TOSHIBA
Carrier

TCTC-E23-VRF009-2

Model name:

MMY-MUP___1FT6P-UL (460V,60Hz)
MMY-MUP___1FT9P-UL (208-230V,60Hz)
MMY-MUP___H1FT6PUL(460V, 60Hz)
MMY-MUP___H1FT9PUL(208-230V, 60Hz)

SHRMu
SUPER HEAT RECOVERY MULTI

Engineering Data Book

Outdoor units

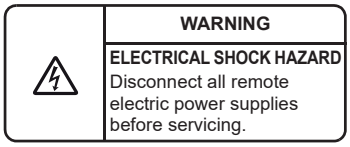
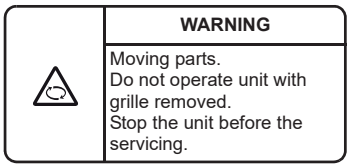
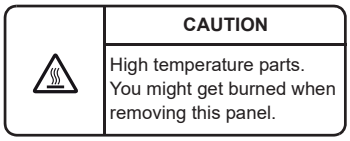
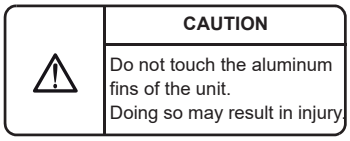
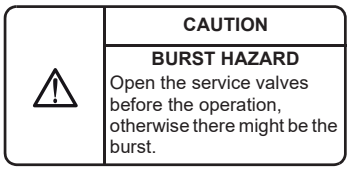
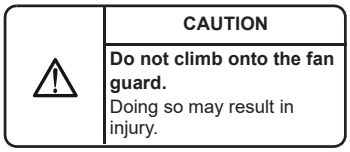
Notice: Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.

Contents

Safety caution

- **Before use, read carefully through the “Safety caution” section to ensure correct operation.**
- **The important contents concerned to the safety are described in the “Safety cautions”. Be sure to keep them. For Indications and their meanings, see the following description.**

Warning Indications on the Air Conditioner Unit

Warning indication	Description
	**WARNING** **ELECTRICAL SHOCK HAZARD** Disconnect all remote electric power supplies before servicing.
	**WARNING** Moving parts. Do not operate unit with grille removed. Stop the unit before the servicing.
	**CAUTION** High temperature parts. You might get burned when removing this panel.
	**CAUTION** Do not touch the aluminium fins of the unit. Doing so may result in injury.
	**CAUTION** **BURST HAZARD** Open the service valves before the operation, otherwise there might be the burst.
	**CAUTION** **Do not climb onto the fan guard.** Doing so may result in injury.

Explanation of indications

⚠ WARNING

Indicates possibilities that a death or serious injury of personnel is caused by an incorrect handling.

⚠ CAUTION

Indicates contents that an injury (*1) or property damage (*2) only may be caused when an incorrect work has been executed.

*1: "Injury" means a hurt, a burn, or an electric shock which does not require hospitalization or a long-term going to the hospital.
*2: "Property damage means an enlarged damage concerned to property, or breakage of materials.

- **After installation work has finished, check there is no trouble by a test operation, and explain using method and maintenance method to the customers based on the Owner's Manual.**
  Please ask the customers to keep this Installation Manual together with the Owner's Manual.

⚠ WARNING

Ask a shop or a professional dealer to install the air conditioner.
If you will install by yourself, a fire, an electric shock, or water leak is caused.

Take measures so that the refrigerant does not exceed the limit concentration even if it leaks when installing the air conditioner in a small room.
For the measures not to exceed the limit of concentration, contact the dealer. If the refrigerant leaks and it exceeds the limit of concentration, an accident of oxygen shortage is caused.

Install the air conditioner at a place which is satisfactorily bearable to weight.
If strength is insufficient, the unit may fall down resulting in human injury.

Perform a specified installation work against a strong wind such as typhoon or earthquake.
If the air conditioner is imperfectly installed, an accident by falling or dropping may be caused.

If refrigerant gas leaks during installation work, ventilate the room.
If the leaked refrigerant gas approaches to fire, noxious gas may generate.

After installation work, confirm that refrigerant gas does not leak.
If refrigerant gas leaks in the room, and approaches to fire such as fan heater, stove or kitchen range, generation of noxious gas may be caused.

Never recover refrigerant in the outdoor unit.
Be sure to use a refrigerant recovery device to recover refrigerant in reinstallation or repair work.
Recovery of refrigerant in the outdoor unit is unavailable; otherwise a serious accident such as crack or human injury is caused.

A person qualified for the electric work should deal with the electric construction conforming to the regulations of the local electric company and the Installation Manual. Be sure to use the exclusive circuit.
If there is capacity shortage of the power supply circuit or incomplete installation, a fire or an electric shock is caused.

For cabling, use the specified cables and connect them securely so that external force of cable does not transmit to the terminal connecting section.
If connection or fixing is incomplete, a fire, etc. may be caused.

Be sure to connect earth wire.
Do not connect earth wire to gas pipe, water pipe, lightning rod, nor earth wire of telephone.
If grounding is incomplete, an electric shock is caused.

⚠ CAUTION

Do not install the air conditioner at a place where combustible gas may leak.
If gas leaks and is collected at surrounding the unit, the production of fire may be caused.

Be sure to attach an earth leakage breaker; otherwise an electric shock may be caused.

Using a torque wrench, tighten the flare nut in the specified method.
If the flare nut is exceedingly tightened, the flare nut is broken and a refrigerant leakage may be caused after a long time has passed.

WARNINGS ON REFRIGERANT LEAKAGE

Check of Concentration Limit

The room in which the air conditioner is to be installed requires a design that in the event of refrigerant gas leaking out, its concentration will not exceed a set limit.

The refrigerant R410A which is used in the air conditioner is safe, without the toxicity or combustibility of ammonia, and is not restricted by laws to be imposed which protect the ozone layer. However, since it contains more than air, it poses the risk of suffocation if its concentration should rise excessively.

Suffocation from leakage of R410A is almost nonexistent. With the recent increase in the number of high concentration buildings, however, the installation of multi air conditioner systems is on the increase because of the need for effective use of floor space, individual control, energy conservation by curtailing heat and carrying power etc.

Most importantly, the multi air conditioner system is able to replenish a large amount of refrigerant compared with conventional individual air conditioners. If a single unit of the multi conditioner system is to be installed in a small room, select a suitable model and installation procedure so that if the refrigerant accidentally leaks out, its concentration does not reach the limit (and in the event of an emergency, measures can be made before injury can occur).

In a room where the concentration may exceed the limit, create an opening with adjacent rooms, or install mechanical ventilation combined with a gas leak detection device.

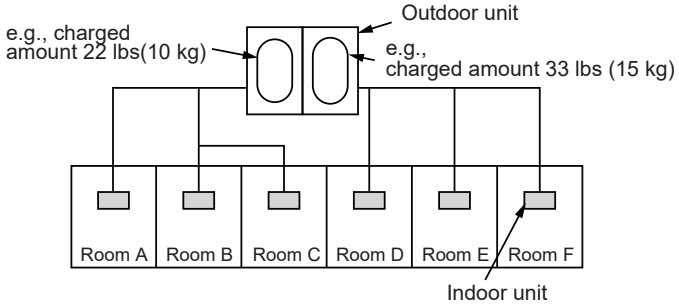
The concentration is as given below.

$$\frac{\text{Total amount of refrigerant (kg)}}{\text{Min. volume of the indoor unit installed room (m}^3\text{)}} \leq \text{Concentration limit (kg/m}^3\text{)}$$

Concentration limit compliance to the local applicable regulations and standards for the concentration limit is required.

NOTE 1:

If there are 2 or more refrigerating systems in a single refrigerating device, the amounts of refrigerant should be as charged in each independent device.



For the amount of charge in this example:

The possible amount of leaked refrigerant gas in rooms A, B and C is 22 lbs (10 kg).

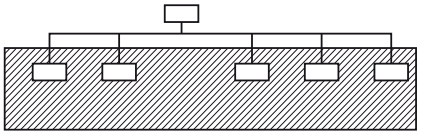
The possible amount of leaked refrigerant gas in rooms D, E and F is 33 lbs (15 kg).

Important

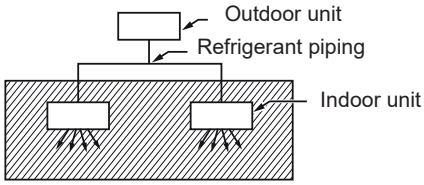
NOTE 2:

The standards for minimum room volume are as follows.

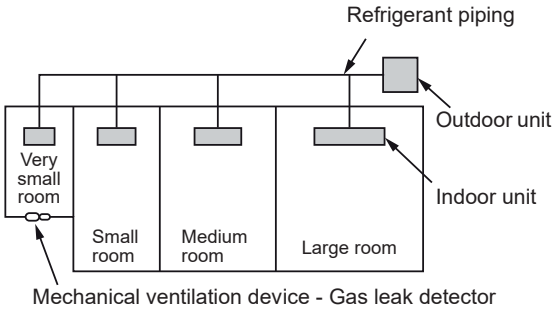
(1) No partition (shaded portion)



(2) When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15 % or larger than the respective floor spaces at the top or bottom of the door).



(3) If an indoor unit is installed in each partitioned room and the refrigerant tubing is interconnected, the smallest room of course becomes the object. But when a mechanical ventilation is installed interlocked with a gas leakage detector in the smallest room where the density limit is exceeded, the volume of the next smallest room becomes the object.



Features and Benefits

Variable refrigerant flow (VRF) series associates all of Toshiba innovative spirit and outstanding expertise to create highly efficient solution with maximum end user comfort at its core.

1. Unrivalled - Superior performance and efficiency beyond

Energy-efficient priority design

New DC Triple-rotary and Twin-rotary compressor, Newly developed compressors offer bigger capacity, better energy efficiency, less vibration and higher toughness which are mandatory to implement advanced VRF system.

Super-efficient heat exchanger

The innovative heat exchanger structures achieve 16%~45% larger heat exchanger area over previous systems for optimum energy efficiency and output capacity.

Refrigerant cooling inverter system

The refrigerant cooling inverter system can bring down the temperature of electric parts on the inverter. That contributes further toward downsizing inverter units, and also it affects of expanding operating temperature range.

Intelligent VRF control

From the sensor of each indoor unit, outdoor unit recognizes the indoor load, and outdoor PCB calculates the necessity of heating / cooling capacity. Then, outdoor unit controls the appropriate amount of refrigerant distribution through PMV to each indoor unit, to match the setting temperature.

Less refrigerants

With considering the eco-friendly and the regulation, SHRM-u realized the reducing of refrigerant amount units by controlling surplus refrigerant amount for indoor.

2. Universal - Industry-leading flexibility and connectivity

Space efficient design

The compact design and bigger capacity by single unit, the total number of installed units are reduced. With 1 stage chassis, Inverter box and Compressor position is at the upper with protecting cover, it is also designed to improve conveniences of serviceability.

Configuration flexibility

Advanced refrigeration cycle design accommodates even more number of indoor units.
Diversity up to 200% single ODU and 135% combination ODU.
Increase piping length and the height difference extends the capability of flexibility to adapt various applications.

Wider Operating temperature range

North America has variety of climates, from extremely warm climate to extremely cold climate.
We have successfully developed the solution for this wider operating temperature ranges, SHRM-u systems can operate in Heating mode from -30°F to 60°F, cooling mode from -10°F to 125°F outdoor ambient dry bulb.

3. Usability - Unparalleled integrated solutions and upgradability

Comprehensive System construction solution

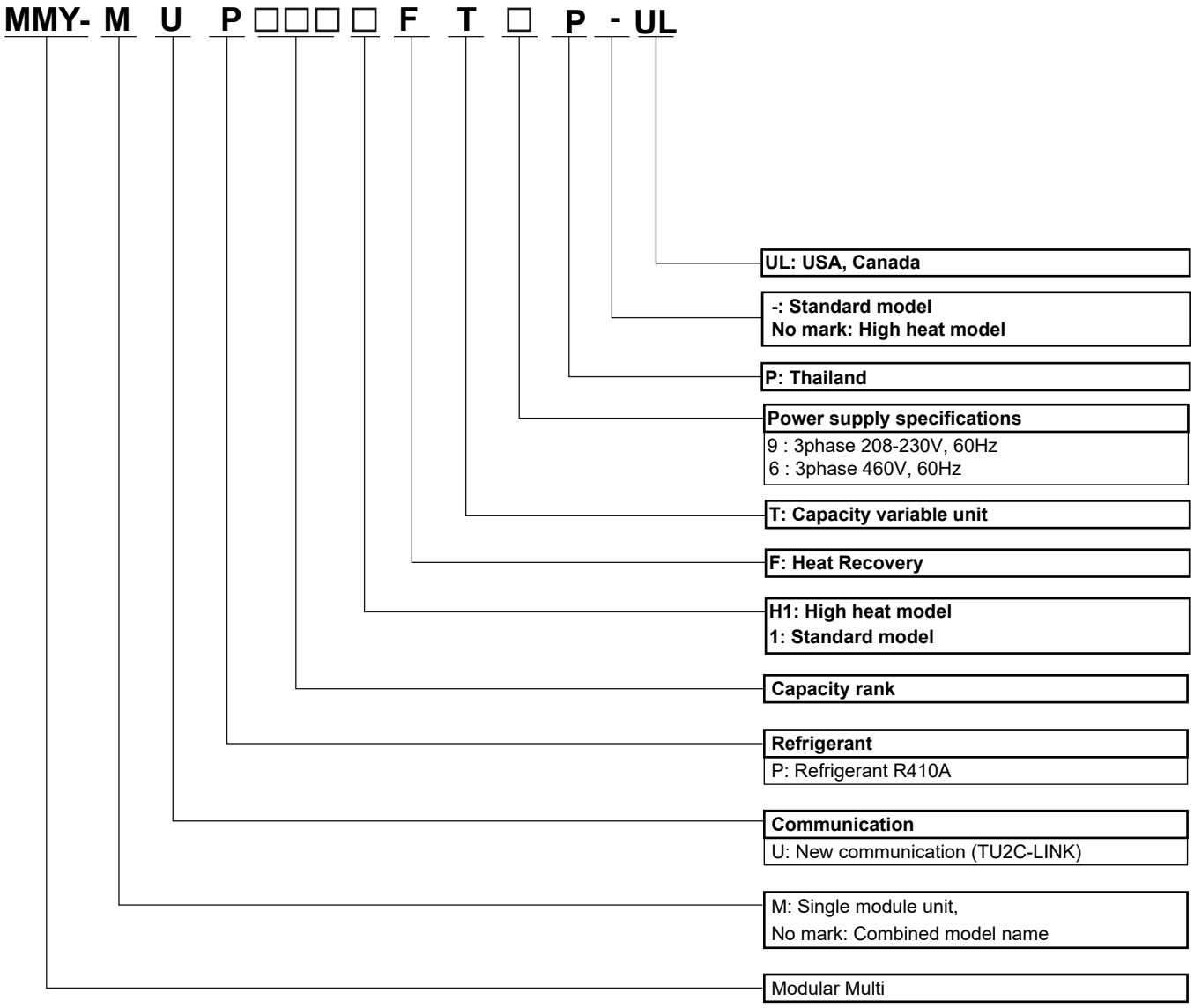
Since new communication, TU2C-LINK has two layer control (Uh and Uv), the lines can have appropriate volume of data, and improved the speed. It allows BMS to connect up to 128 IDU and a system to connect line. up to maximum of 74 IDU thanks to this faster data

Comprehensive Service solution

WTA and Link adapter are available for easy data taking and saving.
WTA (Wave Tool Advance) moves to the advanced stage as using NFC tag (Near Field Communication) + Smart phone APP. This can bring efficient time merit for the service and maintenance.
New service tools can operate outdoors and indoors to use the Link adapter. Test operation, setting, and acquisition of cycle data can be available

1-1. Allocation standard of model name

SHRM-u



1-2. Summary of system equipments

Cautions on communication methods

The communication type of SHRM-u is only TU2C-LINK.

SHRM-u (Outdoor unit) can NOT be combined with TCC-LINK models (other than U series).

For details of communication type, refer to the following table.

Communication type	TU2C-LINK (U series future models)	TCC-LINK (Other than U series)
Outdoor unit	**MMY-MUP＊＊＊**  This letter indicates U series model. **MMY-MUP＊＊＊FT＊P＊**  This letter indicates Heat recovery model.	**MMY-MAP＊＊＊** **MCY-MAP＊＊＊**
Indoor unit	**MM＊-UP＊＊＊**  This letter indicates U series model.	**MM＊-AP＊＊＊**
Flow selector unit	**RBM-Y＊＊＊FUP＊**  This letter indicates U series model. **RBM-Y＊＊＊FU＊P＊**  This letter indicates U series model.	**RBM-Y＊＊＊F＊** **RBM-Y＊＊＊F＊P＊**
Wired remote controller	**RBC-A＊＊U＊＊＊**  This letter indicates U series model.	**RBC-A＊＊＊＊＊**
Wireless remote controller kit & receiver unit	**RBC-AXU＊＊＊**  This letter indicates U series model.	**RBC-AX＊＊＊**

Other than U series outdoor unit : SHRM-i, SHRM-e etc. (MMY-MAP＊＊＊)

1-2-1. Outdoor units

460V Standard model

	Model name	Capacity		Combined outdoor units			
		Type	Code	Ton	Header unit	Follower unit 1	Follower unit 2
6 ton	MMY-MUP0721FT6P-UL	072	72	6	MMY-MUP0721FT6P-UL	—	—
8 ton	MMY-MUP0961FT6P-UL	096	96	8	MMY-MUP0961FT6P-UL	—	—
10 ton	MMY-MUP1201FT6P-UL	120	120	10	MMY-MUP1201FT6P-UL	—	—
12 ton	MMY-MUP1441FT6P-UL	144	144	12	MMY-MUP1441FT6P-UL	—	—
14 ton	MMY-MUP1681FT6P-UL	168	168	14	MMY-MUP1681FT6P-UL	—	—
16 ton	MMY-MUP1921FT6P-UL	192	192	16	MMY-MUP1921FT6P-UL	—	—
16 ton	MMY-UP1921FT6P-UL	192	192	8 + 8	MMY-MUP0961FT6P-UL	MMY-MUP0961FT6P-UL	—
18 ton	MMY-UP2161FT6P-UL	216	216	12 + 6	MMY-MUP1441FT6P-UL	MMY-MUP0721FT6P-UL	—
20 ton	MMY-UP2401FT6P-UL	240	240	12 + 8	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL	—
22 ton	MMY-UP2641FT6P-UL	264	264	14 + 8	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL	—
24 ton	MMY-UP2881FT6P-UL	288	288	12 + 12	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL	—
26 ton	MMY-UP3121FT6P-UL	312	312	14 + 12	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL	—
28 ton	MMY-UP3361FT6P-UL	336	336	14 + 14	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	—
30 ton	MMY-UP3601FT6P-UL	360	360	14 + 8 + 8	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL	MMY-MUP0961FT6P-UL
32 ton	MMY-UP3841FT6P-UL	384	384	12 + 12 + 8	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL
34 ton	MMY-UP4081FT6P-UL	408	408	14 + 12 + 8	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL
36 ton	MMY-UP4321FT6P-UL	432	432	14 + 14 + 8	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL
38 ton	MMY-UP4561FT6P-UL	456	456	14 + 12 + 12	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL
40 ton	MMY-UP4801FT6P-UL	480	480	14 + 14 + 12	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL
42 ton	MMY-UP5041FT6P-UL	504	504	14 + 14 + 14	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL

460V High heat model

	Model name	Capacity		Combined outdoor units			
		Type	Code	Ton	Header unit	Follower unit 1	Follower unit 2
6 ton	MMY-MUP072H1FT6PUL	072	72	6	MMY-MUP072H1FT6PUL	—	—
8 ton	MMY-MUP096H1FT6PUL	096	96	8	MMY-MUP096H1FT6PUL	—	—
10 ton	MMY-MUP120H1FT6PUL	120	120	10	MMY-MUP120H1FT6PUL	—	—
12 ton	MMY-UP144H1FT6PUL	144	144	6 + 6	MMY-MUP072H1FT6PUL	MMY-MUP072H1FT6PUL	—
16 ton	MMY-UP192H1FT6PUL	192	192	8 + 8	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL	—
20 ton	MMY-UP240H1FT6PUL	240	240	10 + 10	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL	—
24 ton	MMY-UP288H1FT6PUL	288	288	8 + 8 + 8	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL
30 ton	MMY-UP360H1FT6PUL	360	360	10 + 10 + 10	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL

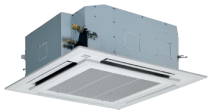
208-230V Standard model

	Model name	Capacity		Combined outdoor units			
		Type	Code	Ton	Header unit	Follower unit 1	Follower unit 2
6 ton	MMY-MUP0721FT9P-UL	072	72	6	MMY-MUP0721FT9P-UL	—	—
8 ton	MMY-MUP0961FT9P-UL	096	96	8	MMY-MUP0961FT9P-UL	—	—
10 ton	MMY-MUP1201FT9P-UL	120	120	10	MMY-MUP1201FT9P-UL	—	—
12 ton	MMY-MUP1441FT9P-UL	144	144	12	MMY-MUP1441FT9P-UL	—	—
14 ton	MMY-MUP1681FT9P-UL	168	168	14	MMY-MUP1681FT9P-UL	—	—
16 ton	MMY-UP1921FT9P-UL	192	192	8 + 8	MMY-MUP0961FT9P-UL	MMY-MUP0961FT9P-UL	—
18 ton	MMY-UP2161FT9P-UL	216	216	12 + 6	MMY-MUP1441FT9P-UL	MMY-MUP0721FT9P-UL	—
20 ton	MMY-UP2401FT9P-UL	240	240	12 + 8	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL	—
22 ton	MMY-UP2641FT9P-UL	264	264	14 + 8	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL	—
24 ton	MMY-UP2881FT9P-UL	288	288	12 + 12	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL	—
26 ton	MMY-UP3121FT9P-UL	312	312	14 + 12	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL	—
28 ton	MMY-UP3361FT9P-UL	336	336	14 + 14	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	—
30 ton	MMY-UP3601FT9P-UL	360	360	14 + 8 + 8	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL	MMY-MUP0961FT9P-UL
32 ton	MMY-UP3841FT9P-UL	384	384	12 + 12 + 8	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL
34 ton	MMY-UP4081FT9P-UL	408	408	14 + 12 + 8	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL
36 ton	MMY-UP4321FT9P-UL	432	432	14 + 14 + 8	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL
38 ton	MMY-UP4561FT9P-UL	456	456	14 + 12 + 12	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL
40 ton	MMY-UP4801FT9P-UL	480	480	14 + 14 + 12	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL
42 ton	MMY-UP5041FT9P-UL	504	504	14 + 14 + 14	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL

208-230V High heat model

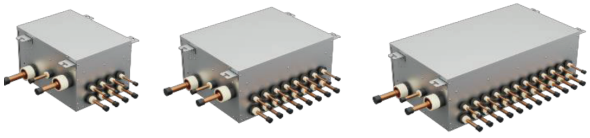
	Model name	Capacity		Combined outdoor units			
		Type	Code	Ton	Header unit	Follower unit 1	Follower unit 2
6 ton	MMY-MUP072H1FT9PUL	072	72	6	MMY-MUP072H1FT9PUL	—	—
8 ton	MMY-MUP096H1FT9PUL	096	96	8	MMY-MUP096H1FT9PUL	—	—
10 ton	MMY-MUP120H1FT9PUL	120	120	10	MMY-MUP120H1FT9PUL	—	—
12 ton	MMY-UP144H1FT9PUL	144	144	6 + 6	MMY-MUP072H1FT9PUL	MMY-MUP072H1FT9PUL	—
16 ton	MMY-UP192H1FT9PUL	192	192	8 + 8	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL	—
20 ton	MMY-UP240H1FT9PUL	240	240	10 + 10	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL	—
24 ton	MMY-UP288H1FT9PUL	288	288	8 + 8 + 8	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL
30 ton	MMY-UP360H1FT9PUL	360	360	10 + 10 + 10	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL

1-2-2. Indoor unit

Type	Appearance	Model name	Capacity type	Capacity code	Cooling capacity (kBtu/h)	Heating capacity (kBtu/h)
4-Way Cassette Type		MMU-UP0071HP-UL	007	7.5	7.5	8.5
		MMU-UP0091HP-UL	009	9.5	9.5	10.5
		MMU-UP0121HP-UL	012	12.0	12.0	13.5
		MMU-UP0151HP-UL	015	15.4	15.4	17.0
		MMU-UP0181HP-UL	018	18.0	18.0	20.0
		MMU-UP0241HP-UL	024	24.0	24.0	27.0
		MMU-UP0301HP-UL	030	30.0	30.0	34.0
		MMU-UP0361HP-UL	036	36.0	36.0	40.0
		MMU-UP0421HP-UL	042	42.0	42.0	47.5
		MMU-UP0481HP-UL	048	48.0	48.0	54.0
		MMU-UP0541HP-UL	054	54.0	54.0	60.0
Compact 4-way Cassette Type		MMU-UP0071MH-UL	007	7.5	7.5	8.5
		MMU-UP0091MH-UL	009	9.5	9.5	10.5
		MMU-UP0121MH-UL	012	12.0	12.0	13.5
		MMU-UP0151MH-UL	015	15.4	15.4	17.0
		MMU-UP0181MH-UL	018	18.0	18.0	20.0
1-Way Cassette Type		MMU-UP0071YHP-UL	007	7.5	7.5	8.5
		MMU-UP0091YHP-UL	009	9.5	9.5	10.5
		MMU-UP0121YHP-UL	012	12.0	12.0	13.5
		MMU-UP0151YHP-UL	015	15.4	15.4	17.0
		MMU-UP0181YHP-UL	018	18.0	18.0	20.0
		MMU-UP0241YHP-UL	024	24.0	24.0	27.0
Slim Duct Type		MMD-UP0071SPH-UL	007	7.5	7.5	8.5
		MMD-UP0091SPH-UL	009	9.5	9.5	10.5
		MMD-UP0121SPH-UL	012	12.0	12.0	13.5
		MMD-UP0151SPH-UL	015	15.4	15.4	17.0
		MMD-UP0181SPH-UL	018	18.0	18.0	20.0
Medium static Concealed Duct Type		MMD-UP0071BHP-UL	007	7.5	7.5	8.5
		MMD-UP0091BHP-UL	009	9.5	9.5	10.5
		MMD-UP0121BHP-UL	012	12.0	12.0	13.5
		MMD-UP0151BHP-UL	015	15.4	15.4	17.0
		MMD-UP0181BHP-UL	018	18.0	18.0	20.0
		MMD-UP0211BHP-UL	021	21.0	21.0	24.0
		MMD-UP0241BHP-UL	024	24.0	24.0	27.0
		MMD-UP0301BHP-UL	030	30.0	30.0	34.0
		MMD-UP0361BHP-UL	036	36.0	36.0	40.0
		MMD-UP0421BHP-UL	042	42.0	42.0	47.5
		MMD-UP0481BHP-UL	048	48.0	48.0	54.0
		MMD-UP0541BHP-UL	054	54.0	54.0	60.0
Concealed Duct High Static Pressure Type		MMD-UP0241HP-UL	024	24.0	24.0	27.0
		MMD-UP0301HP-UL	030	30.0	30.0	34.0
		MMD-UP0361HP-UL	036	36.0	36.0	40.0
		MMD-UP0481HP-UL	048	48.0	48.0	54.0
		MMD-UP0541HP-UL	054	54.0	54.0	60.0
		MMD-UP0721HP-UL	072	72.0	72.0	81.0
		MMD-UP0961HP-UL	096	96.0	96.0	108.0
Ceiling Type		MMC-UP0181HP-UL	018	18.0	18.0	20.0
		MMC-UP0241HP-UL	024	24.0	24.0	27.0
		MMC-UP0301HP-UL	030	30.0	30.0	34.0
		MMC-UP0361HP-UL	036	36.0	36.0	40.0
		MMC-UP0481HP-UL	048	48.0	48.0	54.0
High Wall Type		MMK-UP0071HP-UL	007	7.5	7.5	8.5
		MMK-UP0091HP-UL	009	9.5	9.5	10.5
		MMK-UP0121HP-UL	012	12.0	12.0	13.5
		MMK-UP0151HP-UL	015	15.4	15.4	17.0
		MMK-UP0181HP-UL	018	18.0	18.0	20.0
		MMK-UP0241HP-UL	024	24.0	24.0	27.0
		MMK-UP0301HP-UL	030	30.0	30.0	34.0
		MMK-UP0361HP-UL	036	36.4	36.0	40.0

Type	Appearance	Model name	Capacity type	Capacity code	Cooling capacity (kBtu/h)	Heating capacity (kBtu/h)
Floor standing recessed Type		MML-UP0071BH-UL	007	7.5	7.5	8.5
		MML-UP0091BH-UL	009	9.5	9.5	10.5
		MML-UP0121BH-UL	012	12.0	12.0	13.5
		MML-UP0151BH-UL	015	15.4	15.4	17.0
		MML-UP0181BH-UL	018	18.0	18.0	20.0
		MML-UP0241BH-UL	024	24.0	24.0	27.0
Floor standing exposed Type		MML-UP0071H-UL	007	7.5	7.5	8.5
		MML-UP0091H-UL	009	9.5	9.5	10.5
		MML-UP0121H-UL	012	12.0	12.0	13.5
		MML-UP0151H-UL	015	15.4	15.4	17.0
		MML-UP0181H-UL	018	18.0	18.0	20.0
		MML-UP0241H-UL	024	24.0	24.0	27.0
Outside Air Unit Type		MMD-UP0481HFP-UL	048	48.0	48.0	30.0
		MMD-UP0721HFP-UL	072	72.0	72.0	47.0
		MMD-UP0961HFP-UL	096	96.0	96.0	59.0
		MMD-UP1201HFP-UL	120	120.0	120.0	75.0
Dx-coil controller		TCB-IFDMR01UP-UL	6-16 ton	72-192	72-192	81-216
Dx-valve kit		RBM-A0601UPVA-UL	0.6-5ton	7.5-60.0	7.5-60.0	8.5-68.0
		RBM-A1281UPVA-UL	6-10ton	72-120	72-120	81-135
		RBM-A1921UPVA-UL	12-16ton	144-192	144-192	162-216

1-2-3. FS units (Flow selector units)

Name	Appearance	Model name	Remarks
Flow Selector unit (Multi port type)		RBM-Y0611FU4PUL	
		RBM-Y0611FU8PUL	
		RBM-Y0611FU12PUL	
Flow Selector unit (Single port type)		RBM-Y0611FUPUL	
		RBM-Y0961FUPUL	

1-2-4. Branching joints and headers

Name	Appearance	Model name	Remarks
Y-shape branching joint		RBM-BY55FUL	For 3 piping
		RBM-BY105FUL	
		RBM-BY205FUL	
		RBM-BY305FUL	
		RBM-BY55UL	For 2 piping
		RBM-BY105UL	
		RBM-BY205UL	
		RBM-BY305UL	
4-branching header		RBM-HY1043FUL	For 3 piping
		RBM-HY2043FUL	
		RBM-HY1043UL	For 2 piping
		RBM-HY2043UL	
8-branching header		RBM-HY1083FUL	For 3 piping
		RBM-HY2083FUL	
		RBM-HY1083UL	For 2 piping
		RBM-HY2083UL	
Branching joint for connection of outdoor units		RBM-BT14FUL	
		RBM-BT24FUL	

1-2-5. Optional PCB of outdoor unit

Name	Appearance	Model name	Remarks
Power peak-cut control board		TCB-PCDM4UL	
External master ON/OFF control board		TCB-PCMO4UL	
Output control board		TCB-PCIN4UL	

1-2-6. Remote controllers (TC2C-LINK available)

Name	Model name	Remark
Wired remote controller	RBC-AWSU52-UL	
Wireless remote controller kit	RBC-AXU31UM-UL	For Compact 4-way Cassette type
	RBC-AXU31-UL	Medium Static Ducted type,
		Slim Ducted type,
		Floor console recessed type
	RBC-AXU31UP-UL	For 4-way Cassette（ RBC-U32PGP-UL）
	RBC-AXU33UP-UL	For 4-way Cassette（ RBC-U33P-UL ）
	RBC-AX33UYP-UL	For 1 way Cassette type
	RBC-AXU33CP-UL	For Ceiling type

1-2-7. TU2C-LINK Controls

Name	Model name	Remark
128 touch screen controller	BMS-CT2560U-UL	New model from BMS-CT1280U-UL
BACnet (BN) Interface	BMS-IFBN1281U-UL	New model from BMS-IFBN640TLUL
Central remoto controller	TCB-SC640U-UL	New model from BMS-CM1281TLUL

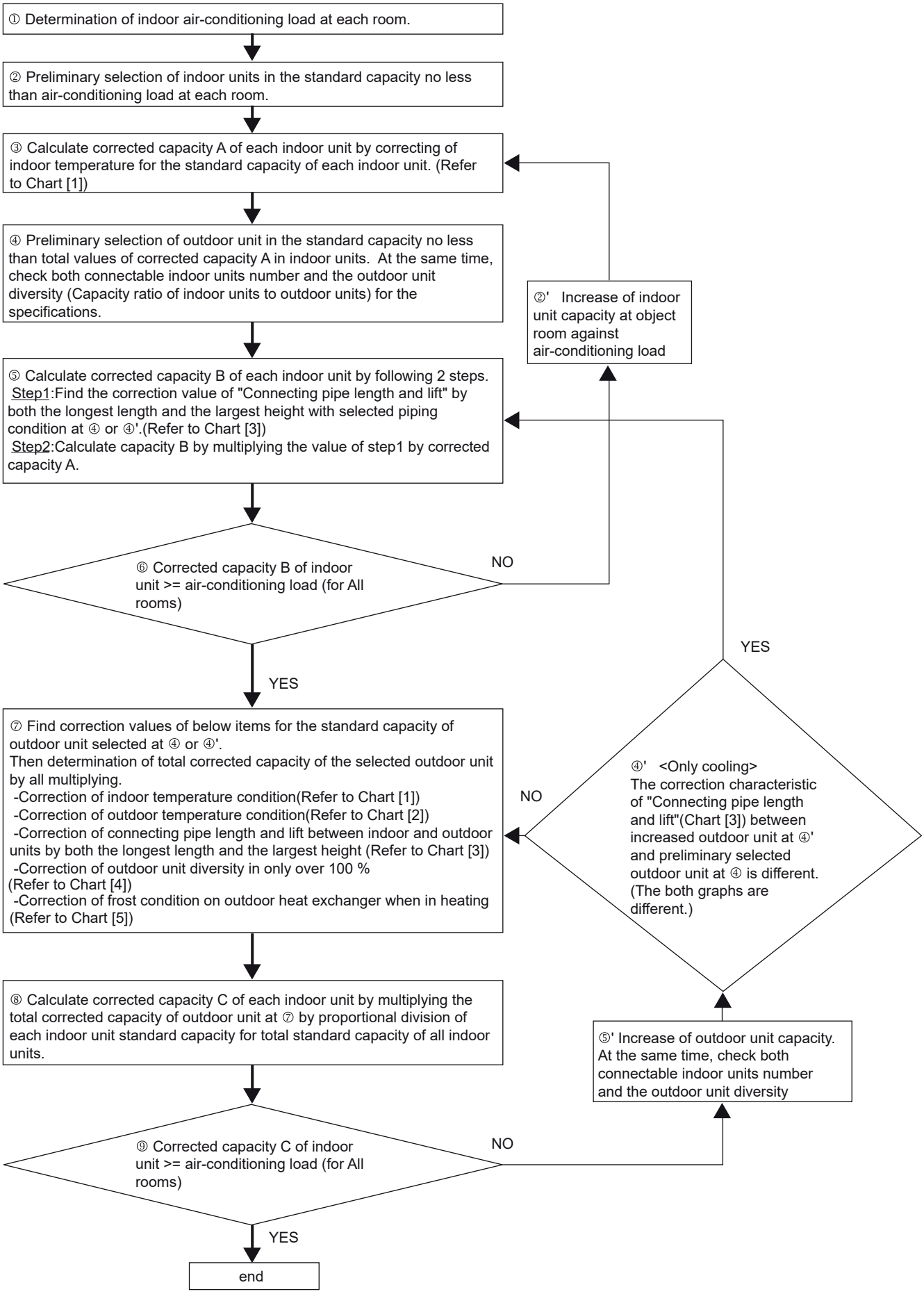
1-2-8. Remote controllers

Name	Model name	Remark
Touch Screen Controller	BMS-CT5120UL	
Relay interface	BMS-IFLSV4UL	
Energy Monitoring Relay Interface	BMS-IFWH5UL	
Digital I/O Relay Interface	BMS-IFDD03UL	
LonWorks LN Interface	TCB-IFLN642TLUL	
Remote location ON/OFF Control Box	TCB-IFCB-4UL	
"1:1 model" Connection Interface	TCB-PCNT31TLUL	UL Link adapter for "1:1 model" to enable connection to VRF system network. *"1:1 model" : RAV type indoor unit

1-2-9. Others

Name	Model name	Remark
Snow Guard	TCB-SGM2802KU-F	Top 990W chassis
	TCB-SGM4502KU-F	Top 1290W chassis
	TCB-SGMH2802KU-B	Back 990W chassis
	TCB-SGMH4502KU-B	Back 1290W chassis
	TCB-SGMH2802KU-Y	Side 990W, 1290W chassis

2-1. Selection flow chart



2-2. Combination conditions for indoor unit and outdoor unit

2-2-1. Standard model

Single module outdoor unit system

- When height difference between indoor units is less than 49 ft (15 m) , the total capacity indoor units must be between 70 % and 200 % of outdoor unit capacity.
- When height difference between indoor units is more than 49 ft (15 m) , the total capacity indoor units must be between 70 % and 105 % of outdoor unit capacity.

Multiple module outdoor units system

- When height difference between indoor units is less than 49 ft (15 m) , the total capacity indoor units must be between 50 % and 135 % of outdoor unit capacity.
- When height difference between indoor units is more than 49 ft (15 m) , the total capacity indoor units must be between 50 % and 105 % of outdoor unit capacity.

2-2-2. High heat model

Single module outdoor unit system

- When height difference between indoor units is less than 49 ft (15 m) , the total capacity indoor units must be between 80 % and 200 % of outdoor unit capacity.
- When height difference between indoor units is more than 49 ft (15 m) , the total capacity indoor units must be between 80 % and 105 % of outdoor unit capacity.

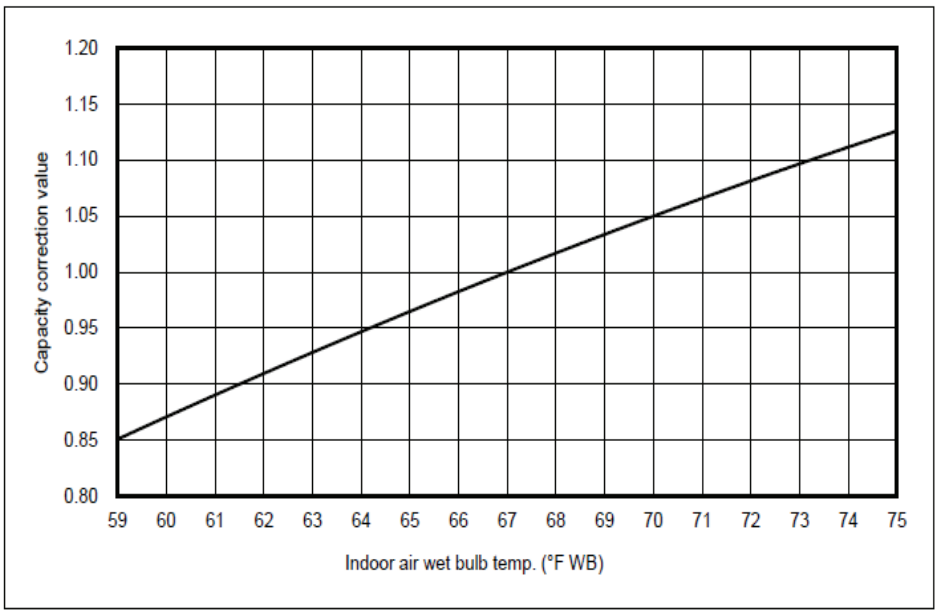
Multiple module outdoor units system

- When height difference between indoor units is less than 49 ft (15 m) , the total capacity indoor units must be between 50 % and 135 % of outdoor unit capacity.
- When height difference between indoor units is more than 49 ft (15 m) , the total capacity indoor units must be between 50 % and 105 % of outdoor unit capacity.

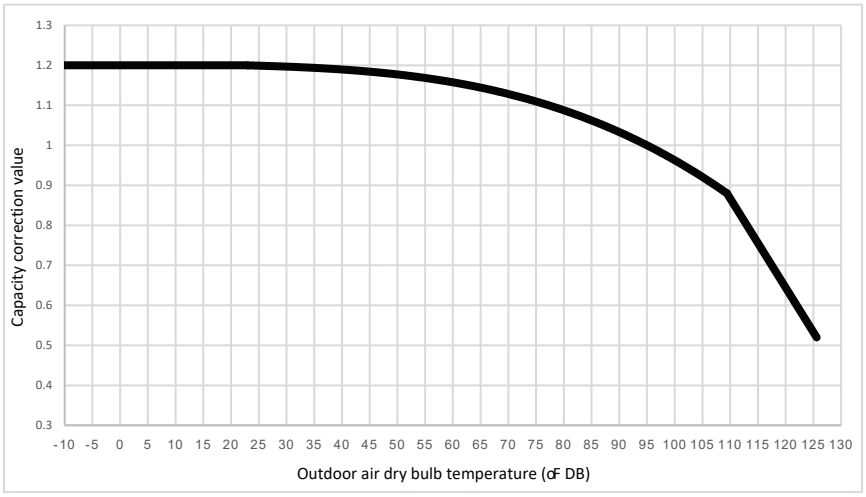
2-3. Cooling/heating capacity characteristics

2-3-1. Correction charts for cooling capacity calculation

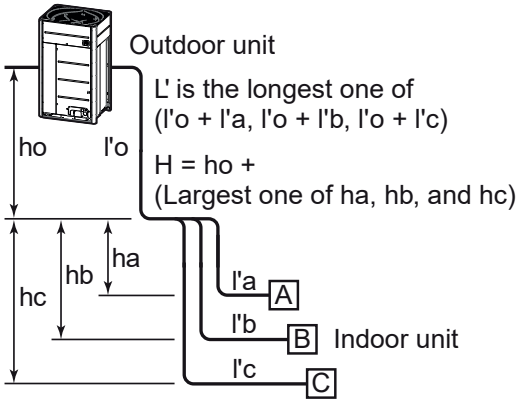
[1] Indoor air wet bulb temperature vs. capacity correction value



[2] Outdoor air dry bulb temperature vs.capacity correction value



[3] Connecting pipe length and lift difference between indoor and outdoor units vs. capacity correction value



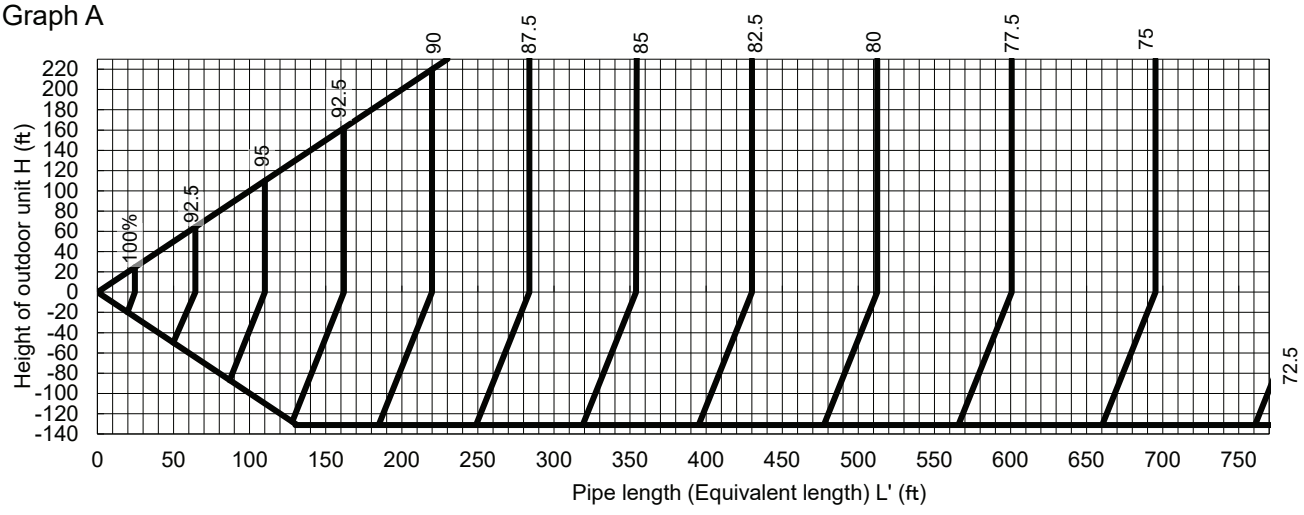
Standard model

Model Type	Graph	Combination [ton]	Pipe length L' [ft]
MUP072	D	6	689
MUP096	C	8	689
MUP120	A	10	689
MUP144	A	12	689
MUP168	B	14	689
MUP192	C	16	689
UP192	C	8+8	738
UP216	D	12+6	738
UP240	A	12+8	738
UP264	A	14+8	738
UP288	B	12+12	738
UP312	A	14+12	738
UP336	A	14+14	738
UP360	A	14+8+8	771
UP384	A	12+12+8	771
UP408	A	14+12+8	771
UP432	B	14+14+8	771
UP456	B	14+12+12	771
UP480	B	14+14+12	771
UP504	B	14+14+14	771

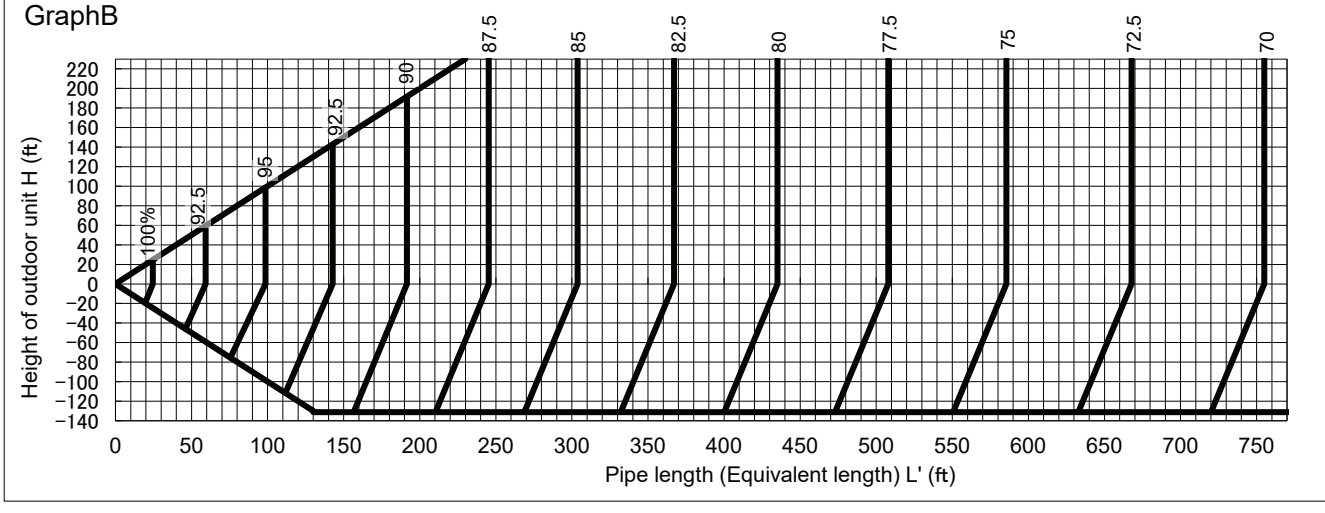
High heat model

Model Type	Graph	Combination [ton]	Pipe length [ft]
MUP072H1	D	6	689
MUP096H1	C	8	689
MUP120H1	A	10	689
UP144H1	A	6+6	738
UP192H1	C	8+8	738
UP240H1	A	10+10	738
UP288H1	B	8+8+8	771
UP360H1	A	10+10+10	771

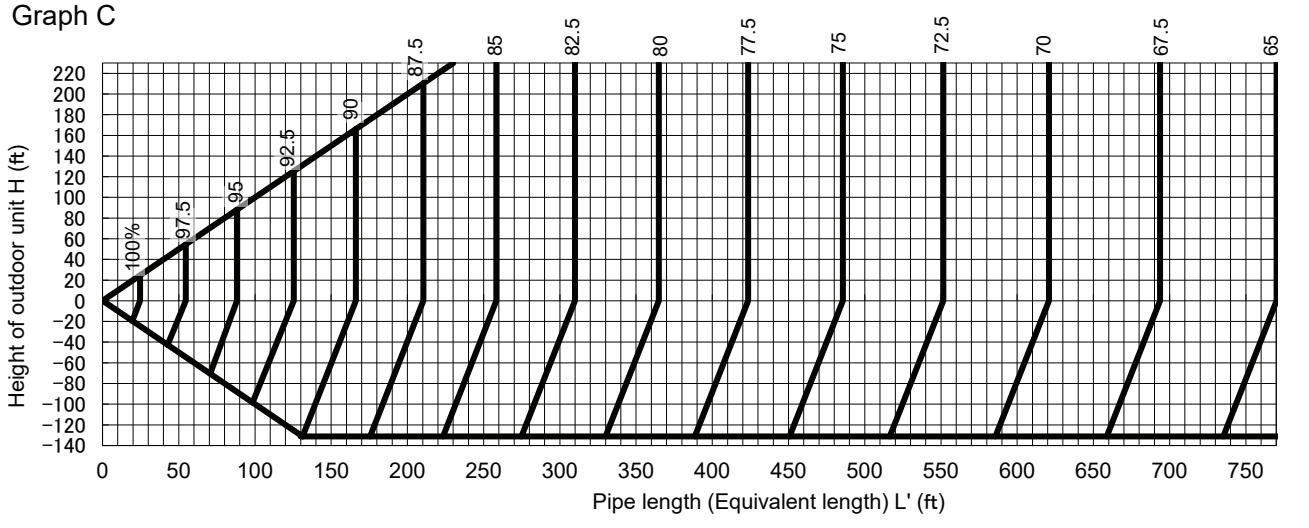
Graph A

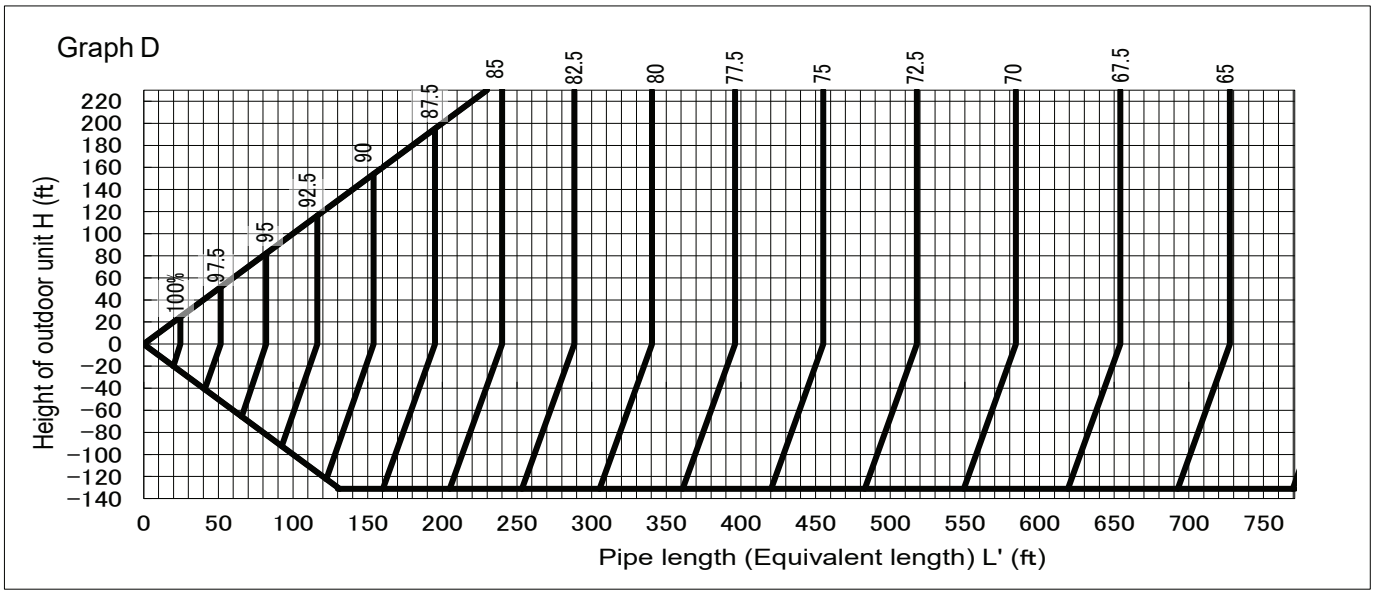


GraphB

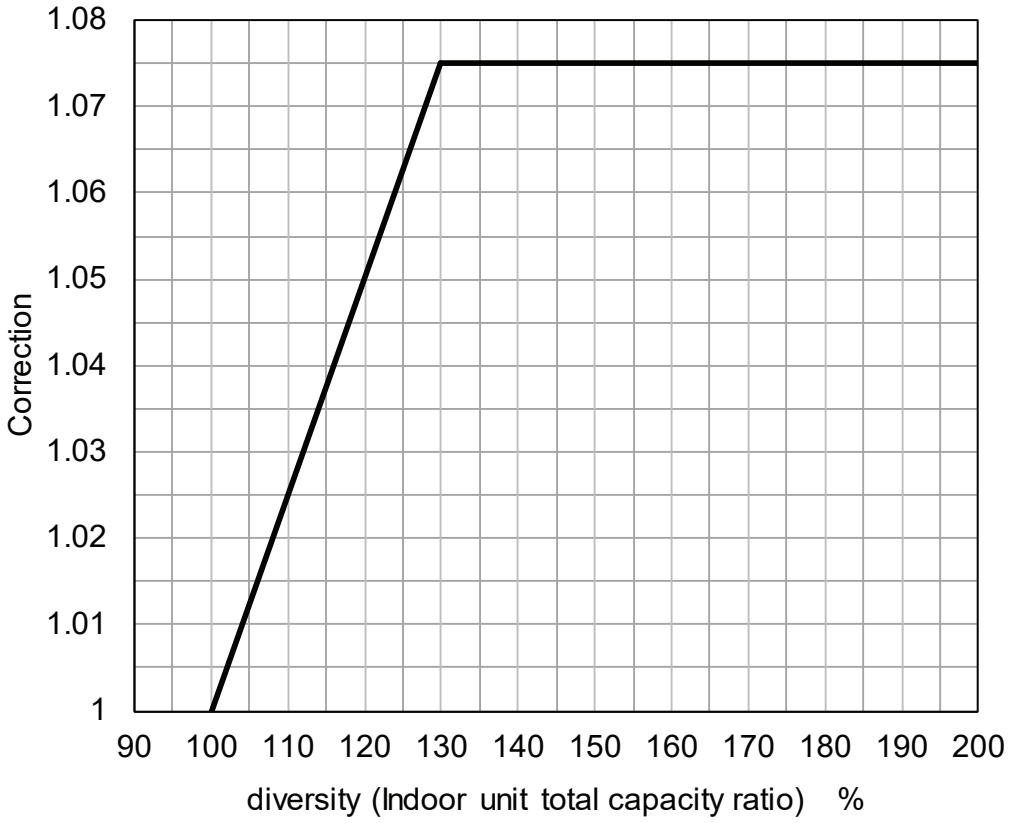


Graph C





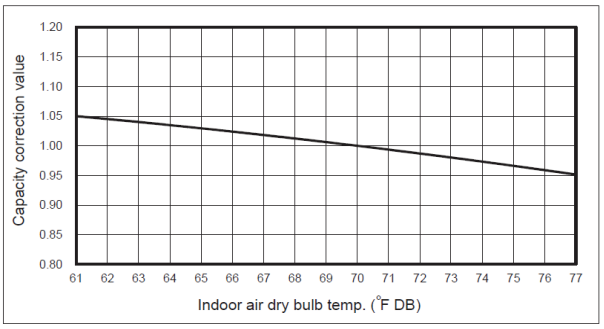
[4]*Cooling Correction of outddor unit diversity



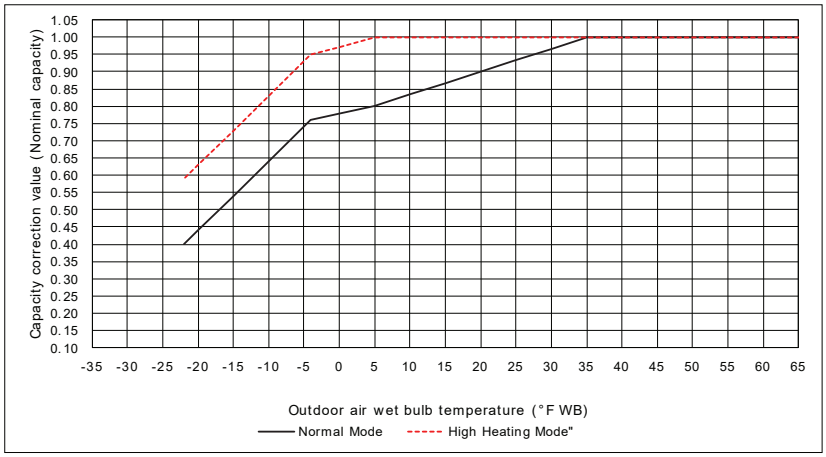
* Coefficient to use for the correction of the outdoor unit capacity when the total capacity of the indoor units are not equal to the outdoor unit capacity.

2-3-2. Correction charts for heating capacity calculation

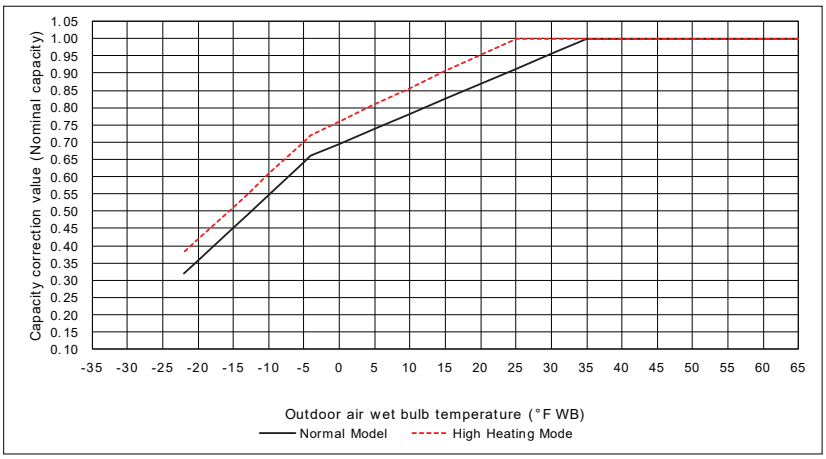
[1] Indoor air dry bulb temperature vs. capacity correction value



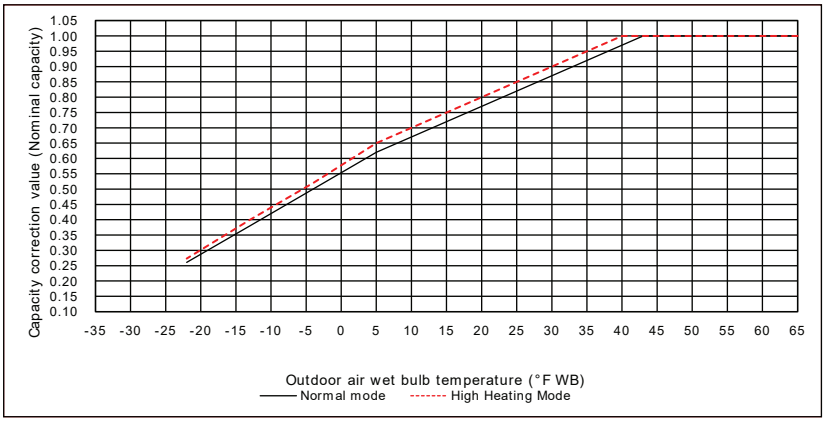
[2] Outdoor air wet bulb temperature vs. capacity correction value



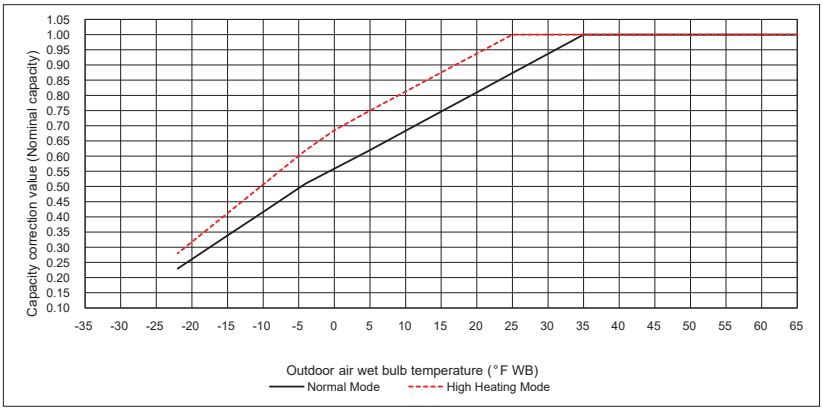
Model Type
MUP072



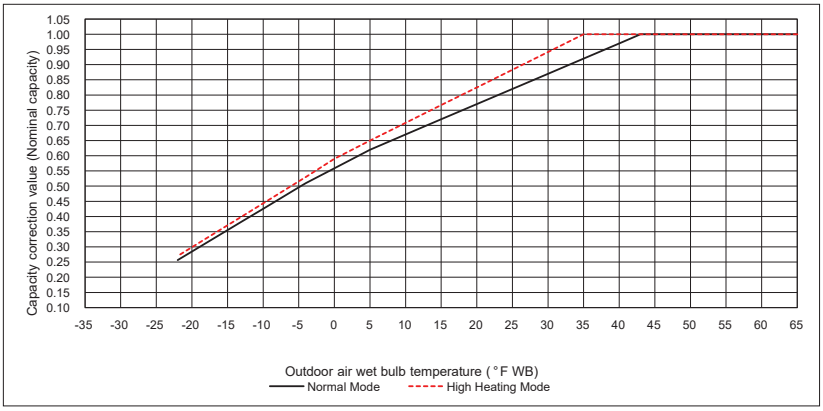
Model Type
MUP096 UP192



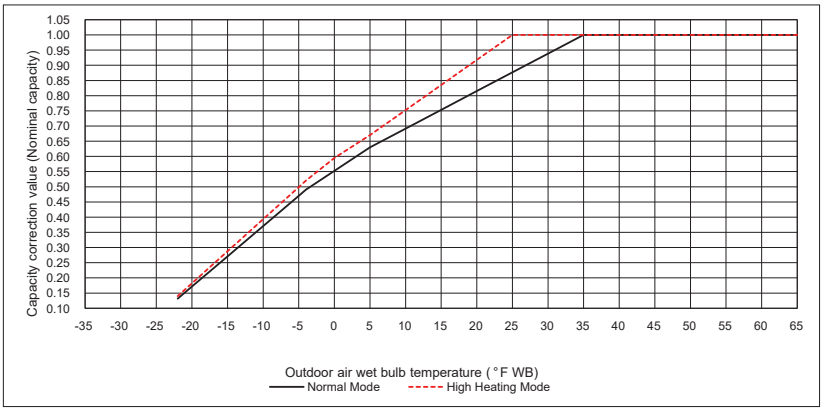
Model Type
MUP120



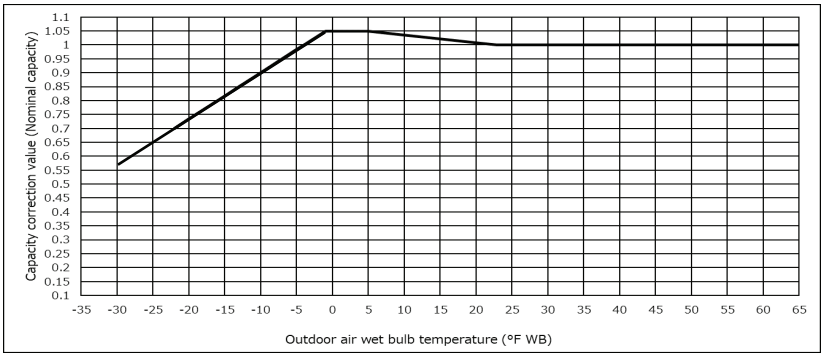
Model Type				
MUP144	UP216	UP240	UP288	UP384



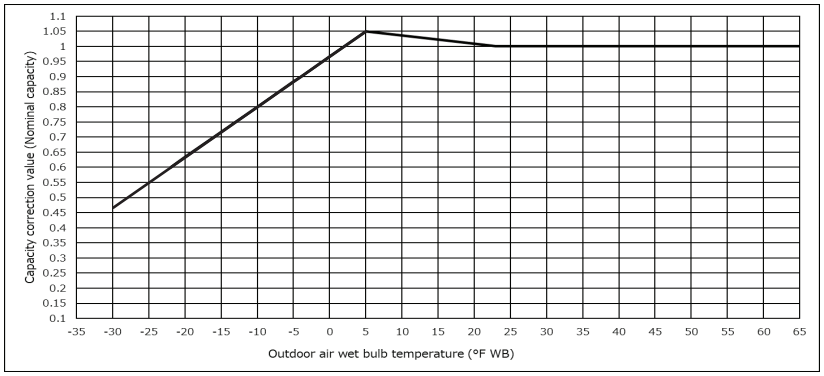
Model Type				
MUP168	UP264	UP312	UP336	UP360
UP408	UP432	UP456	UP480	UP504



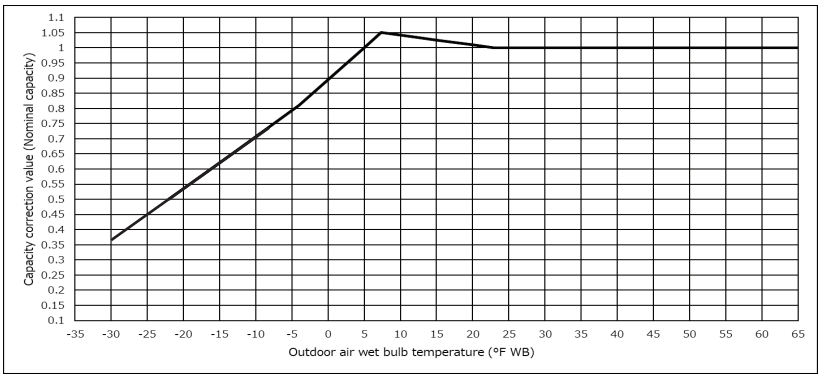
Model Type
MUP192



Model Type	
MUP072H1	MUP144H1

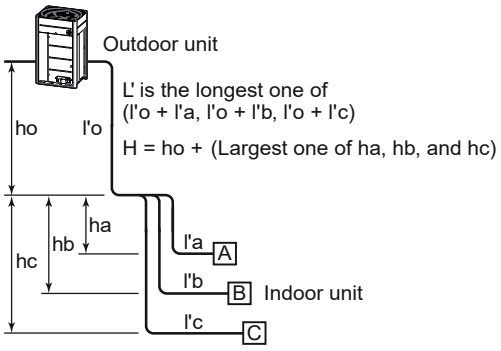


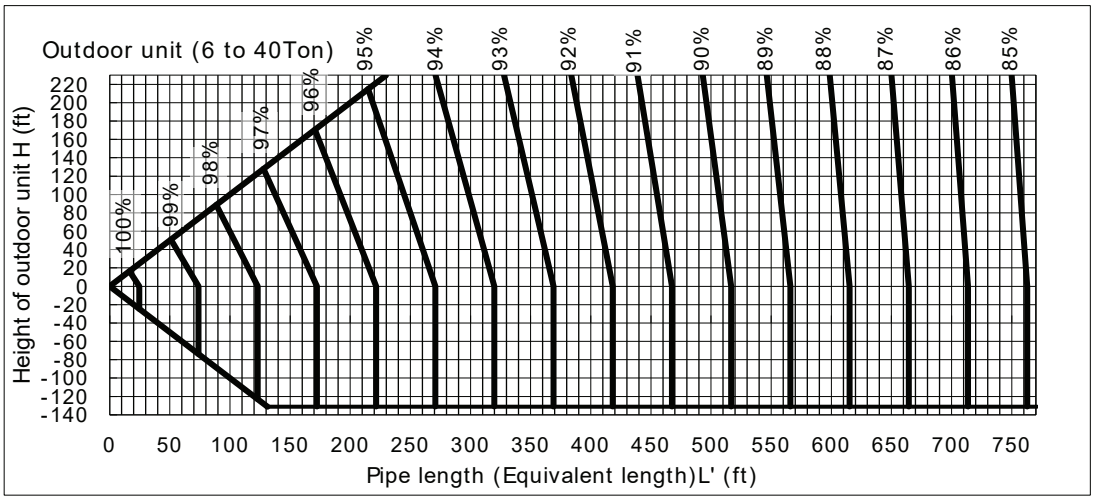
Model Type		
MUP096H1	MUP192H1	MUP288H1



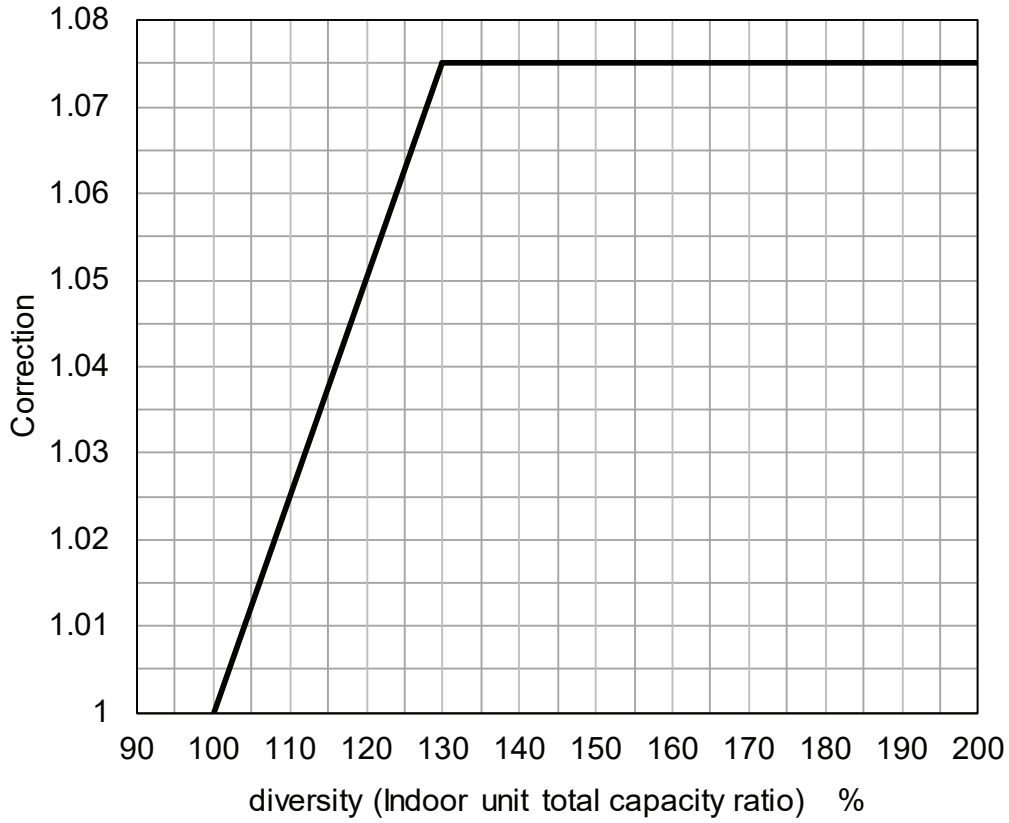
Model Type		
MUP120H1	MUP240H1	MUP360H1

[3] Connecting pipe length and lift difference between indoor and outdoor units vs. capacity correction value





[4]*Heating Correction of outddor unit diversity

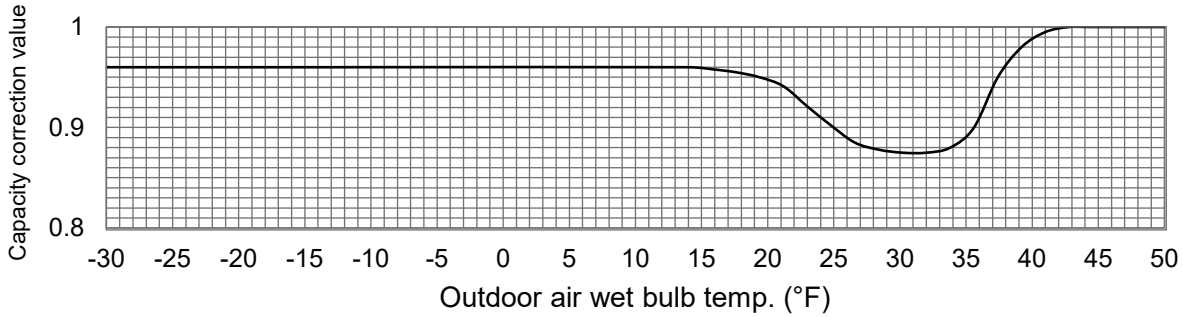


* Coefficient to use for the correction of the outdoor unit capacity when the total capacity of the indoor units are not equal to the outdoor unit capacity.

