DAIKIN

EDUS341824-D
201806

Engineering Data

RXYQ-TAYCU, 575 V

Heat Pump 60 Hz

R-410A

VRV IV

RXYQ-TAYCU (575 V, 60 Hz)

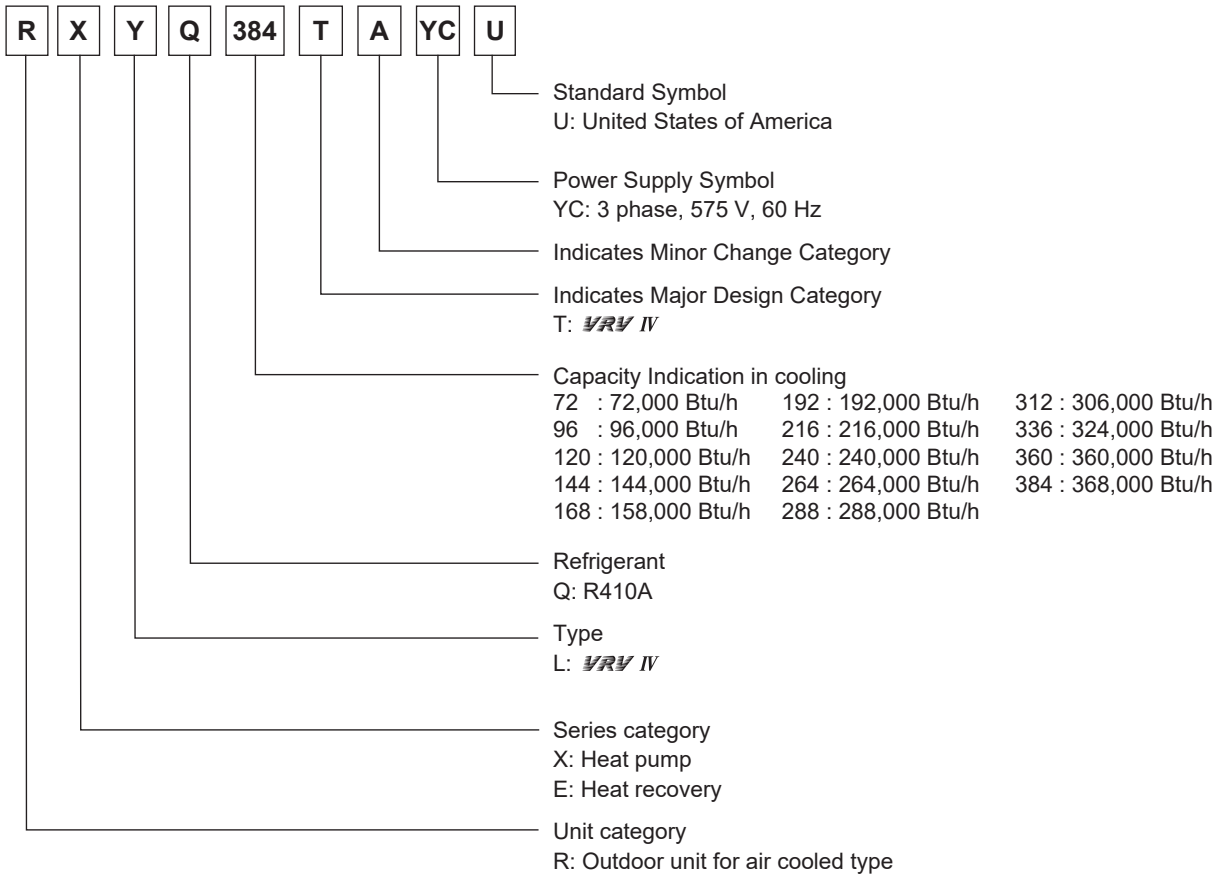
1. Features and Benefits

- 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°F (-25°C) as standard
- Efficient and stable inverter board operation, independent of ambient conditions
- Refrigerant cooled inverter technology allows installation without additional drain pan heater
- Added peace of mind with ability of Auto changeover to back up (auxiliary) heat
- Variable Refrigerant Temperature (VRT) Technology delivers year round comfort and efficiencies
- Designed and optimized for Total Cost of Construction (TCC) and reduced Life Cycle Cost (LCC)
- Long pipe lengths with up to 295 ft. allowable height difference between outdoor and indoor units, allowing for design flexibility
- Corrosion resistant, 1000 hours salt spray tested Daikin's PE Blue fin Heat Exchanger
- Ships factory standard with Coil Guards
- Seamless connection to all *VRV* M, P and T series indoor unit
- Best in class 10-year limited warranty* as standard

* Complete warranty details available from local distributor or manufacturer's representative or at www.daikincomfort.com

2. Nomenclature

Outdoor Unit



Indoor Unit

Standard symbol
U: United States of America

Power supply symbol
VJ: 1 phase, 208/230 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

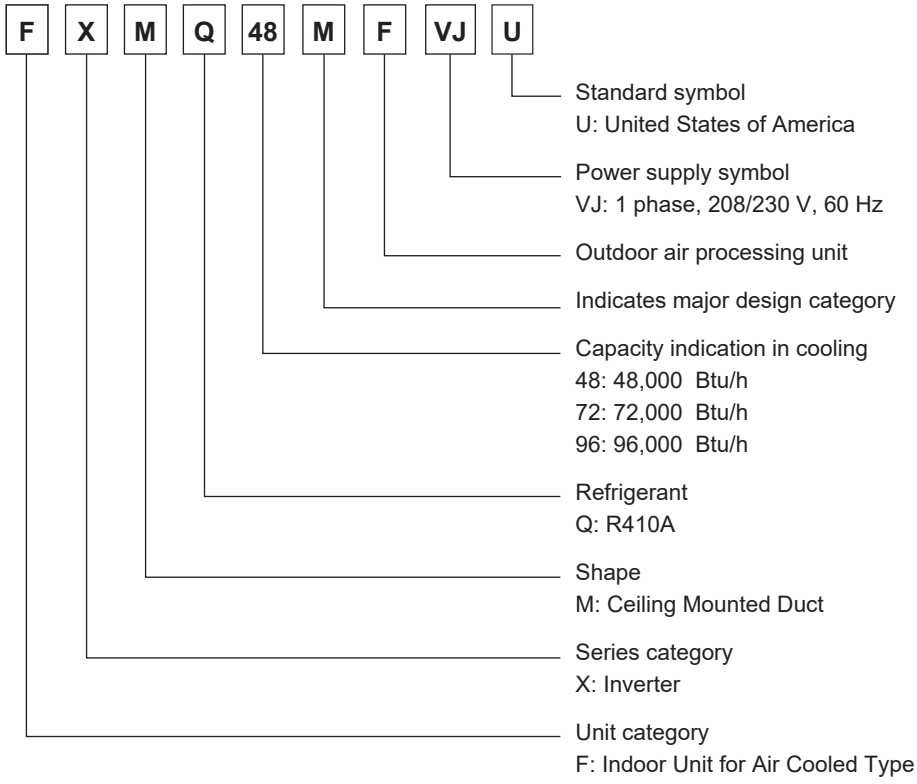
Shape
F: Ceiling Mounted Cassette (Round Flow with Sensing)
Z: VISTA™ 2 × 2 Cassette Unit
U: 4-Way Blow Ceiling-Suspended
E: One Way Blow Cassette
D: Slim Ceiling Mounted Duct
S: MSP Concealed Ducted Unit
M: Ceiling Mounted Duct
H: Ceiling Suspended
A: Wall Mounted
L: Floor Standing
N: Concealed Floor Standing
T: Air Handling Unit

Series category
X: Inverter

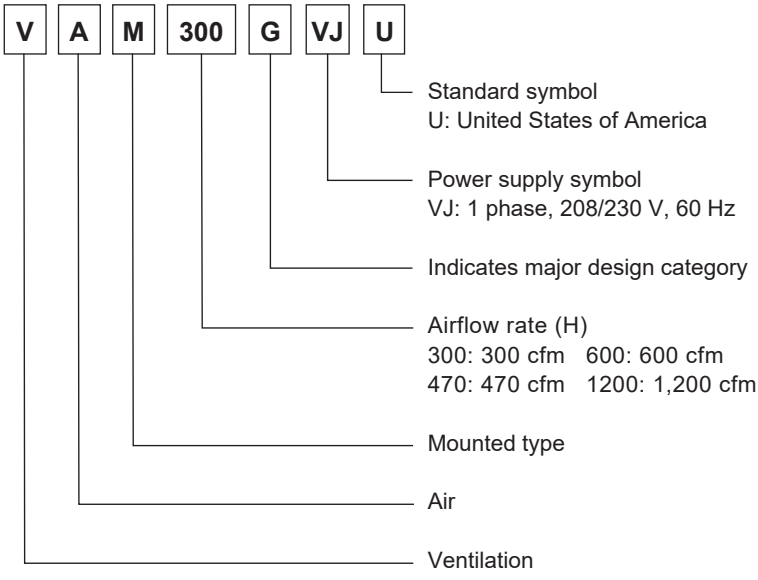
Unit category
F: Indoor Unit for Air Cooled Type

Air Treatment Equipment

Outdoor Air Processing Unit



Energy Recovery Ventilator (VAM series)



3. Model Names of Indoor Unit and Outdoor Unit

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-	72TA	96TA	120TA	144TA	168TA	192TA	216TA	YCU

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-	240TA	264TA	288TA	312TA	336TA	360TA	384TA	YCU

YC : 3 phase, 575 V, 60 Hz

U(YCU): Standard Symbol

Heat Pump 575 V

Model name	RXYQ72TAYCU	RXYQ96TAYCU	RXYQ120TAYCU	RXYQ144TAYCU	RXYQ168TAYCU
Outdoor unit 1	RXYQ72TAYCU	RXYQ96TAYCU	RXYQ120TAYCU	RXYQ144TAYCU	RXYQ168TAYCU

Model name	RXYQ192TAYCU	RXYQ216TAYCU	RXYQ240TAYCU	RXYQ264TAYCU
Outdoor unit 1	RXYQ96TAYCU	RXYQ96TAYCU	RXYQ120TAYCU	RXYQ120TAYCU
Outdoor unit 2	RXYQ96TAYCU	RXYQ120TAYCU	RXYQ120TAYCU	RXYQ144TAYCU

Model name	RXYQ288TAYCU	RXYQ312TAYCU	RXYQ336TAYCU
Outdoor unit 1	RXYQ144TAYCU	RXYQ144TAYCU	RXYQ168TAYCU
Outdoor unit 2	RXYQ144TAYCU	RXYQ168TAYCU	RXYQ168TAYCU

Model name	RXYQ360TAYCU	RXYQ384TAYCU
Outdoor unit 1	RXYQ120TAYCU	RXYQ120TAYCU
Outdoor unit 2	RXYQ120TAYCU	RXYQ120TAYCU
Outdoor unit 3	RXYQ120TAYCU	RXYQ144TAYCU

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	96	
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

VJ : 1 phase, 208/230 V, 60 Hz

U(VJU): Standard Symbol

3.3 Air Treatment Equipment

Outdoor Air Processing Unit

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

VJ : 1 phase, 208/230 V, 60 Hz
U(VJU): Standard Symbol

Energy Recovery Ventilator (VAM series)

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

VJ : 1 phase, 208/230 V, 60 Hz
U(VJU): Standard Symbol

4. External Appearance

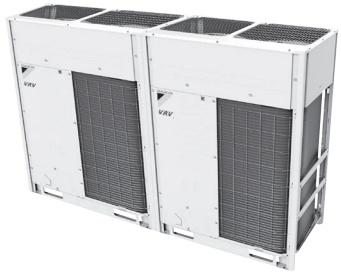
4.1 Outdoor Units

Single Outdoor Units

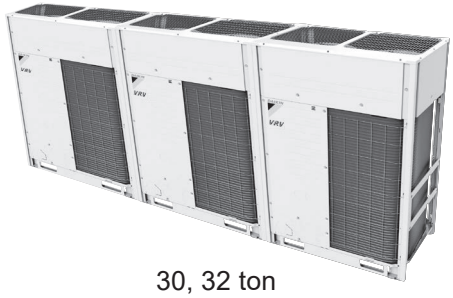
RXYQ72TAYCU RXYQ96TAYCU RXYQ120TAYCU RXYQ144TAYCU RXYQ168TAYCU

6, 8, 10, 12, 14 ton

Double Outdoor Units

RXYQ192TAYCU RXYQ216TAYCU RXYQ240TAYCU RXYQ264TAYCU	RXYQ288TAYCU RXYQ312TAYCU RXYQ336TAYCU
	
16, 18, 20, 22, 24, 26, 28 ton	

Triple Outdoor Units

RXYQ360TAYCU RXYQ384TAYCU

30, 32 ton

4.2 Indoor Units

Ceiling mounted cassette (Round flow with sensing) type

FXFQ-T

Shown with BYCQ125B-W1

Ceiling mounted duct type

FXMQ-M

VISTA™ 2 × 2 Cassette Unit

FXZQ-TA

Shown with BYFQ60C3W1W

Shown with BYFQ60C3W1S

Ceiling suspended type

FXHQ-M

4-way blow ceiling-suspended type

FXUQ-P

Wall mounted type

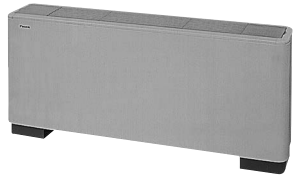
FXAQ-P

One way blow cassette type

FXEQ-P

Floor standing type

FXLQ-M

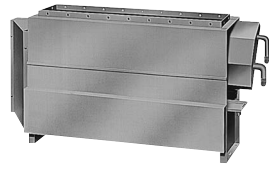


Slim ceiling mounted duct type

FXDQ-M

Concealed floor standing type

FXNQ-M



MSP Concealed Ducted Unit

FXSQ-TA

Air handling unit

FXTQ-TA

Ceiling mounted duct type (Middle and high static pressure)

FXMQ-PB

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	
RXYQ72TAYCU	6	7.5	21.1	1	●					—
RXYQ96TAYCU	8	10.0	28.1	1		●				
RXYQ120TAYCU	10	12.5	35.2	1			●			
RXYQ144TAYCU	12	15.0	42.2	1				●		
RXYQ168TAYCU	14	17.5	49.2	1					●	
RXYQ192TAYCU	16	20.0	56.3	2		●●				BHFP26P100U
RXYQ216TAYCU	18	22.5	63.3	2		●	●			
RXYQ240TAYCU	20	25.0	70.3	2			●●			
RXYQ264TAYCU	22	27.5	77.4	2			●	●		
RXYQ288TAYCU	24	30.0	84.4	2				●●		
RXYQ312TAYCU	26	32.5	91.4	2				●	●	
RXYQ336TAYCU	28	35.0	98.5	2					●●	
RXYQ360TAYCU	30	37.5	105.5	3			●●●			BHFP26P151U
RXYQ384TAYCU	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 equipments	
					FXMQ-MF	
		When using only FXDQ, FXMQ-PB, FXAQ, FXSQ07-54T	When using at least one FXFQ07/09, FXZQ05T FXSQ05T	Other indoor unit models	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%		

Notes:

*1. 70%: RXYQ72T type
*2. If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units. Field setting now exists to configure this situation. 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	RXYQ72TA	RXYQ72TA	—	51 to 93 (144)	12
	8	96	RXYQ96TA	RXYQ96TA		48 to 124 (192)	16
	10	120	RXYQ120TA	RXYQ120TA		60 to 156 (240)	20
	12	144	RXYQ144TA	RXYQ144TA		72 to 187 (288)	25
	14	168	RXYQ168TA	RXYQ168TA		84 to 218 (336)	29
Double outdoor units	16	192	RXYQ192TA	RXYQ96TA+ RXYQ96TA	BHFP22P100U	96 to 249 (307)	33
	18	216	RXYQ216TA	RXYQ96TA+ RXYQ120TA		108 to 280 (345)	37
	20	240	RXYQ240TA	RXYQ120TA+ RXYQ120TA		120 to 312 (384)	41
	22	264	RXYQ264TA	RXYQ120TA+ RXYQ144TA		132 to 343 (422)	45
	24	288	RXYQ288TA	RXYQ144TA+ RXYQ144TA		144 to 374 (460)	49
	26	312	RXYQ312TA	RXYQ144TA+ RXYQ168TA		156 to 405 (499)	54
	28	336	RXYQ336TA	RXYQ168TA+ RXYQ168TA		168 to 436 (537)	58
Triple outdoor units	30	360	RXYQ360TA	RXYQ120TA+ RXYQ120TA+ RXYQ120TA	BHFP26P151U	180 to 468 (468)	62
	32	384	RXYQ384TA	RXYQ120TA+ RXYQ120TA+ RXYQ144TA		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

7.1 RXYQ-TAYCU

Model name			RXYQ72TAYCU	RXYQ96TAYCU	RXYQ120TAYCU
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^3/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^3/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)	65	65	65
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		%	14.8-100	12.5-100	10.7-100
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
Drawing No.	Specification		C: 4D112550A	C: 4D112551A	C: 4D112552A
	Sound level		C: 4D107379A	C: 4D107380	C: 4D107381

Notes:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB)
Equivalent piping length: 25 ft. (7.6 m) for ducted indoor units, 50 ft. (15.5 m) (RXYQ72-96TA) / 75 ft. (23 m) (RXYQ120TA) for non-ducted indoor units, level difference: 0 ft. (0 m).

★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)
Equivalent piping length: 25 ft. (7.6 m) for ducted indoor units, 50 ft. (15.5 m) (RXYQ72-96TA) / 75 ft. (23 m) (RXYQ120TA) for non-ducted indoor units, level difference: 0 ft. (0 m).

