*3)															
④ Push confirmation button(BS3).	The setting in ③ is defined		It will	turn to	light ON.														
⑤ Push confirmation button again (BS3).	The system start the operation according to the setting.		2	0	0														
⑥ Push new page button(BS1).	The system return to normal mode.		light off	light off	light off														
Confirmation procedure	① Push operation button(BS2) according to confirmation item (Ⓙ, Ⓚ) and adjust the 7 segment display to the example shown on the right according to the required mode.	Ⓙ Low noise operation	1	0	1														
		Ⓚ Demand operation	1	0	2														
	② Push confirmation button (BS3). (The present setting will be indicate.)	During setting operation	light off	light off	1														
		During normal operation.	light off	light off	0														

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Additional refrigerant charge operation

- When the outdoor unit is stopped and the entire quantity of refrigerant can not be charged, make sure to charge the remaining quantity of refrigerant using this procedure. If the refrigerant quantity is insufficient, the unit may malfunction.

Setting procedure

- ① Connect the refrigerant charge hose and valve to the stop valve service port on the gas side.
- ② Make sure to completely open the stop valve on the gas side and the liquid side.
- ③ Turn ON the power of the indoor units and the outdoor unit. To protect the compressor, make sure to turn on the power supply for 6 hours before starting operation.

- ④ In the state of unit stopped, turn on the additional refrigerant charge operation by **Setting mode**, and open refrigerant cylinder valve. About valve pulse, make sure to adjust refrigerant charging speed as 2.2 lb/minute.

- The operation is automatically started, 7 segment display will be changed as shown in right(up) and "Test operation" and "Under centralized control" are displayed in the remote controller.
- Low pressure indication may display on 7 segment display (as shown in right(down)), however, operation can be carried out continuously.

Test operation •  
Under centralized control  
7 segment display

**E 0 1** → **E 0 5**  
When start    When finish

Example    7 Segment display

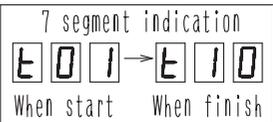
0.17 MPa ⇒ **0 1 7**

- ⑤ After charging the specified quantity of refrigerant, close refrigerant cylinder valve, push confirmation button(BS3).
  - The operation will be stopped. The operation is automatically stopped within 30 minutes. If charging is not completed, set and perform the additional refrigerant charging operation again.
  - If the additional refrigerant charging operation is stopped soon, the refrigerant may be overcharged. Stop additional charging and make sure to confirm charged amount again.

Check operation method

! Make sure to open the gas side and liquid side stop valve before starting operation.

- The items below are automatically checked by check operation.
  - ◆ Check of wrong wiring ◆ Check of stop valve closing ◆ Check of refrigerant overcharge ◆ Detection of piping length.
- For multi system, make sure to confirm setting and result indication by master unit.
- Make sure to carry out the check operation after the first installation. Otherwise, the malfunction code "U3" will be displayed in the remote controller and normal operation can not be carried.
- The check operation is automatically carried out in a cooling mode, the 7 segment will be indicated as shown in right, and "Test operation" and "Under centralized control" will be displayed in the remote controller.
- During the check operation, it is impossible to stop the unit from the remote controller. When discontinue the operation, push confirmation button(BS3). The system will stop after behind operation for 30 seconds.
- It may takes 5 minutes to bring the state of refrigerant uniform before the compressor starts. Moreover, during the check operation, the refrigerant running sound, or the magnetic sound of a solenoid valve may become loud during operation, but these are not malfunctions.
- The abnormality of each indoor unit cannot be checked. After the check operation is finished, check the indoor units individually by normal operation using the remote controller.



【Operation procedure】

- ① To protect the compressor, make sure to turn on the power supply for 6 hours before starting operation.  
(After turning on the power supply, the unit can not start the operation until 7 segment goes off. (Maximum 12 minutes))
- ② In the state of unit stopped, set to Normal mode.
- ③ Push operation button (BS2) for 5 second or more. (Then the unit will start the check operation)
- ④ Close the front panel. (Otherwise, it may cause a wrong judgment.)
- ⑤ When the checks are completed (unit run for 30~40 min.), the system will stop automatically.  
Check the operation results by the outdoor unit 7 segment display. (see the table shown below)

Result	7 Segment display
Normally finished	Light off
Abnormally finished	Malfunction code

! Push new page button (BS1) in case taking a wrong operation, then follow procedure since ② again.

