TOSHIBA
Carrier

TCTC-E23-VRF004-5

Model name:

MMY-MUP___1HT6P-UL (460V,60Hz)
MMY-MUP___1HT9P-UL (208-230V,60Hz)
MMY-MUP___H1HT6PUL(460V, 60Hz)
MMY-MUP___H1HT9PUL(208-230V, 60Hz)

SMMSu
SUPER MODULAR MULTI SYSTEM

Engineering Data Book

Outdoor units

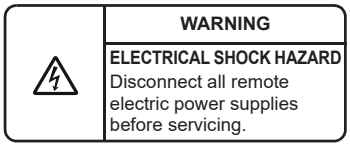
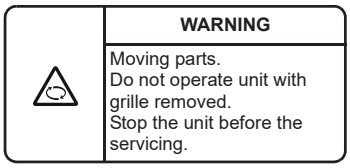
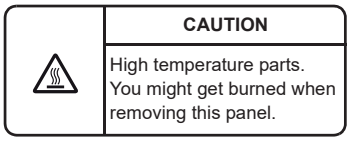
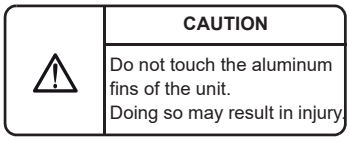
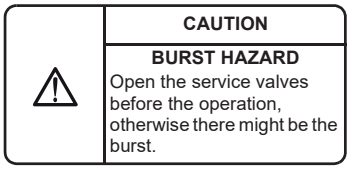
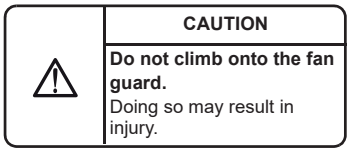
Notice: Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.

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.

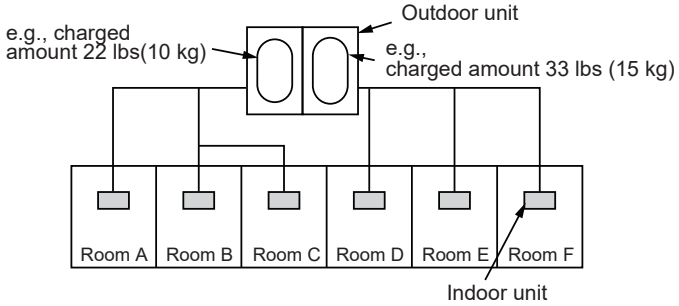
The concentration is as given below.

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

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).

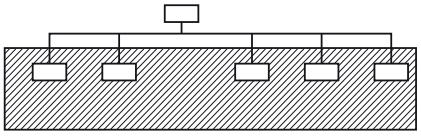
The possible amount of leaked refrigerant gas in rooms D, E and F is 33 lbs (15 kg).

Important

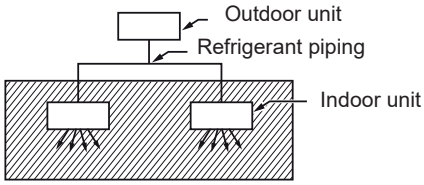
NOTE 2:

The standards for minimum room volume are as follows.

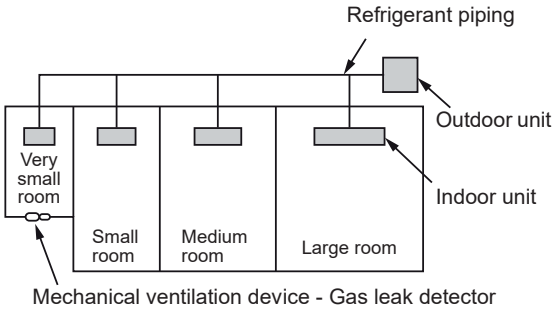
(1) No partition (shaded portion)



(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

SMMS-u 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, SMMS-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 150% 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, SMMS-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

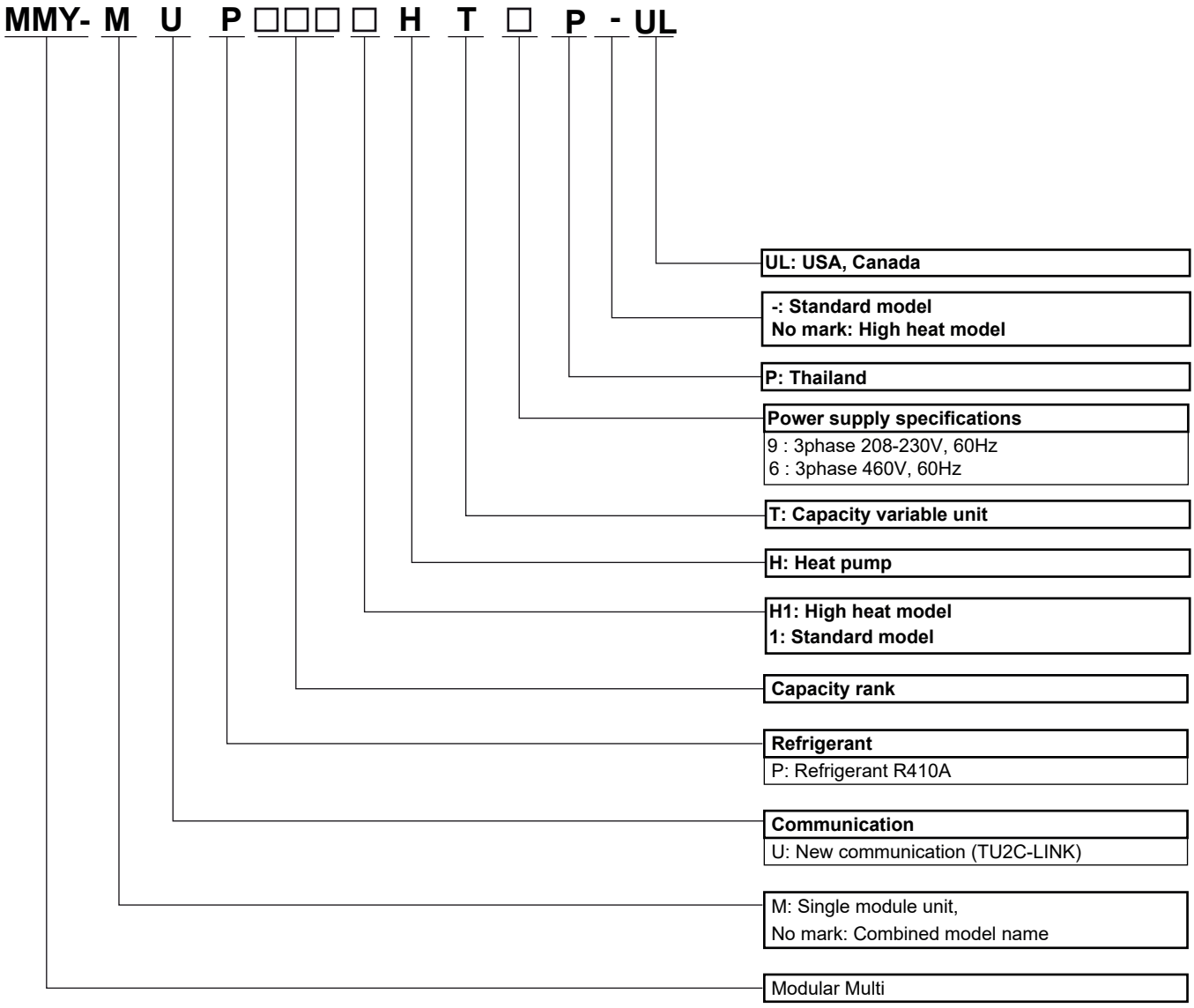
Since new communication, TU2C-LINK has two layer control (Uh and Uv), the lines can have appropriate volume of data, and improved the speed. It allows BMS to connect up to 128 IDU and a system to connect line. up to maximum of 74 IDU thanks to this faster data

