EDUS371706C-D
202002

DAIKIN

Engineering Data

Design Manual

REYQ-TAYCA, 575 V

Heat Recovery 60 Hz

R-410A

VRV IV

Table of Contents

1. Features and Benefits

The new ***VRV*** IV 575 Volt (V) heat recovery unit offers all the features and benefits of the ***VRV*** IV 230/460 V product in a new voltage. Integrated with advanced technology and comfort control, to provide energy efficiency and reliability make the new ***VRV*** IV 575 V a great solution for multi-family residential and commercial applications.

- Engineered with 575 V inverter board and compressor to eliminate the need of additional transformer or voltage converters.
- Designed with the Daikin 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 overall Life Cycle Cost (LCC).
- Long pipe lengths with up to 295* ft allowable height difference between outdoor and indoor units allows for design flexibility.
- Continuous heating during defrost and oil return.
- Corrosion resistant, 1000 hours salt spray tested Daikin PE Blue fin heat exchanger coating.
- Ships factory standard with coil guards.
- Compatible with the full suite of ***VRV***-IV T-series Branch Selector Boxes.
- Seamless connection to all ***VRV*** M, P and T series indoor unit.
- Best in class 10 years limited warranty** as standard.

*- Field setting required

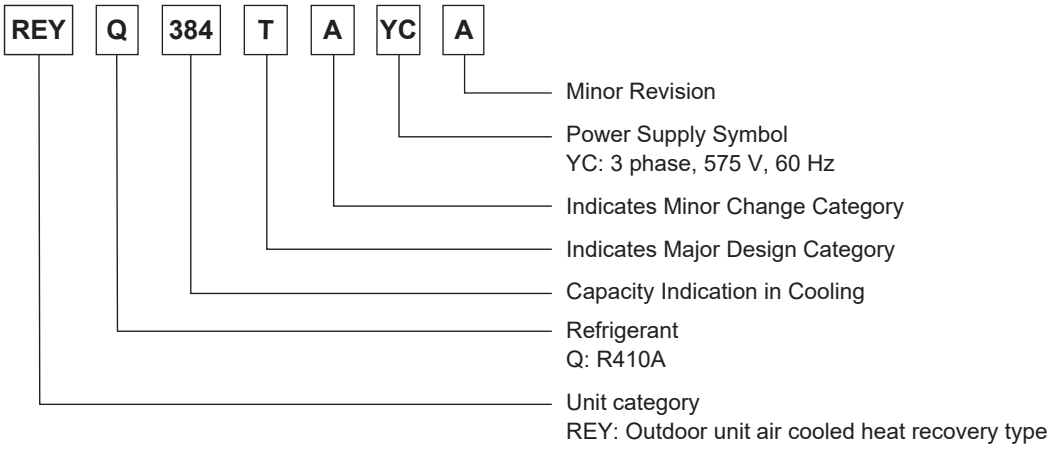
**- Complete warranty details available from local distributor or manufacturer's representative.

2. Compatibility

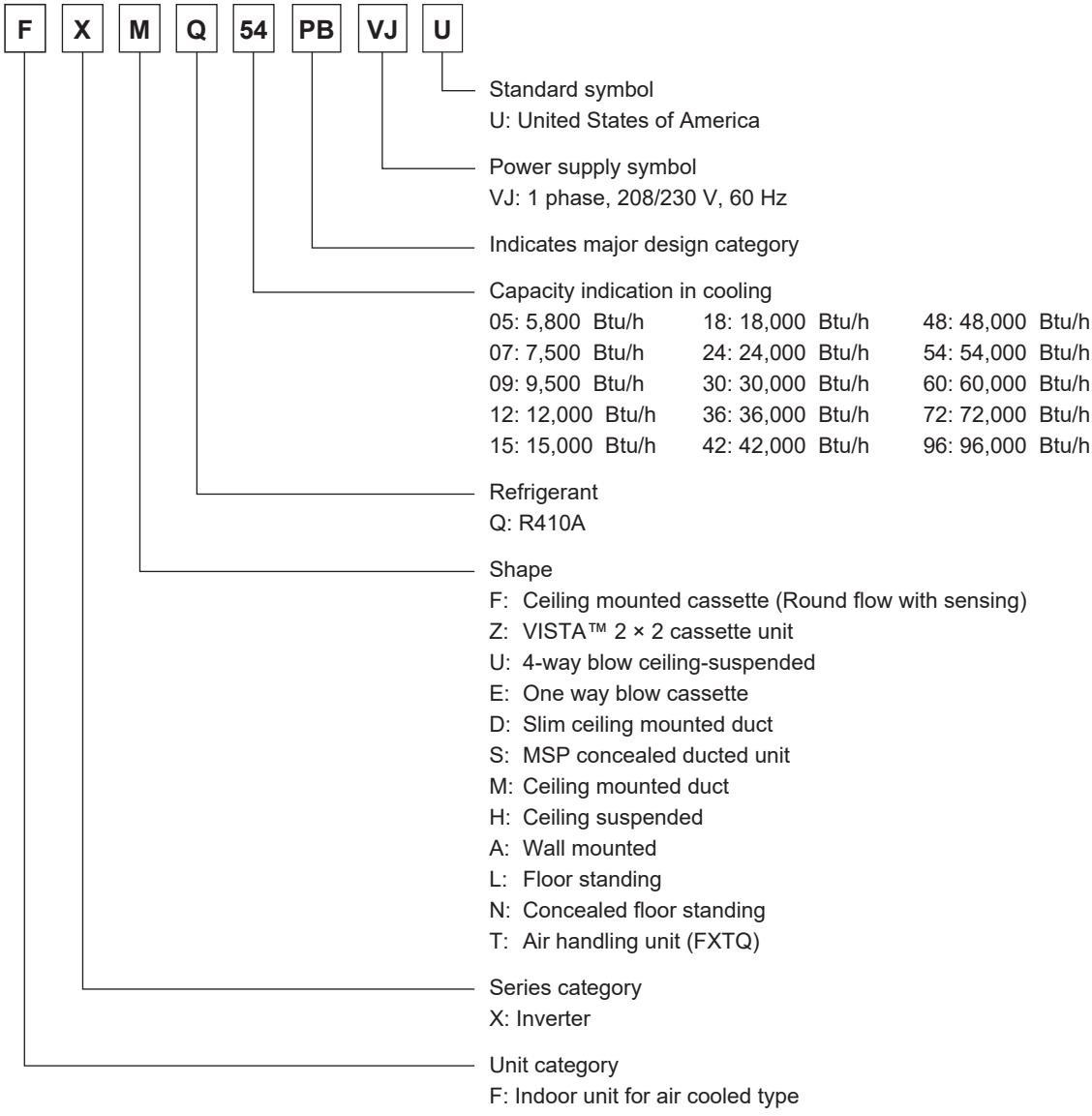
575 V model	
New model	Current model
REYQ72TAYCA	REYQ72TAYCU
REYQ96TAYCA	REYQ96TAYCU
REYQ120TAYCA	REYQ120TAYCU
REYQ144TAYCA	REYQ144TAYCU
REYQ168TAYCA	REYQ168TAYCU
REYQ192TAYCA	REYQ192TAYCU
REYQ216TAYCA	REYQ216TAYCU
REYQ240TAYCA	REYQ240TAYCU
REYQ264TAYCA	REYQ264TAYCU
REYQ288TAYCA	REYQ288TAYCU
REYQ312TAYCA	REYQ312TAYCU
REYQ336TAYCA	REYQ336TAYCU
REYQ360TAYCA	REYQ360TAYCU
REYQ384TAYCA	REYQ384TAYCU

3. Nomenclature

Outdoor Unit

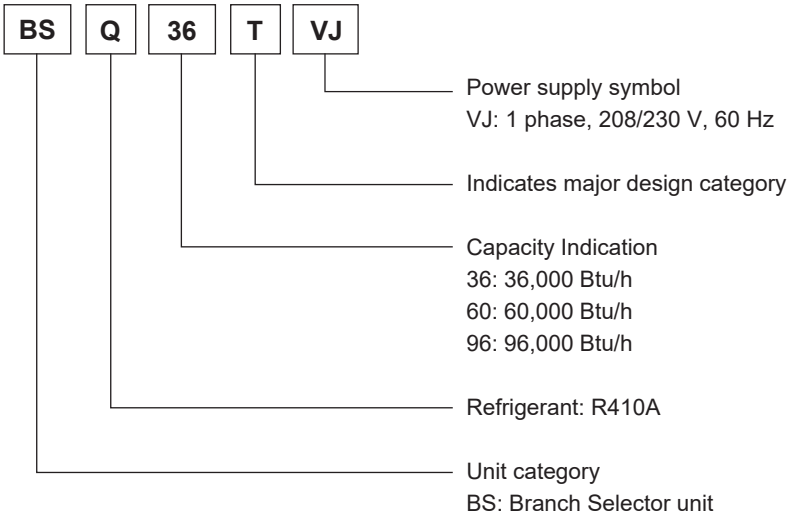


Indoor Unit

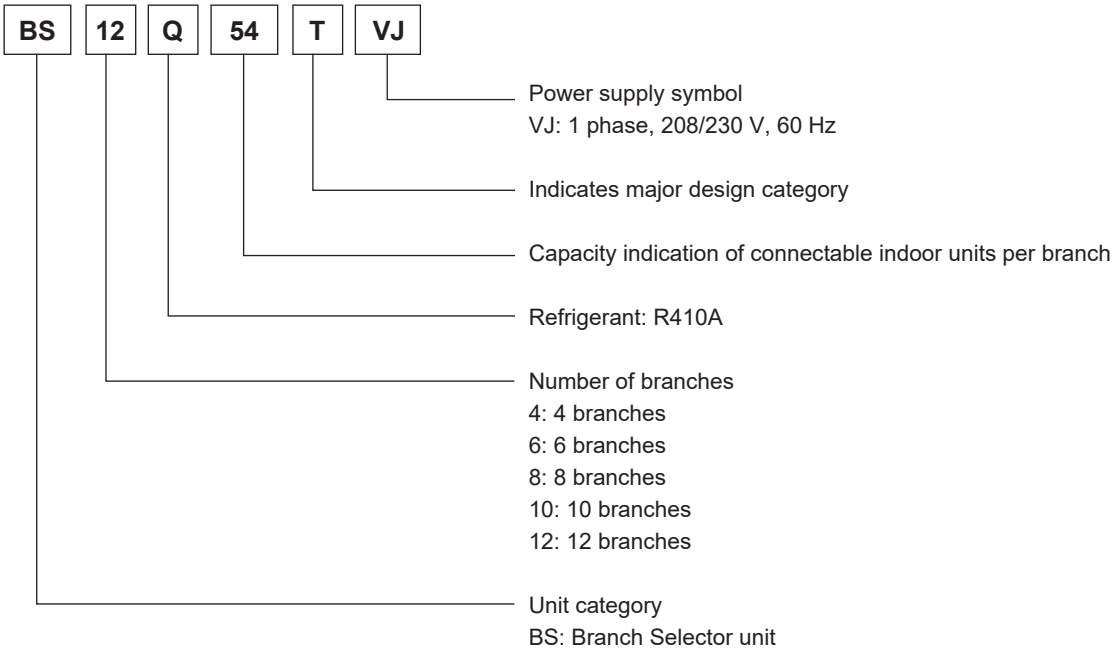

F X M Q 54 PB VJ U
Standard symbol
U: United States of America
Power supply symbol
VJ: 1 phase, 208/230 V, 60 Hz
Indicates major design category
Capacity indication in cooling
05: 5,800 Btu/h
07: 7,500 Btu/h
09: 9,500 Btu/h
12: 12,000 Btu/h
15: 15,000 Btu/h
18: 18,000 Btu/h
24: 24,000 Btu/h
30: 30,000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

Branch Selector Unit

Single Branch Selector unit (only necessary for Heat Recovery System)

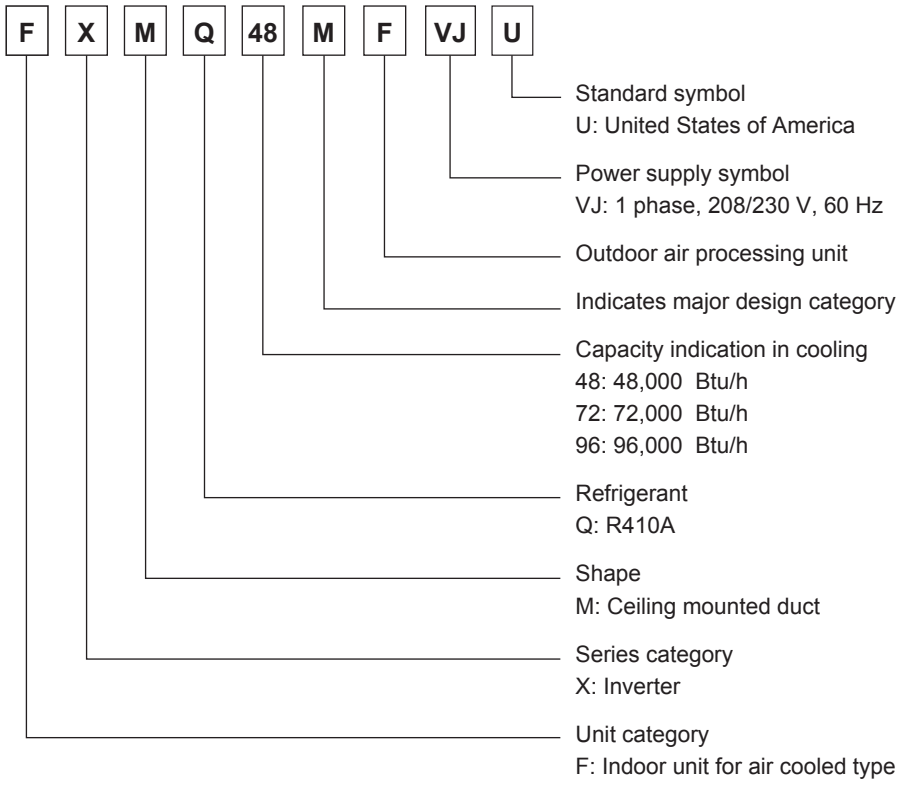


Multi Branch Selector unit (only necessary for Heat Recovery System)

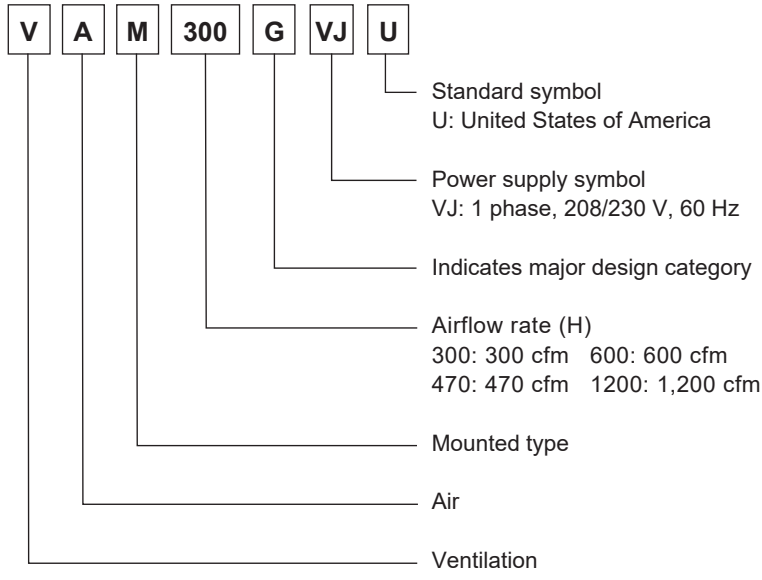


Air Treatment Equipment

Outdoor Air Processing Unit



Energy Recovery Ventilator (VAM series)



4. Model Names

4.1 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 Recovery	575 V	REYQ-	72TA	96TA	120TA	144TA	168TA	192TA	216TA	YCA

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

Note:

YC: 3 phase, 575 V, 60 Hz
A: Minor Revision

Heat Recovery 575 V

Model name	REYQ72TAYCA	REYQ96TAYCA	REYQ120TAYCA	REYQ144TAYCA	REYQ168TAYCA
Outdoor unit 1	REYQ72TAYCA	REYQ96TAYCA	REYQ120TAYCA	REYQ144TAYCA	REYQ168TAYCA

Model name	REYQ192TAYCA	REYQ216TAYCA	REYQ240TAYCA	REYQ264TAYCA
Outdoor unit 1	REYQ96TAYCA	REYQ96TAYCA	REYQ120TAYCA	REYQ120TAYCA
Outdoor unit 2	REYQ96TAYCA	REYQ120TAYCA	REYQ120TAYCA	REYQ144TAYCA

Model name	REYQ288TAYCA	REYQ312TAYCA	REYQ336TAYCA
Outdoor unit 1	REYQ144TAYCA	REYQ144TAYCA	REYQ168TAYCA
Outdoor unit 2	REYQ144TAYCA	REYQ168TAYCA	REYQ168TAYCA

Model name	REYQ360TAYCA	REYQ384TAYCA
Outdoor unit 1	REYQ120TAYCA	REYQ120TAYCA
Outdoor unit 2	REYQ120TAYCA	REYQ120TAYCA
Outdoor unit 3	REYQ120TAYCA	REYQ144TAYCA

4.2 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

4.3 Branch Selector Unit

Single Branch Selector Unit for Heat Recovery

Series		Model Name			Power Supply, Standard
Heat Recovery	BSQ	36T	60T	96T	VJ

Note:

No interchangeability between BSVQ-PVJU and BSQ-TVJ.

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

Multi Branch Selector Unit for Heat Recovery

Series		Model Name					Power Supply, Standard
Heat Recovery	BS	4Q54T	6Q54T	8Q54T	10Q54T	12Q54T	VJ

Note:

No interchangeability between BSV-Q36PVJU and BS-Q54TVJ.