【Measure when abnormally finished】

- ① Confirm the malfunction code by the remote controller and 7 segment display, and correct the abnormality. (For how to correct abnormality and correction method, see the installation manual, operation manual and service manual.)
- ② After correcting the abnormality, push confirmation button (BS3) and reset the malfunction code.
- ③ Carry out the check operation again and confirm that the abnormality is properly corrected.

### Service mode operation method

- After turning on the power supply, the unit can not start until the 7 segment indication goes off for maximum 12 minutes.
- Do not turn off the power and do not reset the [Setting mode] when evacuating or recovering the refrigerant. (The expansion valves will close and the system can not be evacuated or recovered the refrigerant.)

[Evacuation method] (At the first installation this evacuation is not required, It is only required for service.)

- ① When the unit is in the state of unit stopped and under the [Setting mode], set the © refrigerant recovery/evacuation mode. (※)
- ② Evacuate the system with a vacuum pump.
- ③ Push confirmation button (BS3) after finish evacuation and reset the evacuation mode.
- ④ Push new page button (BS1) and reset [Setting mode].

[Refrigerant recovery operation method] (Make sure to use a refrigerant reclaimer)

- ① In the state of unit stopped and under the [Setting mode], set the © refrigerant recovery/evacuation mode. (※)
- ② Recover the refrigerant by a refrigerant reclaimer. (For details, see the manual attached in refrigerant reclaimer.)
- ③ After completed, push confirmation button (BS3) and reset the refrigerant recovery mode.
- ④ Push new page button (BS1) and reset [Setting mode].

(※) The expansion valves in the indoor and outdoor units will be opened completely, 7 segment display will be changed as shown in below and "Test operation" and "Under centralized control" will be displayed in the remote controller. The operation will be rejected.

7 Segment display 

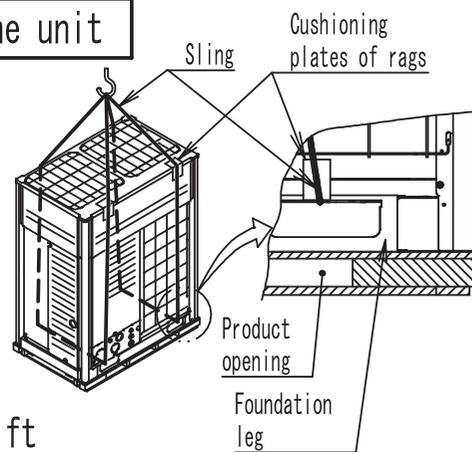
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# R410A

## For those who install or move the unit

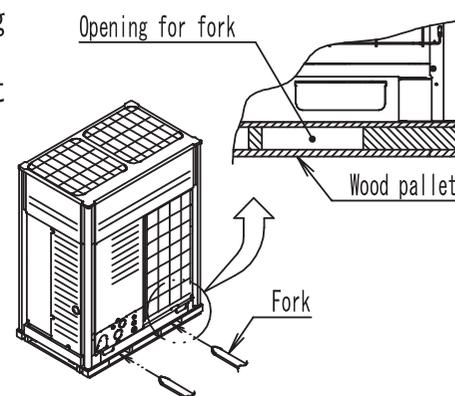
### 1. When lifting the unit

- To hang the unit, use 2 slings of at least 27 ft. long. Put the belt slings into the product openings of foundation legs.
- Put cushioning plates of rags where the slings contact the casing in order to prevent the casing from being damaged.



### 2. When carrying the unit by forklift

- If a forklift is used for carrying the unit, put the fork into wood pallet openings by let the tip out of the opposite side sufficiently.