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

SMMS-u



1-2. Summary of system equipments

1-2-1. Outdoor units

460V Standard model

Capacity rank		Model name	Capacity		Combined outdoor units			
Ton	kBtu/h		Type	Code	Ton	①Header unit	②Follower unit	③Follower unit
6	72	MMY-MUP0721HT6P-UL	072	72	6	MMY-MUP0721HT6P-UL	—	—
8	96	MMY-MUP0961HT6P-UL	096	96	8	MMY-MUP0961HT6P-UL	—	—
10	120	MMY-MUP1201HT6P-UL	120	120	10	MMY-MUP1201HT6P-UL	—	—
12	144	MMY-MUP1441HT6P-UL	144	144	12	MMY-MUP1441HT6P-UL	—	—
14	168	MMY-MUP1681HT6P-UL	168	168	14	MMY-MUP1681HT6P-UL	—	—
16	192	MMY-MUP1921HT6P-UL	192	192	16	MMY-MUP1921HT6P-UL	—	—
16	192	MMY-UP1921HT6P-UL	192	192	8+8	MMY-MUP0961HT6P-UL	MMY-MUP0961HT6P-UL	—
18	216	MMY-UP2161HT6P-UL	216	216	12+6	MMY-MUP1441HT6P-UL	MMY-MUP0721HT6P-UL	—
20	240	MMY-UP2401HT6P-UL	240	240	12+8	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL	—
22	264	MMY-UP2641HT6P-UL	264	264	14+8	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL	—
24	288	MMY-UP2881HT6P-UL	288	288	12+12	MMY-MUP1441HT6P-UL	MMY-MUP1441HT6P-UL	—
26	312	MMY-UP3121HT6P-UL	312	312	14+12	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL	—
28	336	MMY-UP3361HT6P-UL	336	336	14+14	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	—
30	360	MMY-UP3601HT6P-UL	360	360	14+8+8	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL	MMY-MUP0961HT6P-UL
32	384	MMY-UP3841HT6P-UL	384	384	12+12+8	MMY-MUP1441HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL
34	408	MMY-UP4081HT6P-UL	408	408	14+12+8	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL
36	432	MMY-UP4321HT6P-UL	432	432	14+14+8	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL
38	456	MMY-UP4561HT6P-UL	456	456	14+14+10	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1201HT6P-UL
40	480	MMY-UP4801HT6P-UL	480	480	14+14+12	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL

460V High heat model

Capacity rank		Model name	Capacity		Combined outdoor units			
Ton	kBtu/h		Type	Code	Ton	①Header unit	②Follower unit	③Follower unit
6	72	MMY-MUP072H1HT6PUL	072	72	6	MMY-MUP072H1HT6PUL	—	—
8	96	MMY-MUP096H1HT6PUL	096	96	8	MMY-MUP096H1HT6PUL	—	—
10	120	MMY-MUP120H1HT6PUL	120	120	10	MMY-MUP120H1HT6PUL	—	—
12	144	MMY-UP144H1HT6PUL	144	144	6+6	MMY-MUP072H1HT6PUL	MMY-MUP072H1HT6PUL	—
14	168	—			—	—	—	—
16	192	—			—	—	—	—
16	192	MMY-UP192H1HT6PUL	192	192	8+8	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL	—
18	216	—			-	—	—	—
20	240	MMY-UP240H1HT6PUL	240	240	10+10	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL	—
22	264	—			—	—	—	—
24	288	MMY-UP288H1HT6PUL	288	288	8+8+8	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL
26	312	—			—	—	—	—
28	336	—			—	—	—	—
30	360	MMY-UP360H1HT6PUL	360	360	10+10+10	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL
32	384	—			—	—	—	—
34	408	—			—	—	—	—
36	432	—			—	—	—	—
38	456	—			—	—	—	—
40	480	—			—	—	—	—

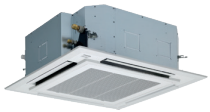
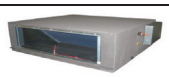
208-230V Standard model

Capacity rank		Model name	Capacity		Combined outdoor units			
Ton	kBtu/h		Type	Code	Ton	①Header unit	②Follower unit	③Follower unit
6	72	MMY-MUP0721HT9P-UL	072	72	6	MMY-MUP0721HT9P-UL	—	—
8	96	MMY-MUP0961HT9P-UL	096	96	8	MMY-MUP0961HT9P-UL	—	—
10	120	MMY-MUP1201HT9P-UL	120	120	10	MMY-MUP1201HT9P-UL	—	—
12	144	MMY-MUP1441HT9P-UL	144	144	12	MMY-MUP1441HT9P-UL	—	—
14	168	MMY-MUP1681HT9P-UL	168	168	14	MMY-MUP1681HT9P-UL	—	—
16	192	—			—	—	—	—
16	192	MMY-UP1921HT9P-UL	192	192	8+8	MMY-MUP0961HT9P-UL	MMY-MUP0961HT9P-UL	—
18	216	MMY-UP2161HT9P-UL	216	216	12+6	MMY-MUP1441HT9P-UL	MMY-MUP0721HT9P-UL	—
20	240	MMY-UP2401HT9P-UL	240	240	12+8	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL	—
22	264	MMY-UP2641HT9P-UL	264	264	14+8	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL	—
24	288	MMY-UP2881HT9P-UL	288	288	12+12	MMY-MUP1441HT9P-UL	MMY-MUP1441HT9P-UL	—
26	312	MMY-UP3121HT9P-UL	312	312	14+12	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL	—
28	336	MMY-UP3361HT9P-UL	336	336	14+14	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	—
30	360	MMY-UP3601HT9P-UL	360	360	14+8+8	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL	MMY-MUP0961HT9P-UL
32	384	MMY-UP3841HT9P-UL	384	384	12+12+8	MMY-MUP1441HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL
34	408	MMY-UP4081HT9P-UL	408	408	14+12+8	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL
36	432	MMY-UP4321HT9P-UL	432	432	14+14+8	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL
38	456	MMY-UP4561HT9P-UL	456	456	14+14+10	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1201HT9P-UL
40	480	MMY-UP4801HT9P-UL	480	480	14+14+12	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL

208-230V High heat model

Capacity rank		Model name	Capacity		Combined outdoor units			
Ton	kBtu/h		Type	Code	Ton	①Header unit	②Follower unit	③Follower unit
6	72	MMY-MUP072H1HT9PUL	072	72	6	MMY-MUP072H1HT9PUL	—	—
8	96	MMY-MUP096H1HT9PUL	096	96	8	MMY-MUP096H1HT9PUL	—	—
10	120	MMY-MUP120H1HT9PUL	120	120	10	MMY-MUP120H1HT9PUL	—	—
12	144	MMY-UP144H1HT9PUL	144	144	6+6	MMY-MUP072H1HT9PUL	MMY-MUP072H1HT9PUL	—
14	168	—			—	—	—	—
16	192	—			—	—	—	—
16	192	MMY-UP192H1HT9PUL	192	192	8+8	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL	—
18	216	—			-	—	—	—
20	240	MMY-UP240H1HT9PUL	240	240	10+10	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL	—
22	264	—			—	—	—	—
24	288	MMY-UP288H1HT9PUL	288	288	8+8+8	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL
26	312	—			—	—	—	—
28	336	—			—	—	—	—
30	360	MMY-UP360H1HT9PUL	360	360	10+10+10	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL
32	384	—			—	—	—	—
34	408	—			—	—	—	—
36	432	—			—	—	—	—
38	456	—			—	—	—	—
40	480	—			—	—	—	—

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
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		MMD-AP0481HF2UL	048	48.0	48.0	54.0
		MMD-AP0721HF2UL	072	72.0	72.0	81.0
		MMD-AP0961HF2UL	096	96.0	96.0	108.0