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

4.4 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

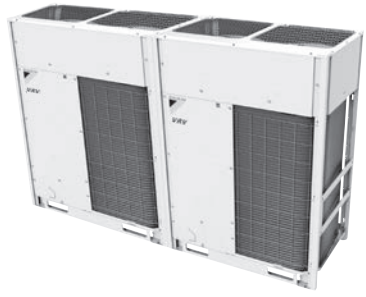
5. External Appearance

5.1 Outdoor Units

Single Outdoor Units

REYQ72TAYCA REYQ96TAYCA REYQ120TAYCA REYQ144TAYCA REYQ168TAYCA
 6, 8, 10, 12, 14 ton

Double Outdoor Units

REYQ192TAYCA REYQ216TAYCA REYQ240TAYCA REYQ264TAYCA	REYQ288TAYCA REYQ312TAYCA REYQ336TAYCA
 16, 18, 20, 22, 24, 26, 28 ton	

Triple Outdoor Units

REYQ360TAYCA REYQ384TAYCA
 30, 32 ton

5.2 Indoor Units

Ceiling mounted cassette (Round flow with sensing) type

FXFQ-T

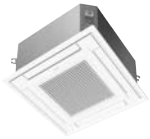
Shown with BYCQ125B-W1

Ceiling mounted duct type

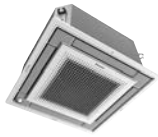
FXMQ-M

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

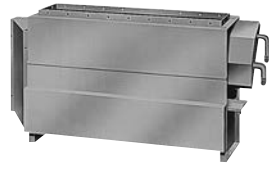
FXLQ-M

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

5.3 Branch Selector Unit

Single branch selector unit BSQ-T 	Multi branch selector unit BS-Q54T 

5.4 Air Treatment Equipment

Outdoor air processing unit FXMQ-MF 	Energy recovery ventilator (VAM series) VAM-G 

6. 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	
REYQ72TAYCA	6	7.5	21.1	1	●					—
REYQ96TAYCA	8	10.0	28.1	1		●				
REYQ120TAYCA	10	12.5	35.2	1			●			
REYQ144TAYCA	12	15.0	42.2	1				●		
REYQ168TAYCA	14	17.5	49.2	1					●	
REYQ192TAYCA	16	20.0	56.3	2		●●				BHFP26P100U BHFP26P100UA
REYQ216TAYCA	18	22.5	63.3	2		●	●			
REYQ240TAYCA	20	25.0	70.3	2			●●			
REYQ264TAYCA	22	27.5	77.4	2			●	●		
REYQ288TAYCA	24	30.0	84.4	2				●●		
REYQ312TAYCA	26	32.5	91.4	2				●	●	
REYQ336TAYCA	28	35.0	98.5	2					●●	
REYQ360TAYCA	30	37.5	105.5	3			●●●			BHFP26P151U BHFP26P151UA
REYQ384TAYCA	32	40.0	112.5	3			●●	●		

Note:

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

7. Interchangeability

Outdoor unit		Branch Selector unit	New Branch Selector unit		(Reference) Current Branch Selector unit	
			Single Branch Selector unit	Multi Branch Selector unit	Single Branch Selector unit	Multi Branch Selector unit
			BSQ36TVJ BSQ60TVJ BSQ96TVJ	BS4Q54TVJ BS6Q54TVJ BS8Q54TVJ BS10Q54TVJ BS12Q54TVJ	BSVQ36PVJU BSVQ60PVJU BSVQ96PVJU	BSV4Q36PVJU BSV6Q36PVJU
Heat Recovery	REYQ-TA	REYQ-TAYCA	Connectable	Connectable	Not connectable	Not connectable

8. Capacity Range

8.1 Connection Ratio

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

Type	Min. connection ratio	Max. connection ratio				
		Types of connected indoor units			Type of connected air treatment equipment	
					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	130%	200% *2	100%	100% *3 *4
Double outdoor units				160% *2		
Triple outdoor units				130%		

Note:

*1. 70%: REYQ72T 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%.
*4. It is permitted to use a maximum connection ratio of 130% in some circumstances – please contact your local Daikin representative for further details.
*5. For indoor units used for cooling only (do not connect to Branch Selector unit when using for heat recovery), total capacity index must be 50% or less than the capacity index of the outdoor units.

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.

8.2 Capacity Range of Connectable Indoor Units

Type	Ton	Capacity index	Model name	Total capacity index of connectable indoor units *1	Maximum number of connectable indoor units
Single outdoor units	6	72	REYQ72TAYCA	51 to 93 (144)	12
	8	96	REYQ96TAYCA	48 to 124 (192)	16
	10	120	REYQ120TAYCA	60 to 156 (240)	20
	12	144	REYQ144TAYCA	72 to 187 (288)	25
	14	168	REYQ168TAYCA	84 to 218 (336)	29
Double outdoor units	16	192	REYQ192TAYCA	96 to 249 (307)	33
	18	216	REYQ216TAYCA	108 to 280 (345)	37
	20	240	REYQ240TAYCA	120 to 312 (384)	41
	22	264	REYQ264TAYCA	132 to 343 (422)	45
	24	288	REYQ288TAYCA	144 to 374 (460)	49
	26	312	REYQ312TAYCA	156 to 405 (499)	54
	28	336	REYQ336TAYCA	168 to 436 (537)	58
Triple outdoor units	30	360	REYQ360TAYCA	180 to 468 (468)	62
	32	384	REYQ384TAYCA	192 to 499 (499)	64

Note:

*1. 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.

8.3 Limitation of Capacity Index for Heat Recovery

Single Branch Selector unit

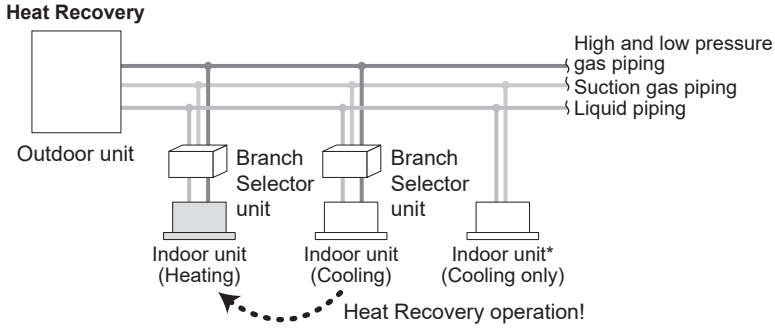
Model	BSQ36TVJ	BSQ60TVJ	BSQ96TVJ
Maximum number of connectable indoor units	4	8	8
Total capacity index of connectable indoor units	unit ≤ 36	36 < unit ≤ 60	60 < unit ≤ 96

Multi Branch Selector unit

Model	BS4Q54TVJ	BS6Q54TVJ	BS8Q54TVJ	BS10Q54TVJ	BS14Q54TVJ
Maximum number of connectable indoor units	20	30	40	41	41
Maximum number of connectable indoor units per branch	5	5	5	5	5
Number of branches	4	6	8	10	12
Maximum capacity index of connectable indoor units	144 or less	216 or less	290 or less	290 or less	290 or less
Maximum capacity index of connectable indoor units per branch (*1)	54 or less	54 or less	54 or less	54 or less	54 or less

Note:

*1. When the total capacity of indoor units to be connected downstream is larger than 54 (Max. 96), use a junction pipe kit (KHRP26A250T, optional parts) to join two connections downstream from the Branch Selector unit.



★For indoor units used for cooling only (do not connect to Branch Selector unit when using for Heat Recovery), total capacity index must be 50% or less than the capacity index of the outdoor units.

9. Specifications

Model name			REYQ72TAYCA	REYQ96TAYCA	REYQ120TAYCA
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)
	Suction 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)
	High/Low pressure gas pipe	in. (mm)	ϕ5/8 (15.9) C1220T (Brazing Connection)	ϕ3/4 (19.1) C1220T (Brazing Connection)	ϕ3/4 (19.1) 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

Note:

★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), 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), level difference: 0 ft. (0 m).

4D107395B, 4D107396C, 4D107397C

Model name (Combination Unit)			REYQ144TAYCA	REYQ168TAYCA	REYQ192TAYCA
Model name (Independent Unit)			—	—	REYQ96TAYCA REYQ96TAYCA
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)	168,000 (49.2)	192,000 (56.3)
	Rated		138,000 (40.4)	160,000 (46.9)	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 (52.7)	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	33.6	17.7 + 17.7
	Number of revolutions	r/min	5,214	6,330	5,214 + 5,214
	Motor output × Number of units	kW	8.0 × 1	9.7 × 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)
	Suction 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)
	High/Low pressure gas pipe	in. (mm)	ϕ7/8 (22.2) C1220T (Brazing Connection)	ϕ7/8 (22.2) 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		%	10.0-100	8.8-100	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

Note:

★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), 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), level difference: 0 ft. (0 m).

4D107398C, 4D107399D, 4D107400C

Model name (Combination Unit)			REYQ216TAYCA	REYQ240TAYCA	REYQ264TAYCA
Model name (Independent Unit)			REYQ96TAYCA REYQ120TAYCA	REYQ120TAYCA REYQ120TAYCA	REYQ120TAYCA REYQ144TAYCA
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 (73.8)
★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	22.0 + 27.7
	Number of revolutions	r/min	5,994 + 5,994	6,702 + 6,702	6,504 + 5,214
	Motor output × Number of units	kW	6.2 × 1 + 6.2 × 1	7.0 × 1 + 7.0 × 1	6.8 × 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)
	Suction 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)
	High/Low pressure 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)	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	4.6-100
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

Note:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Equivalent piping length: 25 ft. (7.6 m), 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), level difference: 0 ft. (0 m).

4D107401A, 4D107402D, 4D107403B

Model name (Combination Unit)			REYQ288TAYCA	REYQ312TAYCA	REYQ336TAYCA
Model name (Independent Unit)			REYQ144TAYCA REYQ144TAYCA	REYQ144TAYCA REYQ168TAYCA	REYQ168TAYCA REYQ168TAYCA
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)	312,000 (91.4)	336,000 (98.5)
	Rated		274,000 (80.3)	296,000 (86.7)	320,000 (93.8)
★2 Heating capacity	Nominal	Btu/h (kW)	324,000 (95.0)	351,000 (102.9)	378,000 (110.8)
	Rated		294,000 (86.1)	320,000 (93.8)	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	25.4 + 25.4	28.0 + 28.0	30.0 + 30.0
	Number of revolutions	r/min	4,794 + 4,794	5,286 + 5,286	5,664 + 5,664
	Motor output × Number of units	kW	7.3 × 1 + 7.3 × 1	8.1 × 1 + 8.1 × 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)
	Suction 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)
	High/Low pressure 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 + 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		%	5.0-100	4.7-100	4.4-100
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Charge	lbs (kg)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)	25.8 + 25.8 (11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

Note:

★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Equivalent piping length: 25 ft. (7.6 m), 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), level difference: 0 ft. (0 m).

4D107404E, 4D107405B, 4D107406D

Model name (Combination Unit)			REYQ360TAYCA	REYQ384TAYCA
Model name (Independent Unit)			REYQ120TAYCA REYQ120TAYCA REYQ120TAYCA	REYQ120TAYCA REYQ120TAYCA REYQ144TAYCA
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)	384,000 (112.5)
	Rated		342,000 (100.2)	364,000 (106.7)
★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)
	Suction gas pipe	in. (mm)	ϕ1-5/8 (41.3) C1220T (Brazing connection)	ϕ1-5/8 (41.3) C1220T (Brazing connection)
	High/Low pressure gas pipe	in. (mm)	ϕ1-3/8 (34.9) C1220T (Brazing Connection)	ϕ1-3/8 (34.9) 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	3.0-100
Refrigerant	Refrigerant name		R410A	R410A
	Charge	lbs (kg)	25.8 + 25.8 + 25.8 (11.7 + 11.7 + 11.7)	25.8 + 25.8 + 25.8 (11.7 + 11.7 + 11.7)
	Control		Electronic expansion valve	Electronic expansion valve
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamps	Installation manual, Operation manual, Connection pipes, Clamps

Note:

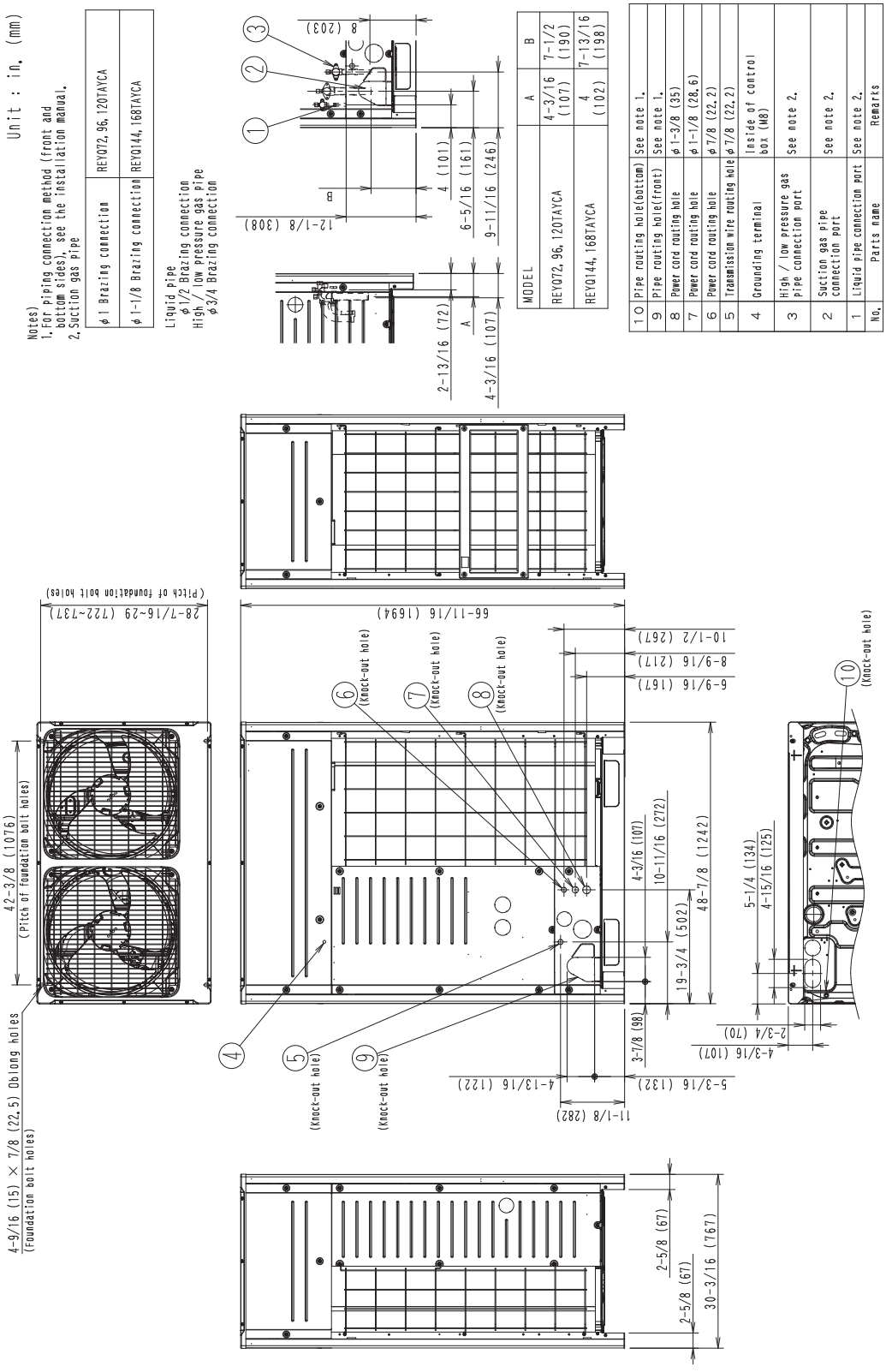
★1. Indoor temp.: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB) / Outdoor temp.: 95°FDB (35.0°CDB) / Equivalent piping length: 25 ft. (7.6 m), level difference: 0 ft. (0 m).

★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), level difference: 0 ft. (0 m).

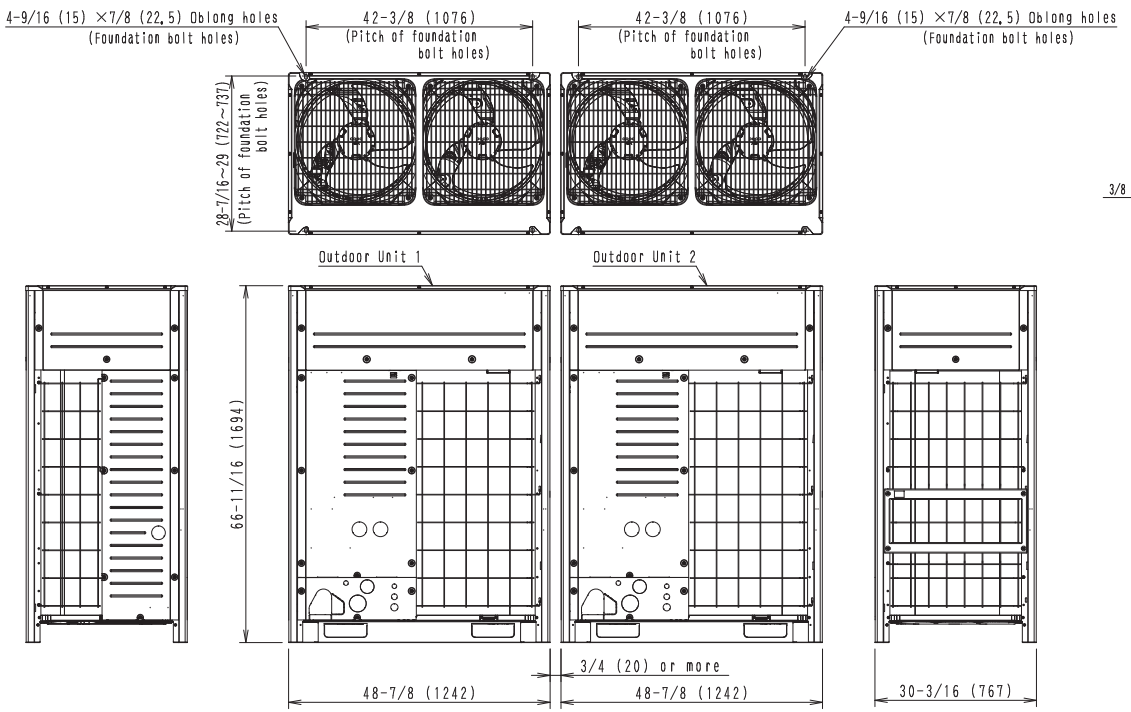
4D107407B, 4D107408C

10.Dimensions

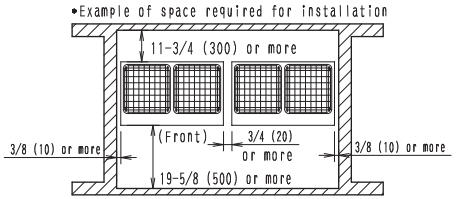
REYQ72 - 168TAYCA

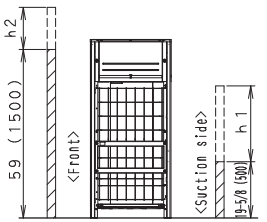


REYQ192 - 336TAYCA



Unit:in.(mm)