### 3. Electrical work

- To prevent electric shock and fire accident, be sure to perform grounding and install an earth leak breaker.
- Electrical work must be carried out by a licensed electrician in accordance with local and national regulations.
- Confirm the insulation of main power supply circuit before opening the stop valve. If stop valve remains open without turn on the power supply, insulation resistance may decline due to refrigerant accumulating in compressor.

### For those who carry out service and maintenance

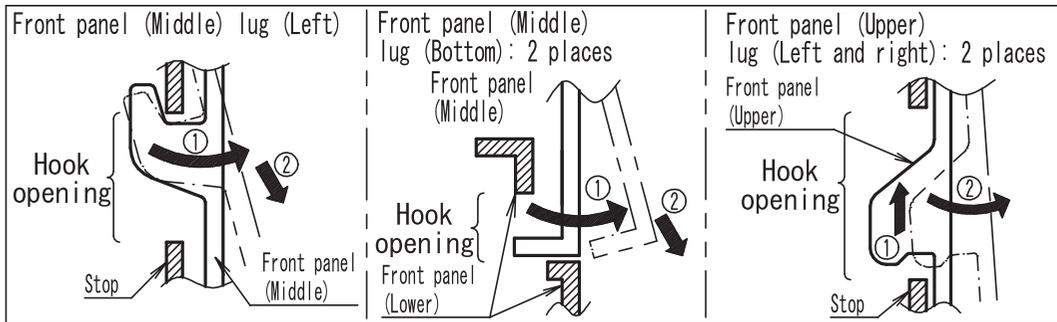
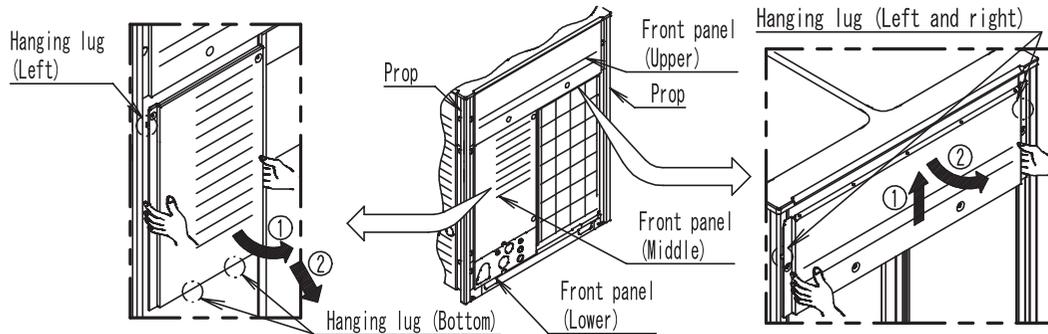
 <b>WARNING</b>	<ul style="list-style-type: none"> <li>• Beware of the fan rotating while inspection.</li> </ul>
 <b>Caution for electric shock</b>	<ul style="list-style-type: none"> <li>• Do not touch the energized parts while inspection.</li> </ul>

<Front panel (Middle) removing method>

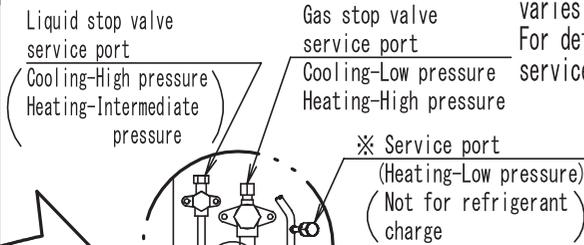
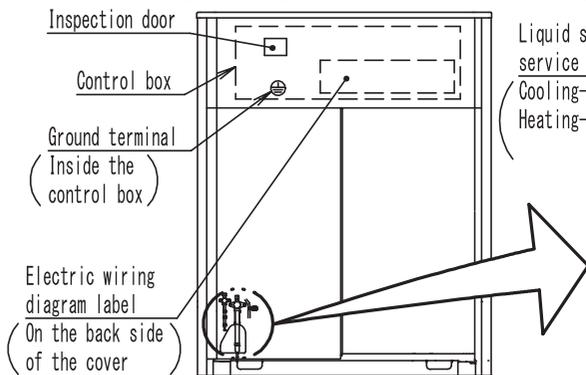
- Pull the front panel (middle) forward to take a hanging lug (bottom) off (①). Remove the panel downward (②).