1-2-3. Branching joints and headers

Name	Appearance	Model name	Remarks
Y-shape branching joint		RBM-BY55UL RBM-BY105UL RBM-BY205UL RBM-BY305UL	
4-branching header		RBM-HY1043UL RBM-HY2043UL	
8-branching header		RBM-HY1083UL RBM-HY2083UL	
Branching joint for connection of outdoor units		RBM-BT14UL RBM-BT24UL	

1-2-4. 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	

1-2-5. 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

1-2-6. TU2C-LINK Controls

Name	Model name	Remarks
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 remote controller	TCB-SC640U-UL	New model from BMS-CM1281TLUL

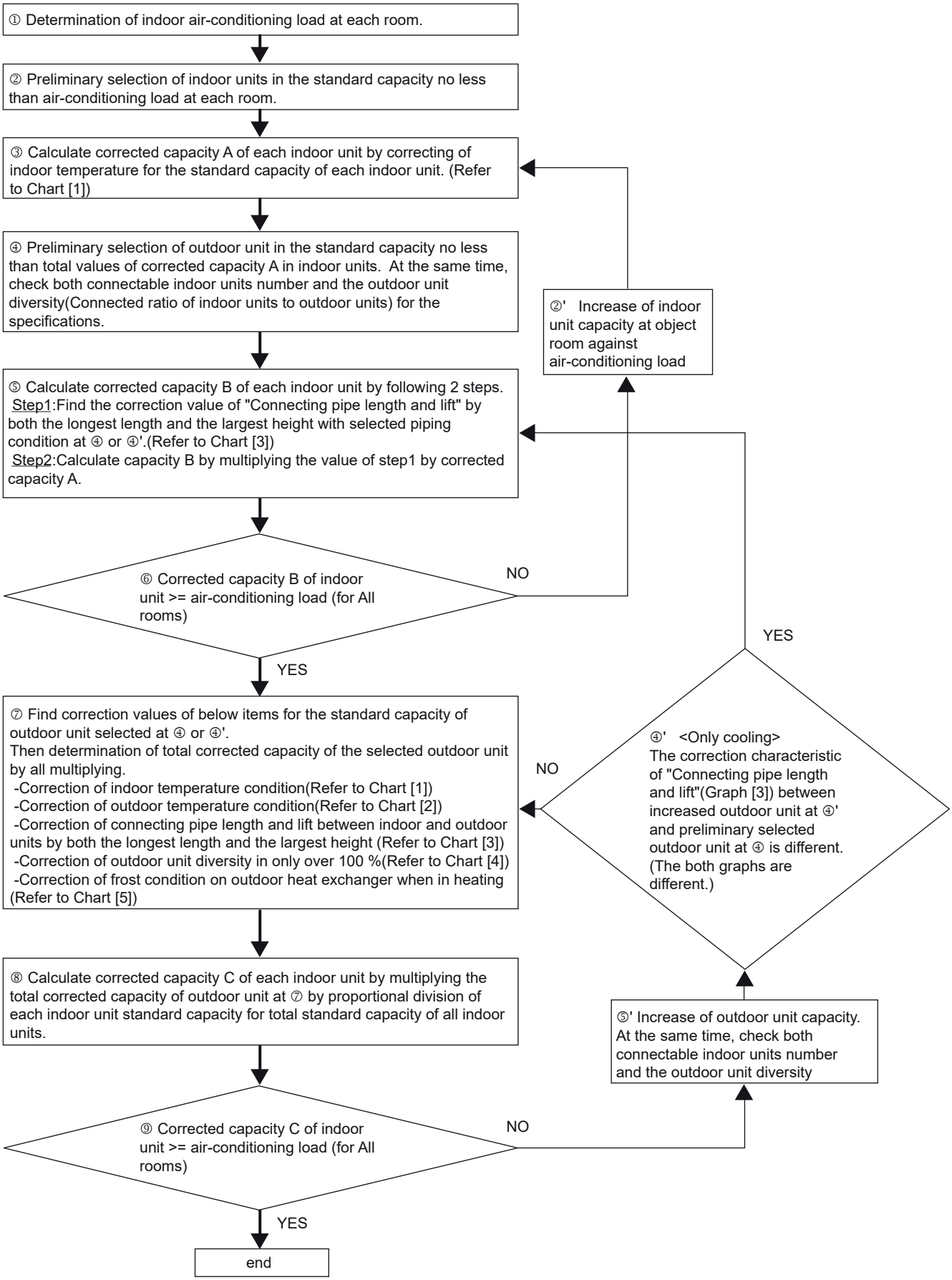
1-2-7. Remote controllers

Name	Model name	Rematks
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	Link adapter for "1:1 model" to enable connection to VRF systemnetwork. 1:1 model : RAV type indoor unit

1-2-8. Others

Name	Model name	Remarks
Snow hood	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

Indoor unit can be connected with range 50% to 200% of outdoor unit capacity.

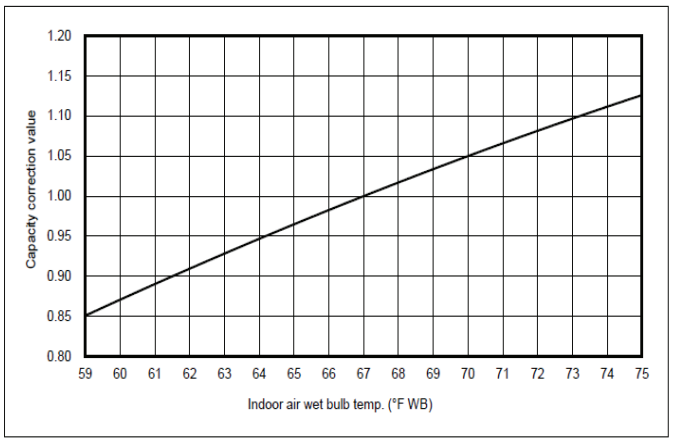
NOTE:

- When height difference between indoor units is less than 49 ft (15 m) and single module outdoor units system, the total capacity indoor units must be between 50% and 200% of outdoor unit capacity.
- When height difference between indoor units is less than 49 ft (15 m) and multiple module outdoor units system, the total capacity indoor units must be between 50% and 150% of outdoor unit capacity.
- When height difference between indoor units is more than 49 ft (15 m) and multiple module outdoor units system, the total capacity indoor units must be between 50% and 105% of outdoor unit capacity.

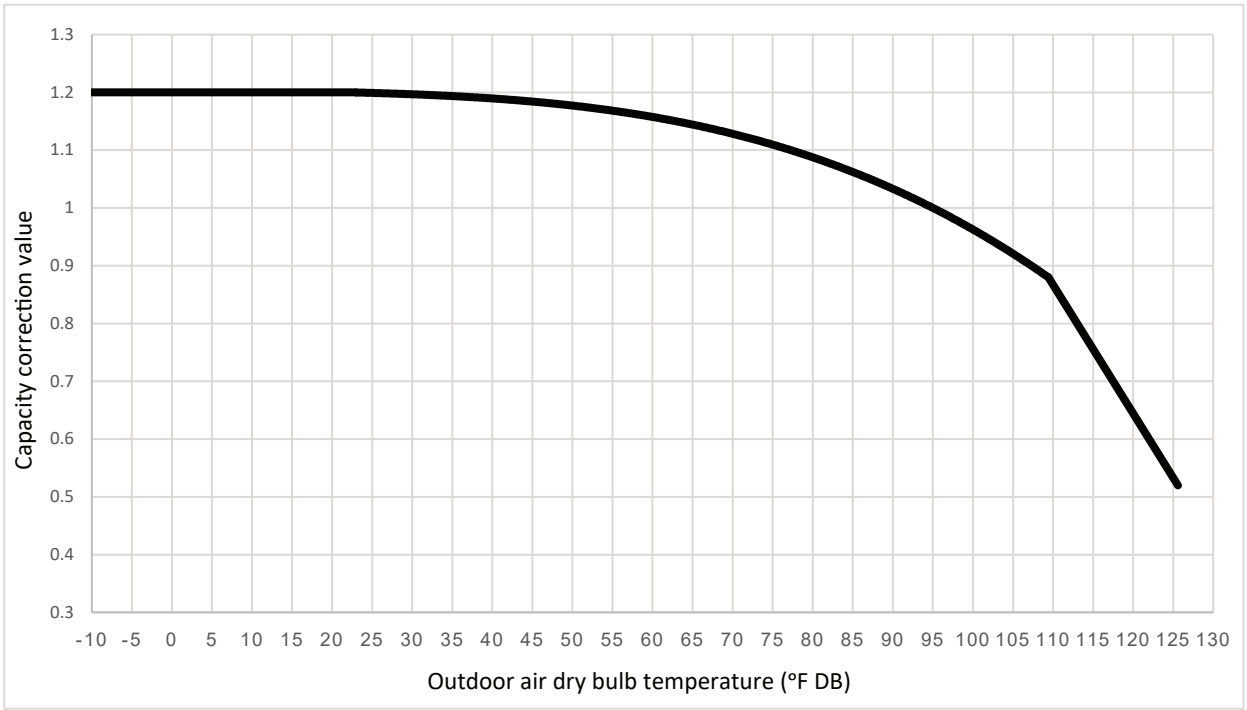
2-3. Cooling/heating capacity characteristics