2-3-3. Capacity correction in case of frost on the outdoor heat exchanger when in heating

Correct the heating capacity when frost can be found on the outdoor heat exchanger.
Heating capacity = Capacity after correction of outdoor unit x Correction value of capacity resulted from frost
(Capacity after correction of outdoor unit: Heating capacity calculated in the above item 2.)

[5] Capacity correction in case of frost on the outdoor heat exchanger

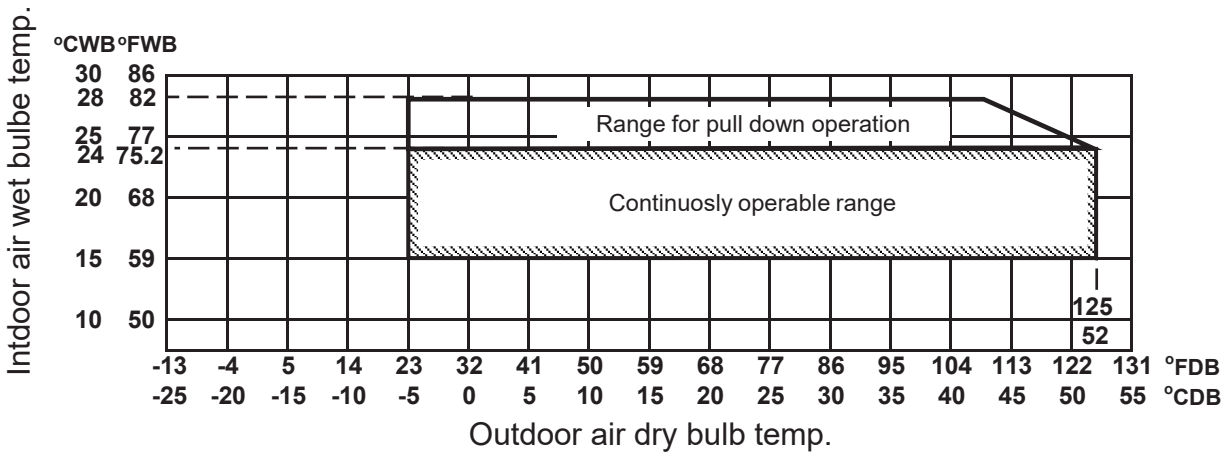


2-3-4. Rated conditions

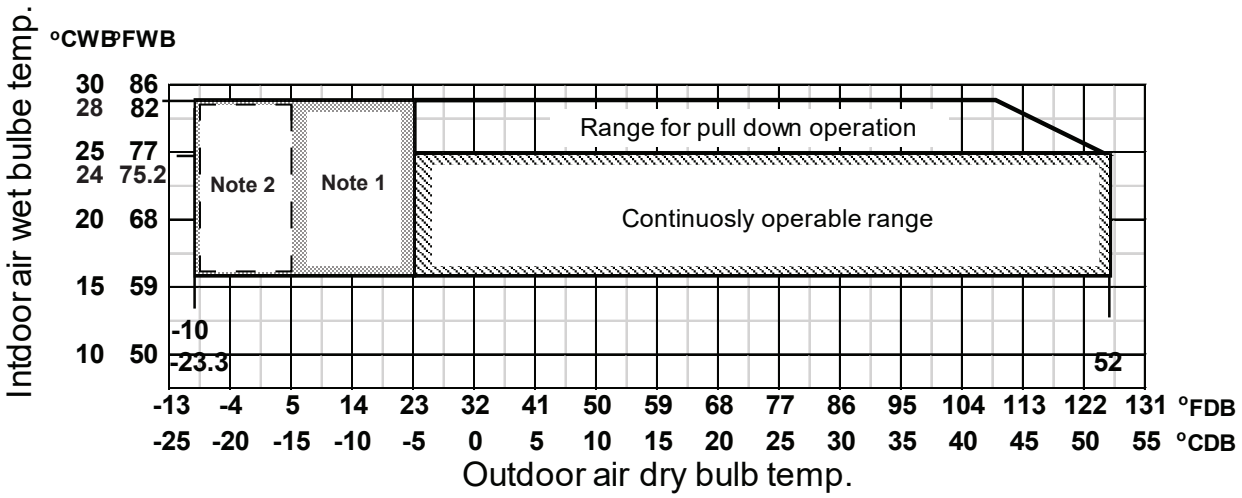
Cooling: Indoor air temperature 80 °F DB / 67°F WB, Outdoor air temperature 95°F DB
Heating: Indoor air temperature 70°F DB, Outdoor air temperature 47°F DB / 43°F WB

2-4. Operational temperature range

1.Standard cooling range (Standard model & High heat model)



2.Extend cooling range (Standard model & High heat model)



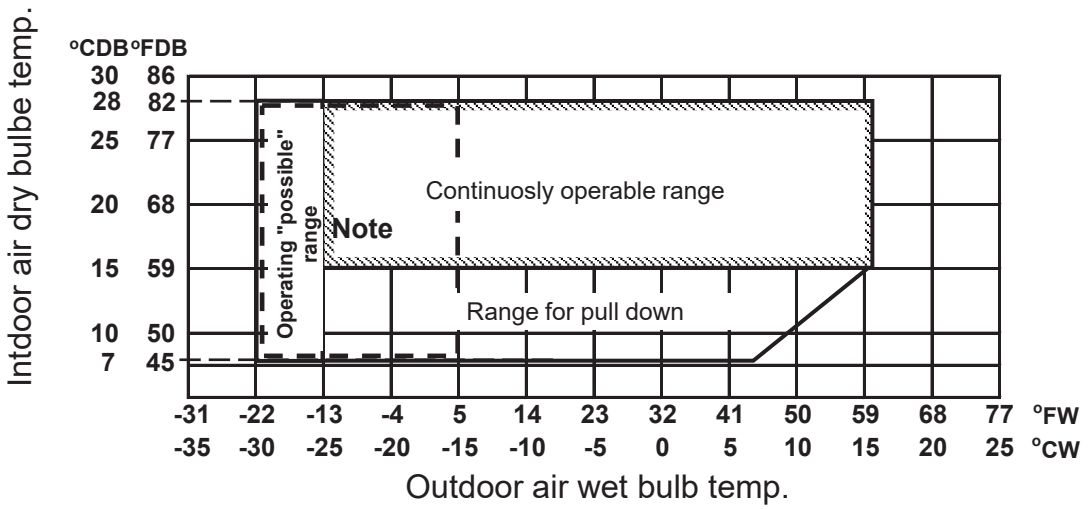
Note1:

1. Install a snowfall-hood, for cooling operation below to 23 °F(-5 °C) of outside air temperature.
2. Only single outdoor unit system be able to operate. If the outdoor unit is installed on the lower side than the indoor unit, the drop height difference between indoor units should be less than 9.8 ft(3 m).
3. The cooling capacity may decline considerably when total operation capacity of cooling indoor units is less than 36 kBut/h.
4. Not suitable for applications, Which require room temperature control, due to increased risk of indoor ON/OFF control and potential low air temperatures.
5. For areas that do demand a precise room temperature control, we wolud recommend the installation of a secondary system, Which has been designed solely for the purpose of low ambient coolimg.
6. The lower limit outside temperarature for simultaneous heating and cooling operation is 23 °F(-5 °C). If simultaneous cooling and heating operation is commaned, heating operation takes priority.

Note2:

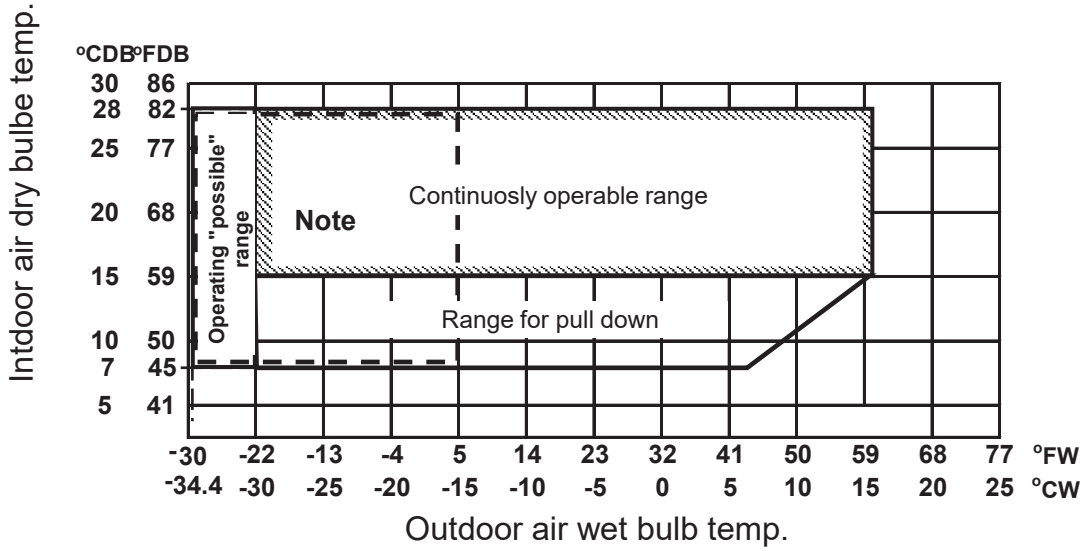
7. At an outside air temperature of 5 °F(-15 °C) or lower, the unit should be operated under constant heat load conditions. If the total capacity of the cooling operation indoor unit falls below 36 kBtu/h, the system may go into protective shutdown.

1.Heating range (Standard model)



Note
1.The unit will operate down to an outdoor temperature of -22 °F(-30 °C), howerer considerable performance decrease will be expected below 5 °F(-15 °C). Therefore please consider installation location/surroundings and system design when expected to operate between 5 oF(-15 °C) and -13 °F(-30 °C).
2.Be sure to turn on the main power at least 12 hours before the start of operation. Do not off the power during the period of use.
3.Install a snow-hood when using in cold regions, snowy regions, or in environments where the outside air temperature is -13 °F(-25 °C) or lower.
4.If operated for extended periods of time (Ex. 24 hr/7 days) below -13 °F(-25 °C) than significant capacity loss may occur.

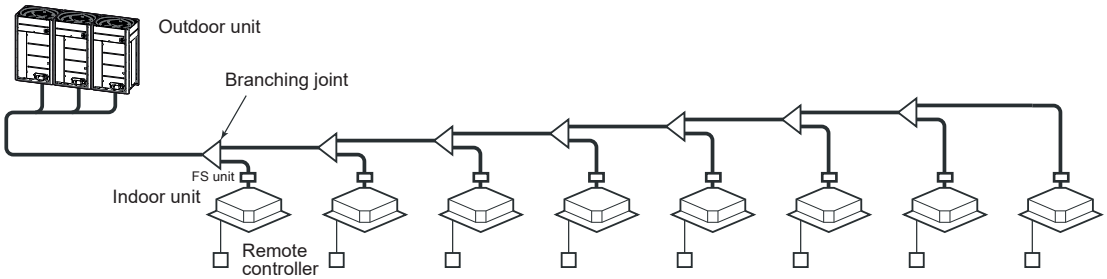
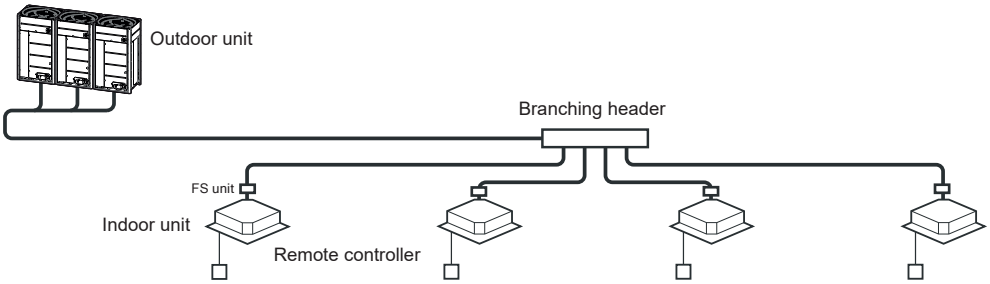
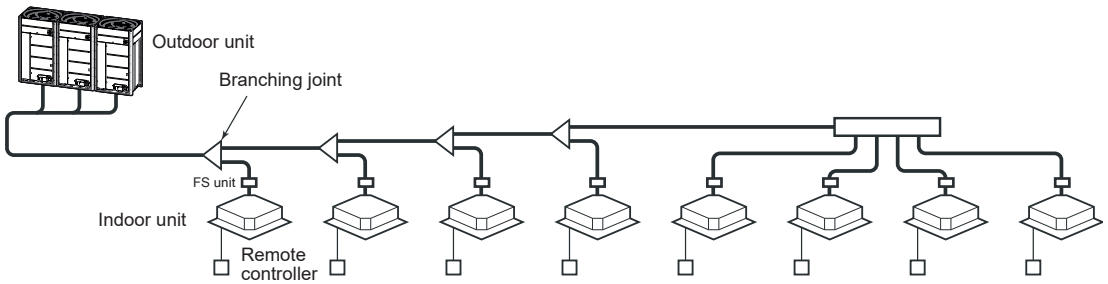
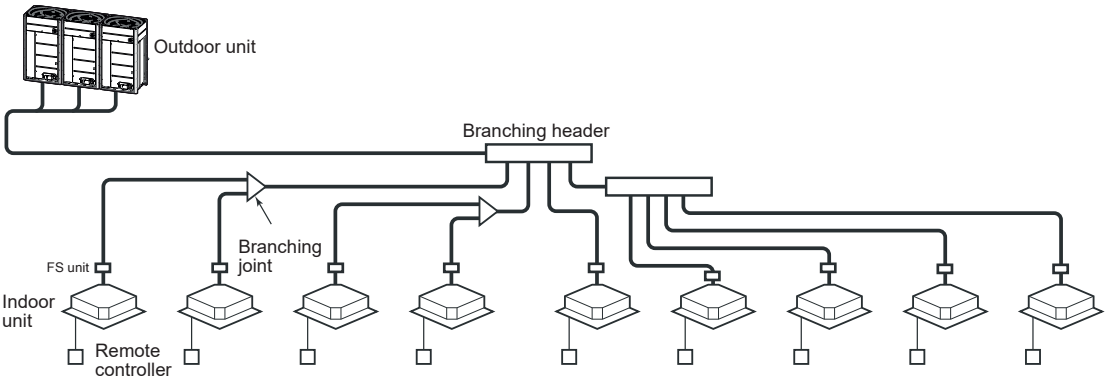
2.Heating range (High heat model)



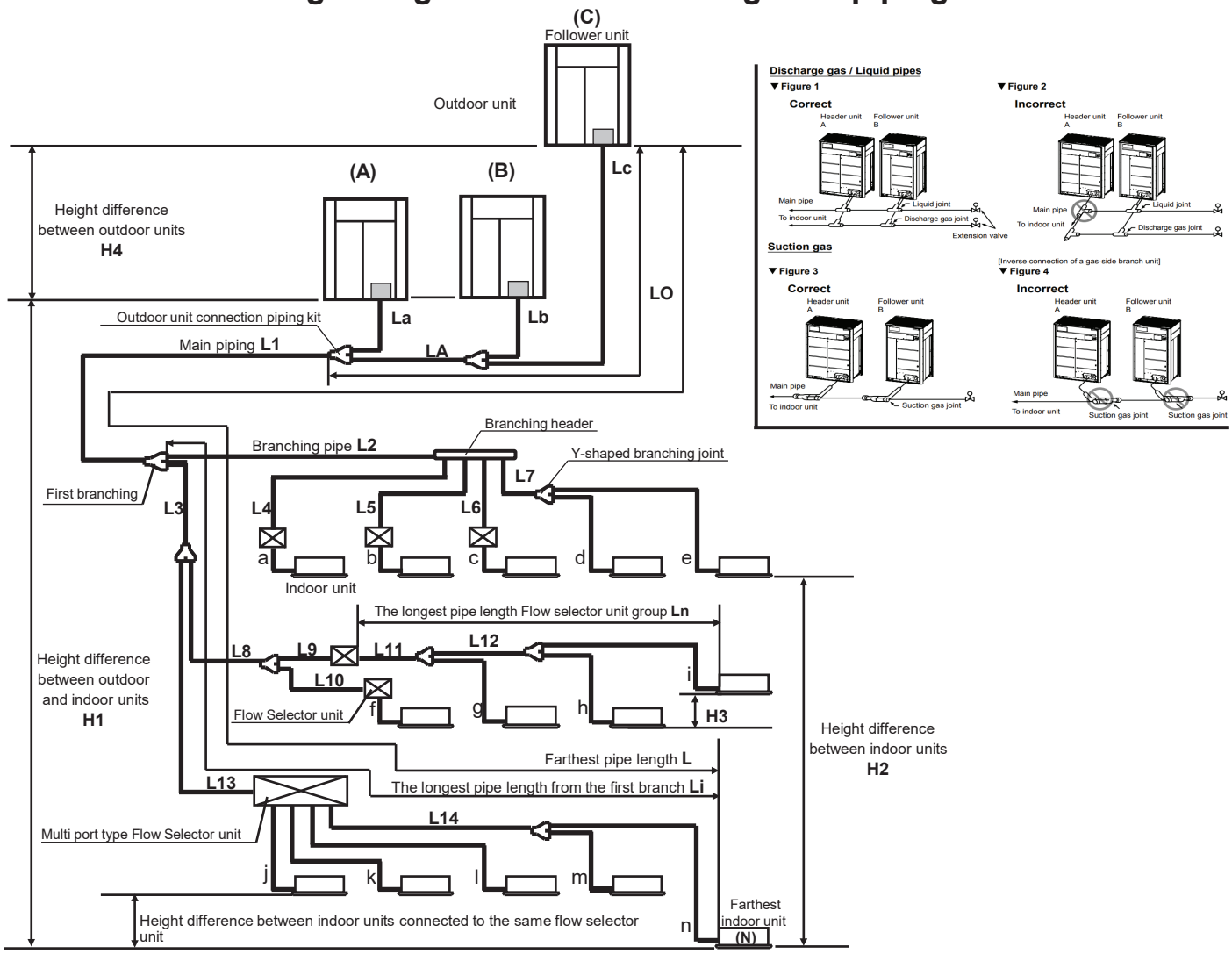
Note
1.The unit will operate down to an outdoor temperature of -30 °F(-34.4 °C), howerer considerable performance decrease will be expected below 5 °F(-15 °C). Therefore please consider installation location/surroundings and system design when expected to operate between 5 oF(-15 °C) and -30 °F(-34.4 °C).
2.Be sure to turn on the main power at least 12 hours before the start of operation. Do not off the power during the period of use.
3.Install a snow hood when using in cold regions, snowy regions, or in environments where the outside air temperature is -13 °F(-25 °C) or lower.
4.If operated for extended periods of time (Ex. 24 hr/7 days) below -22 °F(-30 °C) than significant capacity loss may occur.

3-1. Free branching system

[1] Line branching system
[2] Header branching system
[3] Header branching system after line branching
[4] Line branching system after header branching
[5] Header branching system after header branching
The above five branching systems enable to dramatically increase the flexibility of refrigerant piping design.

Line branching system	
Header branching system	
Header branching system after line branching	
Line branching system after header branching Header branching system after header branching	

3-2. Allowable length/height difference of refrigerant piping



◆System restriction

Outdoor unit combination	3 unit	
Max capacity of outdoor units	504 kBtu/h (42 ton)	
Indoor unit connection	75 units	
Total capacity of indoor units (Varies depending on the height difference between indoor units.)	H2 ≤ 49ft (15m)	Single outdoor unit system :200 % of outdoor units' capacity(*1)
		Multiple outdoor units system:135 % of outdoor units' capacity
	H2 > 49ft (15m)	105 % of outdoor units' capacity

(1*):If it exceeds 135%, there is a limit to the maximum number of indoor units that can be connected.

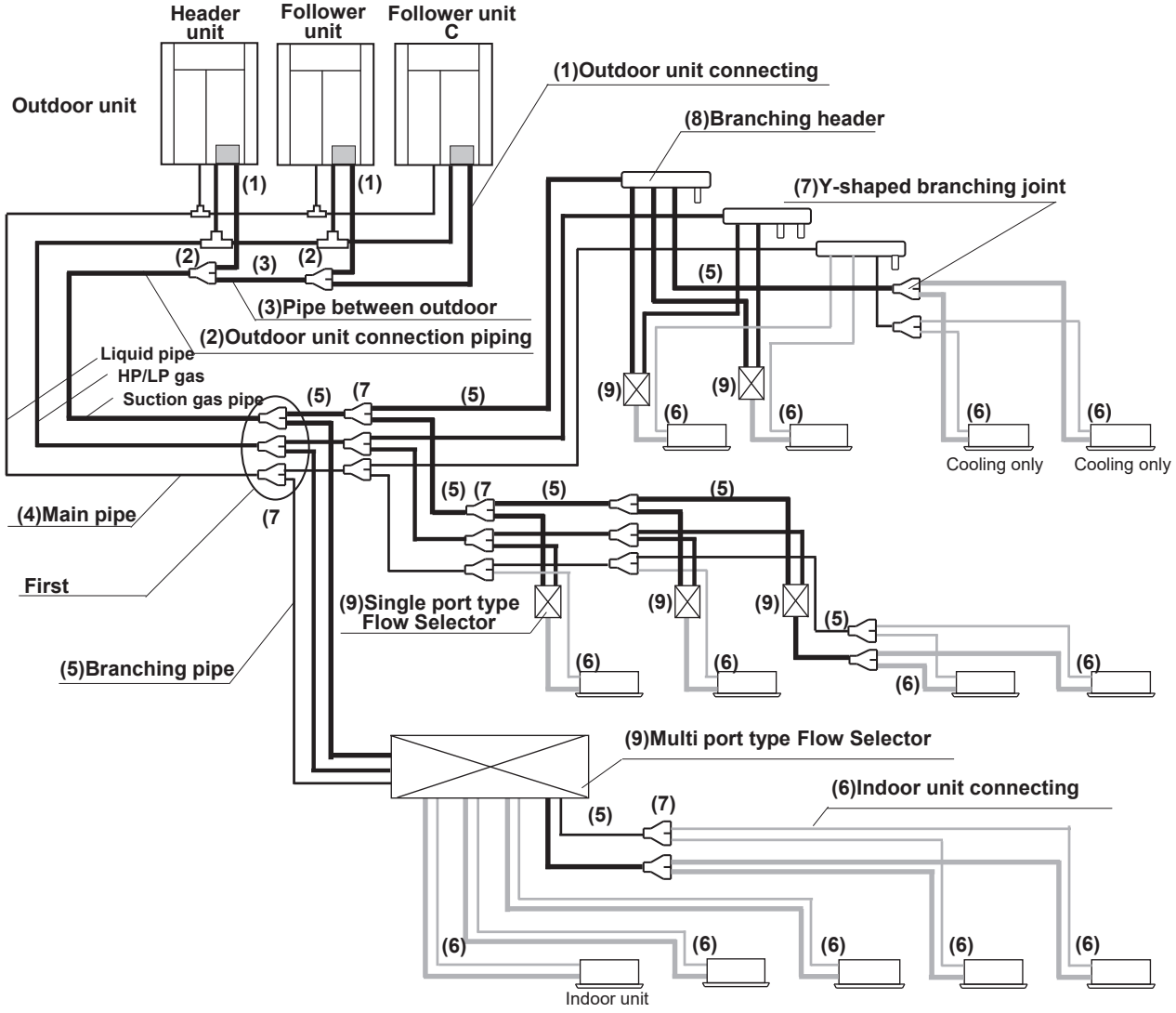
◆Allowable length and allowable height diffefence of refrigerant piping

Item				Allowable Length ft	Allowable Length m	Pipe section
Pipe length	Total extension of pipe (Real length of liquid pipe)	Single outdoor unit system		1640	500	LA + La + Lb + Lc + L1 + L2 + L3 + L4 + L5 + L6 + L7 + L8 + L9 + L10 + L11 + L12 + L13 + L14 + a + b + c + d + e + f + g + h + i + j + k + l + m + n
		Multiple outdoor unit system		3937 (*2)	1200 (*2)	
	Farthest pipe length **L** (*1)		Equivalent length	656	200	Lc + LA + L1 + L3 + L13 + L14 + n
			Real length	591	180	
	Max.length of main pipe **L1**	H2 ≤ 49ft (15m)	Equivalent length	394	120	L1
			Reallength	328	100	
		H2 > 49ft (15m)	Equivalent length	328	100	
			Reallength	279	85	
	Equivalent length of farthest pipe from 1 st branching **Li**		H1 > 9.8ft (3m)	164	50	L3 + L13 + L14 + n
			H1 ≤ 9.8ft (3m)	213	65	
	Equivalent length of farthest pipe between outdoor units **LO**			49	15	LA + Lb 、 LA + Lc
	Equivalent length of outdoor unit connecting pipe			33	10	La、Lb、Lc
	Max. real length of pipe from the end branch to the indoor unit			164	50	L4 + a、L5 + b、L6 + c、d、e、L10 + f
	Max. equivalent length of pipe between branches			164	50	L2、L3、L4、L5、L6、L7、L8、L9、L10
	Max. real length of pipe from flow selector unit to the indoor unit **Ln**			115	35	L11 + g、L11+ L12 + h、L11 + L12 + i、L14 + m、L14 + n、j 、 k 、 l 、 m 、 n
	The total pipe length in one Multi-port type flow selector unit (Real length of liquid pipe)		4 branches	394	120	L14 + j + k + l + m + n
			8 or 12 branches (*3)	591	180	
Difference in height	Height difference between outdoor and indoor unit **H1**	H2 ≤ 9.8ft (3m)	Upper outdiir unit	230 295 (*4)	70 90 (*4)	—
			Lower outdoor unit	131	40	
		H2 > 9.8ft (3m)	Upper outdiir unit	164	50	
			Lower outdoor unit	131	40	
	Height difference between indoor units **H2**	Diversity ≤ 105% (*5)	Upper outdoor unit	131	40	—
			Lower outdoor unit	98 9.8 (*6)	30 3 (*6)	
		Diversity> 105% (*5)	Upper outdoor unit	49	15	
			Lower outdoor unit	49 9.8 (*6)	15 3 (*6)	
	Height difference between indoor units connected to the same flow selector unit **H3**			49	15	—
	Height difference between outdoor units **H4**			16	5	—

(*1):(C) is outdoor unit furthest from the 1st branch and (N) is the indoor unit furthest from the 1st branch.
(*2):The total amount of refrigerant in the system should be 308 lbs (140 kg) or less.
(*3)When using a Multi-port type flow selector unit, be sure to set the piping length between the indoor and the flow selector unit at least 33 ft (10 m).
If a piping length of 33 ft (10 m) or longer is not secured, refrigerant noise generated from the Multi-port type flow selector unit may propagate to the indoor unit.
(*4):Extension up till 295 ft (90 m) is possible with conditions below :
- Single outdoor unit system.
- Diversity is below 105%.
- Liquid side has been increased 1 size from standard size.
- Change the connection method of the indoor unit from flare connection to welding connection.

(*5):Diversity is the ratio of the outdoor unit capacity code to the indoor unit capacity code .
(*6):This limitation is for systems with three outdoor units connected.

3-3. Selection of refrigerant piping



(1)Outdoor unit connecting pipe (*11)

Outdoor unit capacity type	Liquid side	HP/LP gas side	Suction gas side
072type	1/2 in. (12.7 mm)	3/4 in. (19.1 mm)	3/4 in. (19.1 mm)
096type			7/8 in. (22.2 mm)
120type			1-1/8 in. (28.6 mm)
144type	5/8 in. (15.9mm)	7/8 in. (22.2 mm)	
168type			
192type			

(2)Outdoor unit connection piping kit

Total capacity code of outdoor units at downstream side(*1)	Model name
Below 247	RBM-BT14FUL
247 or more	RBM-BT24FUL

(3)Pipe between outdoor units(*11)

Total capacity code of the outdoor units at downstream side(*1)	Liquid side	HP/LP gas side	Suction gas side
Below 216	5/8 in. (15.9 mm)	7/8 in. (22.2 mm)	1-1/8 in. (28.6 mm)
216 to below 336	3/4 in. (19.1 mm)	1-1/8 in. (28.6 mm)	1-3/8 in. (34.9 mm)
336 or more	7/8 in. (22.2 mm)		1-5/8 in. (41.3 mm)

(4)Main pipe(*2)(*11)

Outdoor unit capacity type	Liquid side			HP/LP gas side	Suction gas side
	Standard size	Refrigerant saving size(*3) and Farthest pipe length			
072type	1/2 in. (12.7 mm)	3/8 in (9.6 mm)	261 ft(90 m)	3/4 in. (19.1 mm)	3/4 in. (19.1 mm)
096type					7/8 in. (22.2 mm)
120type		—			1-1/8 in. (28.6 mm)
144, 168type	5/8 in. (15.9 mm)	1/2 in. (12.7 mm)	261 ft(90 m)	7/8 in. (22.2 mm)	
192type		—			
216, 240type	3/4 in. (19.1 mm)	5/8 in. (15.9 mm)	261 ft(90 m)	1-1/8 in. (28.6 mm)	1-3/8 in. (34.9 mm)
264 to 336type	7/8 in. (22.2 mm)	3/4 in. (19.1 mm)	261 ft(90 m)		
More than 336type				1-3/8 in. (34.9 mm)	1-5/8 in. (41.3 mm)

(5)Branching pipe(*8)(*9)(*11)

Total capacity code of indoor units at downstream side(*1)	Liquid side	HP/LP gas side	Suction gas side
Below 61	3/8 in. (9.5 mm)	1/2 in. (12.7mm)	5/8 in. (15.9 mm)
61 to below 116	1/2 in (12.7 mm)	3/4 in. (19.1 mm)	7/8 in. (22.2 mm)
116 to below 193	5/8 in. (15.9 mm)	7/8 in. (22.2 mm)	1-1/8 in. (28.6 mm)
193 to below 241	3/4 in. (19.1 mm)	1-1/8 in. (28.6 mm)	1-3/8 in. (34.9 mm)
241to below 337	7/8 in. (22.2 mm)		
337 or more		1-3/8 in. (34.9 mm)	1-5/8 in. (41.3 mm)

(6)Indoor unit connecting pipe(*9)

Indoor unit capacity type	Liquid side	Suction gas side	Real liquid side piping length
007 to 012type	1/4 in. (6.4 mm)	3/8 in. (9.6 mm)	49 ft(15 m) or less
	3/8 in. (9.6 mm)	1/2 in. (12.7 mm)	Exceeds 49 ft(15 m)
015, 018type	1/4 in. (6.4 mm)	1/2 in. (12.7 mm)	49 ft(15 m) or less
	3/8 in. (9.6 mm)	5/8 in. (15.9 mm)	Exceeds 49 ft(15 m)
021 to 054type	3/8 in. (9.6 mm)	5/8 in. (15.9 mm)	
072、096type	1/2 in. (12.7 mm)	7/8 in. (22.2 mm)	

(7)Y-shaped branching joint(*4)(*5)

Total capacity code of indoor units	Model name	
	For 3 piping	For 2 piping
Below 61	RBM-BY55FUL	RBM-BY55UL
61 to below 136	RBM-BY105FUL	RBM-BY105UL
136 to below 241	RBM-BY205FUL	RBM-BY205UL
241 or more	RBM-BY305FUL	RBM-BY305UL

(8)Branching header(*4)(*5)(*6)(*7)

Number of branches	Total capacity code of indoor units	Model name	
		For 3 piping	For 2 piping
For 4 branching	Below 136	RBM-HY1043FUL	RBM-HY1043UL
	136 to below 241	RBM-HY2043FUL	RBM-HY2043UL
For 8 branching	Below 136	RBM-HY1083FUL	RBM-HY1083UL
	136 to below 241	RBM-HY2083FUL	RBM-HY2083UL

(9)Flow selector unit(*12)

Port type	Total capacity code of indoor units	Model name	Number of branches
Single port	below 61	RBM-Y0611FUPUL	—
	61 to 96 or less	RBM-Y0961FUPUL	—
Multi port	Below 244 (1 branch: below 61)	RBM-Y0611FU4PUL	4
	Below 290 (1 branch: below 61)	RBM-Y0611FU8PUL	8
	Below 290 (1 branch: below 61)	RBM-Y0611FU12PUL	12

(*1):The downstream starting point is the main pipe.
(*2):Main pipe should be selected based on the capacity type of the outdoor unit.
(*3):When making the liquid pipe of the main pipe a refrigerant saving size, make height difference between indoor units smaller than 49 ft (15 m).
In addition, the farthest real length pipe is also limited.
(*4):The branch pipe of the first branch should be selected based on the capacity type of the outdoor unit.
(*5):Select according to the outdoor unit capacity code if the total of the indoor capacity codes exceeds the outdoor unit capacity code.
(*6):When a branch header is used for the first branching of an outdoor unit with a capacity type of 120 (kBtu/h) or more and 241 (kBtu/h) or less,
use RBM-HY2043FUL(4 branches) and RBM-HY2083FUL(8 branches) regardless of the total capacity code of the downstream indoor units.
In addition,for outdoor units of 264 type or larger, the branching header cannot be used as the first branch.
(*7):It is possible to select up to a maximum capacity code total 58 for each one branch of the branching header.
(*8):Use the same size as the main pipe if it is larger than the main pipe.
(*9):Since the liquid side pipe is not connected to the single port type flow selector unit, the pipe length is longer than the suction side gas pipe.
(*10):Use a suction gas pipe and a liquid pipe for the two pipes branching downstream from the flow selector unit and the dedicated cooling circuit.
(*11):If the pipe size is 3/4 in. or more, use a suitable material as detailed in the installation manual.
(*12):Please contact our sales representative when merging downstream piping of multi-port type.

3-4. Charging requirement with additional refrigerant

1.Refrigerant in the outdoor unit when shipped from factory

Standard model

MMY-	MUP***1FT6P-UL MUP***1FT9P-UL		072type	096type	120type	144type	168type	192type
Amount of refrigerant charged in factory		lbs	13.2		19.8			
		kg	6.0		9.0			

High heat model

MMY-	MUP***H1FT6PUL MUP***H1FT9PUL		072type	096type	120type
Amount of refrigerant charged in factory		lbs	13.2	19.8	
		kg	6.0	9.0	

When the outdoor unit is charged with refrigerant from the factory, the amount of refrigerant needed for the piping at the sites is not included. Therefore, calculate the additional amount of refrigerant and add the required amount of refrigerant to the system in field.

2.Calculation of additional amount of refrigerant charge

Additional amount of refrigerant charge at site = [1] + [2] × [A] + [3] + [4]

[1] Additional amount of refrigerant based on the outdoor unit capacity type. (Table 1-1,1-2)

[2] Additional amount of refrigerant based on the liquid pipe diameter and length.

Real length of liquid pipe × Additional amount of refrigerant charge per liquid pip length 1 ft and 1m. (Table 2)

[A] Correction factor based on the indoor unit connection capacity. (Table A)

[3] Additional amount of refrigerant based on the indoor unit capacity type and number. (Table 3-1, 3-2, 3-3, 3-4)

[4] Refrigerant amount adjustment based on the diversity. (Table 4)

Table 1 Compensation amount of refrigerant based on outdoor unit capacity type

Table 1-1 Standard model

	Outdoor unit capacity type	Combination outdoor units			Amount of additional refrigerant(lbs)	Amount of additional refrigerant(kg)
		Unit1	Unit2	Unit3		
6ton	072	072	—	—	2.2	1.0
8ton	096	096	—	—	2.2	1.0
10ton	120	120	—	—	0.0	0.0
12ton	144	144	—	—	2.2	1.0
14ton	168	168	—	—	4.4	2.0
16ton	192	192	—	—	5.5	2.5
16ton	192	096	096	—	4.4	2.0
18ton	216	144	072	—	4.4	2.0
20ton	240	144	096	—	4.4	2.0
22ton	264	168	096	—	6.6	3.0
24ton	288	144	144	—	4.4	2.0
26ton	312	168	144	—	6.6	3.0
28ton	336	168	168	—	8.8	4.0
30tton	360	168	096	096	8.8	4.0
32ton	384	144	144	096	6.6	3.0
34ton	408	168	144	096	8.8	4.0
36ton	432	168	168	096	11.0	5.0
38ton	456	168	144	144	8.8	4.0
40ton	480	168	168	144	11.0	5.0
42ton	504	168	168	168	13.2	6.0

Table 1-2 High heat model

	Outdoor unit capacity type	Combination outdoor units			Amount of additional refrigerant(lbs)	Amount of additional refrigerant(kg)
		Unit1	Unit2	Unit3		
6ton	072	072	—	—	2.2	1.0
8ton	096	096	—	—	2.2	1.0
10ton	120	120	—	—	6.6	3.0
12ton	144	072	072	—	4.4	2.0
16ton	192	096	096	—	4.4	2.0
20ton	240	120	120	—	13.2	6.0
24ton	288	096	096	096	6.6	3.0
30ton	360	120	120	120	19.8	9.0

Table 2.Compensation amount of refrigerant based on liquid pipe diameter and length

Liquid pipe diameter		1/4 in.	3/8 in.	1/2 in.	5/8 in.	3/4 in.	7/8 in.
		6.4 mm	9.6 mm	12.7 mm	15.9 mm	19.1 mm	22.2 mm
Additional amount of refrigerant	lbs / ft	0.017	0.037	0.071	0.108	0.168	0.235
	kg / m	0.025	0.055	0.105	0.160	0.250	0.350

Table A. Factor base on indoor unit connection rate

Diversity	Factor
Less than 135 %	1.3
135 % or more	1.2

Table 3-1. Additional amount of refrigerant based on standard indoor unit capacity type

Indoor unit capacity type		007	009	012	015	018	021	024	027	030	036	042	048	054	072	096
Additional amount of refrigerant	lbs /unit	0.44			0.88						1.32				2.20	
	kg / unit	0.2			0.4						0.6				1.0	

Table 3-2. Additional amount of refrigerant for 4-way Cassette type (MMU-UP*1HP-UL)**

Indoor unit capacity type		007	009	012	015	018	024	027	030	036	042	048	054
Additional amount of refrigerant	lbs /unit	0.44		0.88						1.32			
	kg / unit	0.2		0.4						0.6			

Table 3-3. Additional amount of refrigerant for Concealed Duct Standard Type (MMD-UP*1BHP-UL)**

Indoor unit capacity type		007	009	012	015	018	021	024	030	036	042	048	054
Additional amount of refrigerant	lbs /unit	0.88					1.32						
	kg / unit	0.4					0.6						

Table3-4 DX Coil inter face (Model name: TCB-IFDMR01UP-UL / RBM-A*1UPVR-UL)**

Indoor unit capacity type		007	009	012	015	018	024	027	030	036	048	054	060	072	096	120
	ton	0.6	0.8	1	1.25	1.5	2	2.25	2.5	3	4	4.5	5	6	8	10
Additional amount of refrigerant	lbs /unit	0.24	0.32	0.42	0.60	0.72	0.92	1.12	1.20	1.51	1.91	2.11	2.50	3.09	3.97	4.68
	kg / unit	0.11	0.15	0.19	0.27	0.33	0.42	0.51	0.54	0.69	0.87	0.96	1.13	1.40	1.80	2.12

• If the Outside Air Unit(MMD-UP****HFP-UL) is connected, the correction amount refrigerant for Outside Air Unit is 0kg.

Table 4. Compensation amount of refrigerant based on the diversity

Diversity D	Compensation amount of refrigerant	
	lbs	kg
50 % ≤ D < 60 %	-9.92	-4.5
60 % ≤ D < 70 %	-7.72	-3.5
70 % ≤ D < 80 %	-5.51	-2.5
80 % ≤ D < 90 %	-3.31	-1.5
90 % ≤ D < 95 %	-1.10	-0.5
95 % ≤ D	0.00	0.0

4-1.General

- Perform wiring of the power supply in conformance with the regulations of the local electric company.
- For cabling of the power supply of the indoor unit and the inter-unit cabling between indoor and outdoor units, refer to the Installation Manual of indoor unit.
- Never connect power supply to the terminal block (Uv, Uh, Uc) for control wiring. (The equipment breaks down.)
- Arrange the cables so that the electric wires do not come to contact with high-temperature part of the pipe; otherwise coating melts and an accident may be caused.
- After connecting cable to the terminal block, take off the trap and then fix the cable with cable clamp.
- Do not turn on power of the indoor unit until vacuuming of the refrigerant pipe will finish.

4-2.Summary of wiring design

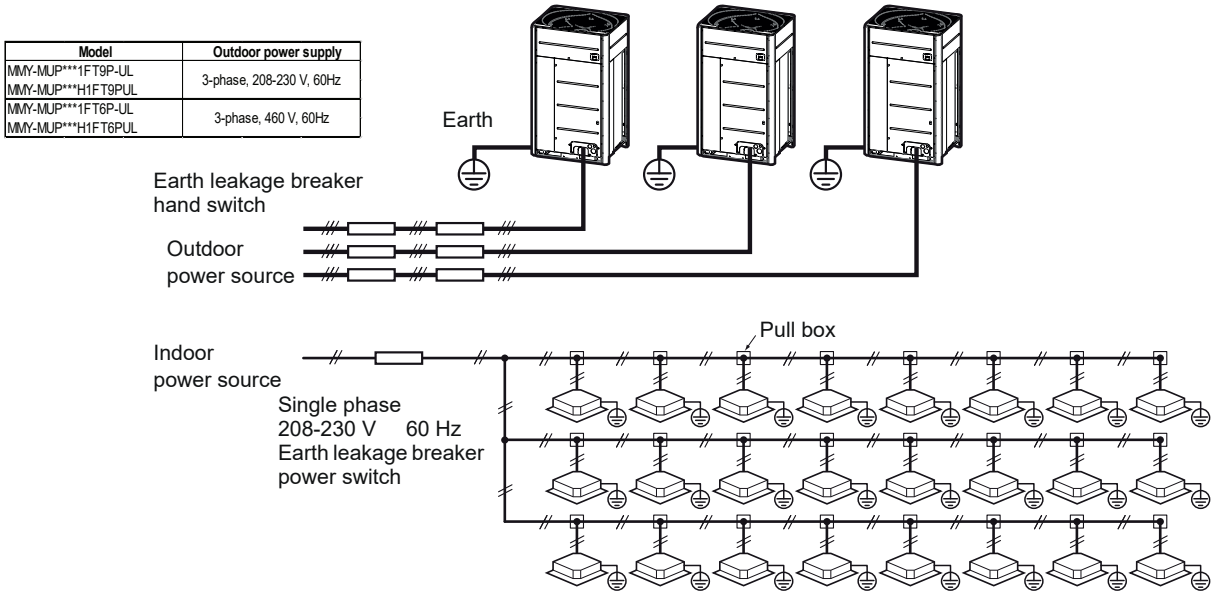
Design of outdoor unit power supply
- Select the wiring depending on MCA.
- Be sure to set the earth leakage breaker from the viewpoint of safety.

Design of indoor unit power supply
- Select the wiring depending on total current of indoor units.
- Determine the wire size for the length rules.
- Be sure to set the earth leakage breaker from the viewpoint of safety.

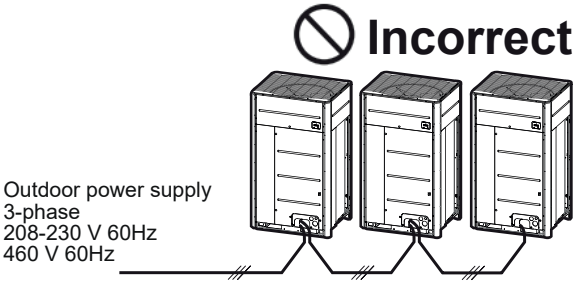
Design of control wiring
- Design each control wiring.
  Between outdoor and indoor units,
  Between indoor units/outdoor units
  Between indoor unit and remote controller, central control, BMS
- Select the wire size and type depending on the length rules.

4-3.Electrical wiring design

Model	Outdoor power supply
MMY-MUP***1FT9P-UL MMY-MUP***H1FT9PUL	3-phase, 208-230 V, 60Hz
MMY-MUP***1FT6P-UL MMY-MUP***H1FT6PUL	3-phase, 460 V, 60Hz



- Wiring size must comply with the applicable local and national code.
- Determine the wire size for the indoor unit according to the number of connected indoor units downstream.



4-4.Outdoor unit power supply

- Select the power supply cabling and fuse of each outdoor unit from the following specifications:
  cable 4-core, in conformance with Design 60245 IEC 66
- Do not connect the outdoor units by crossing outside of them, but connect them via the terminal block (L1, L2, L3).

460V Satandard model

ton	Model MMY-	Power Supply		Voltage Range		Output						MCA	MOCP
						Compressor			Fan motor				
		Phase and frequency	Nominal Voltage	Min (V)	Max (V)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	(A)	(A)
6	MUP0721FT6P-UL	3 - 60Hz	460 V	414	506	4.54	—	—	0.43	—	—	17.4	20
8	MUP0961FT6P-UL	3 - 60Hz	460 V	414	506	6.75	—	—	0.66	—	—	17.5	20
10	MUP1201FT6P-UL	3 - 60Hz	460 V	414	506	8.60	—	—	0.33x2	—	—	21.3	25
12	MUP1441FT6P-UL	3 - 60Hz	460 V	414	506	10.4	—	—	0.48x2	—	—	24.6	30
14	MUP1681FT6P-UL	3 - 60Hz	460 V	414	506	13.0	—	—	0.48x2	—	—	27.4	40
16	MUP1921FT6P-UL	3 - 60Hz	460 V	414	506	7.74x2	—	—	0.73x2	—	—	31.8	45
16	UP1921FT6P-UL	3 - 60Hz	460 V	414	506	6.75	6.75	—	0.66	0.66	—	17.5+17.5	20+20
18	UP2161FT6P-UL	3 - 60Hz	460 V	414	506	10.4	4.54	—	0.48x2	0.43	—	24.6+17.4	30+20
20	UP2401FT6P-UL	3 - 60Hz	460 V	414	506	10.4	6.75	—	0.48x2	0.66	—	24.6+17.5	30+20
22	UP2641FT6P-UL	3 - 60Hz	460 V	414	506	13.0	6.75	—	0.73x2	0.66	—	27.4+17.5	40+20
24	UP2881FT6P-UL	3 - 60Hz	460 V	414	506	10.4	10.4	—	0.48x2	0.48x2	—	24.6+24.6	30+30
26	UP3121FT6P-UL	3 - 60Hz	460 V	414	506	13.0	10.4	—	0.48x2	0.48x2	—	27.4+24.6	40+30
28	UP3361FT6P-UL	3 - 60Hz	460 V	414	506	13.0	13.0	—	0.48x2	0.48x2	—	27.4+27.4	40+40
30	UP3601FT6P-UL	3 - 60Hz	460 V	414	506	13.0	6.75	6.75	0.48x2	0.66	0.66	27.4+17.5+17.5	40+20+20
32	UP3841FT6P-UL	3 - 60Hz	460 V	414	506	10.4	10.4	6.75	0.48x2	0.48x2	0.66	24.6+24.6+17.5	30+30+20
34	UP4081FT6P-UL	3 - 60Hz	460 V	414	506	13.0	10.4	6.75	0.48x2	0.48x2	0.66	27.4+24.6+17.5	40+30+20
36	UP4321FT6P-UL	3 - 60Hz	460 V	414	506	13.0	13.0	6.75	0.48x2	0.48x2	0.66	27.4+27.4+17.5	40+40+20
38	UP4561FT6P-UL	3 - 60Hz	460 V	414	506	13.0	10.4	10.4	0.48x2	0.48x2	0.48x2	27.4+24.6+24.6	40+30+30
40	UP4801FT6P-UL	3 - 60Hz	460 V	414	506	13.0	13.0	10.4	0.48x2	0.48x2	0.48x2	27.4+27.4+24.6	40+40+30
42	UP5041FT6P-UL	3 - 60Hz	460 V	414	506	13.0	13.0	13.0	0.48x2	0.48x2	0.48x2	27.4+27.4+27.4	40+40+40

460V High heat model

ton	Model MMY-	Power Supply		Voltage Range		Output						MCA	MOCP
						Compressor			Fan motor				
		Phase and frequency	Nominal Voltage	Min (V)	Max (V)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	(A)	(A)
6	MUP072H1FT6PUL	3 - 60Hz	460 V	414	506	4.54	—	—	0.43	—	—	18.5	25
8	MUP096H1FT6PUL	3 - 60Hz	460 V	414	506	6.75	—	—	0.38x2	—	—	25.0	30
10	MUP120H1FT6PUL	3 - 60Hz	460 V	414	506	8.60	—	—	0.38x2	—	—	25.4	30
12	UP144H1FT6PUL	3 - 60Hz	460 V	414	506	4.54	4.54	—	0.43	0.43	—	18.5+18.5	25+25
16	UP192H1FT6PUL	3 - 60Hz	460 V	414	506	6.75	6.75	—	0.38x2	0.38x2	—	25.0+25.0	30+30
20	UP240H1FT6PUL	3 - 60Hz	460 V	414	506	8.60	8.60	—	0.38x2	0.38x2	—	25.4+25.4	30+30
24	UP288H1FT6PUL	3 - 60Hz	460 V	414	506	6.75	6.75	6.75	0.38x2	0.38x2	0.38x2	25.0+25.0+25.0	30+30+30
30	UP360H1FT6PUL	3 - 60Hz	460 V	414	506	8.60	8.60	8.60	0.38x2	0.38x2	0.38x2	25.4+25.4+25.4	30+30+30

208-230V Satandard model

ton	Model MMY-	Power Supply		Voltage Range		Output						MCA	MOCP
						Compressor			Fan motor				
		Phase and frequency	Nominal Voltage	Min (V)	Max (V)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	(A)	(A)
6	MUP0721FT9P-UL	3 - 60Hz	208-230 V	187	253	4.54	—	—	0.43	—	—	36.4	45
8	MUP0961FT9P-UL	3 - 60Hz	208-230 V	187	253	6.75	—	—	0.66	—	—	36.6	45
10	MUP1201FT9P-UL	3 - 60Hz	208-230 V	187	253	8.60	—	—	0.33x2	—	—	36.8	45
12	MUP1441FT9P-UL	3 - 60Hz	208-230 V	187	253	10.4	—	—	0.48x2	—	—	51.5	60
14	MUP1681FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	—	—	0.48x2	—	—	57.4	80
16	UP1921FT9P-UL	3 - 60Hz	208-230 V	187	253	6.75	6.75	—	0.66	0.66	—	36.6+36.6	45+45
18	UP2161FT9P-UL	3 - 60Hz	208-230 V	187	253	10.4	4.54	—	0.48x2	0.43	—	51.5+36.4	60+45
20	UP2401FT9P-UL	3 - 60Hz	208-230 V	187	253	10.4	6.75	—	0.48x2	0.66	—	51.5+36.6	60+45
22	UP2641FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	6.75	—	0.73x2	0.66	—	57.4+36.6	80+45
24	UP2881FT9P-UL	3 - 60Hz	208-230 V	187	253	10.4	10.4	—	0.48x2	0.48x2	—	51.5+51.5	60+60
26	UP3121FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	10.4	—	0.48x2	0.48x2	—	57.4+51.5	80+60
28	UP3361FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	13.0	—	0.48x2	0.48x2	—	57.4+57.4	80+80
30	UP3601FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	6.75	6.75	0.48x2	0.66	0.66	57.4+36.6+36.6	80+45+45
32	UP3841FT9P-UL	3 - 60Hz	208-230 V	187	253	10.4	10.4	6.75	0.48x2	0.48x2	0.66	51.5+51.5+36.6	60+60+45
34	UP4081FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	10.4	6.75	0.48x2	0.48x2	0.66	57.4+51.5+36.6	80+60+45
36	UP4321FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	13.0	6.75	0.48x2	0.48x2	0.66	57.4+57.4+36.6	80+80+45
38	UP4561FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	10.4	10.4	0.48x2	0.48x2	0.48x2	57.4+51.5+51.5	80+60+60
40	UP4801FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	13.0	10.4	0.48x2	0.48x2	0.48x2	57.4+57.4+51.5	80+80+60
42	UP5041FT9P-UL	3 - 60Hz	208-230 V	187	253	13.0	13.0	13.0	0.48x2	0.48x2	0.48x2	57.4+57.4+57.4	80+80+80

208-230V High heat model

ton	Model MMY-	Power Supply		Voltage Range		Output						MCA	MOCP
						Compressor			Fan motor				
		Phase and frequency	Nominal Voltage	Min (V)	Max (V)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	Unit1 (kW)	Unit2 (kW)	Unit3 (kW)	(A)	(A)
6	MUP072H1FT9PUL	3 - 60Hz	208-230 V	187	253	4.54	—	—	0.43	—	—	36.6	45
8	MUP096H1FT9PUL	3 - 60Hz	208-230 V	187	253	6.75	—	—	0.38x2	—	—	52.3	60
10	MUP120H1FT9PUL	3 - 60Hz	208-230 V	187	253	8.60	—	—	0.38x2	—	—	53.1	70
12	UP144H1FT9PUL	3 - 60Hz	208-230 V	187	253	4.54	4.54	—	0.43	0.43	—	36.6+36.6	45+45
16	UP192H1FT9PUL	3 - 60Hz	208-230 V	187	253	6.75	6.75	—	0.38x2	0.38x2	—	52.3+52.3	60+60
20	UP240H1FT9PUL	3 - 60Hz	208-230 V	187	253	8.60	8.60	—	0.38x2	0.38x2	—	53.1+53.1	70+70
24	UP288H1FT9PUL	3 - 60Hz	208-230 V	187	253	6.75	6.75	6.75	0.38x2	0.38x2	0.38x2	52.3+52.3+52.3	60+60+60
30	UP360H1FT9PUL	3 - 60Hz	208-230 V	187	253	8.60	8.60	8.60	0.38x2	0.38x2	0.38x2	53.1+53.1+53.1	70+70+70

4-5.Indoor unit power supply

• Electrical characteristics

Type	Model name	Normal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor	Power Supply	
			Min.	Max.	FLA	MCA	MOCP
4-Way Air Discharge Cassette Type	MMU-UP0071HP-UL	208 to 230V - 1 - 60	187	253	0.63	0.79	15
	MMU-UP0091HP-UL	208 to 230V - 1 - 60	187	253	0.63	0.79	15
	MMU-UP0121HP-UL	208 to 230V - 1 - 60	187	253	0.63	0.79	15
	MMU-UP0151HP-UL	208 to 230V - 1 - 60	187	253	0.80	1.00	15
	MMU-UP0181HP-UL	208 to 230V - 1 - 60	187	253	0.80	1.00	15
	MMU-UP0241HP-UL	208 to 230V - 1 - 60	187	253	0.87	1.09	15
	MMU-UP0301HP-UL	208 to 230V - 1 - 60	187	253	0.87	1.09	15
	MMU-UP0361HP-UL	208 to 230V - 1 - 60	187	253	1.15	1.44	15
	MMU-UP0421HP-UL	208 to 230V - 1 - 60	187	253	1.15	1.44	15
	MMU-UP0481HP-UL	208 to 230V - 1 - 60	187	253	1.15	1.44	15
	MMU-UP0541HP-UL	208 to 230V - 1 - 60	187	253	1.15	1.44	15
Compact 4-way Cassette Type	MMU-UP0071MH-UL	208 to 230V - 1 - 60	187	253	0.40	0.50	15
	MMU-UP0091MH-UL	208 to 230V - 1 - 60	187	253	0.40	0.50	15
	MMU-UP0121MH-UL	208 to 230V - 1 - 60	187	253	0.40	0.50	15
	MMU-UP0151MH-UL	208 to 230V - 1 - 60	187	253	0.50	0.70	15
	MMU-UP0181MH-UL	208 to 230V - 1 - 60	187	253	0.50	0.70	15
1-Way Air Discharge Cassette Type	MMU-UP0071YHP-UL	208 to 230V - 1 - 60	187	253	0.32	0.40	15
	MMU-UP0091YHP-UL	208 to 230V - 1 - 60	187	253	0.32	0.40	15
	MMU-UP0121YHP-UL	208 to 230V - 1 - 60	187	253	0.32	0.40	15
	MMU-UP0151YHP-UL	208 to 230V - 1 - 60	187	253	0.58	0.73	15
	MMU-UP0181YHP-UL	208 to 230V - 1 - 60	187	253	0.58	0.73	15
	MMU-UP0241YHP-UL	208 to 230V - 1 - 60	187	253	0.80	1.00	15
Slim Duct Type	MMD-UP0071SPH-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MMD-UP0091SPH-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MMD-UP0121SPH-UL	208 to 230V - 1 - 60	187	253	0.60	0.80	15
	MMD-UP0151SPH-UL	208 to 230V - 1 - 60	187	253	0.70	0.90	15
	MMD-UP0181SPH-UL	208 to 230V - 1 - 60	187	253	0.80	1.00	15
Medium static Concealed Duct Type	MMD-UP0071BHP-UL	208 to 230V - 1 - 60	187	253	0.73	0.91	15
	MMD-UP0091BHP-UL	208 to 230V - 1 - 60	187	253	0.88	1.10	15
	MMD-UP0121BHP-UL	208 to 230V - 1 - 60	187	253	0.88	1.10	15
	MMD-UP0151BHP-UL	208 to 230V - 1 - 60	187	253	1.53	1.91	15
	MMD-UP0181BHP-UL	208 to 230V - 1 - 60	187	253	1.53	1.91	15
	MMD-UP0211BHP-UL	208 to 230V - 1 - 60	187	253	1.78	2.23	15
	MMD-UP0241BHP-UL	208 to 230V - 1 - 60	187	253	1.78	2.23	15
	MMD-UP0301BHP-UL	208 to 230V - 1 - 60	187	253	1.85	2.31	15
	MMD-UP0361BHP-UL	208 to 230V - 1 - 60	187	253	2.71	3.39	15
	MMD-UP0421BHP-UL	208 to 230V - 1 - 60	187	253	2.71	3.39	15
	MMD-UP0481BHP-UL	208 to 230V - 1 - 60	187	253	2.85	3.56	15
	MMD-UP0541BHP-UL	208 to 230V - 1 - 60	187	253	2.85	3.56	15
Concealed Duct High Static Pressure Type	MMD-UP0241HP-UL	208 to 230V - 1 - 60	187	253	2.07	2.59	15
	MMD-UP0301HP-UL	208 to 230V - 1 - 60	187	253	2.39	2.99	15
	MMD-UP0361HP-UL	208 to 230V - 1 - 60	187	253	2.75	3.44	15
	MMD-UP0481HP-UL	208 to 230V - 1 - 60	187	253	3.10	3.88	15
	MMD-UP0541HP-UL	208 to 230V - 1 - 60	187	253	3.46	4.33	15
	MMD-UP0721HP-UL	208 to 230V - 1 - 60	187	253	4.60	5.70	15
	MMD-UP0961HP-UL	208 to 230V - 1 - 60	187	253	5.90	7.40	15
Ceiling Type	MMC-UP0181HP-UL	208 to 230V - 1 - 60	187	253	0.42	0.53	15
	MMC-UP0241HP-UL	208 to 230V - 1 - 60	187	253	0.75	0.93	15
	MMC-UP0301HP-UL	208 to 230V - 1 - 60	187	253	0.75	0.93	15
	MMC-UP0361HP-UL	208 to 230V - 1 - 60	187	253	0.89	1.11	15
	MMC-UP0481HP-UL	208 to 230V - 1 - 60	187	253	0.89	1.11	15
High Wall Type	MMK-UP0071HP-UL	208 to 230V - 1 - 60	187	253	0.17	0.21	15
	MMK-UP0091HP-UL	208 to 230V - 1 - 60	187	253	0.18	0.23	15
	MMK-UP0121HP-UL	208 to 230V - 1 - 60	187	253	0.20	0.25	15
	MMK-UP0151HP-UL	208 to 230V - 1 - 60	187	253	0.30	0.37	15
	MMK-UP0181HP-UL	208 to 230V - 1 - 60	187	253	0.33	0.42	15
	MMK-UP0241HP-UL	208 to 230V - 1 - 60	187	253	0.48	0.60	15
	MMK-UP0301HP-UL	208 to 230V - 1 - 60	187	253	0.66	0.83	15
	MMK-UP0361HP-UL	208 to 230V - 1 - 60	187	253	0.66	0.83	15

Type	Model name	Normal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor	Power Supply	
			Min.	Max.	FLA	MCA	MOCP
Floor standing recessed Type	MML-UP0071BH-UL	208 to 230V - 1 - 60	187	253	0.30	0.40	15
	MML-UP0091BH-UL	208 to 230V - 1 - 60	187	253	0.30	0.40	15
	MML-UP0121BH-UL	208 to 230V - 1 - 60	187	253	0.30	0.40	15
	MML-UP0151BH-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MML-UP0181BH-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MML-UP0241BH-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
Floor standing exposed Type	MML-UP0071H-UL	208 to 230V - 1 - 60	187	253	0.30	0.40	15
	MML-UP0091H-UL	208 to 230V - 1 - 60	187	253	0.30	0.40	15
	MML-UP0121H-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MML-UP0151H-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MML-UP0181H-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
	MML-UP0241H-UL	208 to 230V - 1 - 60	187	253	0.60	0.70	15
Outside Air unit	MMD-AP0481HF2UL	208 to 230V - 1 - 60	187	253	1.42	1.77	15
	MMD-AP0721HF2UL	208 to 230V - 1 - 60	187	253	1.83	2.29	15
	MMD-AP0961HF2UL	208 to 230V - 1 - 60	187	253	2.26	2.82	15
	MMD-AP1201HF2UL	208 to 230V - 1 - 60	187	253	2.89	3.62	15

• Wiring size

Must be independent from the outdoor unit power supply

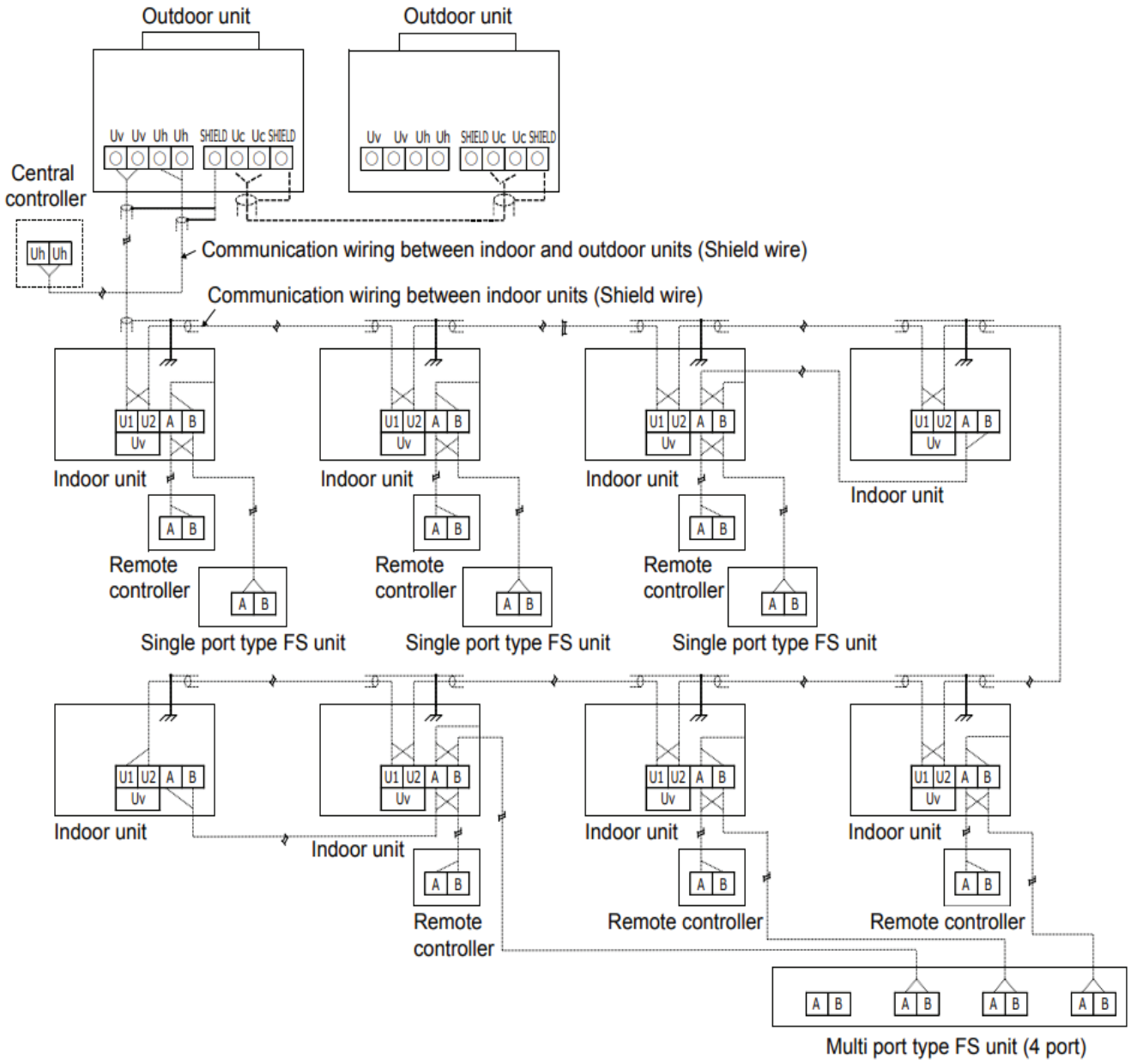
Item / Model	Power supply wiring	
	Wire size	
All models of indoor units	AWG#14 Max. 65.6ft(20m)	AWG#12 Max. 164ft(50m)

NOTE:

The above connecting lengths stated in the table, indicate the length from the isolator to the outdoor unit. When the power supply of the indoor units are connected in parallel, it is assumed that no more than a 2 % voltage drop will occur. If the connecting length is to exceed the stated lengths, select a suitable wire in accordance with the local wiring standards.