Model name (Combination Unit)			RXYQ144TAYCU	RXYQ168TAYCU	RXYQ192TAYCU
Model name (Independent Unit)			—	—	RXYQ96TAYCU RXYQ96TAYCU
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)	144,000 (42.2)	158,000 (46.3)	192,000 (56.3)
	Rated		138,000 (40.4)	150,000 (44.0)	184,000 (53.9)
★2 Heating capacity	Nominal	Btu/h (kW)	162,000 (47.5)	188,000 (55.1)	216,000 (63.3)
	Rated		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^3/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^3/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)	66	66	68
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		%	13.7-100	12.1-100	6.3-100
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
Drawing No.	Specification		C: 4D112553A	C: 4D112554B	C: 4D112555A
	Sound level		C: 4D107382	C: 4D107383	—

Notes:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

Model name (Combination Unit)			RXYQ216TAYCU	RXYQ240TAYCU	RXYQ264TAYCU
Model name (Independent Unit)			RXYQ96TAYCU RXYQ120TAYCU	RXYQ120TAYCU RXYQ120TAYCU	RXYQ120TAYCU RXYQ144TAYCU
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)	216,000 (63.3)	240,000 (70.3)	264,000 (77.4)
	Rated		206,000 (60.4)	228,000 (66.8)	252,000 (73.9)
★2 Heating capacity	Nominal	Btu/h (kW)	243,000 (71.2)	270,000 (79.1)	297,000 (87.0)
	Rated		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^3/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^3/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)	68	68	69
Sound power level (Reference data)		dB	83	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		%	5.8-100	5.4-100	5.8-100
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
Drawing No.	Specification		C: 4D112556A	C: 4D112557A	C: 4D112558A
	Sound level		—	—	—

Notes:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

Model name (Combination Unit)			RXYQ288TAYCU	RXYQ312TAYCU	RXYQ336TAYCU
Model name (Independent Unit)			RXYQ144TAYCU RXYQ144TAYCU	RXYQ144TAYCU RXYQ168TAYCU	RXYQ168TAYCU RXYQ168TAYCU
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)	288,000 (84.4)	306,000 (89.7)	324,000 (95.0)
	Rated		274,000 (80.3)	292,000 (85.6)	308,000 (90.3)
★2 Heating capacity	Nominal	Btu/h (kW)	324,000 (95.0)	351,000 (102.9)	378,000 (110.8)
	Rated		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^3/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^3/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)	69	69	69
Sound power level (Reference data)		dB	90.5	91	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		%	6.9-100	6.4-100	6.0-100
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
Drawing No.	Specification		C: 4D112559A	C: 4D112560A	C: 4D112561A
	Sound level		—	—	—

Notes:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)
Equivalent piping length: 50 ft. (15.5 m) for ducted indoor units, 100 ft. (30.5 m) for non-ducted indoor units, level difference: 0 ft. (0 m).

Model name (Combination Unit)			RXYQ360TAYCU	RXYQ384TAYCU
Model name (Independent Unit)			RXYQ120TAYCU RXYQ120TAYCU RXYQ120TAYCU	RXYQ120TAYCU RXYQ120TAYCU RXYQ144TAYCU
Power supply			3 phase, 575 V, 60 Hz	3 phase, 575 V, 60 Hz
★1 Cooling capacity	Nominal	Btu/h (kW)	360,000 (105.5)	368,000 (107.9)
	Rated		342,000 (100.2)	352,000 (103.2)
★2 Heating capacity	Nominal	Btu/h (kW)	405,000 (118.7)	432,000 (126.6)
	Rated		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^3/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^3/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)	70	70.5
Sound power level (Reference data)		dB	85	89
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		%	3.6-100	3.8-100
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
Drawing No.	Specification		C: 4D112562B	C: 4D112563A
	Sound level		—	—

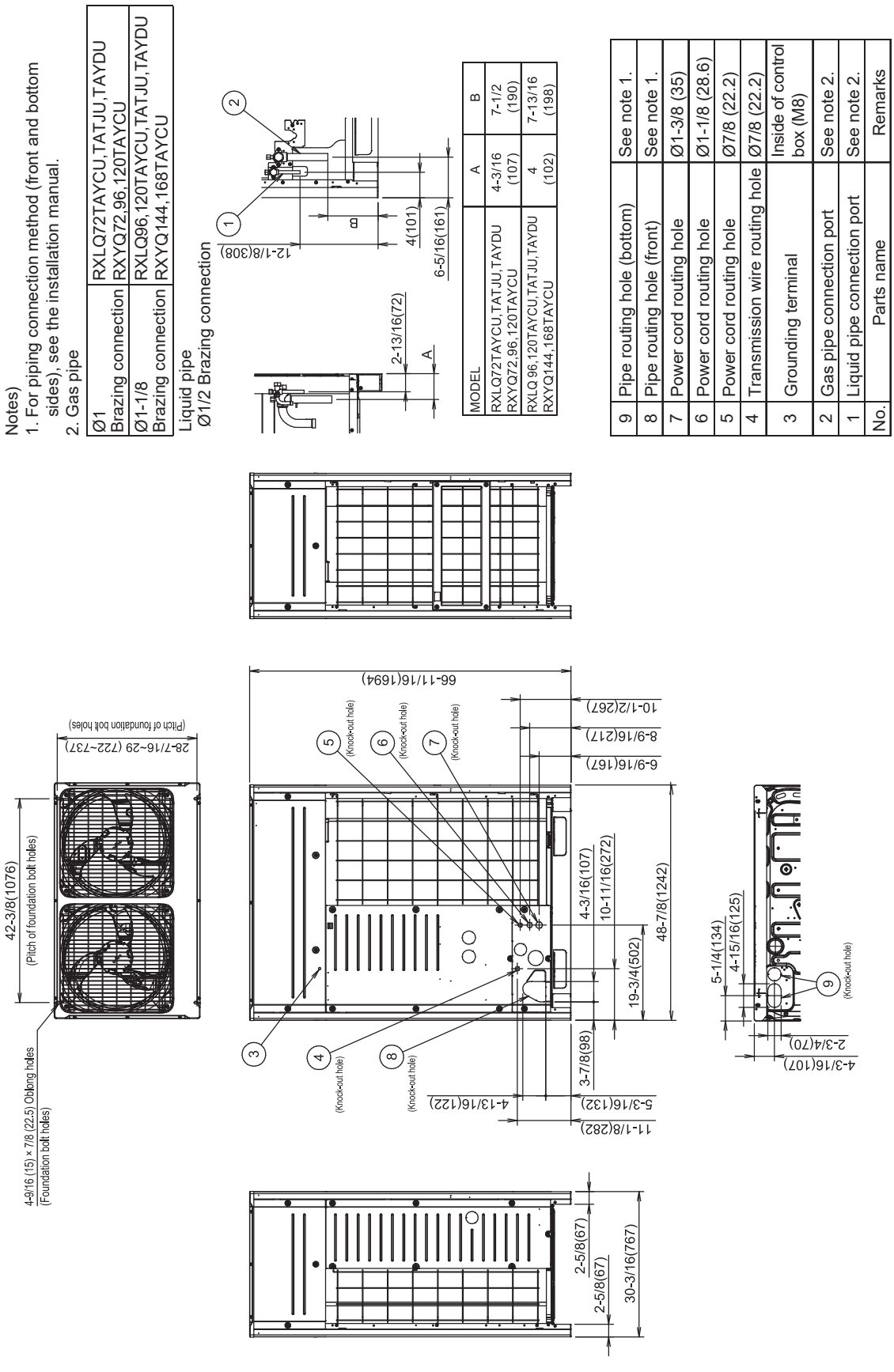
Notes:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB)
Equivalent piping length: 50 ft. (15.5 m) (RXYQ360TA) / 75 ft. (23 m) (RXYQ384TA) for ducted indoor units, 100 ft. (30.5 m) (RXYQ360TA) / 150 ft. (54.7 m) (RXYQ384TA) for non-ducted indoor units, level difference: 0 ft. (0 m).

★2. Indoor temp.: 70°FDB (21.1°CDB) / Outdoor temp.: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)
Equivalent piping length: 50 ft. (15.5 m) (RXYQ360TA) / 75 ft. (23 m) (RXYQ384TA) for ducted indoor units, 100 ft. (30.5 m) (RXYQ360TA) / 150 ft. (54.7 m) (RXYQ384TA) for non-ducted indoor units, level difference: 0 ft. (0 m).

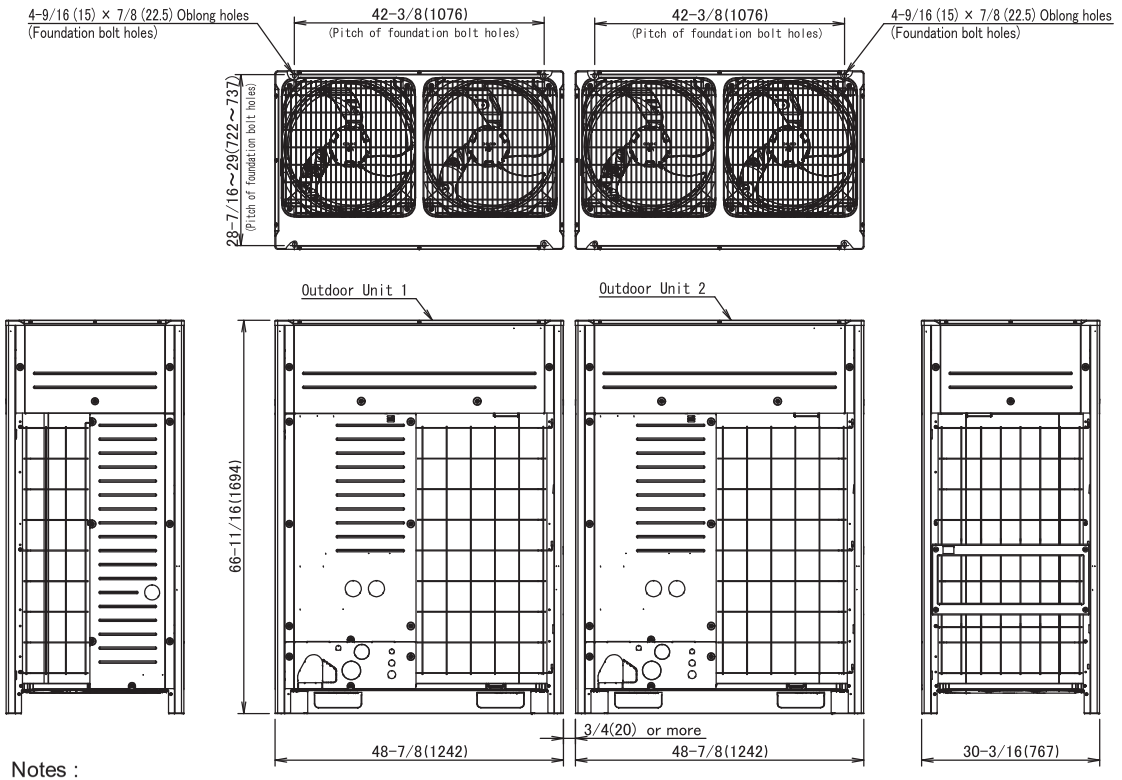
8. Dimensions

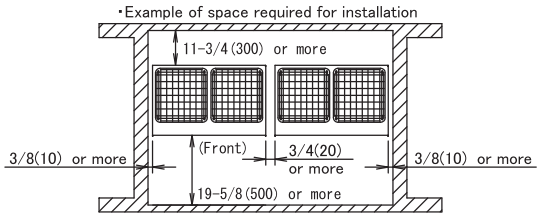
RXYQ72 - 120TAYCU

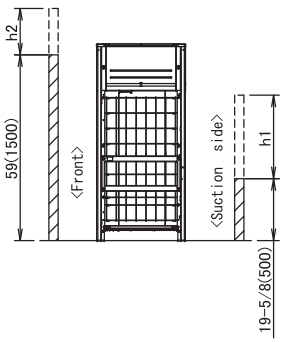


RXYQ144 - 336TAYCU

Unit : in. (mm)







Notes :

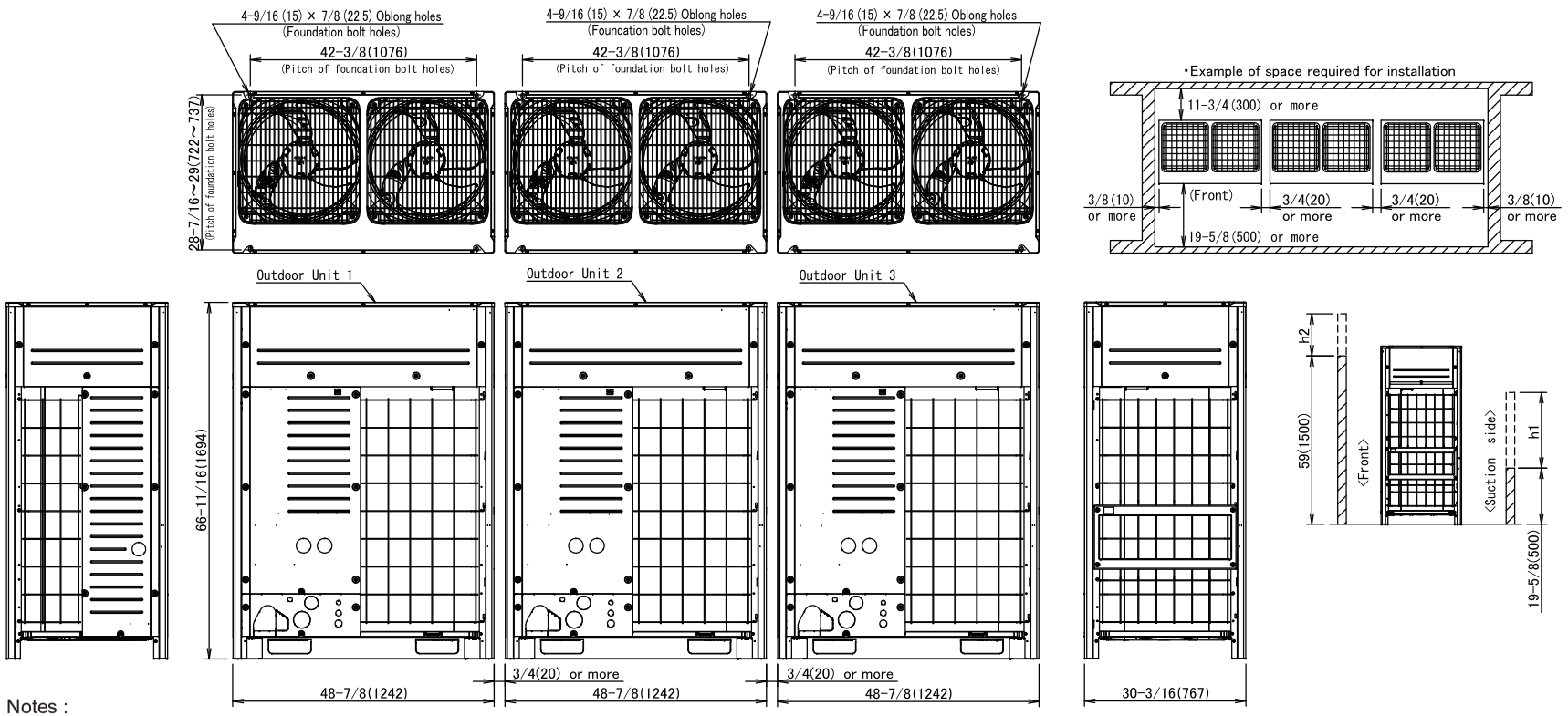
1. Heights of walls of this example;
   Front : 59 in. (1500 mm)
   Suction side : 19-5/8 in. (500 mm)
   Side : Height unrestricted
   The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).
   The installation space 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 h2/2 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.

Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.
RXLQ144TAYCU	RXLQ72TAYCU	3D112576	RXLQ72TAYCU	3D112576
RXLQ192TAYCU	RXLQ96TAYCU	3D112576	RXLQ96TAYCU	3D112576
RXLQ240TAYCU	RXLQ120TAYCU	3D112576	RXLQ120TAYCU	3D112576
RXYQ192TAYCU	RXYQ96TAYCU	3D112576	RXYQ96TAYCU	3D112576
RXYQ216TAYCU	RXYQ96TAYCU	3D112576	RXYQ120TAYCU	3D112576
RXYQ240TAYCU	RXYQ120TAYCU	3D112576	RXYQ120TAYCU	3D112576
RXYQ264TAYCU	RXYQ120TAYCU	3D112576	RXYQ144TAYCU	3D112576
RXYQ288TAYCU	RXYQ144TAYCU	3D112576	RXYQ144TAYCU	3D112576
RXYQ312TAYCU	RXYQ144TAYCU	3D112576	RXYQ168TAYCU	3D112576
RXYQ336TAYCU	RXYQ168TAYCU	3D112576	RXYQ168TAYCU	3D112576
RXLQ144TATJU	RXLQ72TATJU	3D112576	RXLQ72TATJU	3D112576
RXLQ192TATJU	RXLQ96TATJU	3D112576	RXLQ96TATJU	3D112576
RXLQ240TATJU	RXLQ120TATJU	3D112576	RXLQ120TATJU	3D112576
RXLQ144TAYDU	RXLQ72TAYDU	3D112576	RXLQ72TAYDU	3D112576
RXLQ192TAYDU	RXLQ96TAYDU	3D112576	RXLQ96TAYDU	3D112576
RXLQ240TAYDU	RXLQ120TAYDU	3D112576	RXLQ120TAYDU	3D112576

C: 3D112577A

RXYQ360 - 384TAYCU

Unit : in. (mm)



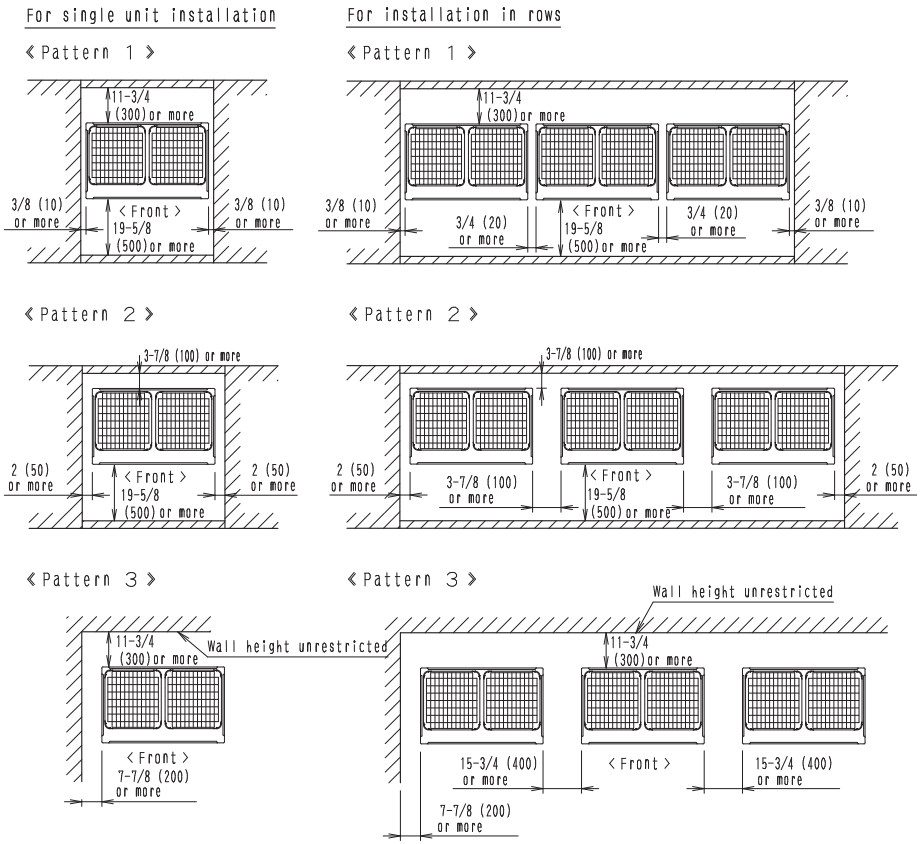
Notes :

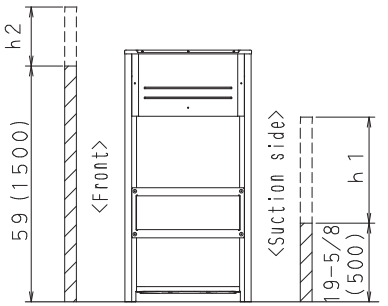
1. Heights of walls of this example;
   Front : 59 in. (1500 mm)
   Suction side : 19-5/8 in. (500 mm)
   Side : Height unrestricted
   The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).
   The installation space 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 h2/2 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.

Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Drawing No.	Outdoor Unit 3
RXYQ360TAYCU	RXYQ120TAYCU	3D112576	RXYQ120TAYCU	3D112576	RXYQ120TAYCU	3D112576
RXYQ384TAYCU	RXYQ120TAYCU	3D112576	RXYQ120TAYCU	3D112576	RXYQ144TAYCU	3D112576

C: 3D112578

Unit : in. (mm)





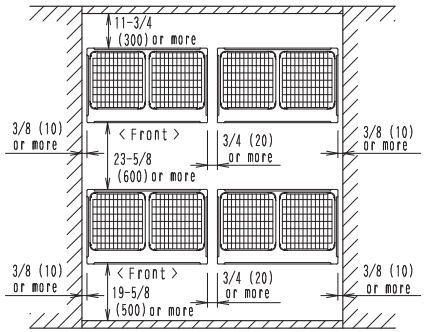
Notes:

1. 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)
2. If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the 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.

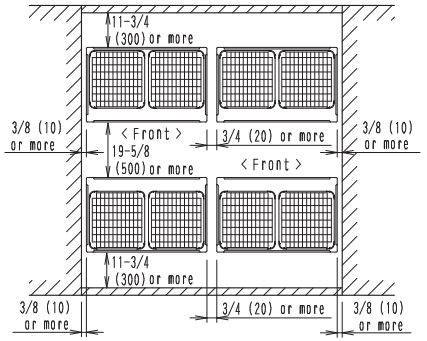
Unit : in. (mm)

For centralized group layout

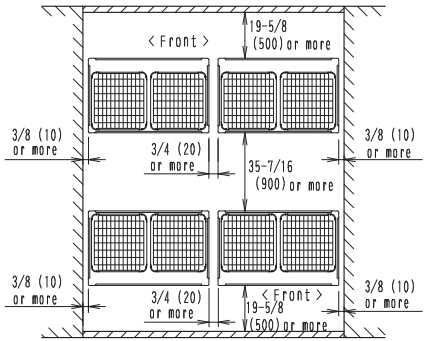
《Pattern 1》

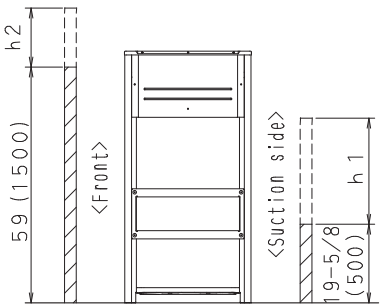


《Pattern 1》

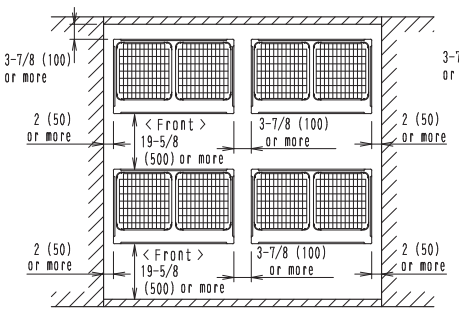


《Pattern 1》

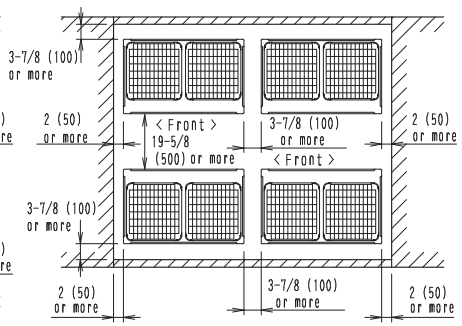




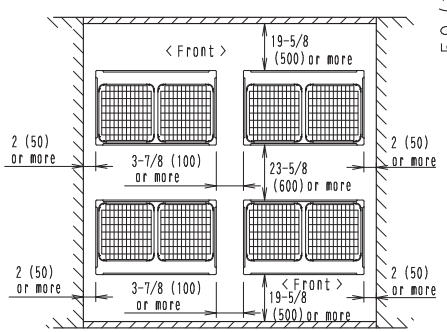
《Pattern 2》



《Pattern 2》



《Pattern 2》



Notes:

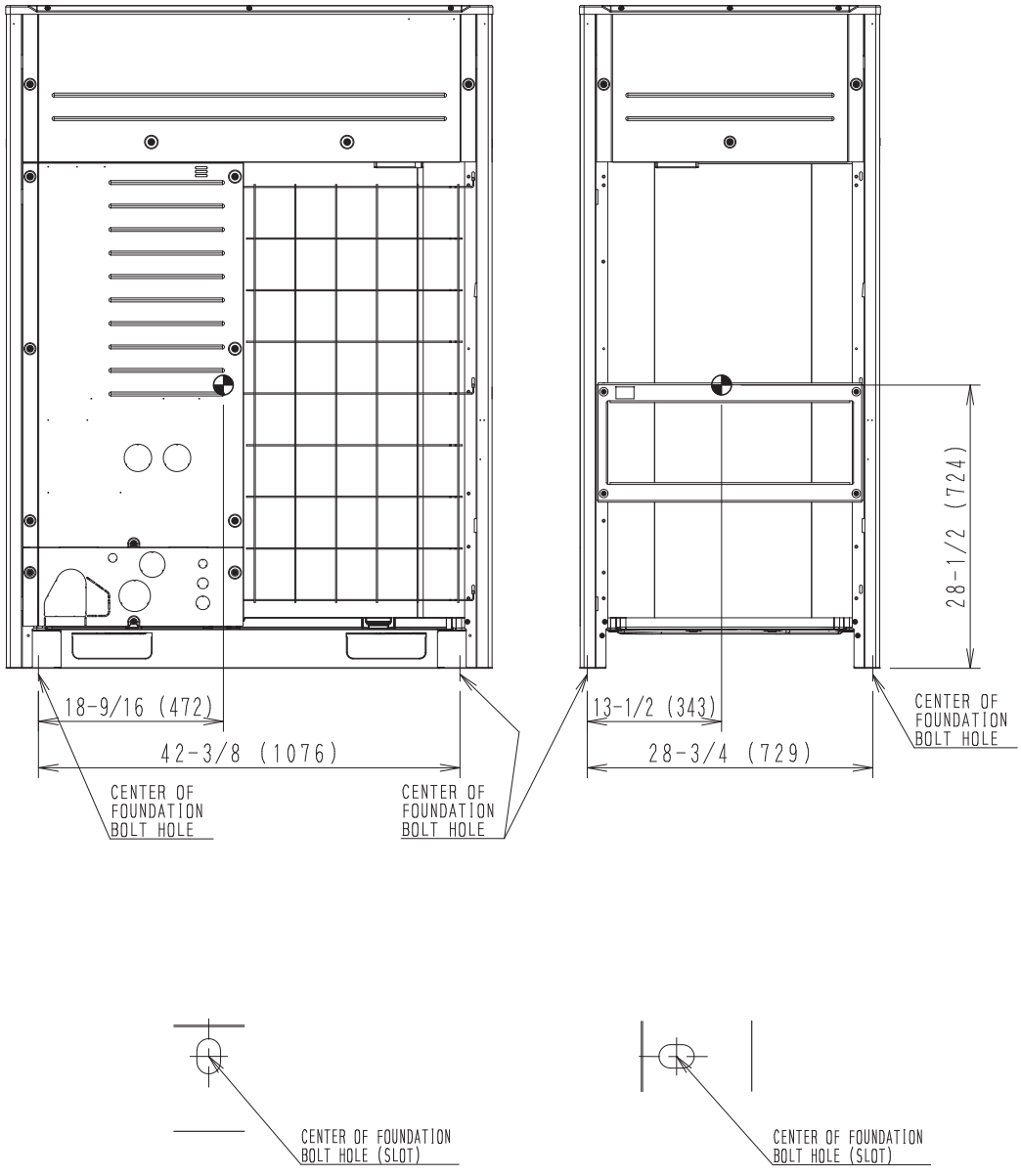
1. Heights of walls in case of Patterns 1 and 2;
   Front : 59 in. (1500 mm)
   Suction side : 19-5/8 in. (500 mm)
   Side : Height unrestricted
   The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 95°FDB (35°CDB).
   The installation 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)
2. If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the 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.

C: 3D085503H

10.Center of Gravity

RXYQ72 - 120TAYCU

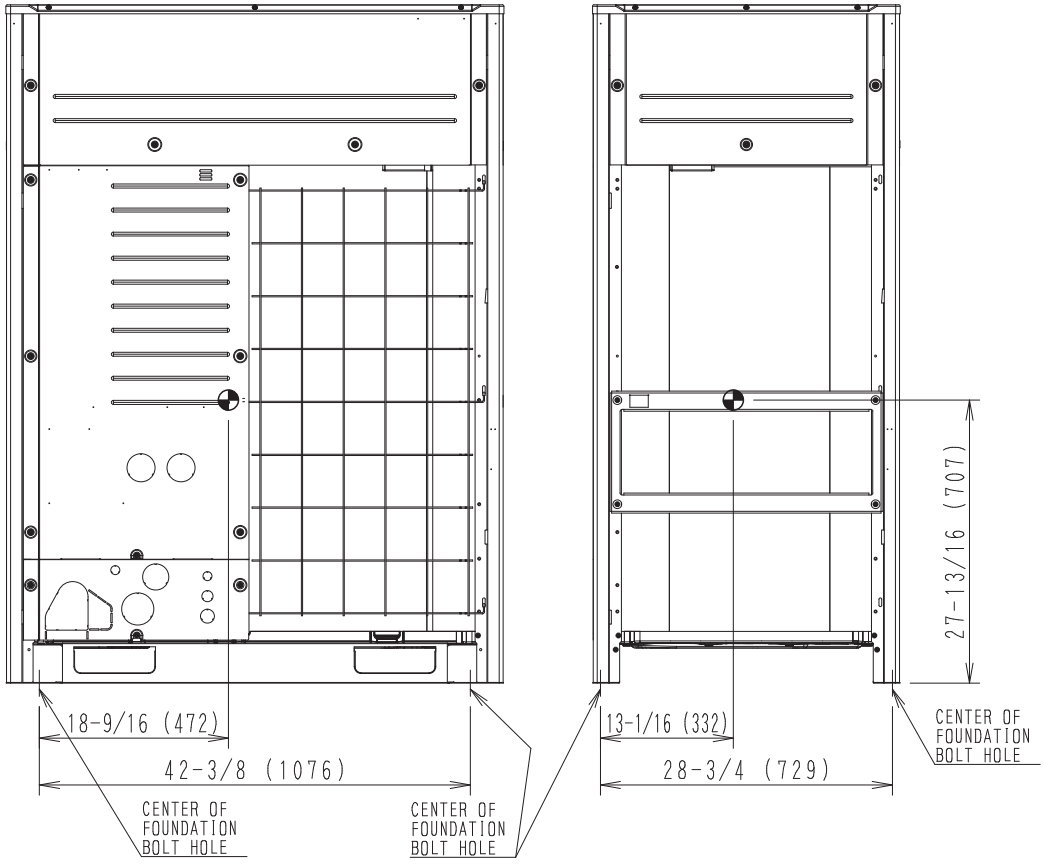
Unit : in. (mm)

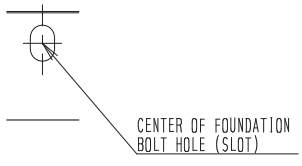


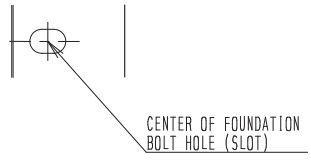
4D107384

RXYQ144 - 168TAYCU

Unit : in. (mm)