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

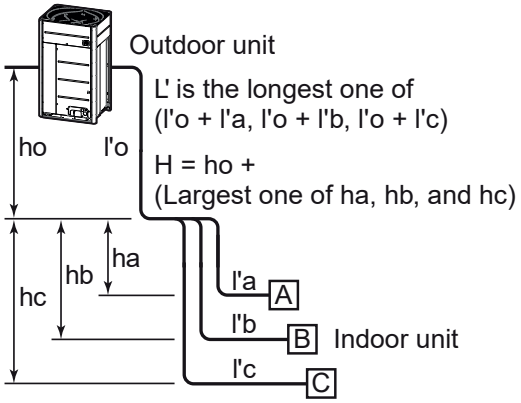
[1] Indoor air wet bulb temperature vs. capacity correction value



[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



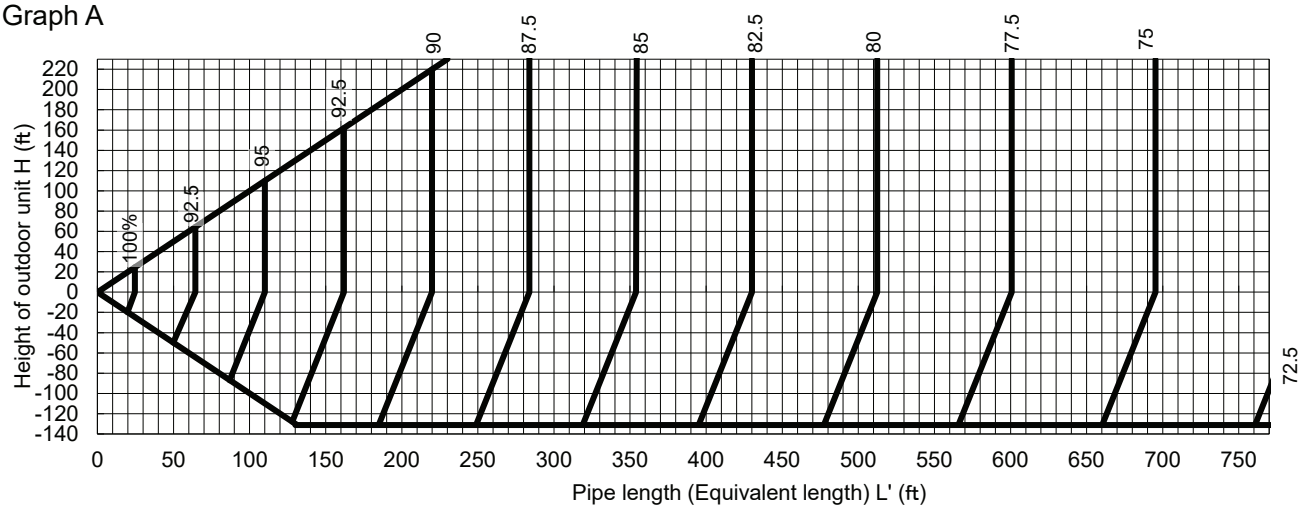
・Standard

Capacity ton	Graph	Standard model	
		Combination ton	Pipe length [ft]
6	D	6	689
8	C	8	689
10	A	10	689
12	A	12	689
14	B	14	689
16	C	16	689
16	C	8+8	738
18	D	12+6	738
20	A	12+8	738
22	A	14+8	738
24	B	12+12	738
26	A	14+12	738
28	A	14+14	738
30	A	14+8+8	771
32	A	12+12+8	771
34	A	14+12+8	771
36	B	14+14+8	771
38	B	14+14+10	771
40	E	14+14+12	771

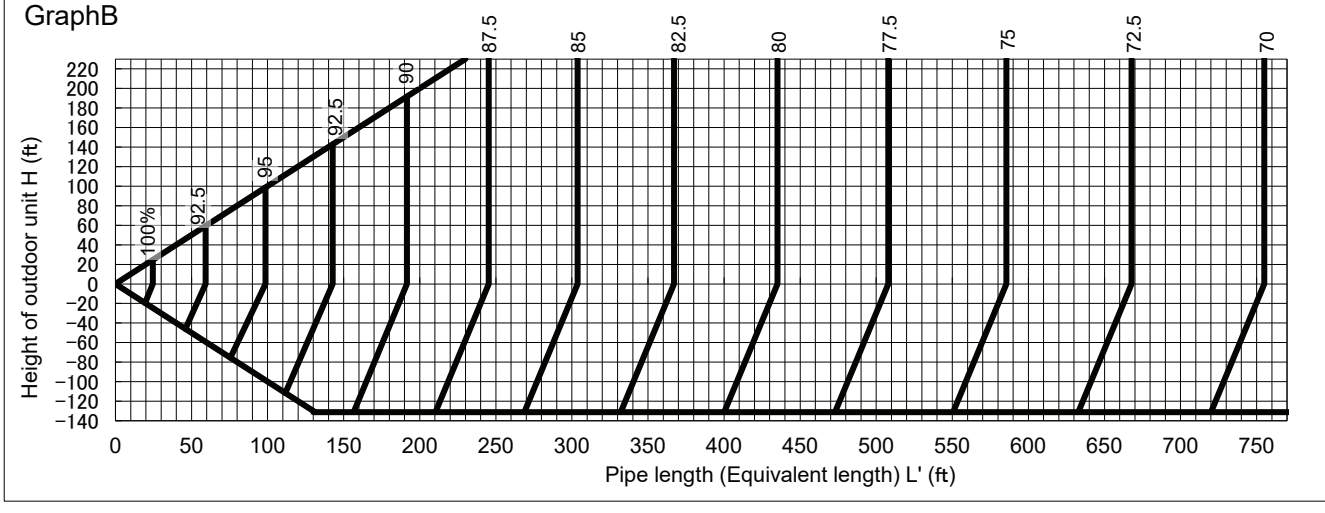
・High Heat

Capacity ton	Graph	Standard model	
		Combination ton	Pipe length [ft]
6	D	6	689
8	C	8	689
10	A	10	689
12	A	6+6	738
16	C	8+8	738
20	A	10+10	738
24	B	8+8+8	771
30	A	10+10+10	771