4-6.Design of control wiring

• Summary of control wiring



・Communication wiring and central control wiring use 2-core non-polarity wires
Use 2-core shield wires to prevent noise trouble.
・Connecting the closed end terminal of shield wire. (Connected to all connecting sections in each unit)
・Use 2-core non-polarity wire for remote controller. (A, B terminals)
Use 2-core non-polarity wire for Multi port type FS unit and Single port type FS unit. (A, B terminals)
Use 2-core non-polarity wire for wiring of group control. (A, B terminals)

Table-1 Uv line

Wiring	2-core, non-polarity
Type	Shield wire
Size/Length	AWG18 to AWG16 : Up to 3280ft (1000m)

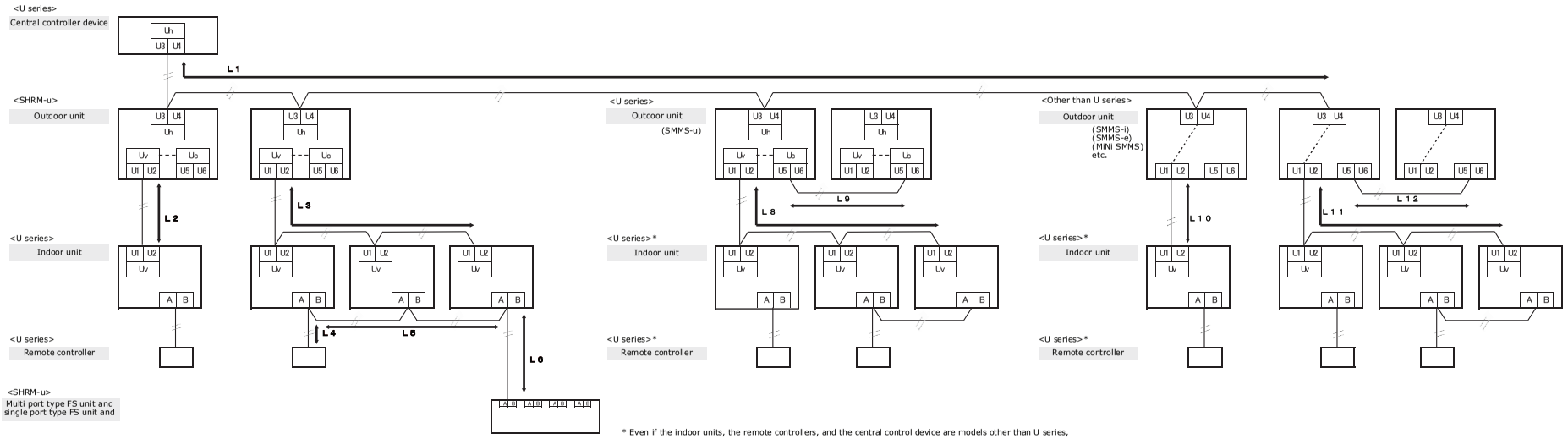
Table-2 Uh line

Wiring	2-core, non-polarity
Type	Shield wire
Size/Length	AWG18 to AWG16 : Up to 3280ft (1000m) AEG14 : Up to 6561ft (2000m)

Table-3 Remote controller wiring, Flow Selector unit Multi-port type and Single - port type wiring

Wiring	2-core, non-polarity
Type	AWG20 to AWG14
Size/Length	Up to 984ft(300m) (L4+L5+L6) Up 1312ft (400 m) in case of wireless remote controller in group control. Up to 656ft (200 m) total length of communication wiring between indoor units and FS unit (Multi-port type and Single-port type) (L5+L6) Up to 984ft(300m)(L4)

U (v, h) line means of control wiring
Uv line : Between indoor and outdoor units
Uh line : Central control line.



* Even if the indoor units, the remote controllers, and the central control device are models other than U series, their system diagrams for the wiring specifications are the same as the system diagram above.

REQUIREMENT

- For the central control line (L1) when SHRM Advance outdoor units and outdoor units other than SHRM Advance and U-series are connected to the central control device,follow the communication wiring specifications for outdoor unit other than SHRM Advance and U -series.
- Using the same wire type and size, wire each line below.
  If the different wire types and sizes are mixed in each line, communication trouble is caused.
  - Central control line and wiring between indoors and outdoor units other than SHRM Advance and U -series
  - Uv line (wiring between indoor and outdoor units) and Uc line (wiring between outdoor and outdoor units) in SHRM Advance and U-series
  - Wiring between outdoor and outdoor units other than SHRM Advance and U-series
- For communication wiring specifications for outdoor unit other than SHRM Advance, refer to the Installation Manual attached to the outdoor unit to be connected.

[Uh-line and line / wiring between outdoor and indoor units other than SHRM Advance and U series]
Up to 2000m (L1 + L10 + L11)
[Uv line and Uc line in U series]
Up to 1000m (L2, L3)
Up to 1000m (L8 + L9)
[Between outdoor and outdoor units other than SHRM Advance and U series
Up to 100m (L12)

5-1. Specifications

Standard model

System with Non-ducted indoor units

Model name				MMY-MUP0721FT6P-UL	MMY-MUP0961FT6P-UL	MMY-MUP1201FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1921FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz
	Voltage range		V	414-506V	414-506V	414-506V	414-506V	414-506V	414-506V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120	144	168	192
	Rated capacity (*1)		kBtu/h	69	92	115	138	160	184
	Rated power consumption (*1)(*2)		kW	4.97	7.41	9.26	11.31	13.97	16.78
	Rated EER (*1)(*2)		kBtu/kW	13.90	12.40	12.40	12.20	11.50	11.00
Heating	Nominal capacity (*1)		kBtu/h	81	108	135	162	189	216
	Rated capacity (*1)		kBtu/h	77	103	129	154	180	206
	Rated power consumption (*1)(*2)		kW	4.81	6.59	8.76	10.99	13.39	16.17
	Rated COP (*1)(*2)		kW/kW	4.69	4.58	4.32	4.11	3.94	3.73
Starting Current			A	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	686	776	776	829
	Packing		lbs	580	580	721	812	812	865
Color				Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor	Hemetictwinrotarycompressor
	Motor output		kW	4.54 x 1	6.75 x 1	8.60 x 1	10.40 x 1	13.00 x 1	7.74 x 2
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.66 x 1	0.33 x 2	0.48 x 2	0.48 x 2	0.73 x 2
	Air volume		cfm	5721	6357	7416	7981	8476	9712
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.4	17.5	21.3	24.6	27.4	31.8
		MOCP (*6)	A	20	20	25	30	40	45
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9	606.9	606.9	606.9
			m	185.0	185.0	185.0	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3	541.3	541.3	541.3
			m	165.0	165.0	165.0	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200	70~200	70~200	70~200
	Maximum capacity of combined indoor units			144.0	192.0	240.0	288.0	336.0	384.0
	Maximum number of indoor units			12.0	17.0	21.0	25.0	30.0	34.0
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0	63.0	63.0	68.0
		Heating	dB(A)	59.0	61.0	61.0	64.0	67.0	71.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Non-ducted indoor units

Model name				MMY-UP1921FT6P-UL		MMY-UP2161FT6P-UL		MMY-UP2401FT6P-UL	
Outdoor unit model name			MMY-	MUP0961FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP0721FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz	
	Voltage range		V	414-506V		414-506V		414-506V	
Cooling	Nominal capacity (*1)		kBtu/h	192		216		240	
	Rated capacity (*1)		kBtu/h	184		206		230	
	Rated power consumption (*1)(*2)		kW	14.79		16.72		18.78	
	Rated EER (*1)(*2)		kBtu/kW	12.40		12.30		12.20	
Heating	Nominal capacity (*1)		kBtu/h	216		243		270	
	Rated capacity (*1)		kBtu/h	206		232		258	
	Rated power consumption (*1)(*2)		kW	13.30		15.26		17.54	
	Rated COP (*1)(*2)		kW/kW	4.54		4.46		4.31	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	41.8	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	776	552	776	552
	Packing		lbs	580	580	812	580	812	580
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Twin	Triple	Twin
	Motor output		kW	6.75 x 1	6.75 x 1	10.40 x 1	4.54 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.66 x 1	0.66 x 1	0.48 x 2	0.43 x 1	0.48 x 2	0.66 x 1
	Air volume		cfm	6357	6357	7981	5721	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.5	17.5	24.6	17.4	24.6	17.5
		MOCP (*6)	A	20	20	30	20	30	20
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	5/8″	1/2″	5/8″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	3/4″	7/8″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	1-1/8″	3/4″	1-1/8″	7/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			259.2		291.6		324.0	
	Maximum number of indoor units			34		38		43	
Sound pressure level		Cooling	dB(A)	64.0		63.8		65.1	
		Heating	dB(A)	64.0		65.2		65.8	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Non-ducted indoor units

Model name				MMY-UP2641FT6P-UL		MMY-UP2881FT6P-UL		MMY-UP3121FT6P-UL		MMY-UP3361FT6P-UL	
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz	
	Voltage range		V	414-506V		414-506V		414-506V		414-506V	
Cooling	Nominal capacity (*1)		kBtu/h	264		288		312		336	
	Rated capacity (*1)		kBtu/h	252		276		298		320	
	Rated power consumption (*1)(*2)		kW	20.96		23.11		25.67		29.38	
	Rated EER (*1)(*2)		kBtu/kW	12.00		11.90		11.60		10.90	
Heating	Nominal capacity (*1)		kBtu/h	297		324		351		378	
	Rated capacity (*1)		kBtu/h	284		308		334		360	
	Rated power consumption (*1)(*2)		kW	20.66		22.58		24.65		28.74	
	Rated COP (*1)(*2)		kW/kW	4.03		4.00		3.97		3.67	
Starting Current			A	Soft Start		Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	552	776	776	776	776	776	776
	Packing		lbs	812	580	812	812	812	812	812	812
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	6.75 x 1	10.40 x 1	10.40 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	6357	7981	7981	8476	7981	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	17.5	24.6	24.6	27.4	24.6	27.4	27.4
		MOCP (*6)	A	40	20	30	30	40	30	40	40
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8		639.8	
			m	195.0		195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1		574.1	
			m	175.0		175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135		50～135	
	Maximum capacity of combined indoor units			356.4		388.8		421.2		453.6	
	Maximum number of indoor units			47		51		56		60	
Sound pressure level		Cooling	dB(A)	65.1		66.0		66.0		66.0	
		Heating	dB(A)	68.0		67.0		68.8		70.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Non-ducted indoor units

Model name				MMY-UP3601FT6P-UL			MMY-UP3841FT6P-UL			MMY-UP4081FT6P-UL		
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	360			384			408		
	Rated capacity (*1)		kBtu/h	342			366			390		
	Rated power consumption (*1)(*2)		kW	31.44			33.59			36.90		
	Rated EER (*1)(*2)		kBtu/kW	10.90			10.90			10.60		
Heating	Nominal capacity (*1)		kBtu/h	405			432			459		
	Rated capacity (*1)		kBtu/h	386			412			438		
	Rated power consumption (*1)(*2)		kW	31.14			33.27			35.61		
	Rated COP (*1)(*2)		kW/kW	3.63			3.63			3.60		
Starting Current			A	Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	39.6	51.4	51.4	39.6	51.4	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	41.8	53.6	53.6	41.8	53.6	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	552	552	776	776	552	776	776	552
	Packing		lbs	812	580	580	812	812	580	812	812	580
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Twin	Twin	Triple	Triple	Twin	Triple	Triple	Twin
	Motor output		kW	13.00 x 1	6.75 x 1	6.75 x 1	10.40 x 1	10.40 x 1	6.75 x 1	13.00 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.66 x 1	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1
	Air volume		cfm	8476	6357	6357	7981	7981	6357	8476	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	13.2	19.8	19.8	13.2	19.8	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	17.5	17.5	24.6	24.6	17.5	27.4	24.6	17.5
		MOCP (*6)	A	40	20	20	30	30	20	40	30	20
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	3/4"	7/8"	7/8"	3/4"	7/8"	7/8"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	7/8"	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	7/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2		
			m	200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5		
			m	180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135		
	Maximum capacity of combined indoor units			486.0			518.4			550.8		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	66.5			67.2			67.2		
		Heating	dB(A)	68.8			68.0			69.4		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5℃)			-22.0 to 60.0 (-30.0 to 15.5℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Non-ducted indoor units

Model name				MMY-UP4321FT6P-UL			MMY-UP4561FT6P-UL			MMY-UP4801FT6P-UL			MMY-UP5041FT6P-UL		
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V			414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	432			456			480			504		
	Rated capacity (*1)		kBtu/h	412			434			456			480		
	Rated power consumption (*1)(*2)		kW	40.55			42.72			45.80			49.71		
	Rated EER (*1)(*2)		kBtu/kW	10.20			10.20			10.00			9.70		
Heating	Nominal capacity (*1)		kBtu/h	486			513			540			567		
	Rated capacity (*1)		kBtu/h	462			488			514			540		
	Rated power consumption (*1)(*2)		kW	37.84			40.34			43.49			47.04		
	Rated COP (*1)(*2)		kW/kW	3.58			3.55			3.46			3.36		
Starting Current			A	Soft Start			Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	776	552	776	776	776	776	776	776	776	776	776
	Packing		lbs	812	812	580	812	812	812	812	812	812	812	812	812
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			←			←		
Compressor	Type			Triple	Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	13.00 x 1	6.75 x 1	13.00 x 1	10.40 x 1	10.40 x 1	13.00 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	8476	6357	8476	7981	7981	8476	8476	7981	8476	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	27.4	17.5	27.4	24.6	24.6	27.4	27.4	24.6	27.4	27.4	27.4
		MOCP (*6)	A	40	40	20	40	30	30	40	40	30	40	40	40
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2			656.2		
			m	200.0			200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5			590.5		
			m	180.0			180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~135			50~135			50~135			50~135		
	Maximum capacity of combined indoor units			583.2			615.6			648.0			680.4		
	Maximum number of indoor units			72			73			74			75		
Sound pressure level		Cooling	dB(A)	67.2			67.8			67.8			67.8		
		Heating	dB(A)	70.5			70.0			71.0			71.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0℃)			23.0 to 125.0 (-5.0 to 52.0℃)			23.0 to 125.0 (-5.0 to 52.0℃)			23.0 to 125.0 (-5.0 to 52.0℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5℃)			-22.0 to 60.0 (-30.0 to 15.5℃)			-22.0 to 60.0 (-30.0 to 15.5℃)			-22.0 to 60.0 (-30.0 to 15.5℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-MUP072H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz
	Voltage range		V	414-506V	414-506V	414-506V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120
	Rated capacity (*1)		kBtu/h	69	92	115
	Rated power consumption (*1)(*2)		kW	4.97	6.72	9.03
	Rated EER (*1)(*2)		kBtu/kW	13.90	13.70	12.70
Heating	Nominal capacity (*1)		kBtu/h	81	108	135
	Rated capacity (*1)		kBtu/h	77	103	129
	Rated power consumption (*1)(*2)		kW	4.81	6.10	8.29
	Rated COP (*1)(*2)		kW/kW	4.69	4.95	4.56
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	51.4	51.4
		Depth	In	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	552	776	776
	Packing		lbs	580	812	812
Color				Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output		kW	4.54 x 1	5.96 x 1	8.27 x 1
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	7240	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	25.0	25.4
		MOCP (*6)	A	25	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	7/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9
			m	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3
			m	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80～200	80～200	80～200
	Maximum capacity of combined indoor units			144.0	192.0	240.0
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0
		Heating	dB(A)	59.0	62.0	63.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-UP144H1FT6PUL		MMY-UP192H1FT6PUL		MMY-UP240H1FT6PUL	
Outdoor unit model name			MMY-	MUP072H1FT6PUL	MUP072H1FT6PUL	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz	
	Voltage range		V	414-506V		414-506V		414-506V	
Cooling	Nominal capacity (*1)		kBtu/h	144		192		240	
	Rated capacity (*1)		kBtu/h	138		184		230	
	Rated power consumption (*1)(*2)		kW	10.01		13.52		17.70	
	Rated EER (*1)(*2)		kBtu/kW	13.80		13.60		13.00	
Heating	Nominal capacity (*1)		kBtu/h	162		216		270	
	Rated capacity (*1)		kBtu/h	154		206		258	
	Rated power consumption (*1)(*2)		kW	8.98		12.91		16.63	
	Rated COP (*1)(*2)		kW/kW	5.03		4.68		4.55	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	776	776	776	776
	Packing		lbs	580	580	812	812	812	812
Color				Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Triple	Triple	Triple
	Motor output		kW	4.54 x 1	4.54 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.43 x 1	0.43 x 1	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	5721	7240	7240	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	18.5	25.0	25.0	25.4	25.4
		MOCP (*6)	A	25	25	30	30	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	7/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			194.4		259.2		324.0	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	59.0		64.0		63.0	
		Heating	dB(A)	62.0		65.0		66.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-UP288H1FT6PUL			MMY-UP360H1FT6PUL		
Outdoor unit model name			MMY-	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	288			360		
	Rated capacity (*1)		kBtu/h	276			342		
	Rated power consumption (*1)(*2)		kW	21.22			27.92		
	Rated EER (*1)(*2)		kBtu/kW	13.00			12.20		
Heating	Nominal capacity (*1)		kBtu/h	324			405		
	Rated capacity (*1)		kBtu/h	308			386		
	Rated power consumption (*1)(*2)		kW	22.47			29.84		
	Rated COP (*1)(*2)		kW/kW	4.02			3.79		
Starting Current			A	Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	776	776	776	776	776
	Packing		lbs	812	812	812	812	812	812
Color				Silky shade(Munselll 1Y8.5/0.5)			Silky shade(Munselll 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	5.96 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan			PropellerFan		
	Motor output		kW	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7240	7240	7240	7416	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	25.0	25.0	25.0	25.4	25.4	25.4
		MOCP (*6)	A	30	30	30	30	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	7/8″	1-1/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	656.2			656.2		
			m	200.0			200.0		
		Real length	ft	590.5			590.5		
			m	180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135		
	Maximum capacity of combined indoor units			388.8			486.0		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	65.8			64.8		
		Heating	dB(A)	66.8			67.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)			-30.0 to 60.0 (-34.4 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Ducted indoor units

Model name				MMY-MUP0721FT6P-UL	MMY-MUP0961FT6P-UL	MMY-MUP1201FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1921FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz
	Voltage range		V	414-506V	414-506V	414-506V	414-506V	414-506V	414-506V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120	144	168	192
	Rated capacity (*1)		kBtu/h	69	92	115	138	160	184
	Rated power consumption (*1)(*2)		kW	4.69	7.39	8.60	10.64	13.22	15.30
	Rated EER (*1)(*2)		kBtu/kW	14.70	12.40	13.40	13.00	12.10	12.00
Heating	Nominal capacity (*1)		kBtu/h	81	108	135	162	189	216
	Rated capacity (*1)		kBtu/h	77	103	129	154	180	206
	Rated power consumption (*1)(*2)		kW	4.61	6.73	8.53	10.27	13.17	16.02
	Rated COP (*1)(*2)		kW/kW	4.90	4.49	4.43	4.39	4.01	3.77
Starting Current			A	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	686	776	776	829
	Packing		lbs	580	580	721	812	812	865
Color				Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor	Hemetictwinrotarycompressor
	Motor output		kW	4.54 x 1	6.75 x 1	8.60 x 1	10.40 x 1	13.00 x 1	7.74 x 2
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.66 x 1	0.33 x 2	0.48 x 2	0.48 x 2	0.73 x 2
	Air volume		cfm	5721	6357	7416	7981	8476	9712
Maximum external static pressure (*3)			In.WG	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.4	17.5	21.3	24.6	27.4	31.8
		MOCP (*6)	A	20	20	25	30	40	45
Piping connections	Gas	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
	Liquid	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
				Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
				3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9	606.9	606.9	606.9
			m	185.0	185.0	185.0	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3	541.3	541.3	541.3
			m	165.0	165.0	165.0	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200	70~200	70~200	70~200
	Maximum capacity of combined indoor units			144.0	192.0	240.0	288.0	336.0	384.0
	Maximum number of indoor units			12	17	21	25	30	34
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0	63.0	63.0	68.0
		Heating	dB(A)	59.0	61.0	61.0	64.0	67.0	71.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Ducted indoor units

Model name				MMY-UP1921FT6P-UL		MMY-UP2161FT6P-UL		MMY-UP2401FT6P-UL	
Outdoor unit model name			MMY-	MUP0961FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP0721FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz	460V,3-Phase,61Hz
	Voltage range		V	414-506V		414-506V		414-506V	414-507V
Cooling	Nominal capacity (*1)		kBtu/h	192		216		240	
	Rated capacity (*1)		kBtu/h	184		206		230	
	Rated power consumption (*1)(*2)		kW	14.11		16.18		18.32	
	Rated EER (*1)(*2)		kBtu/kW	13.00		12.70		12.60	
Heating	Nominal capacity (*1)		kBtu/h	216		243		270	
	Rated capacity (*1)		kBtu/h	206		232		258	
	Rated power consumption (*1)(*2)		kW	13.95		16.68		19.58	
	Rated COP (*1)(*2)		kW/kW	4.33		4.08		3.86	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	41.8	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	776	552	776	552
	Packing		lbs	580	580	812	580	812	580
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Twin	Triple	Twin
	Motor output		kW	6.75 x 1	6.75 x 1	10.40 x 1	4.54 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.66 x 1	0.66 x 1	0.48 x 2	0.43 x 1	0.48 x 2	0.66 x 1
	Air volume		cfm	6357	6357	7981	5721	7981	6357
Maximum external static pressure (*3)			in H2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.5	17.5	24.6	17.4	24.6	17.5
		MOCP (*6)	A	20	20	30	20	30	20
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	5/8″	1/2″	5/8″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	3/4″	7/8″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	1-1/8″	3/4″	1-1/8″	7/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			259.2		291.6		324.0	
	Maximum number of indoor units			34		38		43	
Sound pressure level		Cooling	dB(A)	64.0		63.8		65.1	
		Heating	dB(A)	64.0		65.2		65.8	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Ducted indoor units

Model name				MMY-UP2641FT6P-UL		MMY-UP2881FT6P-UL		MMY-UP3121FT6P-UL		MMY-UP3361FT6P-UL	
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,62Hz	460V,3-Phase,63Hz	460V,3-Phase,62Hz	460V,3-Phase,63Hz	460V,3-Phase,62Hz	460V,3-Phase,63Hz	460V,3-Phase,62Hz	460V,3-Phase,63Hz
	Voltage range		V	414-508V	414-509V	414-508V	414-509V	414-508V	414-509V	414-508V	414-509V
Cooling	Nominal capacity (*1)		kBtu/h	264		288		312		336	
	Rated capacity (*1)		kBtu/h	252		276		298		320	
	Rated power consumption (*1)(*2)		kW	21.18		23.50		25.56		27.46	
	Rated EER (*1)(*2)		kBtu/kW	11.90		11.70		11.70		11.70	
Heating	Nominal capacity (*1)		kBtu/h	297		324		351		378	
	Rated capacity (*1)		kBtu/h	284		308		334		360	
	Rated power consumption (*1)(*2)		kW	23.00		25.07		27.57		29.55	
	Rated COP (*1)(*2)		kW/kW	3.62		3.60		3.55		3.57	
Starting Current			A	Soft Start		Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	552	776	776	776	776	776	776
	Packing		lbs	812	580	812	812	812	812	812	812
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	6.75 x 1	10.40 x 1	10.40 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	6357	7981	7981	8476	7981	8476	8476
Maximum external static pressure (*3)			in H2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	17.5	24.6	24.6	27.4	24.6	27.4	27.4
		MOCP (*6)	A	40	20	30	30	40	30	40	40
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8		639.8	
			m	195.0		195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1		574.1	
			m	175.0		175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135		50～135	
	Maximum capacity of combined indoor units			356.4		388.8		421.2		453.6	
	Maximum number of indoor units			47		51		56		60	
Sound pressure level		Cooling	dB(A)	65.1		66.0		66.0		66.0	
		Heating	dB(A)	68.0		67.0		68.8		70.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Ducted indoor units

Model name				MMY-UP3601FT6P-UL			MMY-UP3841FT6P-UL			MMY-UP4081FT6P-UL		
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP0961FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP0961FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	360			384			408		
	Rated capacity (*1)		kBtu/h	342			366			390		
	Rated power consumption (*1)(*2)		kW	30.17			32.39			35.27		
	Rated EER (*1)(*2)		kBtu/kW	11.30			11.30			11.10		
Heating	Nominal capacity (*1)		kBtu/h	405			432			459		
	Rated capacity (*1)		kBtu/h	386			412			438		
	Rated power consumption (*1)(*2)		kW	31.88			33.77			35.89		
	Rated COP (*1)(*2)		kW/kW	3.55			3.58			3.58		
Starting Current			A	Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	39.6	51.4	51.4	39.6	51.4	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	41.8	53.6	53.6	41.8	53.6	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	552	552	776	776	552	776	776	552
	Packing		lbs	812	580	580	812	812	580	812	812	580
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Twin	Twin	Triple	Triple	Twin	Triple	Triple	Twin
	Motor output		kW	13.00 x 1	6.75 x 1	6.75 x 1	10.40 x 1	10.40 x 1	6.75 x 1	13.00 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.66 x 1	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1
	Air volume		cfm	8476	6357	6357	7981	7981	6357	8476	7981	6357
Maximum external static pressure (*3)			in H2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	13.2	19.8	19.8	13.2	19.8	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	17.5	17.5	24.6	24.6	17.5	27.4	24.6	17.5
		MOCP (*6)	A	40	20	20	30	30	20	40	30	20
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	3/4"	7/8"	7/8"	3/4"	7/8"	7/8"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	7/8"	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	7/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2		
			m	200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5		
			m	180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135		
	Maximum capacity of combined indoor units			486.0			518.4			550.8		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	66.5			67.2			67.2		
		Heating	dB(A)	68.8			68.0			69.4		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Ducted indoor units

Model name				MMY-UP4321FT6P-UL			MMY-UP4561FT6P-UL			MMY-UP4801FT6P-UL			MMY-UP5041FT6P-UL		
Outdoor unit model name			MMY-	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP0961FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP1441FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL	MUP1681FT6P-UL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V			414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	432			456			480			504		
	Rated capacity (*1)		kBtu/h	412			434			456			480		
	Rated power consumption (*1)(*2)		kW	38.07			40.31			43.04			47.09		
	Rated EER (*1)(*2)		kBtu/kW	10.80			10.80			10.60			10.20		
Heating	Nominal capacity (*1)		kBtu/h	486			513			540			567		
	Rated capacity (*1)		kBtu/h	462			488			514			540		
	Rated power consumption (*1)(*2)		kW	37.95			40.31			42.81			45.18		
	Rated COP (*1)(*2)		kW/kW	3.57			3.55			3.52			3.50		
Starting Current			A	Soft Start			Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	776	552	776	776	776	776	776	776	776	776	776
	Packing		lbs	812	812	580	812	812	812	812	812	812	812	812	812
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	13.00 x 1	6.75 x 1	13.00 x 1	10.40 x 1	10.40 x 1	13.00 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	8476	6357	8476	7981	7981	8476	8476	7981	8476	8476	8476
Maximum external static pressure (*3)			in H₂O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	27.4	27.4	17.5	27.4	24.6	24.6	27.4	27.4	24.6	27.4	27.4	27.4
		MOCP (*6)	A	40	40	20	40	30	30	40	40	30	40	40	40
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2			656.2		
			m	200.0			200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5			590.5		
			m	180.0			180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135			50～135		
	Maximum capacity of combined indoor units			583.2			615.6			648.0			680.4		
	Maximum number of indoor units			72			73			74			75		
Sound pressure level		Cooling	dB(A)	67.2			67.8			67.8			67.8		
		Heating	dB(A)	70.5			70.0			71.0			71.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model
System with Ducted indoor units

Model name				MMY-MUP072H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz	460V,3-Phase,60Hz
	Voltage range		V	414-506V	414-506V	414-506V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120
	Rated capacity (*1)		kBtu/h	69	92	115
	Rated power consumption (*1)(*2)		kW	4.69	6.49	8.27
	Rated EER (*1)(*2)		kBtu/kW	14.70	14.20	13.90
Heating	Nominal capacity (*1)		kBtu/h	81	108	135
	Rated capacity (*1)		kBtu/h	77	103	129
	Rated power consumption (*1)(*2)		kW	4.61	6.31	8.36
	Rated COP (*1)(*2)		kW/kW	4.90	4.78	4.52
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	51.4	51.4
		Depth	In	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	552	776	776
	Packing		lbs	580	812	812
Color				Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output		kW	4.54 x 1	5.96 x 1	8.27 x 1
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	7240	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	25.0	25.4
		MOCP (*6)	A	25	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	7/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9
			m	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3
			m	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80～200	80～200	80～200
	Maximum capacity of combined indoor units			144.0	192.0	240.0
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0
		Heating	dB(A)	59.0	62.0	63.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model
System with Ducted indoor units

Model name				MMY-UP144H1FT6PUL		MMY-UP192H1FT6PUL		MMY-UP240H1FT6PUL	
Outdoor unit model name			MMY-	MUP072H1FT6PUL	MUP072H1FT6PUL	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz		460V,3-Phase,60Hz		460V,3-Phase,60Hz	
	Voltage range		V	414-506V		414-506V		414-506V	
Cooling	Nominal capacity (*1)		kBtu/h	144		192		240	
	Rated capacity (*1)		kBtu/h	138		184		230	
	Rated power consumption (*1)(*2)		kW	9.12		12.83		16.79	
	Rated EER (*1)(*2)		kBtu/kW	15.10		14.30		13.70	
Heating	Nominal capacity (*1)		kBtu/h	162		216		270	
	Rated capacity (*1)		kBtu/h	154		206		258	
	Rated power consumption (*1)(*2)		kW	9.38		13.51		18.79	
	Rated COP (*1)(*2)		kW/kW	4.81		4.47		4.02	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	552	552	776	776	776	776
	Packing		lbs	580	580	812	812	812	812
Color				Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Triple	Triple	Triple
	Motor output		kW	4.54 x 1	4.54 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.43 x 1	0.43 x 1	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	5721	7240	7240	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	18.5	25.0	25.0	25.4	25.4
		MOCP (*6)	A	25	25	30	30	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	7/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			194.4		259.2		324.0	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	59.0		64.0		63.0	
		Heating	dB(A)	62.0		65.0		66.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model
System with Ducted indoor units

Model name				MMY-UP288H1FT6PUL			MMY-UP360H1FT6PUL		
Outdoor unit model name			MMY-	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP096H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL	MUP120H1FT6PUL
Power Supply	Nominal voltage		V/Ph/Hz	460V,3-Phase,60Hz			460V,3-Phase,60Hz		
	Voltage range		V	414-506V			414-506V		
Cooling	Nominal capacity (*1)		kBtu/h	288			360		
	Rated capacity (*1)		kBtu/h	276			342		
	Rated power consumption (*1)(*2)		kW	21.26			26.97		
	Rated EER (*1)(*2)		kBtu/kW	13.00			12.70		
Heating	Nominal capacity (*1)		kBtu/h	324			405		
	Rated capacity (*1)		kBtu/h	308			386		
	Rated power consumption (*1)(*2)		kW	22.61			28.83		
	Rated COP (*1)(*2)		kW/kW	3.99			3.92		
Starting Current			A	Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	776	776	776	776	776	776
	Packing		lbs	812	812	812	812	812	812
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	5.96 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan			PropellerFan		
	Motor output		kW	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7240	7240	7240	7416	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601	ON:464 OFF:601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	25.0	25.0	25.0	25.4	25.4	25.4
		MOCP (*6)	A	30	30	30	30	30	30
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	7/8″	1-1/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	656.2			656.2		
			m	200.0			200.0		
		Real length	ft	590.5			590.5		
			m	180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135		
	Maximum capacity of combined indoor units			388.8			486.0		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	65.8			64.8		
		Heating	dB(A)	66.8			67.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)			-30.0 to 60.0 (-34.4 to 15.5 ℃)		

Note

(*1) Rated conditions — Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Non-ducted indoor units

Model name					MMY-MUP0721FT9P-UL	MMY-MUP0961FT9P-UL	MMY-MUP1201FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1681FT9P-UL
Power Supply	Nominal voltage			V/Ph/Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz
	Voltage range			V	187-253V	187-253V	187-253V	187-253V	187-253V
Cooling	Nominal capacity (*1)			kBtu/h	72	96	120	144	168
	Rated capacity (*1)			kBtu/h	69	92	115	138	160
	Rated power consumption (*1)(*2)			kW	4.97	7.41	9.26	11.31	13.97
	Rated EER (*1)(*2)			kBtu/kW	13.90	12.40	12.40	12.20	11.50
Heating	Nominal capacity (*1)			kBtu/h	81	108	135	162	189
	Rated capacity (*1)			kBtu/h	77	103	129	154	180
	Rated power consumption (*1)(*2)			kW	4.81	6.59	8.76	10.99	13.39
	Rated COP (*1)(*2)			kW/kW	4.69	4.58	4.32	4.11	3.94
Starting Current				A	Soft Start	Soft Start	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height		In	66.5	66.5	66.5	66.5	66.5
		Width		In	39.6	39.6	51.4	51.4	51.4
		Depth		In	31.2	31.2	31.2	31.2	31.2
	Packing	Height		In	69.6	69.6	69.6	69.6	69.6
		Width		In	41.8	41.8	53.6	53.6	53.6
		Depth		In	32.6	32.6	32.6	32.6	32.6
Weight	Unit			lbs	532	532	675	783	783
	Packing			lbs	560	560	710	818	818
Color					Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)
Compressor	Type				Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output			kW	4.54 x 1	6.75 x 1	8.60 x 1	10.40 x 1	13.00 x 1
Fan unit	Type				PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan
	Motor output			kW	0.43 x 1	0.66 x 1	0.33 x 2	0.48 x 2	0.48 x 2
	Air volume			cfm	5721	6357	7416	7981	8476
Maximum external static pressure (*3)				in H_2O	0.321	0.321	0.321	0.321	0.321
Heat exchanger					Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name				R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)			lbs	13.2	13.2	19.8	19.8	19.8
High-pressure switch (Protective device)				psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices					(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA		A	36.4	36.6	36.8	51.5	57.4
		MOCP (*6)		A	45	45	45	60	80
Piping connections	Liquid pipe	Type			Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter		In	1/2"	1/2"	1/2"	5/8"	5/8"
	HP/LP gas pipe	Type			Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter		In	3/4"	3/4"	3/4"	7/8"	7/8"
	Suction gas pipe	Type			Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter		In	3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length		ft	606.9	606.9	606.9	606.9	606.9
				m	185.0	185.0	185.0	185.0	185.0
		Real length		ft	541.3	541.3	541.3	541.3	541.3
				m	165.0	165.0	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)		%	70~200	70~200	70~200	70~200	70~200
	Maximum capacity of combined indoor units				144.0	192.0	240.0	288.0	336.0
	Maximum number of indoor units				12	17	21	25	30
Sound pressure level		Cooling		dB(A)	56.0	61.0	60.0	63.0	63.0
		Heating		dB(A)	59.0	61.0	61.0	64.0	67.0
Operation temperature range		Cooling		°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating		°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Non-ducted indoor units

Model name				MMY-UP1921FT9P-UL		MMY-UP2161FT9P-UL		MMY-UP2401FT9P-UL	
Outdoor unit model name			MMY-	MUP0961FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP0721FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	192		216		240	
	Rated capacity (*1)		kBtu/h	184		206		230	
	Rated power consumption (*1)(*2)		kW	14.79		16.72		18.78	
	Rated EER (*1)(*2)		kBtu/kW	12.40		12.30		12.20	
Heating	Nominal capacity (*1)		kBtu/h	216		243		270	
	Rated capacity (*1)		kBtu/h	206		232		258	
	Rated power consumption (*1)(*2)		kW	13.30		15.26		17.54	
	Rated COP (*1)(*2)		kW/kW	4.54		4.46		4.31	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	41.8	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	532	532	783	532	783	532
	Packing		lbs	560	560	818	560	818	560
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Twin	Triple	Twin
	Motor output		kW	6.75 x 1	6.75 x 1	10.40 x 1	4.54 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.66 x 1	0.66 x 1	0.48 x 2	0.43 x 1	0.48 x 2	0.66 x 1
	Air volume		cfm	6357	6357	7981	5721	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	36.6	51.5	36.4	51.5	36.6
		MOCP (*6)	A	45	45	60	45	60	45
	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	5/8″	1/2″	5/8″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	3/4″	7/8″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	1-1/8″	3/4″	1-1/8″	7/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			259.2		291.6		324.0	
	Maximum number of indoor units			34		38		43	
Sound pressure level		Cooling	dB(A)	64.0		63.8		65.1	
		Heating	dB(A)	64.0		65.2		65.8	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Non-ducted indoor units

Model name				MMY-UP2641FT9P-UL		MMY-UP2881FT9P-UL		MMY-UP3121FT9P-UL		MMY-UP3361FT9P-UL	
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	264		288		312		336	
	Rated capacity (*1)		kBtu/h	252		276		298		320	
	Rated power consumption (*1)(*2)		kW	20.96		23.11		25.67		29.38	
	Rated EER (*1)(*2)		kBtu/kW	12.00		11.90		11.60		10.90	
Heating	Nominal capacity (*1)		kBtu/h	297		324		351		378	
	Rated capacity (*1)		kBtu/h	284		308		334		360	
	Rated power consumption (*1)(*2)		kW	20.66		22.58		24.65		28.74	
	Rated COP (*1)(*2)		kW/kW	4.03		4.00		3.97		3.67	
Starting Current			A	Soft Start		Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	532	783	783	783	783	783	783
	Packing		lbs	818	560	818	818	818	818	818	818
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	6.75 x 1	10.40 x 1	10.40 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	6357	7981	7981	8476	7981	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	36.6	51.5	51.5	57.4	51.5	57.4	57.4
		MOCP (*6)	A	80	45	60	60	80	60	80	80
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8″	1/2″	5/8″	5/8″	5/8″	5/8″	5/8″	5/8″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	3/4″	7/8″	7/8″	7/8″	7/8″	7/8″	7/8″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8″	7/8″	1-1/8″	1-1/8″	1-1/8″	1-1/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8		639.8	
			m	195.0		195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1		574.1	
			m	175.0		175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135		50～135	
	Maximum capacity of combined indoor units			356.4		388.8		421.2		453.6	
	Maximum number of indoor units			47		51		56		60	
Sound pressure level		Cooling	dB(A)	65.1		66.0		66.0		66.0	
		Heating	dB(A)	68.0		67.0		68.8		70.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model

System with Non-ducted indoor units

Model name				MMY-UP3601FT9P-UL			MMY-UP3841FT9P-UL			MMY-UP4081FT9P-UL		
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	360			384			408		
	Rated capacity (*1)		kBtu/h	342			366			390		
	Rated power consumption (*1)(*2)		kW	31.44			33.59			36.90		
	Rated EER (*1)(*2)		kBtu/kW	10.90			10.90			10.60		
Heating	Nominal capacity (*1)		kBtu/h	405			432			459		
	Rated capacity (*1)		kBtu/h	386			412			438		
	Rated power consumption (*1)(*2)		kW	31.14			33.27			35.61		
	Rated COP (*1)(*2)		kW/kW	3.63			3.63			3.60		
Starting Current			A	Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	39.6	51.4	51.4	39.6	51.4	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	41.8	53.6	53.6	41.8	53.6	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	532	532	783	783	532	783	783	532
	Packing		lbs	818	560	560	818	818	560	818	818	560
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Twin	Twin	Triple	Triple	Twin	Triple	Triple	Twin
	Motor output		kW	13.00 x 1	6.75 x 1	6.75 x 1	10.40 x 1	10.40 x 1	6.75 x 1	13.00 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.66 x 1	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1
	Air volume		cfm	8476	6357	6357	7981	7981	6357	8476	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	13.2	19.8	19.8	13.2	19.8	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	36.6	36.6	51.5	51.5	36.6	57.4	51.5	36.6
		MOCP (*6)	A	80	45	45	60	60	45	80	60	45
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	3/4"	7/8"	7/8"	3/4"	7/8"	7/8"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	7/8"	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	7/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2		
			m	200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5		
			m	180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135		
	Maximum capacity of combined indoor units			486.0			518.4			550.8		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	66.5			67.2			67.2		
		Heating	dB(A)	68.8			68.0			69.4		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Non-ducted indoor units

Model name				MMY-UP4321FT9P-UL			MMY-UP4561FT9P-UL			MMY-UP4801FT9P-UL			MMY-UP5041FT9P-UL		
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V			187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	432			456			480			504		
	Rated capacity (*1)		kBtu/h	412			434			456			480		
	Rated power consumption (*1)(*2)		kW	40.55			42.72			45.80			49.71		
	Rated EER (*1)(*2)		kBtu/kW	10.20			10.20			10.00			9.70		
Heating	Nominal capacity (*1)		kBtu/h	486			513			540			567		
	Rated capacity (*1)		kBtu/h	462			488			514			540		
	Rated power consumption (*1)(*2)		kW	37.84			40.34			43.49			47.04		
	Rated COP (*1)(*2)		kW/kW	3.58			3.55			3.46			3.36		
Starting Current			A	Soft Start			Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	783	532	783	783	783	783	783	783	783	783	783
	Packing		lbs	818	818	560	818	818	818	818	818	818	818	818	818
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	13.00 x 1	6.75 x 1	13.00 x 1	10.40 x 1	10.40 x 1	13.00 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	8476	6357	8476	7981	7981	8476	8476	7981	8476	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	57.4	36.6	57.4	51.5	51.5	57.4	57.4	51.5	57.4	57.4	57.4
		MOCP (*6)	A	80	80	45	80	60	60	80	80	60	80	80	80
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2			656.2		
			m	200.0			200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5			590.5		
			m	180.0			180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135			50～135		
	Maximum capacity of combined indoor units			583.2			615.6			648.0			680.4		
	Maximum number of indoor units			72			73			74			75		
Sound pressure level		Cooling	dB(A)	67.2			67.8			67.8			67.8		
		Heating	dB(A)	70.5			70.0			71.0			71.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-MUP072H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz
	Voltage range		V	187-253V	187-253V	187-253V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120
	Rated capacity (*1)		kBtu/h	69	92	115
	Rated power consumption (*1)(*2)		kW	4.97	6.72	9.03
	Rated EER (*1)(*2)		kBtu/kW	13.90	13.70	12.70
Heating	Nominal capacity (*1)		kBtu/h	81	108	135
	Rated capacity (*1)		kBtu/h	77	103	129
	Rated power consumption (*1)(*2)		kW	4.81	6.10	8.29
	Rated COP (*1)(*2)		kW/kW	4.69	4.95	4.56
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	51.4	51.4
		Depth	In	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	532	783	783
	Packing		lbs	560	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output		kW	4.54 x 1	5.96 x 1	8.27 x 1
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	7240	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	52.3	53.1
		MOCP (*6)	A	45	60	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4″	7/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9
			m	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3
			m	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80～200	80～200	80～200
	Maximum capacity of combined indoor units			144.0	192.0	240.0
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0
		Heating	dB(A)	59.0	62.0	63.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bu
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-UP144H1FT9PUL		MMY-UP192H1FT9PUL		MMY-UP240H1FT9PUL	
Outdoor unit model name			MMY-	MUP072H1FT9PUL	MUP072H1FT9PUL	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	144		192		240	
	Rated capacity (*1)		kBtu/h	138		184		230	
	Rated power consumption (*1)(*2)		kW	10.01		13.52		17.70	
	Rated EER (*1)(*2)		kBtu/kW	13.80		13.60		13.00	
Heating	Nominal capacity (*1)		kBtu/h	162		216		270	
	Rated capacity (*1)		kBtu/h	154		206		258	
	Rated power consumption (*1)(*2)		kW	8.98		12.91		16.63	
	Rated COP (*1)(*2)		kW/kW	5.03		4.68		4.55	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	532	532	783	783	783	783
	Packing		lbs	560	560	818	818	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Triple	Triple	Triple
	Motor output		kW	4.54 x 1	4.54 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.43 x 1	0.43 x 1	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	5721	7240	7240	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	36.6	52.3	52.3	53.1	53.1
		MOCP (*6)	A	45	45	60	60	70	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	7/8″	7/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			194.4		259.2		324.0	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	59.0		64.0		63.0	
		Heating	dB(A)	62.0		65.0		66.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bu
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Non-ducted indoor units

Model name				MMY-UP288H1FT9PUL			MMY-UP360H1FT9PUL		
Outdoor unit model name			MMY-	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	288			360		
	Rated capacity (*1)		kBtu/h	276			342		
	Rated power consumption (*1)(*2)		kW	21.22			27.92		
	Rated EER (*1)(*2)		kBtu/kW	13.00			12.20		
Heating	Nominal capacity (*1)		kBtu/h	324			405		
	Rated capacity (*1)		kBtu/h	308			386		
	Rated power consumption (*1)(*2)		kW	22.47			29.84		
	Rated COP (*1)(*2)		kW/kW	4.02			3.79		
Starting Current			A	Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	783	783	783	783	783
	Packing		lbs	818	818	818	818	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)			Silky shade(Munselll 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	5.96 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan			PropellerFan		
	Motor output		kW	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7240	7240	7240	7416	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	52.3	52.3	52.3	53.1	53.1	53.1
		MOCP (*6)	A	60	60	60	70	70	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4″	3/4″	3/4″	3/4″	3/4″	3/4″
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8″	7/8″	7/8″	1-1/8″	1-1/8″	1-1/8″
Furthest piping Length		Equivalent length	ft	656.2			656.2		
			m	200.0			200.0		
		Real length	ft	590.5			590.5		
			m	180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135		
	Maximum capacity of combined indoor units			388.8			486.0		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	65.8			64.8		
		Heating	dB(A)	66.8			67.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)			-30.0 to 60.0 (-34.4 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bu
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Ducted indoor units

Model name				MMY-MUP0721FT9P-UL	MMY-MUP0961FT9P-UL	MMY-MUP1201FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1681FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz
	Voltage range		V	187-253V	187-253V	187-253V	187-253V	187-253V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120	144	168
	Rated capacity (*1)		kBtu/h	69	92	115	138	160
	Rated power consumption (*1)(*2)		kW	4.69	7.39	8.60	10.64	13.22
	Rated EER (*1)(*2)		kBtu/kW	14.70	12.40	13.40	13.00	12.10
Heating	Nominal capacity (*1)		kBtu/h	81	108	135	162	189
	Rated capacity (*1)		kBtu/h	77	103	129	154	180
	Rated power consumption (*1)(*2)		kW	4.61	6.73	8.53	10.27	13.17
	Rated COP (*1)(*2)		kW/kW	4.90	4.49	4.43	4.39	4.01
Starting Current			A	Soft Start	0.00	0.00	0.00	0.00
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	532	532	675	783	783
	Packing		lbs	560	560	710	818	818
Color				Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)	Silky shade(Munsell 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output		kW	4.54 x 1	6.75 x 1	8.60 x 1	10.40 x 1	13.00 x 1
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.66 x 1	0.33 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	5721	6357	7416	7981	8476
Maximum external static pressure (*3)			in H2O	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.4	36.6	36.8	51.5	57.4
		MOCP (*6)	A	45	45	45	60	80
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9	606.9	606.9
			m	185.0	185.0	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3	541.3	541.3
			m	165.0	165.0	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200	70~200	70~200
	Maximum capacity of combined indoor units			144.0	192.0	240.0	288.0	336.0
	Maximum number of indoor units			12	17	21	25	30
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0	63.0	63.0
		Heating	dB(A)	59.0	61.0	61.0	64.0	67.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)	-22.0 to 60.0 (-30.0 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Ducted indoor units

Model name				MMY-UP1921FT9P-UL		MMY-UP2161FT9P-UL		MMY-UP2401FT9P-UL	
Outdoor unit model name			MMY-	MUP0961FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP0721FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	192		216		240	
	Rated capacity (*1)		kBtu/h	184		206		230	
	Rated power consumption (*1)(*2)		kW	14.11		16.18		18.32	
	Rated EER (*1)(*2)		kBtu/kW	13.00		12.70		12.60	
Heating	Nominal capacity (*1)		kBtu/h	216		243		270	
	Rated capacity (*1)		kBtu/h	206		232		258	
	Rated power consumption (*1)(*2)		kW	13.95		16.68		19.58	
	Rated COP (*1)(*2)		kW/kW	4.33		4.08		3.86	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	41.8	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	532	532	783	532	783	532
	Packing		lbs	560	560	818	560	818	560
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Twin	Triple	Twin
	Motor output		kW	6.75 x 1	6.75 x 1	10.40 x 1	4.54 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.66 x 1	0.66 x 1	0.48 x 2	0.43 x 1	0.48 x 2	0.66 x 1
	Air volume		cfm	6357	6357	7981	5721	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	36.6	51.5	36.4	51.5	36.6
		MOCP (*6)	A	45	45	60	45	60	45
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	7/8"	3/4"	7/8"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	1-1/8"	3/4"	1-1/8"	7/8"
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			259.2		291.6		324.0	
	Maximum number of indoor units			34		38		43	
Sound pressure level		Cooling	dB(A)	64.0		63.8		65.1	
		Heating	dB(A)	64.0		65.2		65.8	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Ducted indoor units

Model name				MMY-UP2641FT9P-UL		MMY-UP2881FT9P-UL		MMY-UP3121FT9P-UL		MMY-UP3361FT9P-UL	
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	264		288		312		336	
	Rated capacity (*1)		kBtu/h	252		276		298		320	
	Rated power consumption (*1)(*2)		kW	21.18		23.50		25.56		27.46	
	Rated EER (*1)(*2)		kBtu/kW	11.90		11.70		11.70		11.70	
Heating	Nominal capacity (*1)		kBtu/h	297		324		351		378	
	Rated capacity (*1)		kBtu/h	284		308		334		360	
	Rated power consumption (*1)(*2)		kW	23.00		25.07		27.57		29.55	
	Rated COP (*1)(*2)		kW/kW	3.62		3.60		3.55		3.57	
Starting Current			A	Soft Start		Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	532	783	783	783	783	783	783
	Packing		lbs	818	560	818	818	818	818	818	818
Color				Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)		Silky shade(Munsell 1Y8.5/0.5)	
Compressor	Type			Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	6.75 x 1	10.40 x 1	10.40 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	6357	7981	7981	8476	7981	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	36.6	51.5	51.5	57.4	51.5	57.4	57.4
		MOCP (*6)	A	80	45	60	60	80	60	80	80
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8		639.8	
			m	195.0		195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1		574.1	
			m	175.0		175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135		50～135	
	Maximum capacity of combined indoor units			356.4		388.8		421.2		453.6	
	Maximum number of indoor units			47		51		56		60	
Sound pressure level		Cooling	dB(A)	65.1		66.0		66.0		66.0	
		Heating	dB(A)	68.0		67.0		68.8		70.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)		-22.0 to 60.0 (-30.0 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Ducted indoor units

Model name				MMY-UP3601FT9P-UL			MMY-UP3841FT9P-UL			MMY-UP4081FT9P-UL		
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP0961FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP0961FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	360			384			408		
	Rated capacity (*1)		kBtu/h	342			366			390		
	Rated power consumption (*1)(*2)		kW	30.17			32.39			35.27		
	Rated EER (*1)(*2)		kBtu/kW	11.30			11.30			11.10		
Heating	Nominal capacity (*1)		kBtu/h	405			432			459		
	Rated capacity (*1)		kBtu/h	386			412			438		
	Rated power consumption (*1)(*2)		kW	31.88			33.77			35.89		
	Rated COP (*1)(*2)		kW/kW	3.55			3.58			3.58		
Starting Current			A	Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	39.6	39.6	51.4	51.4	39.6	51.4	51.4	39.6
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	41.8	41.8	53.6	53.6	41.8	53.6	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	532	532	783	783	532	783	783	532
	Packing		lbs	818	560	560	818	818	560	818	818	560
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Twin	Twin	Triple	Triple	Twin	Triple	Triple	Twin
	Motor output		kW	13.00 x 1	6.75 x 1	6.75 x 1	10.40 x 1	10.40 x 1	6.75 x 1	13.00 x 1	10.40 x 1	6.75 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.66 x 1	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.66 x 1
	Air volume		cfm	8476	6357	6357	7981	7981	6357	8476	7981	6357
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	13.2	13.2	19.8	19.8	13.2	19.8	19.8	13.2
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	36.6	36.6	51.5	51.5	36.6	57.4	51.5	36.6
		MOCP (*6)	A	80	45	45	60	60	45	80	60	45
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	3/4"	3/4"	7/8"	7/8"	3/4"	7/8"	7/8"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	7/8"	7/8"	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	7/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2		
			m	200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5		
			m	180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135		
	Maximum capacity of combined indoor units			486.0			518.4			550.8		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	66.5			67.2			67.2		
		Heating	dB(A)	68.8			68.0			69.4		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

Standard model
System with Ducted indoor units

Model name				MMY-UP4321FT9P-UL			MMY-UP4561FT9P-UL			MMY-UP4801FT9P-UL			MMY-UP5041FT9P-UL		
Outdoor unit model name			MMY-	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP0961FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP1441FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL	MUP1681FT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V			187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	432			456			480			504		
	Rated capacity (*1)		kBtu/h	412			434			456			480		
	Rated power consumption (*1)(*2)		kW	38.07			40.31			43.04			47.09		
	Rated EER (*1)(*2)		kBtu/kW	10.80			10.80			10.60			10.20		
Heating	Nominal capacity (*1)		kBtu/h	486			513			540			567		
	Rated capacity (*1)		kBtu/h	462			488			514			540		
	Rated power consumption (*1)(*2)		kW	37.95			40.31			42.81			45.18		
	Rated COP (*1)(*2)		kW/kW	3.57			3.55			3.52			3.50		
Starting Current			A	Soft Start			Soft Start			Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	41.8	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	783	532	783	783	783	783	783	783	783	783	783
	Packing		lbs	818	818	560	818	818	818	818	818	818	818	818	818
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Twin	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	13.00 x 1	13.00 x 1	6.75 x 1	13.00 x 1	10.40 x 1	10.40 x 1	13.00 x 1	13.00 x 1	10.40 x 1	13.00 x 1	13.00 x 1	13.00 x 1
Fan unit	Type			PropellerFan			PropellerFan			PropellerFan			PropellerFan		
	Motor output		kW	0.48 x 2	0.48 x 2	0.66 x 1	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2	0.48 x 2
	Air volume		cfm	8476	8476	6357	8476	7981	7981	8476	8476	7981	8476	8476	8476
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	57.4	57.4	36.6	57.4	51.5	51.5	57.4	57.4	51.5	57.4	57.4	57.4
		MOCP (*6)	A	80	80	45	80	60	60	80	80	60	80	80	80
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-1/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2			656.2			656.2		
			m	200.0			200.0			200.0			200.0		
		Real length	ft	590.5			590.5			590.5			590.5		
			m	180.0			180.0			180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135			50～135			50～135		
	Maximum capacity of combined indoor units			583.2			615.6			648.0			680.4		
	Maximum number of indoor units			72			73			74			75		
Sound pressure level		Cooling	dB(A)	67.2			67.8			67.8			67.8		
		Heating	dB(A)	70.5			70.0			71.0			71.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)			-22.0 to 60.0 (-30.0 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Ducted indoor units

Model name				MMY-MUP072H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,60Hz
	Voltage range		V	187-253V	187-253V	187-253V
Cooling	Nominal capacity (*1)		kBtu/h	72	96	120
	Rated capacity (*1)		kBtu/h	69	92	115
	Rated power consumption (*1)(*2)		kW	4.69	6.49	8.27
	Rated EER (*1)(*2)		kBtu/kW	14.70	14.20	13.90
Heating	Nominal capacity (*1)		kBtu/h	81	108	135
	Rated capacity (*1)		kBtu/h	77	103	129
	Rated power consumption (*1)(*2)		kW	4.61	6.31	8.36
	Rated COP (*1)(*2)		kW/kW	4.90	4.78	4.52
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	51.4	51.4
		Depth	In	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	532	783	783
	Packing		lbs	560	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)	Silky shade(Munselll 1Y8.5/0.5)
Compressor	Type			Hemetictwinrotarycompressor	Hemetictriplerotarycompressor	Hemetictriplerotarycompressor
	Motor output		kW	4.54 x 1	5.96 x 1	8.27 x 1
Fan unit	Type			PropellerFan	PropellerFan	PropellerFan
	Motor output		kW	0.43 x 1	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	7240	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321
Heat exchanger				Finnedtube	Finnedtube	Finnedtube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	52.3	53.1
		MOCP (*6)	A	45	60	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing
		Diameter	In	3/4"	7/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	606.9	606.9	606.9
			m	185.0	185.0	185.0
		Real length	ft	541.3	541.3	541.3
			m	165.0	165.0	165.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80～200	80～200	80～200
	Maximum capacity of combined indoor units			144.0	192.0	240.0
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	56.0	61.0	60.0
		Heating	dB(A)	59.0	62.0	63.0
Operation temperature range		Cooling	°FDB	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)	-10.0 to 125.0 (-23.3 to 52.0 ℃)
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)	-30.0 to 60.0 (-34.4 to 15.5 ℃)

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Ducted indoor units

Model name				MMY-UP144H1FT9PUL		MMY-UP192H1FT9PUL		MMY-UP240H1FT9PUL	
Outdoor unit model name			MMY-	MUP072H1FT9PUL	MUP072H1FT9PUL	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz		208-230V,3-Phase,60Hz	
	Voltage range		V	187-253V		187-253V		187-253V	
Cooling	Nominal capacity (*1)		kBtu/h	144		192		240	
	Rated capacity (*1)		kBtu/h	138		184		230	
	Rated power consumption (*1)(*2)		kW	9.12		12.83		16.79	
	Rated EER (*1)(*2)		kBtu/kW	15.10		14.30		13.70	
Heating	Nominal capacity (*1)		kBtu/h	162		216		270	
	Rated capacity (*1)		kBtu/h	154		206		258	
	Rated power consumption (*1)(*2)		kW	9.38		13.51		18.79	
	Rated COP (*1)(*2)		kW/kW	4.81		4.47		4.02	
Starting Current			A	Soft Start		Soft Start		Soft Start	
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	532	532	783	783	783	783
	Packing		lbs	560	560	818	818	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)		Silky shade(Munselll 1Y8.5/0.5)	
Compressor	Type			Twin	Twin	Triple	Triple	Triple	Triple
	Motor output		kW	4.54 x 1	4.54 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan		PropellerFan		PropellerFan	
	Motor output		kW	0.43 x 1	0.43 x 1	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	5721	5721	7240	7240	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	36.6	52.3	52.3	53.1	53.1
		MOCP (*6)	A	45	45	60	60	70	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	7/8"	7/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	639.8		639.8		639.8	
			m	195.0		195.0		195.0	
		Real length	ft	574.1		574.1		574.1	
			m	175.0		175.0		175.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135		50～135		50～135	
	Maximum capacity of combined indoor units			194.4		259.2		324.0	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	59.0		64.0		63.0	
		Heating	dB(A)	62.0		65.0		66.0	
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)		23.0 to 125.0 (-5.0 to 52.0 ℃)	
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)		-30.0 to 60.0 (-34.4 to 15.5 ℃)	

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

High heat model

System with Ducted indoor units

Model name				MMY-UP288H1FT9PUL			MMY-UP360H1FT9PUL		
Outdoor unit model name			MMY-	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP096H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL	MUP120H1FT9PUL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz			208-230V,3-Phase,60Hz		
	Voltage range		V	187-253V			187-253V		
Cooling	Nominal capacity (*1)		kBtu/h	288			360		
	Rated capacity (*1)		kBtu/h	276			342		
	Rated power consumption (*1)(*2)		kW	21.26			26.97		
	Rated EER (*1)(*2)		kBtu/kW	13.00			12.70		
Heating	Nominal capacity (*1)		kBtu/h	324			405		
	Rated capacity (*1)		kBtu/h	308			386		
	Rated power consumption (*1)(*2)		kW	22.61			28.83		
	Rated COP (*1)(*2)		kW/kW	3.99			3.92		
Starting Current			A	Soft Start			Soft Start		
Dimension	Unit	Height	In	66.5	66.5	66.5	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.2	31.2	31.2	31.2	31.2	31.2
	Packing	Height	In	69.6	69.6	69.6	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	783	783	783	783	783	783
	Packing		lbs	818	818	818	818	818	818
Color				Silky shade(Munselll 1Y8.5/0.5)			Silky shade(Munselll 1Y8.5/0.5)		
Compressor	Type			Triple	Triple	Triple	Triple	Triple	Triple
	Motor output		kW	5.96 x 1	5.96 x 1	5.96 x 1	8.27 x 1	8.27 x 1	8.27 x 1
Fan unit	Type			PropellerFan			PropellerFan		
	Motor output		kW	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7240	7240	7240	7416	7416	7416
Maximum external static pressure (*3)			in H_2O	0.321	0.321	0.321	0.321	0.321	0.321
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601	ON:464 OFF601
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	52.3	52.3	52.3	53.1	53.1	53.1
		MOCP (*6)	A	60	60	60	70	70	70
Piping connections	Liquid pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	HP/LP gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	Suction gas pipe	Type		Brazing	Brazing	Brazing	Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	7/8"	1-1/8"	1-1/8"	1-1/8"
Furthest piping Length		Equivalent length	ft	656.2			656.2		
			m	200.0			200.0		
		Real length	ft	590.5			590.5		
			m	180.0			180.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50～135			50～135		
	Maximum capacity of combined indoor units			388.8			486.0		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	65.8			64.8		
		Heating	dB(A)	66.8			67.8		
Operation temperature range		Cooling	°FDB	23.0 to 125.0 (-5.0 to 52.0 ℃)			23.0 to 125.0 (-5.0 to 52.0 ℃)		
		Heating	°FWB	-30.0 to 60.0 (-34.4 to 15.5 ℃)			-30.0 to 60.0 (-34.4 to 15.5 ℃)		

Note

(*1) Rated conditions Cooling : Indoor air temperature 80 F Dry Bulb / 67 F Wet Bulb , Outdoor air tempreture 95 F Dry Bulb.
Heating : Indoor air temperature 70 F Dry Bulb, Outdoor air tempreture 47 F Dry Bulb / 43 F Wet Bulb.
Test conditions are based on AHRI 1230_2021

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) The amount dose not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*5) Discharge temp. sensor / Suction temp. sensor / High-pressure sensor / Low-pressure sensor / PC board fuse

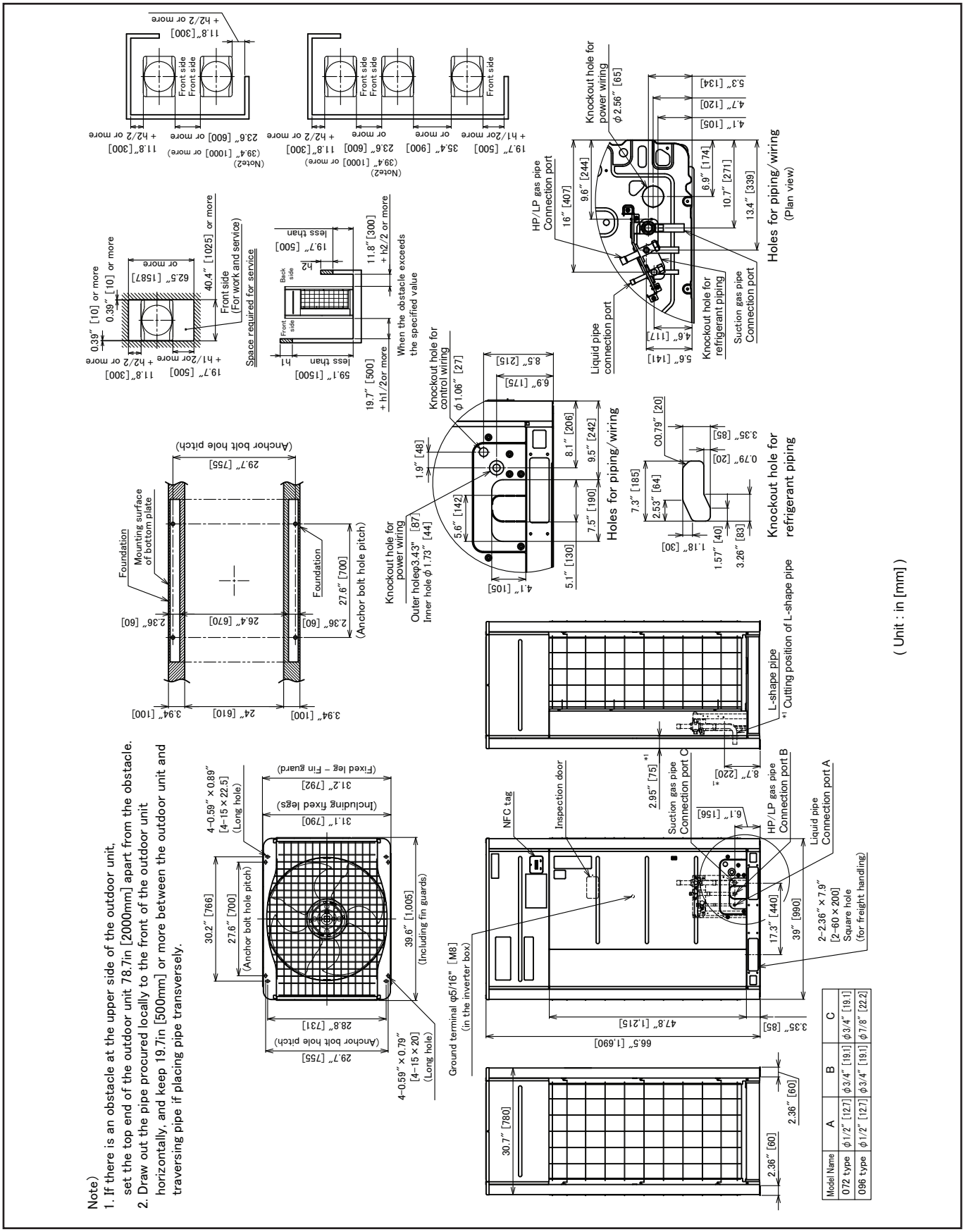
(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) If outdoor temperature is lower than -13°F, please set the total capacity of outdoor unit to 100%.