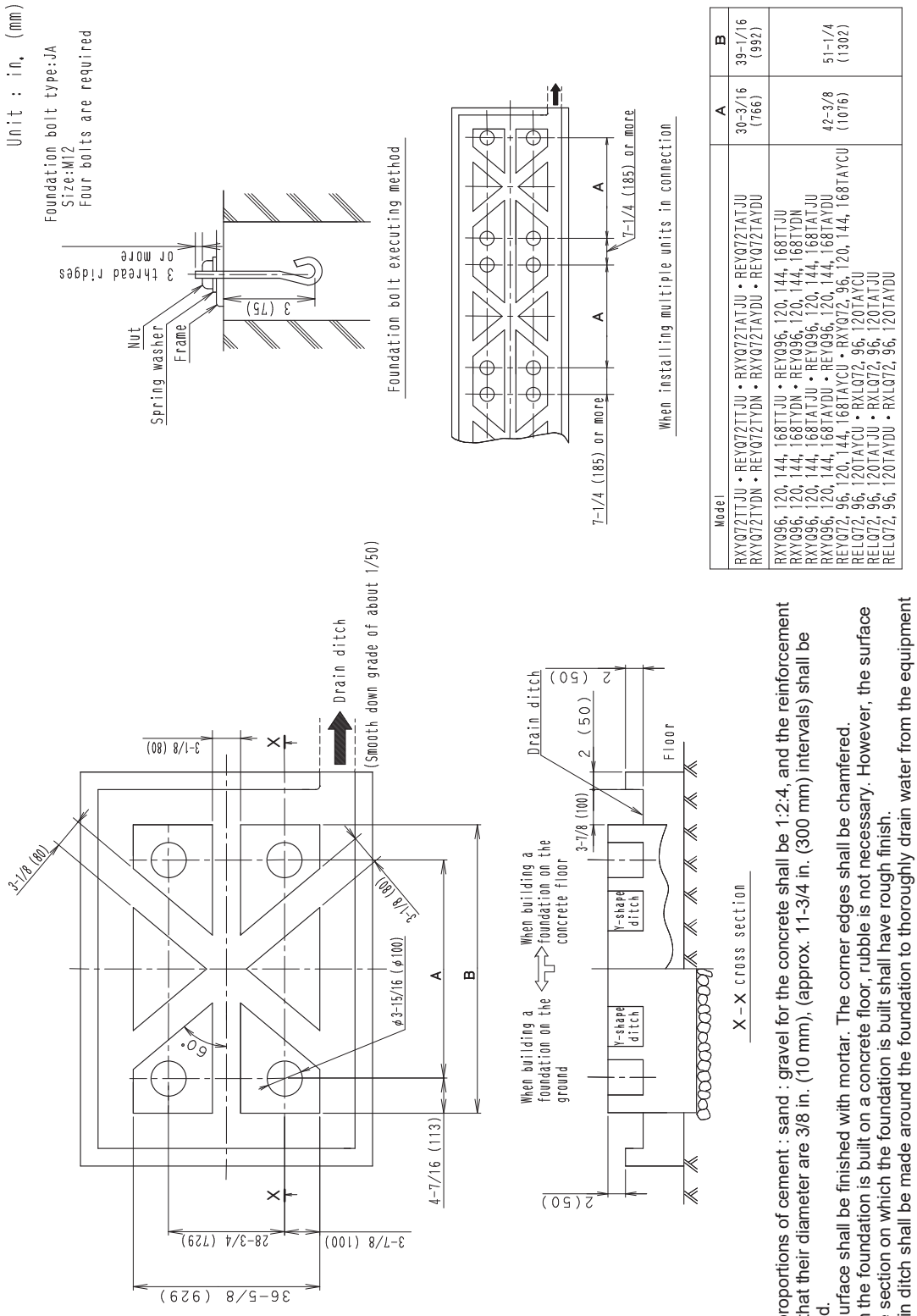




4D107385

11.Foundation Drawing

RXYQ72 - 384TAYCU



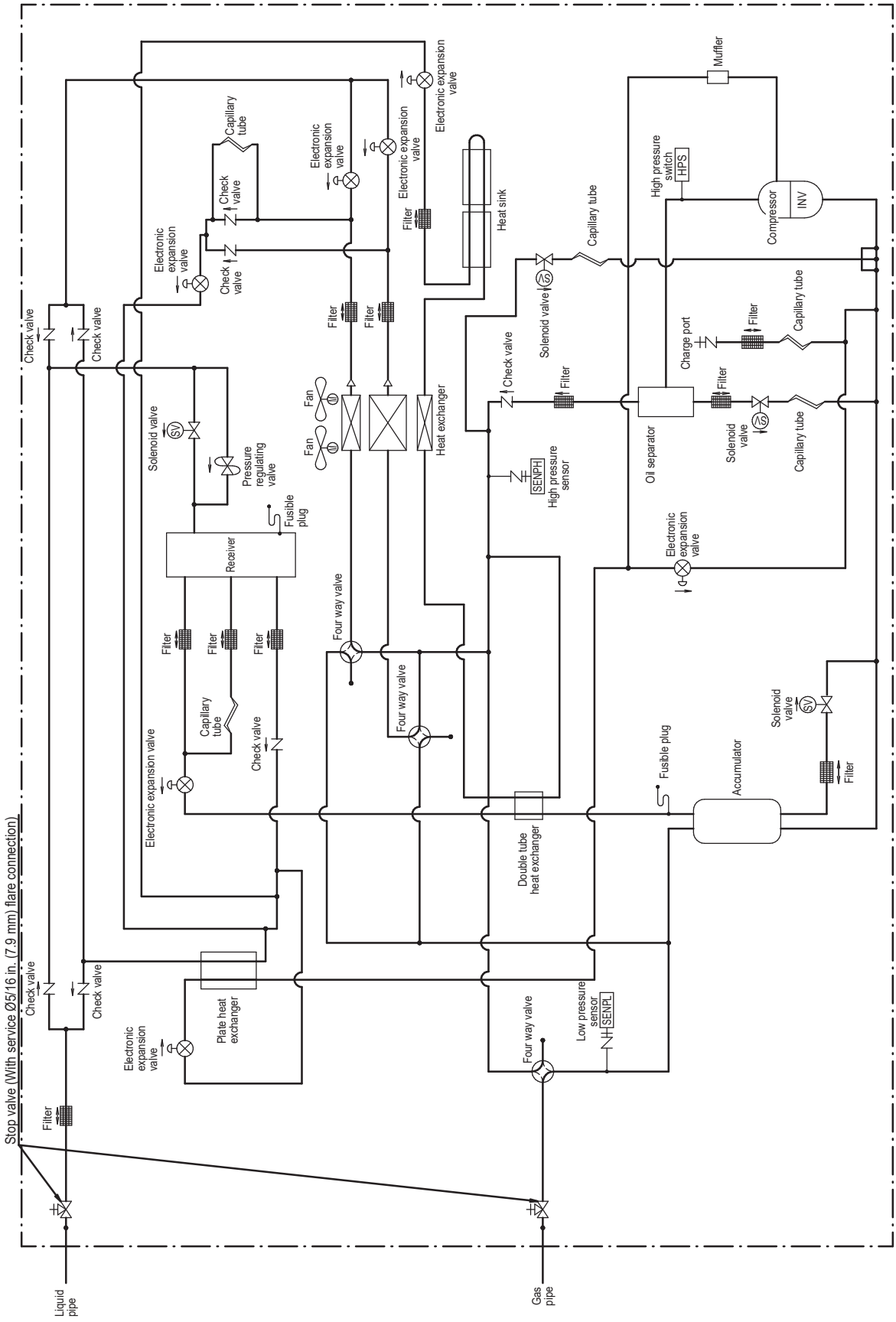
Model	A	B
RXYQ72TTJU • REYQ72TTJU • RXYQ72TATJU • REYQ72TATJU RXYQ72TYDN • REYQ72TYDN • RXYQ72TAYDU • REYQ72TAYDU	30-3/16 (766)	39-1/16 (992)
RXYQ96, 120, 144, 168TTJU • REYQ96, 120, 144, 168TTJU RXYQ96, 120, 144, 168TYDN • REYQ96, 120, 144, 168TYDN RXYQ96, 120, 144, 168TATJU • REYQ96, 120, 144, 168TATJU RXYQ96, 120, 144, 168TAYDU • REYQ96, 120, 144, 168TAYDU REYQ72, 96, 120, 144, 168TAYCU • RXYQ72, 96, 120, 144, 168TAYCU RELQ72, 96, 120TAYCU • RXLQ72, 96, 120TAYCU RELQ72, 96, 120TATJU • RXLQ72, 96, 120TATJU RELQ72, 96, 120TAYDU • RXLQ72, 96, 120TAYDU	42-3/8 (1076)	51-1/4 (1302)

(Notes)
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.

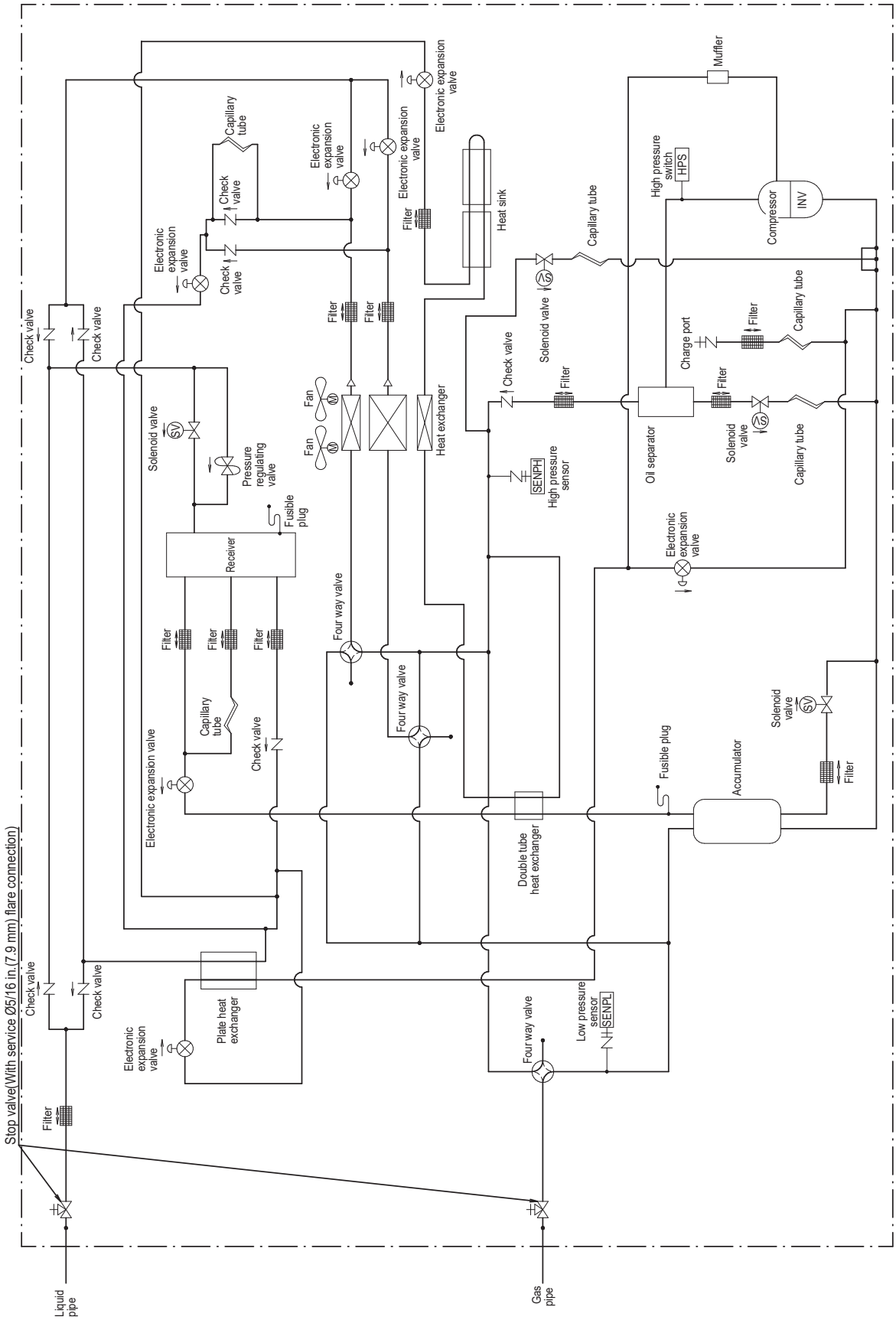
C: 3D085480D

12.Piping Diagrams

RXYQ72 - 120TAYCU



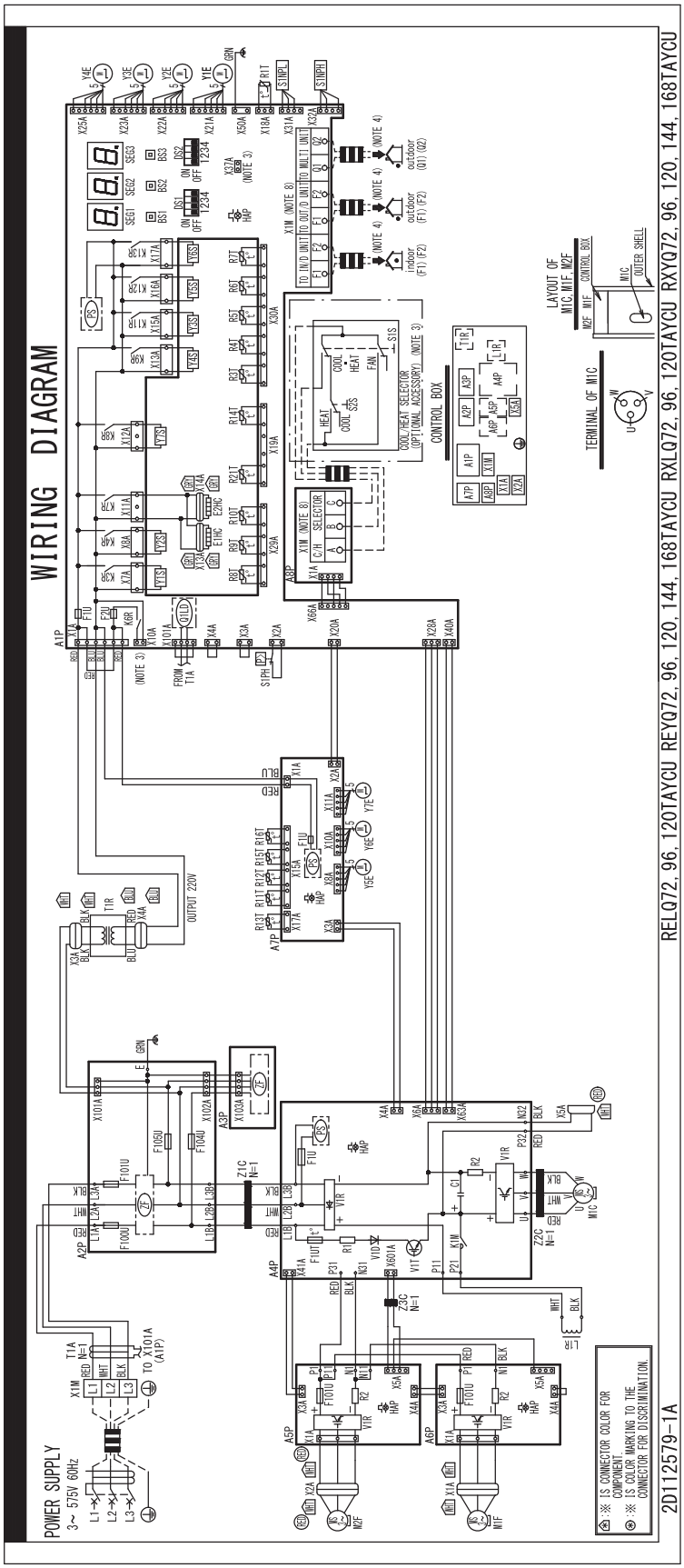
RXYQ144 - 168TAYCU



C: 3D112616

13.Wiring Diagrams

RXYQ72 - 168TAYCU



NOTES)
1. THIS WIRING DIAGRAM APPLIES ONLY TO THE OUTDOOR UNIT.
2. ⊏ ▮▮▮ ⊐ : FIELD WIRING, □□□ : TERMINAL BLOCK, ▯▯ : CONNECTOR,
   ⊸ : TERMINAL, ⏚ : PROTECTIVE EARTH (SCREW), ⏚ : NOISELESS EARTH.
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.
5. HOW TO USE BS1~3 SWITCH, REFER TO “SERVICE PRECAUTION LABEL ON CONTROL BOX COVER.
6. WHEN OPERATING, DON'T 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

C: 2D112579A

RXYQ72 - 168TAYCU

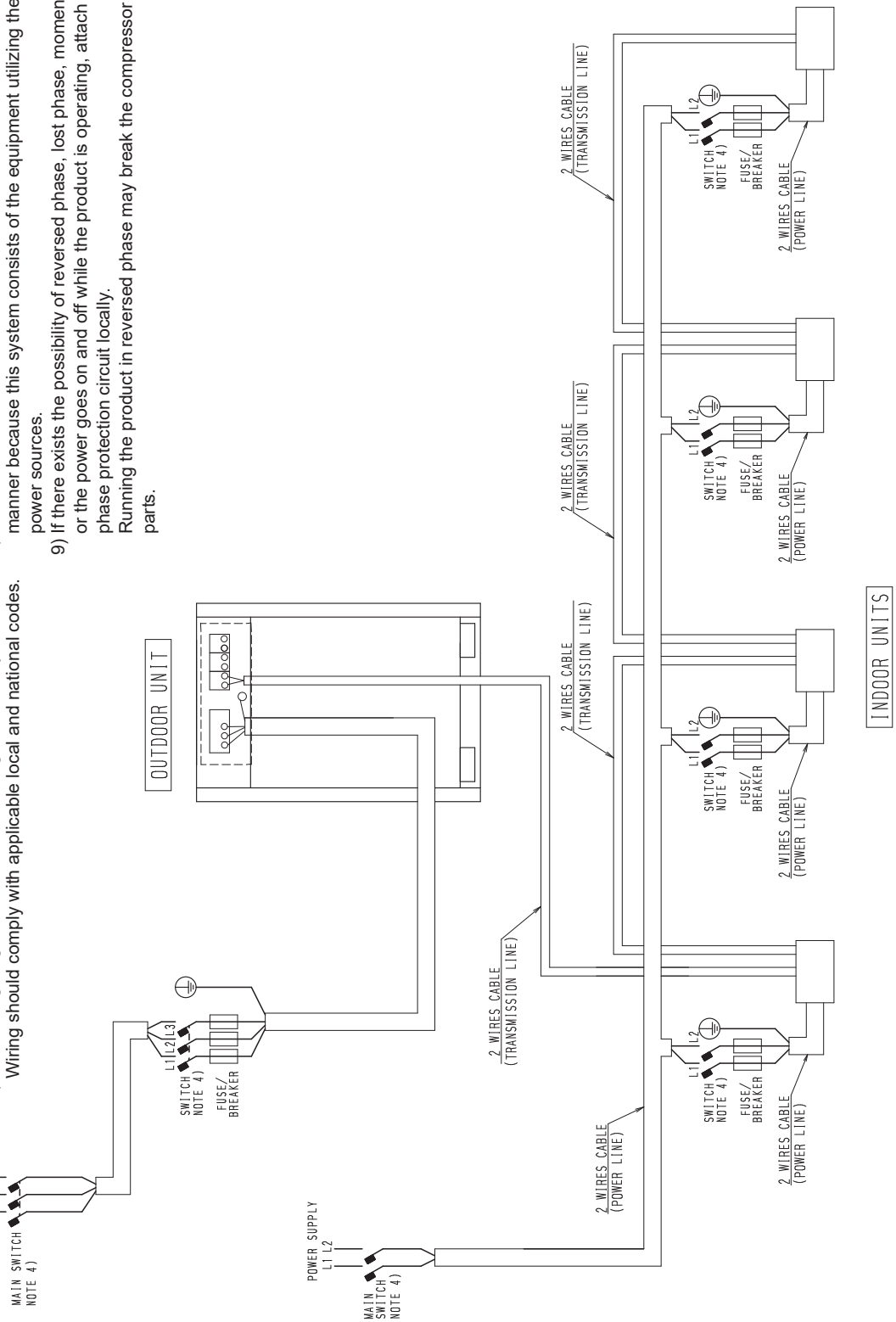
A1P	PRINTED CIRCUIT BOARD (MAIN)	R13T	THERMISTOR (RECEIVER GAS PURGE)
A2P, A3P	PRINTED CIRCUIT BOARD (NOISE FILTER)	R14T	THERMISTOR (M1C BODY)
A4P	PRINTED CIRCUIT BOARD (INV)	R15T	THERMISTOR (LEAK DETECTION)
A5P, A6P	PRINTED CIRCUIT BOARD (FAN)	R16T	THERMISTOR (EVT)
A7P	PRINTED CIRCUIT BOARD (SUB)	R21T	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)		
K12R	MAGNETIC RELAY (Y5S) (A1P)	Y3E	ELECTRIC EXPANSION VALVE (HEAT EXC.LOWER)
K13R	MAGNETIC RELAY (Y6S) (A1P)	Y4E	ELECTRIC EXPANSION VALVE (INJECTION)
L1R	REACTOR	Y5E	ELECTRIC EXPANSION VALVE (REFRIGERAT COOLING)
M1C	MOTOR (COMPRESSOR)	Y6E	ELECTRIC EXPANSION VALVE (LEAK DETECTION)
M1F, M2F	MOTOR (FAN)	Y7E	ELECTRIC EXPANSION VALVE (RECEIVER GAS PURGE)
PS	SWITCHING POWER SUPPLY (A1P, A4P, A7P)	Y1S	SOLENOID VALVE (OS OIL RETURN 1)
Q1LD	LEAKAGE DETECTION CIRCUIT (A1P)	Y2S	SOLENOID VALVE (HOT GAS BYPASS)
R1	RESISTOR (CURRENT LIMITING) (A4P)	Y3S	SOLENOID VALVE (LIQUID SHUT OFF)
R2	RESISTOR (CURRENT SENSOR) (A4P, A5P, A6P)	Y4S	4WAY VALVE (HP/LP GAS)
R1T	THERMISTOR (AIR)	Y5S	4WAY VALVE (HEAT EXC.LOWER)
R3T	THERMISTOR (RECEIVER INLET)	Y6S	4WAY VALVE (HEAT EXC.UPPER)
R4T	THERMISTOR (HEAT EXC.LIQUID UPPER)	Y7S	SOLENOID VALVE (ACCUMU OIL RETURN)
R5T	THERMISTOR (HEAT EXC.LIQUID LOWER)	Z1C~Z3C	NOISE FILTER (FERRITE CORE)
R6T	THERMISTOR (SUBCOOL GAS)	ZF	NOISE FILTER (A2P, A3P) (WITH SURGE ABSORBER)
R7T	THERMISTOR (SUBCOOL LIQUID)		
R8T	THERMISTOR (HEAT EXC.GAS UPPER)	CONNECTOR FOR OPTIONAL ACCESSORIES	
R9T	THERMISTOR (HEAT EXC.GAS LOWER)	X37A	CONNECTOR (POWER ADAPTER) (A1P)
R10T	THERMISTOR (SUCTION)	COOL/HEAT SELECTOR	
R11T	THERMISTOR (DEICER)	S1S	SELECTOR SWITCH (FAN/COOL · HEAT)
R12T	THERMISTOR (COMPSUCTION)	S2S	SELECTOR SWITCH (COOL/HEAT)