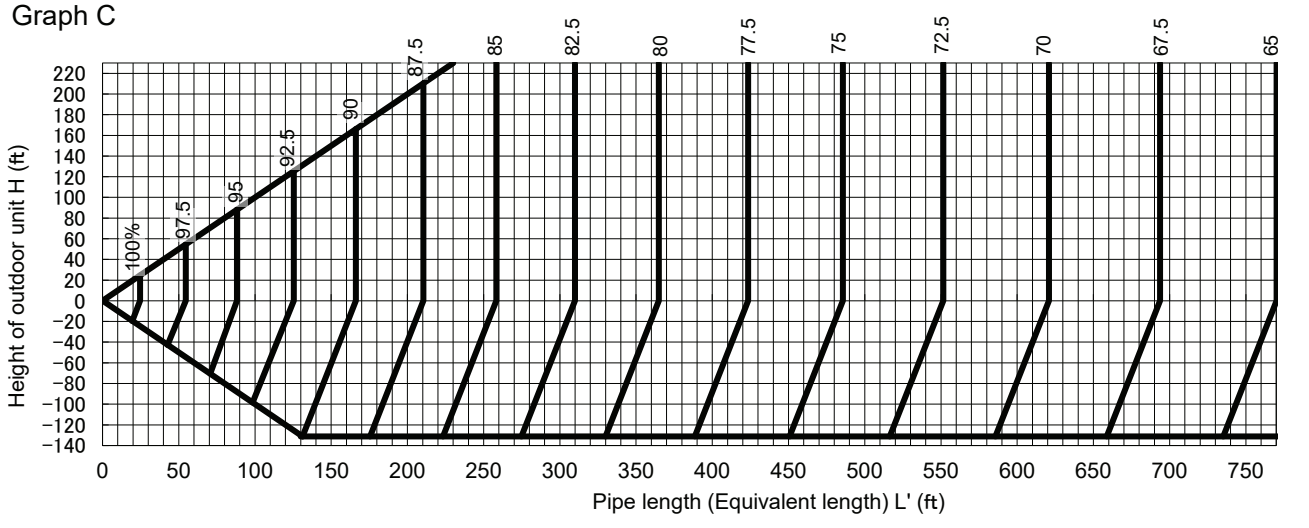
Graph A



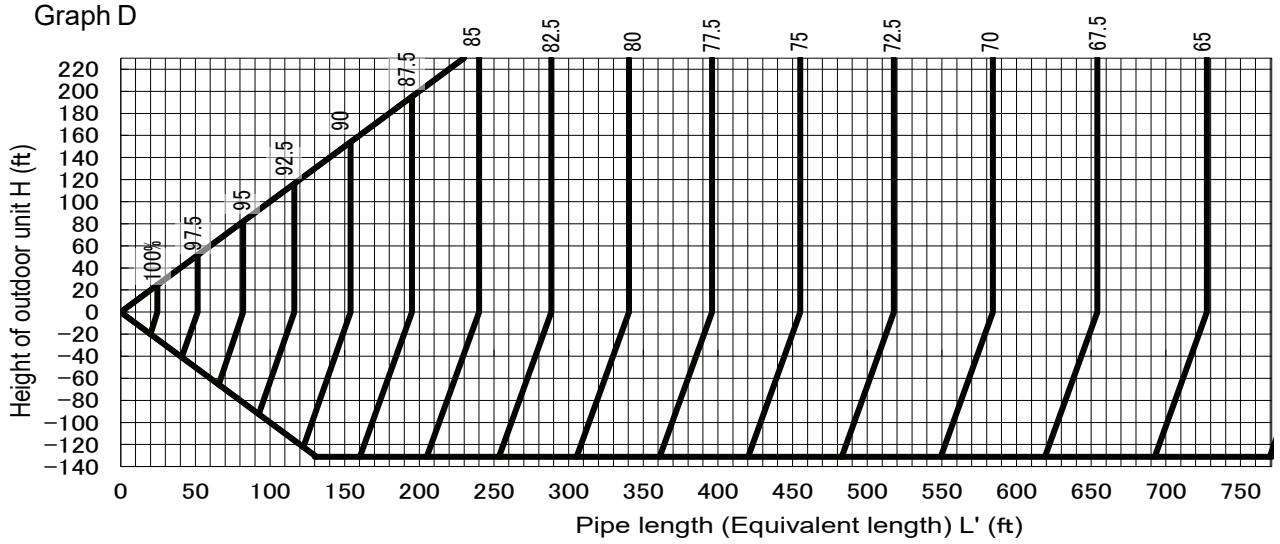
GraphB



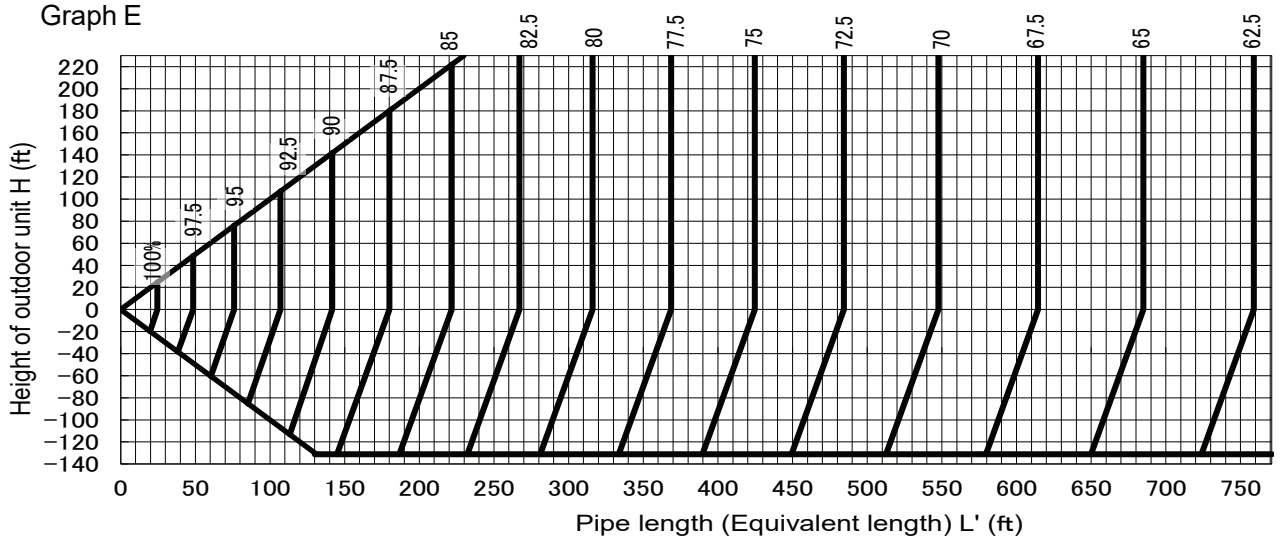
Graph C



Graph D

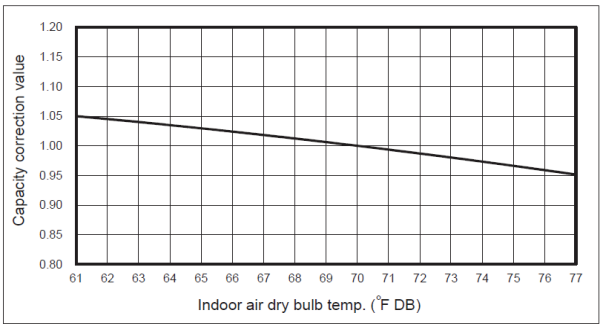


Graph E



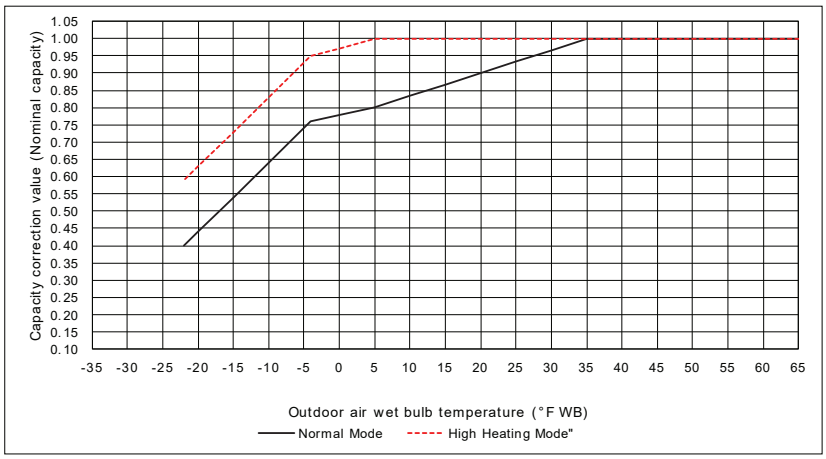
2-3-2. Correction charts for heating capacity calculation