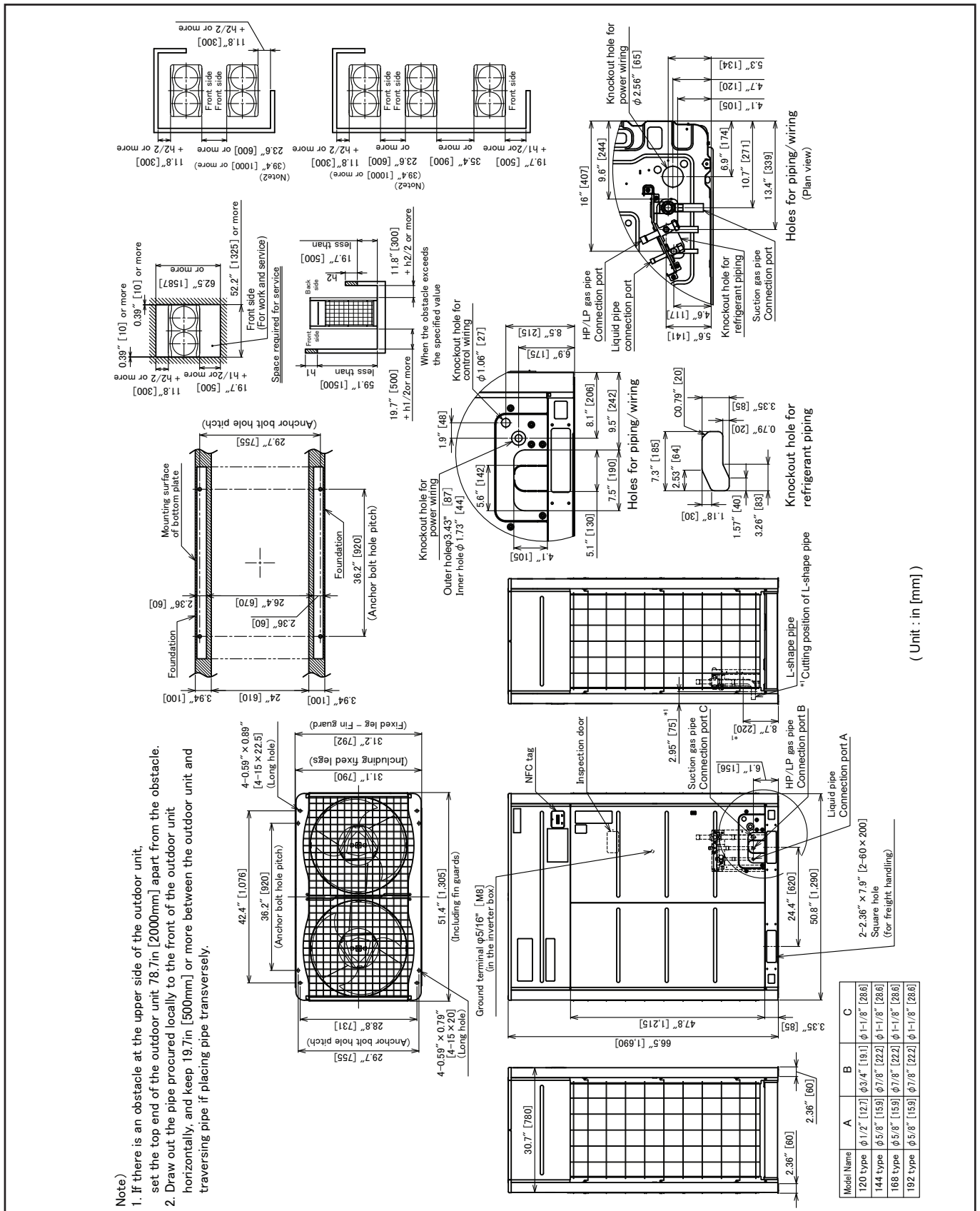
5-2. Dimensional drawing

Single unit

Model : MMY-MUP0721FT6P-UL, MMY-MUP0961FT6P-UL, MMY-MUP0721FT9P-UL, MMY-MUP0961FT9P-UL



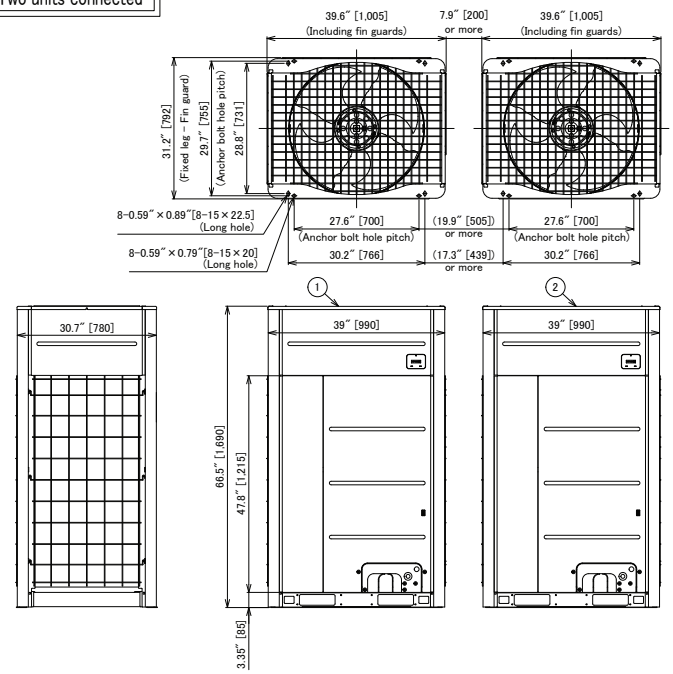
Model : MMY-MUP1201FT6P-UL, MMY-MUP1441FT6P-UL, MMY-MUP1681FT6P-UL, MMY-MUP1921FT6P-UL, MMY-MUP1201FT9P-UL, MMY-MUP1441FT9P-UL, MMY-MUP1681FT9P-UL

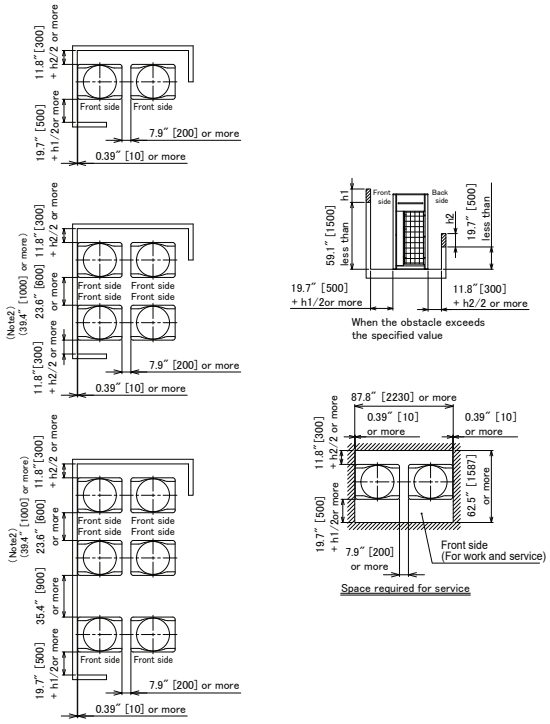


Model Name	A	B	C
120 type	φ1/2" [12.7]	φ3/4" [19.1]	φ1-1/8" [28.6]
144 type	φ5/8" [15.9]	φ7/8" [22.2]	φ1-1/8" [28.6]
168 type	φ5/8" [15.9]	φ7/8" [22.2]	φ1-1/8" [28.6]
192 type	φ5/8" [15.9]	φ7/8" [22.2]	φ1-1/8" [28.6]

Combination

Two units connected



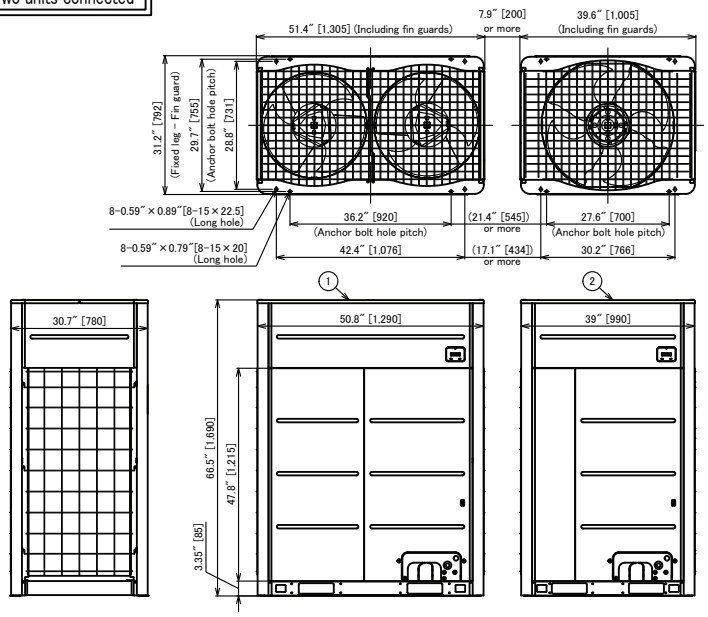


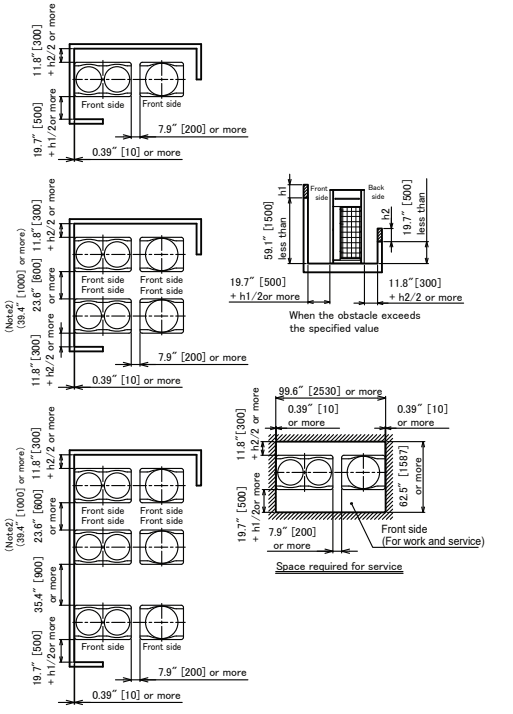
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit②)

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP1921FT6P-UL	MMY-MUP0961FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP1921FT9P-UL	MMY-MUP0961FT9P-UL	MMY-MUP0961FT9P-UL

(Unit : in [mm])

Two units connected





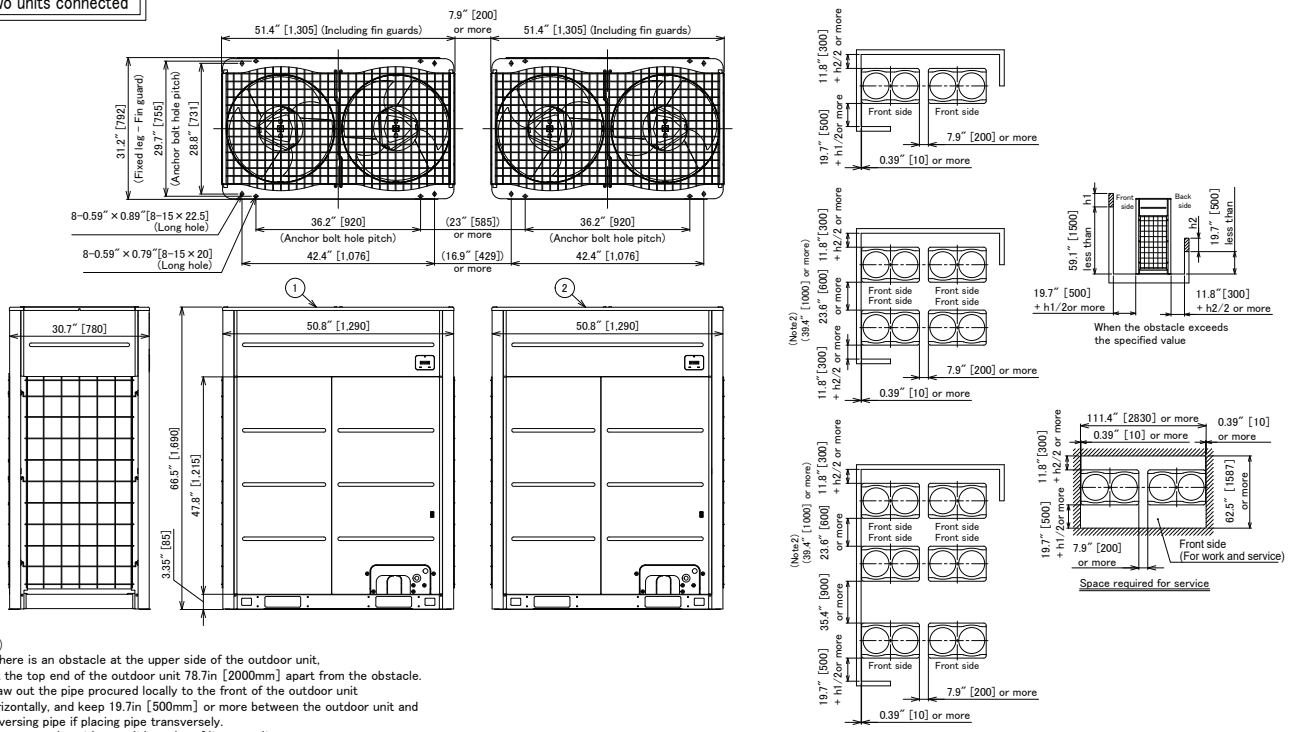
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit②)

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP2161FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0721FT6P-UL
MMY-UP2401FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP2641FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP2161FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0721FT9P-UL
MMY-UP2401FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL
MMY-UP2641FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL

(Unit : in [mm])

Combination

Two units connected

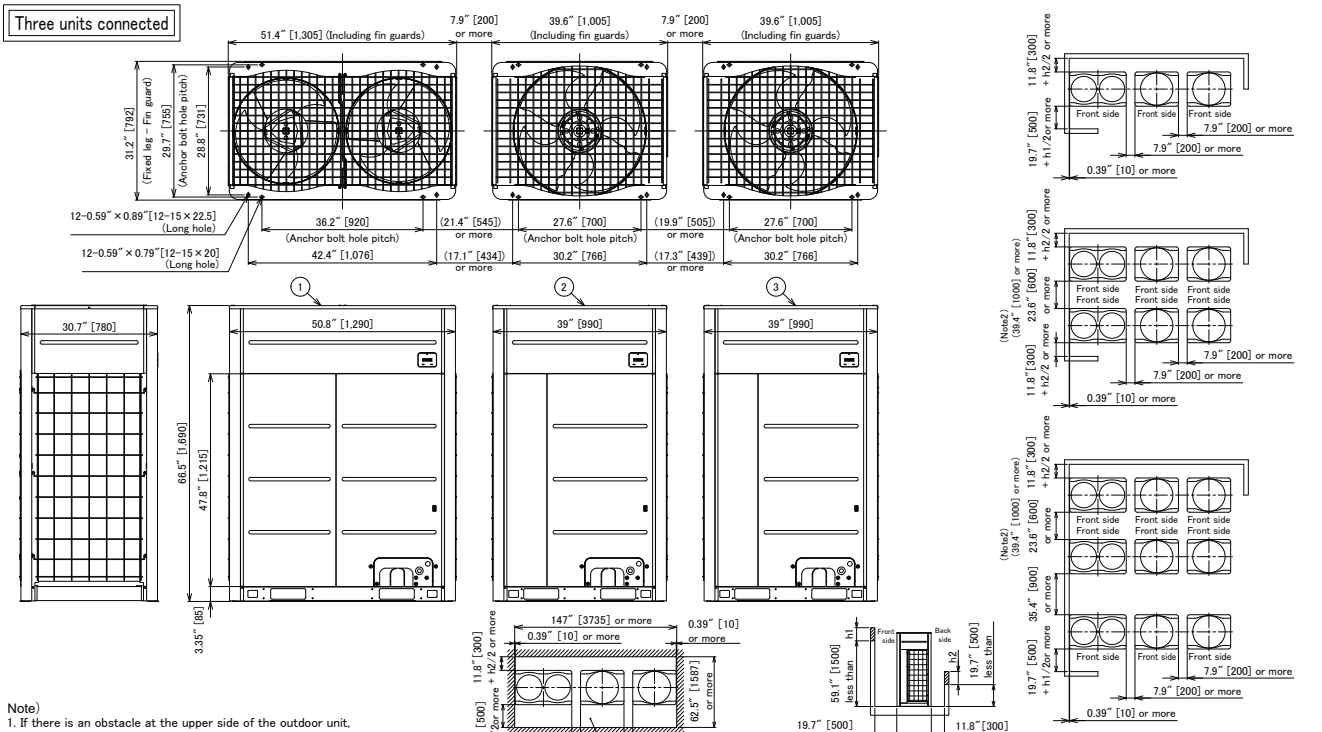


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit②)

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP2881FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL
MMY-UP3121FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL
MMY-UP3361FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL
MMY-UP2881FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL
MMY-UP3121FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL
MMY-UP3361FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL

(Unit : in [mm])

Three units connected



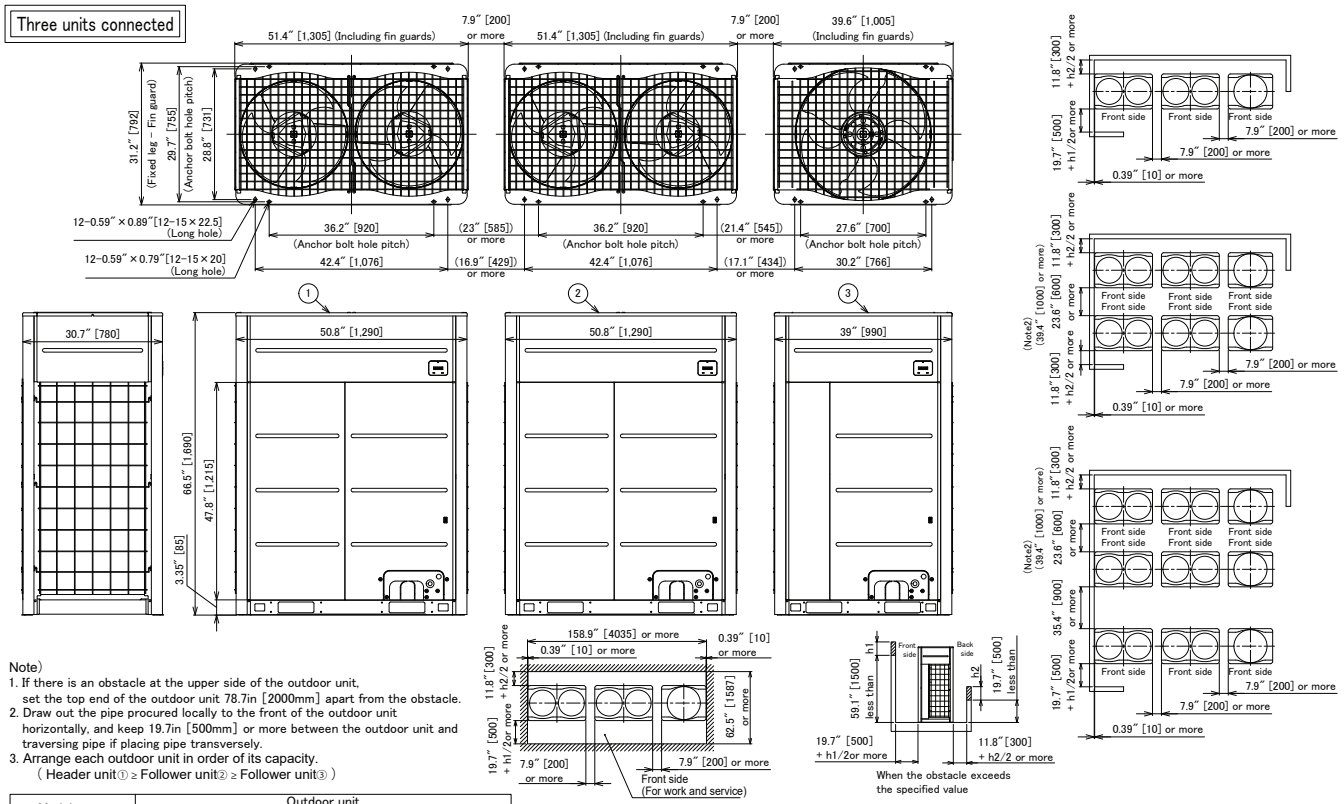
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit ① ≥ Follower unit② ≥ Follower unit③)

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP3601FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP3601FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL	MMY-MUP0961FT9P-UL

(Unit : in [mm])

Combination

Three units connected

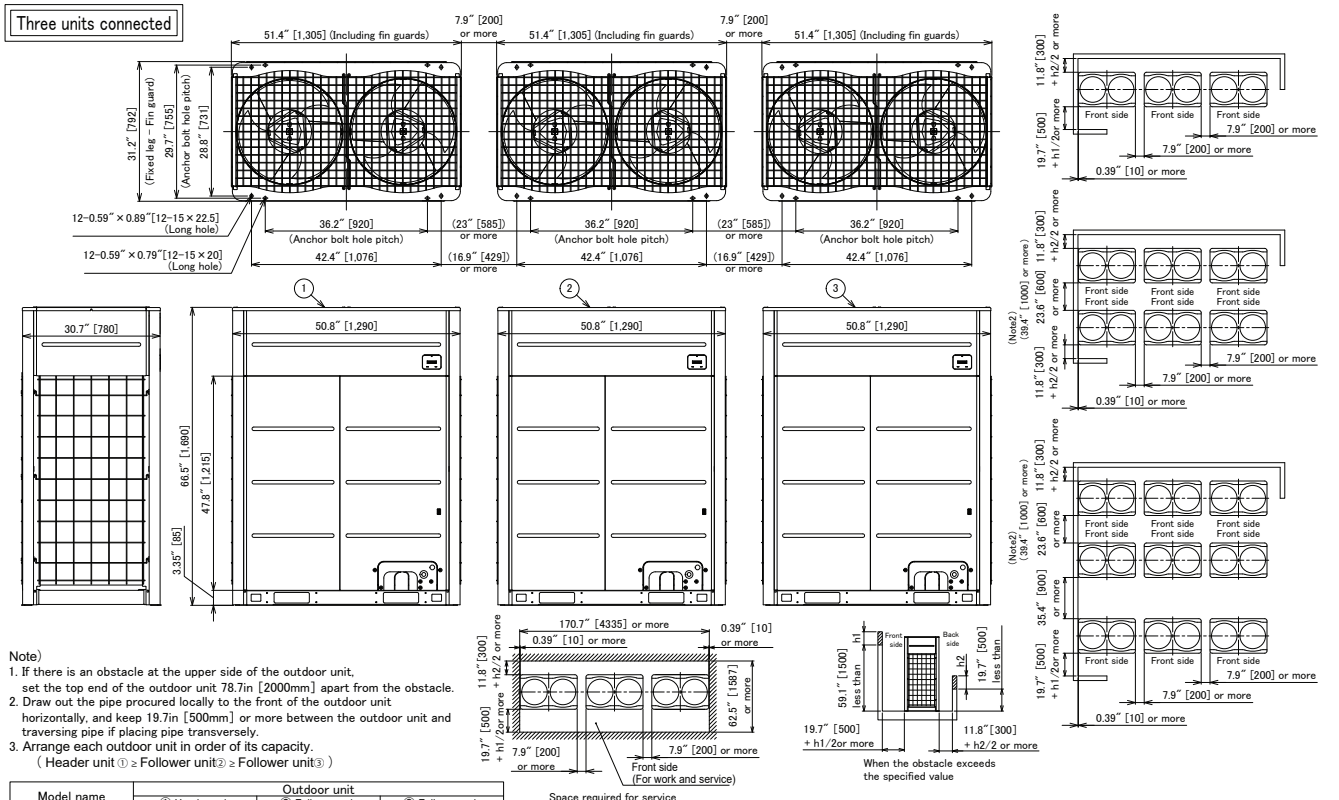


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit② ≥ Follower unit③)

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP3841FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP4081FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP4321FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP0961FT6P-UL
MMY-UP3841FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL
MMY-UP4081FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP0961FT9P-UL
MMY-UP4321FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP0961FT9P-UL

(Unit : in [mm])

Three units connected

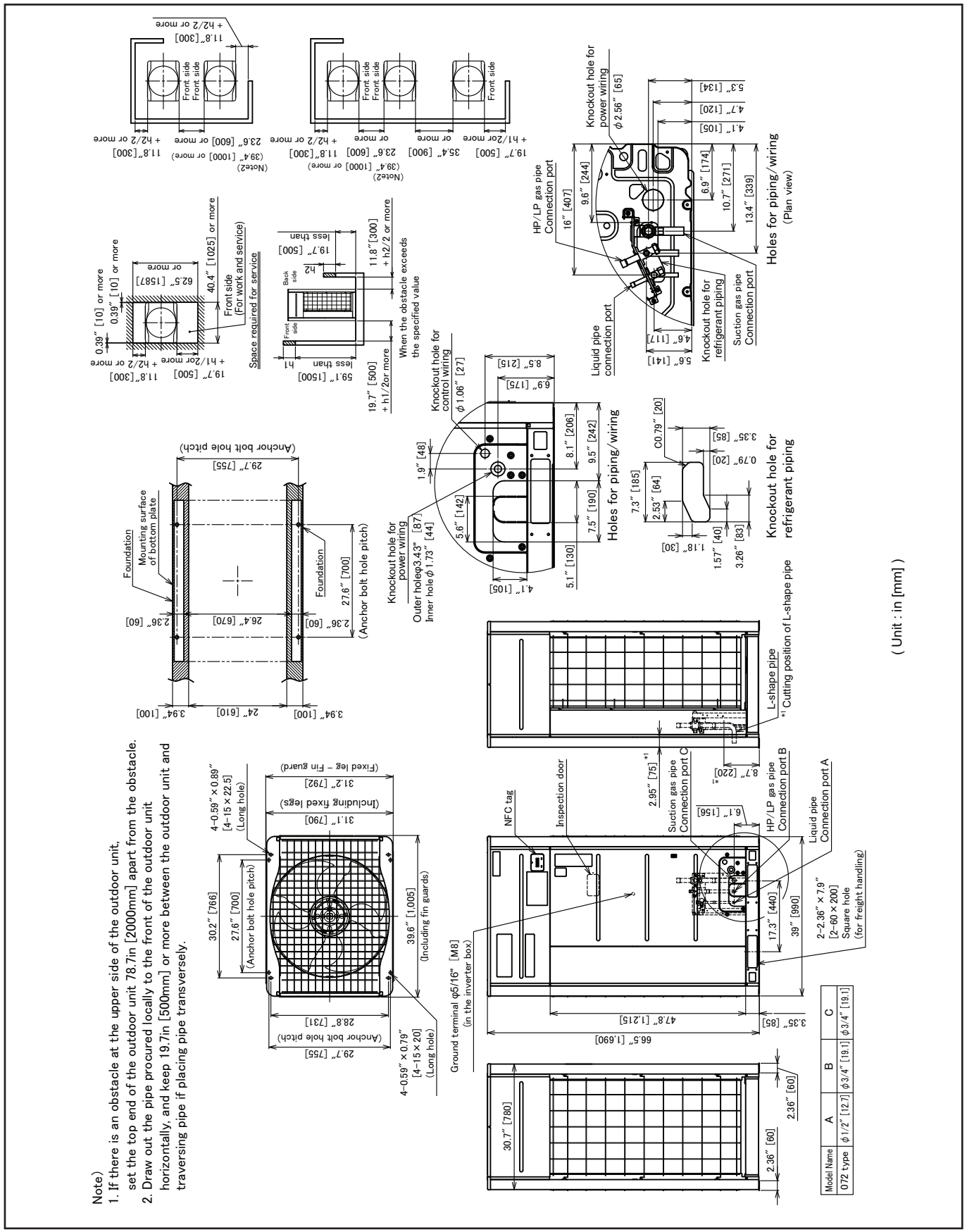


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit② ≥ Follower unit③)

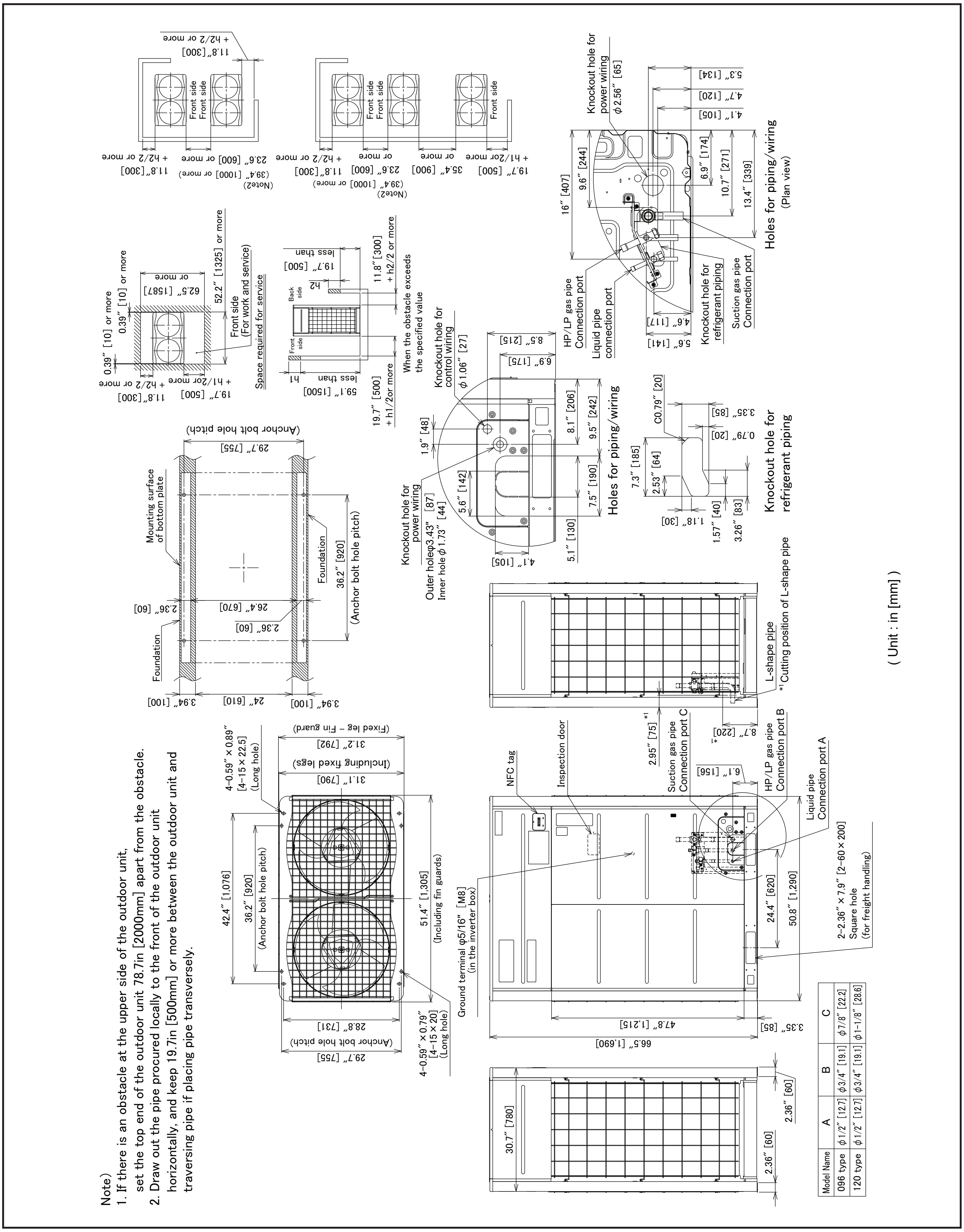
Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP4561FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL	MMY-MUP1441FT6P-UL
MMY-UP4801FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1441FT6P-UL
MMY-UP5041FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL	MMY-MUP1681FT6P-UL
MMY-UP4561FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL	MMY-MUP1441FT9P-UL
MMY-UP4801FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1441FT9P-UL
MMY-UP5041FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL	MMY-MUP1681FT9P-UL

(Unit : in [mm])

Model : MMY-MUP072H1FT6PUL, MMY-MUP072H1FT9PUL

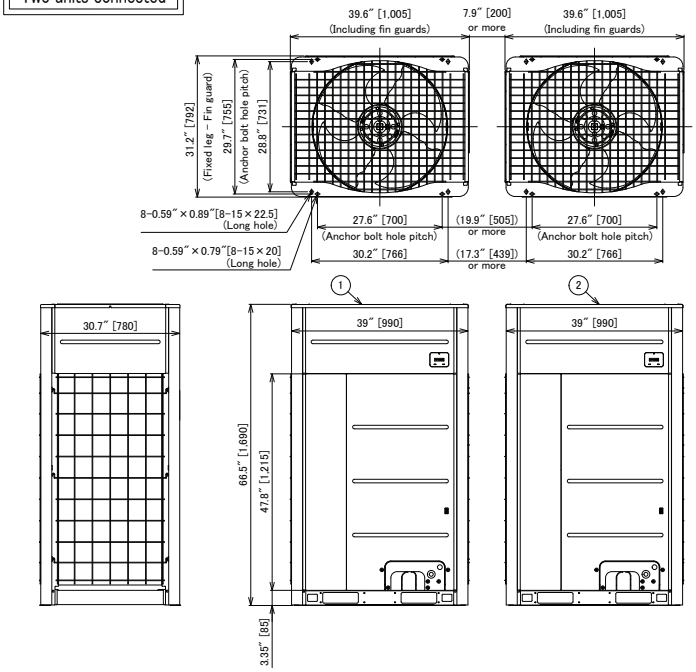


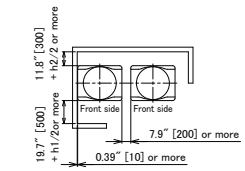
Model : MMY-MUP096H1FT6PUL, MMY-MUP120H1FT6PUL, MMY-MUP096H1FT9PUL, MMY-MUP120H1FT9PUL

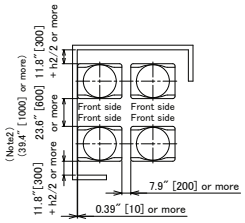


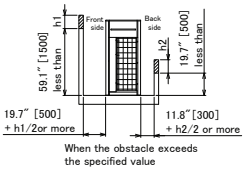
Combination

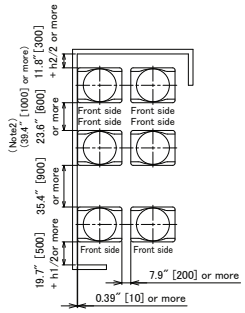
Two units connected

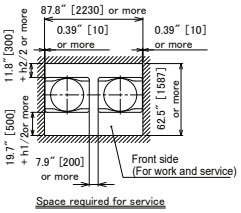










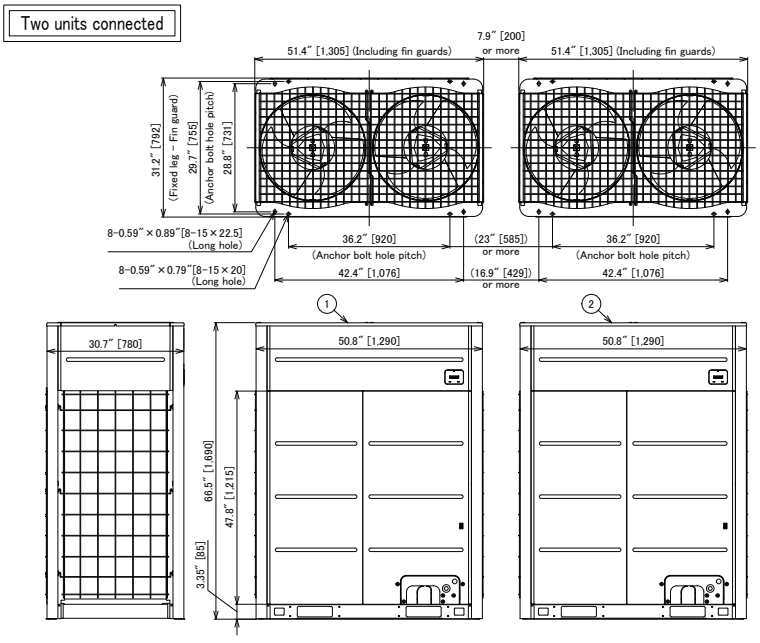


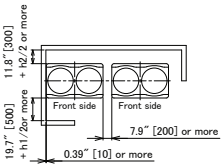
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit②)

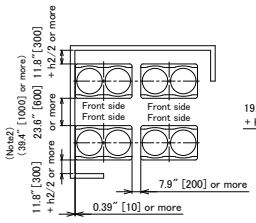
Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP144H1FT6PUL	MMY-MUP072H1FT6PUL	MMY-MUP072H1FT6PUL
MMY-UP144H1FT9PUL	MMY-MUP072H1FT9PUL	MMY-MUP072H1FT9PUL

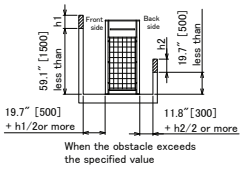
(Unit : in [mm])

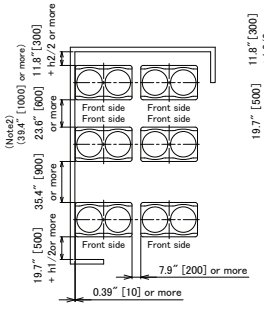
Two units connected

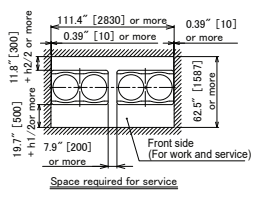










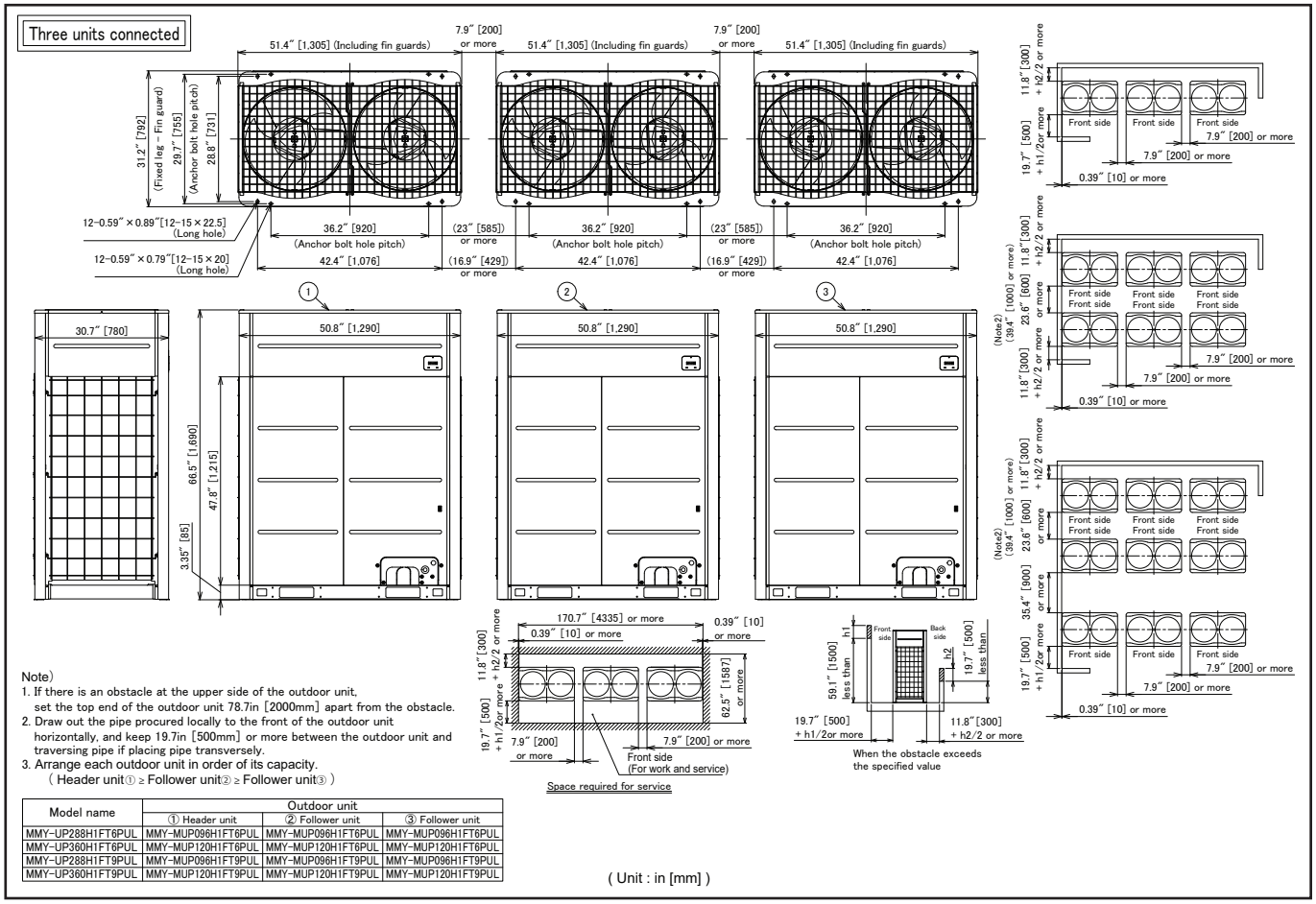


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit②)

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP192H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL
MMY-UP240H1FT6PUL	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL
MMY-UP192H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL
MMY-UP240H1FT9PUL	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL

(Unit : in [mm])

Combination

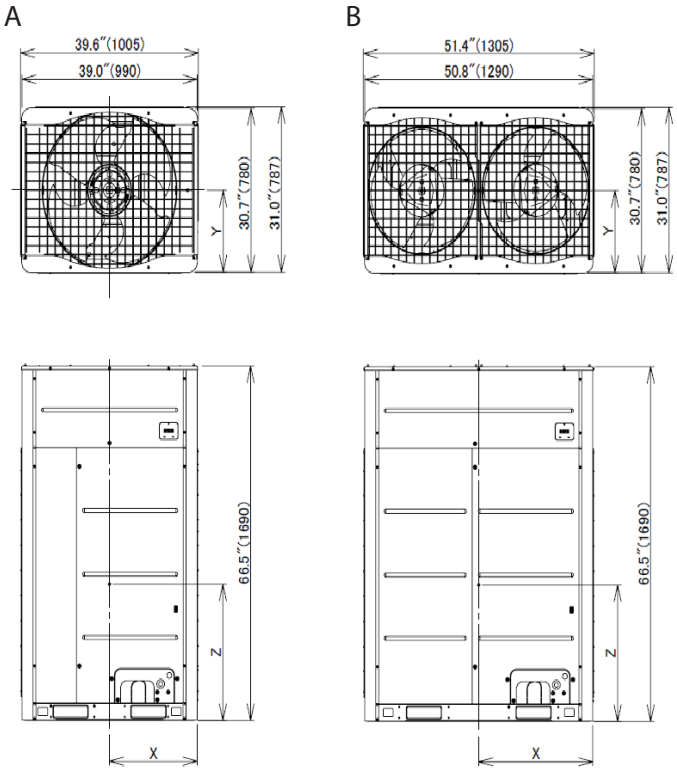


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in [2000mm] apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in [500mm] or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.
(Header unit① ≥ Follower unit② ≥ Follower unit③)

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP288H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL	MMY-MUP096H1FT6PUL
MMY-UP360H1FT6PUL	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL	MMY-MUP120H1FT6PUL
MMY-UP288H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL	MMY-MUP096H1FT9PUL
MMY-UP360H1FT9PUL	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL	MMY-MUP120H1FT9PUL

(Unit : in [mm])

5-3. Center of gravity



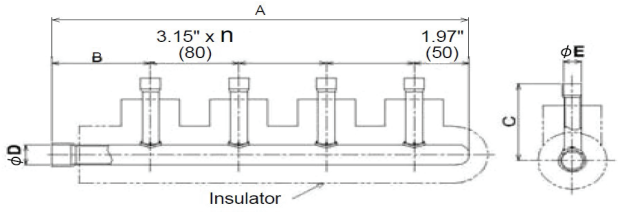
Type	Model			X	Y	Z	Weight
				in. (mm)	in. (mm)	in. (mm)	lbs (kg)
A	Standard	6ton	MMY-MUP0721FT6P-UL	21.3 (540)	16.1 (410)	45.7 (1160)	552 (250)
	Standard	8ton	MMY-MUP0961FT6P-UL				
	High heat	6ton	MMY-MUP072H1FT6PUL				
B	Standard	10ton	MMY-MUP1201FT6P-UL	25.3 (642)	12.6 (320)	50.6 (1284)	686 (311)
	Standard	12ton	MMY-MUP1441FT6P-UL	25.8 (655)	12.4 (315)	30.9 (785)	776 (352)
	Standard	14ton	MMY-MUP1681FT6P-UL				
	High heat	8ton	MMY-MUP096H1FT6PUL				
	High heat	10ton	MMY-MUP120H1FT6PUL				
	Standard	16ton	MMY-MUP1921FT6P-UL	24.6 (625)	15.6 (395)	41.7 (1060)	829 (376)
A	Standard	6ton	MMY-MUP0721FT9P-UL	20.5 (520)	12.0 (305)	40.6 (1030)	532 (241)
	Standard	8ton	MMY-MUP0961FT9P-UL				
	High heat	6ton	MMY-MUP072H1FT9PUL				
B	Standard	10ton	MMY-MUP1201FT9P-UL	24.8 (630)	15.9 (405)	31.1 (790)	675 (306)
	Standard	12ton	MMY-MUP1441FT9P-UL	24.6 (625)	15.4 (390)	35.2 (895)	783 (355)
	Standard	14ton	MMY-MUP1681FT9P-UL				
	High heat	8ton	MMY-MUP096H1FT9PUL				
	High heat	10ton	MMY-MUP120H1FT9PUL				

5-4. Branch header / branch joint

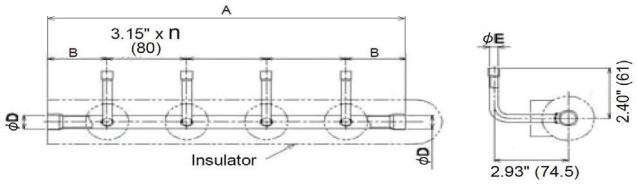
• **Branch header**

RBM-HY1043FUL, HY1083FUL, HY2043FUL, HY2083FUL (For 3 piping)

Suction gas side, HP/LP gas side



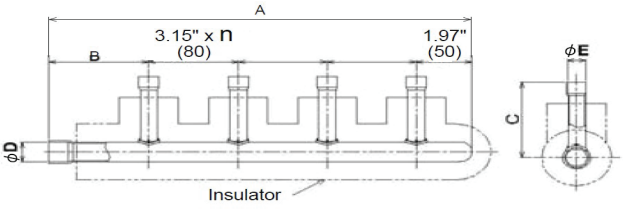
Liquid side



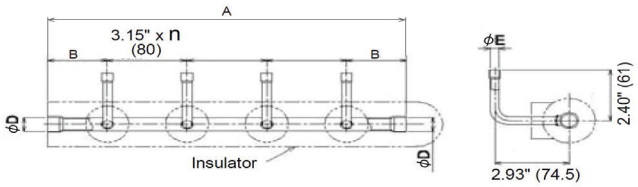
Model		A	B	C	øD	øE	n	Accessory socket Q'ty	Accessory sealed pipe Qty
RBM-HY1043FUL	Suction gas side	15.0" (380)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	3	(6) × 3 , (9) × 4 , (14) × 1 , (18) × 1 , (70) × 1	ø5/8" (15.9) × 1
	HP/LP gas side	15.0" (380)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	3	(6) × 4 , (9) × 4 , (18) × 1 , (85) × 1	ø5/8" (15.9) × 3
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	(1) × 4 , (6) × 1 , (9) ×1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 1
RBM-HY1083FUL	Suction gas side	27.6" (700)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	7	(6) × 7 , (9) × 8 , (14) × 1 , (18) × 1 , (70) × 1	ø5/8" (15.9) × 3
	HP/LP gas side	27.6" (700)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	7	(6) × 8 , (9) × 8 , (18) × 1 , (85) × 1	ø5/8" (15.9) × 7
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	(1) × 8 , (6) × 1 , (9) ×1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 3
RBM-HY2043FUL	Suction gas side	15.2" (385.5)	3.76" (95.5)	3.52" (89.3)	1-1/4" (31.8)	5/8" (15.9)	3	(6) × 2 , (9) × 2 , (27) × 1 , (59) × 1	ø5/8" (15.9) × 1
	HP/LP gas side	15.0" (380)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	3	(9) × 4 , (70) × 1	ø5/8" (15.9) × 3
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	(1) × 2 , (9) × 1 , (51) × 1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 1
RBM-HY2083FUL	Suction gas side	27.8" (705.5)	3.76" (95.5)	3.52" (89.3)	1-1/4" (31.8)	5/8" (15.9)	7	(6) × 7 , (9) × 7 , (27) × 1 , (59) × 1	ø5/8" (15.9) × 3
	HP/LP gas side	27.6" (700)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	7	(9) × 8 , (70) × 1	ø5/8" (15.9) × 7
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	(1) × 7 , (9) × 1 , (51) × 1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 3

RBM-HY1043UL, HY1083UL, HY2043UL, HY2083UL (For 2 piping)

Gas side



Liquid side

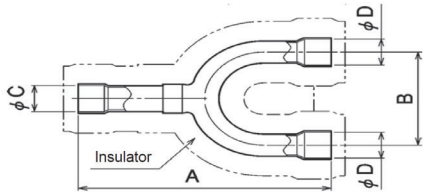


Model		A	B	C	øD	øE	n	Accessory socket Q'ty	Accessory sealed pipe Qty
RBM-HY1043UL	Gas side	15.0" (380)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	3	(6) × 4 , (9) × 4 , (14) × 1 , (18) × 1 , (70) × 1	ø5/8" (15.9) × 1
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	(1) × 4 , (6) × 1 , (9) ×1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 1
RBM-HY1083UL	Gas side	27.6" (700)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	7	(6) × 8 , (9) × 8 , (14) × 1 , (18) × 1 , (70) × 1	ø5/8" (15.9) × 3
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	(1) × 8 , (6) × 1 , (9) ×1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 3
RBM-HY2043UL	Gas side	15.2" (385.5)	3.76" (95.5)	3.52" (89.3)	1-1/4" (31.8)	5/8" (15.9)	3	(6) × 2 , (9) × 2 , (27) × 1 , (59) × 1	ø5/8" (15.9) × 1
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	(1) × 2 , (9) × 1 , (51) × 1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 1
RBM-HY2083UL	Gas side	27.8" (705.5)	3.76" (95.5)	3.52" (89.3)	1-1/4" (31.8)	5/8" (15.9)	7	(6) × 7 , (9) × 7 , (27) × 1 , (59) × 1	ø5/8" (15.9) × 3
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	(1) × 7 , (9) × 1 , (51) × 1	ø5/8" (15.9) × 1 , ø3/8" (9.5) × 3

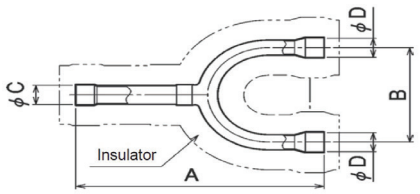
• **Y-shape branching joint**

RBM-BY55FUL, BY105FUL, BY205FUL, BY305FUL (For 3 piping)

Suction gas side, HP/LP gas side



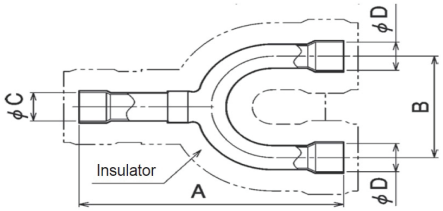
Liquid side



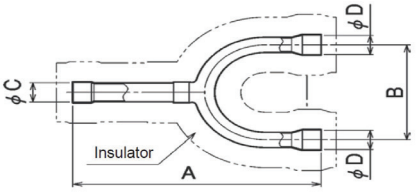
Model		A	B	øC	øD	Accessory socket Q'ty	Accessory sealed pipe Qty
RBM-BY55FUL	Suction gas side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(91) × 2	
	HP/LP gas side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(9) × 3	ø1/2" (12.7) × 1
	Liquid side	5.12" (130)	2.76" (70)	3/8" (9.5)	3/8" (9.5)	(1) × 2	
RBM-BY105FUL	Suction gas side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	(14) × 2 , (18) × 1 , (70) × 2 , (91) × 1	
	HP/LP gas side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	(18) × 1, (93) × 2	ø1/2" (12.7) × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(6) × 1 , (9) × 1 , (91) × 1 , (92) × 1	
RBM-BY205FUL	Suction gas side	7.87" (200)	3.15" (80)	1-1/4" (31.8)	1-1/8" (28.6)	(16) × 1 , (27) × 1 , (43) × 2 , (58) × 1 , (59) × 1, (91) × 1	
	HP/LP gas side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	(18) × 2 , (70) × 2 , (93) × 1	ø1/2" (12.7) × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(9) × 2 , (51) × 2, (92) × 1	
RBM-BY305FUL	Suction gas side	8.66"(220)	3.15" (80)	11-1/2"(38.1)	1-1/2"(38.1)	(43) × 1 , (61) × 3 , (62) × 2 , (71) × 2, (75) × 1, (91) × 1	
	HP/LP gas side	7.87" (200)	3.15" (80)	1-1/4" (31.8)	1-1/8" (28.6)	(27) × 1 , (43) × 2 , (58) × 1 , (59) × 1 , (93) × 1	ø1/2" (12.7) × 1
	Liquid side	6.69"(170)	3.15"(80)	7/8"(22.2)	7/8"(22.2)	(14) × 1, (18) × 1 ,(92) × 1, (94) × 1	

RBM-BY55UL, BY105UL, BY205UL, BY305UL (For 2 piping)

Gas side



Liquid side

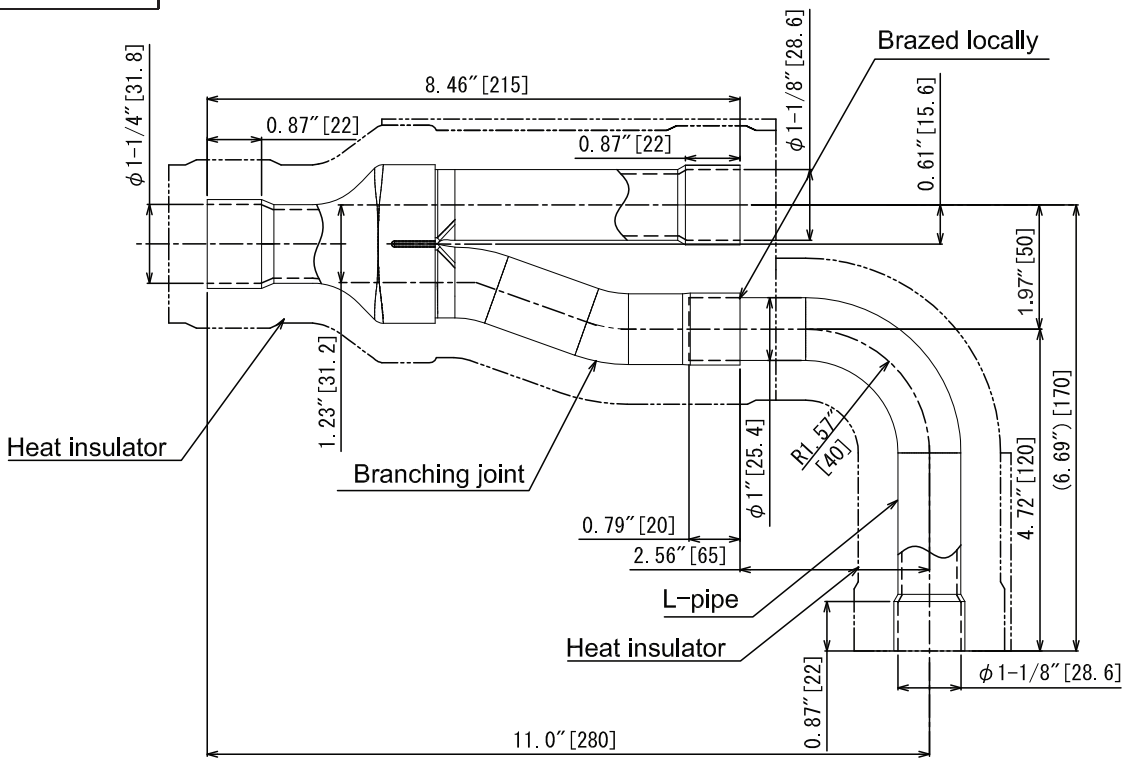


Model		A	B	øC	øD	Accessory socket Q'ty
RBM-BY55UL	Gas side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(9) × 1 , (51) × 2 , (91) × 2
	Liquid side	5.12" (130)	2.76" (70)	3/8" (9.5)	3/8" (9.5)	(1) × 2
RBM-BY105UL	Gas side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	(14) × 2 , (18) × 1 , (70) × 2 , (91) × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(6) × 1 , (9) × 1 , (91) × 1 , (92) × 1
RBM-BY205UL	Gas side	7.87" (200)	3.15" (80)	1-1/4" (31.8)	1-1/8" (28.6)	(16) × 1 , (27) × 1 , (43) × 2 , (58) × 1 , (59) × 1, (91) × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	(9) × 2 , (51) × 2, (92) × 1
RBM-BY305UL	Gas side	8.66"(220)	3.15" (80)	11-1/2"(38.1)	1-1/2"(38.1)	(43) × 1 , (61) × 3 , (62) × 2 , (71) × 2, (75) × 1, (91) × 1
	Liquid side	6.69"(170)	3.15"(80)	7/8"(22.2)	7/8"(22.2)	(92) × 1, (94) × 3

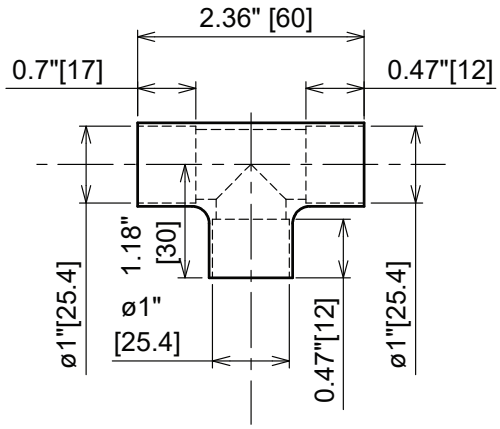
• Branching joint for connection of outdoor units (for 3 piping)
RBM-BT14FUL

Suction Gas side

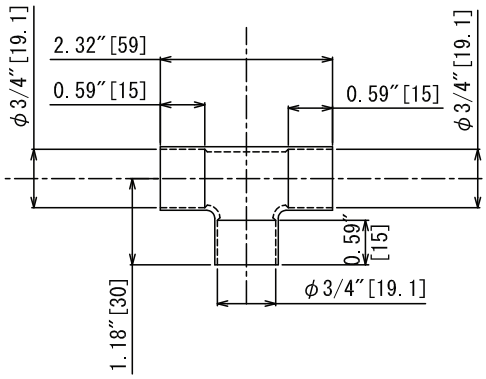
Unit: in (mm)



HP/LP gas side



Liquid side

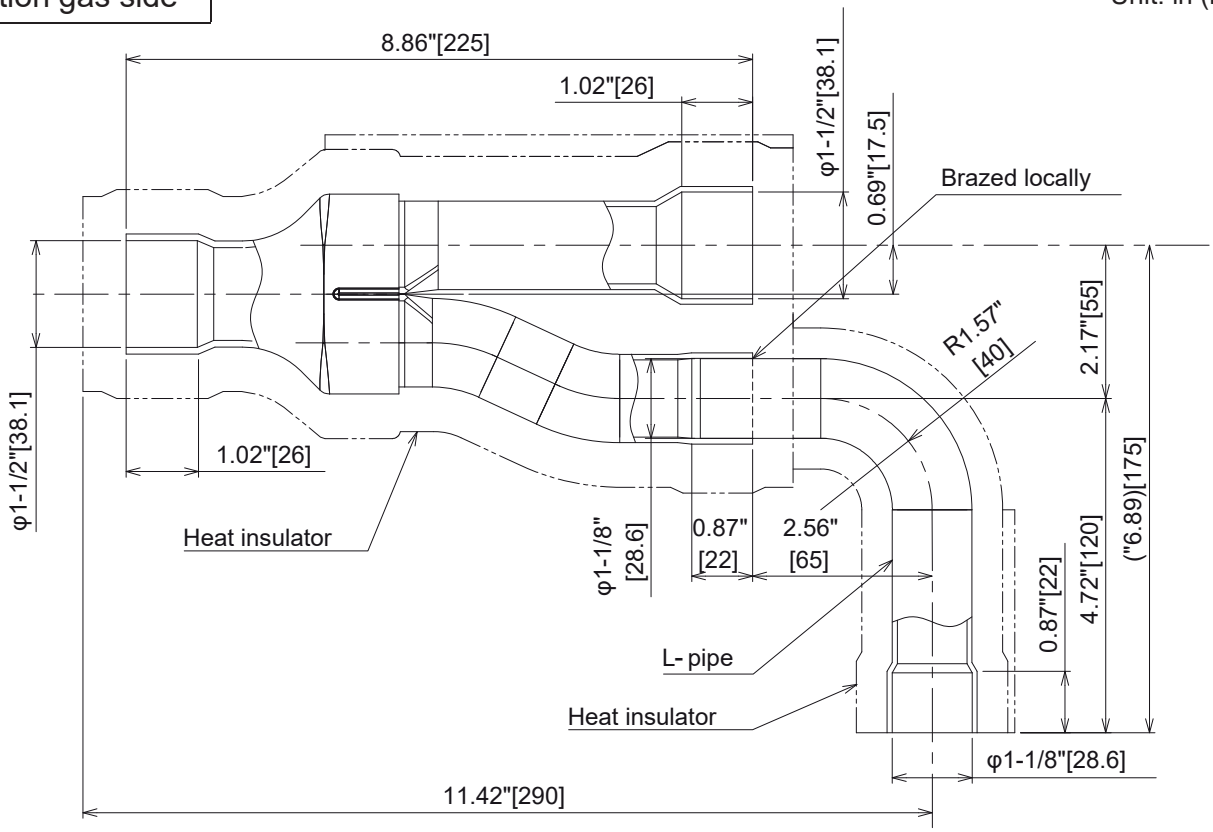


Model		Accessory socket Qty
RBM-BT14FUL	Suction gas side	⑳ x 2, ㉗ x 1, ㊸ x 2, ㊾ x 1
	HP/LP gas side	⑲ x 2, ㉒ x 1, ㊼ x 1
	Liquid side	⑩ x 3, ⑬ x 2

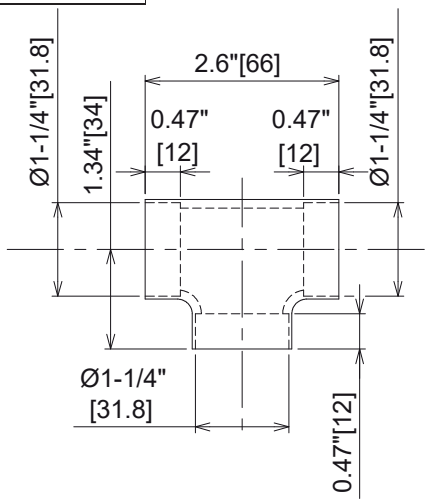
RBM-BT24FUL

Suction gas side

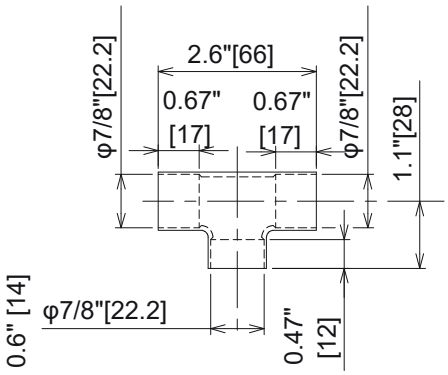
Unit: in (mm)



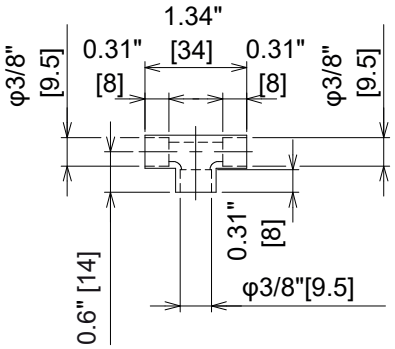
HP/LP gas side



Liquid side



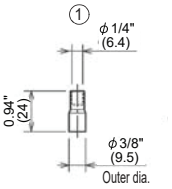
Balance pipe side

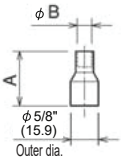


Model		Accessory socket Qty
RBM-BT24FUL	Suction gas side	㊸ × 1, ㊶ × 2, ㊷ × 1, ㊼ × 1
	HP/LP gas side	㉑ × 1, ㉓ × 2, ㉗ × 2, ㊾ × 1
	Liquid side	⑭ × 2, ⑱ × 2, ㊺ × 1

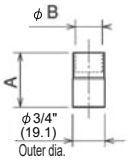
• Accessory socket

Unit:in(mm)

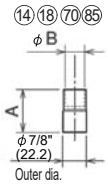
① 

⑥⑨⑤1 

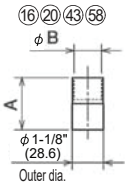
	A	ϕB
⑥	1.26" (32)	3/8" (9.5)
⑨	1.10" (28)	1/2" (12.7)
⑤1	1.48" (37.5)	3/4" (19.1)

⑩⑬ 

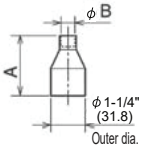
	A	B
⑩	1.42" (36)	1/2" (12.7)
⑬	1.30" (33)	5/8" (15.9)

⑭⑱⑦⓪⑧⑤ 

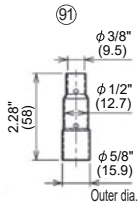
	A	ϕB
⑭	1.57" (40)	5/8" (15.9)
⑱	1.57" (40)	3/4" (19.1)
⑦⓪	2.13" (54)	1-1/8" (28.6)
⑧⑤	1.61" (41)	1/2" (12.7)

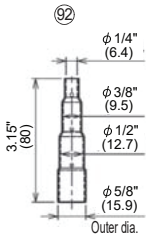
⑯⑳④③⑤⑧ 

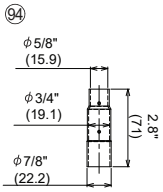
	A	ϕB
⑯	1.97" (50)	5/8" (15.9)
⑳	2.05" (52)	3/4" (19.1)
④③	1.97" (50)	7/8" (22.2)
⑤⑧	2.44" (62)	1-3/8" (34.9)

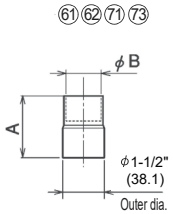
②⑦⑤⑨ 

	A	B
②⑦	1.93" (49)	1-1/8" (28.6)
⑤⑨	2.32" (59)	1-3/8" (34.9)

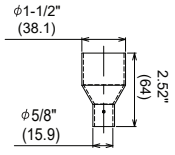
⑨1 

⑨2 

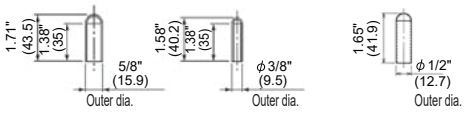
⑨④ 

⑥⑥②⑦①⑦③ 

	A	øB
⑥①	2.17" (55)	1-3/8" (34.9)
⑥②	2.6" (66)	1-5/8" (41.3)
⑦①	2.6" (66)	1-1/8" (28.6)
⑦③	2.6" (66)	7/8" (22.2)