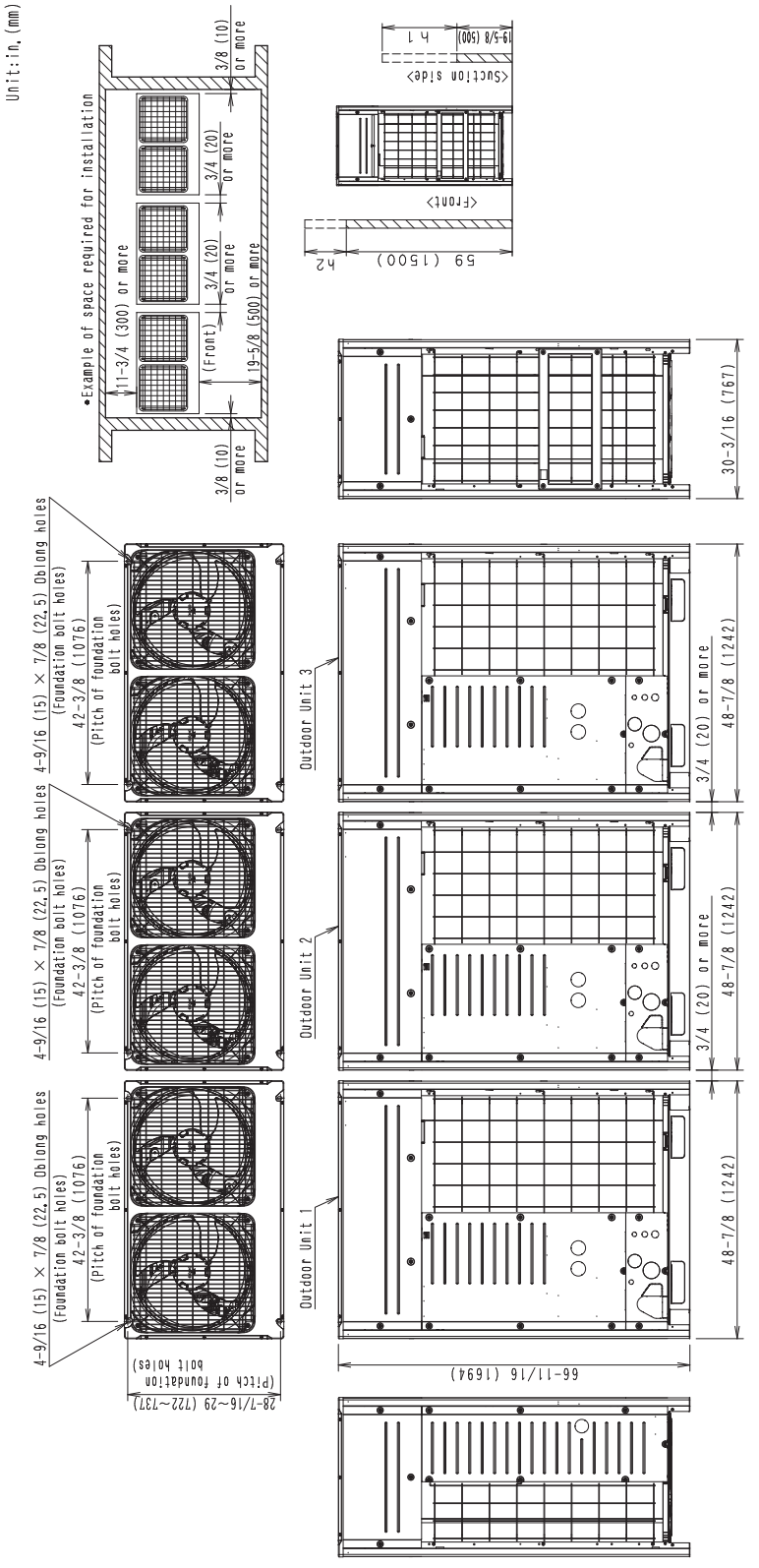
Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.
REYQ192TAYCA	REYQ96TAYCA	3D107340	REYQ96TAYCA	3D107340
REYQ216TAYCA	REYQ96TAYCA	3D107340	REYQ120TAYCA	3D107340
REYQ240TAYCA	REYQ120TAYCA	3D107340	REYQ120TAYCA	3D107340
REYQ264TAYCA	REYQ120TAYCA	3D107340	REYQ144TAYCA	3D107340
REYQ288TAYCA	REYQ144TAYCA	3D107340	REYQ144TAYCA	3D107340
REYQ312TAYCA	REYQ144TAYCA	3D107340	REYQ168TAYCA	3D107340
REYQ336TAYCA	REYQ168TAYCA	3D107340	REYQ168TAYCA	3D107340

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.

C: 3D107341C

REYQ360 - 384TAYCA



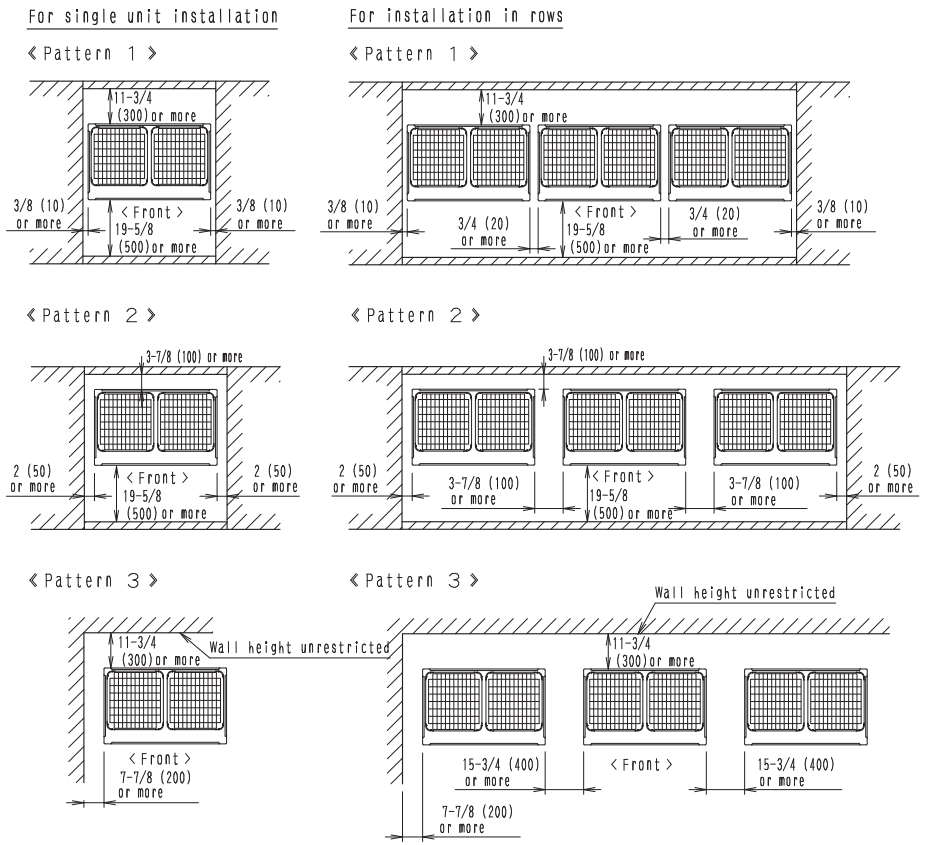
Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Outdoor Unit 3	Drawing No.
REYQ360TAYCA	REYQ120TAYCA	3D107340	REYQ120TAYCA	3D107340	REYQ120TAYCA	3D107340
REYQ384TAYCA	REYQ120TAYCA	3D107340	REYQ120TAYCA	3D107340	REYQ144TAYCA	3D107340

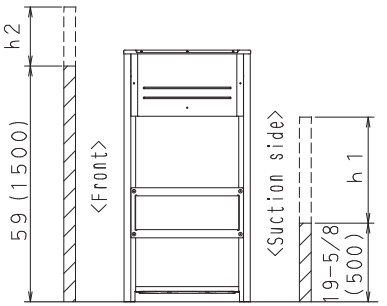
Notes :

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.

C: 3D107342B

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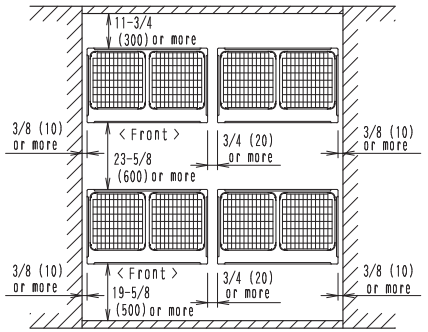
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

REYQ72 - 384TAYCA

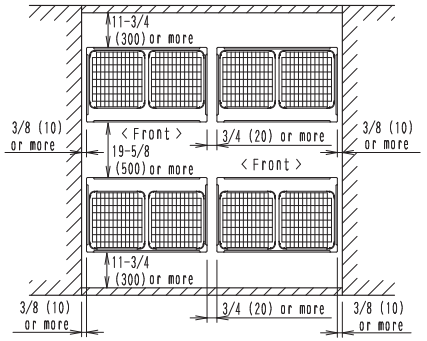
Unit : in. (mm)

For centralized group layout

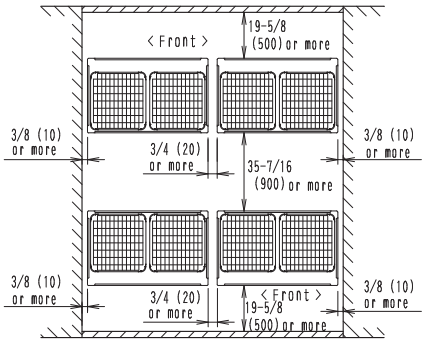
《Pattern 1》

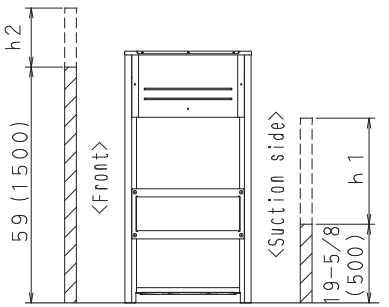


《Pattern 1》

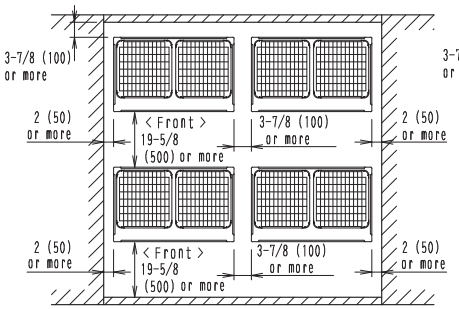


《Pattern 1》

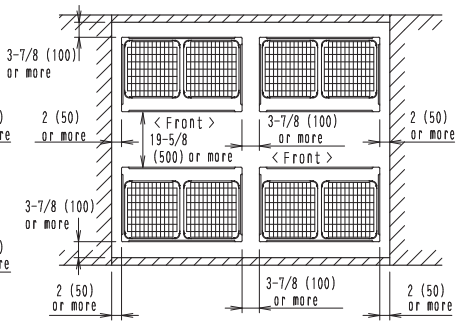




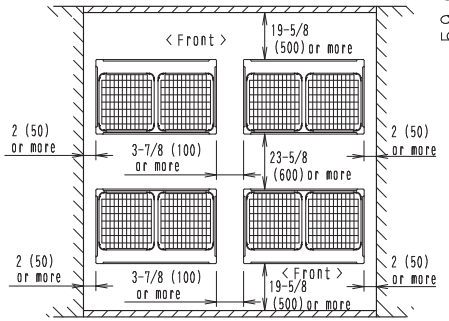
《Pattern 2》



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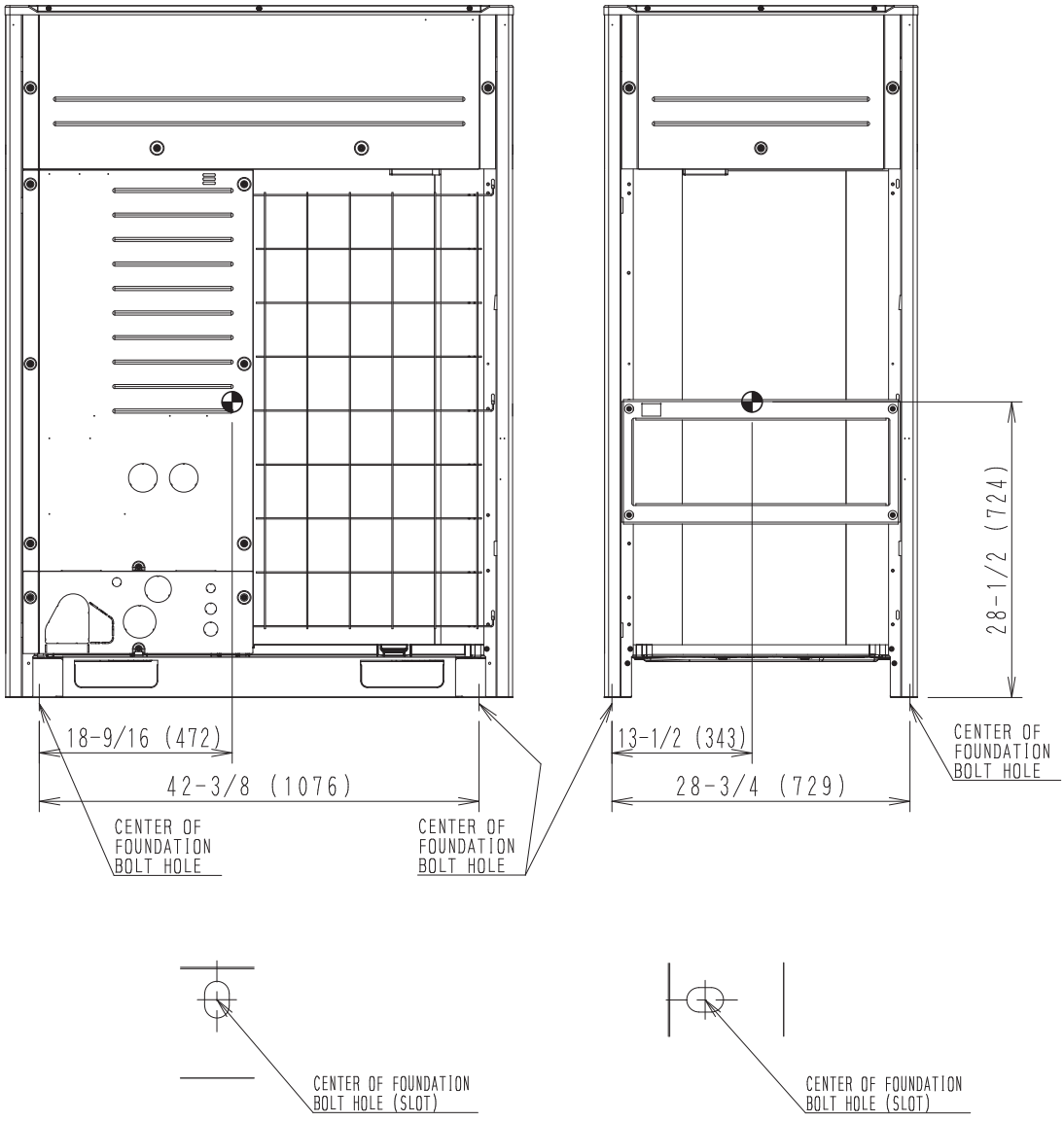
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

C: 3D085503H

12.Center of Gravity

REYQ72 - 120TAYCA

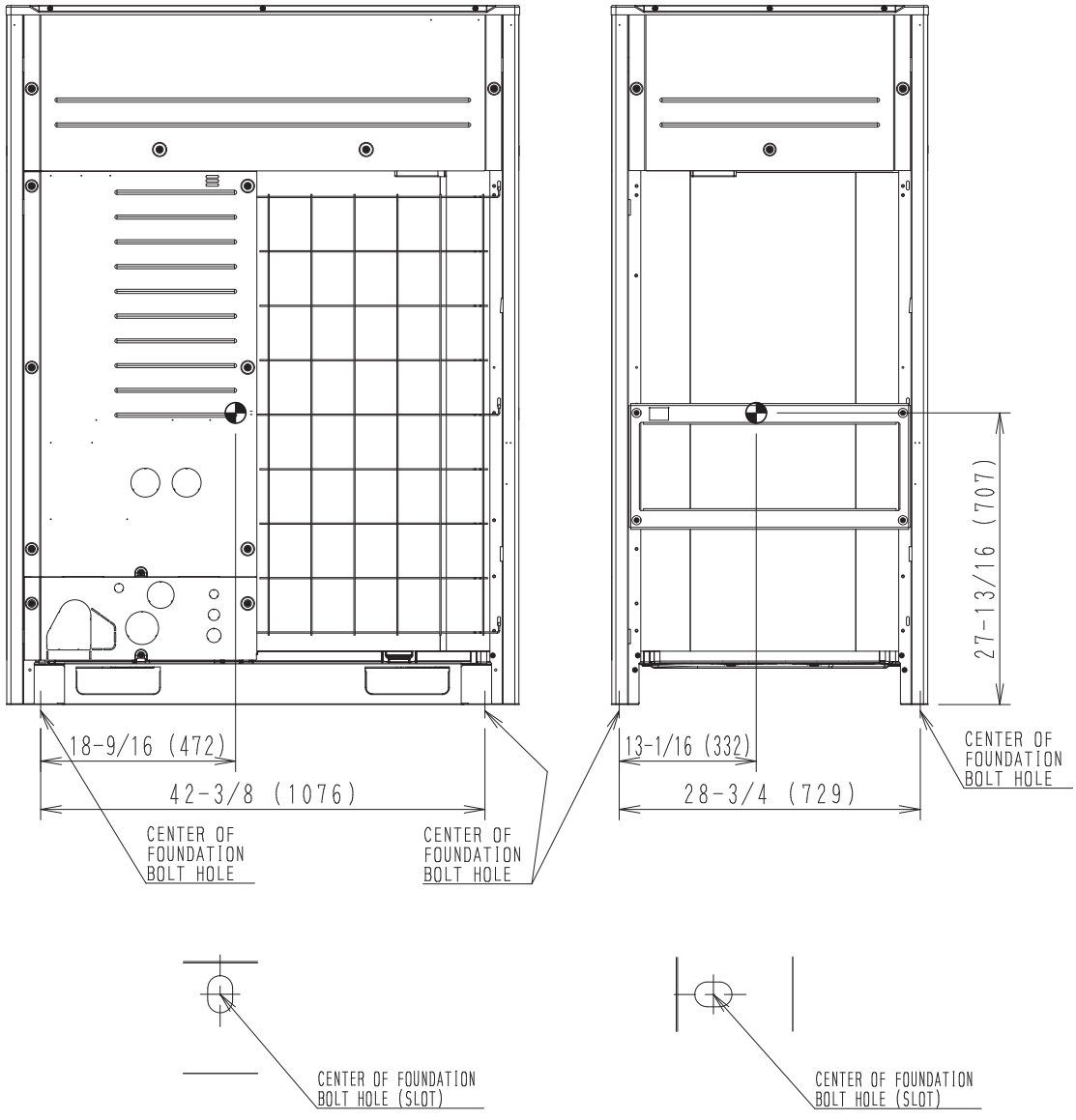
Unit : in. (mm)