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

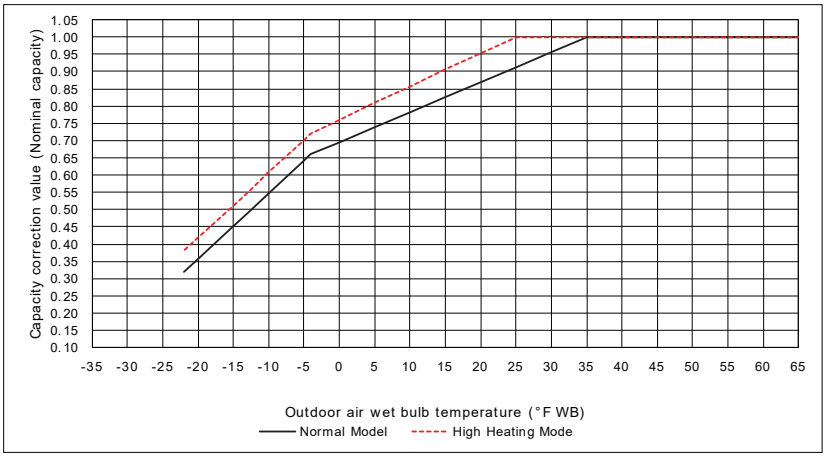


[2] Outdoor air wet bulb temperature vs. capacity correction value

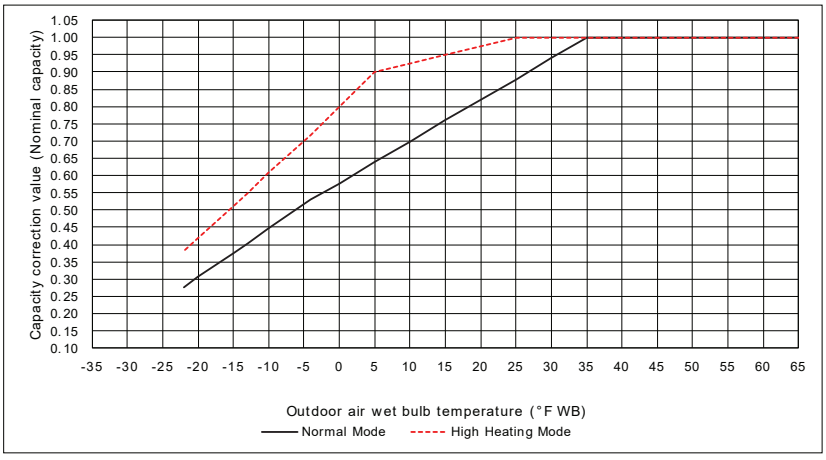
【SMMS-u】



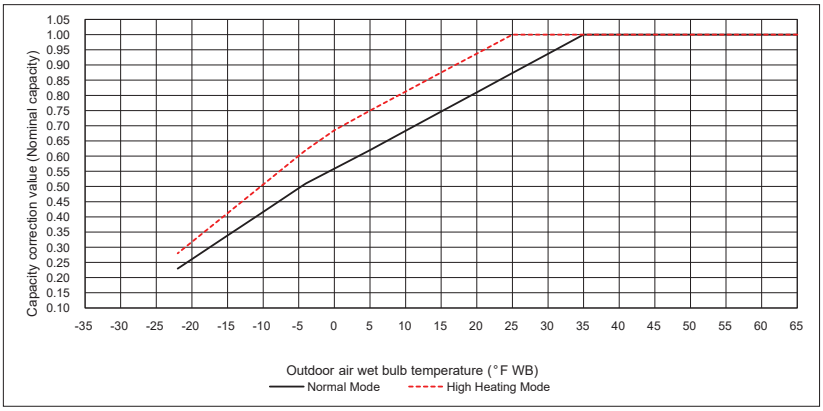
Model Type
MUP072



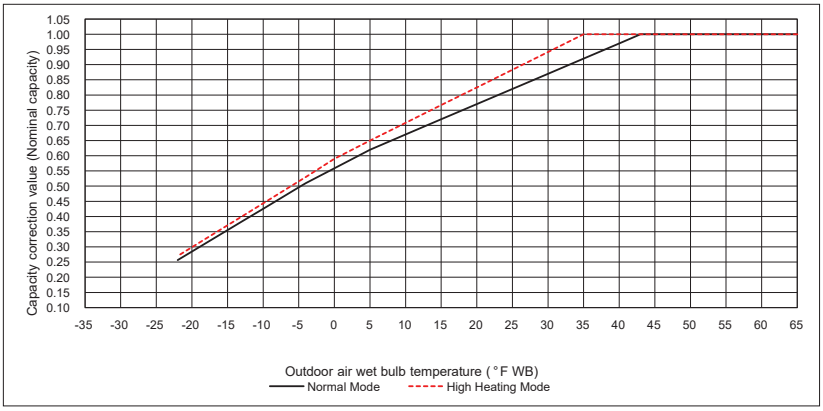
Model Type
MUP096 UP192



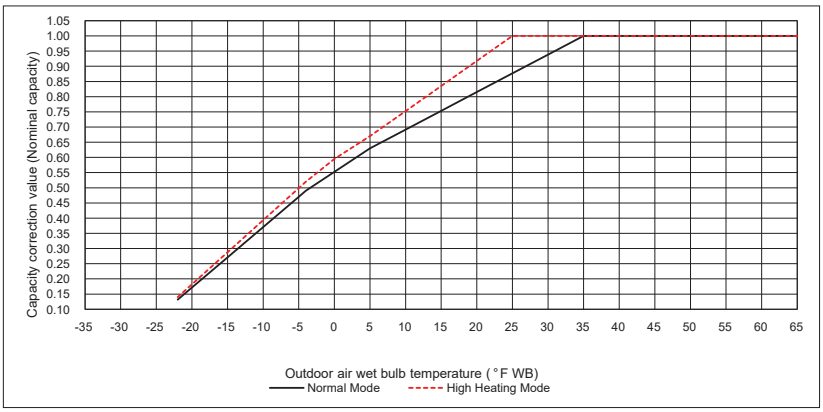
Model Type
MUP120



Model Type				
MUP144	UP216	UP240	UP288	UP384



Model Type				
MUP168	UP264	UP312	UP336	UP360
UP408	UP432	UP456	UP480	

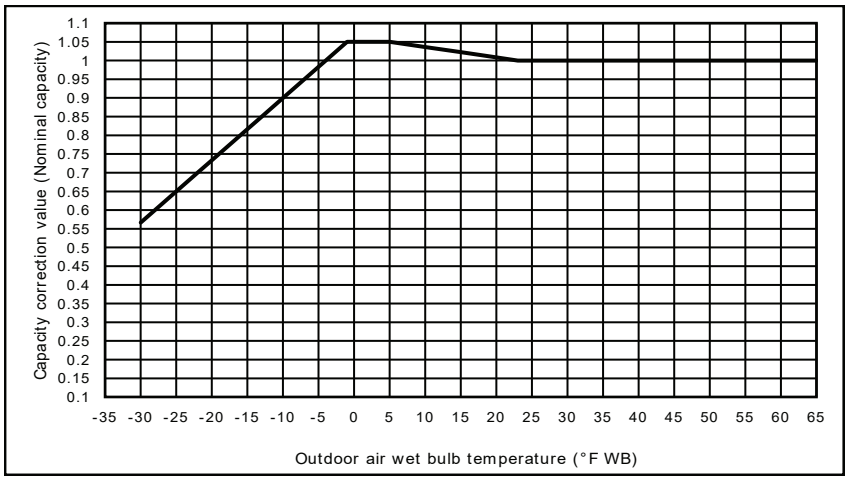


Model Type
MUP192

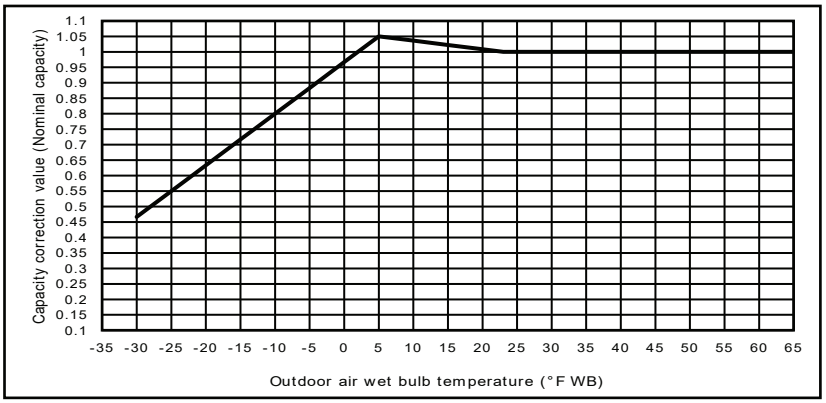
Note:

1.For temperature 5.9°F(DB)/5.0°F(WB)~-21.8°F(DB)/-22.0°F(WB), the data is shown as reference.