C: 2D112579A

14.Field Wiring

RXYQ72 - 168TAYCU

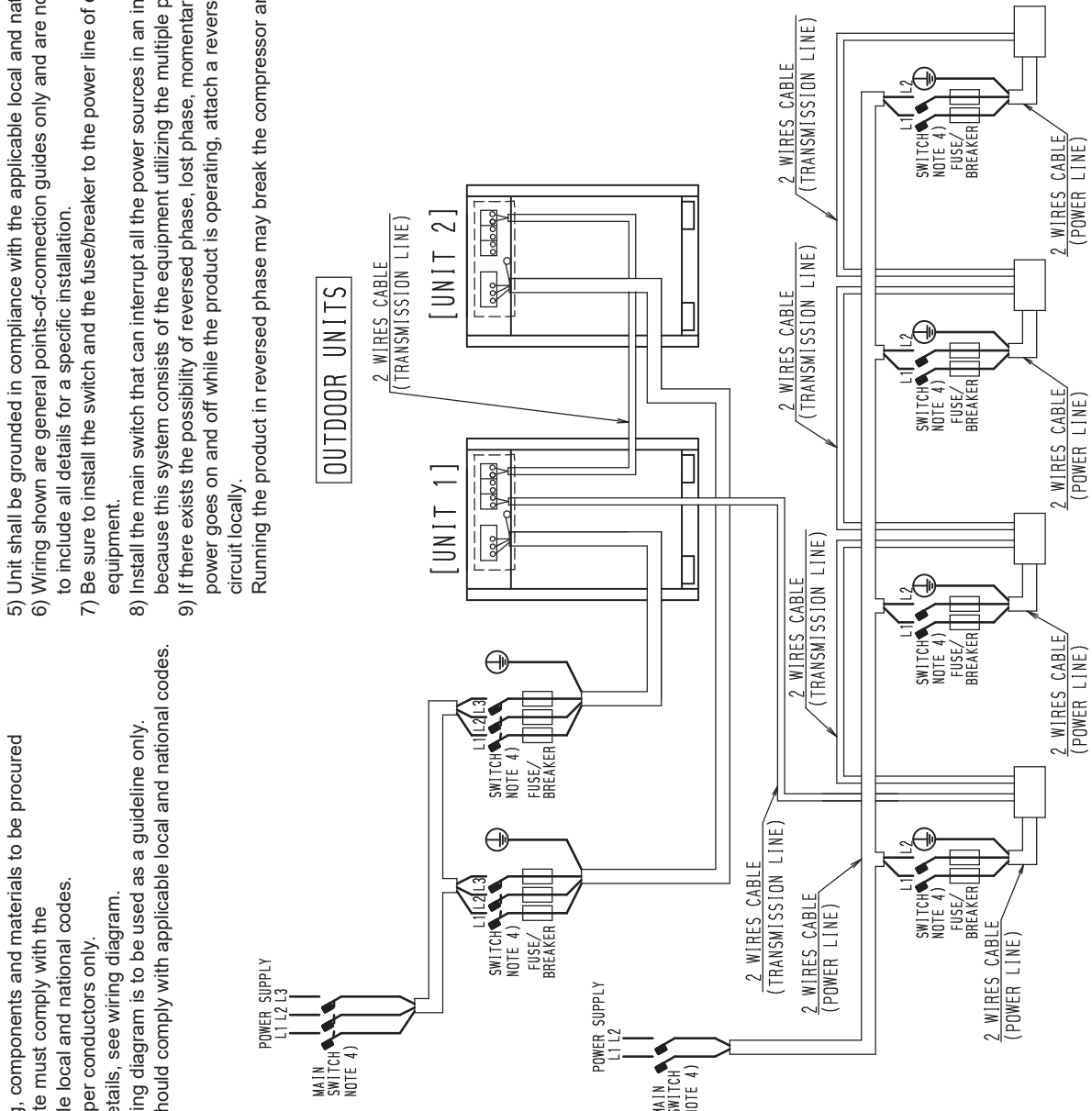
Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2) Use copper conductors only.
3) As for details, see wiring diagram.
4) Field wiring diagram is to be used as a guideline only. Wiring should comply with applicable local 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 - 336TAYCU

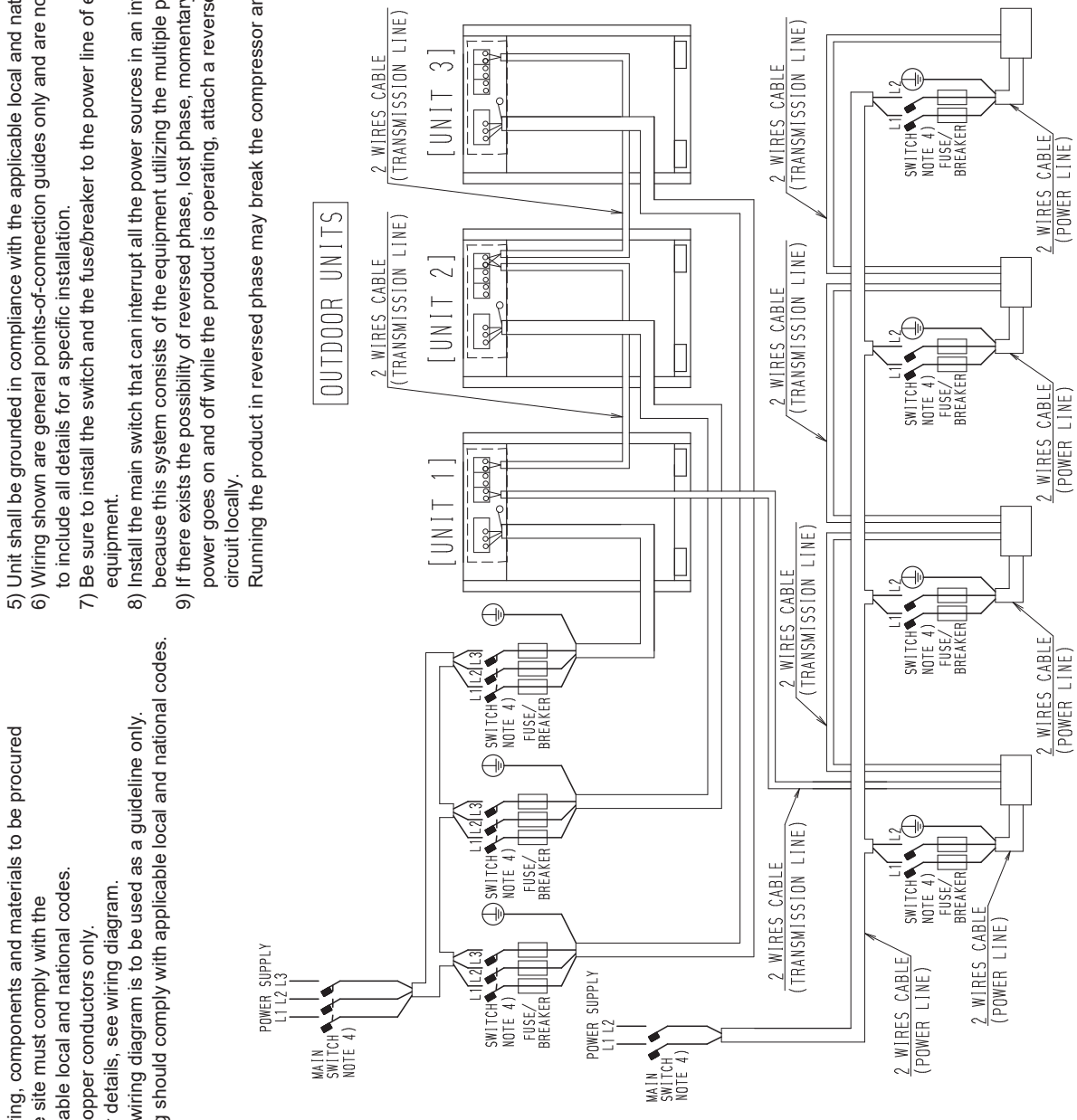
Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2) Use copper conductors only.
3) As for details, see wiring diagram.
4) Field wiring diagram is to be used as a guideline only. Wiring should comply with applicable local 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 - 384TAYCU

Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2) Use copper conductors only.
3) As for details, see wiring diagram.
4) 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: 3D087056D

15. Electrical Characteristics

RXYQ72 - 384TAYCU

Model name		Units				Power supply		Comp.	OFM	
		Hz	Volts	Min.	Max.	MCA	MOP	RLA	kW	FLA
RXYQ72TAYCU		60	575	518	632	15.1	20	8.3	0.7 × 2	1.0 × 2
RXYQ96TAYCU		60	575	518	632	16.8	20	10.2	0.7 × 2	1.0 × 2
RXYQ120TAYCU		60	575	518	632	18.2	25	11.9	0.7 × 2	1.0 × 2
RXYQ144TAYCU		60	575	518	632	22.3	30	16.0	0.7 × 2	1.0 × 2
RXYQ168TAYCU		60	575	518	632	24.9	30	16.8	0.7 × 2	1.0 × 2
RXYQ192TAYCU	RXYQ96TAYCU	60	575	518	632	16.8 + 16.8	20 + 20	10.0 + 10.0	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ96TAYCU									
RXYQ216TAYCU	RXYQ96TAYCU	60	575	518	632	16.8 + 18.2	20 + 25	11.0 + 11.0	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ120TAYCU									
RXYQ240TAYCU	RXYQ120TAYCU	60	575	518	632	18.2 + 18.2	25 + 25	12.2 + 12.2	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ120TAYCU									
RXYQ264TAYCU	RXYQ120TAYCU	60	575	518	632	18.2 + 22.3	25 + 30	13.2 + 16.3	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ144TAYCU									
RXYQ288TAYCU	RXYQ144TAYCU	60	575	518	632	22.3 + 22.3	30 + 30	16.4 + 16.4	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ144TAYCU									
RXYQ312TAYCU	RXYQ144TAYCU	60	575	518	632	22.3 + 24.9	30 + 30	17.1 + 17.1	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ168TAYCU									
RXYQ336TAYCU	RXYQ168TAYCU	60	575	518	632	24.9 + 24.9	30 + 30	18.2 + 18.2	(0.7 × 2) × 2	(1.0 × 2) × 2
	RXYQ168TAYCU									
RXYQ360TAYCU	RXYQ120TAYCU	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
	RXYQ120TAYCU									
	RXYQ120TAYCU									
RXYQ384TAYCU	RXYQ120TAYCU	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
	RXYQ120TAYCU									
	RXYQ144TAYCU									

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)

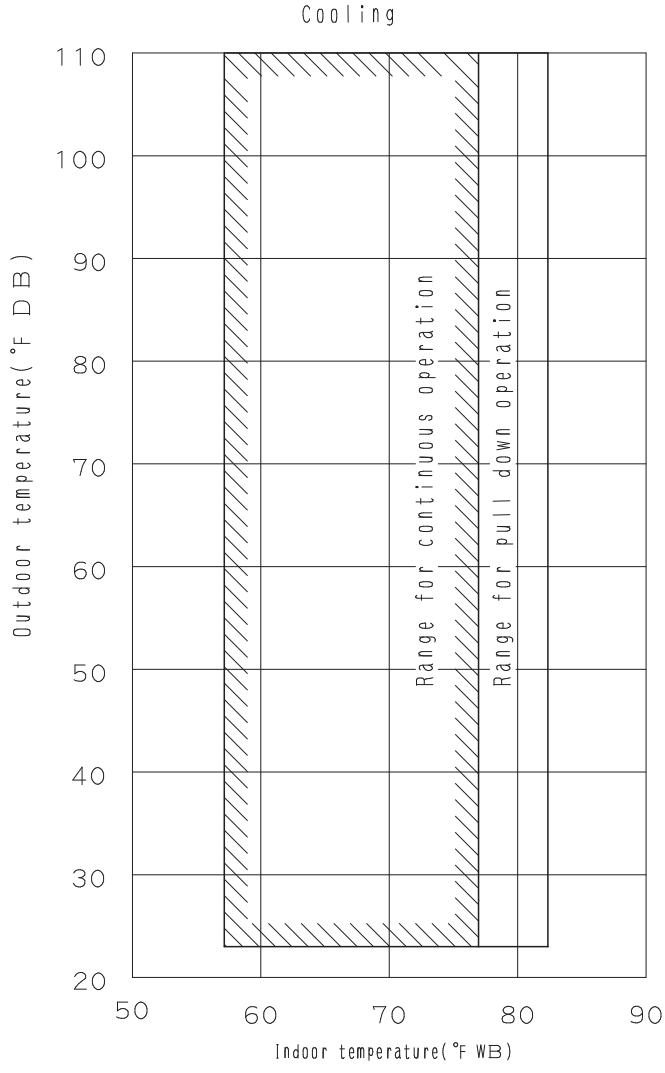
Notes:

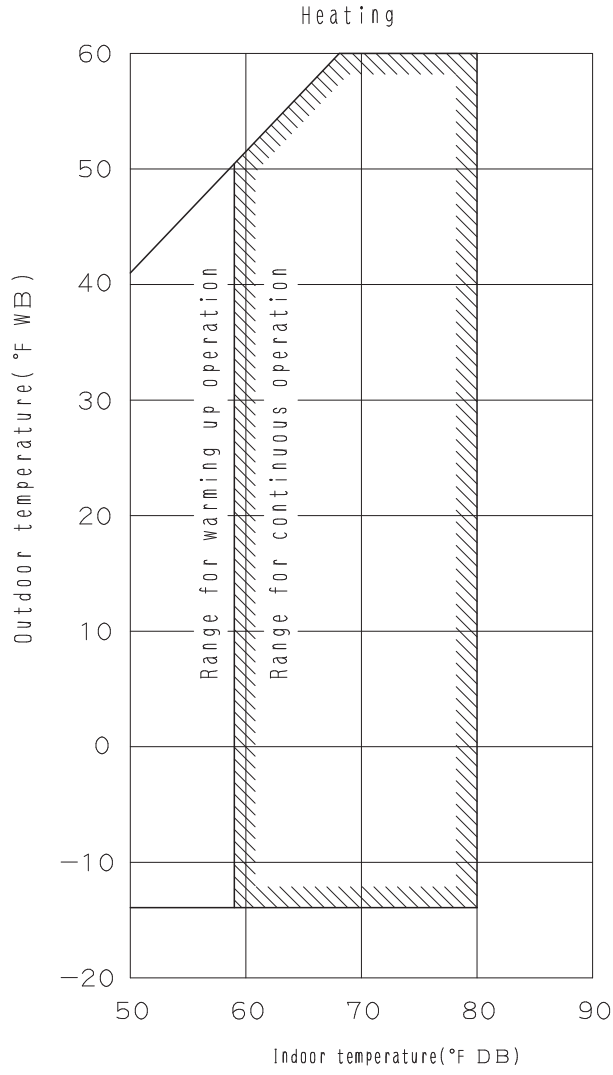
1. RLA is based on the following conditions.
   Indoor temp. 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)
   Outdoor temp. 95°FDB (35.0°CDB)
2. Voltage range
   Units are designed to operate only at the rated voltage provided in the table above.
3. The maximum percent unbalance of phase voltage shall be 2%.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

C: 4D112610A, 4D112611A, 4D112612A

16.Operation Limits

RXYQ72 - 384TAYCU

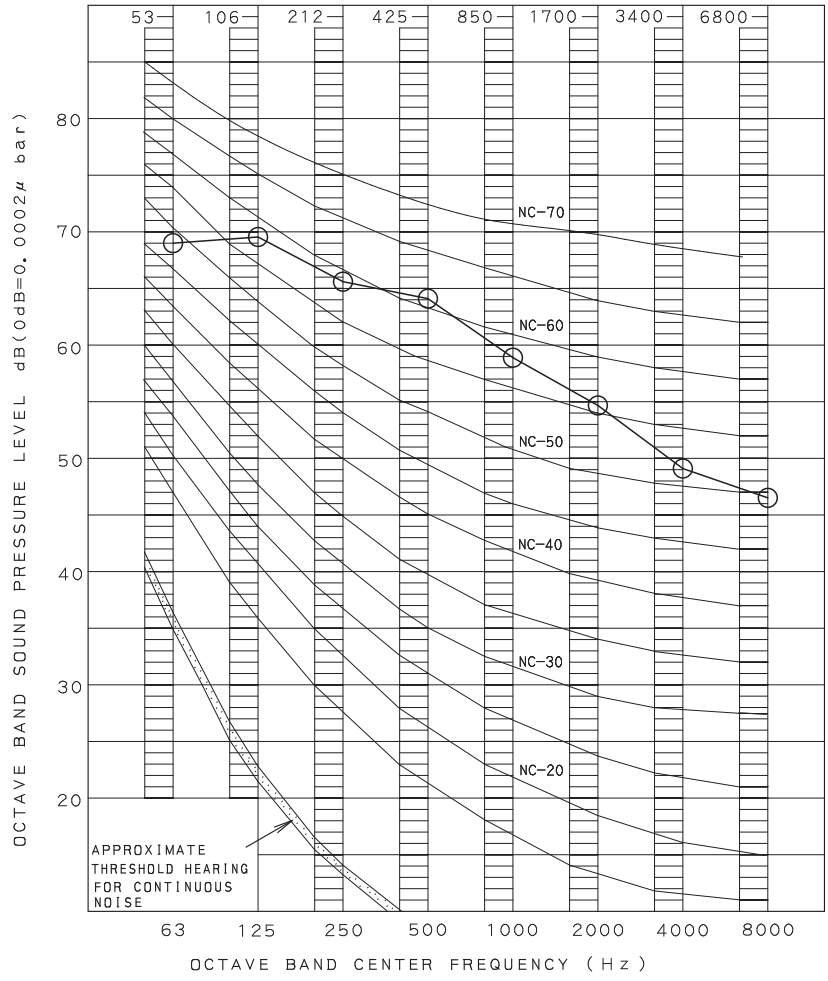




3D107375

17.Sound Levels (Reference Data)