⑦⑤ 

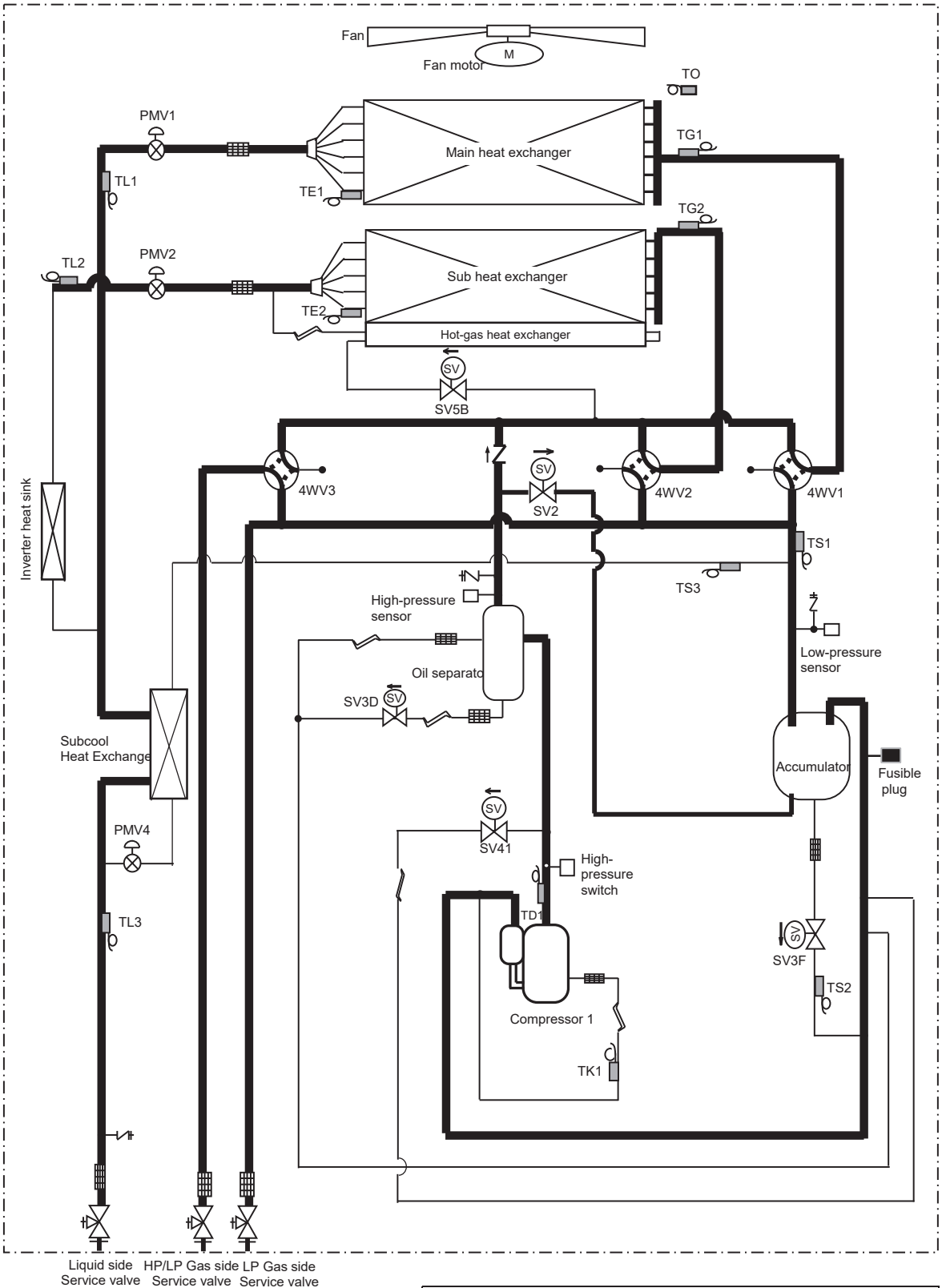
Sealed pipe



5-5. Refrigerant cycle diagram

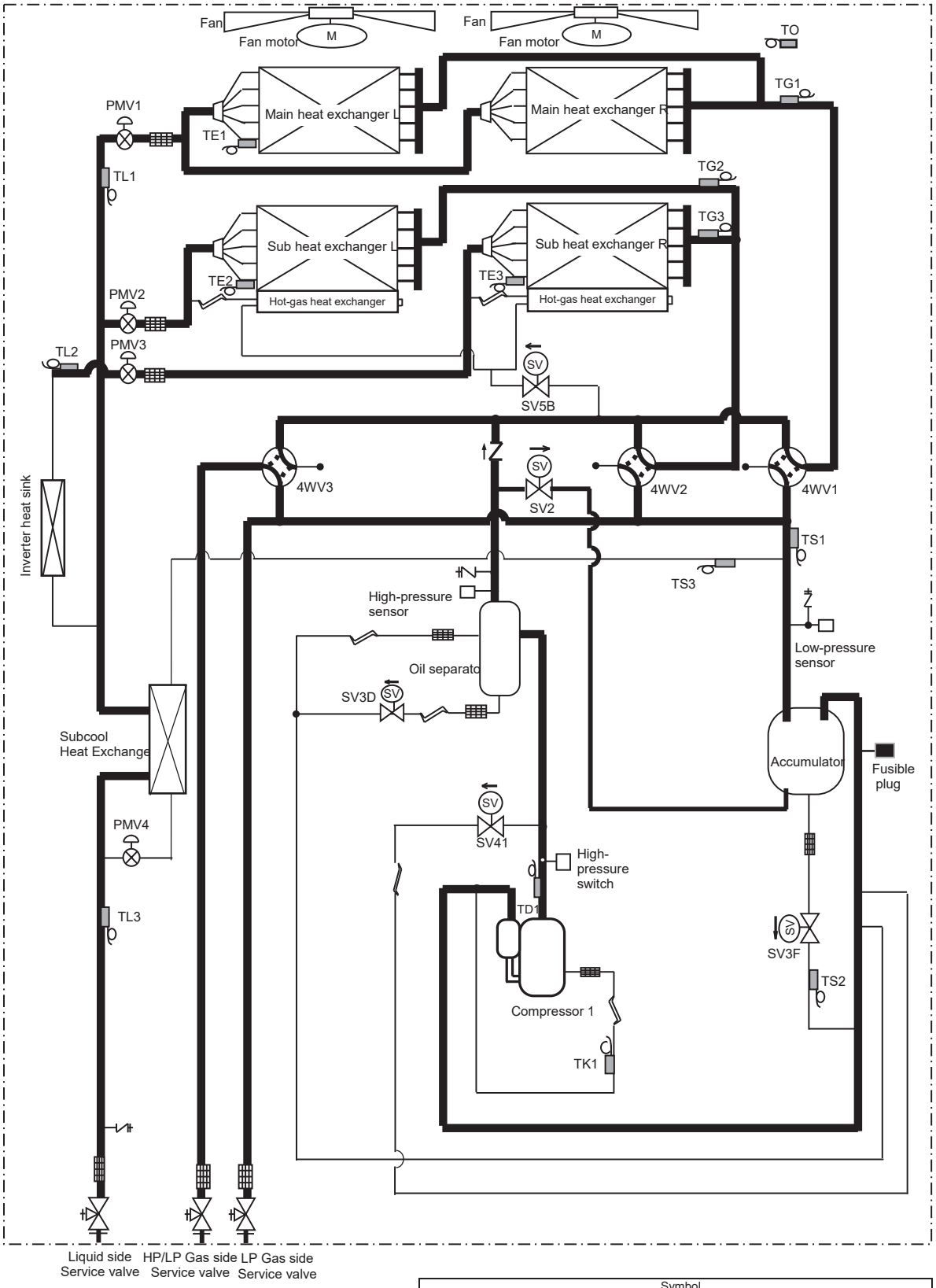
Standard model : MMY-MUP0721FT*P-UL, MUP-0961FT*P-UL

High heat model: MMY-MUP072H1FT*PUL



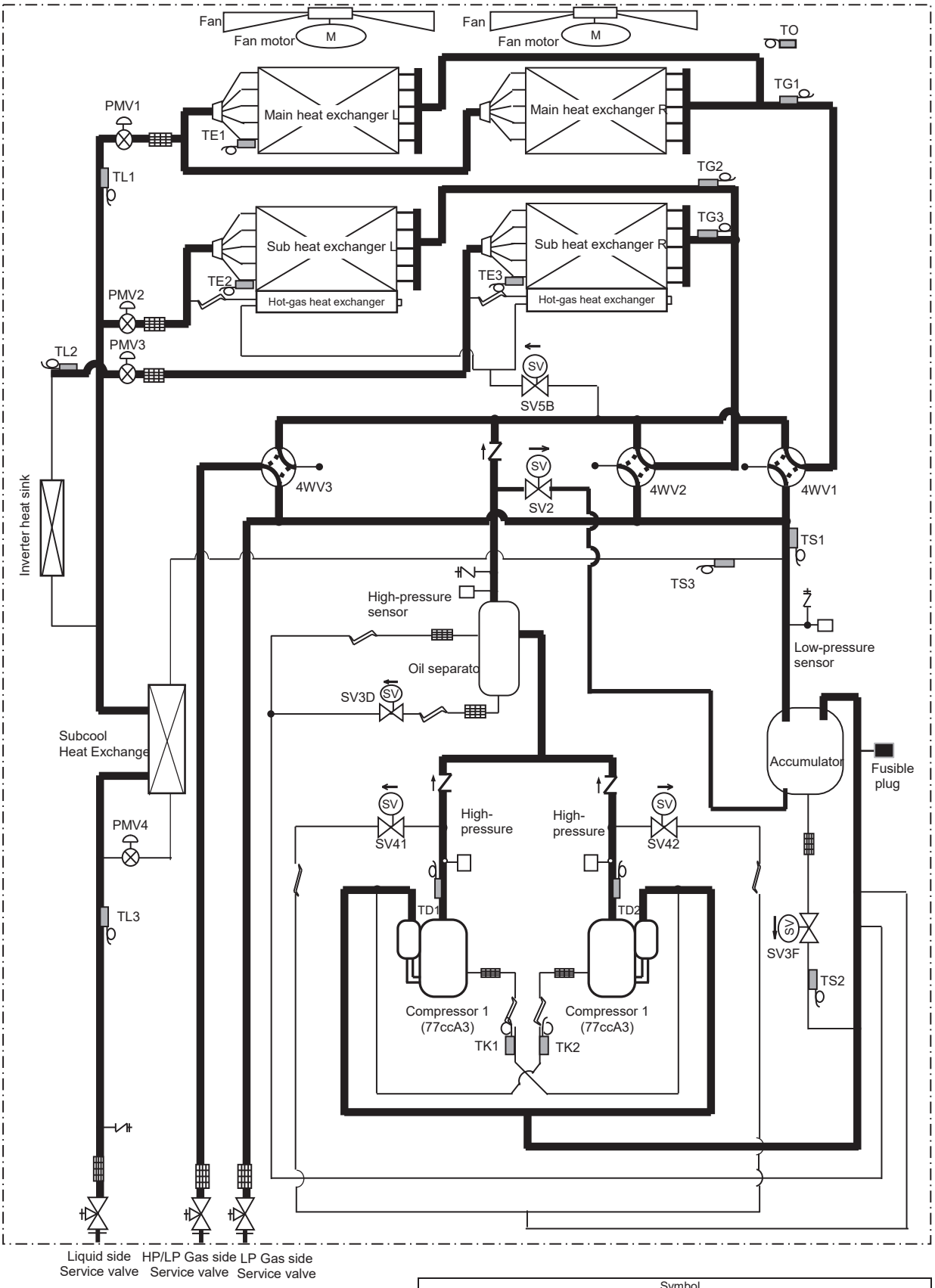
Symbol						
Solenoid valve	Capillary tube	Check valve	Check joint	Strainer	Temperature sensor	Distributor

Standard model : MMY-MUP1201FT*P-UL, MUP1441FT*P-UL, MUP1681FT*P-UL
High heat model: MMY-MUP096H1FT*PUL, MUP120H1FT*PUL



Symbol						
Solenoid valve	Capillary tube	Check valve	Check joint	Strainer	Temperature sensor	Distributor

Standard model : MMY-MUP1921FT6P-UL



Symbol						
Solenoid valve	Capillary tube	Check valve	Check joint	Strainer	Temperature sensor	Distributor

5-6. Wiring diagram

Model :MMY-MUP0721FT6P-UL, MMY-MUP0961FT6P-UL, MMY-MUP072H1FT6PUL

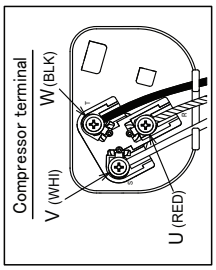
P.C.Board

Symbol	Parts name
MCC-1729	Inverter P.C.Board (Compressor)
MCC-1734	Inverter P.C.Board (Fan)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1,4WV2,4WV3	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734)	Fuse (Fan)
F01	6.3A 750VDC
(MCC-1729)	Fuse (Compressor)
F01,F02	40A 500VAC
(MCC-1747)	Fuse (Interface)
F01,F02	T6.3A 250VAC
(MCC-1749)	Fuse (Noise filter)
F01,F02,F03	T6.3A 250VAC
(MCC-1749)	Fuse (Noise filter)
F11,F12	T3.15A 600VAC
FM	Fan motor
HEATER1	Compressor case heater
L-CM	Reactor for compressor
Mg-CTT	Magnet contactor
NFC	NFC tag
PD	Pressure sensor (High)
PMV1	Pulse motor valve (Main)
PMV2	Pulse motor valve (Sub)
PMV4	Pulse motor valve (Sub cool)
PS	Pressure sensor (Low)
RB	Rush current protect resistor
SV2,SV3D,SV3F SV41,SV5B	2-way valve coil
SW01,SW02,SW03	Rotary switch
SW04,SW05,SW06	Push button switch
SW100,SW101,SW102 SW103,SW104,SW105 SW106,SW800	Dip switch
TB1	Terminal block(Power supply)
TD1	Discharge temp. sensor
TE1,TE2	Heat exchange temp. sensor
TG1,TG2	Gas temp. sensor
TK1	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TR	Trans
TS1,TS2,TS3	Suction temp. sensor

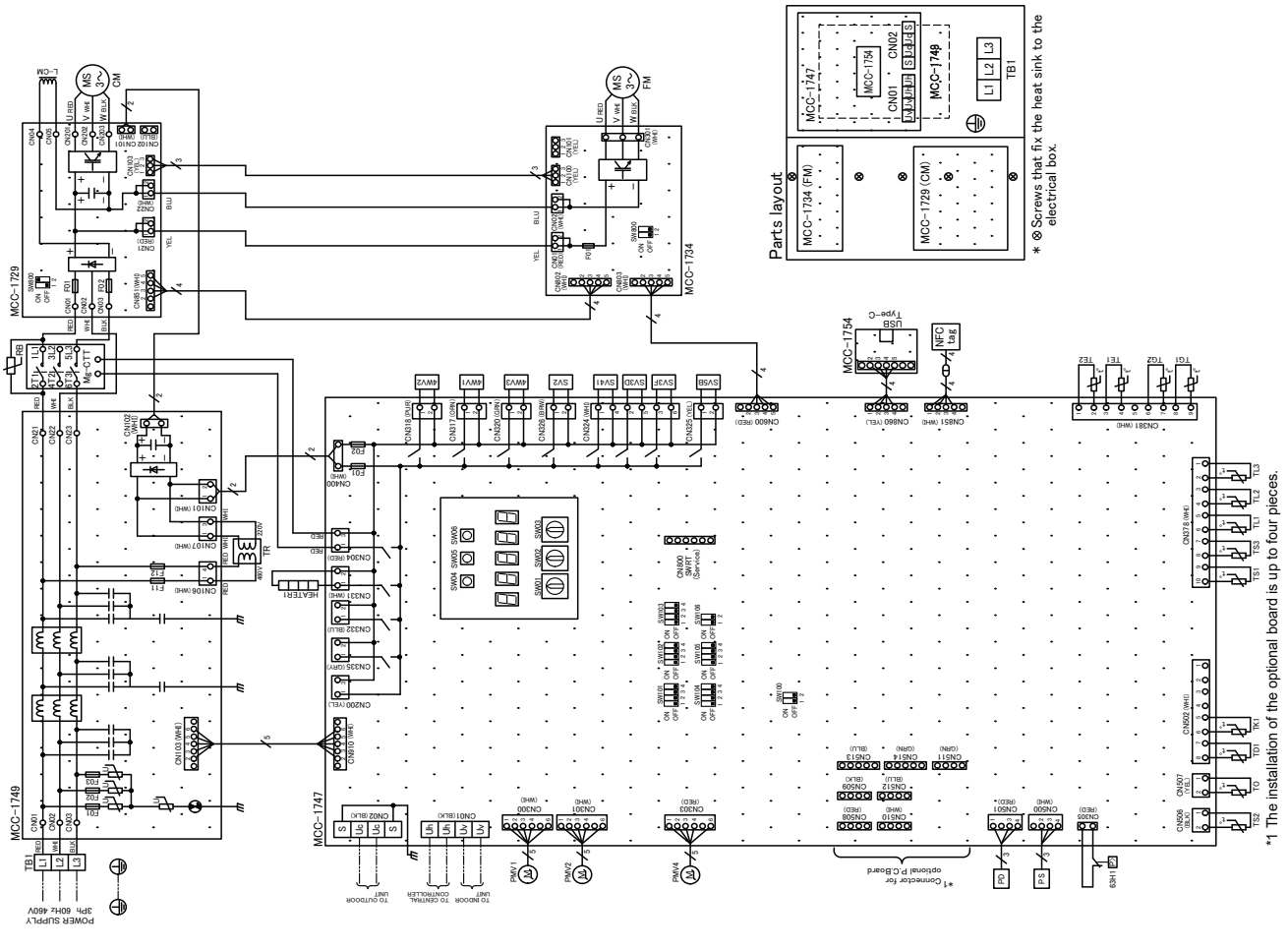
Temperature sensor color I/D

Symbol	Connector No.	Connector color	Wire mark (Sensor holder) color (wire color)
TD1	CN502	WHI	YEL (BLK)
TE1	CN381	WHI	– (BLU)
TE2	CN381	WHI	– (RED)
TG1	CN381	WHI	GRN (BLK)
TG2	CN381	WHI	GRN・YEL (BLK)
TK1	CN502	WHI	– (BLK)
TL1	CN378	WHI	WHI (YEL)
TL2	CN378	WHI	– (GRY)
TL3	CN378	WHI	GRN (RED)
TO	CN507	YEL	– (BLK)
TS1	CN378	WHI	YEL (BLU)
TS2	CN506	BLK	– (GRY)
TS3	CN378	WHI	WHI・YEL (BLK)



----	Field wiring
⏚	Protective earth
□□	Terminal block
—○—	Terminal
⊡⊡	Connector
⊡⊡	P.C.Board

Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
GRY:GRAY
ORN:ORANGE
GRN:GREEN
PUR:PURPLE
BRW:BROWN



Model :MMY-MUP1201FT6P-UL, MMY-MUP1441FT6P-UL, MMY-MUP1681FT6P-UL, MMY-MUP096H1FT6PUL, MMY-MUP120H1FT6PUL

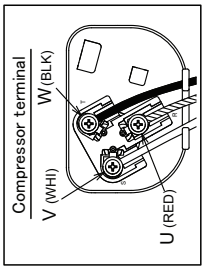
P.C.Board

Symbol	Parts name
MCC−1729	Inverter P.C.Board (Compressor)
MCC−1734	Inverter P.C.Board (Fan)
MCC−1747	Interface Control P.C.Board
MCC−1749	Noise filter P.C.Board
MCC−1754	USB isolate P.C.Board

Symbol	Parts name
4WV1,4WV2,4WV3	4−way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC−1734)	Fuse (Fan)
F01	6.3A 750VDC
(MCC−1729)	Fuse (Compressor)
F01,F02	120 type 40A 500VAC 144,168,096H,120H type 63A 600VAC
(MCC−1747)	Fuse (Interface)
F01,F02	T6.3A 250VAC
(MCC−1749)	Fuse (Noise filter)
F01,F02,F03	T6.3A 250VAC
(MCC−1749)	Fuse (Noise filter)
F11,F12	T3.15A 600VAC
FM1,FM2	Fan motor
HEATER1	Compressor case heater
L−CM	Reactor for compressor
Mg−CTT	Magnet contactor
NFC	NFC tag
PD	Pressure sensor (High)
PMV1	Pulse motor valve (Main)
PMV2	Pulse motor valve (Sub(L))
PMV3	Pulse motor valve (Sub(R))
PMV4	Pulse motor valve (Sub cool)
PS	Pressure sensor (Low)
RB	Rush current protect resistor
SV2,SV3D,SV3F SV41,SV5B	2−way valve coil
SW01,SW02,SW03	Rotary switch
SW04,SW05,SW06	Push button switch
SW100,SW101,SW102 SW103,SW104,SW105 SW106,SW800	Dip switch
TB1	Terminal block(Power supply)
TD1	Discharge temp. sensor
TE1,TE2,TE3	Heat exchange temp. sensor
TG1,TG2,TG3	Gas temp. sensor
TK1	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TR	Trans
TS1,TS2,TS3	Suction temp. sensor

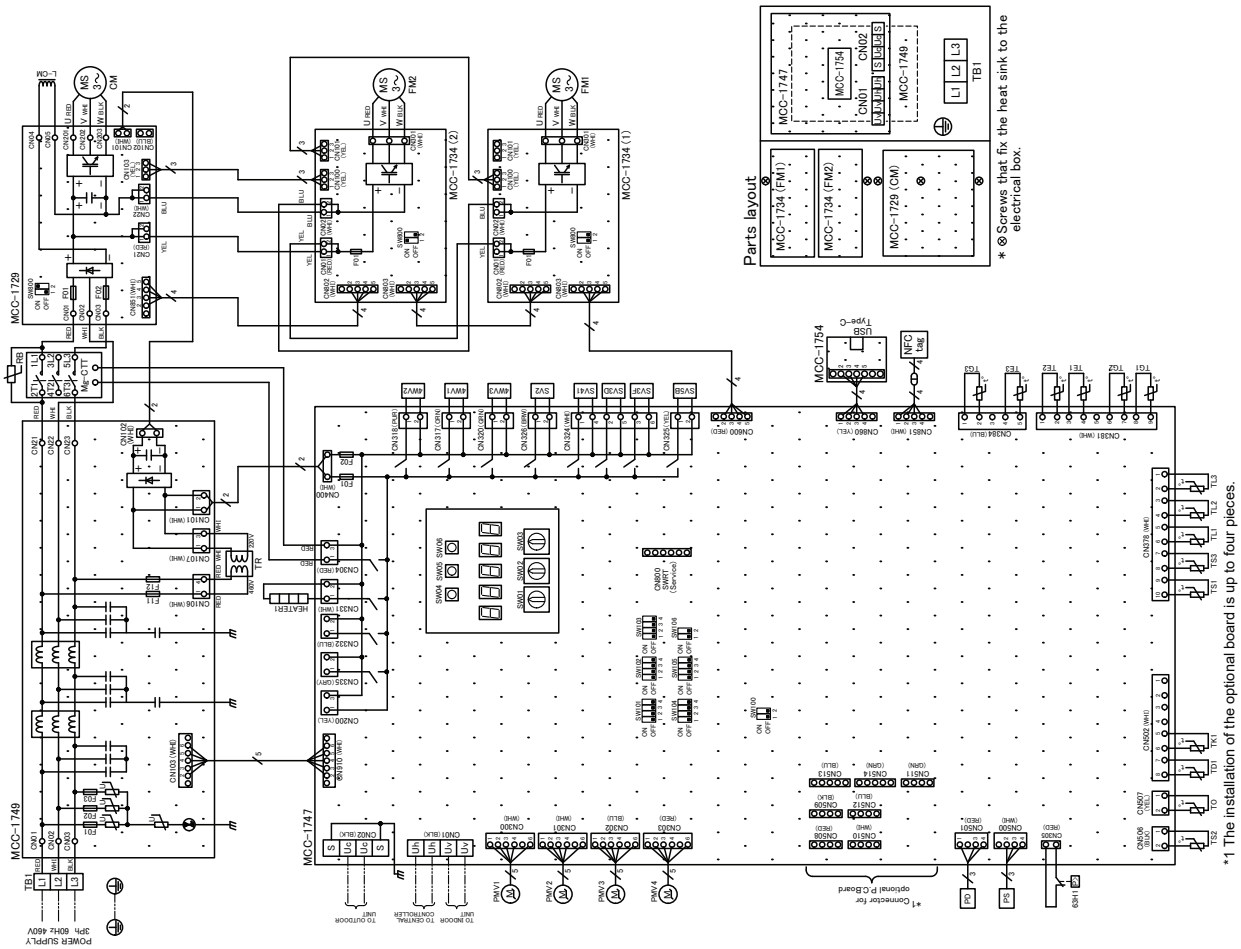
Temperature sensor color I/D

Symbol	Connector No.	Connector color	Wire mark (Sensor holder) color (wire color)
TD1	CN502	WHI	YEL (BLK)
TE1	CN381	WHI	− (BLU)
TE2	CN381	WHI	− (RED)
TE3	CN384	BLU	− (YEL)
TG1	CN381	WHI	GRN (BLK)
TG2	CN381	WHI	GRN･YEL (BLK)
TG3	CN384	BLU	WHI (BLK)
TK1	CN502	WHI	− (BLK)
TL1	CN378	WHI	WHI (YEL)
TL2	CN378	WHI	− (GRY)
TL3	CN378	WHI	GRN (RED)
TO	CN507	YEL	− (BLK)
TS1	CN378	WHI	YEL (BLU)
TS2	CN506	BLK	− (GRY)
TS3	CN378	WHI	WHI･YEL (BLK)

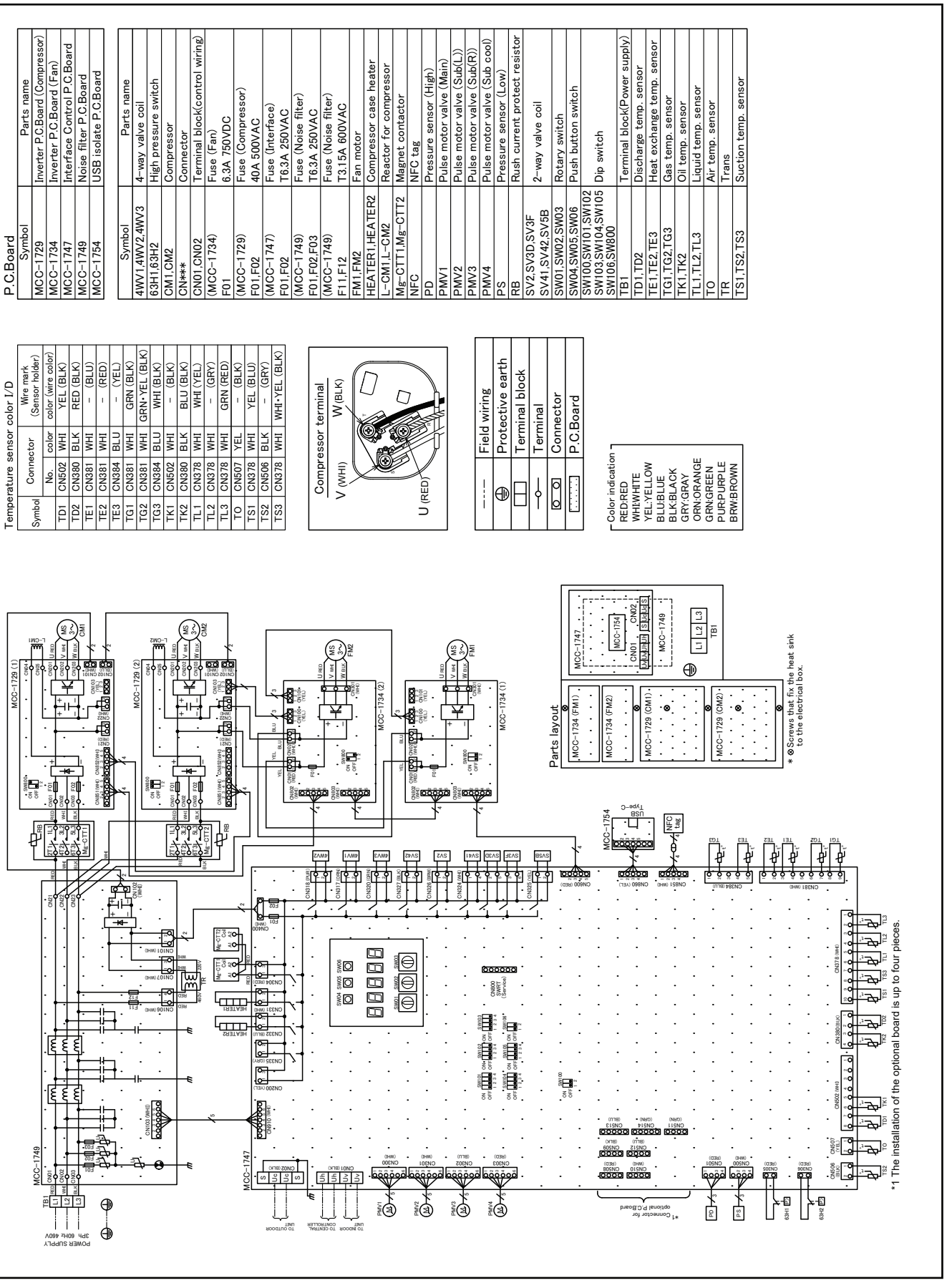


-----	Field wiring
⏚	Protective earth
□□	Terminal block
—○—	Terminal
⊙⊙	Connector
⬚	P.C.Board

Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
GRY:GRAY
ORN:ORANGE
GRN:GREEN
PUR:PURPLE
BRW:BROWN



Model : MMY-MUP1921FT6P-UL



Model : MMY-MUP0721FT9P-UL, MMY-MUP0961FT9P-UL, MMY-MUP072H1FT9PUL

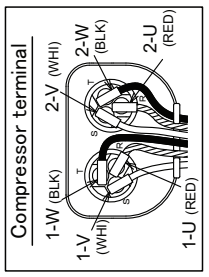
P.C.Board

Symbol	Parts name
MCC-1711	Capacitor P.C.Board
MCC-1734	Inverter P.C.Board (Fan)
MCC-1746	Inverter P.C.Board (Compressor)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1,4WV2,4WV3	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN**	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734) F02	Fuse (Fan) 12.5A 450VDC
(MCC-1747) F01,F02	Fuse (Interface) T6.3A 250VAC
(MCC-1749) F01,F02,F03	Fuse (Noise filter) T6.3A 250VAC
(MCC-1749) F11,F12	Fuse (Noise filter) 70A 250VAC
FM	Fan motor
HEATER1	Compressor case heater
L-CM	Reactor for compressor
Mg-CTT	Magnet contactor
NFC	NFC tag
PD	Pressure sensor (High)
PMV1	Pulse motor valve (Main)
PMV2	Pulse motor valve (Sub)
PMV4	Pulse motor valve (Sub cool)
PS	Pressure sensor (Low)
RB	Rush current protect resistor
SV2,SV3D,SV3F SV41,SV5B	2-way valve coil
SW01,SW02,SW03	Rotary switch
SW04,SW05,SW06	Push button switch
SW100,SW101,SW102 SW103,SW104,SW105 SW106,SW800	Dip switch
TB1	Terminal block(Power supply)
TD1	Discharge temp. sensor
TE1,TE2	Heat exchange temp. sensor
TG1,TG2	Gas temp. sensor
TK1	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TS1,TS2,TS3	Suction temp. sensor

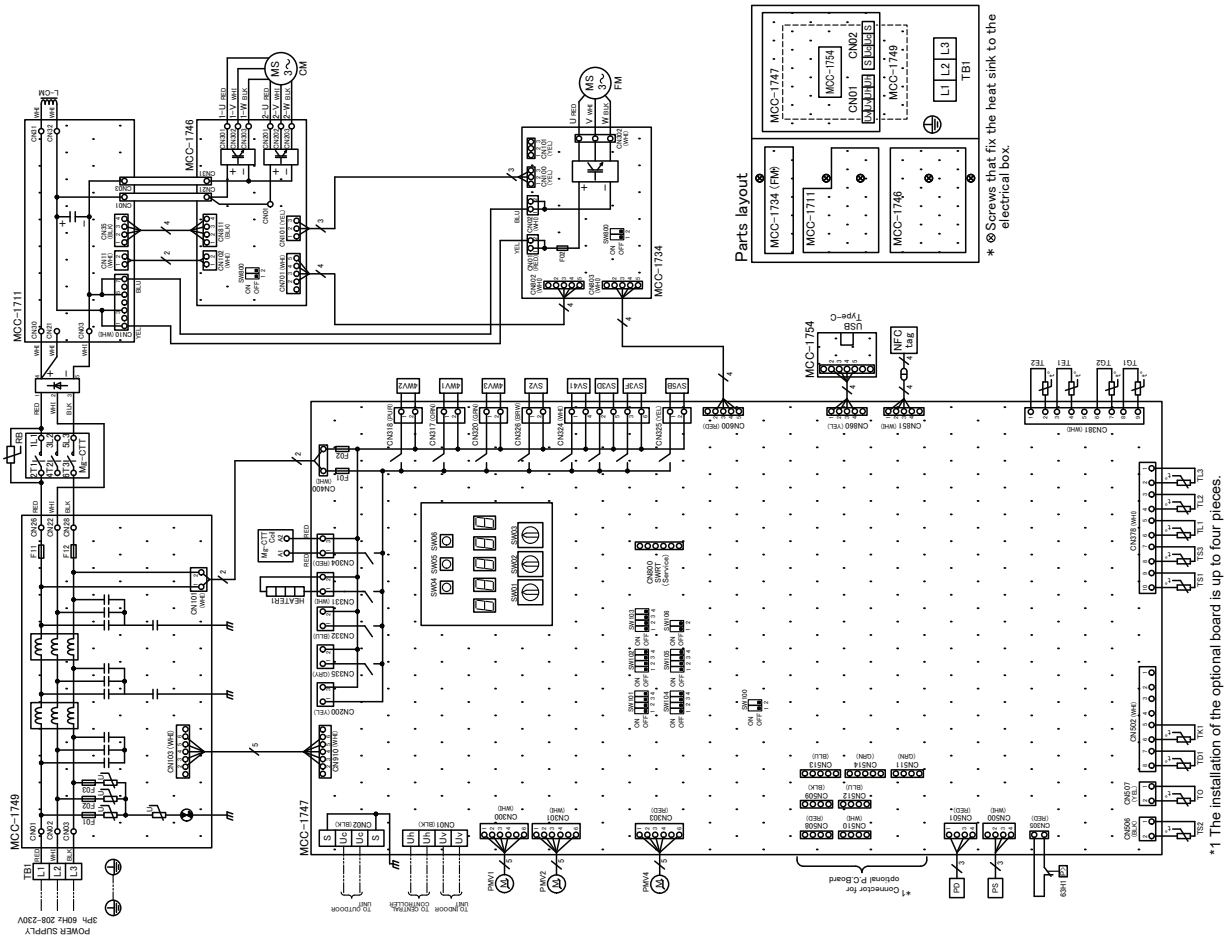
Temperature sensor color I/D

Symbol	Connector No.	Connector color	Wire mark (Sensor holder) color (wire color)
TD1	CN502	WHI	YEL (BLK)
TE1	CN381	WHI	– (BLU)
TE2	CN381	WHI	– (RED)
TG1	CN381	WHI	GRN (BLK)
TG2	CN381	WHI	GRN·YEL (BLK)
TK1	CN502	WHI	– (BLK)
TL1	CN378	WHI	WHI (YEL)
TL2	CN378	WHI	– (GRY)
TL3	CN378	WHI	GRN (RED)
TO	CN507	YEL	– (BLK)
TS1	CN378	WHI	YEL (BLU)
TS2	CN506	BLK	– (GRY)
TS3	CN378	WHI	WHI·YEL (BLK)



Field wiring
Protective earth
Terminal block
Terminal
Connector
P.C.Board

Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
GRY:GRAY
ORN:ORANGE
GRN:GREEN
PUR:PURPLE
BRW:BROWN



Model : MMY-MUP1201FT9P-UL

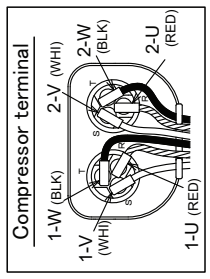
P.C.Board

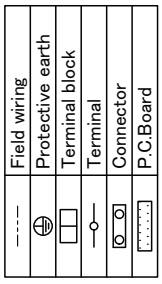
Symbol	Parts name
MCC-1711	Capacitor P.C.Board
MCC-1734	Inverter P.C.Board (Fan)
MCC-1746	Inverter P.C.Board (Compressor)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1,4WV2,4WV3	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734)	Fuse (Fan)
F02	12.5A 450VDC
(MCC-1747)	Fuse (Interface)
F01,F02	T6.3A 250VAC
(MCC-1749)	Fuse (Noise filter)
F01,F02,F03	T6.3A 250VAC
(MCC-1749)	Fuse (Noise filter)
F11,F12	150A 250VAC
FM1,FM2	Fan motor
HEATER1	Compressor case heater
L-CM	Reactor for compressor
Mg-CTT1,Mg-CTT2	Magnet contactor
NFC	NFC tag
PD	Pressure sensor (High)
PMV1	Pulse motor valve (Main)
PMV2	Pulse motor valve (Sub(L))
PMV3	Pulse motor valve (Sub(R))
PMV4	Pulse motor valve (Sub cool)
PS	Pressure sensor (Low)
RB	Rush current protect resistor
SV2,SV3D,SV3F	2-way valve coil
SV41,SV5B	
SW01,SW02,SW03	Rotary switch
SW04,SW05,SW06	Push button switch
SW100,SW101,SW102	Dip switch
SW103,SW104,SW105	
SW106,SW800	
TB1	Terminal block (Power supply)
TD1	Discharge temp. sensor
TE1,TE2,TE3	Heat exchange temp. sensor
TG1,TG2,TG3	Gas temp. sensor
TK1	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TS1,TS2,TS3	Suction temp. sensor

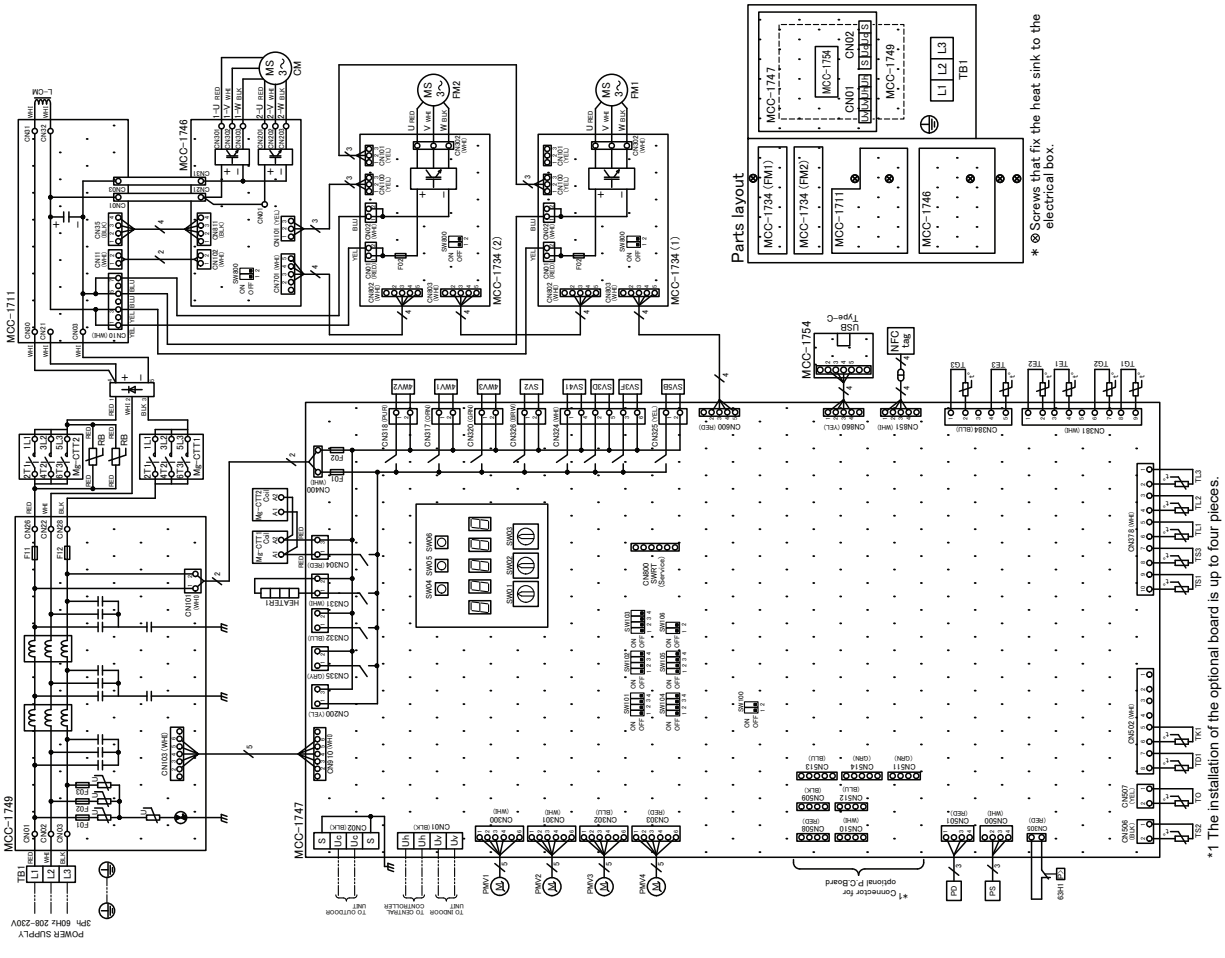
Temperature sensor color I/D

Symbol	Connector No.	Connector color	Wire mark (Sensor holder) color (wire color)
TD1	CN502	WHI	YEL (BLK)
TE1	CN381	WHI	– (BLU)
TE2	CN381	WHI	– (RED)
TE3	CN384	BLU	– (YEL)
TG1	CN381	WHI	GRN (BLK)
TG2	CN381	WHI	GRN･YEL (BLK)
TG3	CN384	BLU	WHI (BLK)
TK1	CN502	WHI	– (BLK)
TL1	CN378	WHI	WHI (YEL)
TL2	CN378	WHI	– (GRY)
TL3	CN378	WHI	GRN (RED)
TO	CN507	YEL	– (BLK)
TS1	CN378	WHI	YEL (BLU)
TS2	CN506	BLK	– (GRY)
TS3	CN378	WHI	WHI･YEL (BLK)

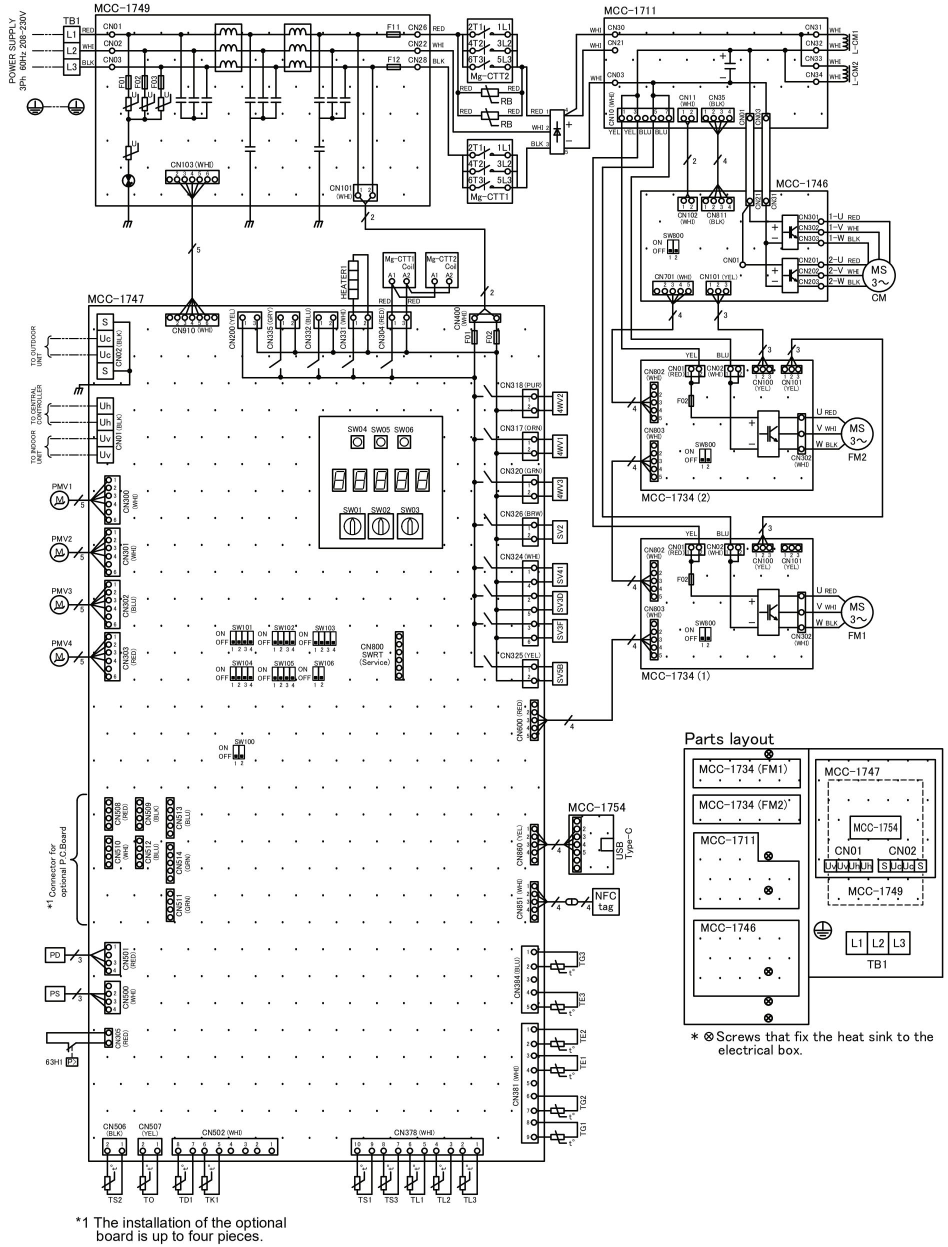




Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
GRY:GRAY
ORN:ORANGE
GRN:GREEN
PUR:PURPLE
BRW:BROWN



Model : MMY-MUP1441FT9P-UL, MMY-MUP1681FT9P-UL, MMY-MUP096H1FT9PUL, MMY-MUP120H1FT9PUL



*1 The installation of the optional board is up to four pieces.

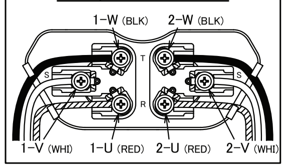
Parts layout

* ⊗Screws that fix the heat sink to the electrical box.

Temperature sensor color I/D

Symbol	Connector No.	Connector color	Wire mark (Sensor holder) color (wire color)
TD1	CN502	WHI	YEL (BLK)
TE1	CN381	WHI	– (BLU)
TE2	CN381	WHI	– (RED)
TE3	CN384	BLU	– (YEL)
TG1	CN381	WHI	GRN (BLK)
TG2	CN381	WHI	GRN・YEL (BLK)
TG3	CN384	BLU	WHI (BLK)
TK1	CN502	WHI	– (BLK)
TL1	CN378	WHI	WHI (YEL)
TL2	CN378	WHI	– (GRY)
TL3	CN378	WHI	GRN (RED)
TO	CN507	YEL	– (BLK)
TS1	CN378	WHI	YEL (BLU)
TS2	CN506	BLK	– (GRY)
TS3	CN378	WHI	WHI・YEL (BLK)

Compressor terminal



Symbol	Meaning
----	Field wiring
⊕	Protective earth
	Terminal block
	Terminal
	Connector
	P.C.Board

Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
GRY:GRAY
ORN:ORANGE
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PUR:PURPLE
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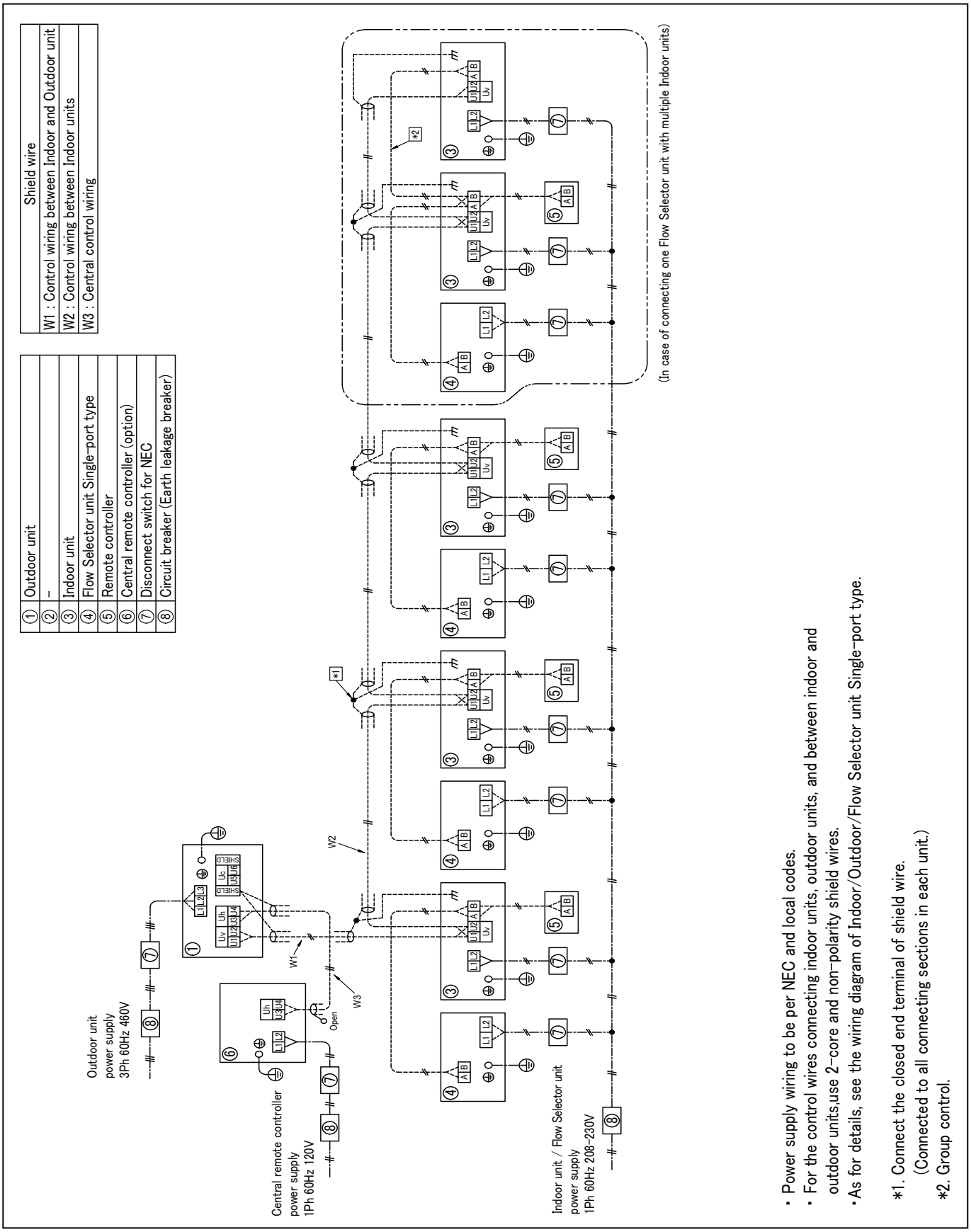
P.C.Board

Symbol	Parts name
MCC-1711	Capacitor P.C.Board
MCC-1734	Inverter P.C.Board (Fan)
MCC-1746	Inverter P.C.Board (Compressor)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1,4WV2,4WV3	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734) F02	Fuse (Fan) 12.5A 450VDC
(MCC-1747) F01,F02	Fuse (Interface) T6.3A 250VAC
(MCC-1749) F01,F02,F03	Fuse (Noise filter) T6.3A 250VAC
(MCC-1749) F11,F12	Fuse (Noise filter) 150A 250VAC
FM1,FM2	Fan motor
HEATER1	Compressor case heater
L-CM1,L-CM2	Reactor for compressor
Mg-CTT1,Mg-CTT2	Magnet contactor
NFC	NFC tag
PD	Pressure sensor (High)
PMV1	Pulse motor valve (Main)
PMV2	Pulse motor valve (Sub(L))
PMV3	Pulse motor valve (Sub(R))
PMV4	Pulse motor valve (Sub cool)
PS	Pressure sensor (Low)
RB	Rush current protect resistor
SV2,SV3D,SV3F SV41,SV5B	2-way valve coil
SW01,SW02,SW03	Rotary switch
SW04,SW05,SW06	Push button switch
SW100,SW101,SW102 SW103,SW104,SW105 SW106,SW800	Dip switch
TB1	Terminal block (Power supply)
TD1	Discharge temp. sensor
TE1,TE2,TE3	Heat exchange temp. sensor
TG1,TG2,TG3	Gas temp. sensor
TK1	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TS1,TS2,TS3	Suction temp. sensor

5-7. Connecting diagram

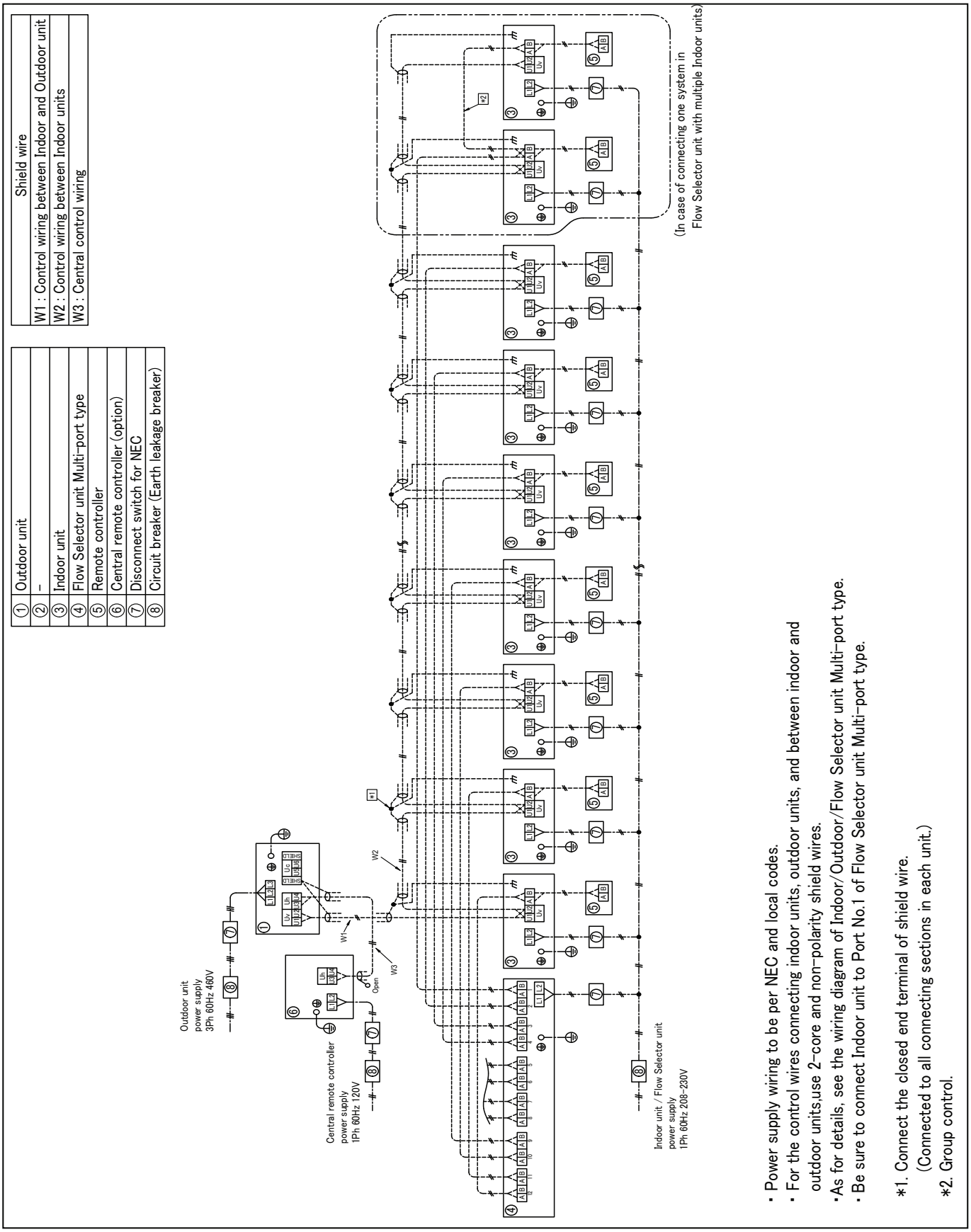
Model : MMY-MUP0721FT6P-UL, MMY-MUP0961FT6P-UL, MMY-MUP1201FT6P-UL, MMY-MUP1441FT6P-UL, MMY-MUP1681FT6P-UL, MMY-MUP1921FT6P-UL, MMY-MUP072H1FT6PUL, MMY-MUP096H1FT6PUL, MMY-MUP120H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

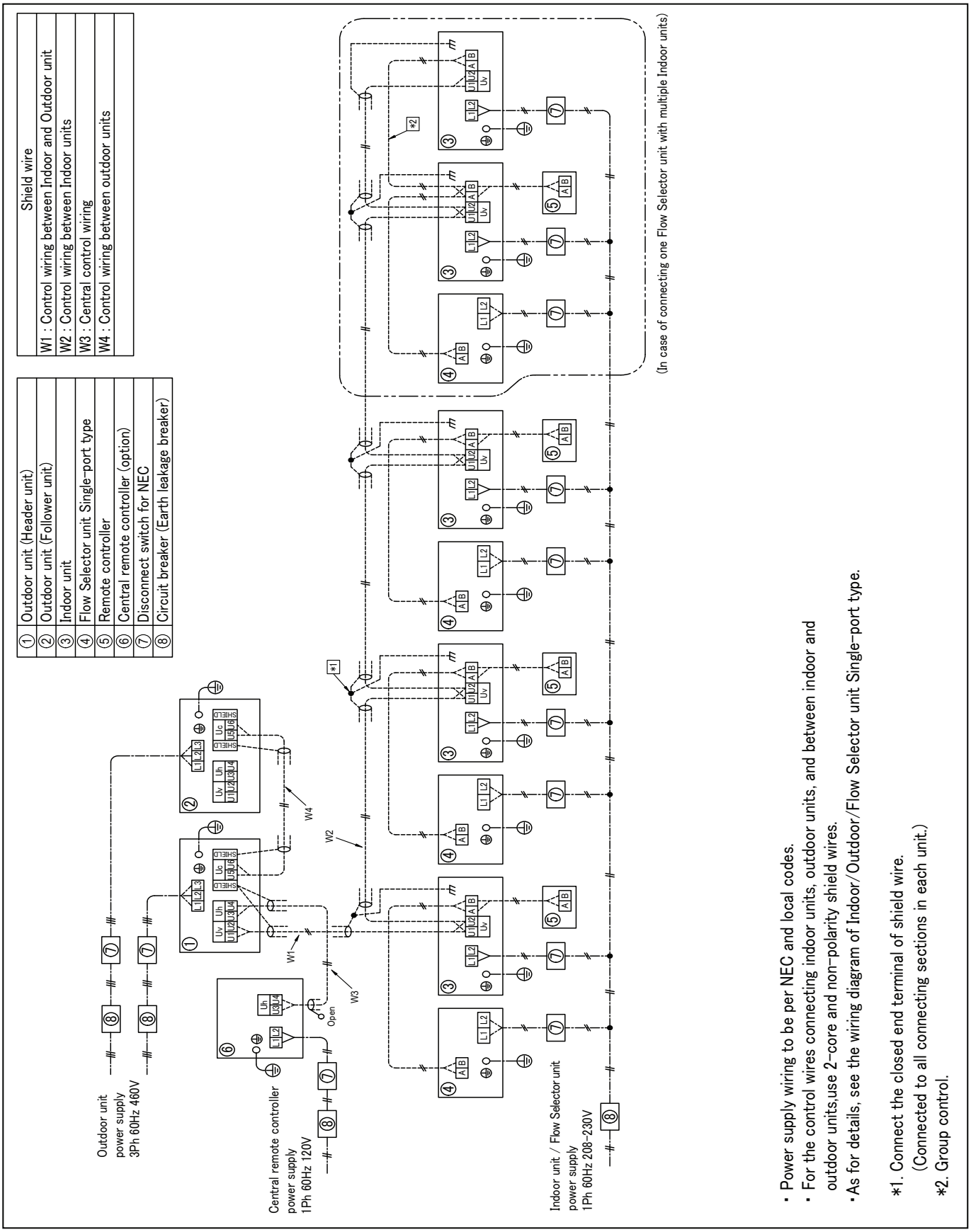
Model : MMY-MUP0721FT6P-UL, MMY-MUP0961FT6P-UL, MMY-MUP1201FT6P-UL, MMY-MUP1441FT6P-UL, MMY-MUP1681FT6P-UL, MMY-MUP1921FT6P-UL, MMY-MUP072H1FT6PUL, MMY-MUP096H1FT6PUL, MMY-MUP120H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

Model : MMY-UP1921FT6P-UL, MMY-UP2161FT6P-UL, MMY-UP2401FT6P-UL, MMY-UP2641FT6P-UL, MMY-UP2881FT6P-UL, MMY-UP3121FT6P-UL, MMY-UP3361FT6P-UL, MMY-UP144H1FT6PUL, MMY-UP192H1FT6PUL, MMY-UP240H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
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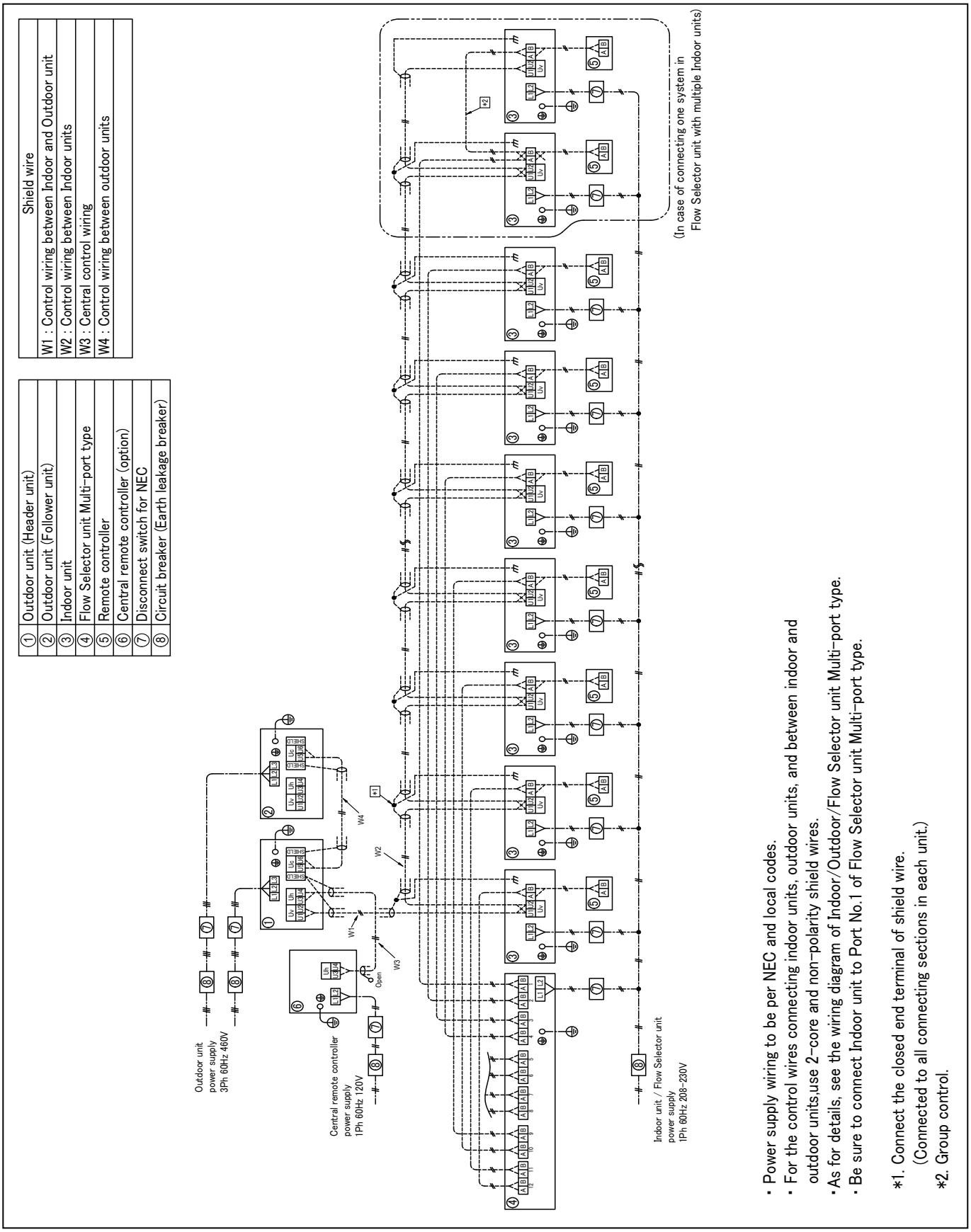
*2. Group control.