2.Actual results may vary according to the condition of use such as piping losses, indoor unit power consumption,etc.

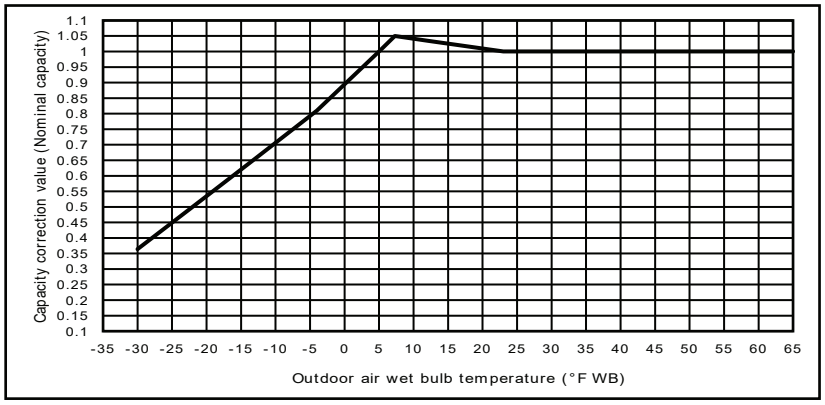
【SMMS High Heat】



Model Type	
MUP072H1	MUP144H1



Model Type		
MUP096H1	MUP192H1	MUP288H1

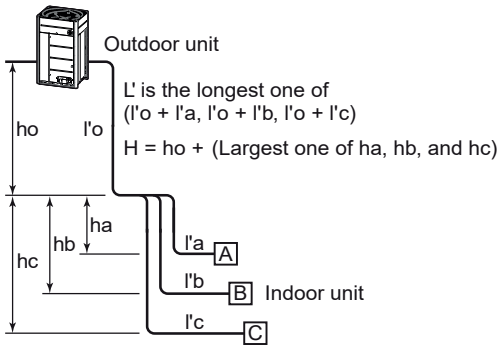


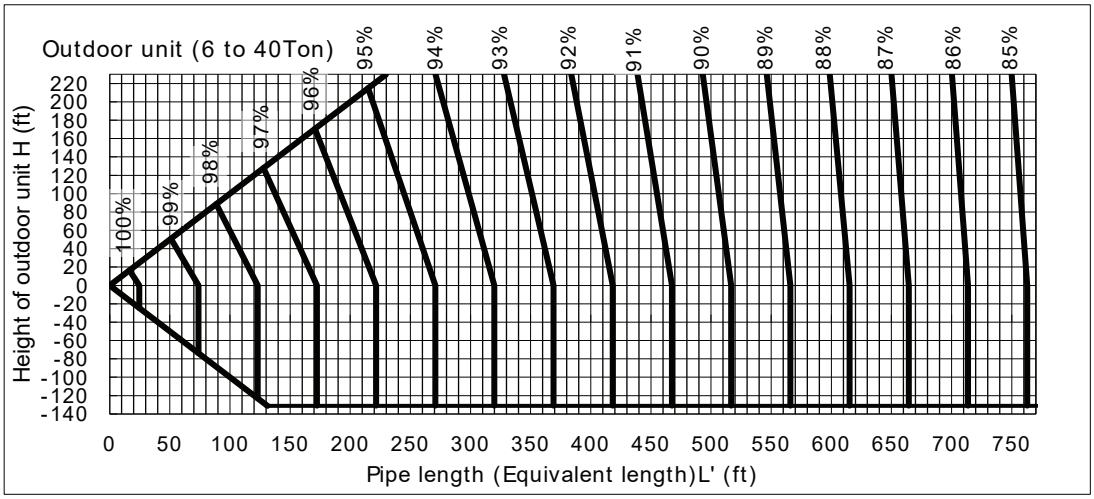
Model Type		
MUP120H1	MUP240H1	MUP360H1

Note:

1.For temperature 5.9°F(DB)/5.0°F(WB)~-29.8°F(DB)/-30.0°F(WB), the data is shown as reference.
2.Actual results may vary according to the condition of use such as piping losses, indoor unit power consumption,etc.

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





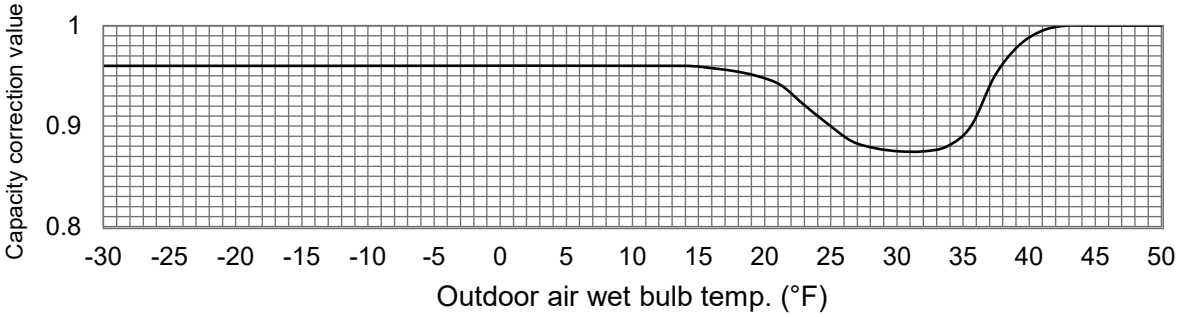
2-3-3. Capacity correction in case of frost on the outdoor heat exchanger when in heating