<Front panel (Upper) removing method>

- Lift up the panel a little and take a hanging lug off (①). Remove the panel forward (②).



• For the location of the control box and the service parts, see below.



※ This service port varies by each models. For details refer to service manual.

## 21. Caution for Refrigerant Leaks

### 21.1 Introduction

Points to note in connection with refrigerant leaks

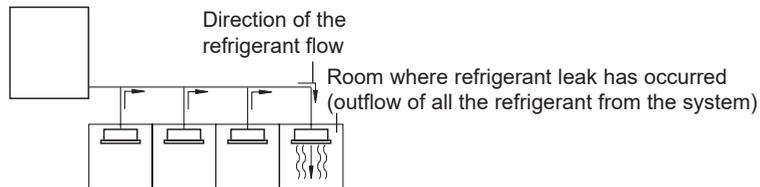
**The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.**

The **VRV** System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that the maximum concentration level of refrigerant gas is not exceeded, in the unlikely event of major leak in the system and this in accordance to the local applicable regulations and standards.

#### Maximum concentration level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is  $\text{lb./1000 ft.}^3$  (the weight in lbs. of the refrigerant gas in  $1 \text{ ft.}^3$  volume of the occupied space). Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.



**Pay special attention to places, such as basements, etc. where refrigerant can stay, since refrigerant is heavier than air.**

## 21.2 Procedure for Checking Maximum Concentration

Check the maximum concentration level in accordance with steps 1 to 4 below and take whatever action is necessary to comply.

**Step 1: Calculate the amount of refrigerant (lbs.) charged to each system separately.**

$$\begin{array}{l}
 \text{Amount of refrigerant in a single unit} \\
 \text{system (amount of refrigerant with} \\
 \text{which the system is charged before} \\
 \text{leaving the factory)}
 \end{array}
 +
 \begin{array}{l}
 \text{Additional charging amount (amount} \\
 \text{of refrigerant added locally in} \\
 \text{accordance with the length or diameter} \\
 \text{of the refrigerant piping)}
 \end{array}
 =
 \begin{array}{l}
 \text{Total amount of refrigerant (lbs.)} \\
 \text{in the system}
 \end{array}$$



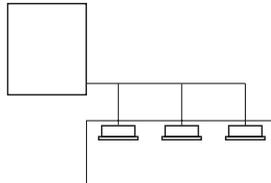
**Note:**

Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.

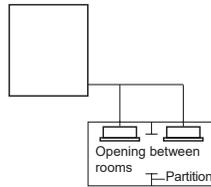
**Step 2: Calculate the smallest room volume (ft.<sup>3</sup>)**

In case like the following, calculate the volume of (a), (b) as a single room or as the smallest room.

(a) Where there are no smaller room divisions.

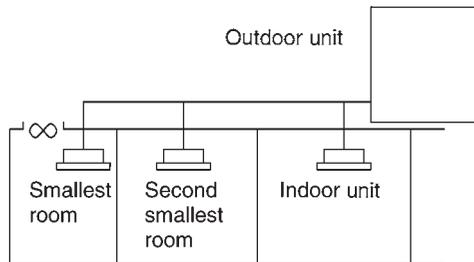


(b) Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



(Where there is an opening without a door or where there are openings above and below the door which are each equivalent in size to 0.15% or more of the floor area.)

(c) Where there is a gas leak detection alarm device linked to a mechanical ventilator in the smallest room then the next smallest room will become the measurement target.



**Step 3: Calculating the refrigerant density using the results of the calculations in steps 1 and 2 above.**

$$\frac{\text{Total volume of refrigerant in the refrigerant system}}{\text{Size (ft.}^3\text{) of the smallest room in which there is an indoor unit installed}} \leq \text{Maximum concentration level (lbs./ft.}^3\text{)}$$

If the result of the above calculation exceeds the maximum concentration level then make similar calculations for the second then third smallest room and so until the result falls short of the maximum concentration.