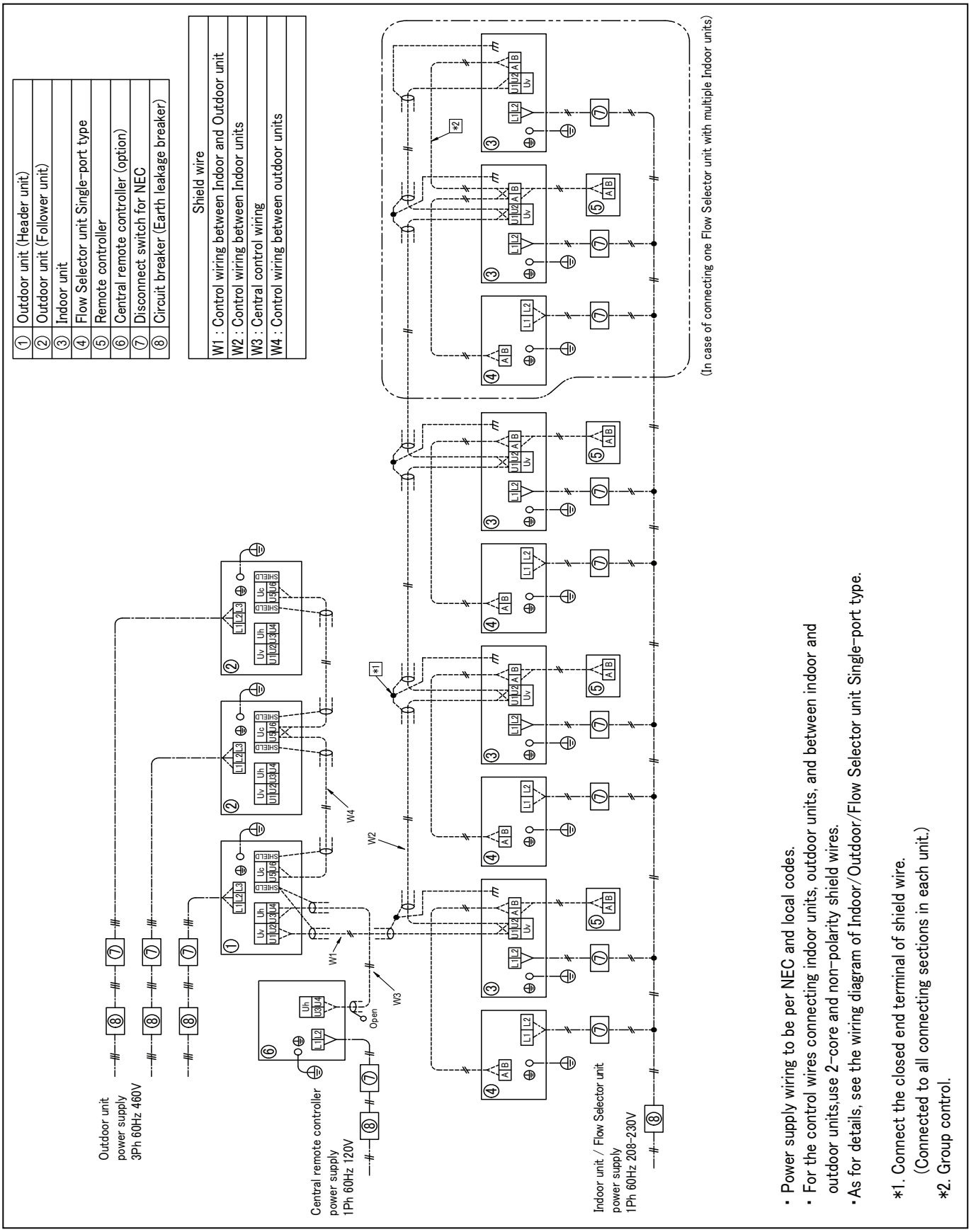
Model : MMY-UP1921FT6P-UL, MMY-UP2161FT6P-UL, MMY-UP2401FT6P-UL, MMY-UP2641FT6P-UL, MMY-UP2881FT6P-UL, MMY-UP3121FT6P-UL, MMY-UP3361FT6P-UL, MMY-UP144H1FT6PUL, MMY-UP192H1FT6PUL, MMY-UP240H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

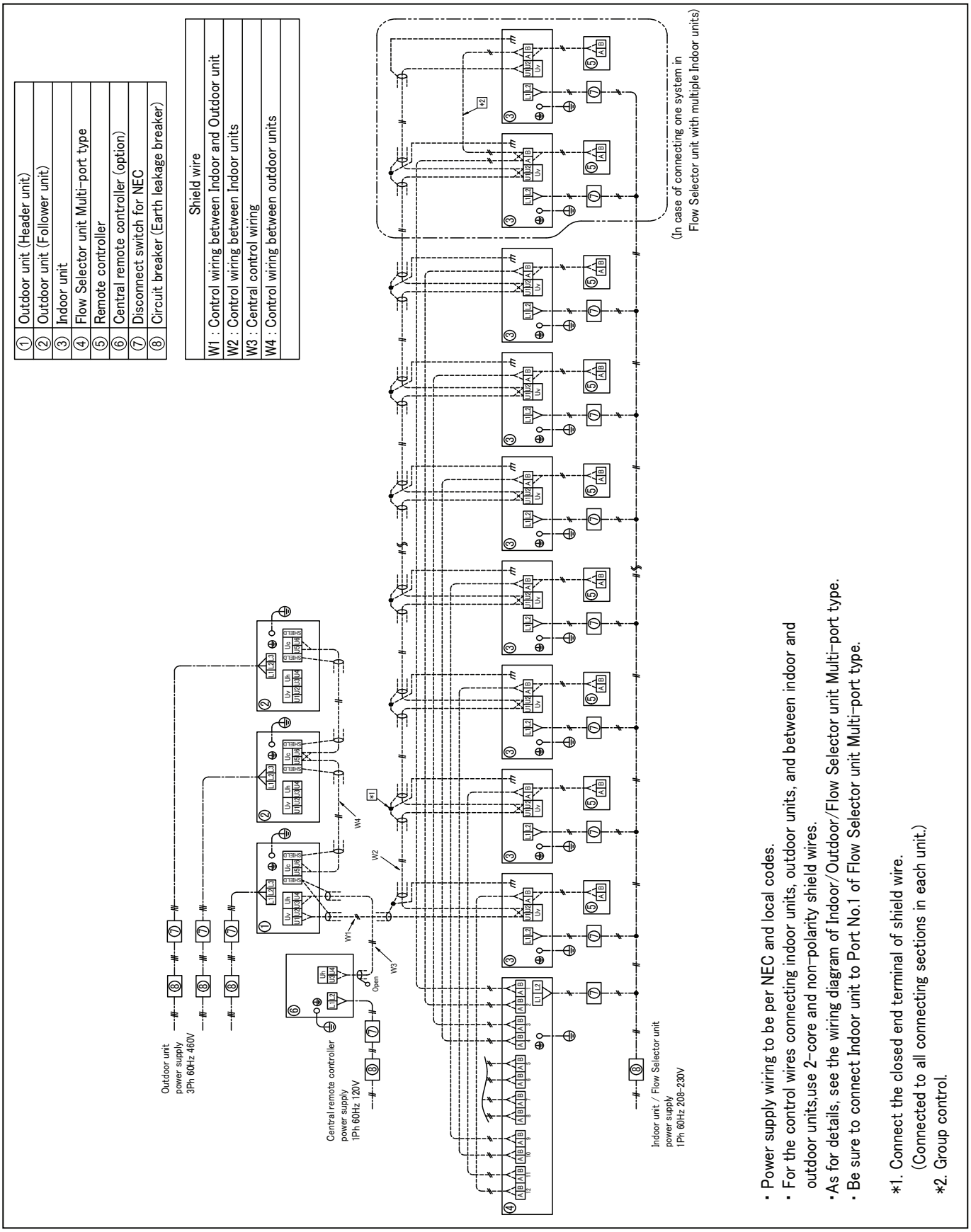
Model : MMY-UP3601FT6P-UL, MMY-UP3841FT6P-UL, MMY-UP4081FT6P-UL, MMY-UP4321FT6P-UL, MMY-UP4561FT6P-UL, MMY-UP4801FT6P-UL, MMY-UP5401FT6P-UL, MMY-UP288H1FT6PUL, MMY-UP360H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

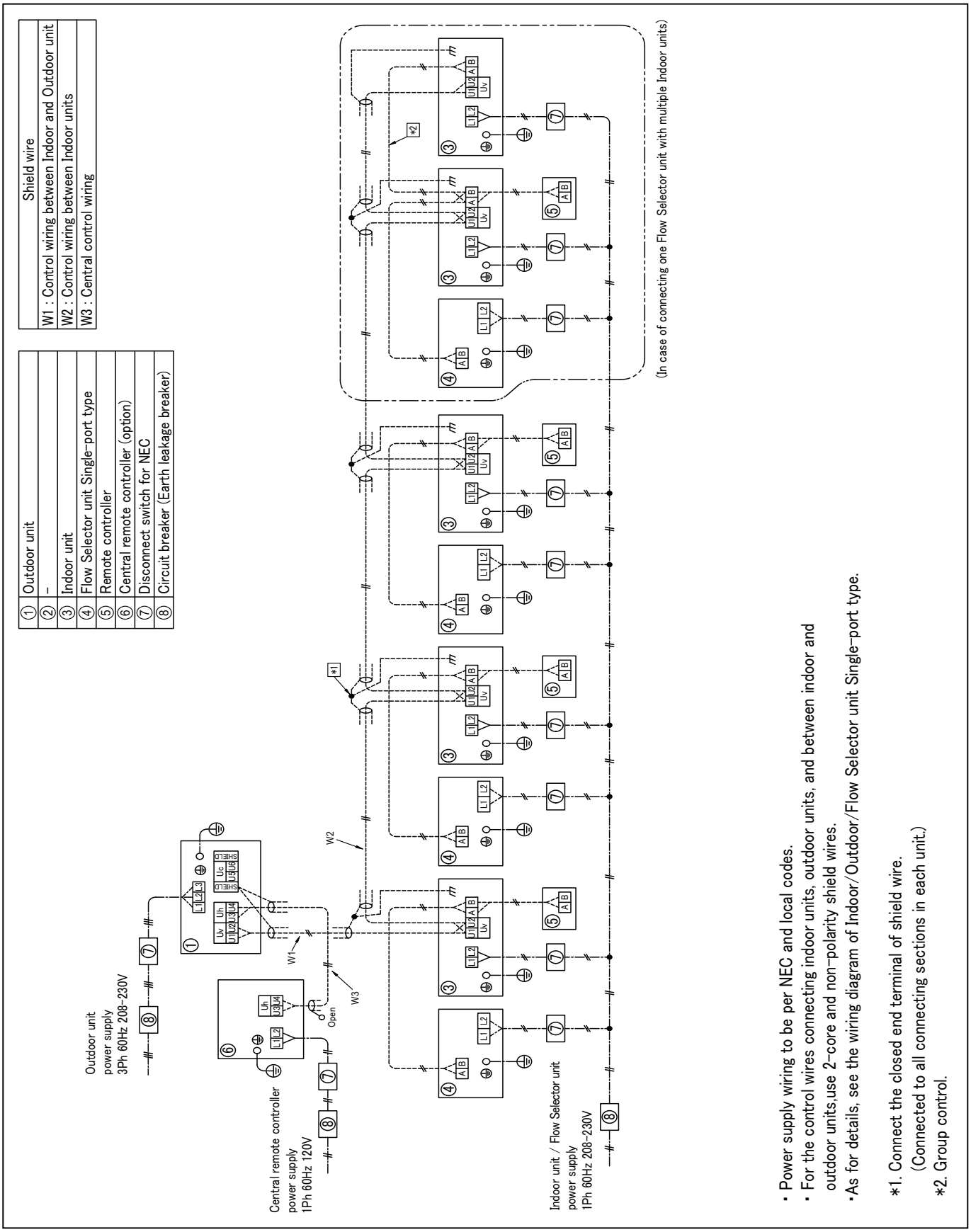
Model : MMY-UP3601FT6P-UL, MMY-UP3841FT6P-UL, MMY-UP4081FT6P-UL, MMY-UP4321FT6P-UL, MMY-UP4561FT6P-UL, MMY-UP4801FT6P-UL, MMY-UP5401FT6P-UL, MMY-UP288H1FT6PUL, MMY-UP360H1FT6PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

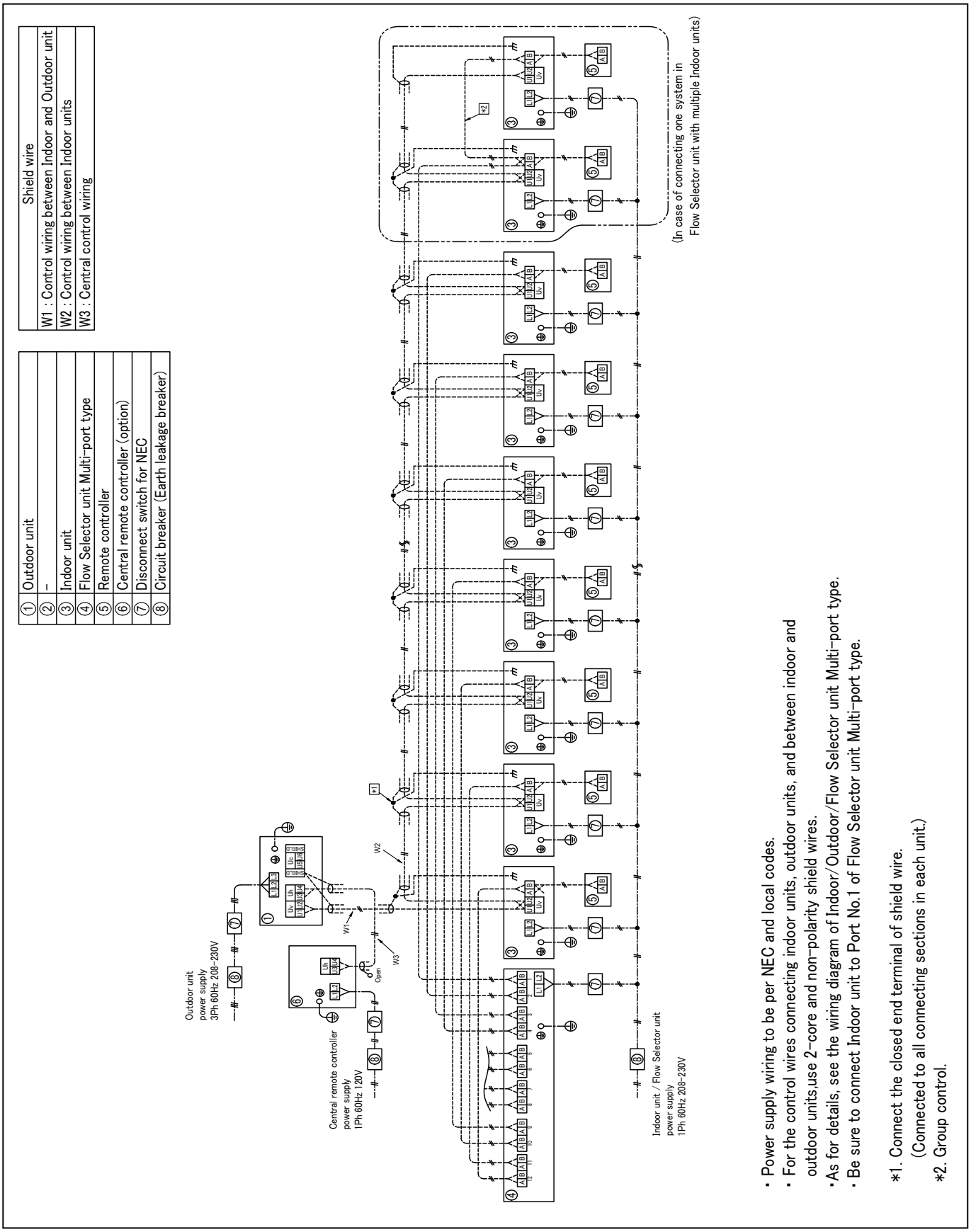
Model : MMY-MUP0721FT9P-UL, MMY-MUP0961FT9P-UL, MMY-MUP1201FT9P-UL, MMY-MUP1441FT9P-UL, MMY-MUP1681FT9P-UL, MMY-MUP072H1FT9PUL, MMY-MUP096H1FT9PUL, MMY-MUP120H1FT9PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

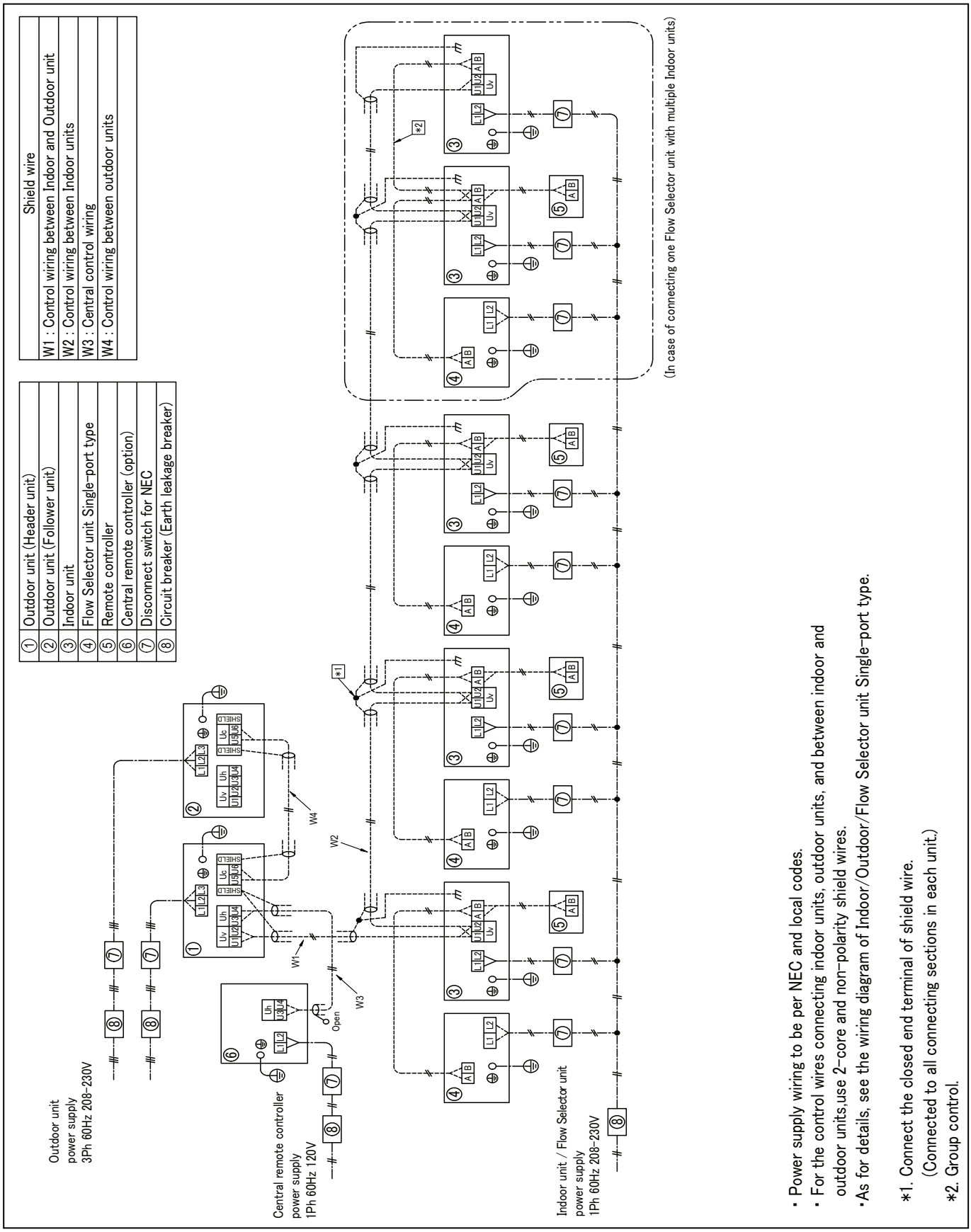
Model : MMY-MUP0721FT9P-UL, MMY-MUP0961FT9P-UL, MMY-MUP1201FT9P-UL, MMY-MUP1441FT9P-UL, MMY-MUP1681FT9P-UL, MMY-MUP072H1FT9PUL, MMY-MUP096H1FT9PUL, MMY-MUP120H1FT9PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

Model : MMY-UP1921FT9P-UL, MMY-UP2161FT9P-UL, MMY-UP2401FT9P-UL, MMY-UP2641FT9P-UL, MMY-UP2881FT9P-UL, MMY-UP3121FT9P-UL, MMY-UP3361FT9P-UL, MMY-UP144H1FT9PUL MMY-UP192H1FT9PUL, MMY-UP240H1FT9PUL

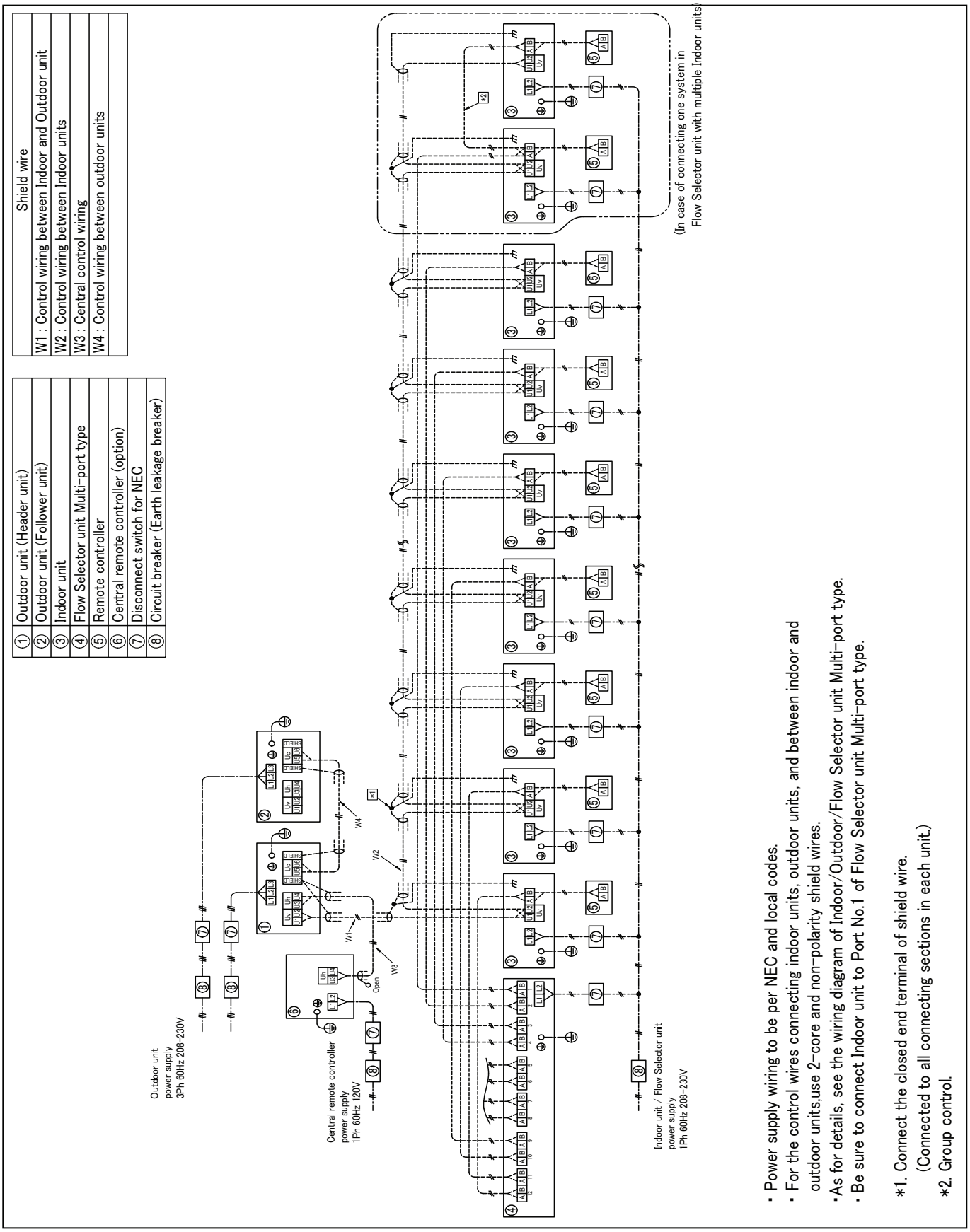


- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)

*2. Group control.

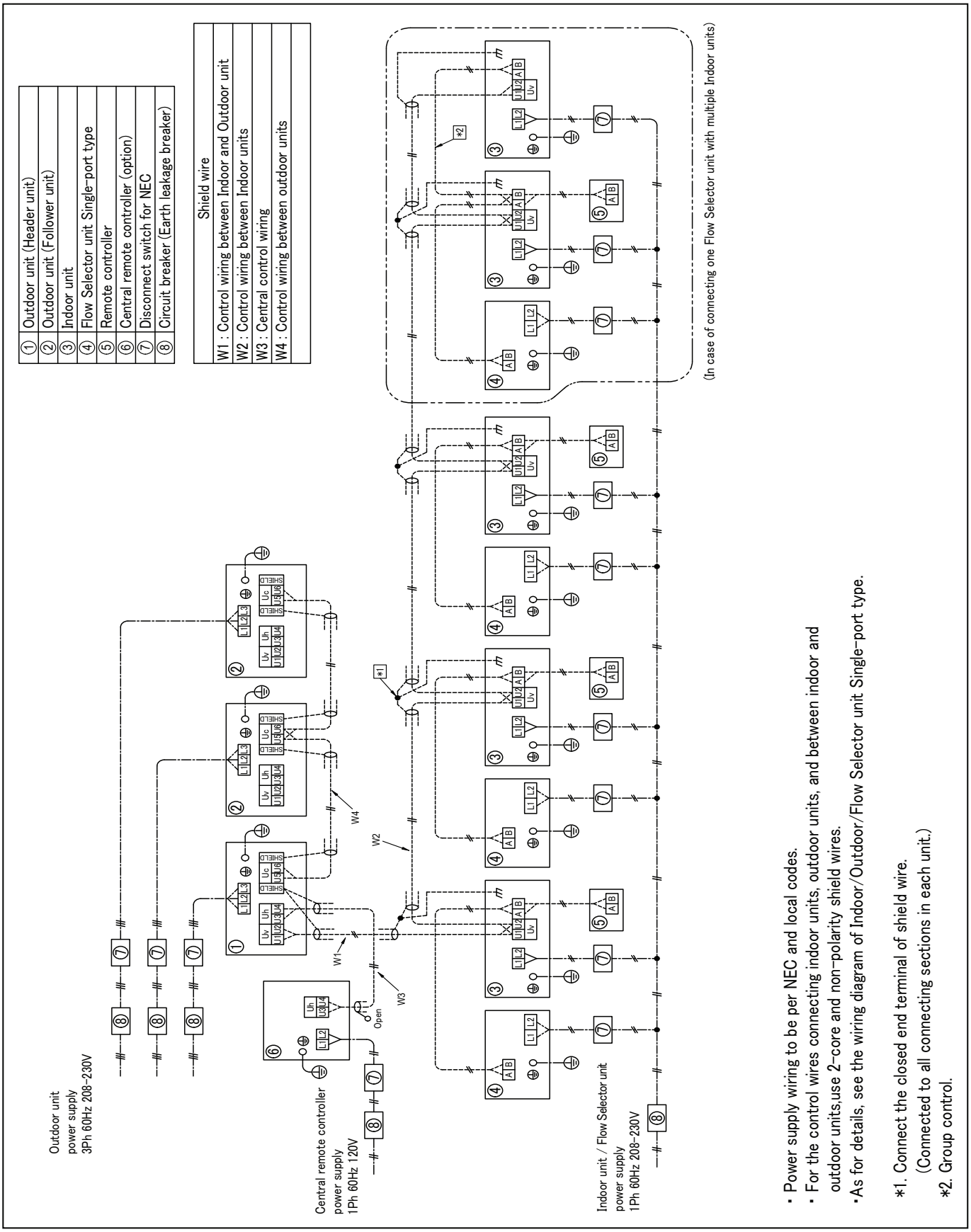
Model : MMY-UP1921FT9P-UL, MMY-UP2161FT9P-UL, MMY-UP2401FT9P-UL, MMY-UP2641FT9P-UL, MMY-UP2881FT9P-UL, MMY-UP3121FT9P-UL, MMY-UP3361FT9P-UL, MMY-UP144H1FT9PUL MMY-UP192H1FT9PUL, MMY-UP240H1FT9PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

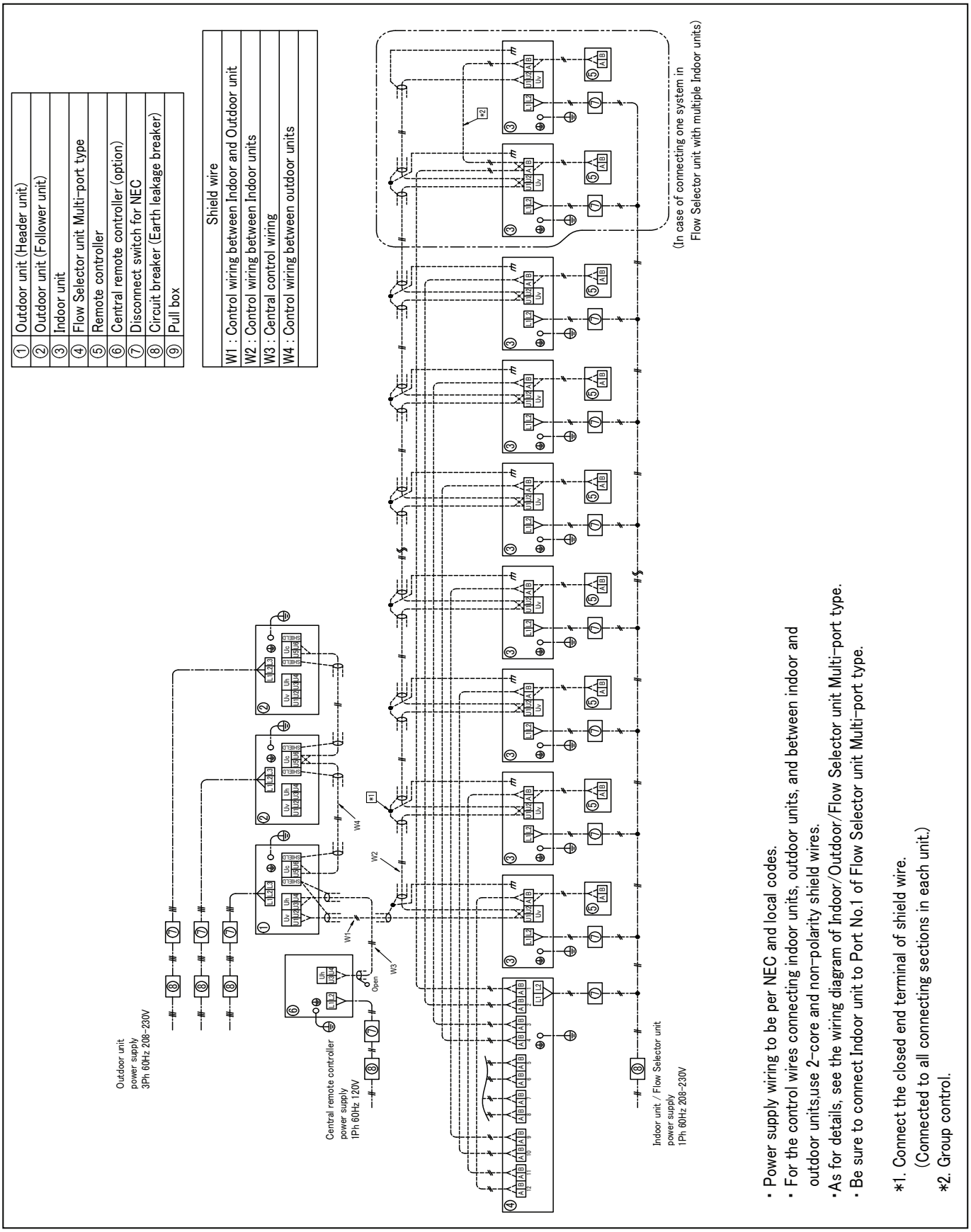
Model : MMY-UP3601FT9P-UL, MMY-UP3841FT9P-UL, MMY-UP4081FT9P-UL, MMY-UP4321FT9P-UL, MMY-UP4561FT9P-UL, MMY-UP4801FT9P-UL, MMY-UP5401FT9P-UL, MMY-UP288H1FT9PUL, MMY-UP360H1FT9PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Single-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

Model : MMY-UP3601FT9P-UL, MMY-UP3841FT9P-UL, MMY-UP4081FT9P-UL, MMY-UP4321FT9P-UL, MMY-UP4561FT9P-UL, MMY-UP4801FT9P-UL, MMY-UP5401FT9P-UL, MMY-UP288H1FT9PUL, MMY-UP360H1FT9PUL



- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of Indoor/Outdoor/Flow Selector unit Multi-port type.
- Be sure to connect Indoor unit to Port No.1 of Flow Selector unit Multi-port type.

*1. Connect the closed end terminal of shield wire.
(Connected to all connecting sections in each unit.)
*2. Group control.

5-8. Applied control for Outdoor Unit

The outdoor fan high static pressure mode and high heating mode functions can be used by setting the switch on the outdoor unit interface PC board or the remotecontroller.

5-8-1. Outdoor Fan High Static Pressure Mode

Purpose/characteristics

This function is used when connecting a duct to the discharge port of an outdoor unit (as part of, for example, unit installation on the floor by floor installation).

Setup

Change the outdoor DN code [019] setting to 0001.
0000 : Usual 0001 : High Static Pressure Mode
This function must be enabled with every discharge duct connected outdoor unit both of the header and follower units. If there are multiple outdoor units, set all outdoor units.

Specification

Increase the speed of the propeller fan units on the outdoor fan to allow the installation of a duct with a maximum external static pressure not greater than 0.321 inH2O (80 Pa). If a dis charge duct with a resistance greater than 0.061 inH2G (15 Pa) is to be used, enable this function. The maximum external static pressures of base outdoor units are shown below (Table 1). Incase of combined use of multiple outdoor units, set all the unit to the maximum external static pressure not greater than 0.321 inH2O (80Pa).

Table 1: Maximum External Static Pressure of Base Outdoor Units

Model	MMY-MUP	0721FT*P-UL	0961FT*P-UL	1201FT*P-UL	1441FT*P-UL	1681FT*P-UL	1921FT6P-UL
Maximum external static pressure		0.321inH_2O (80Pa)	0.321inH_2O (80Pa)	0.321inH_2O (80Pa)	0.321inH_2O (80Pa)	0.321inH_2O (80Pa)	0.321inH_2O (80Pa)
Outdor unit air flow(*1)	CFM	5721	6357	7416	7981	8476	9712

Model	MMY-MUP	072H1FT*PUL	096H1FT*P-UL	120H1FT*PUL
Maximum external static pressure		0.321inH_2O (80Pa)	0.321inH_2O (80Pa)	0.321inH_2O (80Pa)
Outdor unit air flow(*1)	CFM	5721	6357	7416

*1 : Calculate duct resistance from outdoor unit air flow
* : 6= 460V, 9= 208-230V

5-8-2. High Heating mode

Purpose/characteristics

This function increases heating capacity when heating capacity is insufficient in cold or snowy regions.

Setup

Change the outdoor DN code [0C6] setting to 0001.
0000 : Usual 0001 : High Heating Mode
If there are multiple outdoor units, set all outdoor units.

Specification

For capacity characteristics, see 2-3-2. Correction charts for heating capacity calculation

Note:

This function is valid only for the standard model.

5-9. Optional printed circuit board (PCB) of outdoor unit

Optional control P.C. boards provide access to a range of functions as listed below.

No.	Function		Outdoor unit for control P.C. board Connection	Control P.C. board be used			Outdoor unit interface P.C. board setting*			
				TCB-PCDM4UL	TCB-PCMO4UL	TCB-PCIN4UL	Connector No.	DIP SW No.	Bit ON	Outdoor DN Code (O.DN)
1	Power peak-cut Control (Standard)	Threshold capacity setting	Header unit	✓	-	-	CN513 (blue)	-	-	[009] = 0 (factory default)
	Power peak-cut Control (Standard)	Threshold power consumption setting	Header unit	✓	-	-	CN513 (blue)	-	-	[009] = 1
	Power peak-cut Control (For one input function)	Threshold capacity setting	Header unit	✓	-	-	CN513 (blue)	SW105	1	[009] = 0 (factory default)
	Power peak-cut Control (For one input function)	Threshold power consumption setting	Header unit	✓	-	-	CN513 (blue)	SW105	1	[009] =1
2	Power peak-cut Control (Enhanced Function)	Threshold capacity setting	Header unit	✓	-	-	CN513 (blue)	SW105	2	[009] = 0 (factory default)
	Power peak-cut Control (Enhanced Function)	Threshold power consumption setting	Header unit	✓	-	-	CN513 (blue)	SW105	2	[009] = 1
3	Snowfall fan Control		Header unit	-	✓	-	CN509 (black)	-	-	-
4	External master ON/OFF Control		Header unit	-	✓	-	CN512 (blue)	-	-	-
5	Night operation (Sound reduction) Control		Header unit	-	✓	-	CN508 (red)	-	-	-
6	Operation Mode Selection Control		Header unit	-	✓	-	CN510 (white)	-	-	[008] = 0 (factory default)
	Operation Mode Selection Control (forced choice)		Header unit	-	✓	-	CN510 (white)	-	-	[008] = 1
7	Error/Operation output		Header unit	-	-	✓	CN511 (green)	-	-	-
8	Compressor Operation Output		Individual outdoor unit	-	-	✓	CN514 (green)	-	-	[012] = 0 (factory default)
9	Operating Rate Output		Header unit	-	-	✓	CN514 (green)	-	-	[012] = 1

To limit a maximum power, set the outdoor unit O.DN code to [009]=1, and set the criteria value of a maximum power consumption with O.DN code [00A], [00B], [00C] and [00D]. Input the values for both cooling and heating.
Outdoor unit DN Code (O.DN) [00C], [00D]
Criteria value setting for a maximum cooling power
(e.g.) When the maximum standard value of cooling power consumption is set as 19.35 kW = 19.35kW

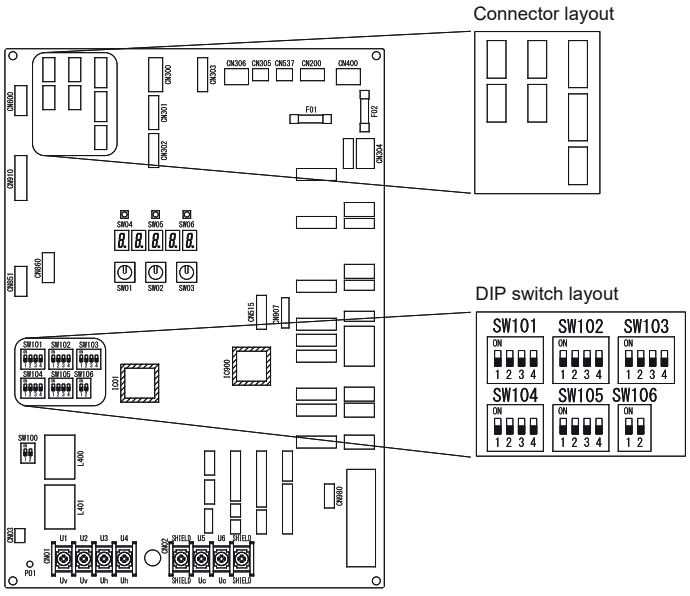
Outdoor unit DN Code (O.DN)	[00C]	[00D]
Value	19	35

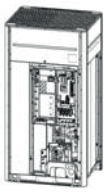
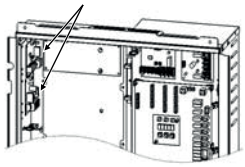
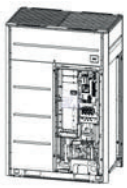
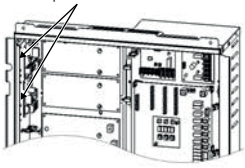
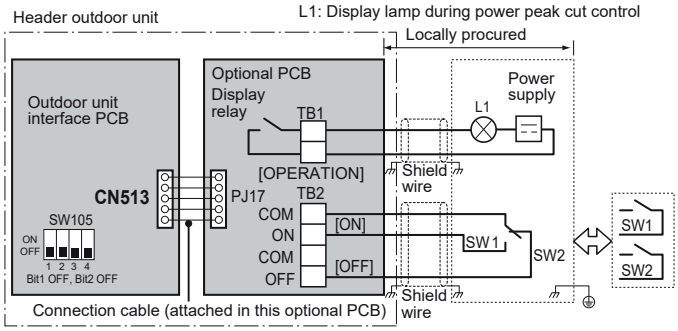
Outdoor unit DN Code (O.DN) [00A], [00B]
Criteria value setting for a maximum heating power
(e.g.) When the maximum standard value of heating power consumption is set as 14.00 kW = 14.00kW

Outdoor unit DN Code (O.DN)	[00A]	[00B]
Value	14	00

Layout of Outdoor Unit Interface P.C. Board

* DIP switch settings vary from function to function.



Model name	Appearance	Function
TCB-PCDM4UL	 Size: 2.80 x 3.35 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[1] Power peak-cut Control** • **Purpose: Limiting air conditioning performance with external signals and decreasing the peak power consumption.** • **Feature** The upper limit capacity of the outdoor unit is restricted based on the outdoor power peak selected setting. **Standard Specifications** (Wiring example)  For SW1 and SW2, be sure to provide no-voltage contacts for each terminal. The input signals of SW1 and SW2 may be pulse input (100 msec or more) or continuous make. Do not turn on [SW1] and [SW2] simultaneously. **[2-stage switching] < SW105 bit1 OFF, bit2 OFF >** * The upper limit Z% can be regulated with the outdoor DN Code (O.DN) [00E]

	Optional PCB			Outdoor unit interface PCB			
	Input		Display relay	SW105		Outdoor DN Code [00E]	
	SW1	SW2	(L1)	Bit1	Bit2	factory default [00E]=15	[00E]=0~10
Input demand OFF signal to release the demand	OFF	ON	OFF	OFF	OFF	100% (normal operation)	100% (normal operation)
Input demand ON signal to control the demand	ON	OFF	ON			0% (forced stop)	Approx. X% (50%~100%) (upper limit regulated)

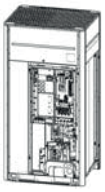
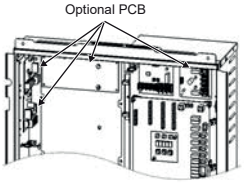
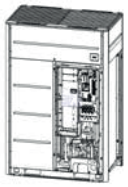
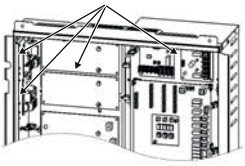
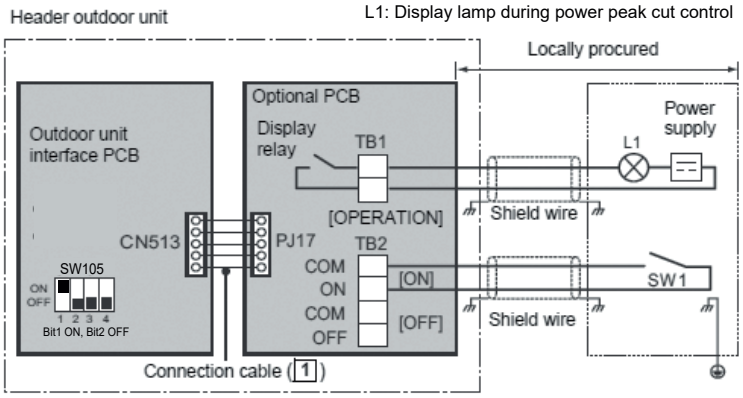
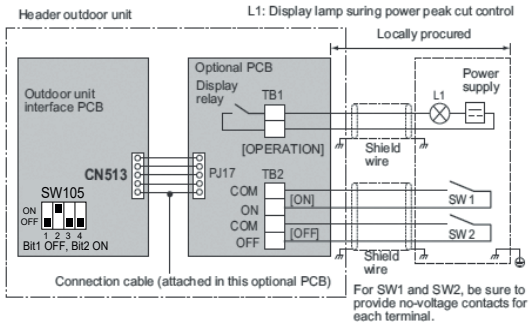
Outdoor unit DN Code (O.DN) [00E]	X
0	100%
1	95%
2	90%
3	85%
4	80%
5	75%
6	70%
7	65%
8	60%
9	55%
10	50%
15 (factory default)	0% (forced stop)

Note1: Specifications of display relay contact
- The terminal for display output ([Operation] terminal) must satisfy the following electrical rating.

<Electrical Rating>
208 to 230VAC, 10 mA or more, 1 A or less
24 VAC, 10 mA or more, 1 A or less (non-conductive load)

When connecting a conductive load (e.g. relay coil) to the display relay load, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force (for a DC power supply) on the bypass circuit. The optional P.C. board should be connected to the header outdoor unit (U1).

Note2: Specifications of COM terminal
(1) For SW*, be sure to use non-voltage contacts for each terminal.
(2) COM terminals are DC12 V output with a basic insulation.
Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact.
DC12 V has a current-limiting resistor of 3.3 kΩ.
To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact.

Model name	Appearance	Function
TCB-PCDM4UL	 Size: 2.80 × 3.35 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**For one input function (This function is possible only on the SHRM-u)** Setting SW105 bit1 on I/F P.C.board of the header outdoor unit to ON allows ON/OFF power peak-cut control to be switched using [ON] terminal input (SW1) alone. (Wiring example)  **[2-stage switching] <SW105 bit1 ON, bit2 OFF>** Power peak-cut control turns ON when SW 1 in the wiring example is ON (continuous make). * The upper limit Z% can be regulated with the outdoor DN Code (O.DN) [00E]. **Enhanced Specifications** (Wiring example)  Note1: Specifications of display relay contact • The terminal for display output ([Operation] terminal) must satisfy the following electrical rating. <Electrical Rating> 208 to 230VAC, 10 mA or more, 1 A or less 24 VAC, 10 mA or more, 1 A or less (non-conductive load) When connecting a conductive load (e.g. relay coil) to the display relay load, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force (for a DC power supply) on the bypass circuit. The optional P.C. board should be connected to the header outdoor unit (U1). Note2: Specifications of COM terminal (1) For SW*, be sure to use non-voltage contacts for each terminal. (2) COM terminals are DC12 V output with a basic insulation. Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact. DC12 V has a current-limiting resistor of 3.3 kΩ To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact.

	Optional PCB		Outdoor unit interface PCB			
	Input	Display relay	SW105		Outdoor DN Code [00E]	
	SW1	(L1)	Bit1	Bit2	factory default [00E]=15	[00E]=0~10
Input demand OFF signal to release the demand	OFF	OFF	ON	OFF	100% (normal operation)	100 % (normal operation)
Input demand ON signal to control the demand	ON	ON			0% (forced stop)	Approx. X% (50%~100%) (upper limit regulated)

Model name	Appearance	Function
TCB-PCDM4UL		[4-stage switching] <SW105 Bit1 ON, Bit2 ON>

	Optional PCB			Outdoor unit interface PCB			
	Input		Display relay	SW105		Outdoor DN Code [**]	
	SW1	SW2	(L1)	Bit1	Bit2	factory default [00E]=15、[00F]=8、[010]=4	[00E]=X、[00F]=Y、[010]=Z
Input demand OFF signal to release the demand	OFF	OFF	OFF	OFF	ON	100% (normal operation)	100% (normal operation)
Input demand ON signal to control the demand	ON	OFF	ON			Approx. 80% (upper limit regulated)	Approx. Z% (50%～100%) (upper limit regulated)
Input demand ON signal to control the demand	OFF	ON	ON			Approx. 60% (upper limit regulated)	Approx. Y% (50%～100%) (upper limit regulated)
Input demand ON signal to control the demand	ON	ON	ON			0%（forced stop）	Approx. X% (50%～100%) (upper limit regulated)

* The upper limit X%, Y%, Z% can be regulated with the outdoor DN Code (O.DN) [00E] [00F] [010].

Outdoor DN Code (O.DN) [00E]	X
0	100%
1	95%
2	90%
3	85%
4	80%
5	75%
6	70%
7	65%
8	60%
9	55%
10	50%
15（factory default）	0% (forced stop)

Outdoor DN Code (O.DN) [00F]	Y
0	100%
1	95%
2	90%
3	85%
4	80%
5	75%
6	70%
7	65%
8（factory default）	60%
9	55%
10	50%
15	0% (forced stop)

Outdoor DN Code (O.DN) [010]	Z
0	100%
1	95%
2	90%
3	85%
4（factory default）	80%
5	75%
6	70%
7	65%
8	60%
9	55%
10	50%
15	0% (forced stop)

Power peak-cut control by power consumption

Peak cut control by power consumption can be set with Outdoor DN CODE (O.DN) [009].
Peak cut control by power consumption adjusts the outdoor unit output so that the power consumption does not exceed the upper limit control value.

[1] Setting “Outdoor DN [009] = 1” changes the control method to peak cut control by power consumption.
(Setting “Outdoor DN [009] = 0” returns the control method to normal peak cut control.)

[2] Check Outdoor DN [00A] to [00D] to make sure that upper power limit reference values for cooling and heating are registered.

Outdoor unit DN Code (O.DN) [00C], [00D] Cooling upper limit power standard setting
Ex. The upper limit of cooling power consumption setting = 19.35kw

Outdoor DN Code (O.DN)	[00C]	[00D]
Value	19	35

Outdoor unit DN Code (O.DN) [00A], [00B] Heating upper limit power standard setting
Ex. The upper limit of heating power consumption setting = 14.00kw

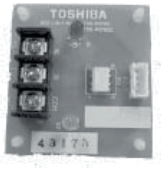
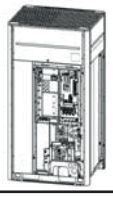
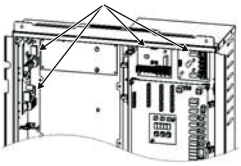
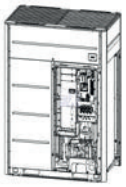
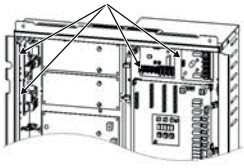
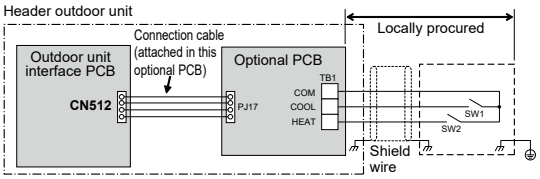
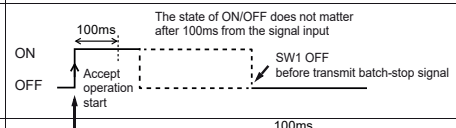
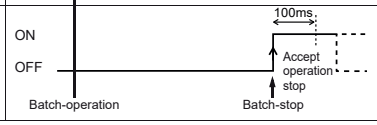
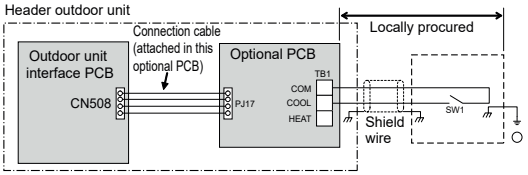
Outdoor DN Code (O.DN)	[00A]	[00B]
Value	14	00

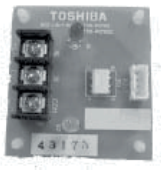
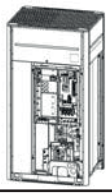
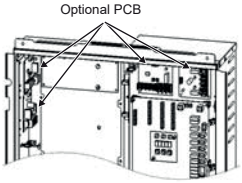
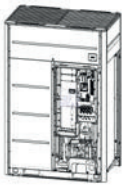
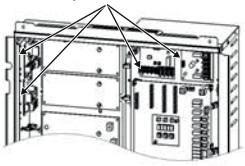
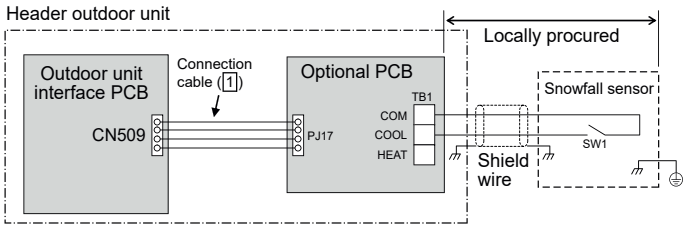
[3] When an ON signal is input from the optional PCB, peak cut control by power consumption is enabled.
The way to input the ON signal is the same as with normal peak cut control. Refer to the sections on “Standard Specifications”, “For one input function” and “Enhanced Specifications”.

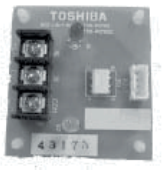
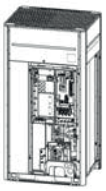
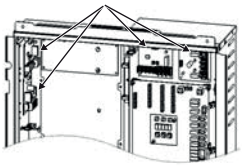
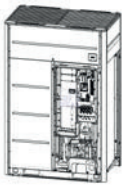
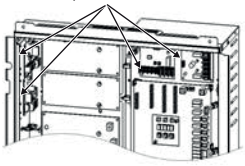
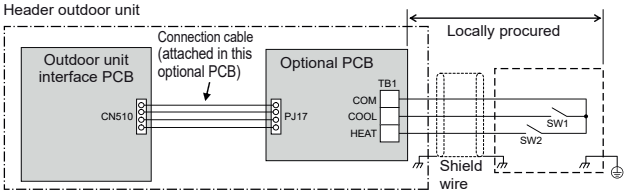
Based on the upper power limit reference values registered in [2], the outdoor unit capacity is adjusted so that the upper limit control value set with Outdoor DN Code (O.DN) [00E], [00F], and [010] is not exceeded.

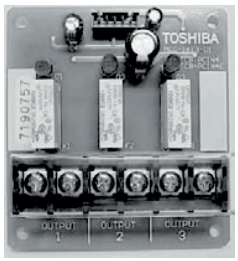
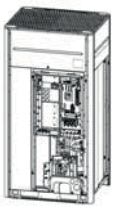
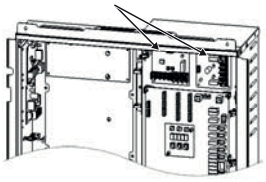
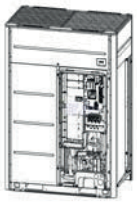
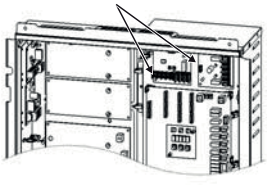
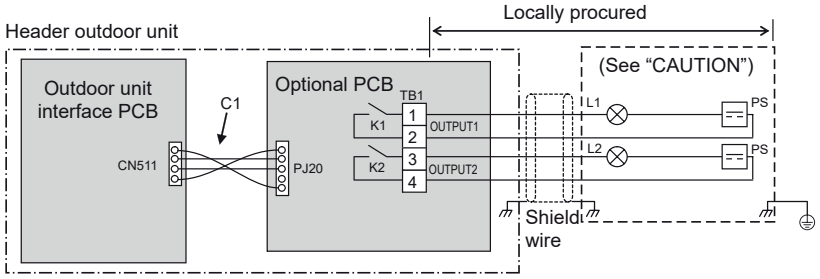
NOTE:

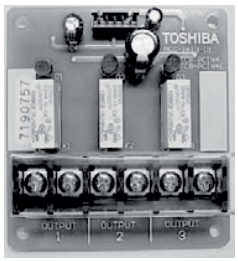
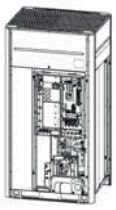
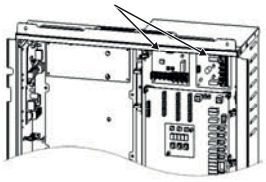
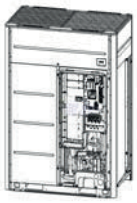
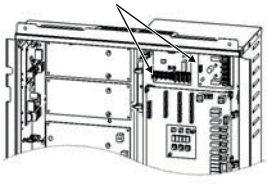
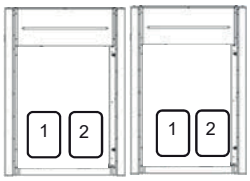
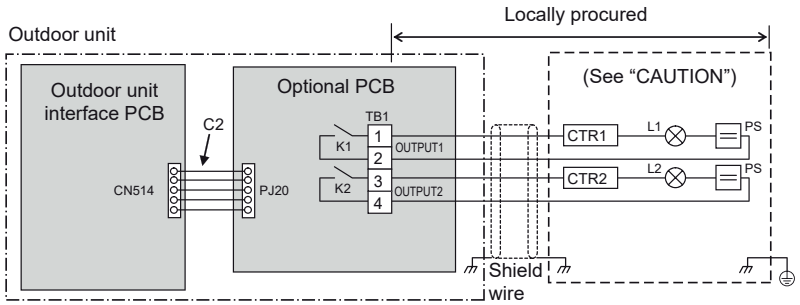
* To protect the cycle, peak cut control by power consumption may not be carried out. (During defrosting operation, oil recovery operation, coolant recovery operation, etc.)
* The value of power consumption is computed by estimation, so an error of about ±5% from the actual value occurs.
  If you want to perform accurate peak cut control by power consumption and demand control, use a power meter and demand controller.
* If the desired effect cannot be obtained, e.g. if the power consumption does not go down as much as expected, make adjustment by changing the set values of power upper limit reference and coefficient α (upper limit control (%)).

Model name	Appearance	Function
TCB-PCMO4UL	 Size: 2.19 × 2.36 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[2] External master ON/OFF control** • Feature The outdoor unit starts or stop the system. • Function By connecting the cable (attached in this optional PCB) to the interface PC board on an outdoor unit, all indoor units connected to the outdoor unit enable to operate simultaneously. • Operation The outdoor unit connection is for the header unit (U1).  SW1: Operation input switch SW2: Stop input switch **Terminal** / **Input signal** / **Operation** [SW1] COOL —  — All indoor units operate together [SW2] HEAT —  — All indoor units stop together The input signal is recognized during its falling phase. (After reaching the bottom of the falling edge, the signal must remain there for at least 100 ms.) The control turned ON first is valid, and the control turned ON later is not accepted when cooling (SW1) and Heating (SW2) input ON at one time. Note (1) For SW*, be sure to use non-voltage contacts for each terminal. (2) COM terminals are DC12 V output with a basic insulation. Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact. DC12 V has a current-limiting resistor of 3.3 kΩ. To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact. **[3] Night time operation (sound reduction) control** • Purpose: Reducing noise from an outdoor unit • Feature Sound level can be reduced by restri cting the compressor and fan speed • Function As the cable (attached in this optional PCB) is connected to the “Interface PCB” on an outdoor unit, both compressor speed and fan speed are restricted while the signal of the night operation control is input. It makes the noise reduction during the night time operation. • Operation The outdoor unit connection is for the header unit (U1).  SW1: Night time signal switch **Terminal** / **Input signal** / **Operation** COOL (SW1) — ON / OFF — All indoor units operate together COOL (SW1) — ON / OFF — All indoor units stop together Each terminal should be connected to dry contact. The input signal is recognized during its rising/falling phase. (After reaching the top/bottom of the rising/falling edge, the signal must remain there for at least 100 ms.) Note (1) For SW*, be sure to use non-voltage contacts for each terminal. (2) COM terminals are DC12 V output with a basic insulation. Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact. DC12 V has a current-limiting resistor of 3.3 kΩ To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact.

Model name	Appearance	Function
TCB-PCMO4UL	 Size: 2.19 × 2.36 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**Sound reduction and approximation capacity (reference)** Model MMY- / Night operation sound reduction dB(A) / Capacity COOL / Capacity HEAT MUP0721* 50/50 Approx. 85% Approx. 85% MUP0961* 50/50 Approx. 70% Approx. 70% MUP1201* 54/53 Approx. 85% Approx. 80% MUP1441* 54/53 Approx. 85% Approx. 70% MUP1681* 54/54 Approx. 80% Approx. 65% MUP1921* 52/54 Approx. 60% Approx. 60% MUP072H1* 50/50 Approx. 85% Approx. 85% MUP096H1* 54/53 Approx. 90% Approx. 90% MUP120H1* 54/53 Approx. 85% Approx. 80% Condition Cooling: (Indoor 80 °F DB, 67 °F WB) (Outdoor temperature 95 °F DB) Heating: (Indoor 70 °F DB) (Outdoor temperature 47 °F DB, 43 °F WB) **[4] Snowfall fan control** • Purpose: Rotating the fan to prevent snow accumulation • Feature Outdoor fan is operated from the snowfall signal received from the outside. **▼ Functions** The outdoor unit fan operates at snowfall by connecting to the outdoor unit interface PCB. **▼ Operation**  SW1: Snowfall selection switch (snowfall sensor) Terminal / Input signal / Operation Cooling (SW1) — ON → OFF — Snowfall fan control (Fan in outdoor unit operates.) ON → OFF — Normal operation Be sure to provide no-voltage continuous contacts for each terminal. Note (1) For SW*, be sure to use non-voltage contacts for each terminal. (2) COM terminals are DC12 V output with a basic insulation. Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact. DC12 V has a current-limiting resistor of 3.3 kΩ To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact.

Model name	Appearance	Function
TCB-PCMO4UL	 Size: 2.19 × 2.36 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[5] Operation mode selection control** • **Purpose: Limiting operation modes to cooling and heating only** • **Feature** This control can restrict the selectable operation mode. **▼Functions** The heating/cooling mode of the system can be selected by connecting to the interface PCB of outdoor units. **▼Operation** The outdoor unit connection is for the header unit (U1).  SW1: Cooling mode specified input switch SW2: Heating mode specified input switch **Input Signal** / **Operation: Selected operation mode** **Cool (SW1)** / **Heat(SW2)** **OFF** / **OFF** — **Normal operation** **ON** / **OFF** — **Cooling operation only** **OFF** / **ON** — **Heating operation only** Each terminal should be connected to dry contact. **About Switching of Processing of Indoor Unit Operation State** Processing of the operation state can be switched for indoor units in a mode other than the selected operation mode by setting the Outdoor DN code [008] of the header outdoor unit interface PCB. **Outdoor DN Code (O.DN) [008]** / **Details of Processing** **O.DN [008] = 0 (factory default)** Unallowed indoor units in a mode other than the P.C.board selection modes are not treated as priority (thermostat OFF state). P.C. board selection mode / Input Signal COOL (SW1) / Input Signal HEAT (SW2) / Remote control / Operation State Normal / OFF / OFF / ✱ or 💧 / ✺ / 🌀 — Follow the remote controller. Cooling operation only allowed / ON / OFF / ✱ or 💧 — Follow the remote controller (Normal cooling operation). ✺ — Thermostat OFF (Air blow operation at super-slow blow rate) 🌀 — Follow the remote controller (Normal air blow operation). Heating operation only allowed / OFF / ON / ✱ or 💧 — Thermostat OFF (Air blow operation at blow rate set on remote control) ✺ — Follow the remote controller (Normal heating operation). 🌀 — Follow the remote controller (Normal air blow operation). **O.DN [008]= 1** Only operation modes and air blow operation selected on the P.C.board can be selected on the remote controller. When the input signal is turned ON, indoor units operated in a mode other than the P.C.board selection mode are forcibly switched to the P.C.board selection modes. P.C. board selection mode / Input Signal COOL (SW1) / Input Signal HEAT (SW2) / Remote control Normal / OFF / OFF — ✱, 💧, ✺ or 🌀 can be selected. COOL / ON / OFF — • Only ✱, 💧 or 🌀 can be selected. • Indoor units in Heat mode are forcibly switched to the Cool mode. — When using the remote control, (mode select control) indicator is displayed. HEAT / OFF / ON — • Only ✺ or 🌀 can be selected. • Indoor units in Cool or Dry mode are forcibly switched to the Heat mode. — When using the remote control, (mode select control) indicator is displayed. The jumper lead is not switched. Indoor units in a mode other than the selected operation mode are forcibly switched to the selected operation mode. Note (1) For SW*, be sure to use non-voltage contacts for each terminal. (2) COM terminals are DC12 V output with a basic insulation. Use a switch (relay or photocoupler) isolated from a controller (locally procured) for CO (Change-Over) contact or NO (normally-open) contact. DC12 V has a current-limiting resistor of 3.3 kΩ To use the relay, confirm a minimum applicable load for each relay and select the suitable relay to avoid a poor contact.

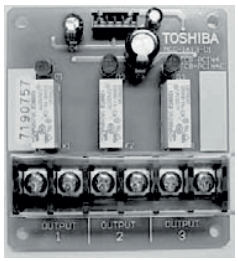
Model name	Appearance	Function
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[6] Error / Operation Output** • Feature Operation and error monitoring is possible. **▼ Function** The operation error output PCB can indicate operation and error states by connecting to the interface PCB of outdoor units. **▼ Operation** Operation output: The operation indicator is on while any indoor unit in the system is operating. Error output: The error indicator is on when an error is occurred on even one of the indoor or outdoor units in the system. **Wiring example**  **C1** Attached connection cable 1 (4 wires) **CN511** Connector on interface side (green) **K1, K2** Relays **L1** Error indication Lamp **L2** Operation indication Lamp **OUTPUT1** Error output **OUTPUT2** Operation output **PJ20** Connector on optional PCB side **PS** Power supply unit **TB1** Terminal block * [OUTPUT3] is normally output when power is turned out. Note1: Output Relay (K1, K2) Contact Specifications • Output terminals (OUTPUT1, 2) must satisfy the following electrical rating. • When connecting a conductive load (e.g. relay coil) to loads K1 and K2, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force (for a DC power supply) on the bypass circuit. <Electrical Rating> 208 to 230VAC, 10 mA or more, 1 A or less 24 VAC, 10 mA or more, 1 A or less (non-conductive load)

Model name	Appearance	Function
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in) **Application**  MMY-MUP0721, 0961,072H1 Optional PCB   MMY-MUP1201 to 1921 MMY-MUP096H1,120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[7] Compressor Operation Output** • Feature Outputs the operation status of the compressors in each outdoor unit. **▼Function** This function can be applied, for example, to the elapsed operation time count of each compressor mounted on an outdoor unit since the compressor in operation signal can be output externally. **▼Operation** During compressor operation, the relay of the output terminal corresponding to that compressor turns ON (closes) and turns OFF (opens) when compressor operation stops. As shown in the figure, the output terminals are "OUTPUT1" and "OUTPUT2" from the left compressor facing the front of the outdoor unit.  **Wiring example**  Locally procured Outdoor unit Outdoor unit interface PCB Optional PCB (See "CAUTION") C2 CN514 PJ20 TB1 K1 K2 OUTPUT1 OUTPUT2 CTR1 CTR2 L1 L2 PS Shield wire

C2	**Connector cable 2 (2)**
CN514	**Connector on interface side (green)**
CTR1	**Elapsed operation counter 1**
CTR2	**Elapsed operation counter 2**
K1, K2	**Relays**
L1, L2	**Operation indication LEDs**
OUTPUT1	**Compressor 1 operation output terminal**
OUTPUT2	**Compressor 2 operation output terminal**
PJ20	**Connector on optional PCB side**
PS	**Power supply unit**
TB1	**Terminal block**

Note1: Output Relay (K1, K2) Contact Specifications
- Output terminals (OUTPUT1, 2) must satisfy the following electrical rating.
- When connecting a conductive load (e.g. relay coil) to loads K1 and K2, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force (for a DC power supply) on the bypass circuit.

<Electrical Rating>
208 to 230VAC, 10 mA or more, 1 A or less
24 VAC, 10 mA or more, 1 A or less (non-conductive load)

Model name	Appearance	Function
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in)	**[8] Operating Rate Output**

• Feature
Relay turn ON/OFF depending on the running rate of the system.

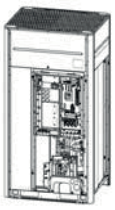
▼Functions
The operation state can be remotely checked since the system operating rate signal can be output externally.

▼Operation
As shown in the table, each of the output terminals turns ON (relay closes) and OFF (relay opens) according to the system operating rate.

Functions	Outdoor DN Code (O.DN) [012]	OUTPUT1	OUTPUT2	OUTPUT3	Operating rate FA
System operating rate output	O.DN [012] = 1	OFF	OFF	OFF	FA=0%
		ON	OFF	OFF	0%<FA<20%
		OFF	ON	OFF	20%≤FA<35%
		ON	ON	OFF	35%≤FA<50%
		OFF	OFF	ON	50%≤FA<65%
		ON	OFF	ON	65%≤FA<80%
		OFF	ON	ON	80%≤FA<95%
		ON	ON	ON	95%≤FA

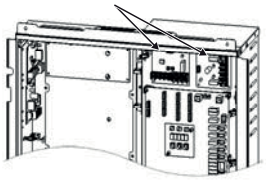
OFF=relay open ON=relay closed

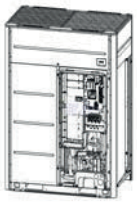
Application



MMY-MUP0721, 0961,072H1

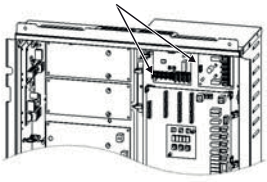
Optional PCB





MMY-MUP1201 to 1921
MMY-MUP096H1,120H1

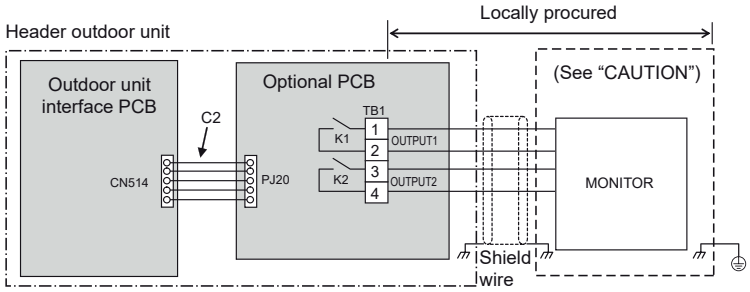
Optional PCB



(max. number installed: 1pc)

* Install the optional PCB in the outdoor header unit.

Wiring example



C2	Connector cable 2 (2)
CN514	Connector on interface side (green)
K1, K2, K3	Relays
MONITOR	Monitoring device
OUTPUT1	Output terminal for each function
OUTPUT2	Output terminal for each function
OUTPUT3	Output terminal for each function
PJ20	Connector on optional PCB side
TB1	Terminal block

* Connect optional boards to the center outdoor unit.

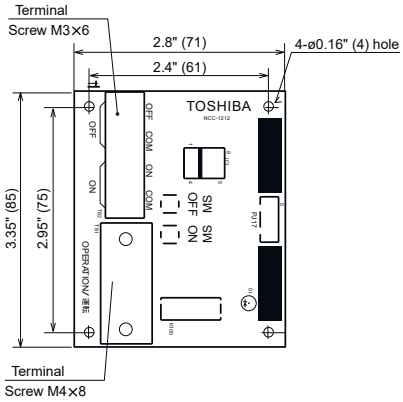
Note1: Output Relay (K1, K2) Contact Specifications
- Output terminals (OUTPUT1, 2) must satisfy the following electrical rating.
- When connecting a conductive load (e.g. relay coil) to loads K1 and K2, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force (for a DC power supply) on the bypass circuit.