RXYQ72TAYCU



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

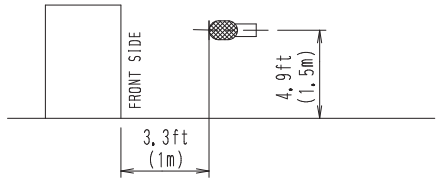
OPERATING CONDITIONS

POWER SOURCE 575V 60Hz

MEASURING PLACE

ANECHOIC CHAMBER(CONVERSION VALUE)

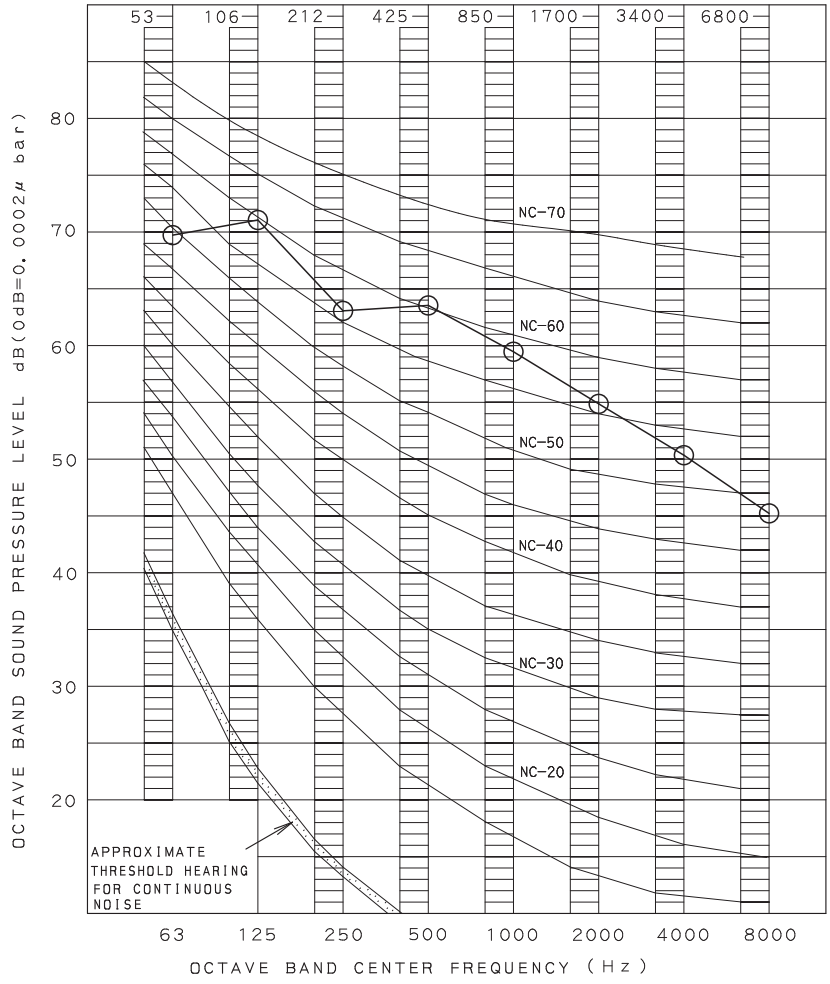
LOCATION OF MICROPHONE



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.

C: 4D107379A

RXYQ96TAYCU



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

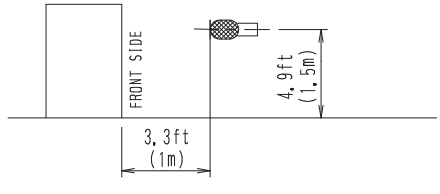
OPERATING CONDITIONS

POWER SOURCE 575V 60Hz

MEASURING PLACE

ANECHOIC CHAMBER(CONVERSION VALUE)

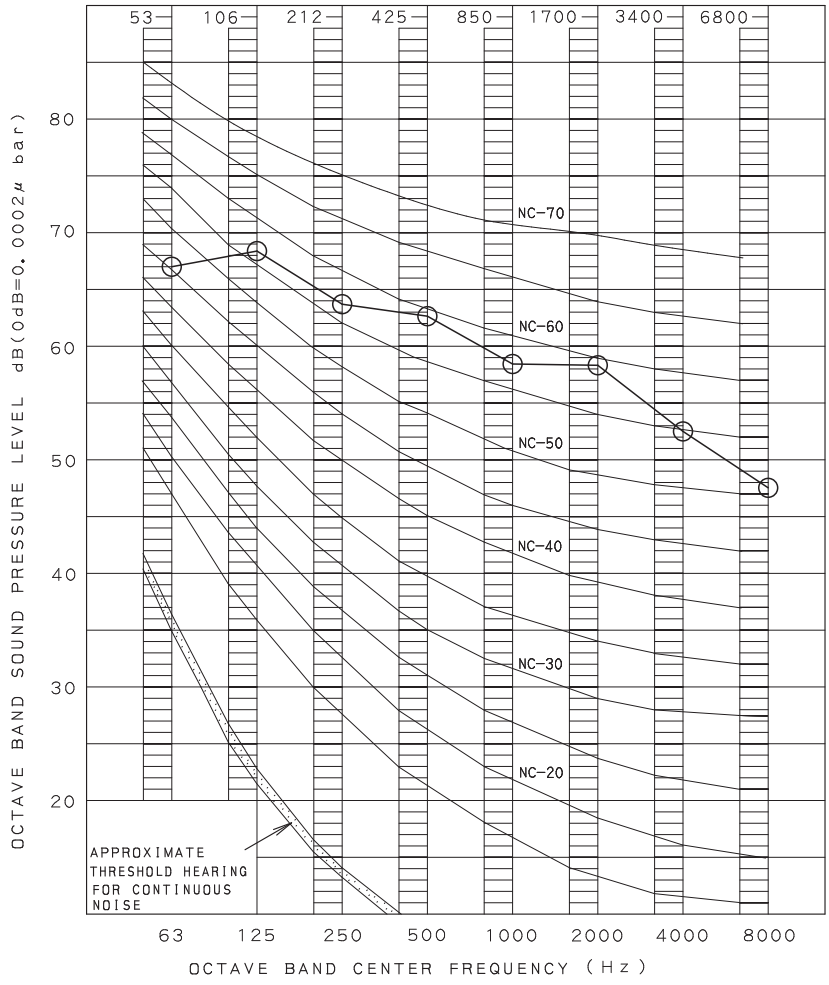
LOCATION OF MICROPHONE



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.

C: 4D107380

RXYQ120TAYCU



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

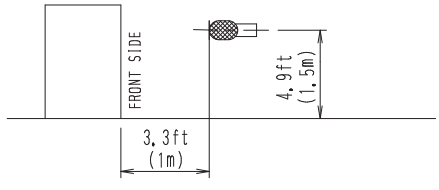
OPERATING CONDITIONS

POWER SOURCE 575V 60Hz

MEASURING PLACE

ANECHOIC CHAMBER(CONVERSION VALUE)

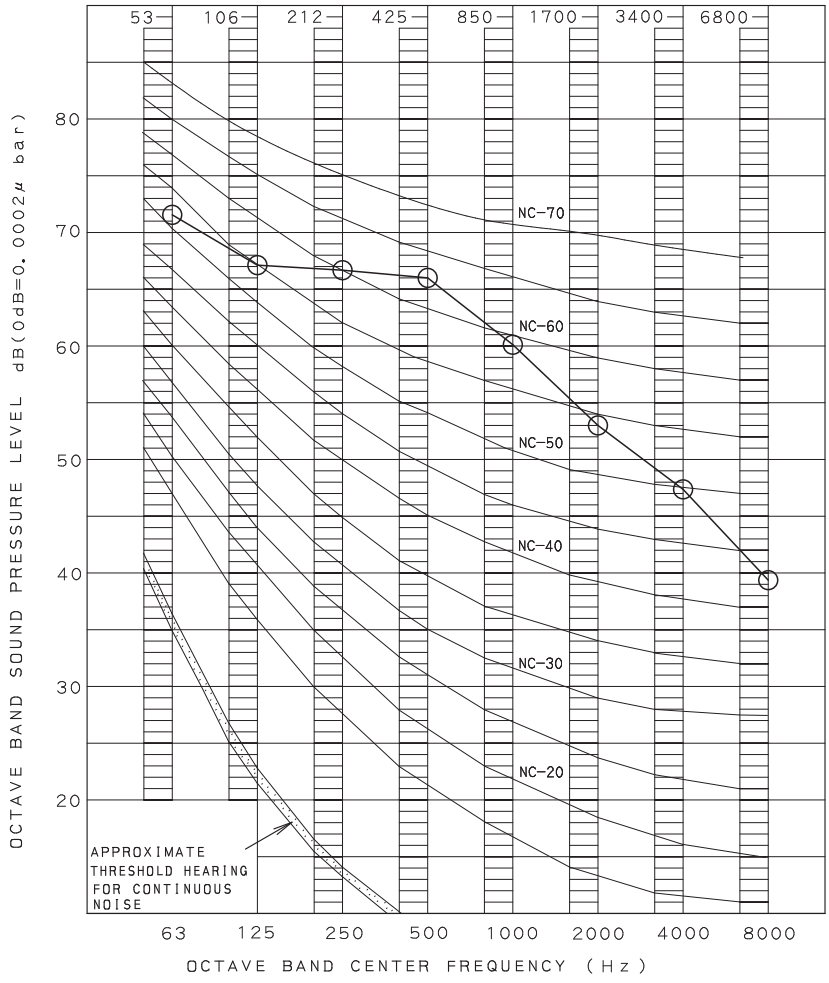
LOCATION OF MICROPHONE



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.

C: 4D107381

RXYQ144TAYCU



OVER ALL (dB)

SCALE	60Hz
A	66

(B.G.N IS ALREADY RECTIFIED)

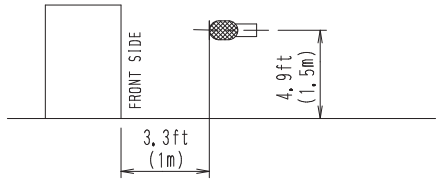
OPERATING CONDITIONS

POWER SOURCE 575V 60Hz

MEASURING PLACE

ANECHOIC CHAMBER(CONVERSION VALUE)

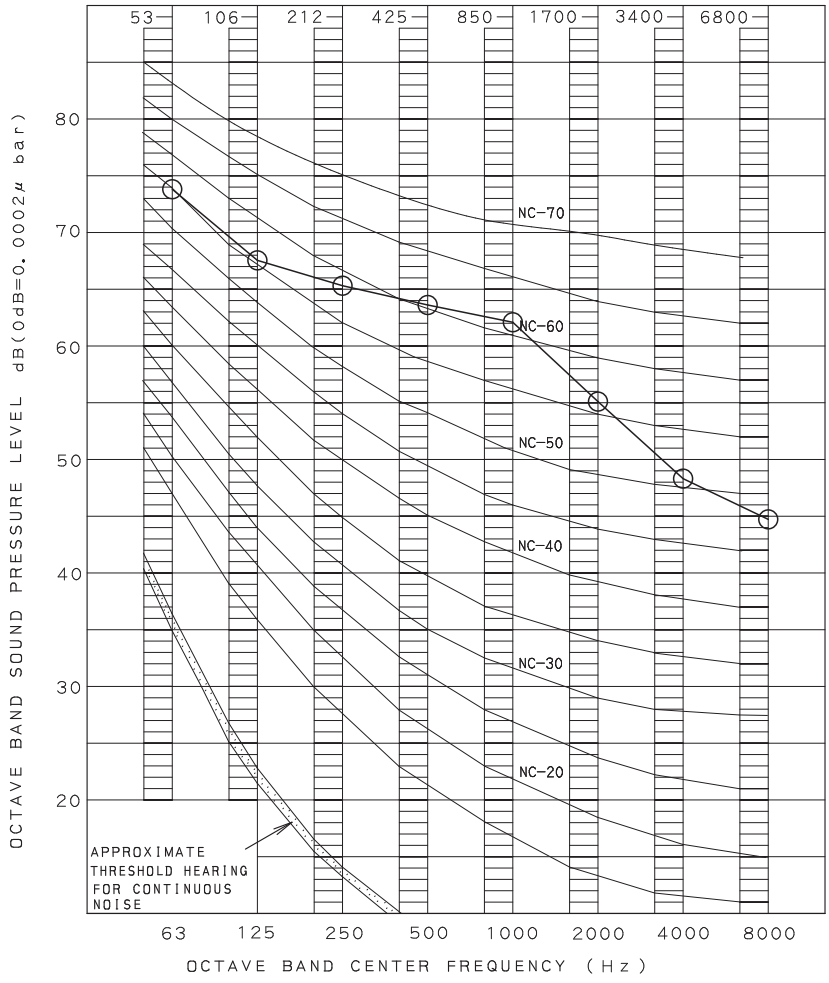
LOCATION OF MICROPHONE



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 ENVIROMENTAL NOISE
AND SOUND REFLECTION.

C: 4D107382

RXYQ168TAYCU



OVER ALL (dB)

SCALE	60Hz
A	66

(B.G.N IS ALREADY RECTIFIED)

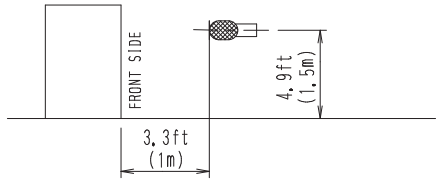
OPERATING CONDITIONS

POWER SOURCE 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 ENVIROMENTAL NOISE AND SOUND REFLECTION.

C: 4D107383

18.Accessories

18.1 Optional Accessories

RXYQ72 - 384TAYCU

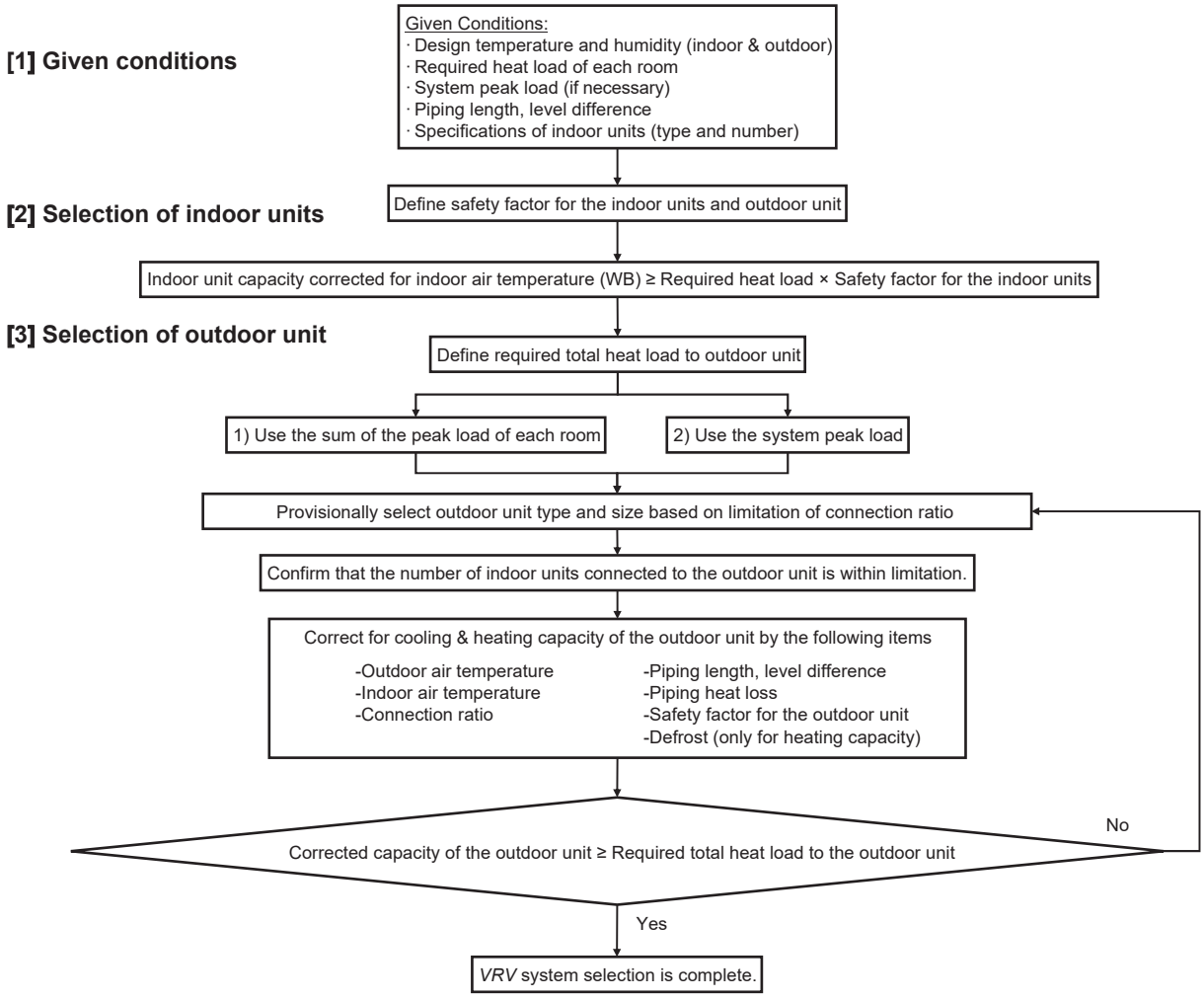
Optional accessories		RXYQ72TAYCU RXYQ96TAYCU	RXYQ120TAYCU RXYQ144TAYCU RXYQ168TAYCU	RXYQ192TAYCU RXYQ216TAYCU RXYQ240TAYCU RXYQ264TAYCU RXYQ288TAYCU RXYQ312TAYCU RXYQ336TAYCU	RXYQ360TAYCU RXYQ384TAYCU
Distributive piping	REFNET header	KHRP26M22H9 (Max. 4 branch) KHRP26M33H9 (Max. 8 branch)	KHRP26M22H9 (Max. 4 branch) KHRP26M33H9 (Max. 8 branch) KHRP26M72H9 (Max. 8 branch)	KHRP26M22H9 (Max. 4 branch) KHRP26M33H9 (Max. 8 branch) KHRP26M72H9 (Max. 8 branch) KHRP26M73HU9 (Max. 8 branch)	
	REFNET joint	KHRP26A22T9 KHRP26A33T9	KHRP26A22T9 KHRP26A33T9 KHRP26M72TU9	KHRP26A22T9 KHRP26A33T9 KHRP26M72TU9 KHRP26M73TU9	
Outdoor unit multi connection piping kit		–		BHFP22P100U	BHFP22P151U

C: 3D087057D

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.