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**Step 4: Dealing with the situations where the result exceeds the maximum concentration level.**

Where the installation of a facility results in a concentration in excess of the maximum concentration level then it will be necessary to revise the system.

Please consult your Daikin supplier.

## 22. Safety Devices Setting

### 22.1 FXFQ-T

Model		FXFQ07TVJU	FXFQ09TVJU	FXFQ12TVJU	FXFQ15TVJU	FXFQ18TVJU
Printed circuit board fuse		250 V, 3.15 A				
Drain pump thermal fuse	°F (°C)	–	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–	–
Fan motor thermal fuse	°F (°C)	–	–	–	–	–

Model		FXFQ24TVJU	FXFQ30TVJU	FXFQ36TVJU	FXFQ48TVJU
Printed circuit board fuse		250 V, 3.15 A			
Drain pump thermal fuse	°F (°C)	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–
Fan motor thermal fuse	°F (°C)	–	–	–	–

C: 3D086932C

### 22.2 FXZQ-TA

Model		FXZQ05TAVJU	FXZQ07TAVJU	FXZQ09TAVJU	FXZQ12TAVJU	FXZQ15TAVJU	FXZQ18TAVJU
Printed circuit board fuse		250 V, 3.15 A					
Fan motor thermal fuse	°F (°C)	–	–	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–	–	–
Drain pump fuse	°F (°C)	–	–	–	–	–	–

C: 4D110603

### 22.3 FXUQ-P

Model		FXUQ18PVJU	FXUQ24PVJU	FXUQ30PVJU	FXUQ36PVJU
Printed circuit board fuse		250 V, 3.15 A			
Drain pump thermal fuse	°F (°C)	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–
Fan motor thermal fuse	°F (°C)	–	–	–	–

C: 3D090213

### 22.4 FXEQ-P

Model		FXEQ07PVJU	FXEQ09PVJU	FXEQ12PVJU	FXEQ15PVJU	FXEQ18PVJU	FXEQ24PVJU
Printed circuit board fuse	A1P	250 V, 3.15 A					
Fan motor thermal protector	°F (°C)	OFF: 223±9 (106±5) ON: 205±27 (96±15)					

C: 4D098709

## 22.5 FXDQ-M

Model		FXDQ07MVJU	FXDQ09MVJU	FXDQ12MVJU	FXDQ18MVJU	FXDQ24MVJU
Printed circuit board fuse	A1P	250 V, 5 A				
Fan motor thermal protector	°F	OFF: 266±9 ON: 181±27				

C: 3D051758

## 22.6 FXSQ-TA

Model		FXSQ05TAVJU	FXSQ07TAVJU	FXSQ09TAVJU	FXSQ12TAVJU	FXSQ15TAVJU
Printed circuit board fuse		250 V, 3.15 A				
Printed circuit board fuse (Fan driver)		250 V, 6.3 A				
Drain pump thermal fuse	°F (°C)	—	—	—	—	—

Model		FXSQ18TAVJU	FXSQ24TAVJU	FXSQ30TAVJU	FXSQ36TAVJU	FXSQ48TAVJU	FXSQ54TAVJU
Printed circuit board fuse		250 V, 3.15 A					
Printed circuit board fuse (Fan driver)		250 V, 6.3 A					
Drain pump thermal fuse	°F (°C)	—	—	—	—	—	—

3D112398

## 22.7 FXMQ-PB

Model		FXMQ07PBVJU	FXMQ09PBVJU	FXMQ12PBVJU	FXMQ15PBVJU	FXMQ18PBVJU
Printed circuit board fuse		250 V, 3.15 A				
Printed circuit board fuse (Fan driver)		250 V, 5 A	250 V, 5 A	250 V, 5 A	250 V, 6.3 A	250 V, 6.3 A
Drain pump thermal fuse	°F (°C)	293 (145)	293 (145)	293 (145)	293 (145)	293 (145)

Model		FXMQ24PBVJU	FXMQ30PBVJU	FXMQ36PBVJU	FXMQ48PBVJU	FXMQ54PBVJU
Printed circuit board fuse		250 V, 3.15 A				
Printed circuit board fuse (Fan driver)		250 V, 6.3 A				
Drain pump thermal fuse	°F (°C)	293 (145)	293 (145)	293 (145)	293 (145)	293 (145)