<Electrical Rating>
208 to 230VAC, 10 mA or more, 1 A or less
24 VAC, 10 mA or more, 1 A or less (non-conductive load)

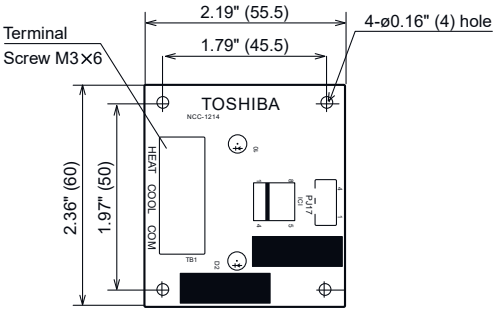
Dimensions of P.C. board

Unit: in (mm)

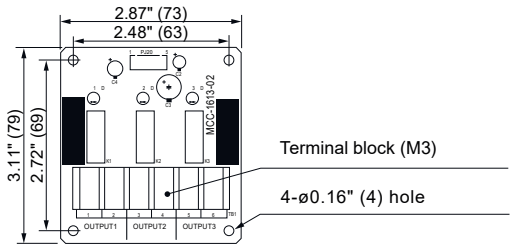
TCB-PCDM4UL



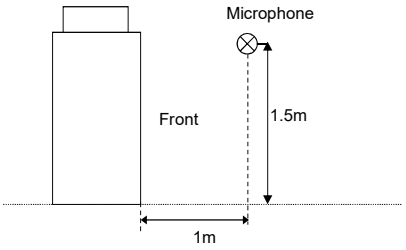
TCB-PCMO4UL



TCB-PCIN4UL



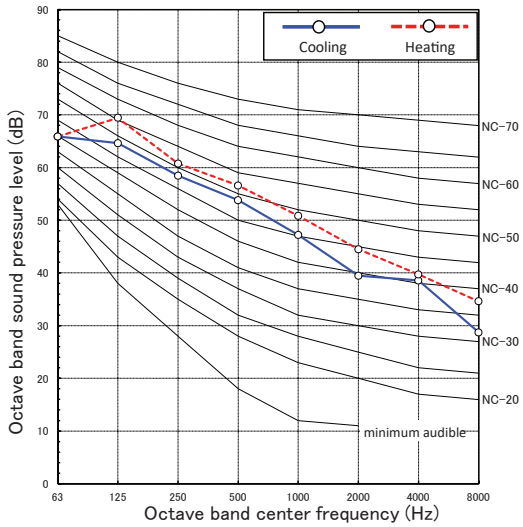
5-10. Sound data (NC curve)



MMY-MUP0721FT6P-UL / MMY-MUP0721FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	56.0	59.0

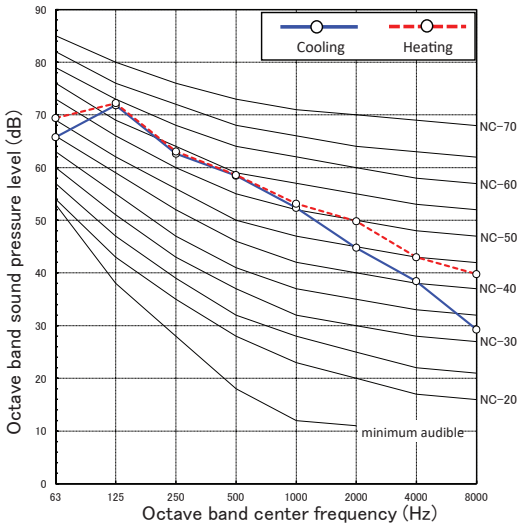
MMY-MUP0721FT6P-UL / MMY-MUP0721FT9P-UL



MMY-MUP0961FT6P-UL / MMY-MUP0961FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	61.0

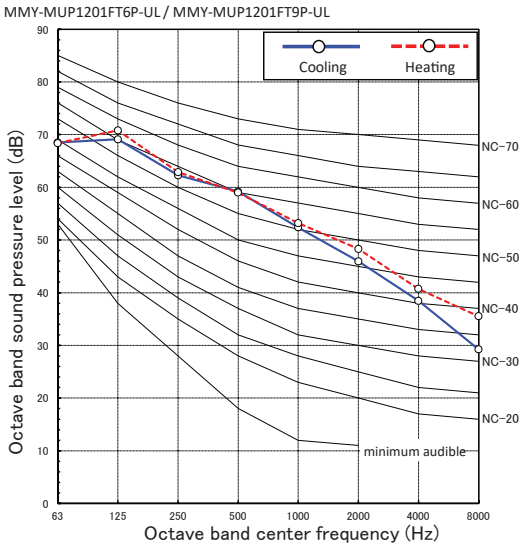
MMY-MUP0961FT6P-UL / MMY-MUP0961FT9P-UL



MMY-MUP1201FT6P-UL / MMY-MUP1201FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	60.0	61.0

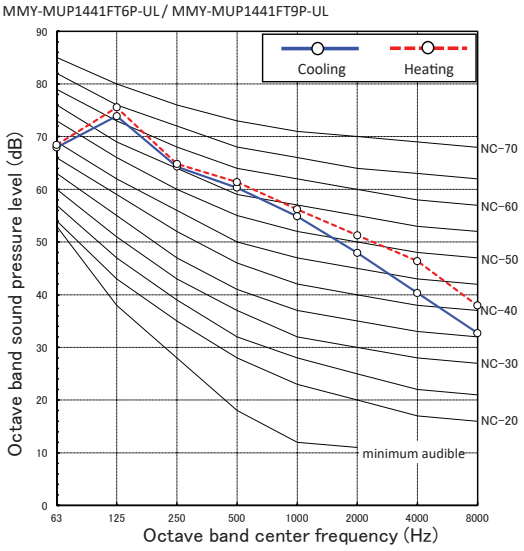
MMY-MUP1201FT6P-UL / MMY-MUP1201FT9P-UL



MMY-MUP1441FT6P-UL / MMY-MUP1441FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	63.0	64.0

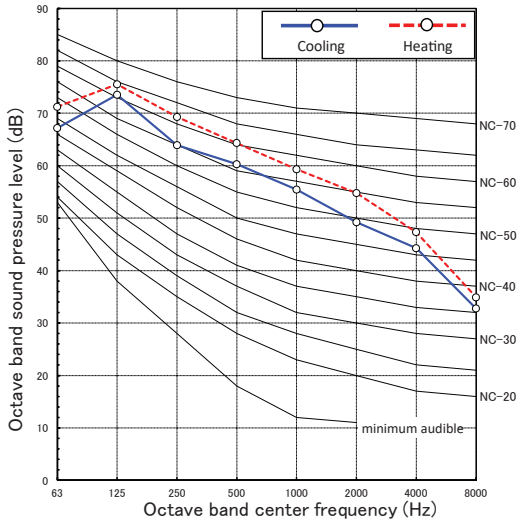
MMY-MUP1441FT6P-UL / MMY-MUP1441FT9P-UL



MMY-MUP1681FT6P-UL / MMY-MUP1681FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	63.0	67.0

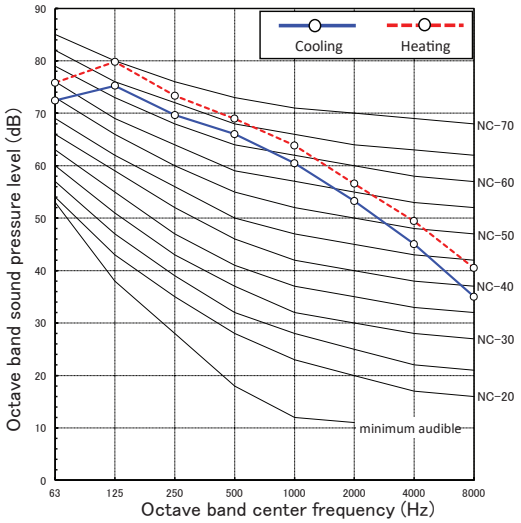
MMY-MUP1681FT6P-UL / MMY-MUP1681FT9P-UL



MMY-MUP1921FT6P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	68.0	71.0

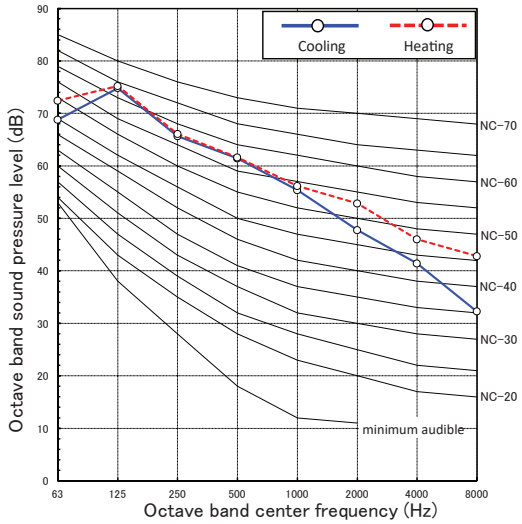
MMY-MUP1921FT6P-UL



MMY-UP1921FT6P-UL / MMY-UP1921FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	64.0

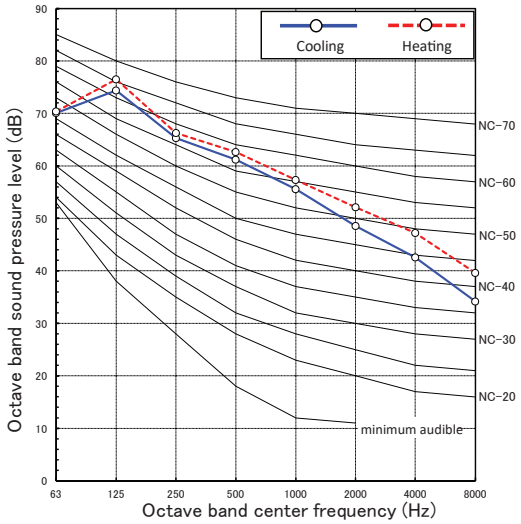
MMY-UP1921FT6P-UL / MMY-UP1921FT9P-UL



MMY-UP2161FT6P-UL / MMY-UP2161FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	63.8	65.2

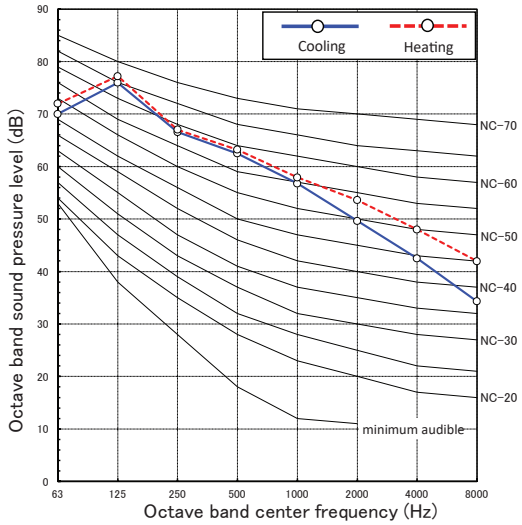
MMY-UP2161FT6P-UL / MMY-UP2161FT9P-UL



MMY-UP2401FT6P-UL / MMY-UP2401FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	65.1	65.8

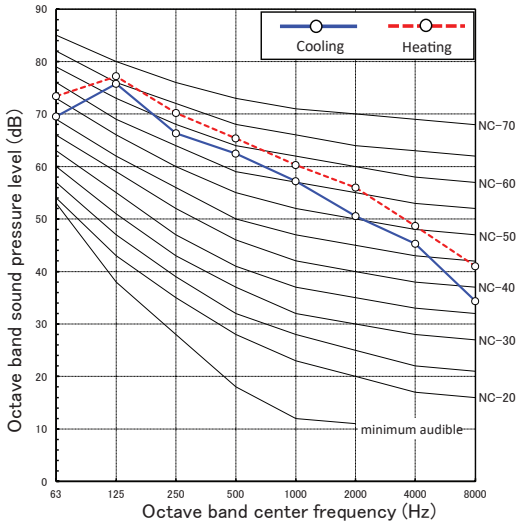
MMY-UP2401FT6P-UL / MMY-UP2401FT9P-UL



MMY-UP2641FT6P-UL / MMY-UP2641FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	65.1	68.0

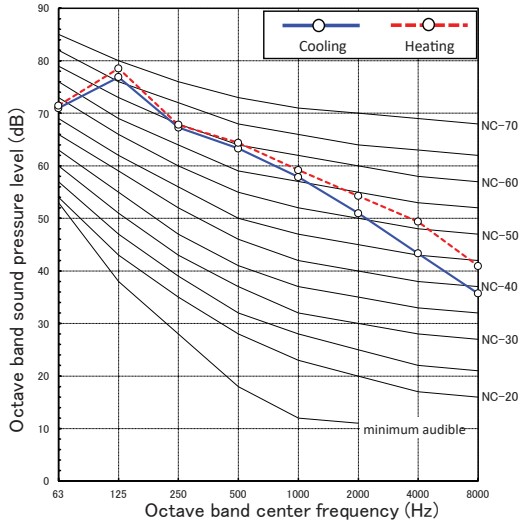
MMY-UP2641FT6P-UL / MMY-UP2641FT9P-UL



MMY-UP2881FT6P-UL / MMY-UP2881FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	66.0	67.0

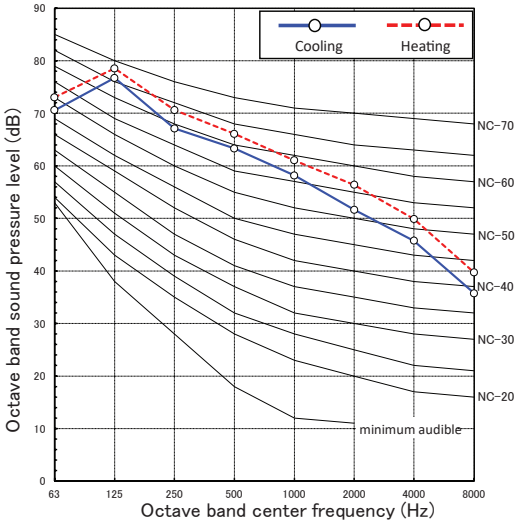
MMY-UP2881FT6P-UL / MMY-UP2881FT9P-UL



MMY-UP3121FT6P-UL / MMY-UP3121FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	68.8

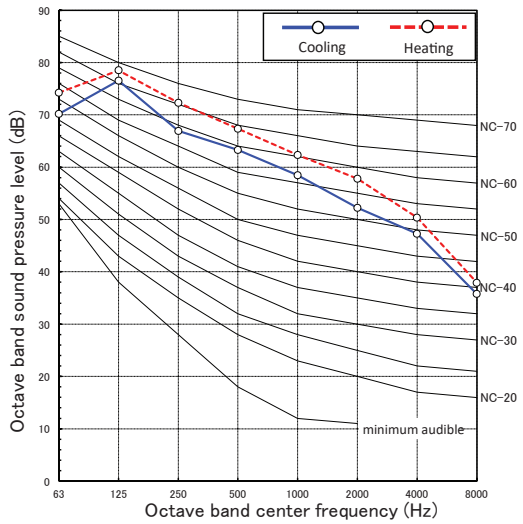
MMY-UP3121FT6P-UL / MMY-UP3121FT9P-UL



MMY-UP3361FT6P-UL / MMY-UP3361FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	66.0	70.0

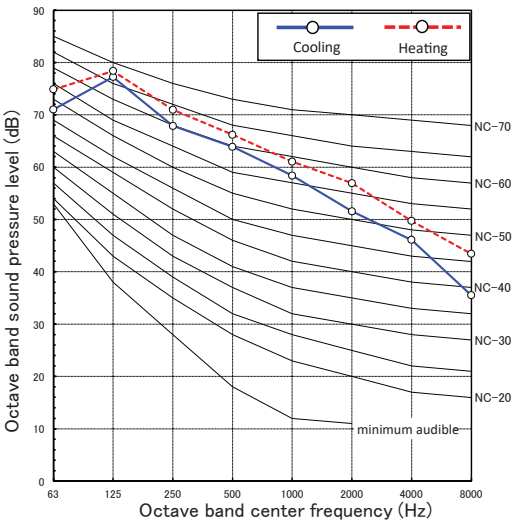
MMY-UP3361FT6P-UL / MMY-UP3361FT9P-UL



MMY-UP3601FT6P-UL / MMY-UP3601FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	66.5	68.8

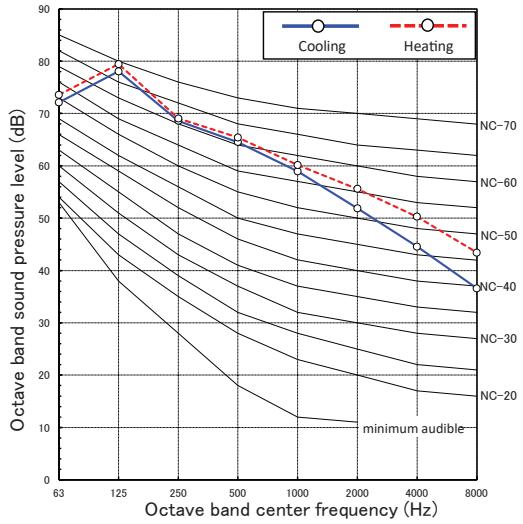
MMY-UP3601FT6P-UL / MMY-UP3601FT9P-UL



MMY-UP3841FT6P-UL / MMY-UP3841FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.2	68.0

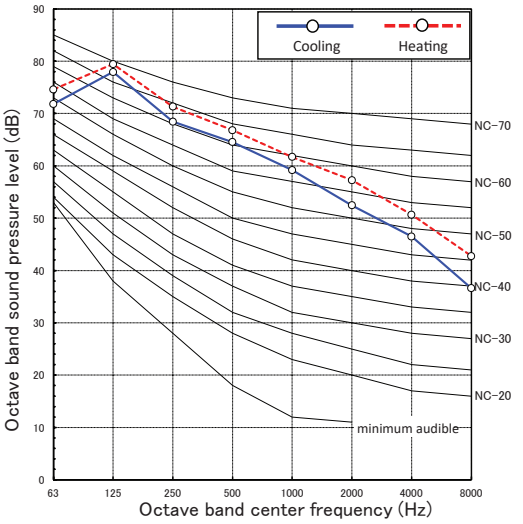
MMY-UP3841FT6P-UL / MMY-UP3841FT9P-UL



MMY-UP4081FT6P-UL / MMY-UP4081FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.2	69.4

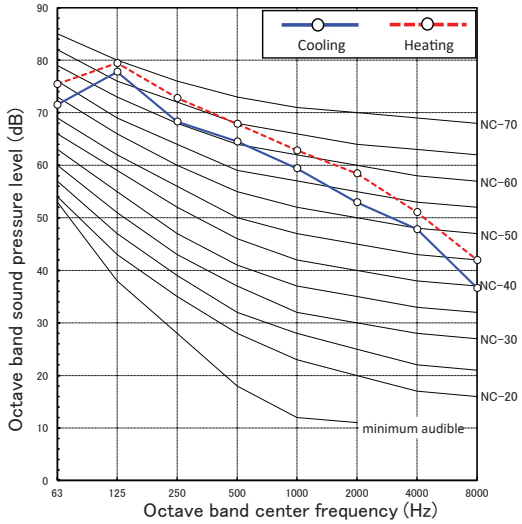
MMY-UP4081FT6P-UL / MMY-UP4081FT9P-UL



MMY-UP4321FT6P-UL / MMY-UP4321FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.2	70.5

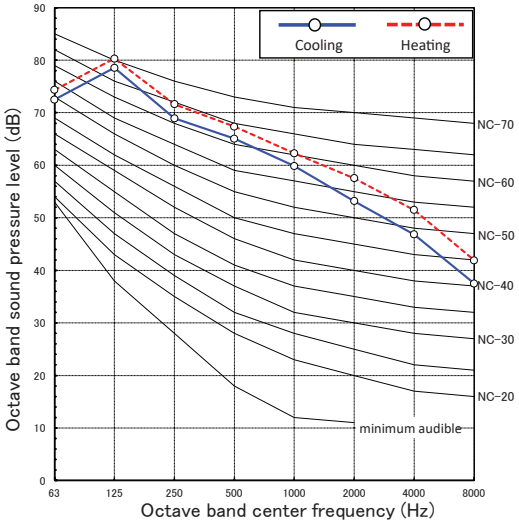
MMY-UP4321FT6P-UL / MMY-UP4321FT9P-UL



MMY-UP4561FT6P-UL / MMY-UP4561FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.8	70.0

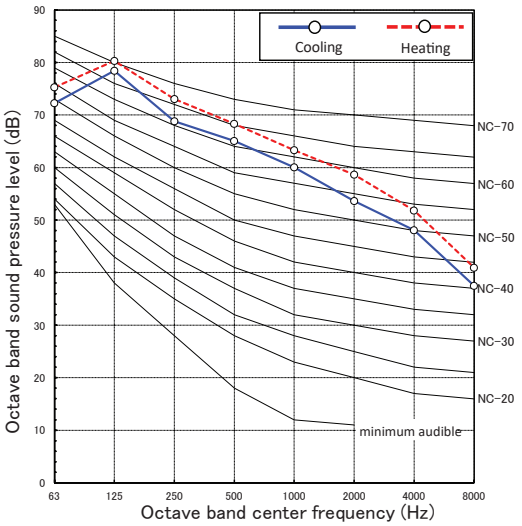
MMY-UP4561FT6P-UL / MMY-UP4561FT9P-UL



MMY-UP4801FT6P-UL / MMY-UP4801FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.8	71.0

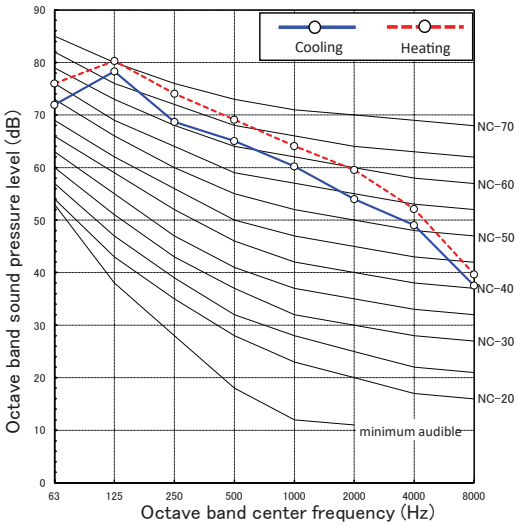
MMY-UP4801FT6P-UL / MMY-UP4801FT9P-UL



MMY-UP5401FT6P-UL / MMY-UP5401FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	67.8	71.8

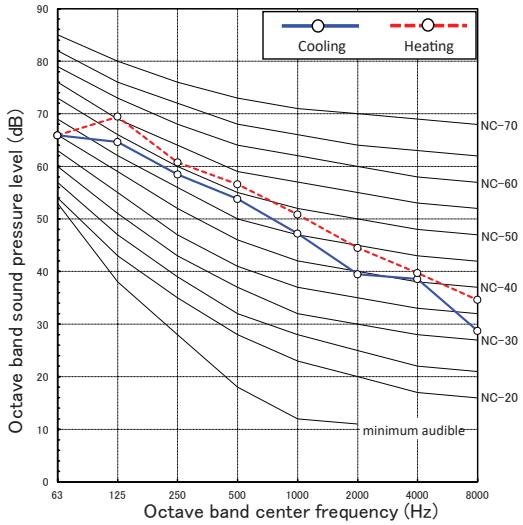
MMY-UP5401FT6P-UL / MMY-UP5401FT9P-UL



MMY-MUP072H1FT6PUL / MMY-MUP072H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	56.0	59.0

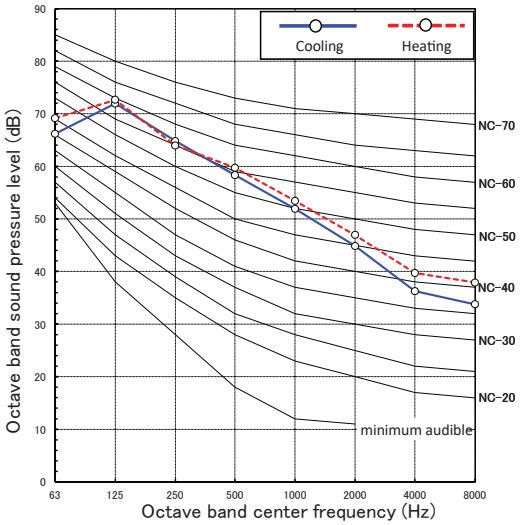
MMY-MUP072H1FT6PUL / MMY-MUP072H1FT9PUL



MMY-MUP096H1FT6PUL / MMY-MUP096H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	62.0

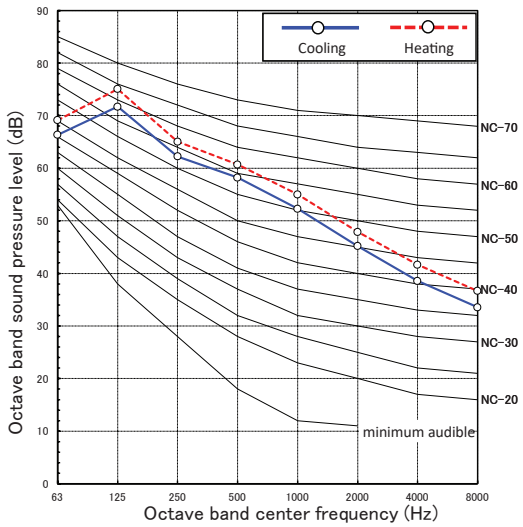
MMY-MUP096H1FT6PUL / MMY-MUP096H1FT9PUL



MMY-MUP120H1FT6PUL / MMY-MUP120H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	60.0	63.0

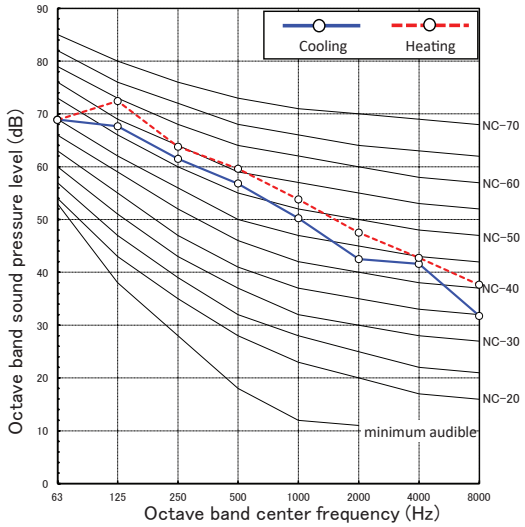
MMY-MUP120H1FT6PUL / MMY-MUP120H1FT9PUL



MMY-UP144H1FT6PUL / MMY-UP144H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	59.0	62.0

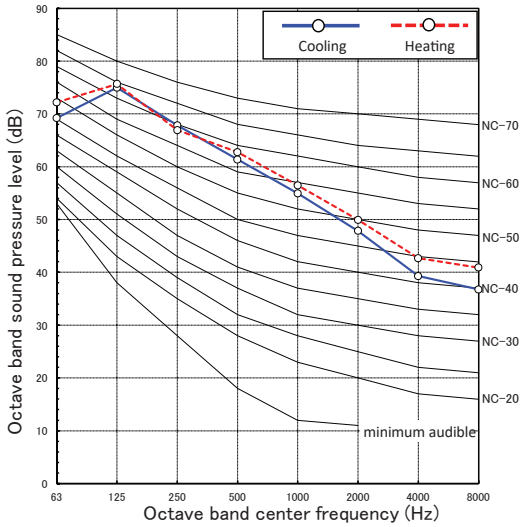
MMY-UP144H1FT6PUL / MMY-UP144H1FT9PUL



MMY-UP192H1FT6PUL / MMY-UP192H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	65.0

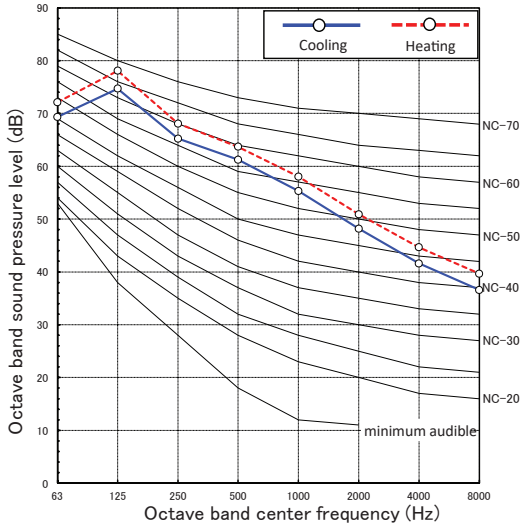
MMY-UP192H1FT6PUL / MMY-UP192H1FT9PUL



MMY-UP240H1FT6PUL / MMY-UP240H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	63.0	66.0

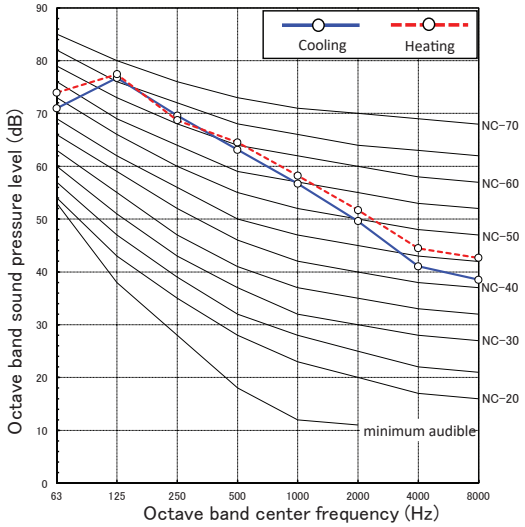
MMY-UP240H1FT6PUL / MMY-UP240H1FT9PUL



MMY-UP288H1FT6PUL / MMY-UP288H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	65.8	66.8

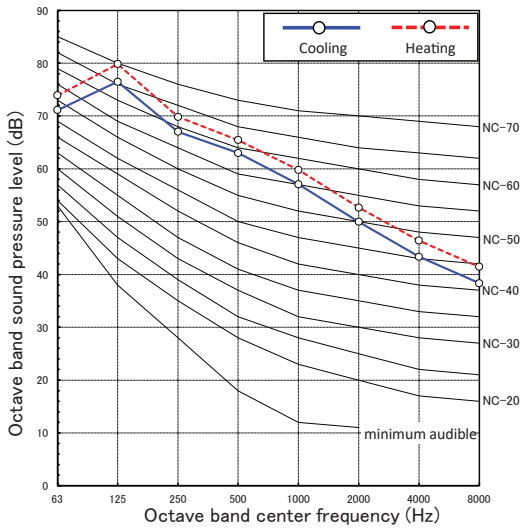
MMY-UP288H1FT6PUL / MMY-UP288H1FT9PUL



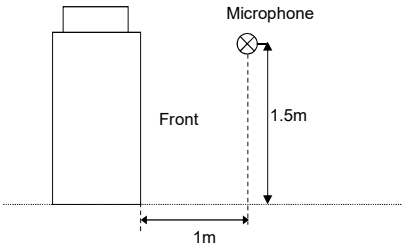
MMY-UP360H1FT6PUL / MMY-UP360H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	64.8	67.8

MMY-UP360H1FT6PUL / MMY-UP360H1FT9PUL



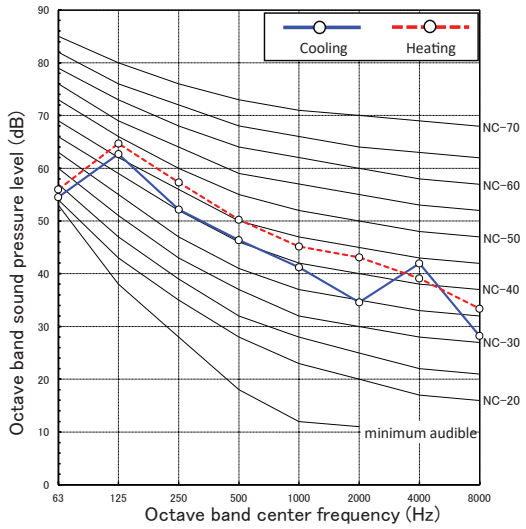
5-11. Sound data (NC Curve - Night operation mode)



MMY-MUP0721FT6P-UL / MMY-MUP0721FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	51.0	54.0

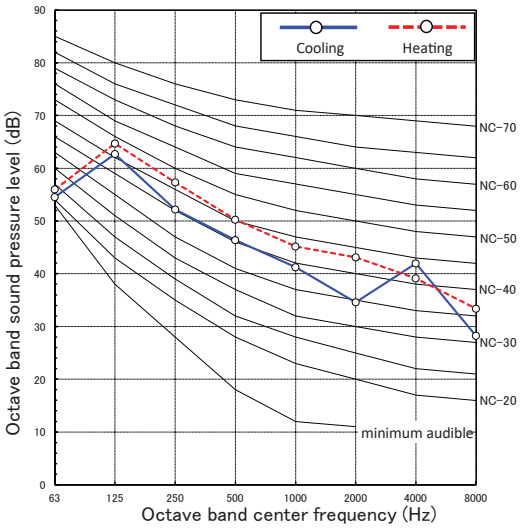
MMY-MUP0721FT6P-UL / MMY-MUP0721FT9P-UL



MMY-MUP0961FT6P-UL / MMY-MUP0961FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	51.0	54.0

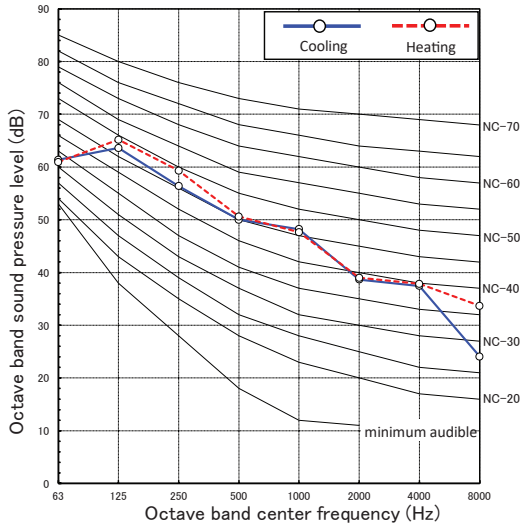
MMY-MUP0961FT6P-UL / MMY-MUP0961FT9P-UL



MMY-MUP1201FT6P-UL / MMY-MUP1201FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.0	56.0

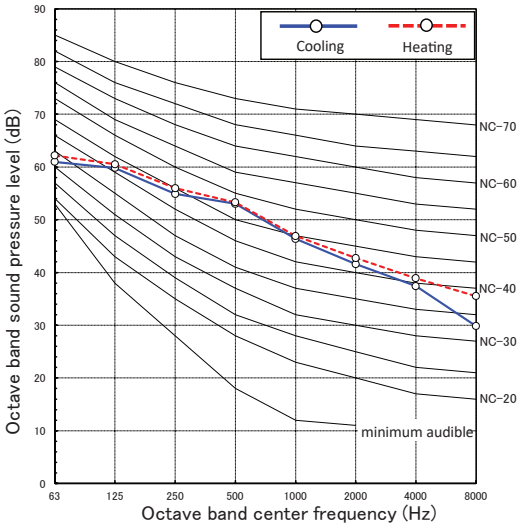
MMY-MUP1201FT6P-UL / MMY-MUP1201FT9P-UL



MMY-MUP1441FT6P-UL / MMY-MUP1441FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	55.0

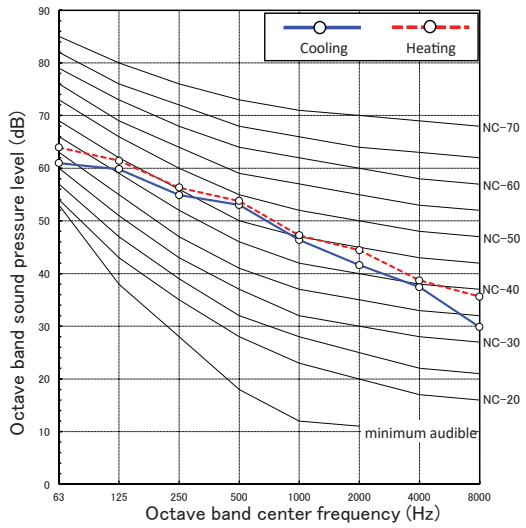
MMY-MUP1441FT6P-UL / MMY-MUP1441FT9P-UL



MMY-MUP1681FT6P-UL / MMY-MUP1681FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	55.0

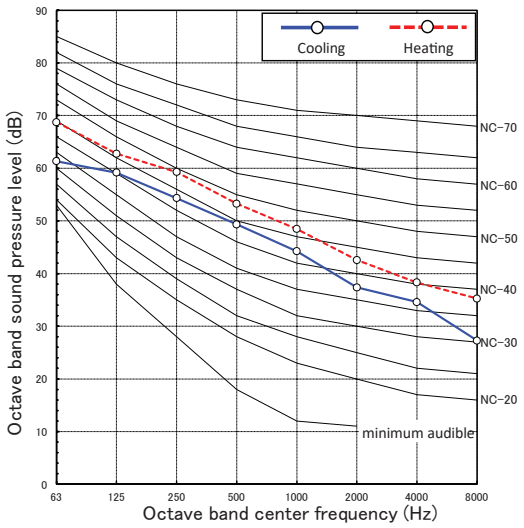
MMY-MUP1681FT6P-UL / MMY-MUP1681FT9P-UL



MMY-MUP1921FT6P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	52.0	57.0

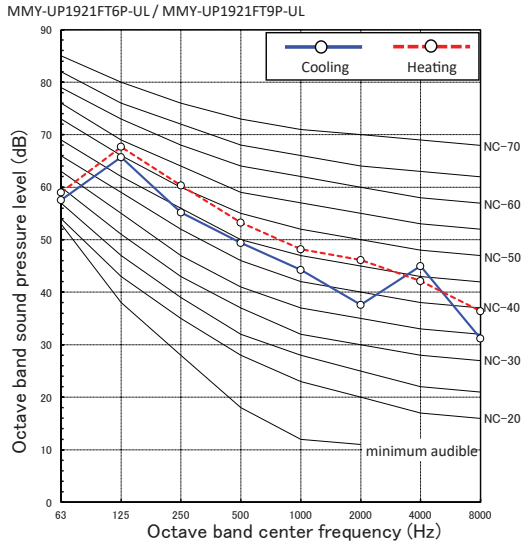
MMY-MUP1921FT6P-UL



MMY-UP1921FT6P-UL / MMY-UP1921FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	57.0

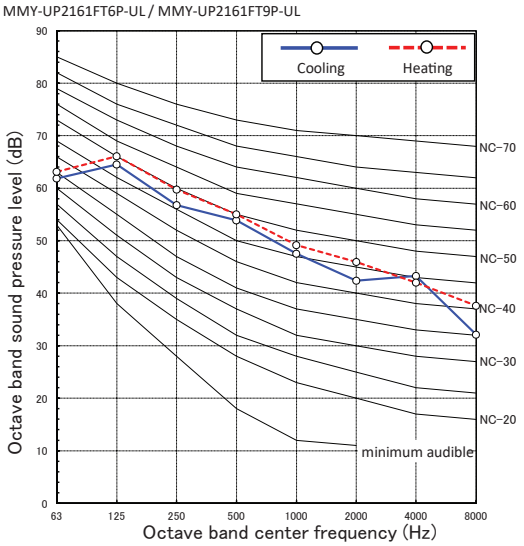
MMY-UP1921FT6P-UL / MMY-UP1921FT9P-UL



MMY-UP2161FT6P-UL / MMY-UP2161FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.8	57.5

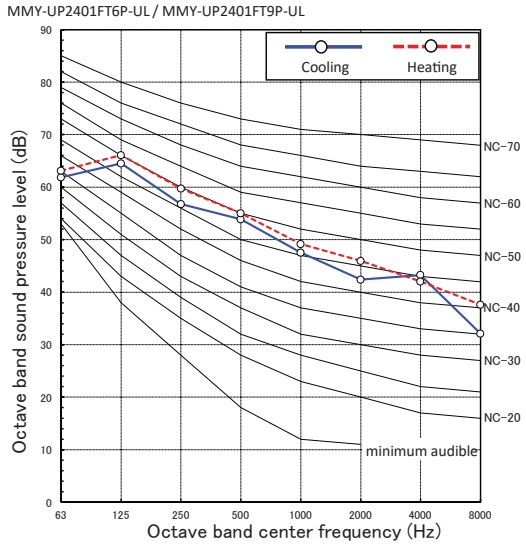
MMY-UP2161FT6P-UL / MMY-UP2161FT9P-UL



MMY-UP2401FT6P-UL / MMY-UP2401FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.8	57.5

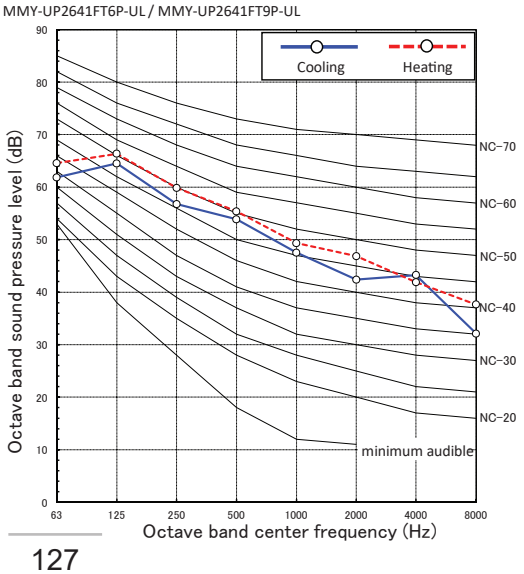
MMY-UP2401FT6P-UL / MMY-UP2401FT9P-UL



MMY-UP2641FT6P-UL / MMY-UP2641FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.8	57.5

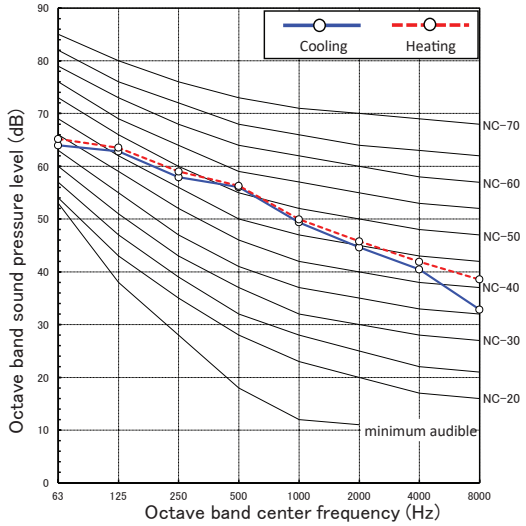
MMY-UP2641FT6P-UL / MMY-UP2641FT9P-UL



MMY-UP2881FT6P-UL / MMY-UP2881FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	58.0

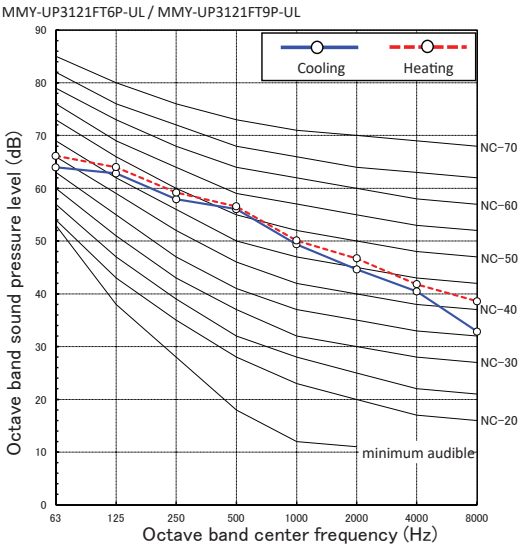
MMY-UP2881FT6P-UL / MMY-UP2881FT9P-UL



MMY-UP3121FT6P-UL / MMY-UP3121FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	58.0

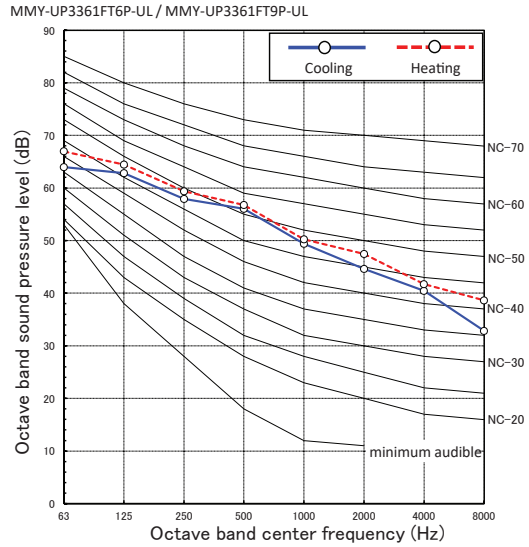
MMY-UP3121FT6P-UL / MMY-UP3121FT9P-UL



MMY-UP3361FT6P-UL / MMY-UP3361FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	58.0

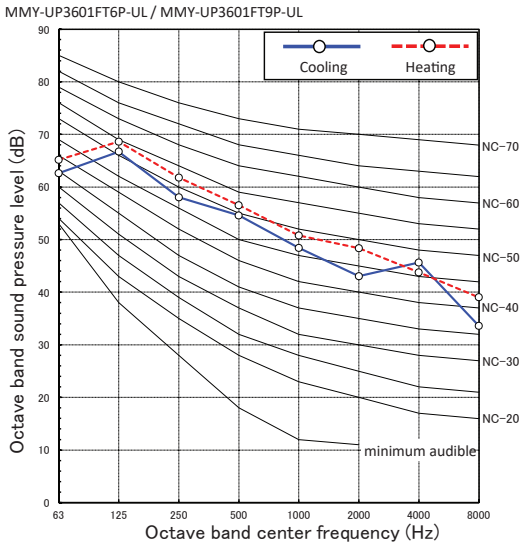
MMY-UP3361FT6P-UL / MMY-UP3361FT9P-UL



MMY-UP3601FT6P-UL / MMY-UP3601FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	59.1

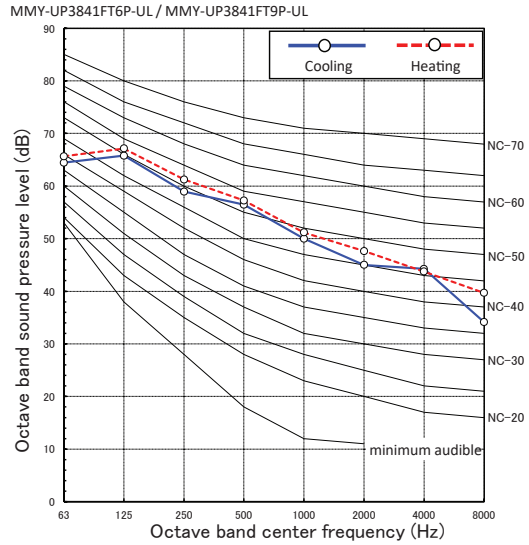
MMY-UP3601FT6P-UL / MMY-UP3601FT9P-UL



MMY-UP3841FT6P-UL / MMY-UP3841FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	59.5

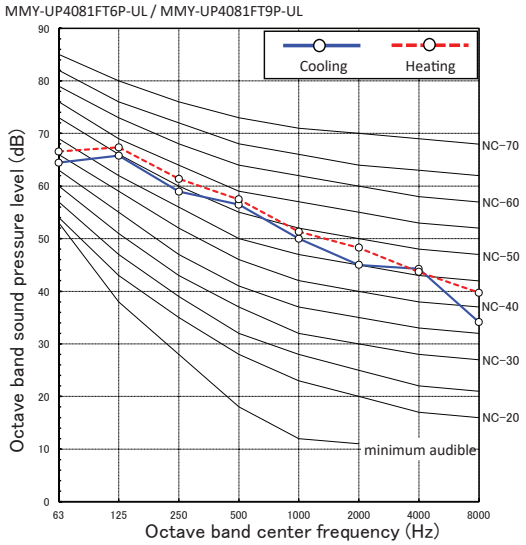
MMY-UP3841FT6P-UL / MMY-UP3841FT9P-UL



MMY-UP4081FT6P-UL / MMY-UP4081FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	59.5

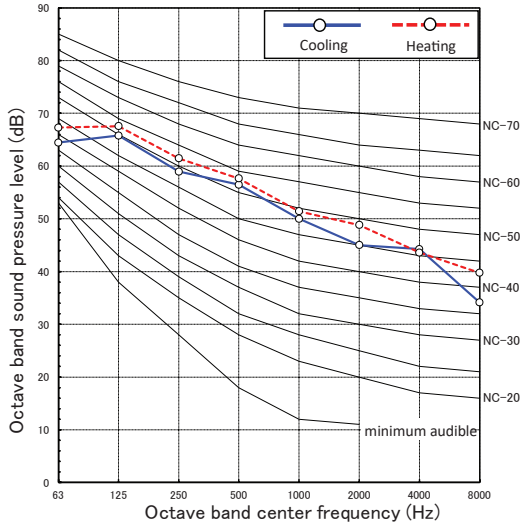
MMY-UP4081FT6P-UL / MMY-UP4081FT9P-UL



MMY-UP4321FT6P-UL / MMY-UP4321FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	59.5

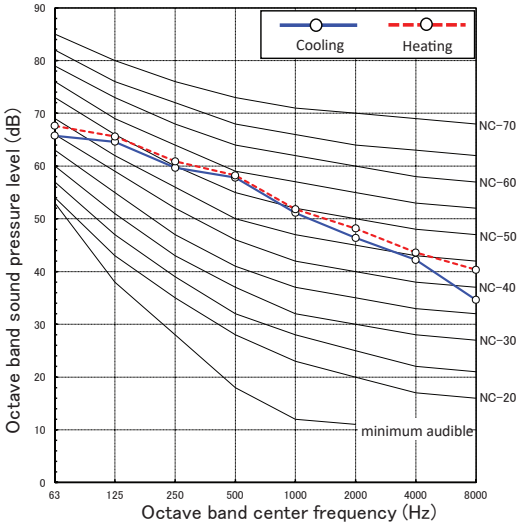
MMY-UP4321FT6P-UL / MMY-UP4321FT9P-UL



MMY-UP4561FT6P-UL / MMY-UP4561FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	59.8

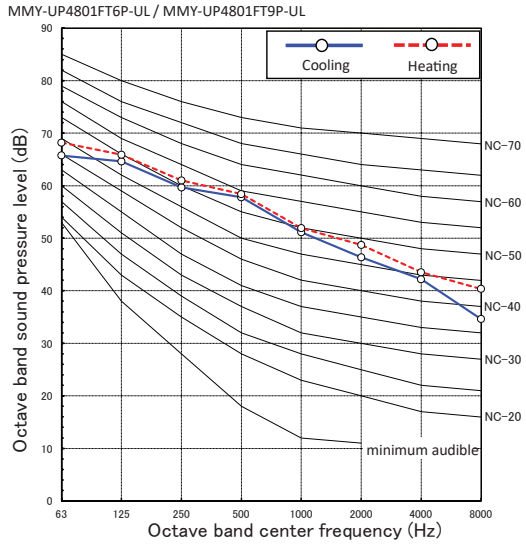
MMY-UP4561FT6P-UL / MMY-UP4561FT9P-UL



MMY-UP4801FT6P-UL / MMY-UP4801FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	59.8

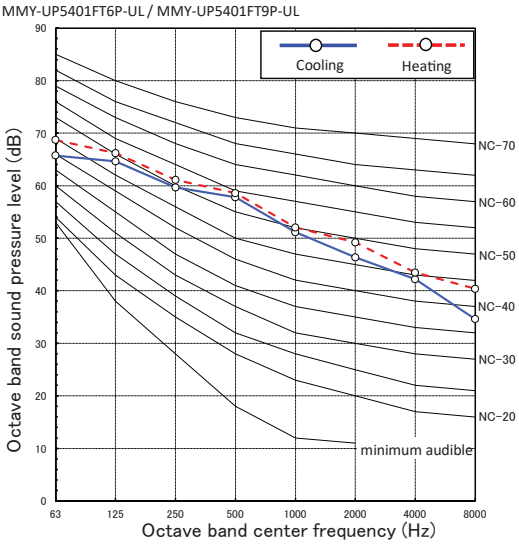
MMY-UP4801FT6P-UL / MMY-UP4801FT9P-UL



MMY-UP5401FT6P-UL / MMY-UP5401FT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	59.8

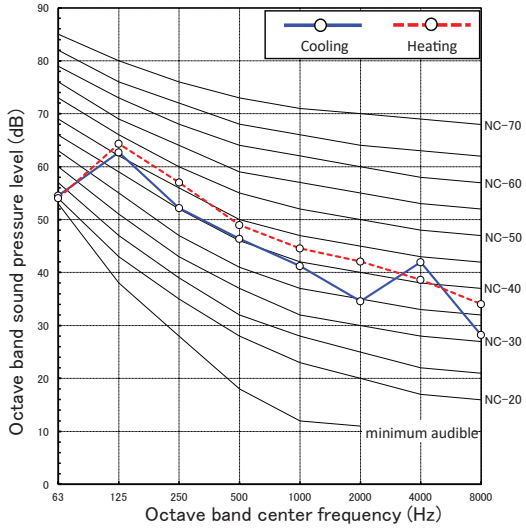
MMY-UP5401FT6P-UL / MMY-UP5401FT9P-UL



MMY-MUP072H1FT6PUL / MMY-MUP072H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	51.0	54.0

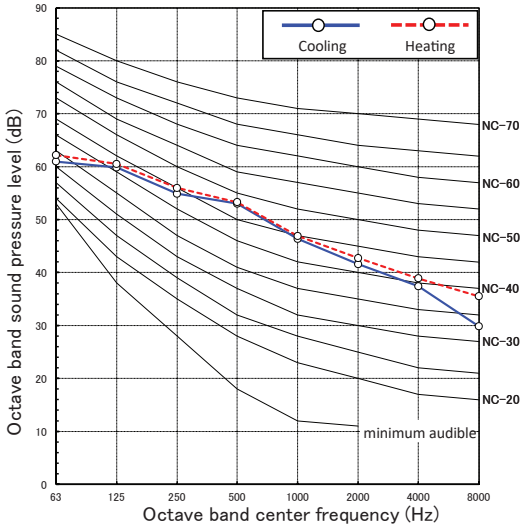
MMY-MUP072H1FT6PUL / MMY-MUP072H1FT9PUL



MMY-MUP096H1FT6PUL / MMY-MUP096H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	55.0

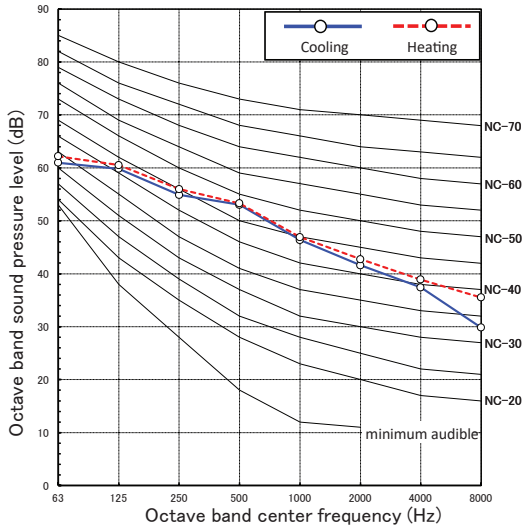
MMY-MUP096H1FT6PUL / MMY-MUP096H1FT9PUL



MMY-MUP120H1FT6PUL / MMY-MUP120H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	55.0

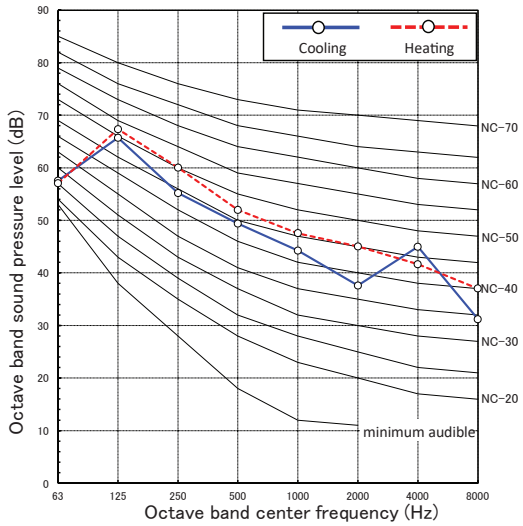
MMY-MUP120H1FT6PUL / MMY-MUP120H1FT9PUL



MMY-UP144H1FT6PUL / MMY-UP144H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	57.0

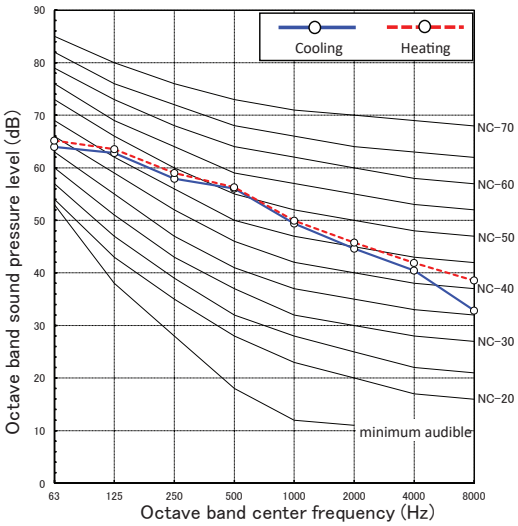
MMY-UP144H1FT6PUL / MMY-UP144H1FT9PUL



MMY-UP192H1FT6PUL / MMY-UP192H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	58.0

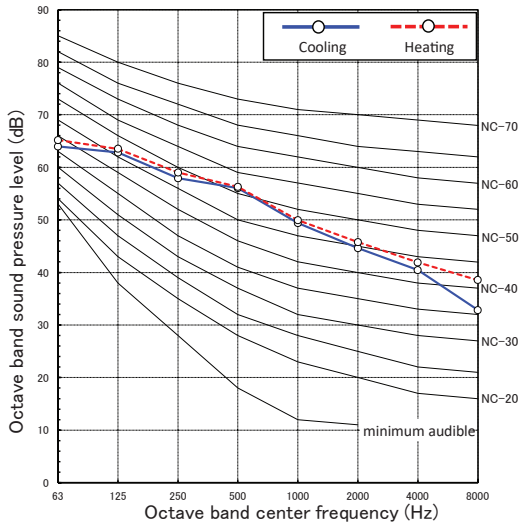
MMY-UP192H1FT6PUL / MMY-UP192H1FT9PUL



MMY-UP240H1FT6PUL / MMY-UP240H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	58.0

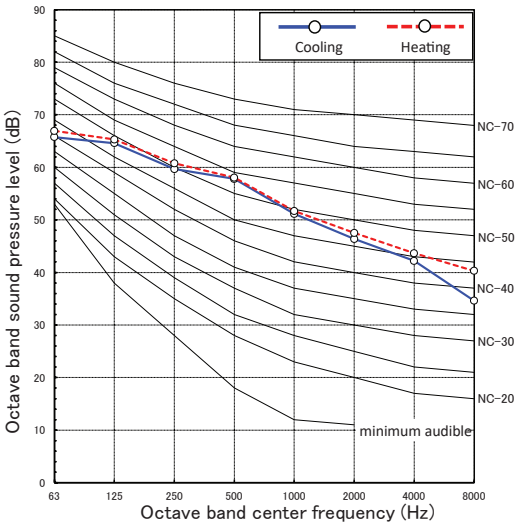
MMY-UP240H1FT6PUL / MMY-UP240H1FT9PUL



MMY-UP288H1FT6PUL / MMY-UP288H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	59.8

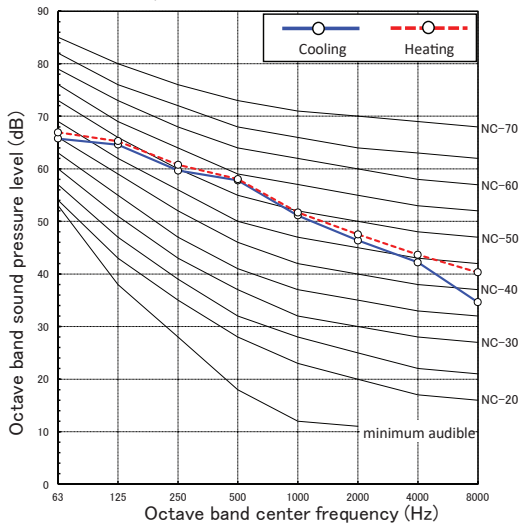
MMY-UP288H1FT6PUL / MMY-UP288H1FT9PUL



MMY-UP360H1FT6PUL / MMY-UP360H1FT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	59.8

MMY-UP360H1FT6PUL / MMY-UP360H1FT9PUL



5-12. Dimensional drawing of optional units

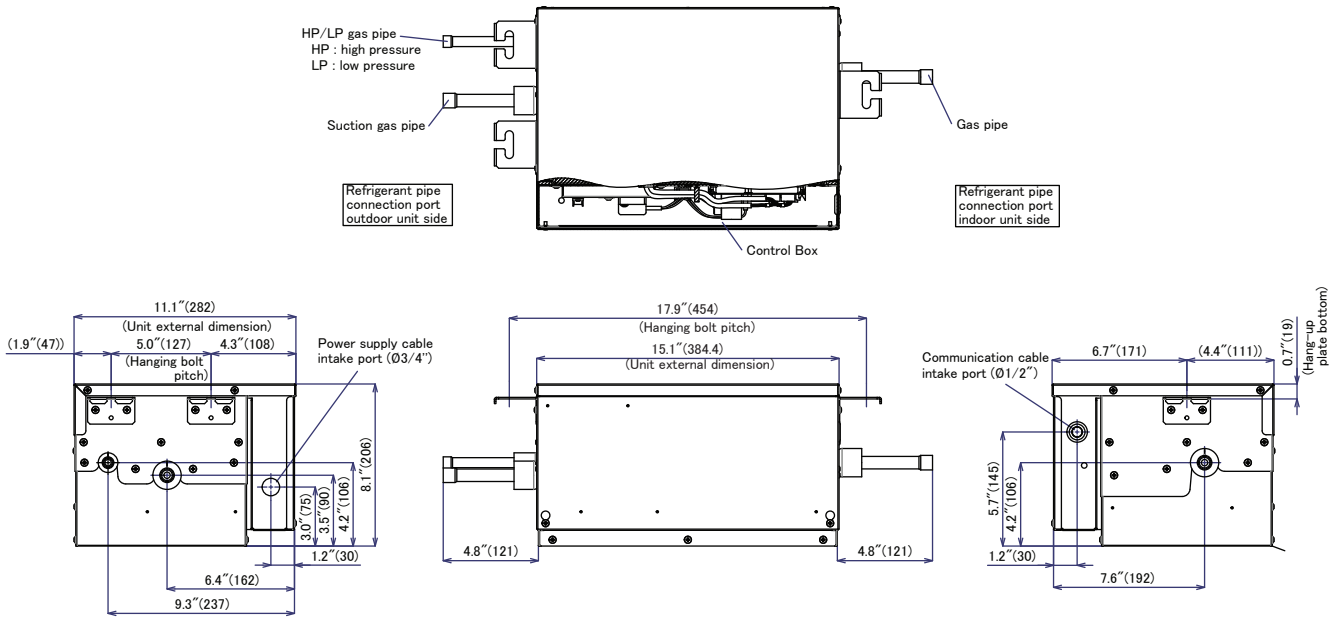
5-12-1. FS unit (Single port type)

Specfication (Single port type)

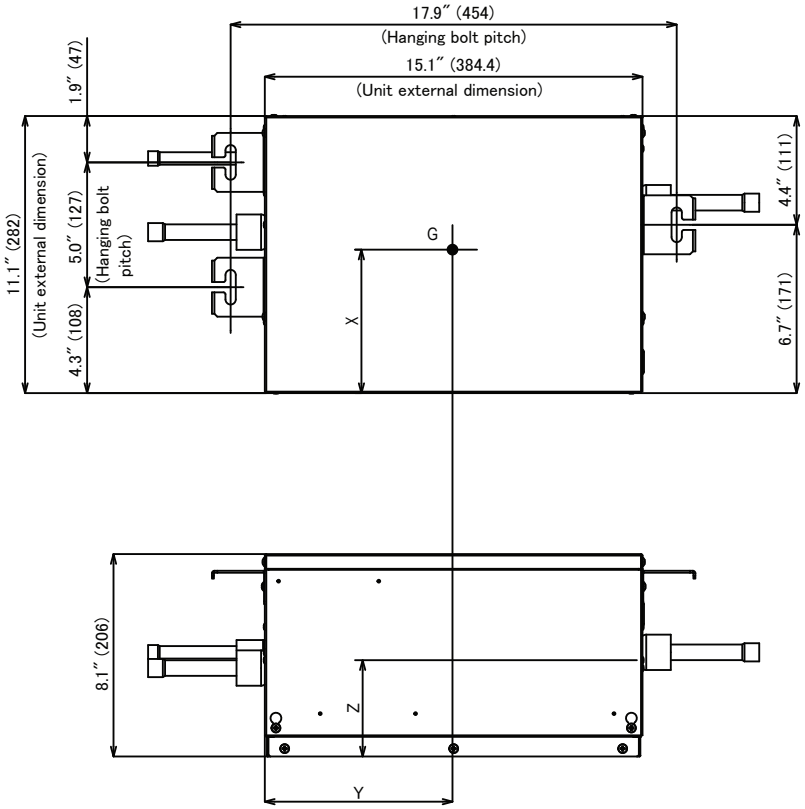
Model name		RBM-Y0611FUPUL	RBM-Y0961FUPUL
Power supply		208-230V 1 phase 60Hz	
Connectable indoor unit capacity per 1 branch (kBtu/h)		below 61	61 to 96 or less
Connectable indoor units		10	16
Dimension	Height (in)	8.1	8.1
	Width (in)	15.1	15.2
	Depth (in)	11.1	11.1
Total Weight (lbs)		22	22
Connecting port dia. (Indoor unit side)	Liquid side (in)	-	-
	Gas side (in)	Ø5/8	Ø7/8
Connecting port dia. (Outdoor unit side)	Liquid side (in)	-	-
	HP/LP gas side (in)	Ø1/2	Ø3/4
	Suction gas side (in)	Ø5/8	Ø7/8
Connection		Blaze connection	

External view (Single-port type)
RBM-Y0611FUPUL, RBM-Y0961FUPUL

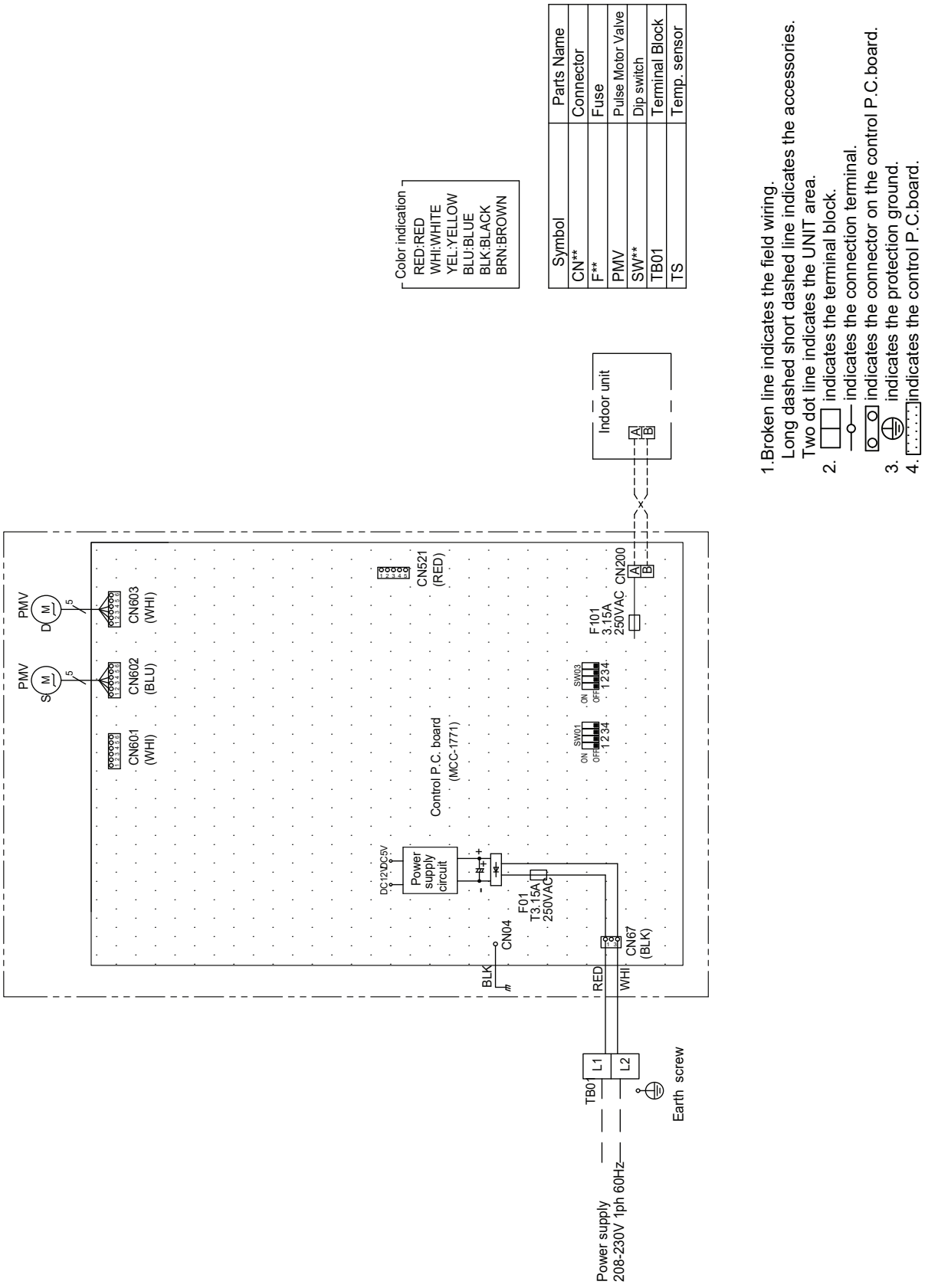
(Unit : in (mm))



Center of gravity (Single-port type)

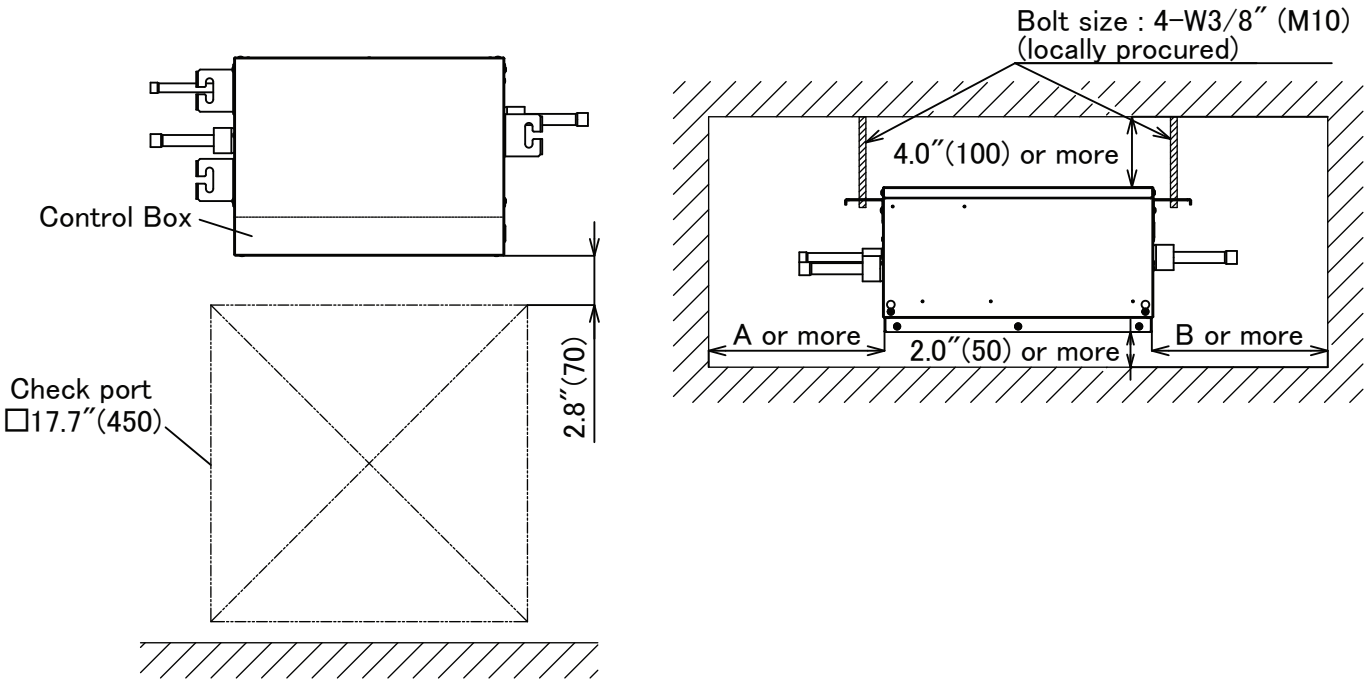


RBM-***	X [in(mm)]	Y [in(mm)]	Z [in(mm)]	Weight [lbs(kg)]
Y0611FUPUL	5.7" (146)	7.5" (191)	3.9" (98)	22 (11)
Y0961FUPUL	5.7" (146)	7.5" (191)	3.9" (98)	22 (11)


Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
BRN:BROWN
Symbol | Parts Name
CN** | Connector
F** | Fuse
PMV | Pulse Motor Valve
SW** | Dip switch
TB01 | Terminal Block
TS | Temp. sensor
1.Broken line indicates the field wiring.
Long dashed short dashed line indicates the accessories.
Two dot line indicates the UNIT area.
2. indicates the terminal block.
indicates the connection terminal.
3. indicates the connector on the control P.C.board.
4. indicates the protection ground.
indicates the control P.C.board.
Indoor unit
A
B
CN200
F101
3.15A
250VAC
CN521
(RED)
PMV
CN603
(WHI)
PMV
CN602
(BLU)
CN601
(WHI)
Control P.C. board
(MCC-1771)
SW03
SW01
ON
OFF
1234
DC12V
DC5V
Power
supply
circuit
F01
T3.15A
250VAC
CN04
CN67
(BLK)
BLK
RED
WHI
TB0
L1
L2
Earth screw
Power supply
208-230V 1ph 60Hz

Installation space (Single-port type)

(Unit : in (mm))



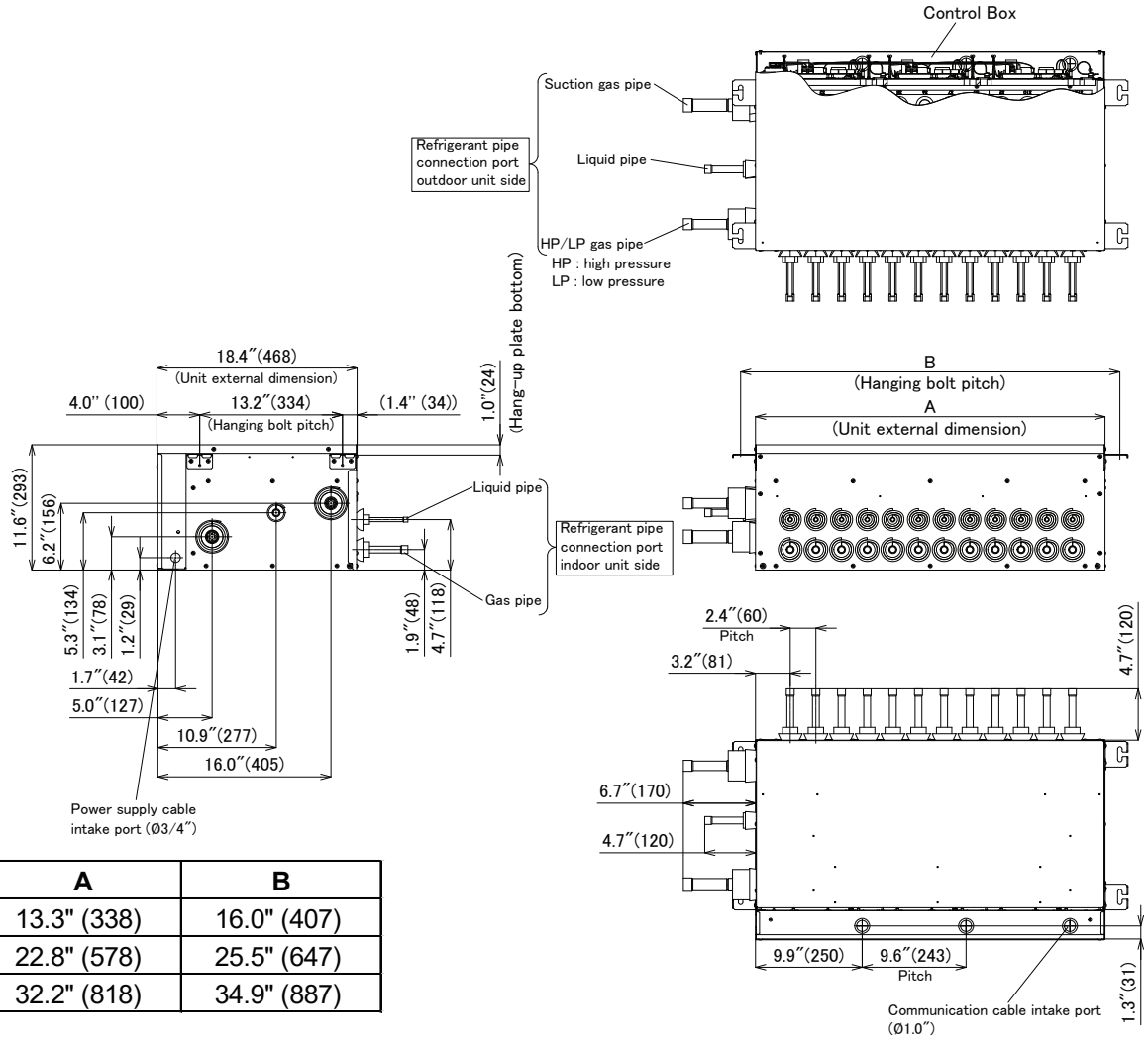
5-12-2. FS unit (Multi port type)

Specfication (Multi port type)

Model name		RBM-Y0611FU4PUL	RBM-Y0611FU8PUL	RBM-Y0611FU12PUL
Power supply		208-230V 1 phase 60Hz		
Connectable indoor unit capacity (kBtu/h)		Below 193 (1 branch: below 61)	Below 216 (1 branch: below 61)	Below 216 (1 branch: below 61)
Dimension	Height (in)	11.5	11.5	11.5
	Width (in)	13.3	22.8	32.2
	Depth (in)	18.4	18.4	18.4
Total Weight (lbs)		46	77	106
Connecting port dia. (Indoor unit side)	Liquid side (in)	Ø3/8	Ø3/8	Ø3/8
	Gas side (in)	Ø5/8	Ø5/8	Ø5/8
Connecting port dia. (Outdoor unit side)	Liquid side (in)	Ø5/8	Ø5/8	Ø5/8
	HP/LP gas side (in)	Ø7/8	Ø7/8	Ø7/8
	Suction gas side (in)	Ø1-1/8	Ø1-1/8	Ø1-1/8
Connection		Blaze connection		

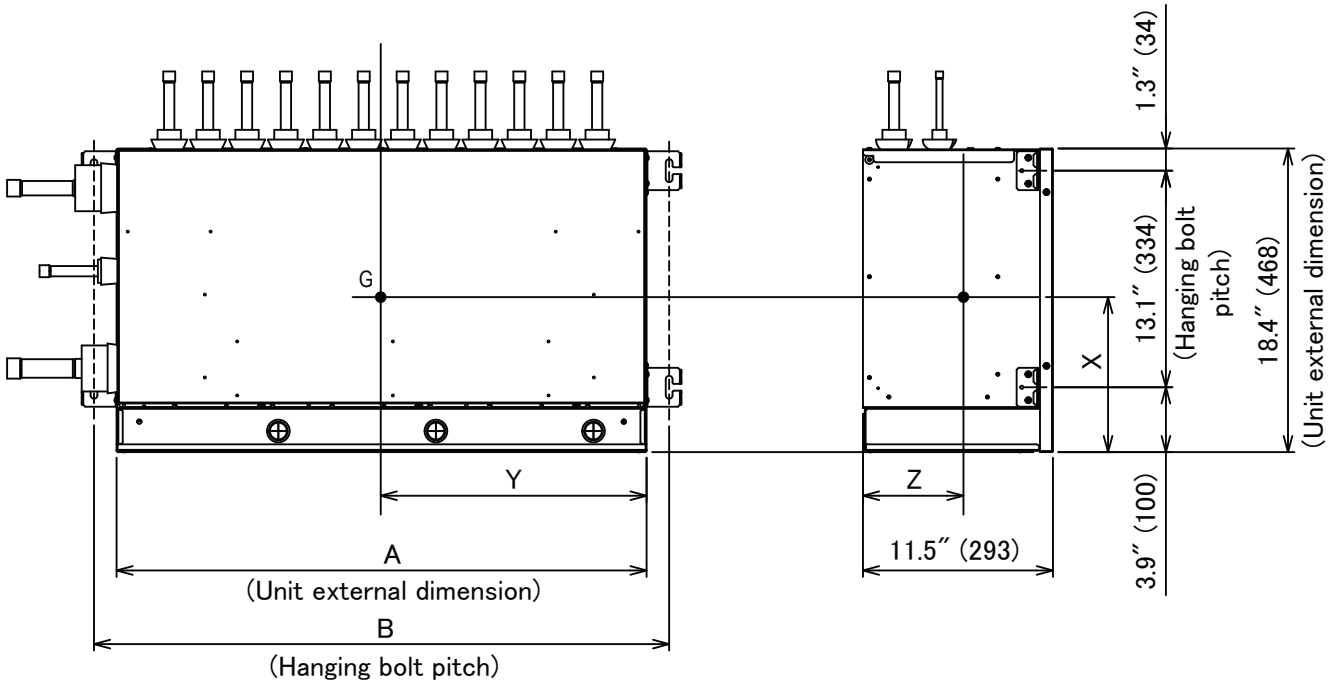
External view (Multi -port type)
RBM-Y0611FU4PUL, RBM-Y0611FU8PUL, RBM-Y0611FU12PUL

(Unit : in (mm))

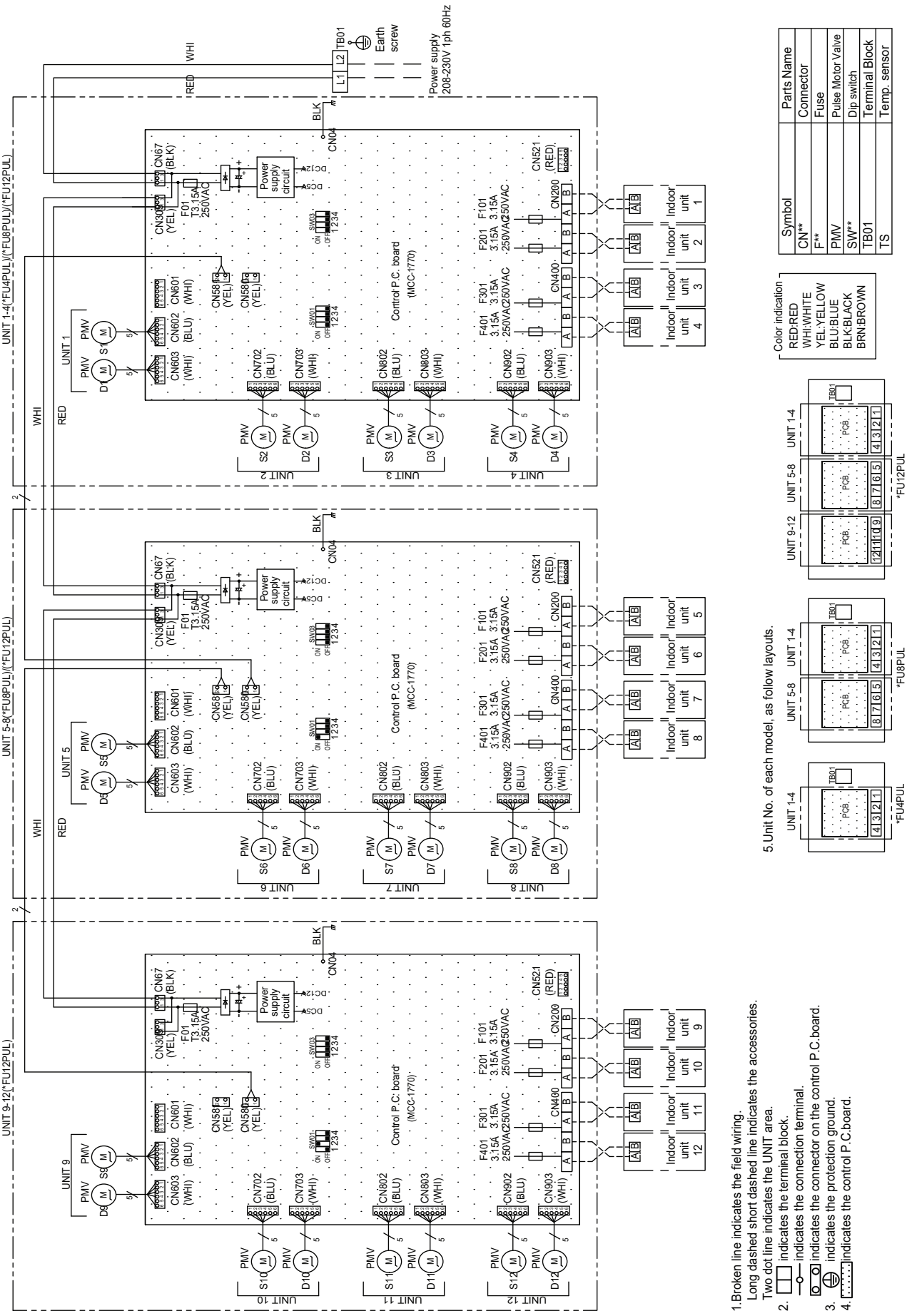


RBM-Y0611***	A	B
FU4PUL	13.3" (338)	16.0" (407)
FU8PUL	22.8" (578)	25.5" (647)
FU12PUL	32.2" (818)	34.9" (887)

Center of gravity (Single-port type)

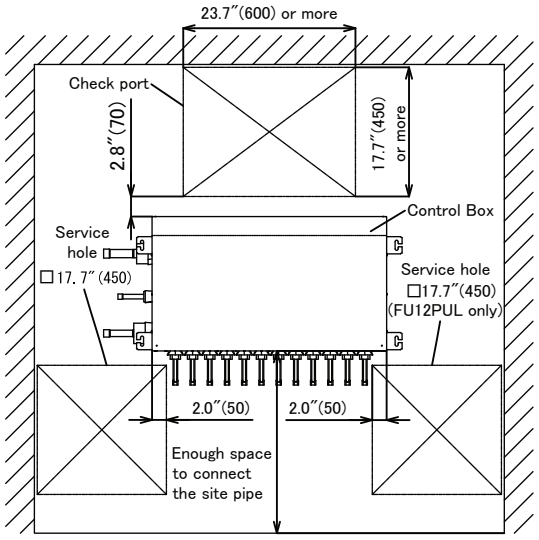


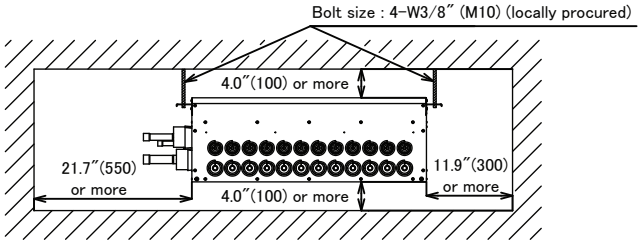
RBM-Y0611***	A [in(mm)]	B [in(mm)]	X [in(mm)]	Y [in(mm)]	Z [in(mm)]	Weight [lbs(kg)]
FU4PUL	13.3" (338)	16.0" (407)	9.4" (239)	7.0" (178)	6.1" (155)	46 (22)
FU8PUL	22.8" (578)	25.5" (647)	9.4" (239)	11.9" (302)	6.1" (155)	77 (35)
FU12PUL	32.2" (818)	34.9" (887)	9.4" (239)	16.1" (410)	6.1" (155)	106 (48)


UNIT 1-4(*FU4PUL)/(*FU8PUL)/(*FU12PUL)
UNIT 5-8(*FU8PUL)/(*FU12PUL)
UNIT 9-12(*FU12PUL)
WHI
RED
BLK
TB01
L1
L2
Earth screw
Power supply 208-230V 1ph 60Hz
CN04
CN67 (BLK)
CN30 (YEL)
F01 T3.15A 250VAC
Power supply circuit
DC12V
DC5V
CN58 (YEL)
SW01 1234
Control P.C. board (MCC-1770)
CN601 (WHI)
CN602 (BLU)
CN603 (WHI)
CN702 (BLU)
CN703 (WHI)
CN802 (BLU)
CN803 (WHI)
CN902 (BLU)
CN903 (WHI)
CN400
CN200
CN521 (RED)
F101 3.15A 250VAC
F201 3.15A 250VAC
F301 3.15A 250VAC
F401 3.15A 250VAC
UNIT 1
UNIT 2
UNIT 3
UNIT 4
UNIT 5
UNIT 6
UNIT 7
UNIT 8
UNIT 9
UNIT 10
UNIT 11
UNIT 12
PMV
Indoor unit 1
Indoor unit 2
Indoor unit 3
Indoor unit 4
Indoor unit 5
Indoor unit 6
Indoor unit 7
Indoor unit 8
Indoor unit 9
Indoor unit 10
Indoor unit 11
Indoor unit 12
Color indication
RED:RED
WHI:WHITE
YEL:YELLOW
BLU:BLUE
BLK:BLACK
BRN:BROWN
Symbol
Parts Name
CN**
Connector
F**
Fuse
PMV
Pulse Motor Valve
SW**
Dip switch
TB01
Terminal Block
TS
Temp. sensor
5.Unit No. of each model, as follow layouts.
UNIT 1-4
UNIT 5-8
UNIT 9-12
*FU4PUL
*FU8PUL
*FU12PUL
PCB
1.Broken line indicates the field wiring.
Long dashed short dashed line indicates the accessories.
Two dot line indicates the UNIT area.
2. indicates the terminal block.
indicates the connection terminal.
indicates the connector on the control P.C.board.
3. indicates the protection ground.
4. indicates the control P.C.board.

Installation space (Multi-port type)

(Unit : in (mm))





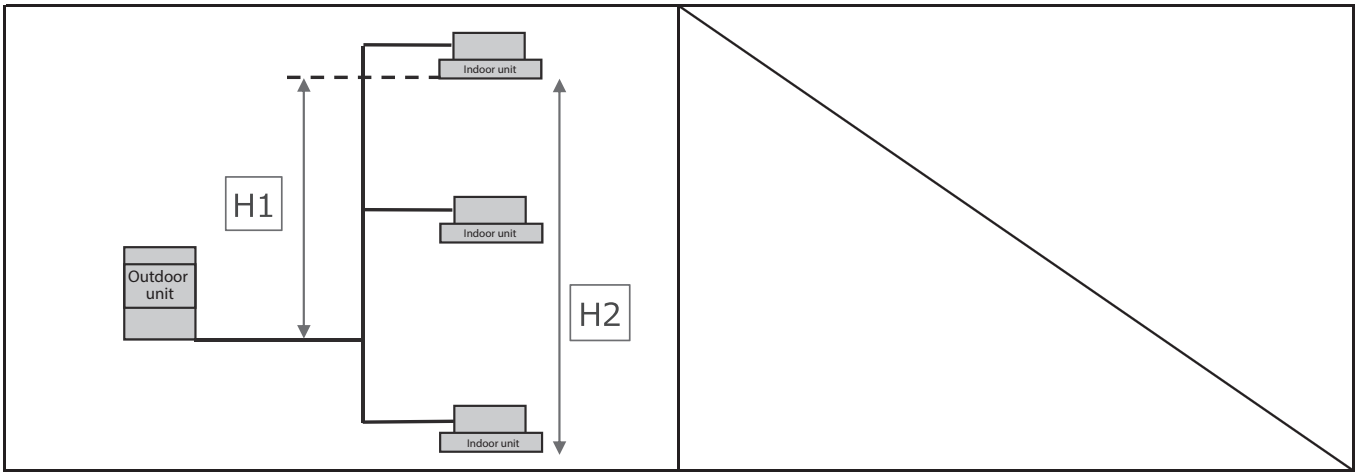
APPENDIX

6-1. Special Installation guide

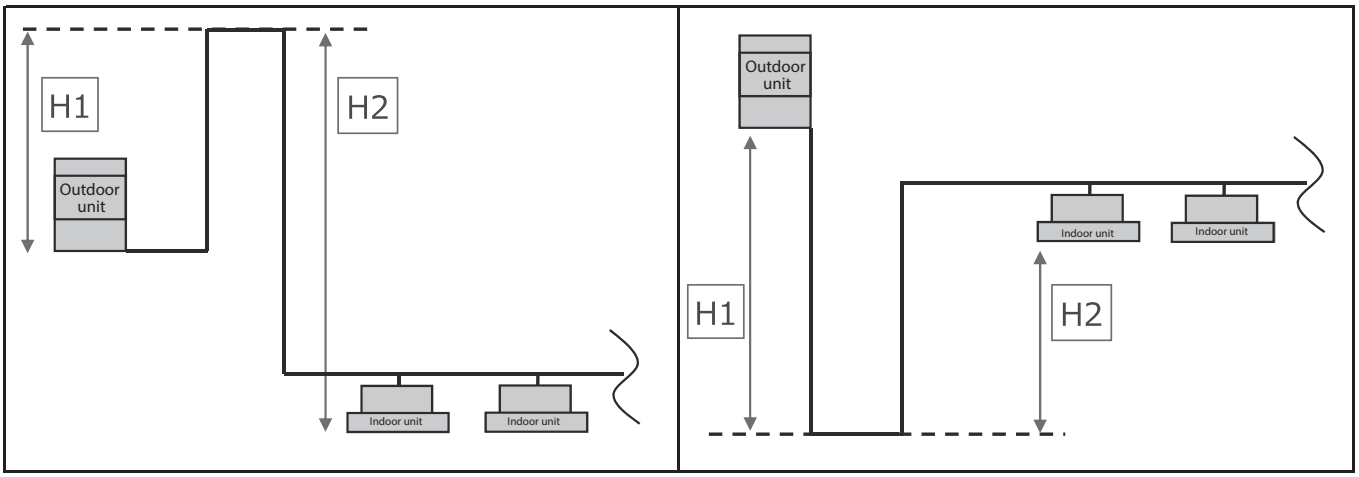
●Special piping construction conditions

※ H1, H2:Refer to Refrigerant piping design

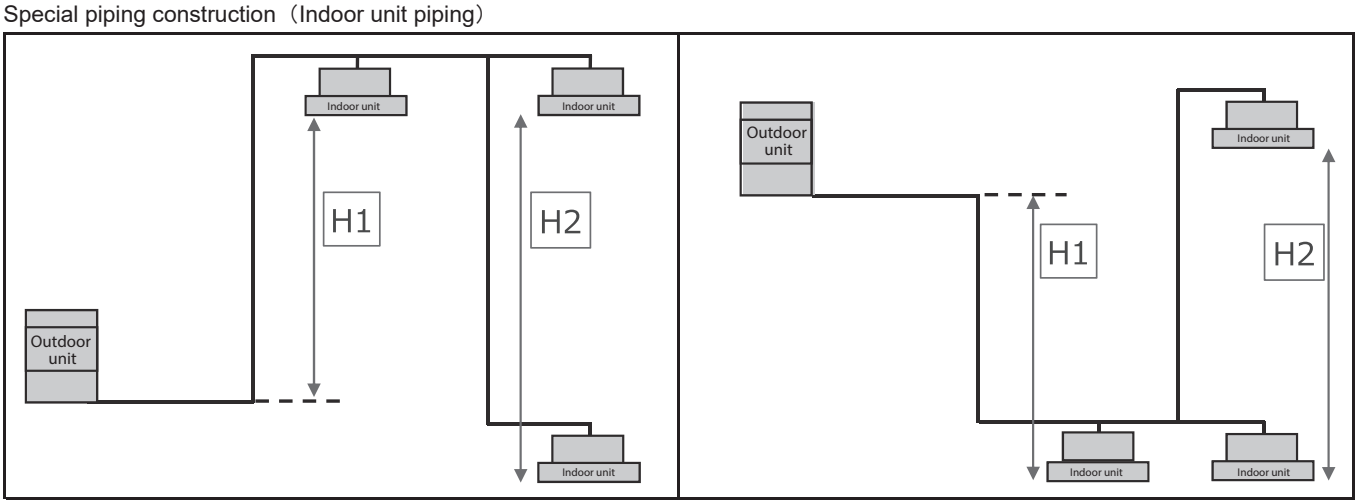
Mid-floor installation



Special piping construction (Main piping)



Special piping construction（Indoor unit piping）



• For the same refrigerant piping group

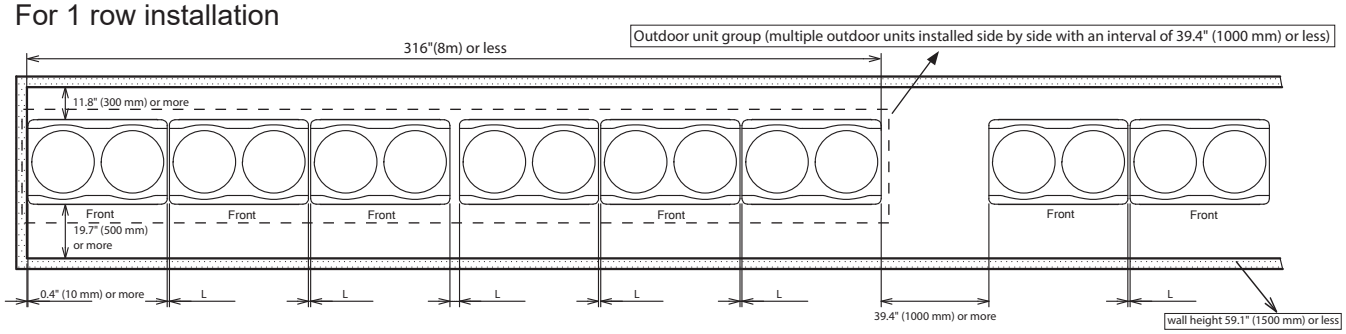
Low ambient temperature in area	L
32°F (0°C) ~ 5°F (-15°C)	7.9" (200 mm), at least 0.8" (20 mm) or more.
5°F (-15°C) ~ -30°F (-34.4°C)	7.9" (200 mm) or more.
	*5°F (-15°C) ~ -13°F (-25°C) : With Outdoor Unit Function Code setting (O.DN : 058 / Setting value : 2), Available at least 0.8" (20 mm) or more. Setting is required for each outdoor unit of the same refrigerant piping group.
	※1: For details on how to set the O.DN, see 11 Applicable control settings.

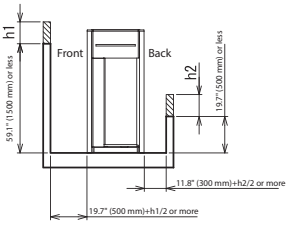
• For other refrigerant piping groups, keep at least 7.9" (200 mm) apart.

① When outer wall is shorter than outdoor units. "1"

※If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit.

■ For 1 row installation



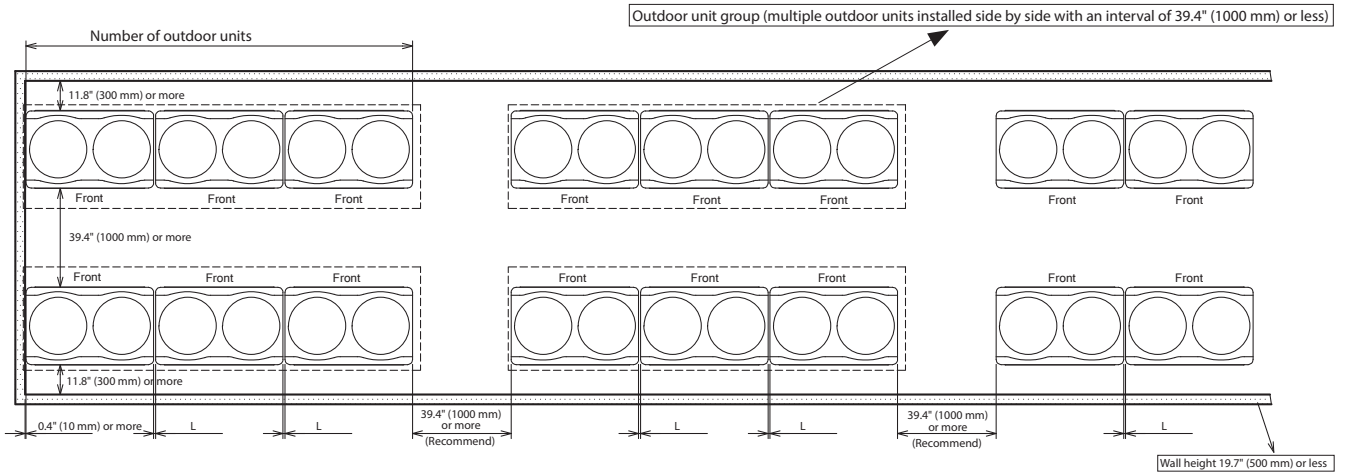


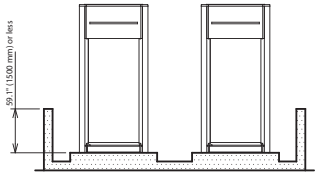
※ When attaching a snow hood take a space for the unit right and left side for snow hood.

1.If there is an obstacle above the outdoor unit, leave a space of 78.7"(2000 mm) or more from the top

2.The obstacle height in : Front side 59.1"(1500 mm) , Back side19.7"(500 mm), Side no height restriction*

■ For 2 row installation



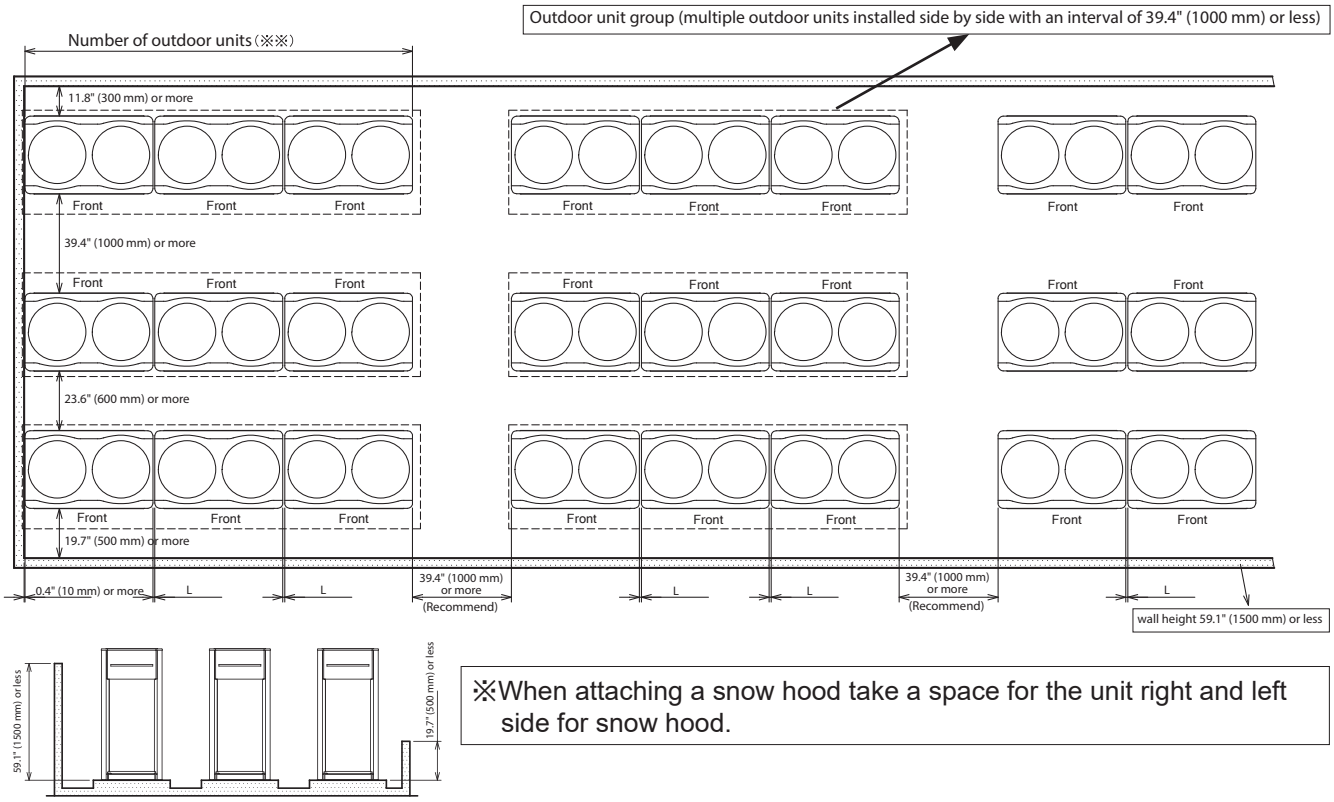


※When attaching a snow hood take a space for the unit right and left side for snow hood.

① When outer wall is shorter than outdoor units. "2"

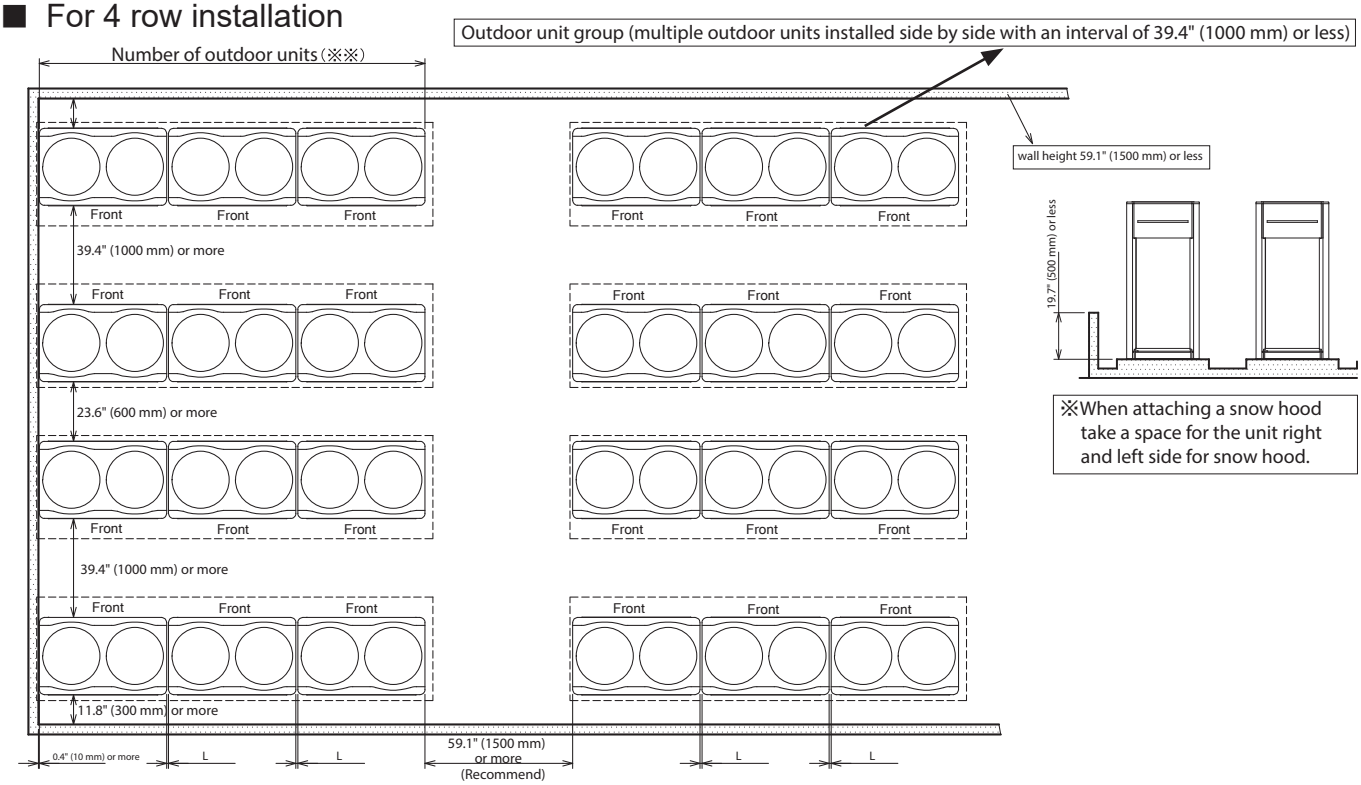
※If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit. (When attaching a snow hood take a space for the unit height plus the snow hood height.)

■ For 3 row installation



※When attaching a snow hood take a space for the unit right and left side for snow hood.

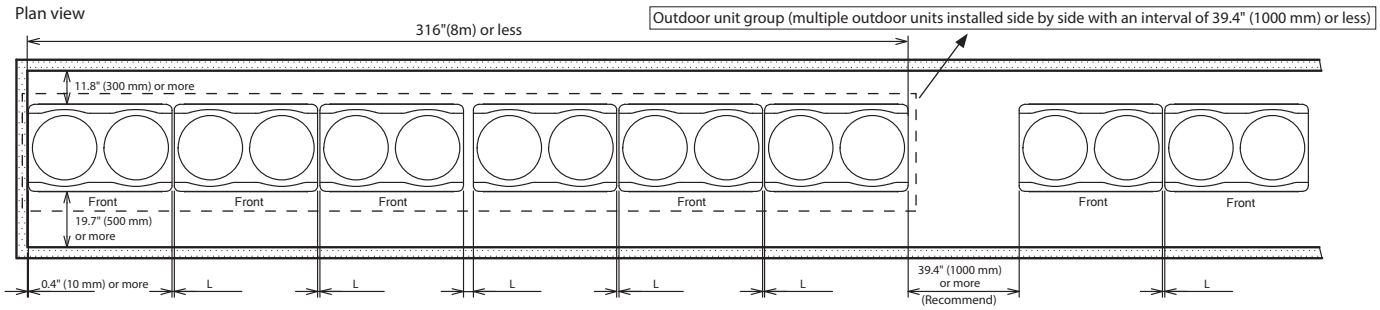
■ For 4 row installation



※When attaching a snow hood take a space for the unit right and left side for snow hood.

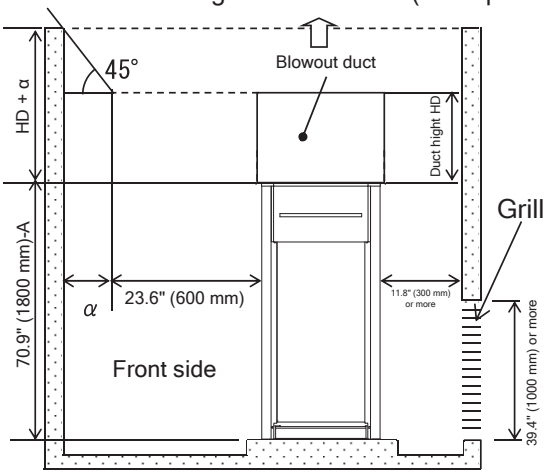
② When the outer wall is higher than the outdoor unit

※Do not put obstacle above the outdoor unit



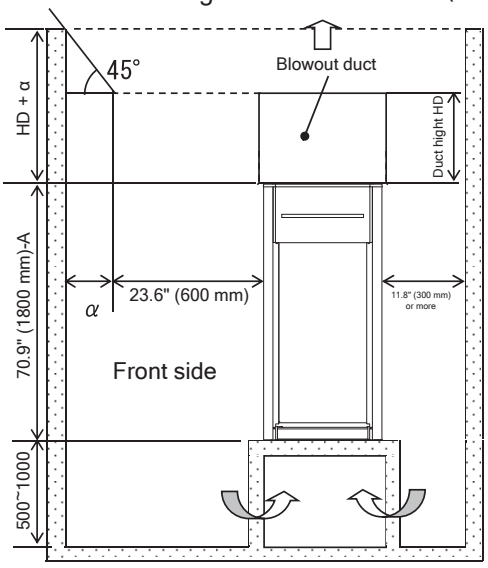
※When attaching a snow hood take a space for the unit height plus the snow hood height.

■ When ventilation grate is installed (Floor plan is refer to following drawing)



※ Duct hight HD 39.4" (1000 mm) or less

■ When ventilation grate is not installed（Floor plan is refer to following drawing）

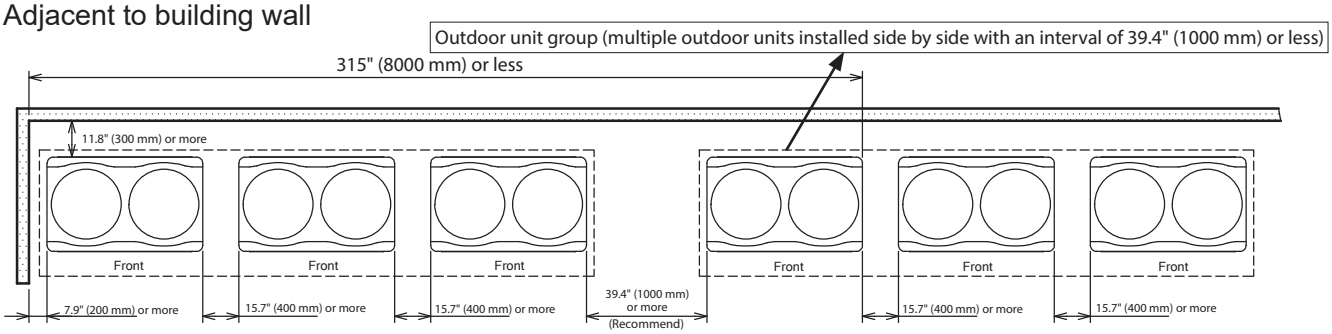


※ Duct hight HD 39.4" (1000 mm) or less

③ Walls without height restrictions

※Walls without height restrictions

■ Adjacent to building wall

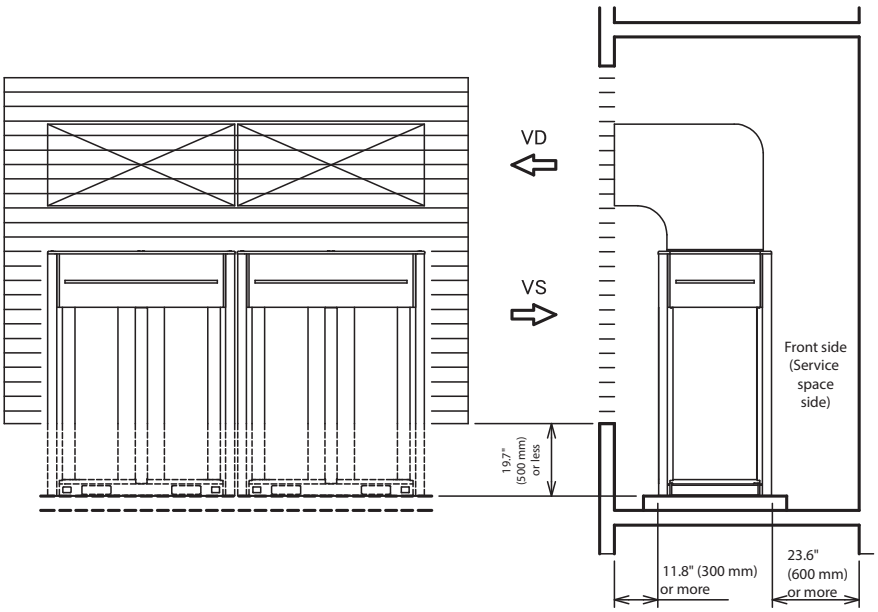


※ Outdoor unit group should be designed to line up a maximum of three outdoor units. A minimum separation of 1000 mm is recommended between groups. Number of groups is recommended up to 2 groups. For single row installation only.

④ Other installation

■ Installation on each floor

① Install air discharge ducts for each air discharge side.
② Air resistance of discharge ducts and ventilation grate is less than 15 Pa.
③ Louver angle within 20°of horizontal (Effective aperture ratio of ventilation grate is 80% or more.)
④ Suction air flow rate 1.5 m/s or less, discharge air flow rate 4 to 5 m/s or less
⑤ The space for suction, service, piping and wiring should be secured.
⑥ Suction and discharge side should be on the same side.
※ Grating is acceptable. However, drain water treatment is required.



※ Maximum External Static Pressure of Base Outdoor Units

MMY-MUP	0721FT*P-UL	0961FT*P-UL	1201FT*P-UL	1441FT*P-UL	1681FT*P-UL	1921FT6P-UL
inH20	0.321	0.321	0.321	0.321	0.321	0.321
cfm	5650	6180	7770	8650	8670	9780

MMY-MUP	072H1FT*PUL	096H1FT*PUL	1201H1FT*PUL
inH20	0.321	0.321	0.321
cfm	6340	7770	7415

*** : 6=460V, 9=208-230V**

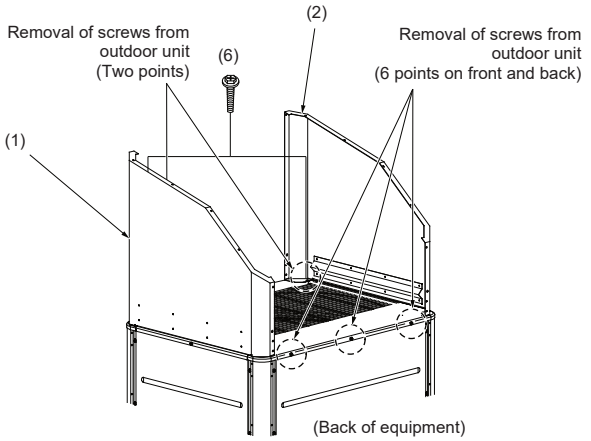
6-2. Snow hood Installation procedure

Model name: TCB-SGM2802KU-F (Upper side)

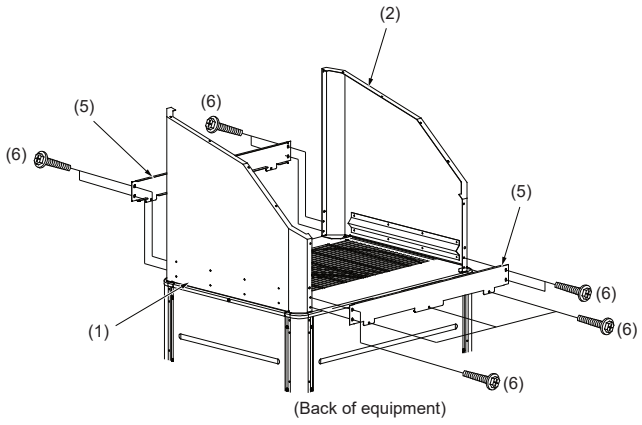
⚠CAUTION

During installation work, wear protective gear to avoid sustaining cuts on the edges of the sheet metal.

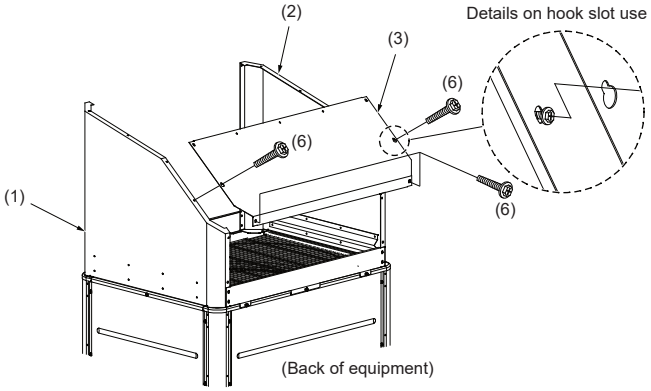
1 **Remove the 2 screws that hold the upper cabinet of the outdoor unit, and the 6 screws that hold the front and rear cabinets.**
Next, attach (1) Side plate R and (2) Side plate L to the upper surface of the outdoor unit with 2 of the (6) S-TITE screws included.



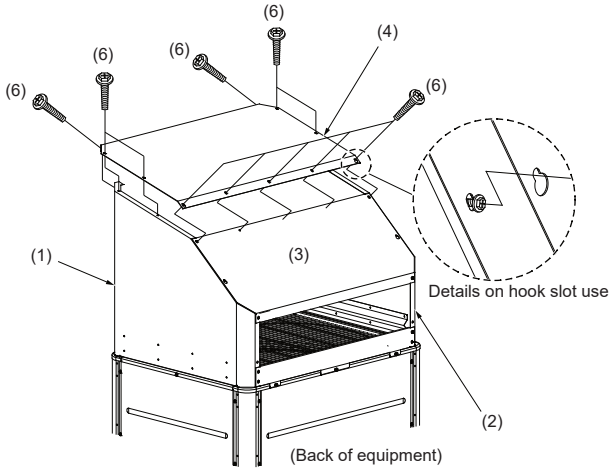
2 **Attach the (5) Front and rear crosspieces to (1) Side plate R and (2) Side plate L with 8 of the (6) S-TITE screws included, as well as the 6 S-TITE screws removed from the front and back of the outdoor unit in Step *1*.**



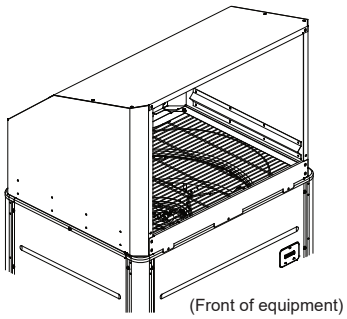
3 **Attach (3) Face plate 1 to (1) Side plate R and (2) Side plate L with four of the (6) S-TITE screws included.**
Use the hook slot for installation.
* (4) Face plate 2 overlaps the topmost hole of the face plate, so do not fasten it at this point.



4 **Attach (4) Face plate 2 to (1) Side plate R, (2) Side plate L, and (3) Face plate 1 with 11 of the (6) S-TITE screws included.**



5 **Diagram of completed installation**



⚠CAUTION

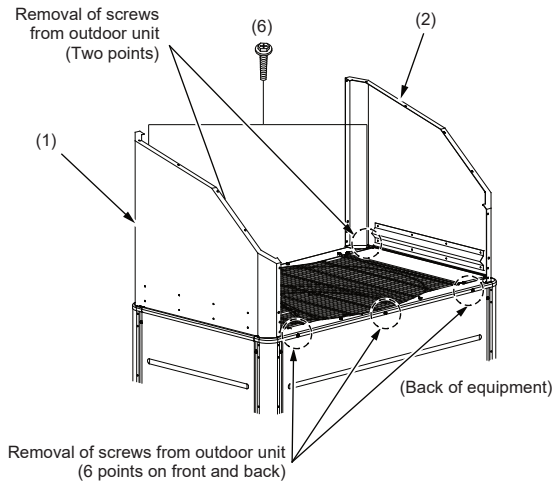
Tighten the screws used for installation securely so that there is no looseness. If screws are not tight, there is a risk of parts falling off in strong winds, etc.

Model name: TCB-SGM4502KU-F (Upper side)

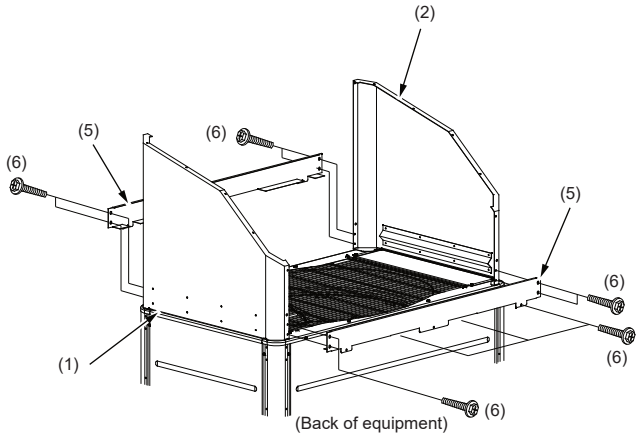
⚠CAUTION

During installation work, wear protective gear to avoid sustaining cuts on the edges of the sheet metal.

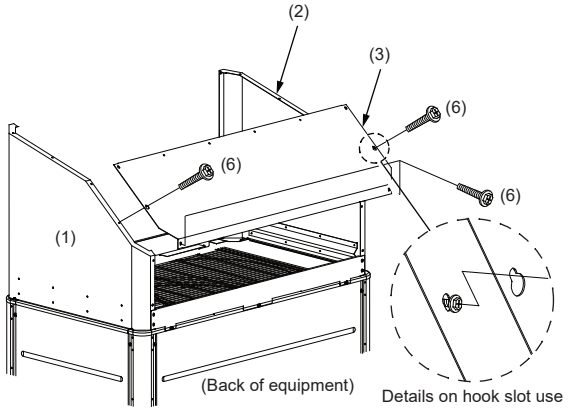
1 **Remove the 2 screws that hold the upper cabinet of the outdoor unit, and the 6 screws that hold the front and rear cabinets.**
Next, attach (1) Side plate R and (2) Side plate L to the upper surface of the outdoor unit with 2 of the (6) S-TITE screws included.



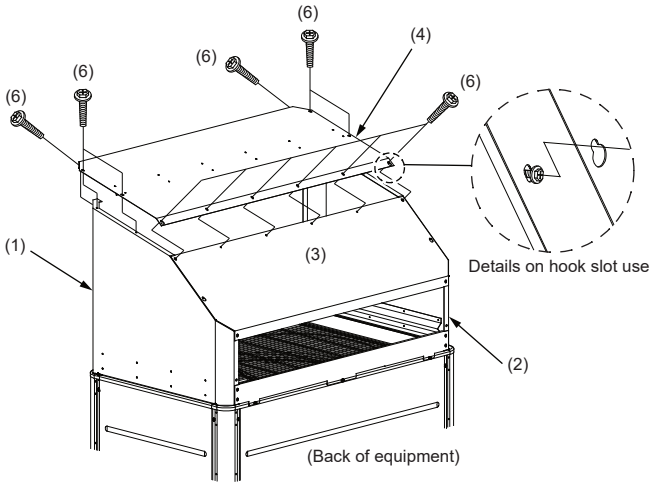
2 **Attach the (5) Front and rear crosspieces to (1) Side plate R and (2) Side plate L with 8 of the (6) S-TITE screws included, as well as the 6 S-TITE screws removed from the front and back of the outdoor unit in Step 1.**



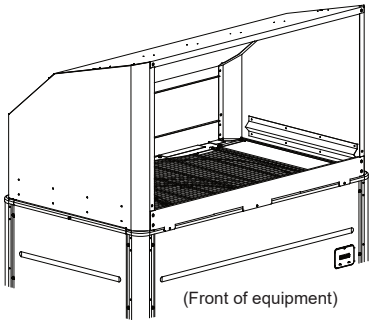
3 **Attach (3) Face plate 1 to (1) Side plate R and (2) Side plate L with four of the (6) S-TITE screws included.**
Use the hook slot for installation.
* (4) Face plate 2 overlaps the topmost hole of the face plate, so do not fasten it at this point.



4 **Attach (4) Face plate 2 to (1) Side plate R, (2) Side plate L, and (3) Face plate 1 with 12 of the (6) S-TITE screws included.**



5 **Diagram of completed installation**



⚠CAUTION

Tighten the screws used for installation securely so that there is no looseness. If screws are not tight, there is a risk of parts falling off in strong winds, etc.

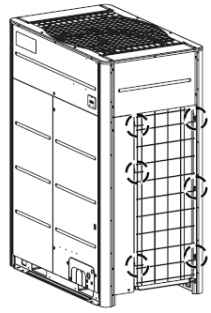
Snowfall hood (Right and Left side), Snow hood (Rear side)

Model name: TCB-SGMH2802KU-Y, TCB-SGMH2802KU-B, TCB-SGMH4502KU-B

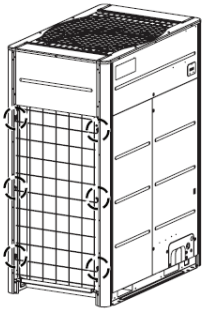
Installation procedure

Preparations before installation procedure

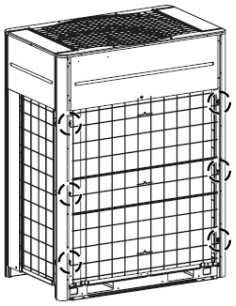
- If a Fin guard is attached to the product, remove the Fin guard before attaching Snow hood to prevent snow from accumulating on the heat exchanger. After removing the fin guard mounting screws, be sure to reattach all screws to the product.
- The illustration below shows the 51 inches width type, but the fin guard mounting position is the same for the 39 inches width type, except for the difference in the width length.



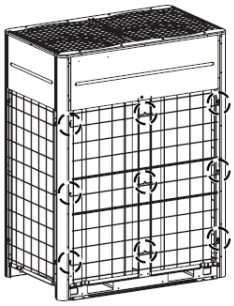
Right side of 1 fan model
(6 mounting screws)



Left side of 1 fan model
Both sides of the 2 fan model
(6 mounting screws)



Rear side of 1 fan model
(6 mounting screws)



Rear side of 2 fan model
(9 mounting screws)

Installation at the (1) Right and Left side of intake port

1 **At the embossed points on the side of the outdoor unit (except for the top 3 points), use (5) Drill screws to drill pilot holes in 12 places (6 on the left and 6 on the right). Be sure to remove any shavings produced when drilling pilot holes and apply rust prevention treatment to the installation points.**

2 **Attach the right Side plate R and Side plate L to the sides of the outdoor unit using (4) S-TITE screws in 12 places (6 on each side).**

* When installing the side plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 2nd and 3rd holes from the upper portion of the pilot holes. (See Part A.)

3 **Attach the lower plate to the Side plate R and Side plate L using (4) S-TITE screws in 6 places.**

* When installing the lower plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 2nd hole from the bottom of the Side plate R and Side plate L. (See Part B.)

4 **Attach the mid plate to the Side plate R and Side plate L using (4) S-TITE screws in 4 places at the bottom left, bottom right, and middle.**

* When installing the mid plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 5th hole from the bottom of the Side plate R and Side plate L. (See Part B.)

5 **Attach the upper plate to the Side plate R and Side plate L and the mid plate using (4) S-TITE screws in 8 places.**

* When installing the upper plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the two points on the upper Side plate R and Side plate L. (Detail of Part C)

* After installation, make sure that the mounting screws (including temporary mounting screws) are firmly tightened.

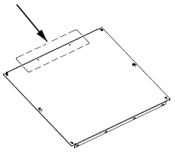
* The diagram shows the right side intake port. The left side intake port is installed in the same way.

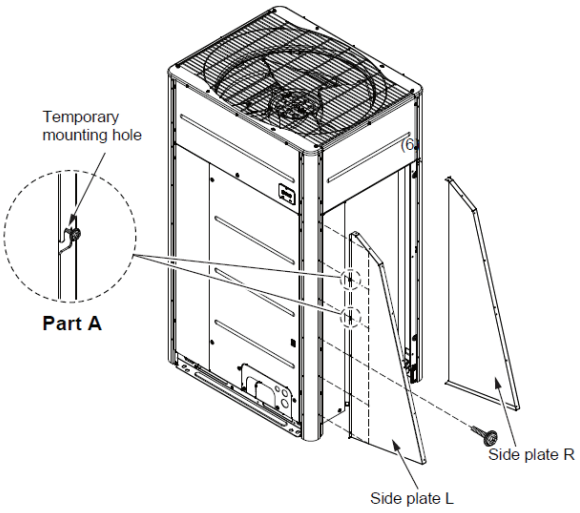
<Since the lower plate and mid plate have similar shapes, exercise care when installing them.>

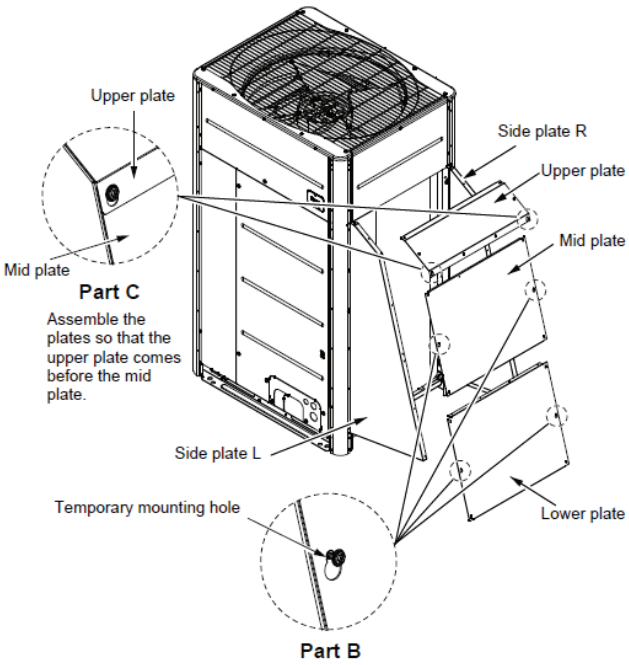
Lower plate

Mid plate

*The difference in shape is that there is a screw fixing point at this position on the board.







Installation at the (2) Rear side of intake port and (3) Rear side of intake port

1 **At the embossed points on the back of the outdoor unit (except for the top 3 points), use (5) Drill screws to drill pilot holes in 12 places (6 on the left and 6 on the right). Be sure to remove any shavings produced when drilling pilot holes and apply rust prevention treatment to the installation points.**

2 **Attach the Side plate R and Side plate L to the back of the outdoor unit using (4) S-TITE screws in 12 places (6 on each side).**

* When installing the side plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 2nd and 3rd holes from the upper portion of the pilot holes. (See Part D.)

3 **Attach the lower plate to the Side plate R and Side plate L using (4) S-TITE screws in 6 places.**

* When installing the lower plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 2nd hole from the bottom of the Side plate R and Side plate L. (See Part E.)

4 **Attach the mid plate to the Side plate R and Side plate L using (4) S-TITE screws in 4 places at the bottom left, bottom right, and middle.**

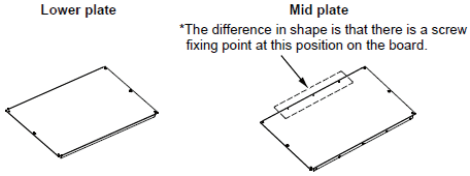
* When installing the mid plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 5th hole from the bottom of the Side plate R and Side plate L. (See Part E.)

5 **Attach the upper plate to the Side plate R and Side plate L and mid plate using (4) S-TITE screws, either in 9 places for (2) Rear side of intake port or 10 places for (3) Rear side of intake port.**

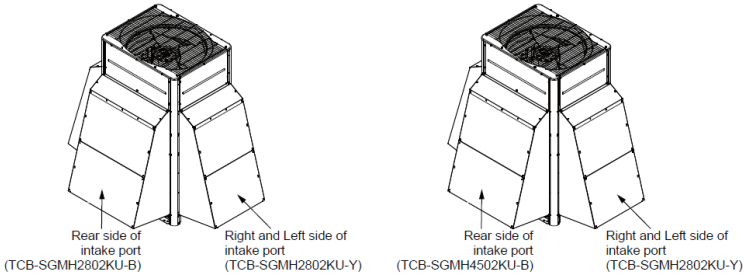
* When installing the upper plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the two points on the upper left and right of the mid plate. (Detail of Part F)

* After installation, make sure that the mounting screws (including temporary mounting screws) are firmly tightened.

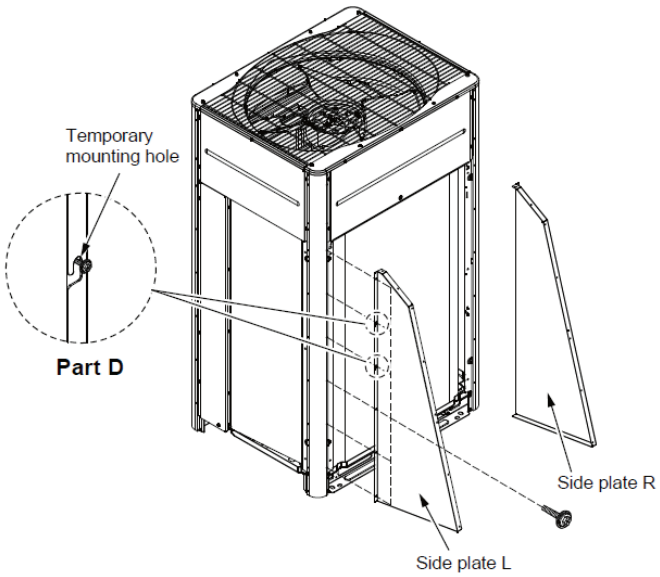
<Since the lower plate and mid plate have similar shapes, exercise care when installing them.>

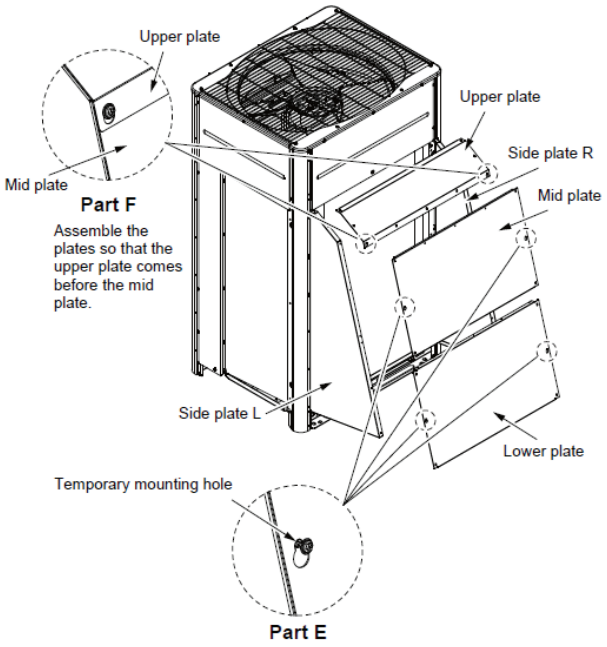


Installed unit diagrams



39 inches width type **51 inches width type**





Confirmation of installation work

After completing the installation work, perform a test run to confirm that there are no abnormalities.

6-3. Efficiency Ratings

	Ducted				Non Ducted			
Model name	**EER**	**IEER**	**COP47F**	**SCHE**	**EER**	**IEER**	**COP47F**	**SCHE**
MMY-MUP0721FT*P-UL	12.6	23.4	4.18	34.0	13.5	26.5	4.55	35.00
MMY-MUP0961FT*P-UL	10.9	21.2	3.88	33.0	12.1	26.0	4.45	35.00
MMY-MUP1201FT*P-UL	11.6	22	3.84	31.0	12.1	24.6	4.20	35.00
MMY-MUP1441FT*P-UL	11.3	21.6	3.81	31.0	11.9	24.3	4.00	34.00
MMY-MUP1681FT*P-UL	10.7	21.5	3.54	29.5	11.2	24.2	3.85	30.50
MMY-MUP1921FT6P-UL	10.7	20.7	3.37	29.0	10.7	21.4	3.64	30.00
MMY-UP1921FT*P-UL	11.5	22	3.81	32.0	12.1	24.7	4.40	33.00
MMY-UP2161FT*P-UL	11.3	21.9	3.63	32.0	12	23.9	4.33	33.00
MMY-UP2401FT*P-UL	11.2	21.8	3.47	31.5	11.9	22.9	4.18	32.00
MMY-UP2641FT*P-UL	10.7	21.8	3.28	30.5	11.7	22.9	3.92	31.00
MMY-UP2881FT*P-UL	10.6	21.7	3.27	30.0	11.6	22.8	3.88	30.80
MMY-UP3121FT*P-UL	10.6	21	3.25	30.0	11.3	22.2	3.86	30.60
MMY-UP3361FT*P-UL	10.5	20.3	3.24	28.0	10.6	21.4	3.57	29.00
MMY-UP3601FT*P-UL	10.3	19.6	3.24	25.0	10.6	20.5	3.54	25.70
MMY-UP3841FT*P-UL	10.2	18.6	3.24	25.0	10.6	20.4	3.53	26.00
MMY-UP4081FT*P-UL	10	18.2	3.24	25.0	10.3	20.2	3.51	26.00
MMY-UP4321FT*P-UL	9.8	18.2	3.23	25.0	9.9	20.0	3.48	26.00
MMY-UP4561FT*P-UL	9.80	18.1	3.23	24.9	9.9	19.8	3.45	25.80
MMY-UP4801FT*P-UL	9.70	18.1	3.22	24.8	9.7	19.8	3.37	25.30
MMY-UP5041FT*P-UL	9.4	18.1	3.22	24.0	9.4	19.6	3.27	24.90
MMY-MUP072H1FT*PUL	12.6	23.4	4.18	34.0	13.5	26.5	4.55	35.00
MMY-MUP096H1FT*PUL	12.2	21.6	4.1	32.0	13.3	25.3	4.80	35.00
MMY-MUP120H1FT*PUL	12.0	22.5	3.91	32.0	12.4	24.8	4.43	35.00
MMY-UP144H1FT*PUL	12.9	23.4	4.12	35.0	13.4	25.0	4.87	36.00
MMY-UP192H1FT*PUL	12.5	22.5	3.92	33.0	13.2	23.3	4.53	33.90
MMY-UP240H1FT*PUL	12.1	22.5	3.6	28.0	12.6	23.3	4.40	28.80
MMY-UP288H1FT*PUL	11.6	19.8	3.59	25.8	12.6	21.0	3.90	26.00
MMY-UP360H1FT*PUL	11.4	19.6	3.55	24.5	11.9	20.9	3.69	24.90

SHRM-u Engineering Data Book

Model name:

MMY-MUP___1FT6P-UL (460V,60Hz)
MMY-MUP___1FT9P-UL (208-230V,60Hz)
MMY-MUP___H1FT6PUL(460V, 60Hz)
MMY-MUP___H1FT9PUL(208-230V, 60Hz)

April, 2024

Toshiba Carrier Corporation

Revision 02 : 240423