4D107384

REYQ144 - 168TAYCA

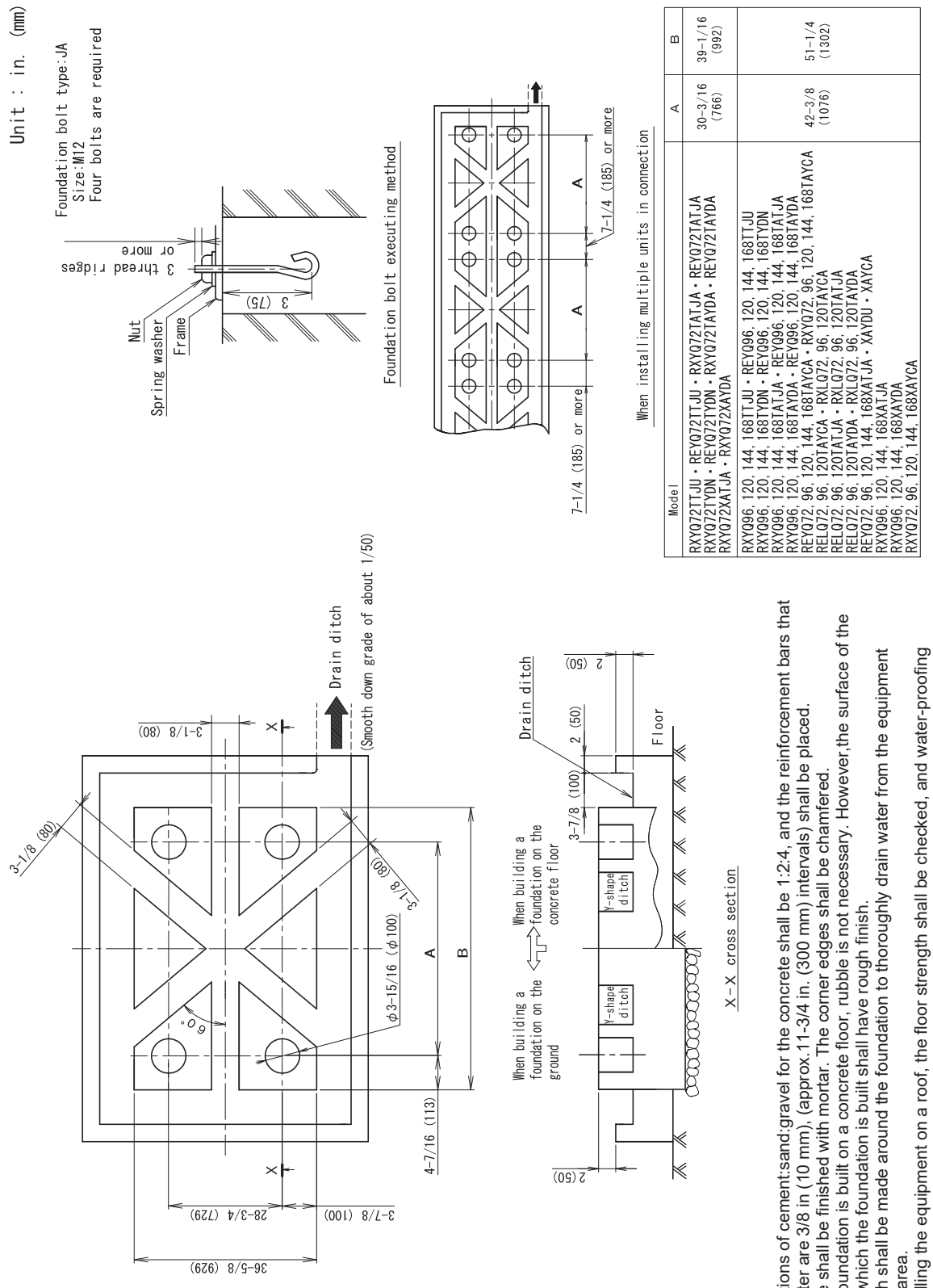
Unit : in. (mm)



4D107385

13.Foundation Drawing

REYQ72 - 384TAYCA



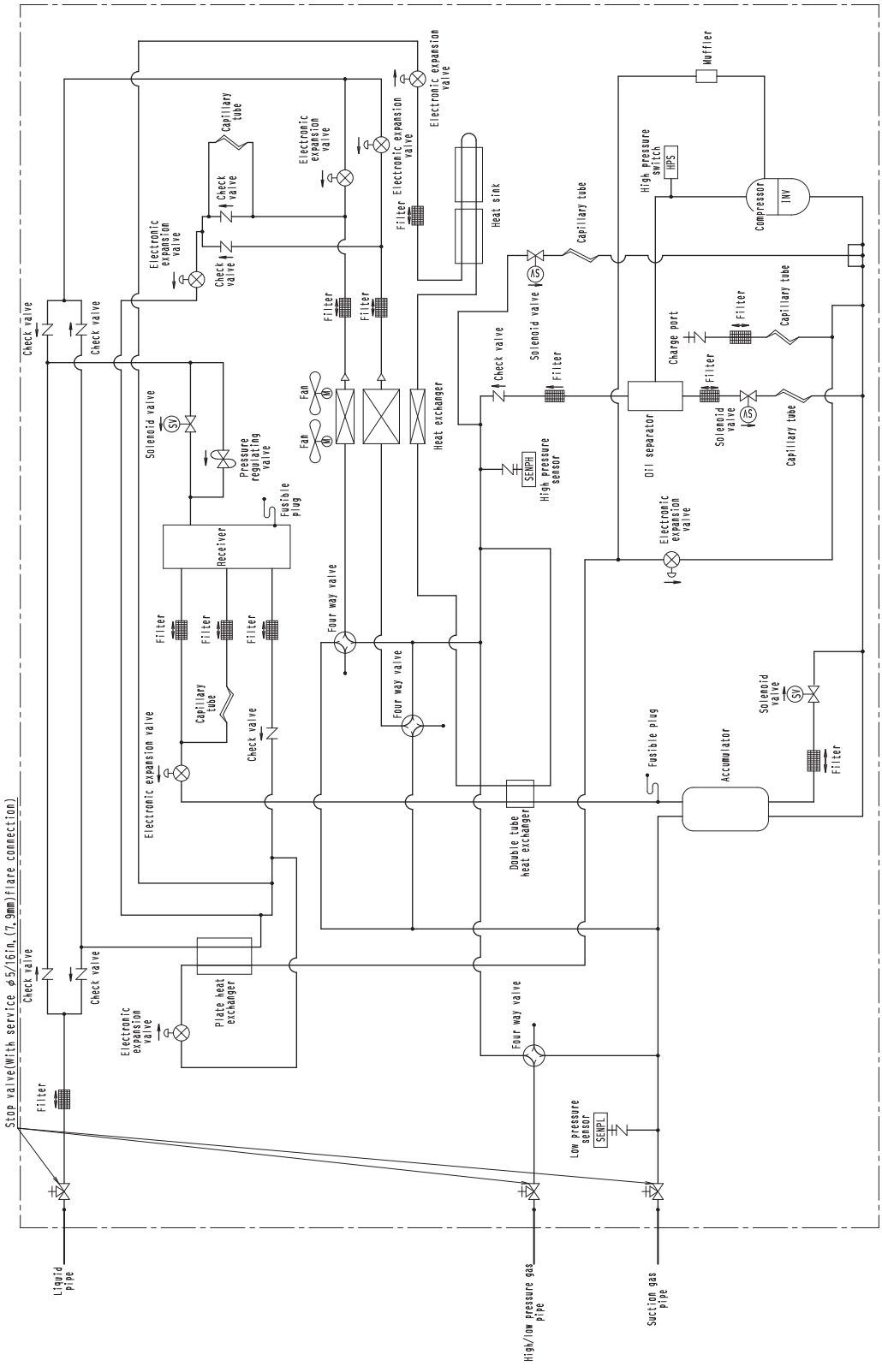
Model	A	B
RXYQ72TTJU・REYQ72TTJU・RXYQ72TATJA・REYQ72TATJA RXYQ72TYDN・REYQ72TYDN・RXYQ72TAYDA・REYQ72TAYDA RXYQ72XATJA・RXYQ72XAYDA	30-3/16 (766)	39-1/16 (992)
RXYQ96,120,144,168TTJU・REYQ96,120,144,168TTJU RXYQ96,120,144,168TYDN・REYQ96,120,144,168TYDN RXYQ96,120,144,168TATJA・REYQ96,120,144,168TATJA RXYQ96,120,144,168TAYDA・REYQ96,120,144,168TAYDA REYQ72,96,120,144,168TAYCA・RXYQ72,96,120,144,168TAYCA RELQ72,96,120TAYCA・RXLQ72,96,120TAYCA RELQ72,96,120TATJA・RXLQ72,96,120TATJA RELQ72,96,120TAYDA・RXLQ72,96,120TAYDA REYQ72,96,120,144,168XATJA・XAYDU・XAYCA RXYQ96,120,144,168XATJA RXYQ96,120,144,168XAYDA RXYQ72,96,120,144,168XAYCA	42-3/8 (1076)	51-1/4 (1302)

C: 3D085480F

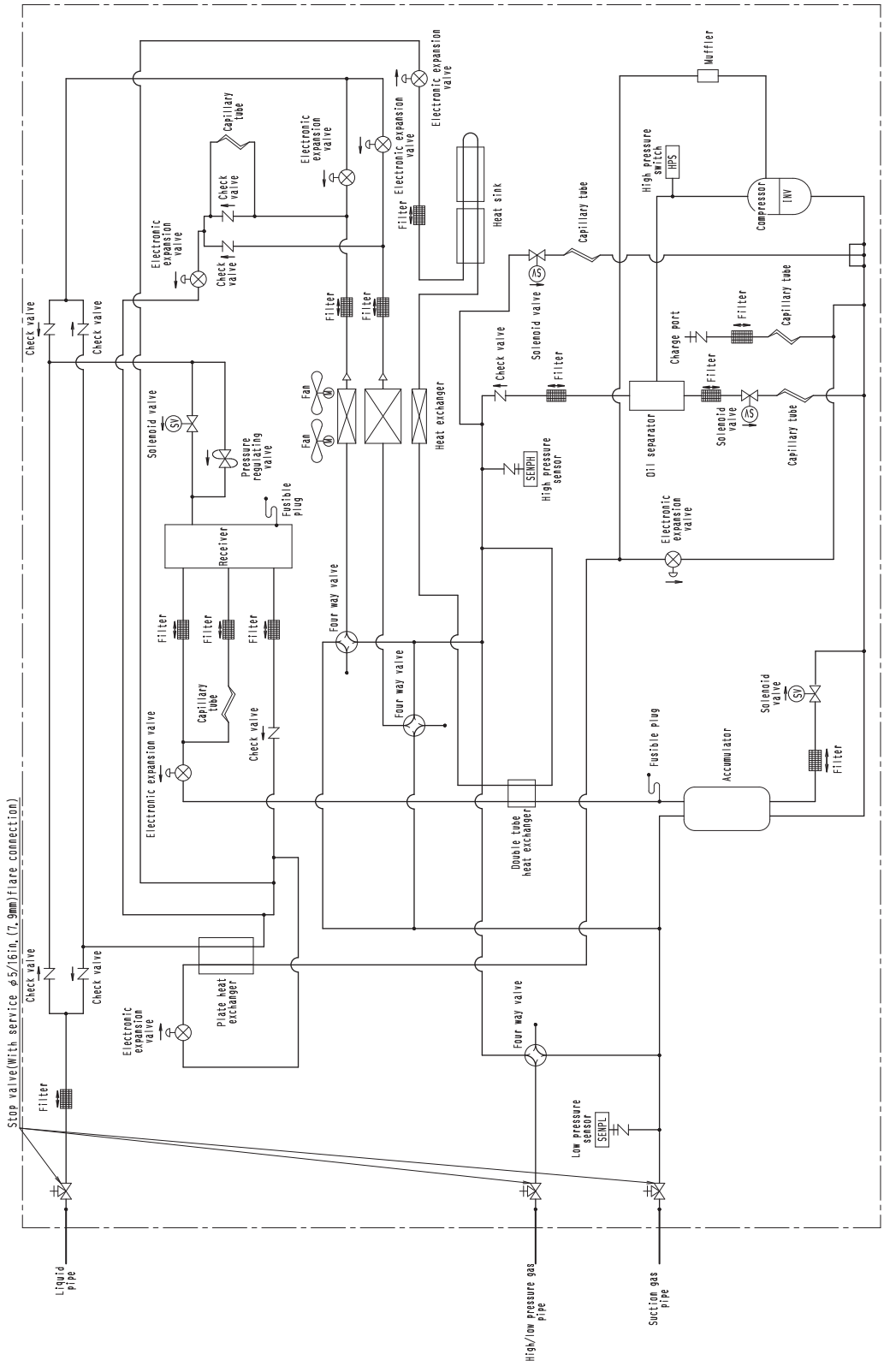
Note:
1. The proportions of cement:sand:gravel for the concrete shall be 1:2:4, and the reinforcement bars that their diameter are 3/8 in (10 mm), (approx.11-3/4 in. (300 mm) intervals) shall be placed.
2. The surface shall be finished with mortar. The corner edges shall be chamfered.
3. When the foundation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