<table>
<tr><td rowspan="2">Room A</td><td>Room H</td><td>Room G</td><td rowspan="2">Room F</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td rowspan="2">Room B</td><td colspan="2"></td><td rowspan="2">Room E</td></tr>
<tr><td>Room C</td><td>Room D</td></tr>
</table>

Floor plan

[1] Given conditions

-Design conditions

Indoor air temperature: 67°FWB / 80°FDB, Outdoor air temperature: 93°FDB

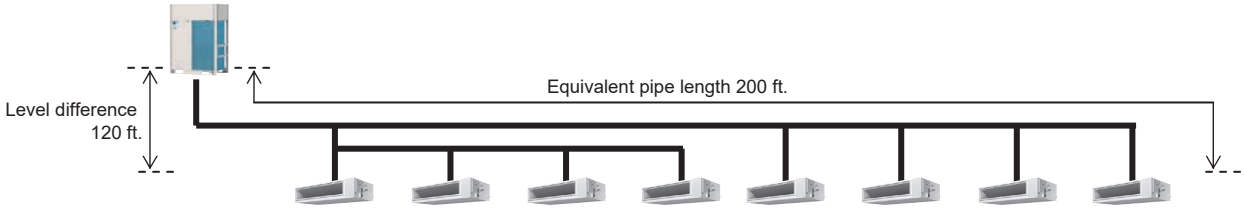
-Determine peak load of each room (and system peak load if necessary)

-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	Capacity indication	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	07	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	09	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	12	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	15	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	18	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	24	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	30	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	36	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	48	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	54	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-TA shall be between 50% (70%: RXYQ72TA 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	RXYQ72TA	RXYQ72TA	—	51 to 93 (144)	12
	8	96	RXYQ96TA	RXYQ96TA		48 to 124 (192)	16
	10	120	RXYQ120TA	RXYQ120TA		60 to 156 (240)	20
	12	144	RXYQ144TA	RXYQ144TA		72 to 187 (288)	25
	14	168	RXYQ168TA	RXYQ168TA		84 to 218 (336)	29
Double outdoor units	16	192	RXYQ192TA	RXYQ96TA+ RXYQ96TA	BHFP22P100U	96 to 249 (307)	33
	18	216	RXYQ216TA	RXYQ96TA+ RXYQ120TA		108 to 280 (345)	37
	20	240	RXYQ240TA	RXYQ120TA+ RXYQ120TA		120 to 312 (384)	41
	22	264	RXYQ264TA	RXYQ120TA+ RXYQ144TA		132 to 343 (422)	45
	24	288	RXYQ288TA	RXYQ144TA+ RXYQ144TA		144 to 374 (460)	49
	26	312	RXYQ312TA	RXYQ144TA+ RXYQ168TA		156 to 405 (499)	54
	28	336	RXYQ336TA	RXYQ168TA+ RXYQ168TA		168 to 436 (537)	58
Triple outdoor units	30	360	RXYQ360TA	RXYQ120TA+ RXYQ120TA+ RXYQ120TA	BHFP26P151U	180 to 468 (468)	62
	32	384	RXYQ384TA	RXYQ120TA+ RXYQ120TA+ RXYQ144TA		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 RXYQ192TAYCU = 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.

RXYQ192TAYCU Cooling Capacity for Standard Condition (Te: 43°F)

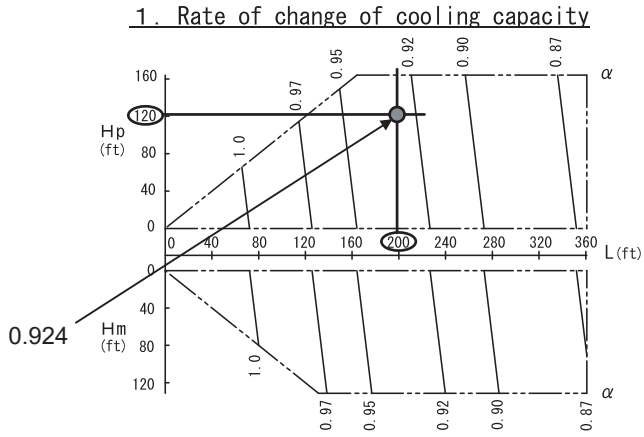
Combi-nation	Outdoor air temp.	Indoor air temp. (°FWB)													
		57		61		64		67		70		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°FDB	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
130	23	146	5.71	188	7.52	219	8.95	250	10.4	271	11.5	275	11.6	281	11.7
	30	146	5.89	188	7.76	219	9.25	250	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	8.93	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) × (122 – 120) / (130 – 120)
= 201.8

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

(K1) = 0.924



-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								
Heat loss factor per feet of piping (%)	41°F	50°F	59°F	68°F	77°F	86°F*4	93°F*3	95°F*5	104°F
	0.000	0.000	0.013	0.030	0.046	0.072*2	(R)	0.098*1	0.125

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

-Calculate the corrected capacity of RXYQ192TAYCU(C) by using (K1) and (K2).
Corrected capacity of RXYQ192TAYCU (C) = (B) × (K1) / (K2) (add defrost correction factor for heating capacity)
Therefore (C) = 201.8 × 0.924 / 1.161 = 160.6 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, 160.6 MBH (C) < 173.0 MBH (A), so need to select a larger outdoor unit.

The capacity of RXYQ216TAYCU at the same condition is 177.9 MBH, which is more than the heat load (A): 173.0 MBH.
So the selection is complete.

20.Caution Label

20.1 RXYQ72 - 120TAYCU

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.

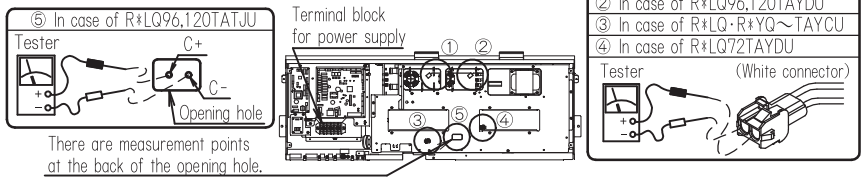
⚠ After service is complete, make sure to close the control box cover. (Water soaking or foreign object may cause failure.)

CAUTION for 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

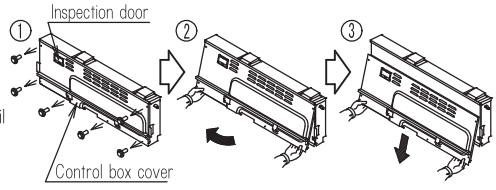
- Make sure to turn on the power supply of all connected units (indoor · BS · outdoor) before operation.
- Make sure to close all outer panels when operating. Otherwise, the system cannot be checked properly.



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 appeares.

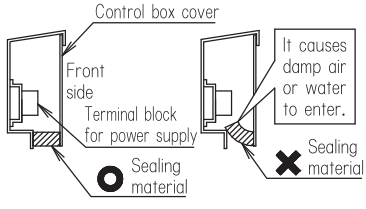


[Method of installation]

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.
- Install the cover so that the sealing material does not get caught in control box. (See the right figure.)



DANGER 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 REPARER 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.

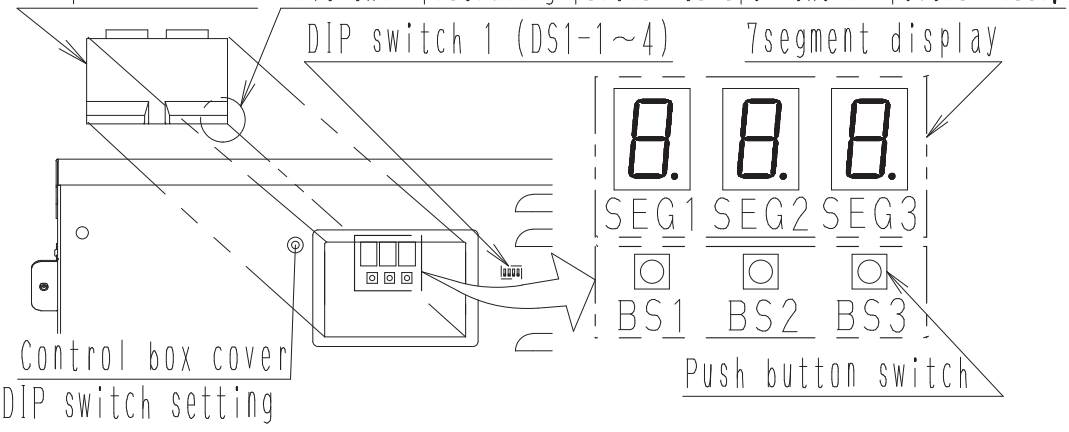
3P487082-1

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

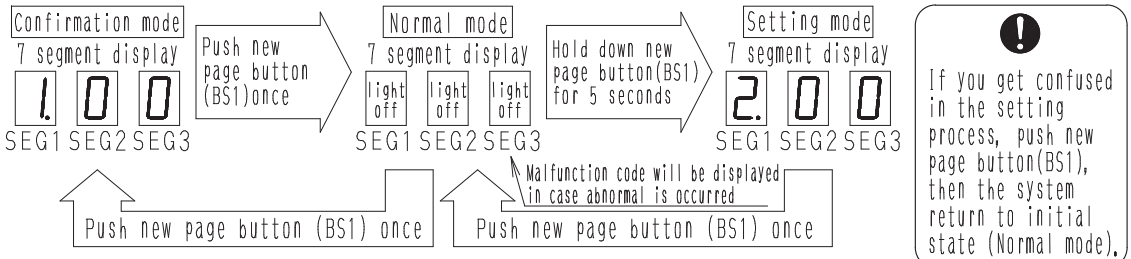
● Normal Mode, Setting Mode, Confirmation mode change method

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

Setting mode can use for setting Ⓐ ~ Ⓗ as shown in right table.

Confirmation mode can use for confirmation of Ⓙ・Ⓚ 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 Normal mode, push new page button (BS1) and charge to Confirmation mode. Confirm 7 segment display show right description.		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

			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 Ⓓ and Ⓔ: Setting value: level 1 ~ level 3; Noise value: ⟶ low noise For Ⓕ: Setting value: level 1 ~ level 8; Power consumption: less power ⟵ For details, see the service manual.	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
		For ⒷⒸ ⒼⒽ	ON	light off	light off	1
			OFF (Factory setting)	light off	light off	0
		For Ⓓ (※2)	OFF (Factory setting)	light off	light off	0
			level A(※3) (※3) A is a number of 1~3	light off	light off	A(※3)
		For Ⓔ (※2)	level A(※3) (※3) A is a number of 1~3 (Factory setting :2)	light off	light off	A(※3)
		For Ⓕ (※2)	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

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.

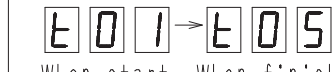
② Make sure to completely open the stop valve on the gas side and the liquid side.

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



When start When finish

Example 7 Segment display

0.17 MPa ⇒

⑤ After charging the specified quantity of refrigerant, close refrigerant cylinder valve, push confirmation button(BS3).

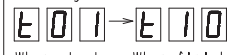
- The operation will be stopped. The operation is automatically stopped within 30 minutes. If charging is not completed, set and perform the additional refrigerant charging operation again.
- If the additional refrigerant charging operation is stopped soon, the refrigerant may be overcharged. Stop additional 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.

7 segment indication



When start When finish

【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
Normaly finished	Light off
Abnormaly finished	Malfunction code

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

【Measure when abnornaly 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 vaccuum 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.

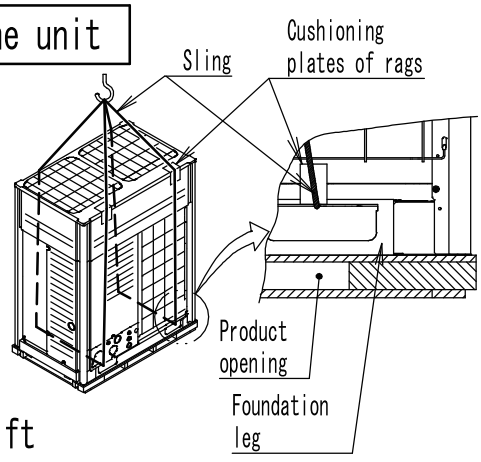
7 Segment display	E	0	1

R410A

For those who install or move the unit

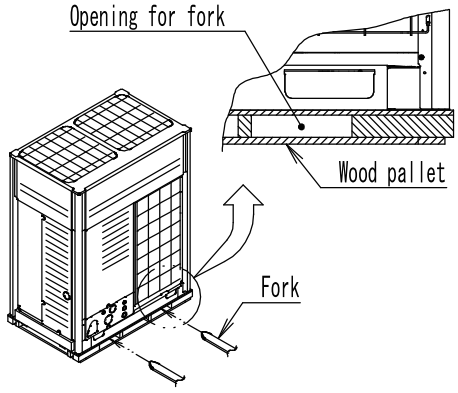
1. When lifting the unit

- To hang the unit, use 2 slings of at least 27 ft. long. Put the belt slings into he product openings tof 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

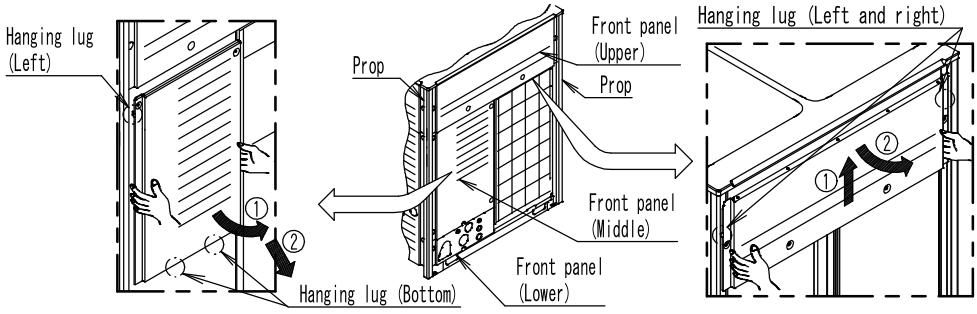
- To prevent electric shock and fire accident, be sure to perform grounding and install an earth leak breaker.
- Electrical work must be carried out by a licensed electrician in accordance with local and national regulations.
- Confirm the insulation of main power supply circuit before opening the stop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

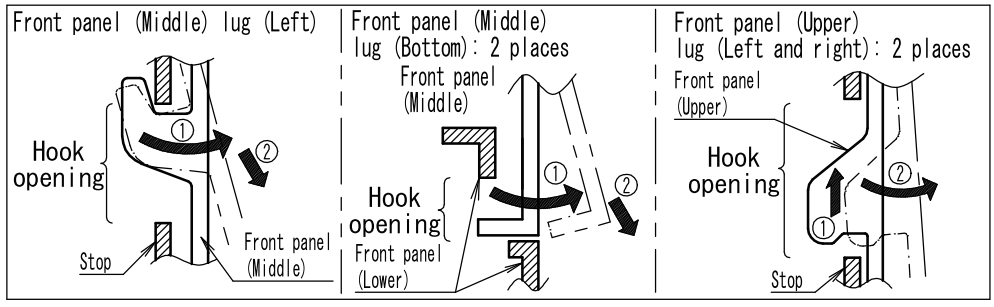
For those who carry out service and maintenance

⚠ WARNING	・Beware of the fan rotating while inspection.
Caution for electric shock	・Do not touch the energized parts while inspection.

〈Front panel (Middle) removing method〉
・Pull the front panel (middle) forward to take a hanging lug (bottom) off (①). Remove the panel downward (②).

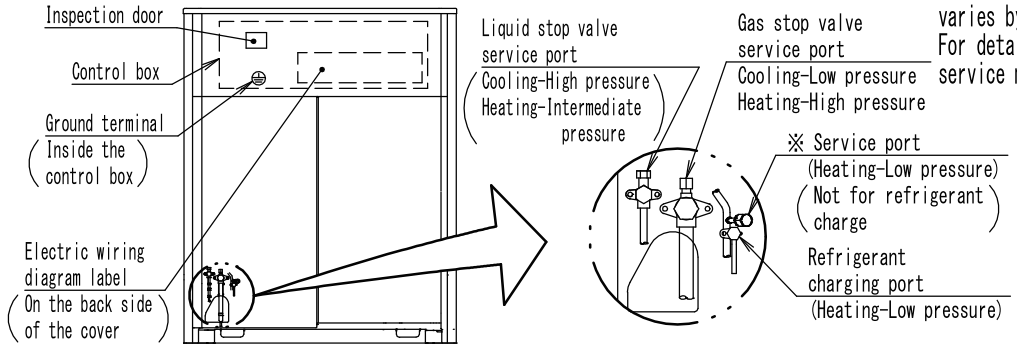
〈Front panel (Upper) removing method〉
・Lift up the panel a little and take a hanging lug off (①). Remove the panel forward (②).





・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.



3P510840-1

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.

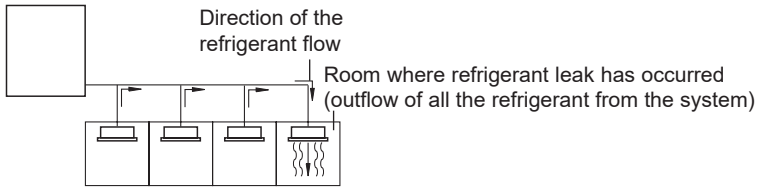
The *VRV* System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that 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 lb./1000 ft.^{3} (the weight in lbs. of the refrigerant gas in 1 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.

Step1: Calculate the amount of refrigerant (lbs.) charged to each system separately.

Amount of refrigerant in a single unit system (amount of refrigerant with which the system is charged before leaving the factory)	+	Additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping)	=	Total amount of refrigerant (lbs.) in the system

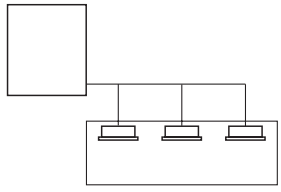
Note:

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.

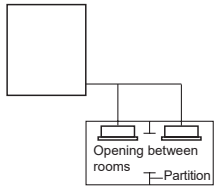
Step 2: Calculate the smallest room volume (ft.^{3})

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.