C: 3D086916B

## 22.8 FXMQ-M

Model		FXMQ72MVJU	FXMQ96MVJU
Printed circuit board fuse		250 V, 5 A	250 V, 5 A
Fan motor thermal fuse	°F	—	—
Fan motor thermal protector	°F	OFF: 275±14 (ON: 189±27)	OFF: 275±14 (ON: 189±27)

## 22.9 FXHQ-M

Model		FXHQ12MVJU	FXHQ24MVJU	FXHQ36MVJU
Printed circuit board fuse		250 V, 5 A	250 V, 5 A	250 V, 5 A
Fan motor thermal fuse	°F	–	–	–
Fan motor thermal protector	°F	OFF: 266±9 ON: 176±36	OFF: 266±9 ON: 176±36	OFF: 266±9 ON: 176±36

C: 3D049334A

## 22.10 FXAQ-P

Model		FXAQ07PVJU	FXAQ09PVJU	FXAQ12PVJU	FXAQ18PVJU	FXAQ24PVJU
Printed circuit board fuse		250 V, 3.15 A				
Fan motor thermal fuse	°F	–	–	–	–	–
Fan motor thermal protector	°F	–	–	–	–	–

C: 4D047085D

## 22.11 FXLQ-M, FXNQ-M

Model		FXLQ07MVJU FXNQ07MVJU	FXLQ09MVJU FXNQ09MVJU	FXLQ12MVJU FXNQ12MVJU	FXLQ18MVJU FXNQ18MVJU	FXLQ24MVJU FXNQ24MVJU
Printed circuit board fuse		250 V, 5 A				
Fan motor thermal protector	°F (°C)	OFF: 275±18 (135±10) ON: 248 (120) or less				

C: 3D045646B

## 22.12 FXTQ-TA

Model	FXTQ09TAVJUA	FXTQ12TAVJUA	FXTQ18TAVJUA	FXTQ24TAVJUA	FXTQ30TAVJUA
<b>Model (with factory disconnect)</b>	<b>FXTQ09TAVJUD</b>	<b>FXTQ12TAVJUD</b>	<b>FXTQ18TAVJUD</b>	<b>FXTQ24TAVJUD</b>	<b>FXTQ30TAVJUD</b>
Printed circuit board fuse (F1U)	32 V, 3 A	32 V, 3 A	32 V, 3 A	32 V, 3 A	32 V, 3 A
Printed circuit board fuse (F2U)	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Others	Blower motor, Fan driver overload protector				

Model	FXTQ36TAVJUA	FXTQ42TAVJUA	FXTQ48TAVJUA	FXTQ54TAVJUA	FXTQ60TAVJUA
<b>Model (with factory disconnect)</b>	<b>FXTQ36TAVJUD</b>	<b>FXTQ42TAVJUD</b>	<b>FXTQ48TAVJUD</b>	<b>FXTQ54TAVJUD</b>	<b>FXTQ60TAVJUD</b>
Printed circuit board fuse (F1U)	32 V, 3 A	32 V, 3 A	32 V, 3 A	32 V, 3 A	32 V, 3 A
Printed circuit board fuse (F2U)	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Others	Blower motor, Fan driver overload protector				

## 22.13 CXTQ-TA

Model	CXTQ24TASBLU	CXTQ36TASBLU	CXTQ48TASBLU	CXTQ60TASBLU
Printed circuit board fuse (F1U)	32 V, 3 A			
Printed circuit board fuse (F2U)	250 V, 3.15 A			

# Appendix

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1.2 Publication List of Engineering Data for <b>VRV</b> Products .....	67

## 1. Introduction

### 1.1 ED Book List

**Design Manual** ..... RXYQ-XAYCA ..... **EDUS341928-D**  
(This booklet)

### Capacity Table Book

Heat Pump ..... RXYQ-XAYCA ..... **EDUS341928-C**

### Installation

Heat Pump, Heat Recovery..... RXYQ  
REYQ ..... **EDUS371848-N**

### Indoor Units

Ceiling Mounted Cassette Type (Round Flow with Sensing) ..... FXFQ-T ..... **EDUS391400A-F14**