14.Piping Diagrams

REYQ72 - 120TAYCA



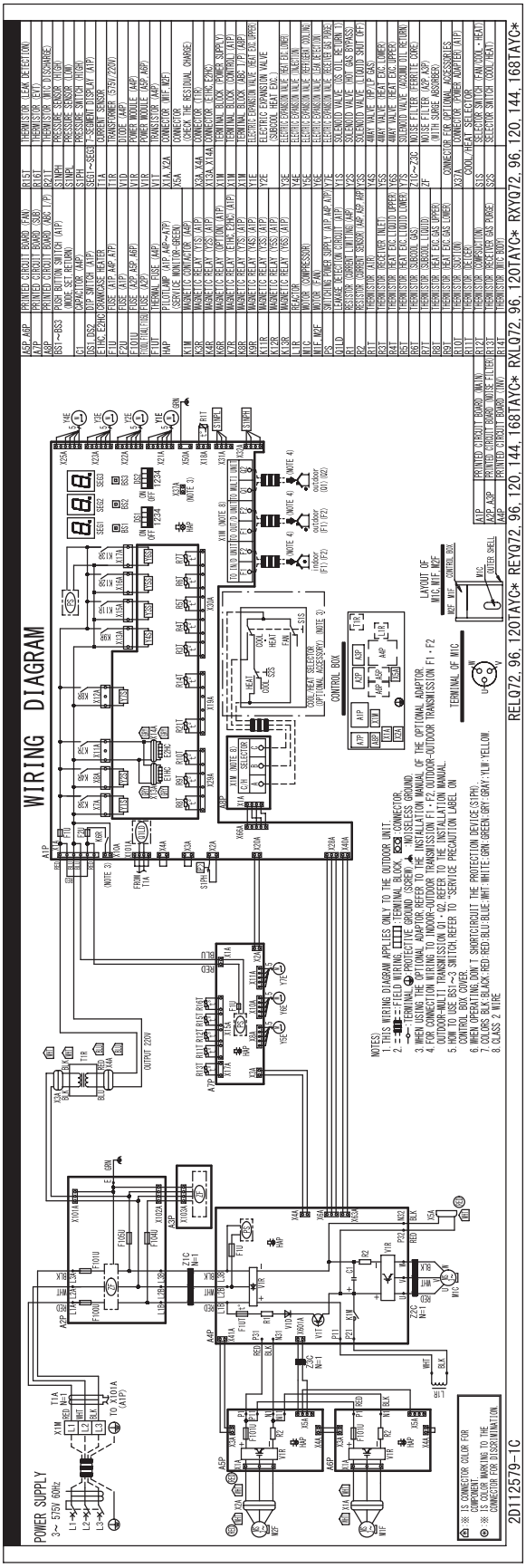
REYQ144 - 168TAYCA



3D107167

15.Wiring Diagrams

REYQ72 - 168TAYCA



C: 2D112579C

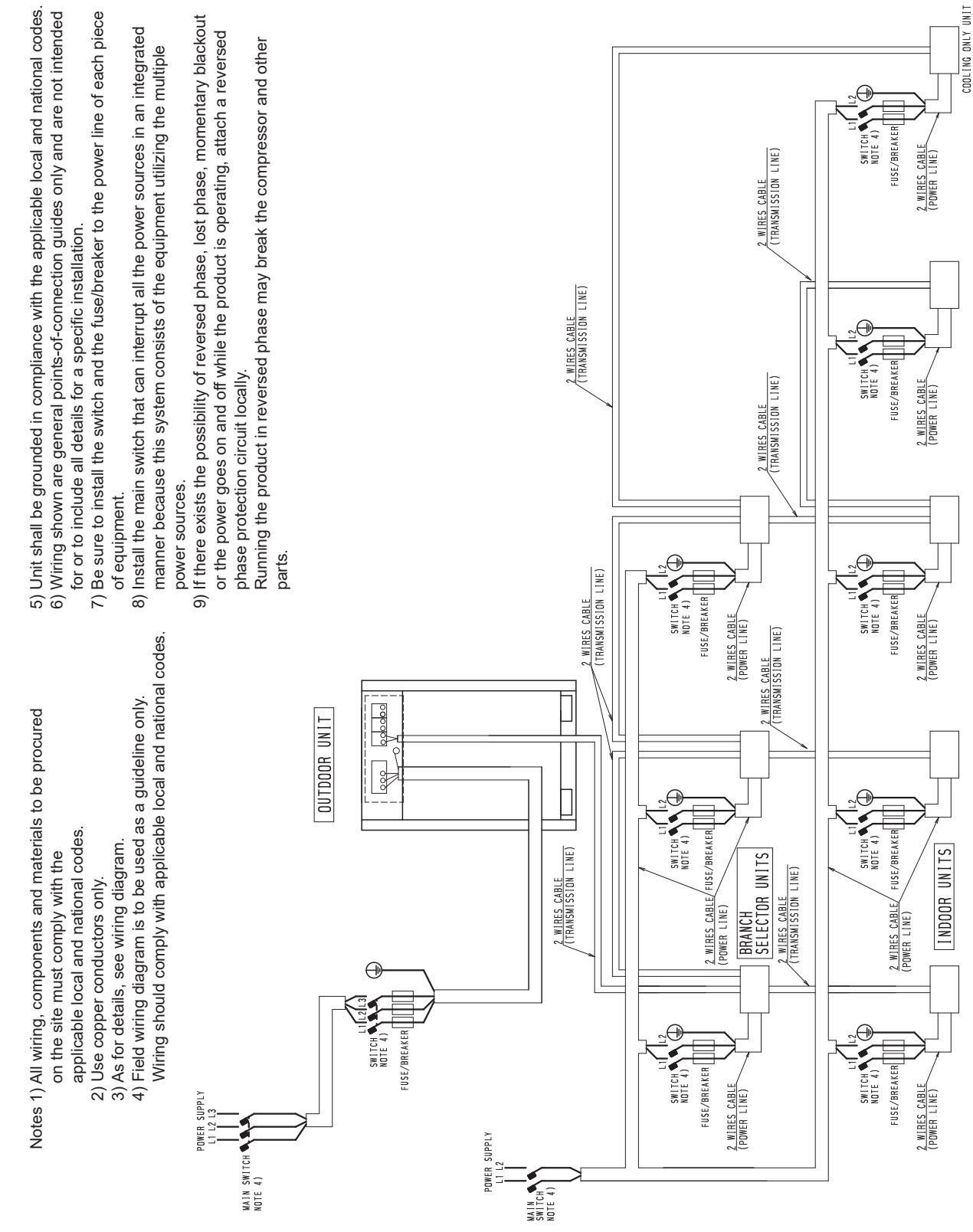
REYQ72 - 168TAYCA

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)
		X1A, X2A	CONNECTOR (M1F, M2F)
F1UT	THERMAL FUSE (A4P)	X5A	CONNECTOR (CHECK THE RESIDUAL CHARGE)
HAP	PILOTLAMP (A1P, A4P~A7P) (SERVICE MONITOR-GREEN)		
		X3A, X4A	CONNECTOR (T1R)
K1M	MAGNETIC CONTACTOR (A4P)	X13A, X14A	CONNECTOR (E1HC, E2HC)
K3R	MAGNETIC RELAY (Y1S) (A1P)	X1M	TERMINAL BLOCK (POWER SUPPLY)
K4R	MAGNETIC RELAY (Y2S) (A1P)	X1M	TERMINAL BLOCK (CONTROL) (A1P)
K6R	MAGNETIC RELAY (OPTION) (A1P)	X1M	TERMINAL BLOCK (ABC I/P) (A8P)
K7R	MAGNETIC RELAY (E1HC, E2HC) (A1P)	Y1E	ELECTRIC EXPANSION VALVE (HEAT EXC.UPPER)
K8R	MAGNETIC RELAY (Y7S) (A1P)	Y2E	ELECTRIC EXPANSION VALVE (SUBCOOL HEAT EXC.)
K9R	MAGNETIC RELAY (Y4S) (A1P)		
K11R	MAGNETIC RELAY (Y3S) (A1P)	Y3E	ELECTRIC EXPANSION VALVE (HEAT EXC.LOWER)
K12R	MAGNETIC RELAY (Y5S) (A1P)	Y4E	ELECTRIC EXPANSION VALVE (INJECTION)
K13R	MAGNETIC RELAY (Y6S) (A1P)	Y5E	ELECTRIC EXPANSION VALVE (REFRIGERANT COOLING)
L1R	REACTOR	Y6E	ELECTRIC EXPANSION VALVE (LEAK DETECTION)
M1C	MOTOR (COMPRESSOR)	Y7E	ELECTRIC EXPANSION VALVE (RECEIVER GAS PURGE)
M1F, M2F	MOTOR (FAN)		
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 ADAPTOR) (A1P)
R10T	THERMISTOR (SUCTION)	COOL/HEAT SELECTOR	
R11T	THERMISTOR (DEICER)	S1S	SELECTOR SWITCH (FAN/COOL · HEAT)
R12T	THERMISTOR (COMP.SUCTION)	S2S	SELECTOR SWITCH (COOL/HEAT)

16.Field Wiring

REYQ72 - 168TAYCA

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: 3D107344A

Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
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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.
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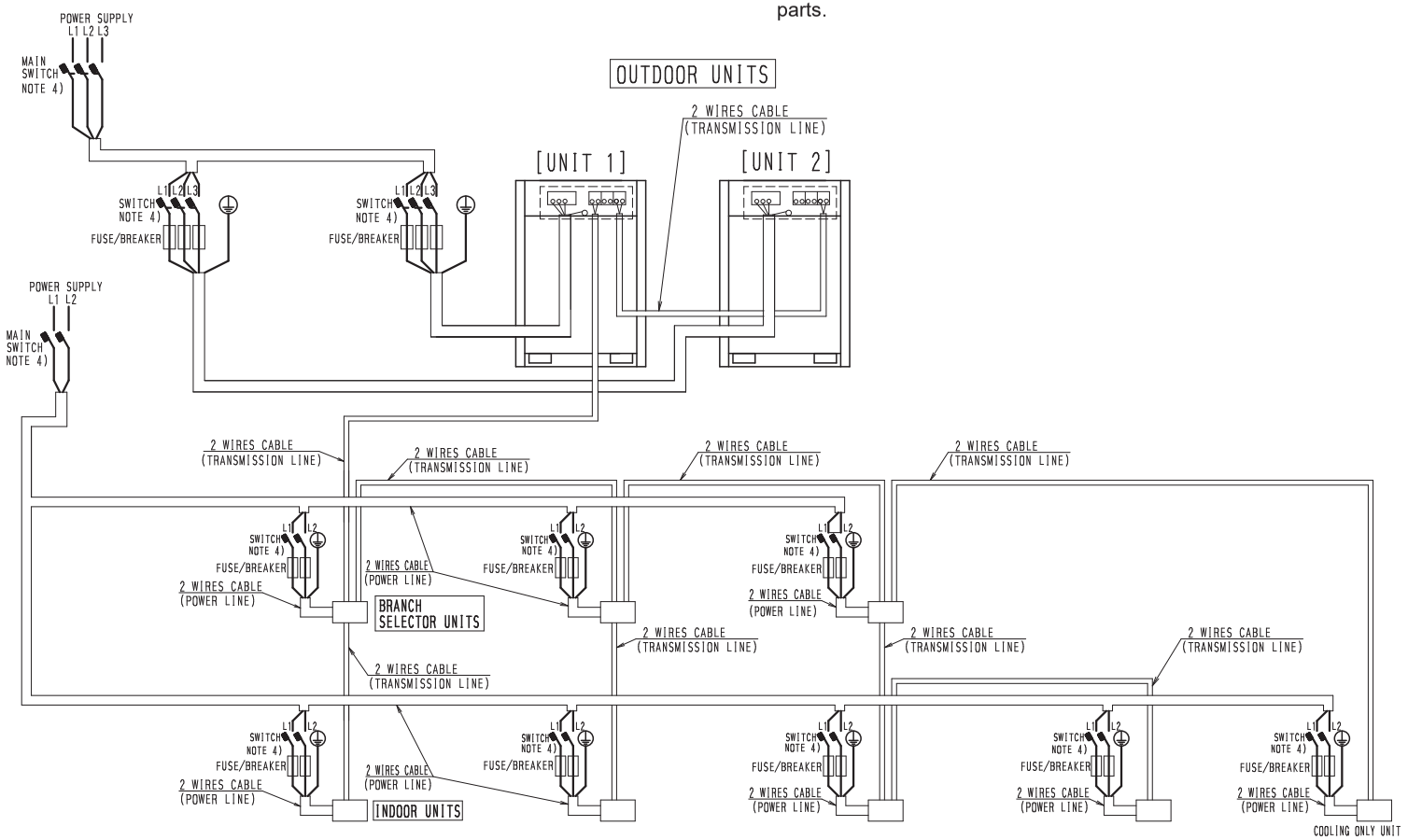
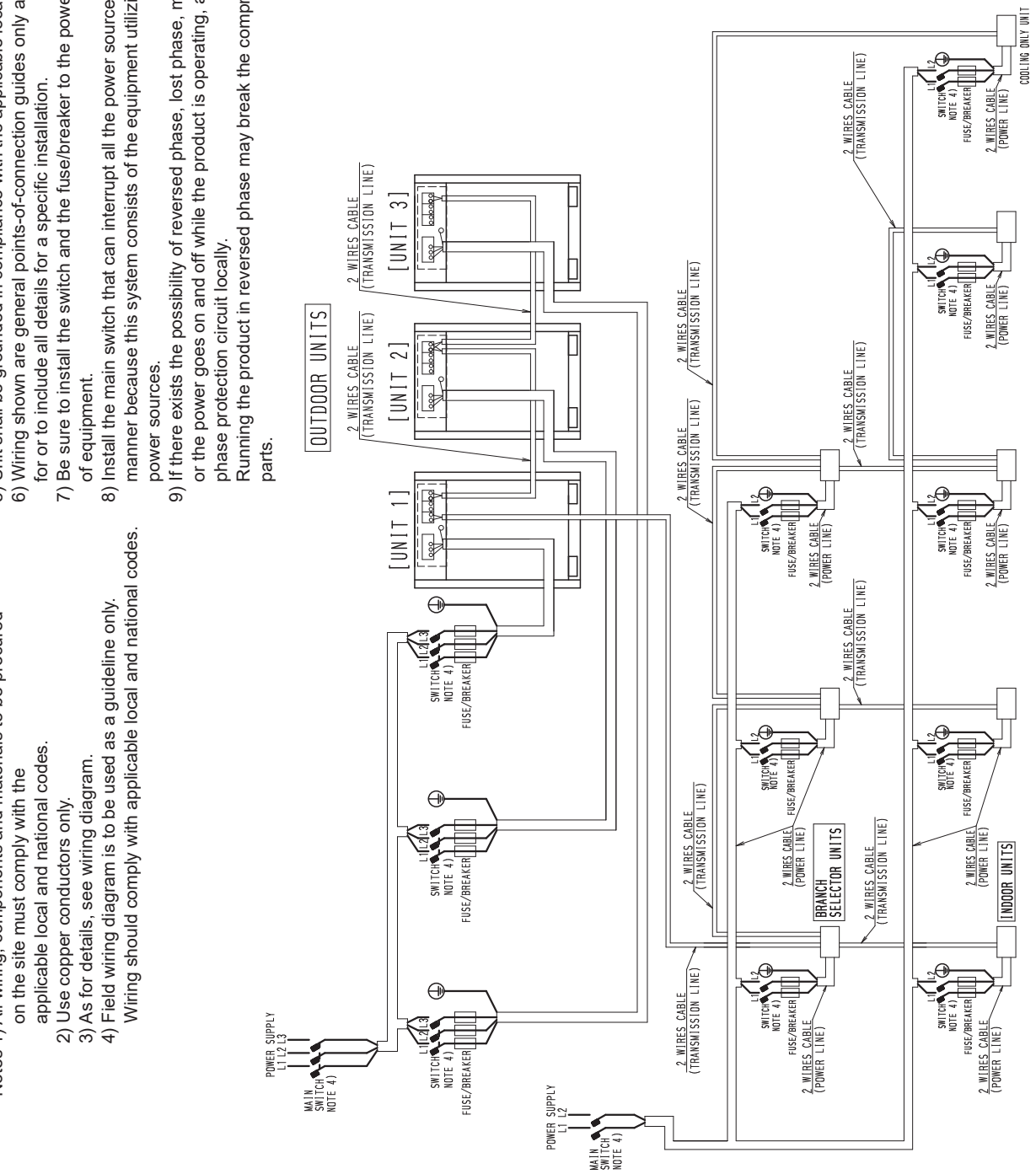


C: 3D107345A

REYQ360 - 384TAYCA

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: 3D107346A

17. Electrical Characteristics

REYQ72 - 384TAYCA

Model name		Units				Power supply		Comp.	OFM		SCCR
		Hz	Volts	Min.	Max.	MCA	MOP	RLA	kW	FLA	
REYQ72TAYCA		60	575	518	632	15.1	20	7.5	0.7 × 2	1.0 × 2	SCCR kA rms, Symmetrical @600 V MAX: 5
REYQ96TAYCA		60	575	518	632	16.8	20	8.4	0.7 × 2	1.0 × 2	
REYQ120TAYCA		60	575	518	632	18.2	25	10.2	0.7 × 2	1.0 × 2	
REYQ144TAYCA		60	575	518	632	22.3	30	15.4	0.7 × 2	1.0 × 2	
REYQ168TAYCA		60	575	518	632	24.9	30	17.7	0.7 × 2	1.0 × 2	
REYQ192TAYCA	REYQ96TAYCA	60	575	518	632	16.8 + 16.8	20 + 20	8.9 + 8.9	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ96TAYCA										
REYQ216TAYCA	REYQ96TAYCA	60	575	518	632	16.8 + 18.2	20 + 25	10.3 + 10.3	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ120TAYCA										
REYQ240TAYCA	REYQ120TAYCA	60	575	518	632	18.2 + 18.2	25 + 25	10.8 + 10.8	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ120TAYCA										
REYQ264TAYCA	REYQ120TAYCA	60	575	518	632	18.2 + 22.3	25 + 30	11.9 + 15.2	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ144TAYCA										
REYQ288TAYCA	REYQ144TAYCA	60	575	518	632	22.3 + 22.3	30 + 30	15.7 + 15.7	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ144TAYCA										
REYQ312TAYCA	REYQ144TAYCA	60	575	518	632	22.3 + 24.9	30 + 30	16.8 + 16.8	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ168TAYCA										
REYQ336TAYCA	REYQ168TAYCA	60	575	518	632	24.9 + 24.9	30 + 30	18.1 + 18.1	(0.7 × 2) × 2	(1.0 × 2) × 2	
	REYQ168TAYCA										
REYQ360TAYCA	REYQ120TAYCA	60	575	518	632	18.2 + 18.2 + 18.2	25 + 25 + 25	11.8 + 11.8 + 11.8	(0.7 × 2) × 3	(1.0 × 2) × 3	
	REYQ120TAYCA										
	REYQ120TAYCA										
REYQ384TAYCA	REYQ120TAYCA	60	575	518	632	18.2 + 18.2 + 22.3	25 + 25 + 30	12.2 + 12.2 + 15.8	(0.7 × 2) × 3	(1.0 × 2) × 3	
	REYQ120TAYCA										
	REYQ144TAYCA										

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

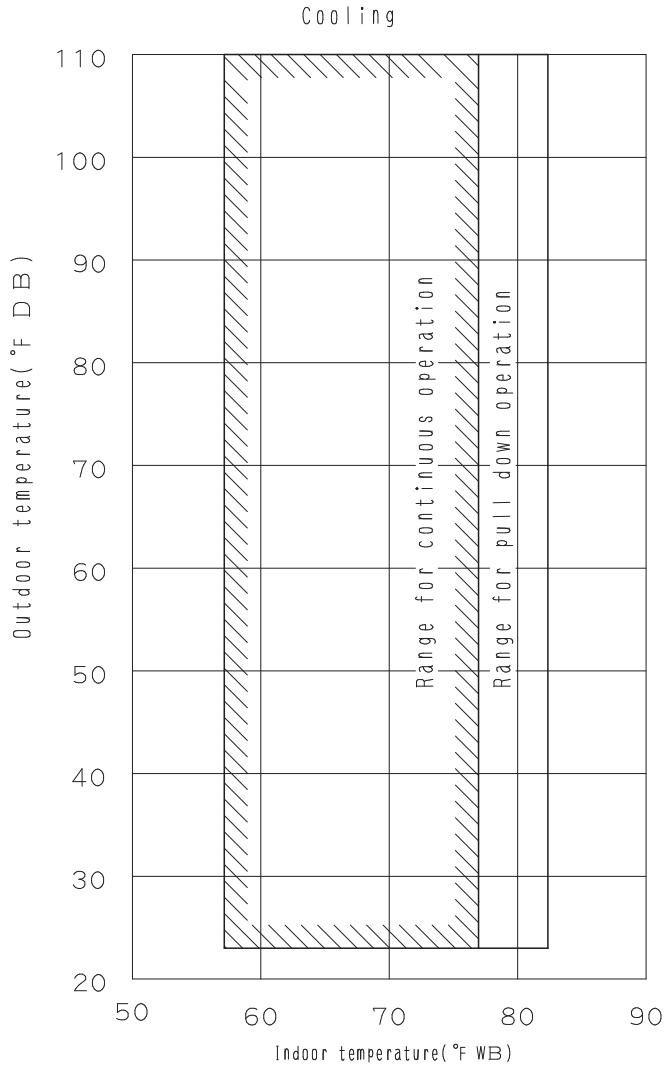
Note:

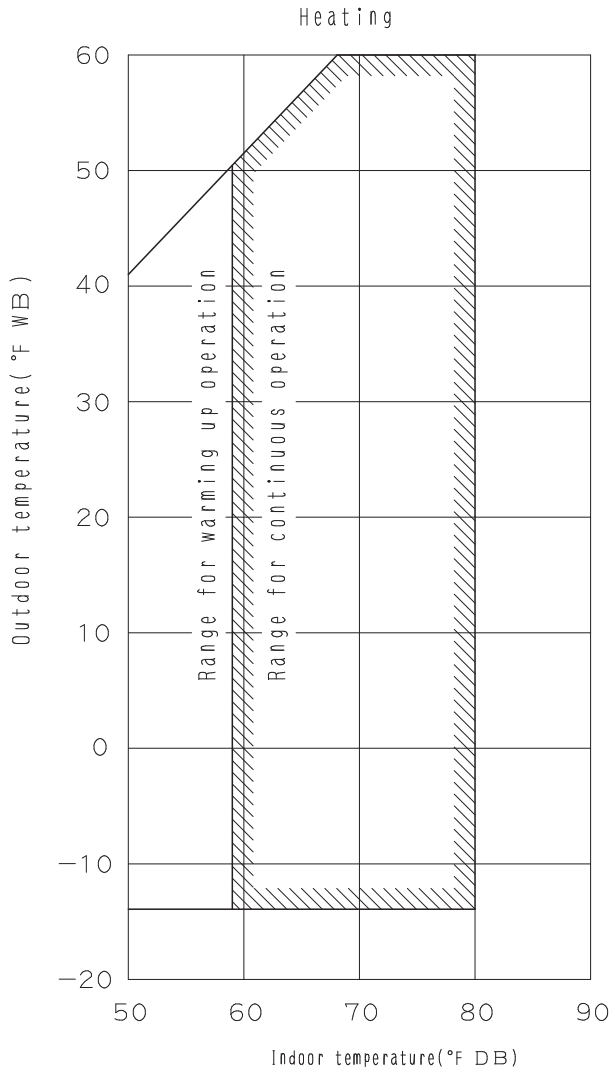
1. RLA is based on the following conditions.
   Indoor temp. 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)
   Outdoor temp. 95°FDB (35.0°CDB)
2. Voltage range
   Units are designed to operate only at the rated voltage provided in the table above.
3. The maximum percent unbalance of phase voltage shall be 2%.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

C: 3D107369A, 3D107370C, 3D107371C

18.Operation Limits

REYQ72 - 384TAYCA



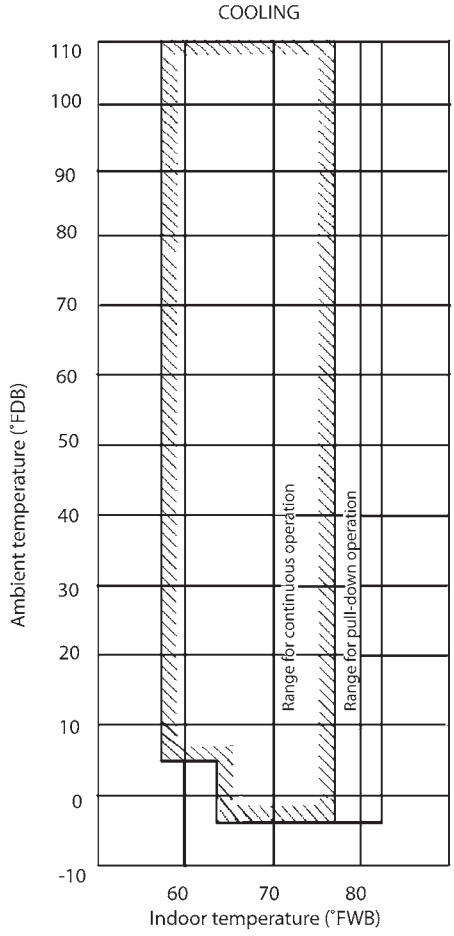


3D107375

19.Low Ambient Cooling Enhancement

REYQ72 - 384TAYCA

- REYQ-T series include a feature for Low Ambient Cooling.
- The function enhances REYQ-T series as follows:
  - Allows operation to –4ºFDB (–20ºCDB) ambient temperature in cooling mode. (Normal limit is 23ºFDB (–5ºCDB).)
  - Operation below 23ºFDB (–5ºCDB) requires the addition of wind covers onto the outdoor unit.*



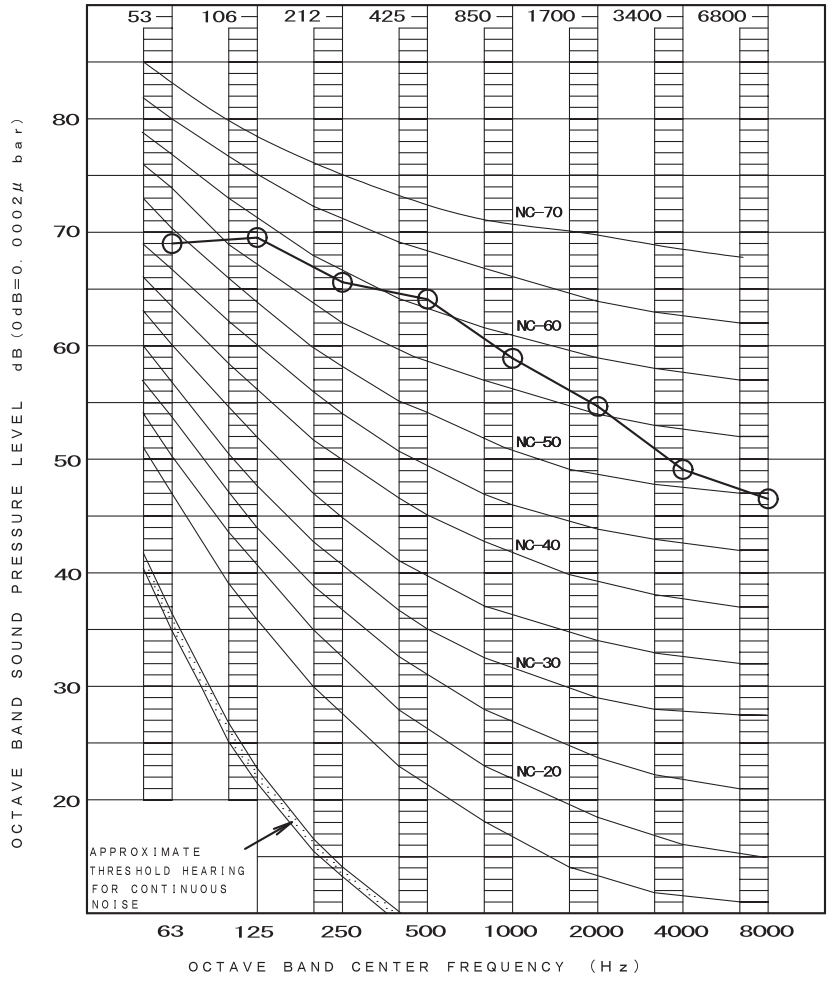
Application Rules:

- Total connection index of each system is limited to 50-130% when height difference is 0-194 ft. (0-50 m), 80-130% when 194-295 ft. (50-90 m).
- All units on the system must be connected to a Branch Selector Box, Low ambient cooling is only available on indoor unit connected to a single branch selector box. Single and Multi-port Branch Selector Boxes may be combined on one system but all indoor units connected to a multi branch selector box will operate as standard without the low ambient cooling function.
- Function is engaged by a field setting on the outdoor unit (to enable Low Ambient Cooling) and a dip switch setting is necessary on the Single Branch Selector Boxes BSQ-T series serving the indoor units NOT subject to Low Ambient Cooling requirements.
- During operation below 23ºFDB (–5ºCDB), the available cooling capacity decreases as follows:
  14ºFDB (–10ºCDB) - Reduces to 80% of nominal.
  5ºFDB (–15ºCDB) - Reduces to 65% of nominal.
  –4ºFDB (–20ºCDB) - Reduces to 60% of nominal. (Only applicable to Single-port Branch Selector Boxes)
- The operating sound level of the Single Branch Selector Boxes BSQ-T series could increase 3 dB(A) higher than maximum while the system is operating in the Low Ambient Cooling mode. It is recommended to locate units away from zones sensitive to sound levels.
- Allowable height difference between outdoor and indoor units (when outdoor unit is below) is limited to 130 ft. (40 m). (Normal limit is 195 ft. (60 m).)

  *** Contact your local Daikin representative for wind cover specification requirements and part numbers.**

20.Sound Levels (Reference Data)

REYQ72TAYCA



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

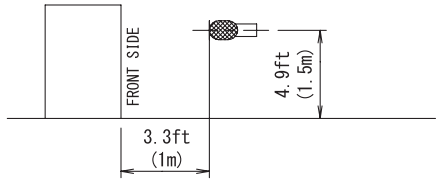
OPERATING CONDITIONS

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

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

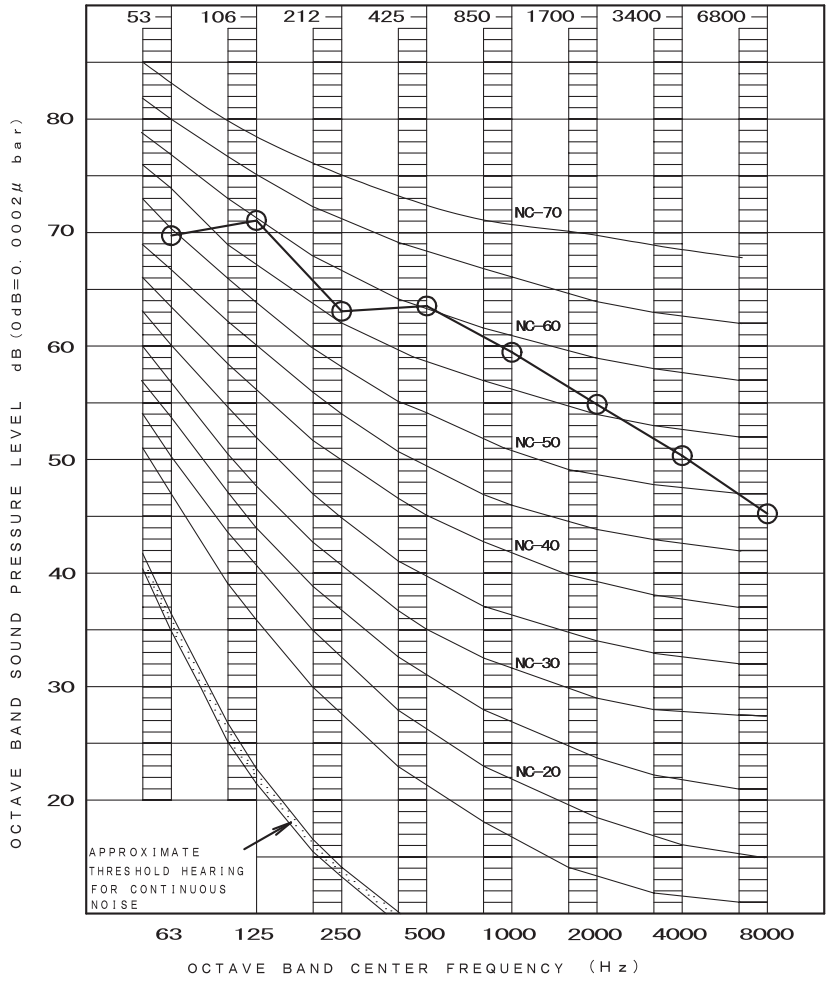
LOCATION OF MICROPHONE



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

4D107379B

REYQ96TAYCA



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

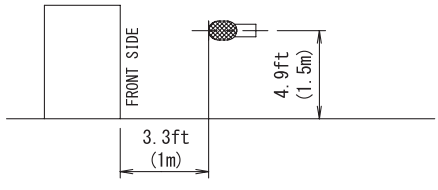
OPERATING CONDITIONS

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

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

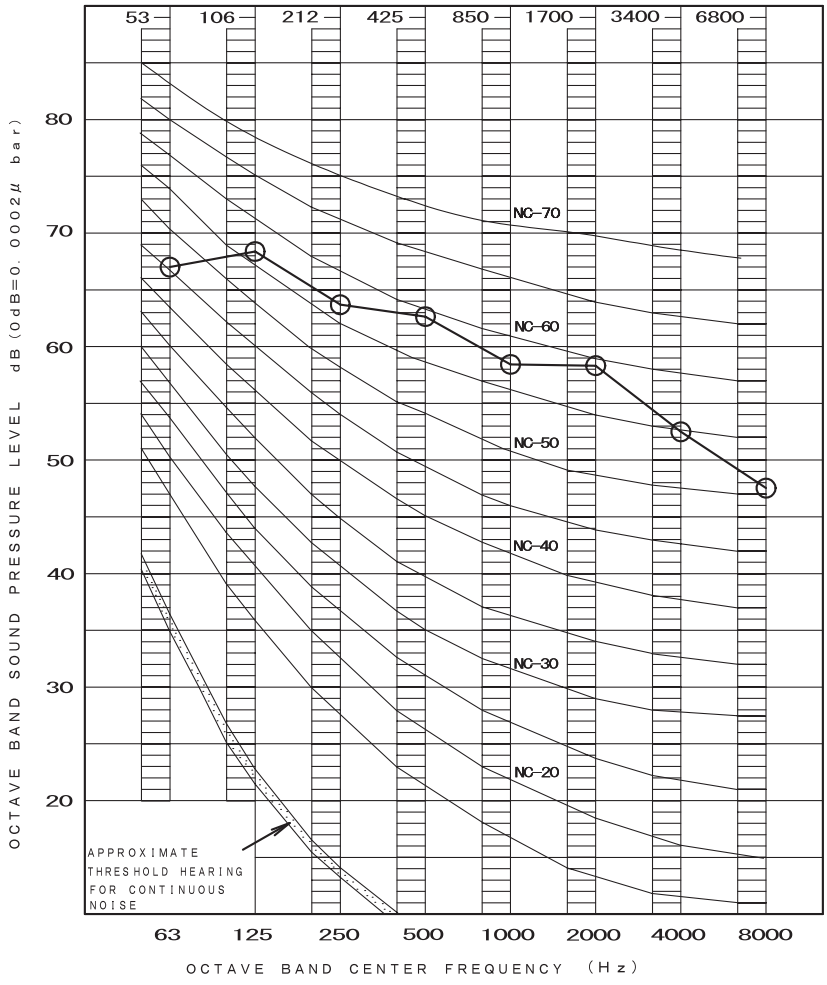
LOCATION OF MICROPHONE



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

4D107380A

REYQ120TAYCA



OVER ALL (dB)

SCALE	60Hz
A	65

(B.G.N IS ALREADY RECTIFIED)

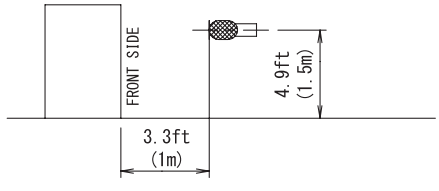
OPERATING CONDITIONS

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

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

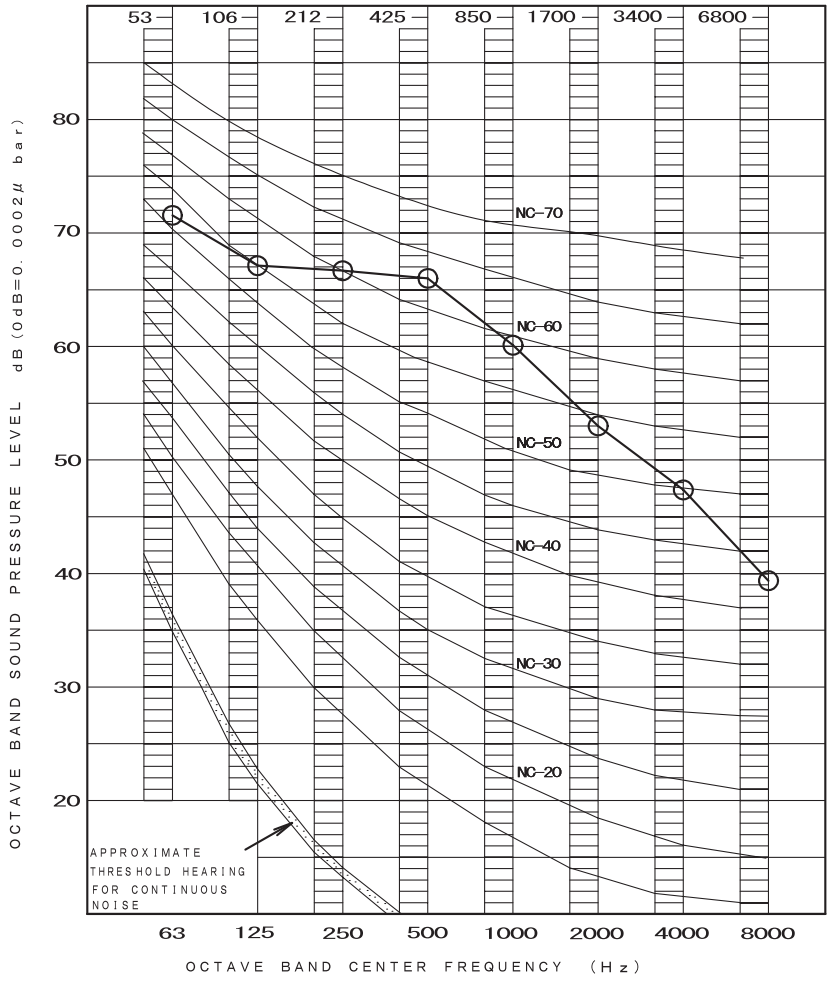
LOCATION OF MICROPHONE



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

4D107381A

REYQ144TAYCA



OVER ALL (dB)

SCALE	60Hz
A	66

(B.G.N IS ALREADY RECTIFIED)

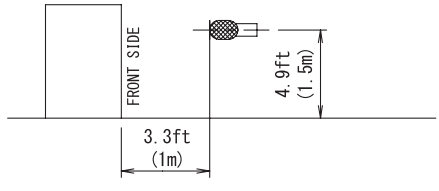
OPERATING CONDITIONS

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

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

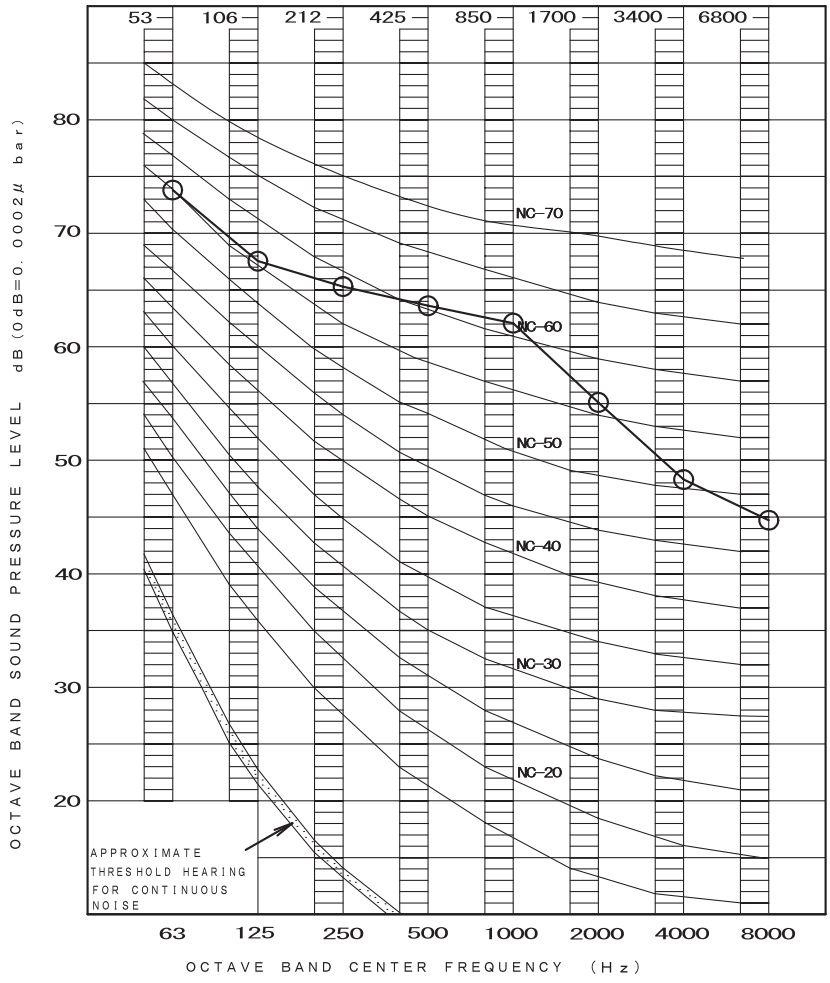
LOCATION OF MICROPHONE



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

4D107382A

REYQ168TAYCA



OVER ALL (dB)

SCALE	60Hz
A	66

(B.G.N IS ALREADY RECTIFIED)

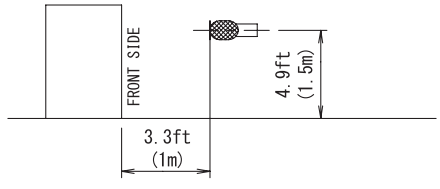
OPERATING CONDITIONS

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

MEASURING PLACE

ANECHOIC CHAMBER (CONVERSION VALUE)

LOCATION OF MICROPHONE



NOTE : THE OPERATING SOUND IS MEASURED IN ANECHOIC CHAMBER,
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IT IS NORMALLY OVER THE SET VALUE DUE TO ENVIROMENTAL NOISE
AND SOUND REFLECTION.