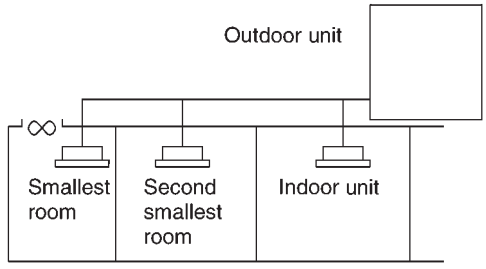


(b) Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



(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.

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	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Fan motor thermal fuse	°F (°C)	–	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–	–

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

C: 3D086932A

22.2 FXZQ-TA

Model		FXZQ05TAVJU	FXZQ07TAVJU	FXZQ09TAVJU	FXZQ12TAVJU	FXZQ15TAVJU	FXZQ18TAVJU
Printed circuit board fuse		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	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	250 V, 3.15 A	250 V, 3.15 A	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	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
Fan motor thermal protector	°F (°C)	OFF: 223±9 (106±5) ON: 205±27 (96±15)	OFF: 223±9 (106±5) ON: 205±27 (96±15)	OFF: 223±9 (106±5) ON: 205±27 (96±15)	OFF: 223±9 (106±5) ON: 205±27 (96±15)	OFF: 223±9 (106±5) ON: 205±27 (96±15)	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	250 V, 5 A	250 V, 5 A	250 V, 5 A	250 V, 5 A
Fan motor thermal protector	°F	OFF: 266±9 ON: 181±27	OFF: 266±9 ON: 181±27	OFF: 266±9 ON: 181±27	OFF: 266±9 ON: 181±27	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	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Printed circuit board fuse (Fan driver)		250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A	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	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
Printed circuit board fuse (Fan driver)		250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 A
Drain pump thermal fuse	°F (°C)	—	—	—	—	—	—

C: 3D112398

22.7 FXMQ-PB

Model		FXMQ07PBVJU	FXMQ09PBVJU	FXMQ12PBVJU	FXMQ15PBVJU	FXMQ18PBVJU
Printed circuit board fuse		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
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	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Printed circuit board fuse (Fan driver)		250 V, 6.3 A	250 V, 6.3 A	250 V, 6.3 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)

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	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A	250 V, 3.15 A
Fan motor thermal fuse	°F	–	–	–	–	–
Fan motor thermal protector	°F	–	–	–	–	–

C: 4D047085C

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	250 V, 5 A	250 V, 5 A	250 V, 5 A	250 V, 5 A
Fan motor thermal protector	°F (°C)	OFF: 275±18 (135±18) ON: 248 (120) or less	OFF: 275±18 (135±18) ON: 248 (120) or less	OFF: 275±18 (135±18) ON: 248 (120) or less	OFF: 275±18 (135±18) ON: 248 (120) or less	OFF: 275±18 (135±18) ON: 248 (120) or less

C: 3D045646B

22.12 FXTQ-TA

Model	FXTQ09TAVJUA	FXTQ12TAVJUA	FXTQ18TAVJUA	FXTQ24TAVJUA	FXTQ30TAVJUA
Model (with factory disconnect)	FXTQ09TAVJUD	FXTQ12TAVJUD	FXTQ18TAVJUD	FXTQ24TAVJUD	FXTQ30TAVJUD
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
Model (with factory disconnect)	FXTQ36TAVJUD	FXTQ42TAVJUD	FXTQ48TAVJUD	FXTQ54TAVJUD	FXTQ60TAVJUD
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				

Appendix

1. Introduction

1.1 ED Book List

Design Manual ..... RXYQ-TA ..... **EDUS341824-D (This booklet)**

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**

Air Treatment Equipment

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

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

Outdoor Units Capacity Table Book

Heat Pump ..... RXYQ-TA **EDUS341824-C**

Controls **EDUS391000-C**

Remote Controller

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

1.2 Publication List of Engineering Data for *VRV* Products

Refrigerant	Type	Product	Series	Book No.	Type	Hz	Volts	Model name	Area	Note	Published in
R410A	Air cooled	VRV IV VRV III	Inverter **T, PC**	EDUS371435-M	H/R H/R H/R H/R	60 Hz 60 Hz 60 Hz 60 Hz	460 V 208/230 V 460 V 208/230 V	REYQ72-456TYDN REYQ72-456TTJU REYQ72-120PCYD REYQ72-144PCTJ	USA	General information	Aug. 2015
				EDUS371435-N	H/R H/R H/R H/R	60 Hz 60 Hz 60 Hz 60 Hz	460 V 208/230 V 460 V 208/230 V	REYQ72-456TYDN REYQ72-456TTJU REYQ72-120PCYD REYQ72-144PCTJ	USA	Installation	Jul. 2015
				EDUS371435-R3	H/R	60 Hz	460 V	REYQ72-120PCYD	USA	Specification	Mar. 2015
				EDUS371435-R4	H/R	60 Hz	208/230 V	REYQ72-144PCTJ	USA	Specification	Mar. 2015
		VRV IV	Inverter **TA**	EDUS341703-M	H/P H/P	60 Hz 60 Hz	460 V 208/230 V	RXYQ72-408TAYDU RXYQ72-408TATJU	USA	General information	Jun. 2017
				EDUS341703-N	H/P H/P	60 Hz 60 Hz	460 V 208/230 V	RXYQ72-408TAYDU RXYQ72-408TATJU	USA	Installation	Jul. 2017
				EDUS341703-R1	H/P	60 Hz	460 V	RXYQ72-408TAYDU	USA	Specification	Apr. 2017
				EDUS341703-R2	H/P	60 Hz	208/230 V	RXYQ72-408TATJU	USA	Specification	Apr. 2017
				EDUS371704-M	H/R H/R	60 Hz 60 Hz	460 V 208/230 V	REYQ72-456TAYDU REYQ72-456TATJU	USA	General information	Jun. 2017
				EDUS371704-N	H/R H/R	60 Hz 60 Hz	460 V 208/230 V	REYQ72-456TAYDU REYQ72-456TATJU	USA	Installation	Jul. 2017
				EDUS371704-R1	H/R	60 Hz	460 V	REYQ72-456TAYDU	USA	Specification	May 2017
				EDUS371704-R2	H/R	60 Hz	208/230 V	REYQ72-456TATJU	USA	Specification	May 2017
				EDUS341824-D	H/P	60 Hz	575 V	RXYQ72-384TAYCU	Canada	Design manual	Jun. 2018
				EDUS341824-C	H/P	60 Hz	575 V	RXYQ72-384TAYCU	Canada	Capacity table book	Jun. 2018
				EDUS371706-M	H/R	60 Hz	575 V	REYQ72-384TAYCU	Canada	General Information	Jun. 2017
				EDUS371706-N	H/R	60 Hz	575 V	REYQ72-384TAYCU	Canada	Installation	Jul. 2017
				EDUS371706-R	H/R	60 Hz	575 V	REYQ72-384TAYCU	Canada	Specification	Jun. 2017
		VRV Aurora		EDUS371705A-M	H/R	60 Hz	208/230 V 460 V	RELQ72-240TATJU RELQ72-240TAYDU	USA Canada	General Information	Oct. 2017
							575 V	RELQ72-240TAYCU	Canada		
				EDUS371705A-N	H/R	60 Hz	208/230 V 460 V	RELQ72-240TATJU RELQ72-240TAYDU	USA Canada	Installation	Oct. 2017
							575 V	RELQ72-240TAYCU	Canada		
				EDUS371705A-R	H/R	60 Hz	208/230 V 460 V	RELQ72-240TATJU RELQ72-240TAYDU	USA Canada	Specification	Oct. 2017
							575 V	RELQ72-240TAYCU	Canada		
				EDUS341819-D	H/P	60 Hz	208/230 V 460 V	RXLQ72-240TATJU RXLQ72-240TAYDU	USA Canada	Design manual	Jun. 2018
							575 V	RXLQ72-240TAYCU	Canada		
				EDUS341819-C	H/P	60 Hz	208/230 V 460 V	RXLQ72-240TATJU RXLQ72-240TAYDU	USA Canada	Capacity table book	Jun. 2018
							575 V	RXLQ72-240TAYCU	Canada		
		VRV IV-S		EDUS331608B-M	H/P	60 Hz	208/230 V	RXTQ36TAVJ9 RXTQ48/60TAVJU	USA	General information	Feb. 2018
				EDUS331608B-N	H/P	60 Hz	208/230 V	RXTQ36TAVJ9 RXTQ48/60TAVJU	USA	Installation	Jan. 2018
				EDUS331608B-R	H/P	60 Hz	208/230 V	RXTQ36TAVJ9 RXTQ48/60TAVJU	USA	Specification	Jan. 2018
	Water cooled	VRV T- Series Water Cooled System		EDUS301716-M	H/P H/R H/P H/R	60 Hz 60 Hz 60 Hz 60 Hz	208/230 V 208/230 V 460 V 460 V	RWEQ96-432TATJU RWEQ96-432TAYDU	USA	General information	Mar. 2018
				EDUS301716-N	H/P H/R H/P H/R	60 Hz 60 Hz 60 Hz 60 Hz	208/230 V 208/230 V 460 V 460 V	RWEQ96-432TATJU RWEQ96-432TAYDU	USA	Installation	Mar. 2018
				EDUS301716-R	H/P H/R H/P H/R	60 Hz 60 Hz 60 Hz 60 Hz	208/230 V 208/230 V 460 V 460 V	RWEQ96-432TATJU RWEQ96-432TAYDU	USA	Specification	Mar. 2018

Refrigerant	Type	Product	Series	Book No.	Type	Hz	Volts	Model name	Area	Note	Published in
R410A	***VRV*** Indoor units			EDUS391400A-F14	–	60 Hz	–	FXFQ07-48TVJU	USA	Ceiling Mounted Cassette (Round Flow with Sensing) Type	May 2018
				EDUS391776-F9	–	60 Hz	–	FXZQ05-18TAVJU	USA	VISTA™ 2 x 2 Cassette Unit	Mar. 2018
				EDUS391437-F15	–	60 Hz	–	FXUQ18-36PVJU	USA	4-Way Blow Ceiling-Suspended Type	May 2015
				EDUS391533-F16	–	60 Hz	–	FXEQ07-24PVJU	USA	One Way Blow Cassette Type	Oct. 2015
				EDUS39-600-F2	–	60 Hz	–	FXDQ07-24MVJU	USA	Slim Ceiling Mounted Duct Type	Sep. 2006
				EDUS391777-F17	–	60 Hz	–	FXSQ05-54TAVJU	USA	MSP Concealed Ducted Unit	Mar. 2018
				EDUS391503A-F4	–	60 Hz	–	FXMQ07-54PBVJU	USA	Ceiling Mounted Duct Type (Middle and High Static Pressure)	May 2018
				EDUS39-900A-F11	–	60 Hz	–	FXMQ72/96MVJU	USA	Ceiling Mounted Duct Type	May 2010
				EDUS39-600-F5	–	60 Hz	–	FXHQ12-36MVJU	USA	Ceiling Suspended Type	Sep. 2006
				EDUS391100-F6	–	60 Hz	–	FXAQ07-24PVJU	USA	Wall Mounted Type	Jan. 2012
				EDUS391502-F7	–	60 Hz	–	FXLQ07-24MVJU FXNQ07-24MVJU	USA	Floor Standing Type Concealed Floor Standing Type	Jul. 2015
				Engineering Data FXTQ-TA	–	60 Hz	–	FXTQ09-60TAVJUA FXTQ09-60TAVJUD	USA	Air Handling Unit	Sep. 2016
				EDUS39-900A-F10	–	60 Hz	–	FXMQ48-96MFVJU	USA	Outdoor Air Processing Unit	May 2010
				EDUS391434-B	–	60 Hz	–	BSQ36-96TVJ	USA	Single Branch Selector Unit	Aug. 2015
				EDUS391434-B	–	60 Hz	–	BS4-12Q54TVJ	USA	Multi Branch Selector Unit	Aug. 2015
	Controls and networks			EDUS391000-C	–	–	–	BRC1E71, BRC4C/7C/7E, BRC2A71 DCS302C71, DCS301C71, DST301BA61, DCS601C71 KRP1C74/75	USA	Remote controller Control devices Adaptor	Aug. 2010
				EDUS721438	–	–	–	BRC1E73	USA	Navigation remote controller	Apr. 2015
				EDUS721212	–	–	–	DCM601A71 DCM601A72	USA	intelligent Touch Manager	Oct. 2012
				EDUS72-608	–	–	–	DCS601C71	USA	intelligent Touch Controller	Dec. 2006
				EDUS72-749	–	–	–	DMS502B71	USA	Interface for use in BACnet®	Oct. 2007
Option for all type				OHUS07-1	–	–	–	For indoor and outdoor units	USA	Option handbook	Nov. 2007
Energy Recovery Ventilator (VAM)				EDUS711116A	–	60 Hz	–	VAM300-1200GVJU	USA	Energy Recovery Ventilator	Jun. 2017

EDUS341824-D, C as shown by .
C/O : Cooling only
H/P : Heat pump
H/R : Heat recovery

2. Guide Specifications

2.1 Guide Specifications

General

Unit shall be air cooled, split type multi-system air conditioner consisting of one outdoor unit and plural indoor units, each having capability to cool or heat independently for the requirements of the rooms.
Up to 13 different type indoor units can be connected to one refrigerant circuit and controlled individually.
Compressor shall be equipped with inverter controller, and capable of changing the rotating speed to follow variations in cooling and heating load.
Outdoor unit shall be suitable for mix-match connection of following models.

- Ceiling Mounted Cassette Type (Round Flow with Sensing)
- VISTA™ 2 × 2 Cassette Unit
- 4-Way Blow Ceiling-Suspended Type
- One Way Blow Cassette Type
- Slim Ceiling Mounted Duct Type
- MSP Concealed Ducted Unit
- Ceiling Mounted Duct Type (Middle and High Static Pressure)
- Ceiling Mounted Duct Type
- Ceiling Suspended Type
- Wall Mounted Type
- Floor Standing Type
- Concealed Floor Standing Type
- Air Handling Unit

- Refrigerant: R410A

2.1.1 TA Series Outdoor Unit

The actual refrigerant piping length shall be extended up to 540 ft. (165 m) with 164 ft. (50 m) (★1) level difference without any oil traps.

- Air conditioner shall operate continuously at the ambient temperature of 23°F (-5°C) in cooling -13°F (-25°C) in heating.
  Both indoor unit and outdoor unit are assembled, tested, and charged with refrigerant at the factory.
  ★1: The value is based on the case where the outdoor unit is located above indoor unit. Where the outdoor unit is located under the indoor unit, the level difference is a maximum of 130 ft. (40 m).

Outdoor Unit

The outdoor unit shall be a factory assembled unit housed in a sturdy weatherproof casing constructed form rust-proofed mild steel panels coated with a baked enamel finish.

- The outdoor unit shall be modular in design and should be allowed for side by side installation.

Compressor

The compressor shall be of highly efficient hermetic scroll type and equipped with inverter control capable of changing the speed in accordance to the cooling or heating load requirement.

- The outdoor unit shall have the multi-step of capacity control to meet load fluctuation and indoor unit individual control.

Heat Exchanger

The heat exchanger shall be constructed with copper tubes mechanically bonded to aluminum fins to form a cross fin coil.

- The aluminum fins shall be covered by anti-corrosion resin film.

Refrigerant Circuit

The refrigerant circuit shall include liquid and gas shut off valves and solenoid valves.
All necessary safety devices shall be provided to ensure the safety operation of the system.

Safety Devices
The following safety devices shall be part of the outdoor unit.
High pressure switch, Fan driver overload protector, Overcurrent fuse, Inverter overload protector, Leak detecting device.

Oil Recovery System
Unit shall be equipped with an oil recovery system to ensure stable operation with long refrigerant piping.

2.1.2 Indoor Units

Each indoor unit shall be of the Ceiling Mounted Cassette Type (Round Flow with Sensing), VISTA™ 2 × 2 Cassette Unit, 4-Way Blow Ceiling-Suspended Type, One Way Blow Cassette Type, Slim Ceiling Mounted Duct Type, MSP Concealed Ducted Unit, Ceiling Mounted Duct Type (Middle and High Static Pressure), Ceiling Mounted Duct Type, Ceiling Suspended Type, Wall Mounted Type, Floor Standing Type, Concealed Floor Standing Type, or Air Handling Unit. It shall have electronic control valve which controls refrigerant flow rate in respond to load variations of the room. The fan shall be of the multi blade type and statically and dynamically balanced to ensure low noise and vibration free operation.

- The address of the indoor unit shall be set automatically in case of individual and group control.
- In case of centralized control, it shall be set by remote controller.

Control
Computerized PID control shall be used to maintain a correct room temperature.
Unit shall be equipped with a self-diagnosis for easy and quick maintenance and service.
The Navigation remote controller shall memorize the latest malfunction code for easy maintenance.

- It shall be able to control up to 16 indoor units and change fan speed and angle of swing flap individually in the group.

Central Remote Controller (Option)
A multi-functional centralized control equipment (central remote controller) shall be supplied as optional accessory.

- It shall be able to control up to 64 Zones of 64 indoor unit groups (each group consists of max. 16 indoor units) or 128 indoor units with the following functions.
  a) Temperature setting for each Zone, or group, or indoor unit.
  b) ON/OFF as a Zone or individual unit.
  c) Indication of operating condition.
  d) Select one of 10 operation modes for each Zone.
- The controller shall have wide screen LCD and can be wired by a non-polar 2-wire transmission cable to a distance of 3280 ft. (1000 m) away from the indoor unit.

Unified ON / OFF Controller (Option)
Unified ON / OFF controller shall be supplied as optional accessory.
It shall be able to control up to 16 indoor unit groups (each group consists of max. 16 indoor units) or 128 indoor units with the following functions.
a) ON/OFF as a zone or individual unit.
b) Indication of operation condition of each group.
c) Select one of 4 operation modes.

It shall be wired by a non-polar 2-wire transmission cable to a distance of 3280 ft. (1000 m) away from indoor unit.

Schedule Timer (Option)
A schedule timer shall be supplied as optional accessory.

- It shall be able to set operation schedule of up to 128 indoor units.
  The operation schedule shall include twice ON/OFF a day and holiday.
- It shall be able to set 8 patterns of schedule combined with centralized controller.

intelligent Touch Controller (Option)
Air-conditioning management system that can be controlled by a compact all-in-one unit.

intelligent Touch Manager (Option)
Air-conditioning management system that can be controlled by a compact all-in-one unit.

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.