VISTA™ 2 × 2 Cassette Unit ..... FXZQ-TA ..... **EDUS391776-F9**

4-Way Blow Ceiling-Suspended Type ..... FXUQ-P ..... **EDUS391437-F15**

One Way Blow Cassette Type ..... FXEQ-P ..... **EDUS391533-F16**

Slim Ceiling Mounted Duct Type ..... FXDQ-M ..... **EDUS39-600-F2**

MSP Concealed Duct Unit ..... FXSQ-TA ..... **EDUS391777-F17**

Ceiling Mounted Duct Type ..... FXMQ-PB ..... **EDUS391503A-F4**

Ceiling Mounted Duct Type ..... FXMQ-M ..... **EDUS39-900A-F11**

Ceiling Suspended Type ..... FXHQ-M ..... **EDUS39-600-F5**

Wall Mounted Type ..... FXAQ-P ..... **EDUS391100-F6**

Floor Standing Type / Concealed Floor Standing Type..... FXLQ-M  
FXNQ-M ..... **EDUS391502-F7**

Air Handling Unit..... FXTQ-TA .... **Engineering Data FXTQ-TA**

Cased Coil Unit ..... CXTQ-TA .... **Engineering Data CXTQ-TA**

### Air Treatment Equipment

Outdoor Air Processing Unit ..... FXMQ-MF ..... **EDUS39-900A-F10**

Energy Recovery Ventilator..... VAM-G ..... **EDUS711116A**

**Controls**.....(coming soon)

### Remote Controller

Navigation Remote Controller..... BRC1E73 ..... **EDUS721438**

## 1.2 Publication List of Engineering Data for VRV Products

Shaded sections indicate Engineering Data Book/s published for this series.

Timing of publication is subject to change without notice.

### Outdoor Unit

Refrigerant	Category	Product series	Type	Volts	Model name	Area	Book category	Book No.	Published in
R410A	Air cooled	<b>VRV IV-X</b>	H/R	208/230 V 460 V 575 V	REYQ-XATJA, XAYDA, XAYCA	USA Canada	Design manual	EDUS371848A-D	Jan.2020
							Capacity table	EDUS371848A-C	
			H/P	208/230 V 460 V	RXYQ-XATJA, XAYDA	USA Canada	Design manual	EDUS341923-D	Nov.2019
							Capacity table	EDUS341923-C	
		575 V	RXYQ-XAYCA	Canada	Design manual	EDUS341928-D			
					Capacity table	EDUS341928-C			
		<b>VRV IV</b>	H/R	208/230 V 460 V	REYQ-TATJA, TAYDA	USA Canada	Design manual	EDUS371704C-D	Feb.2020
							Capacity table	EDUS371704C-C	
			575 V	REYQ-TAYCA	Canada	Design manual	EDUS371706C-D		
						Capacity table	EDUS371706C-C		
		H/P	208/230 V 460 V	RXYQ-TATJA, TAYDA	USA Canada	Design manual	EDUS341703B-D	Jan.2020	
						Capacity table	EDUS341703B-C		
		575 V	RXYQ-TAYCA	Canada	Design manual	EDUS341824A-D			
					Capacity table	EDUS341824A-C			
	<b>VRV Aurora</b>	H/R	208/230 V 460 V 575 V	RELQ-TATJA, TAYDA, TAYCA	USA Canada	Design manual	EDUS371705C-D	Feb.2020	
						Capacity table	EDUS371705C-C		
H/P	208/230 V 460 V 575 V	RXLQ-TATJA, TAYDA, TAYCA	USA Canada	Design manual	EDUS341819A-D	Jan.2020			
				Capacity table	EDUS341819A-C				
<b>VRV IV-S</b>	H/P	208/230 V	RXTQ36TAVJ9A RXTQ48/60TAVJUA	USA Canada	Design manual	EDUS331608C-D	Feb.2020		
					Capacity table	EDUS331608C-C			
Installation for all <b>VRV</b> air cooled type							Installation	EDUS371848-N	Aug.2019
Water cooled	<b>VRV-W</b>	H/P H/R	208/230 V 460 V 575 V	RWEQ-TATJU, TAYDU, TAYCU RWEQ-TATJA, TAYDA	USA Canada	Design manual	EDUS301864A-D	Jan.2020	
						Capacity table	EDUS301864A-C		
Installation for all <b>VRV</b> water cooled type							Installation	EDUS301864-N	Aug.2019