4D107383A

21.Accessories

21.1 Optional Accessories

REYQ72 - 384TAYCA

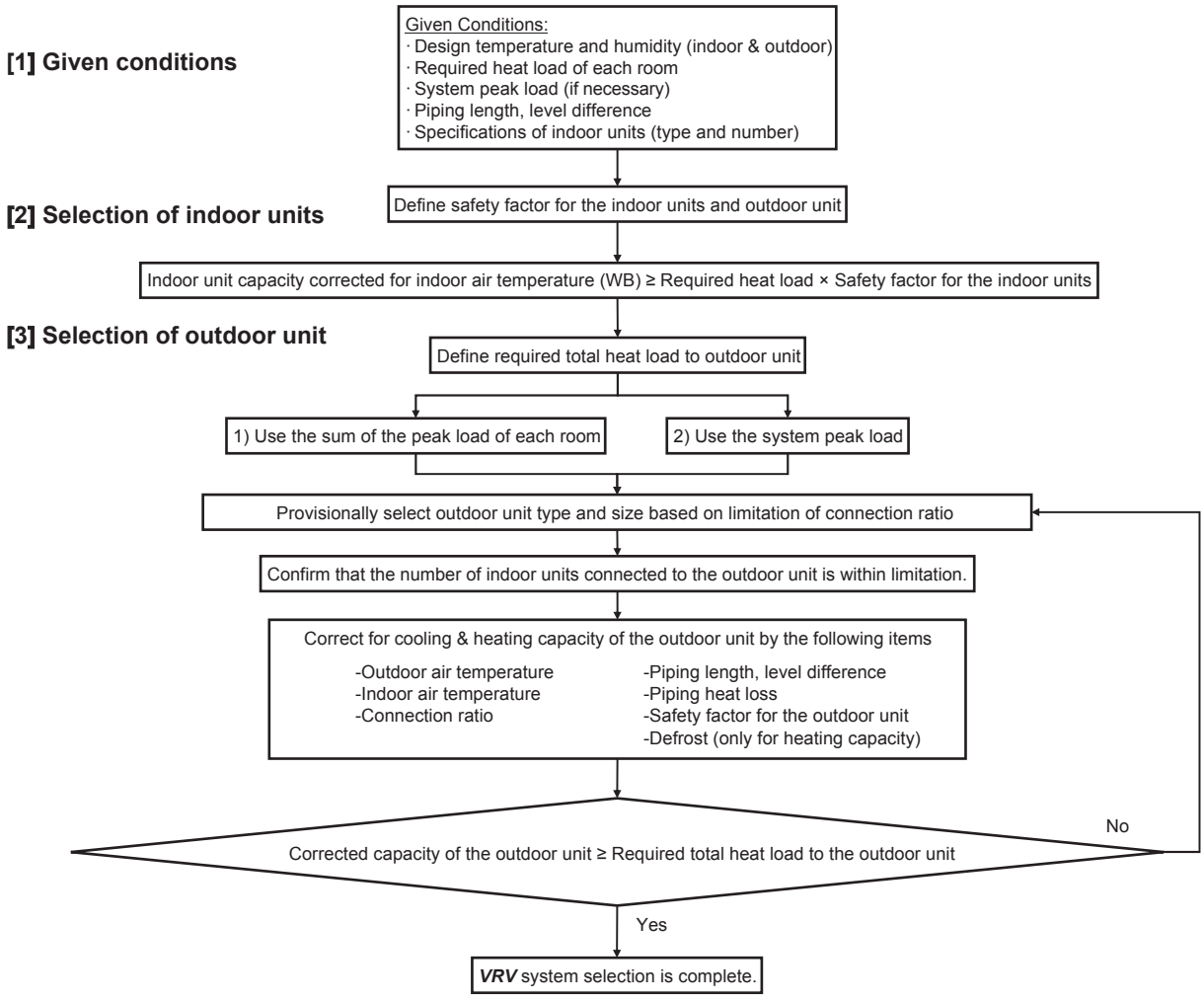
Optional accessories		REYQ72TAYCA REYQ96TAYCA	REYQ120TAYCA REYQ144TAYCA REYQ168TAYCA	REYQ192TAYCA REYQ216TAYCA REYQ240TAYCA REYQ264TAYCA REYQ288TAYCA REYQ312TAYCA REYQ336TAYCA	REYQ360TAYCA REYQ384TAYCA
Distributive piping	REFNET header	(Max. 8 branch) KHRP25M33H9 KHRP25M33HA	(Max. 8 branch) KHRP25M33H9 KHRP25M33HA KHRP25M72H9 KHRP25M72HA	(Max. 8 branch) KHRP25M33H9 KHRP25M33HA KHRP25M72H9 KHRP25M72HA KHRP25M73HU9 KHRP25M73HUA	
	REFNET joint	KHRP25A22T9 KHRP25A22TA KHRP25A33T9 KHRP25A33TA	KHRP25A22T9 KHRP25A22TA KHRP25A33T9 KHRP25A33TA KHRP25M72TU9 KHRP25M72TUA	KHRP25A22T9 KHRP25A33T9 KHRP25M72TU9 KHRP25M73TU9	KHRP25A22TA KHRP25A33TA KHRP25M72TUA KHRP25M73TUA
Outdoor unit multi connection piping kit		—		BHFP26P100U BHFP26P100UA	BHFP26P151U BHFP26P151UA

C: 3D091328H

22.Selection Procedure

22.1 Selection Procedure

22.1.1 Flowchart



22.1.2 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 / 75°FDB, Outdoor air temperature: 93°FDB

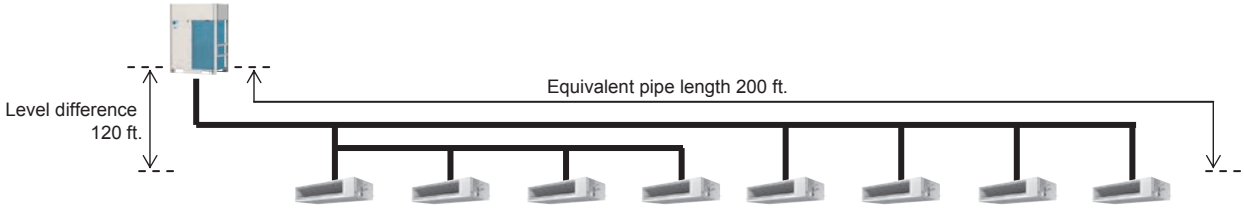
-Determine peak load of each room (and system peak load if necessary)

-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	**14.2**	**14.2**	**173.2**
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 173.2 MBH.



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

-Safety factor

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

[2] Selection of indoor units

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

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

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

Capacity table of indoor unit
Cooling Capacity

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

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

Selection results of indoor units

	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
Max. heat load (MBH)	36.1	36.4	17.3	17.3	30.9	30.8	14.2	14.2
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) = 173.2 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 REYQ-TA shall be between 50% 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	Total capacity index of connectable indoor units *1	Maximum number of connectable indoor units
Single outdoor units	6	72	REYQ72TAYCA	51 to 93 (144)	12
	8	96	REYQ96TAYCA	48 to 124 (192)	16
	10	120	REYQ120TAYCA	60 to 156 (240)	20
	12	144	REYQ144TAYCA	72 to 187 (288)	25
	14	168	REYQ168TAYCA	84 to 218 (336)	29
Double outdoor units	16	192	REYQ192TAYCA	96 to 249 (307)	33
	18	216	REYQ216TAYCA	108 to 280 (345)	37
	20	240	REYQ240TAYCA	120 to 312 (384)	41
	22	264	REYQ264TAYCA	132 to 343 (422)	45
	24	288	REYQ288TAYCA	144 to 374 (460)	49
	26	312	REYQ312TAYCA	156 to 405 (499)	54
	28	336	REYQ336TAYCA	168 to 436 (537)	58
Triple outdoor units	30	360	REYQ360TAYCA	180 to 468 (468)	62
	32	384	REYQ384TAYCA	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 REYQ192TAYCA = 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.

REYQ192TAYCA Cooling Capacity for Standard Condition (Te: 43°F)

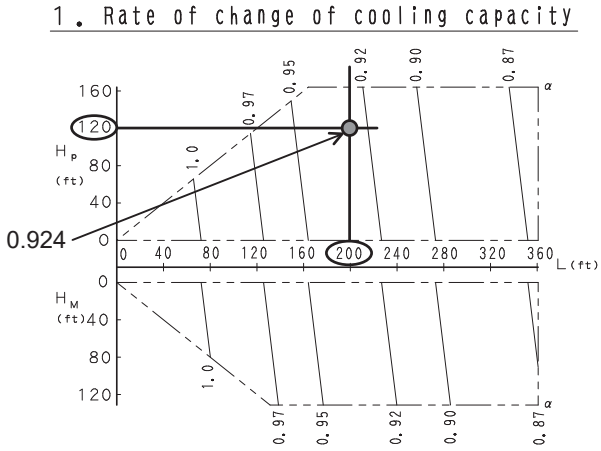
Combi-nation	Outdoor air temp.	Indoor air temp. (°FWB)													
		57		61		64		67		70		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°FDB	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW	MBH	kW
130	23	146	4.62	188	6.07	219	7.23	250	8.43	271	9.31	275	9.36	281	9.43
	30	146	4.76	188	6.27	219	7.47	250	8.76	265	9.44	269	9.49	275	9.56
	40	146	4.98	188	6.58	219	7.84	250	9.47	256	9.61	260	9.67	266	9.75
	50	146	5.22	188	6.91	219	8.42	242	9.71	248	9.80	251	9.85	257	9.94
	54	146	5.33	188	7.06	219	8.70	238	9.78	244	9.87	248	9.93	254	10.0
	58	146	5.44	188	7.21	219	9.00	235	9.85	241	9.94	245	10.0	250	10.1
	62	146	5.55	188	7.44	219	9.31	231	9.93	237	10.0	241	10.1	247	10.2
	66	146	5.67	188	7.69	219	9.63	228	10.0	234	10.1	238	10.2	243	10.2
	70	146	5.79	188	8.09	219	10.2	224	10.3	230	10.3	234	10.4	240	10.5
	72	146	5.94	188	8.41	217	10.4	223	10.5	229	10.6	232	10.7	238	10.8
	75	146	6.28	188	8.91	214	10.8	220	10.9	226	11.0	230	11.1	236	11.2
	79	146	6.75	188	9.60	211	11.3	217	11.4	222	11.5	226	11.6	232	11.7
	83	146	7.25	188	10.3	207	11.8	213	11.9	219	12.1	223	12.1	229	12.3
	87	146	7.78	188	11.1	204	12.3	210	12.5	216	12.6	219	12.7	225	12.8
	91	146	8.34	188	11.9	200	12.9	206	13.0	212	13.1	216	13.2	219	13.3
	93	146	8.63	188	12.4	199	13.1	205	13.3	210	13.4	214	13.5	215	13.5
	95	146	8.93	188	12.8	197	13.4	203	13.5	209	13.7	210	13.7	210	13.7
	99	146	9.57	188	13.8	194	13.9	199	14.1	202	14.1	202	14.1	202	14.1
	103	146	10.2	184	14.3	190	14.4	193	14.5	193	14.5	193	14.5	193	14.5
	106	146	10.9	182	14.9	187	15.0	187	15.0	187	15.0	187	15.0	187	15.0
	110	146	11.9	178	15.7	178	15.7	178	15.7	178	15.7	178	15.7	178	15.7
	115	146	13.3	154	15.9	154	15.9	155	15.9	155	15.9	155	15.9	155	15.9
	118	133	13.4	134	13.4	134	13.4	134	13.5	135	13.5	135	13.5	135	13.5
	122	107	10.2	107	10.2	107	10.2	108	10.2	108	10.2	108	10.2	108	10.3
120	23	135	4.24	173	5.55	202	6.60	230	7.68	259	8.80	271	9.31	276	9.37
	30	135	4.37	173	5.73	202	6.81	230	7.94	259	9.26	264	9.43	270	9.50
	40	135	4.57	173	6.00	202	7.15	230	8.40	252	9.56	256	9.61	261	9.68
	50	135	4.78	173	6.31	202	7.52	230	9.10	244	9.74	247	9.79	252	9.87
	54	135	4.88	173	6.44	202	7.74	230	9.41	240	9.81	244	9.86	249	9.94
	58	135	4.98	173	6.57	202	7.99	230	9.73	237	9.88	240	9.94	246	10.0
	62	135	5.08	173	6.72	202	8.26	228	9.87	233	9.95	237	10.0	242	10.1
	66	135	5.19	173	6.86	202	8.55	224	9.94	230	10.0	233	10.1	239	10.2
	70	135	5.30	173	7.22	202	9.00	221	10.2	226	10.3	230	10.3	235	10.4
	72	135	5.36	173	7.50	202	9.36	219	10.4	224	10.5	228	10.6	233	10.7
	75	135	5.64	173	7.93	202	9.91	217	10.8	222	10.9	225	11.0	231	11.1
	79	135	6.06	173	8.54	202	10.7	213	11.4	218	11.5	222	11.5	227	11.6
	83	135	6.50	173	9.19	202	11.5	210	11.9	215	12.0	219	12.1	224	12.2
	87	135	6.97	173	9.88	201	12.3	206	12.4	211	12.5	215	12.6	220	12.7
	91	135	7.47	173	10.6	197	12.8	203	12.9	208	13.0	212	13.1	217	13.3
	93	135	7.73	173	11.0	196	13.2	201	13.2	206	13.3	210	13.4	215	13.5
	95	135	8.00	173	11.4	194	13.3	199	13.4	205	13.6	208	13.7	210	13.7
	99	135	8.56	173	12.2	190	13.8	196	14.0	201	14.1	202	14.1	202	14.1
	103	135	9.15	173	13.1	187	14.4	192	14.5	193	14.5	193	14.5	193	14.5
	106	135	9.76	173	14.0	184	15.0	187	15.0	187	15.0	187	15.0	187	15.0
	110	135	10.6	173	15.3	178	15.7	178	15.7	178	15.7	178	15.7	178	15.7
	115	135	11.8	154	15.9	154	15.9	155	15.9	155	15.9	155	15.9	155	15.9
	118	133	13.4	134	13.4	134	13.4	134	13.5	135	13.5	135	13.5	135	13.5
	122	107	10.2	107	10.2	107	10.2	108	10.2	108	10.2	108	10.2	108	10.3

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]) × (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 REYQ192TAYCA(C) by using (K1) and (K2).
Corrected capacity of REYQ192TAYCA (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) < 173.2 MBH (A), so need to select a larger outdoor unit.

The capacity of REYQ216TAYCA at the same condition is 177.6 MBH, which is more than the heat load (A): 173.2 MBH.
So the selection is complete.

23.Caution Label

23.1 REYQ72 - 168TAYCA

Operation Name Plate

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

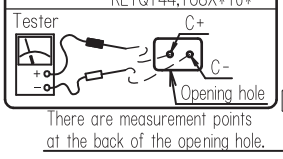
CAUTION when performing service inside the control box

⚠ 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.

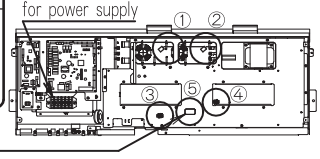
- For details, see the wiring diagram label on the back of the control box cover.
- Otherwise, malfunction code "E7" will be displayed on 7 segment display of outdoor unit printed circuit board (A1P) and in the remote controller due to wrong connection, and normal operation will not be performed.

⑤ In case of R*LQ96,120T*TJ* REYQ144,168X*TJ*



There are measurement points at the back of the opening hole.

Terminal block for power supply



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

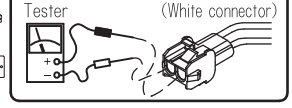
CAUTION for piping work and additional refrigerant charge

- 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.

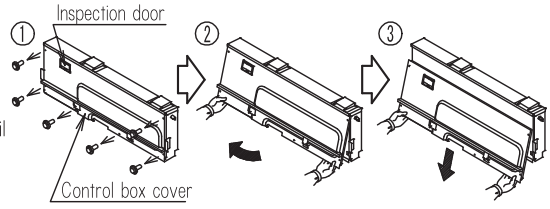
① In case of R*LQ72T*TJ* REYQ72～120X*TJ*
② In case of R*LQ96,120T*YD* REYQ144,168X*YD*
③ In case of R*LQ,R*YQ～T*YC* R*YQ72～168X*YC*
④ In case of R*LQ72T*YD* REYQ72～120X*YD*



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 coveris deformed, water may enter inside, which may cause failure.

ELECTRIC SHOCK HAZARD!

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

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

DANGER D' ELECTROCUTION!

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

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

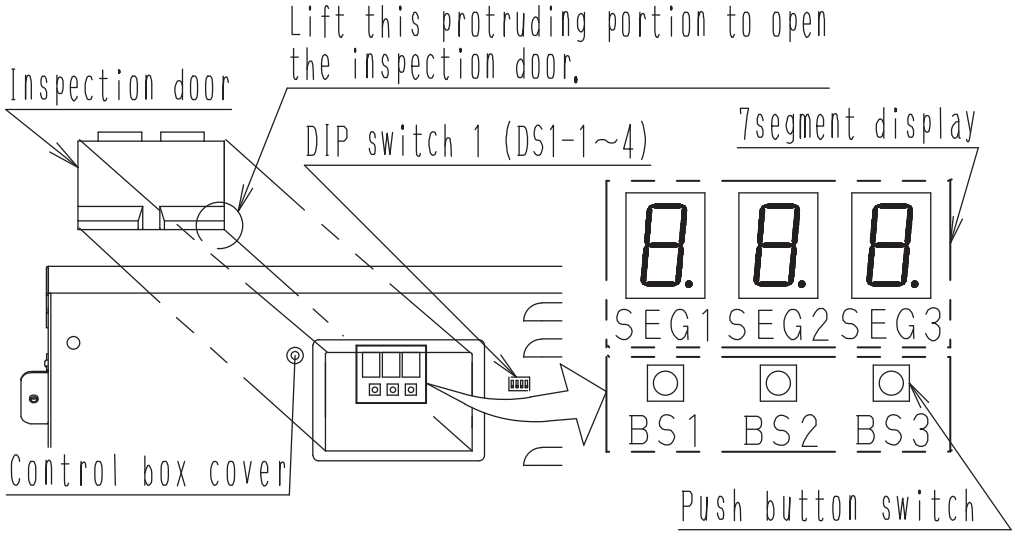
Service precautions (2/2)

Field setting

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

1. How to operate

- 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.



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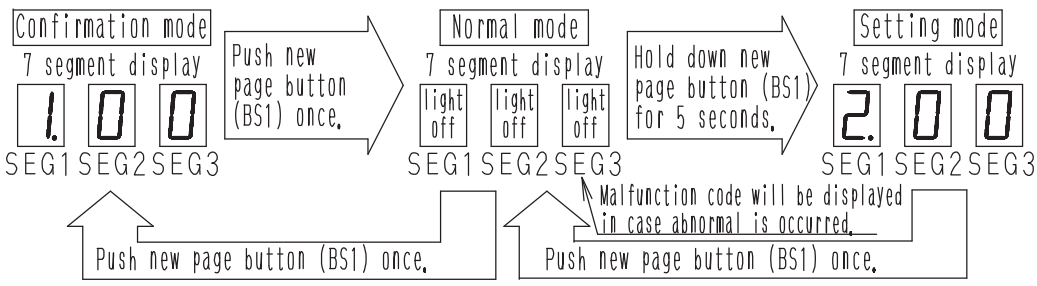
2. Setting by the push button switch (BS1~3)

●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 the right table.
Confirmation mode can use for confirmation of Ⓚ・Ⓛ items as shown in the right table.
(Note) About other settings and malfunction codes, 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 BS unit (indoor unit) by transmission wiring is master unit, others 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

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	Set Setting mode or Confirmation mode first, then perform procedure below.		Details of setting	7 Segment display SEG1	SEG2	SEG3
Setting procedure	①Push operation button (BS2) and adjust 7 segment display to the required 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.		Ⓐ 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
			Ⓗ Year-round cooling (outdoor temp. -4°F(-20℃)) setting (※5)	2	4	5
	②Push confirmation button (BS3). (The present setting is indicated.)			Either of ③		
	③Push operation button (BS2) and adjust 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 ⒶⒷ ⒻⒼⒽ	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(※4)
	④Push confirmation button (BS3).		The setting in ③ is defined.	It will turn to light ON.		
	⑤Push confirmation button again (BS3).		The system start the operation according to the setting.	2	0	0
	⑥Push new page button (BS1).		The system return to normal mode.	light off	light off	light off
Confirmation procedure	①Push operation button (BS2) according to confirmation item (Ⓚ, Ⓛ) and adjust 7 segment display to the example shown in right according to the required mode.		Ⓚ Low noise operation	1	0	1
			Ⓛ Demand operation	1	0	2
	②Push confirmation button (BS3). (The present setting will be indicated.)		During setting operation	light off	light off	1
			During normal operation	light off	light off	0

(※5) Set Ⓗ in case of operating cooling mode in the outdoor temperature 23° (F5℃) or below.
This setting is not applicable to BS unit (multi type).

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Additional refrigerant charge operation

● When the outdoor unit is stopped and the entire quantity of refrigerant cannot 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 suction gas side.

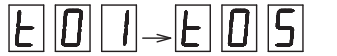
② Make sure to completely open the stop valve on the suction gas side, the high/low pressure gas side and the liquid side.

③ Turn ON the power of the indoor units, BS unit 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

0.17MPa⇒ 

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

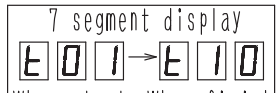
- The operation will be stopped. The operation is automatically stopped within 30 minutes. If charging is not completed, set and perform the additional refrigerant charging operation again.
- If the additional refrigerant charging operation is stopped soon, the refrigerant may be overcharged. Stop additional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

Check operation method

Make sure to open the suction gas side, the high/low pressure gas side and the liquid side stop valve before starting operation.

- 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 cannot 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.

7 segment display



When start When finish

- 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 and BS unit cannot be checked. After the check operation is finished, check the indoor units individually by normal operation using the remote controller.

【Operation procedure】

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

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 cannot start until 7 segment display goes off for maximum 12 minutes.
- Do not turn off the power and do not reset Setting mode when evacuating or recovering the refrigerant. (The expansion valves will close and the system cannot be evacuated or recovered the refrigerant.)

【Evacuation method】(At the first installation this evacuation is not required. It is only required for service.)

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

【Refrigerant recovery operation method】(Make sure to use a refrigerant reclaimer.)

① In the state of unit stopped and under 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

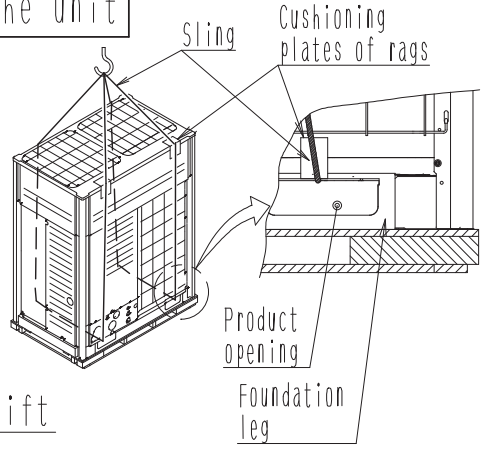
Collective Indications Label

R410A

For those who install or move the unit

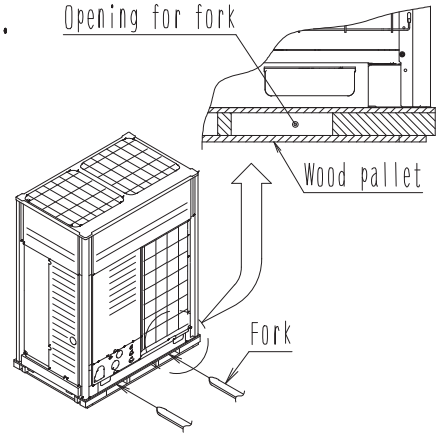
1. When lifting the unit

- 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.

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For those who carry out service and maintenance

WARNING

Caution for electric shock

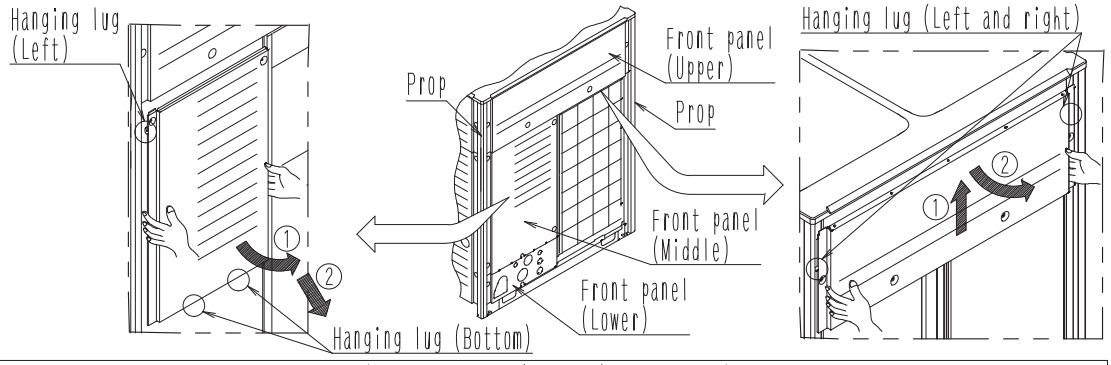
- Beware of the fan rotating while inspection.
- Do not touch the energized parts while inspection.

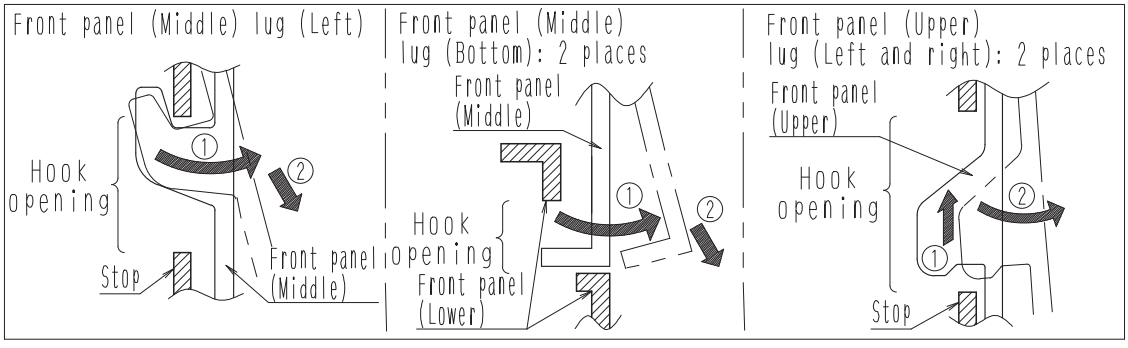
<Front panel (Middle) removing method>

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

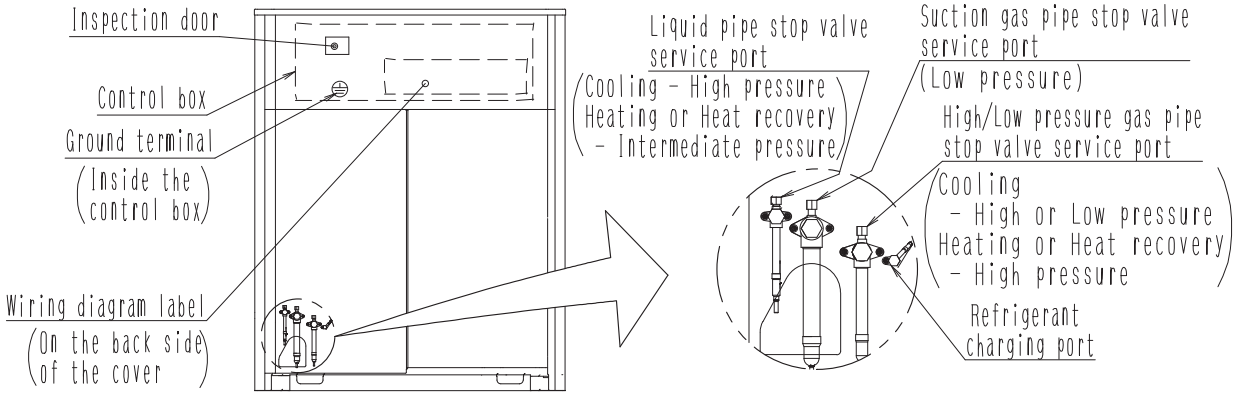
<Front panel (Upper) removing method>

- 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 ports, see below.



24. Caution for Refrigerant Leaks

24.1 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.

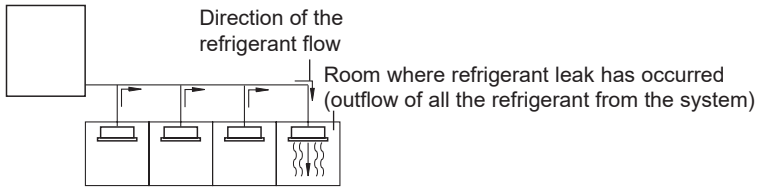
The ***VRV*** System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that 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.

24.2 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

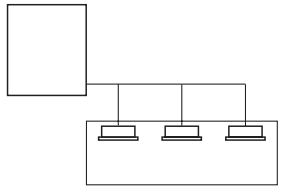
Note:

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.

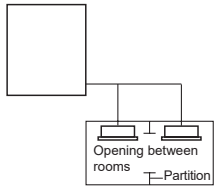
Step 2: Calculate the smallest room volume (ft.^{3})

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.

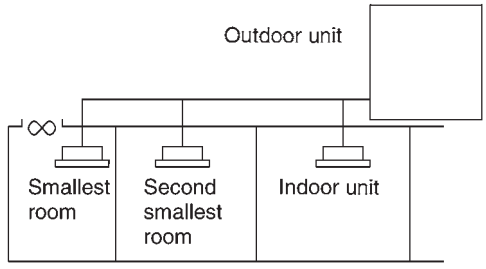


(b) Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



(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.

25.Safety Devices Setting

25.1 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
Drain pump thermal fuse	°F (°C)	–	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–	–
Fan motor thermal fuse	°F (°C)	–	–	–	–	–

Model		FXFQ24TVJU	FXFQ30TVJU	FXFQ36TVJU	FXFQ48TVJU
Printed circuit board fuse		250 V, 3.15 A	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: 3D086932C

25.2 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

25.3 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

25.4 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

25.5 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

25.6 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)	—	—	—	—	—	—

3D112398

25.7 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

25.8 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)

25.9 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

25.10 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: 4D047085D

25.11 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±10) ON: 248 (120) or less	OFF: 275±18 (135±10) ON: 248 (120) or less	OFF: 275±18 (135±10) ON: 248 (120) or less	OFF: 275±18 (135±10) ON: 248 (120) or less	OFF: 275±18 (135±10) ON: 248 (120) or less

C: 3D045646B

25.12 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 ..... REYQ-TAYCA ..... **EDUS371706C-D (This booklet)**

Capacity Table Book

Heat Recovery ..... REYQ-TAYCA **EDUS371706C-C**

Installation

Heat Recovery ..... REYQ **EDUS371706-N**

Indoor Units

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

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

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

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

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

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

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

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

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

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

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

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

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

Air Treatment Equipment

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

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

Controls **EDUS721909-T**

Remote Controller

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

1.2 Publication List of Engineering Data for *VRV* Products

Shaded sections indicate Engineering Data Book/s published for this series.
Timing of publication is subject to change without notice.

Outdoor Unit

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

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

Indoor Unit and Other Products

Refrigerant	Product category	Product type	Model name	Area	Book No.	Published in
R410A	***VRV*** Indoor units	Ceiling Mounted Cassette Type (Round Flow with Sensing)	FXFQ07-48TVJU	USA	EDUS391400A-F14	May 2018
		VISTA™ 2 x 2 Cassette Unit	FXZQ05-18TAVJU	USA	EDUS391776-F9	Mar.2018
		4-Way Blow Ceiling- Suspended Type	FXUQ18-36PVJU	USA	EDUS391437-F15	May 2015
		One Way Blow Cassette Type	FXEQ07-24PVJU	USA	EDUS391533-F16	Oct.2015
		Slim Ceiling Mounted Duct Type	FXDQ07-24MVJU	USA	EDUS39-600-F2	Sep.2006
		MSP Concealed Ducted Unit	FXSQ05-54TAVJU	USA	EDUS391777-F17	Mar.2018
		Ceiling Mounted Duct Type (Middle and High Static Pressure)	FXMQ07-54PBVJU	USA	EDUS391503A-F4	May 2018
		Ceiling Mounted Duct Type	FXMQ72/96MVJU	USA	EDUS39-900A-F11	May 2010
		Ceiling Suspended Type	FXHQ12-36MVJU	USA	EDUS39-600-F5	Sep.2006
		Wall Mounted Type	FXAQ07-24PVJU	USA	EDUS391100-F6	Jan.2012
		Floor Standing Type Concealed Floor Standing Type	FXLQ07-24MVJU FXNQ07-24MVJU	USA	EDUS391502-F7	Jul.2015
		Air Handling Unit	FXTQ09-60TAVJUA FXTQ09-60TAVJUD	USA	Engineering Data FXTQ-TA	Sep.2016
		Cased Coil Unit	CXTQ24-60TASBLU	USA	Engineering Data CXTQ-TA	—
		Outdoor Air Processing Unit	FXMQ48-96MFVJU	USA	EDUS39-900A-F10	May 2010
		Single Branch Selector Unit	BSQ36-96TVJ	USA	EDUS391434-B	Aug.2015
		Multi Branch Selector Unit	BS4-12Q54TVJ	USA	EDUS391434-B	Aug.2015
	Controls and networks	Remote controllers Control devices Adaptors	BRC1E71, BRC4C/7C/7E, BRC2A71 DCS302C71, DCS301C71, DST301BA61, DCS601C71 KRP1C74/75	USA	EDUS721909-T	Dec. 2020
		Navigation remote controller	BRC1E73	USA	EDUS721438	Apr.2015
		intelligent Touch Manager	DCM601A71, DCM601A72	USA	EDUS721212	Oct.2012
		intelligent Touch Controller	DCS601C71	USA	EDUS72-608	Dec.2006
		Interface for use in BACnet®	DMS502B71	USA	EDUS72-749	Oct.2007
Option for all type			For indoor and outdoor units	USA	OHUS07-1	Nov.2007
Energy Recovery Ventilator (VAM)			VAM300-1200GVJU	USA	EDUS711116A	Jun.2017

Warning

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

If you have any inquiries, 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.

●Specifications, designs and other content appearing in this brochure are current as of February 2020 but subject to change without notice.