**Note:**

C/O: Cooling only, H/P: Heat pump, H/R: Heat recovery

## Indoor Unit and Other Products

Refrigerant	Product category	Product type	Model name	Area	Book No.	Published in
R410A	VRV Indoor units	Ceiling Mounted Cassette Type (Round Flow with Sensing)	FXFQ07-48TVJU	USA	EDUS391400A-F14	May 2018
		VISTA™ 2 x 2 Cassette Unit	FXZQ05-18TAVJU	USA	EDUS391776-F9	Mar.2018
		4-Way Blow Ceiling- Suspended Type	FXUQ18-36PVJU	USA	EDUS391437-F15	May 2015
		One Way Blow Cassette Type	FXEQ07-24PVJU	USA	EDUS391533-F16	Oct.2015
		Slim Ceiling Mounted Duct Type	FXDQ07-24MVJU	USA	EDUS39-600-F2	Sep.2006
		MSP Concealed Ducted Unit	FXSQ05-54TAVJU	USA	EDUS391777-F17	Mar.2018
		Ceiling Mounted Duct Type (Middle and High Static Pressure)	FXMQ07-54PBVJU	USA	EDUS391503A-F4	May 2018
		Ceiling Mounted Duct Type	FXMQ72/96MVJU	USA	EDUS39-900A-F11	May 2010
		Ceiling Suspended Type	FXHQ12-36MVJU	USA	EDUS39-600-F5	Sep.2006
		Wall Mounted Type	FXAQ07-24PVJU	USA	EDUS391100-F6	Jan.2012
		Floor Standing Type Concealed Floor Standing Type	FXLQ07-24MVJU FXNQ07-24MVJU	USA	EDUS391502-F7	Jul.2015
		Air Handling Unit	FXTQ09-60TAVJUA FXTQ09-60TAVJUD	USA	Engineering Data FXTQ-TA	Sep.2016
		Cased Coil Unit	CXTQ24-60TASBLU	USA	Engineering Data CXTQ-TA	—
		Outdoor Air Processing Unit	FXMQ48-96MFVJU	USA	EDUS39-900A-F10	May 2010
		Single Branch Selector Unit	BSQ36-96TVJ	USA	EDUS391434-B	Aug.2015
		Multi Branch Selector Unit	BS4-12Q54TVJ	USA	EDUS391434-B	Aug.2015
	Controls and networks	Remote controllers Control devices Adaptors	BRC1E71, BRC4C/7C/7E, BRC2A71 DCS302C71, DCS301C71, DST301BA61, DCS601C71 KRP1C74/75	USA	EDUS721909-T	Coming soon
		Navigation remote controller	BRC1E73	USA	EDUS721438	Apr.2015
		intelligent Touch Manager	DCM601A71, DCM601A72	USA	EDUS721212	Oct.2012
		intelligent Touch Controller	DCS601C71	USA	EDUS72-608	Dec.2006
Interface for use in BACnet®		DMS502B71	USA	EDUS72-749	Oct.2007	
Option for all type			For indoor and outdoor units	USA	OHUS07-1	Nov.2007
Energy Recovery Ventilator (VAM)			VAM300-1200GVJU	USA	EDUS711116A	Jun.2017





- Warning**  ● Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
  - Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

### **Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

**VRV** is a trade mark of Daikin Industries, Ltd.

**VRV** Air Conditioning System is the world's first individual air conditioning system with variable refrigerant flow control and was commercialised by Daikin in 1982.

**VRV** is the trade mark of Daikin Industries, Ltd., which is derived from the technology we call "variable refrigerant volume."