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

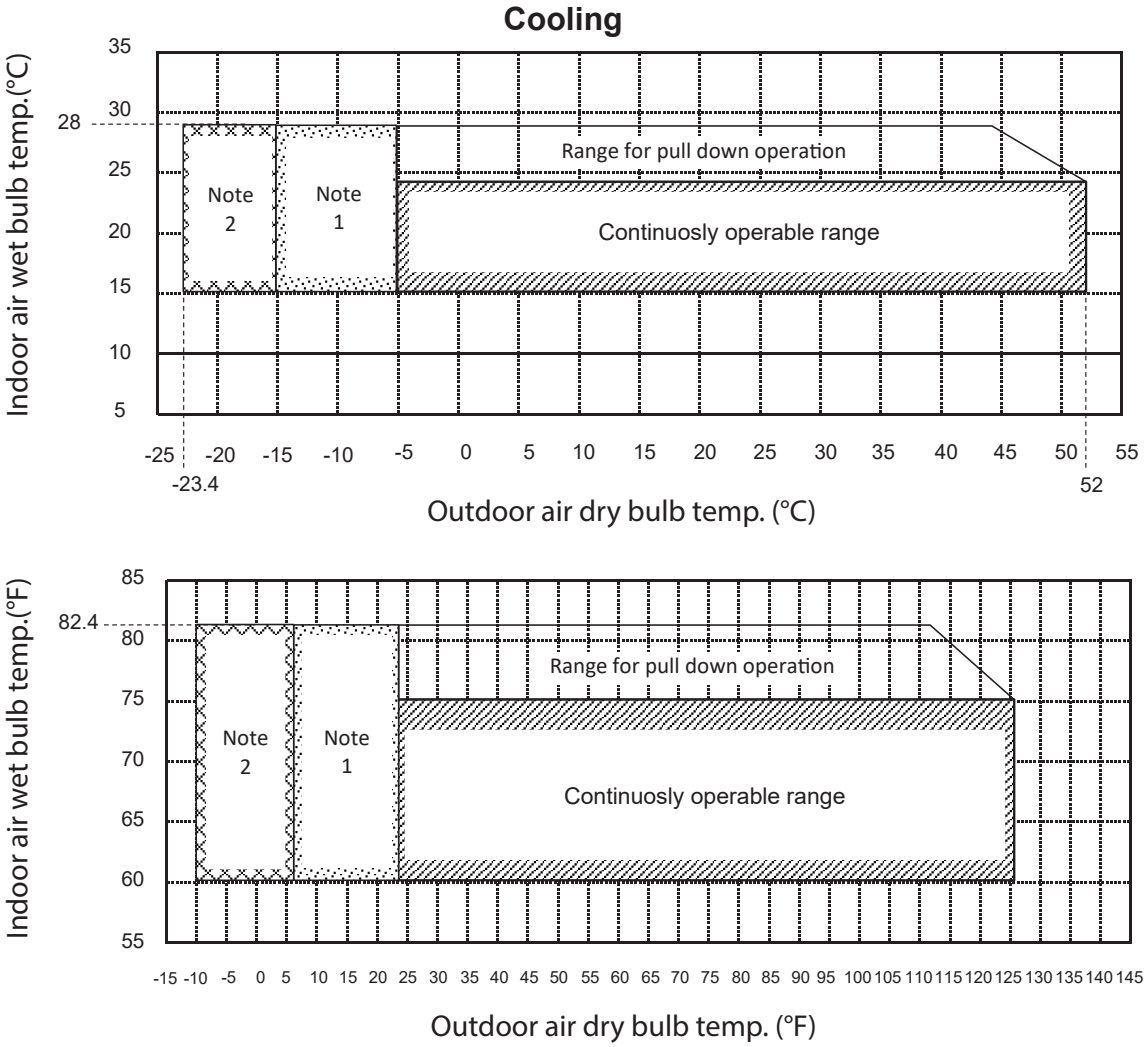


2-3-4. Rated conditions

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

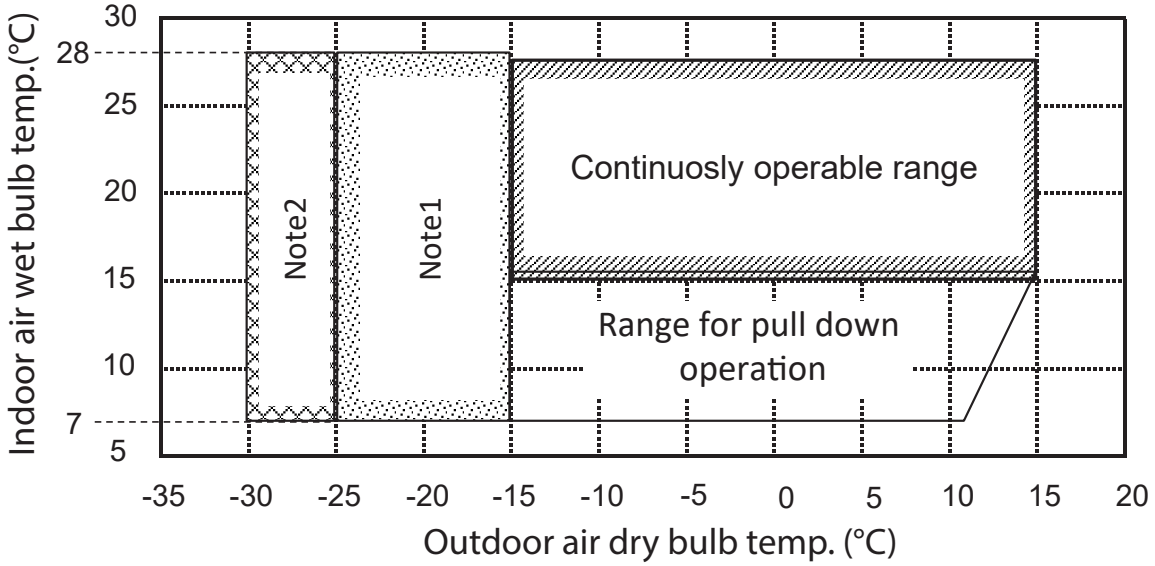


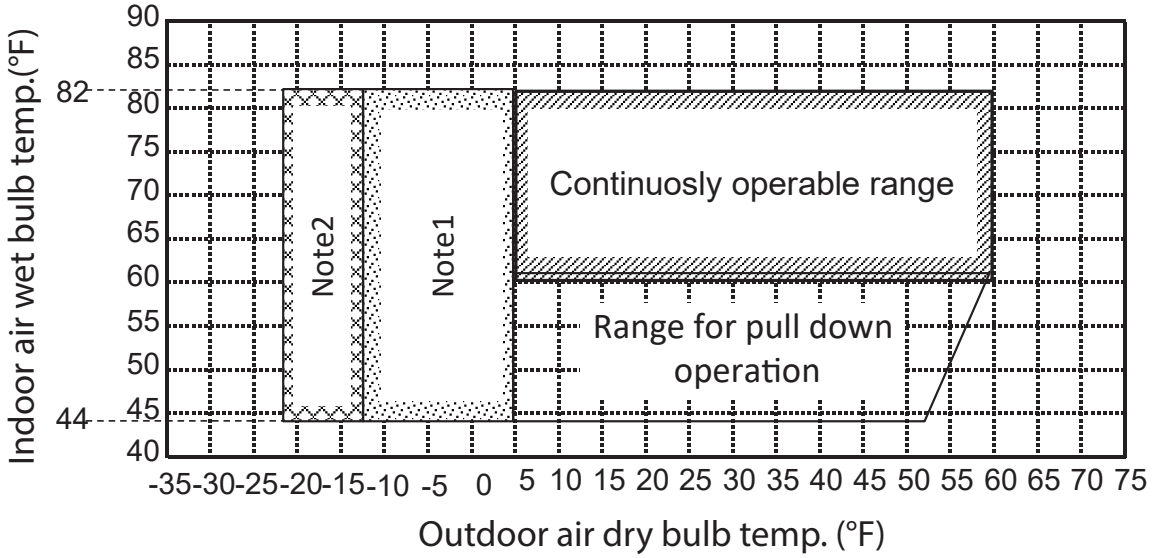
Note1:
1. Not Suitable for applications,Which require room temperature control, due to Increased risk of indoor ON/OFF control and potential low air off temperatures.
2. For areas that do demand a precise room temperature control, we would recommend The installation of secondary system, which has been designed solely for the purpose of low ambient cooling.
3. Single module outdoor unit only
4. No height difference between indoor units.
5. The cooling performance may decline considerably when total operation capacity of cooling indoor units is less than 36kBtu/h.

Note 2:
1. The constraints and cautions No 1~3 that described in Note 1 also apply in Note 2.
2. Cooling operation is not possible when the total cooling operation capacity of the indoor unit is less than 36kBtu/h. Forced shutdown will be happened.
3. Install a snow-proof hood, when the ambient temperature is below 5°F.

Heating

- Standard



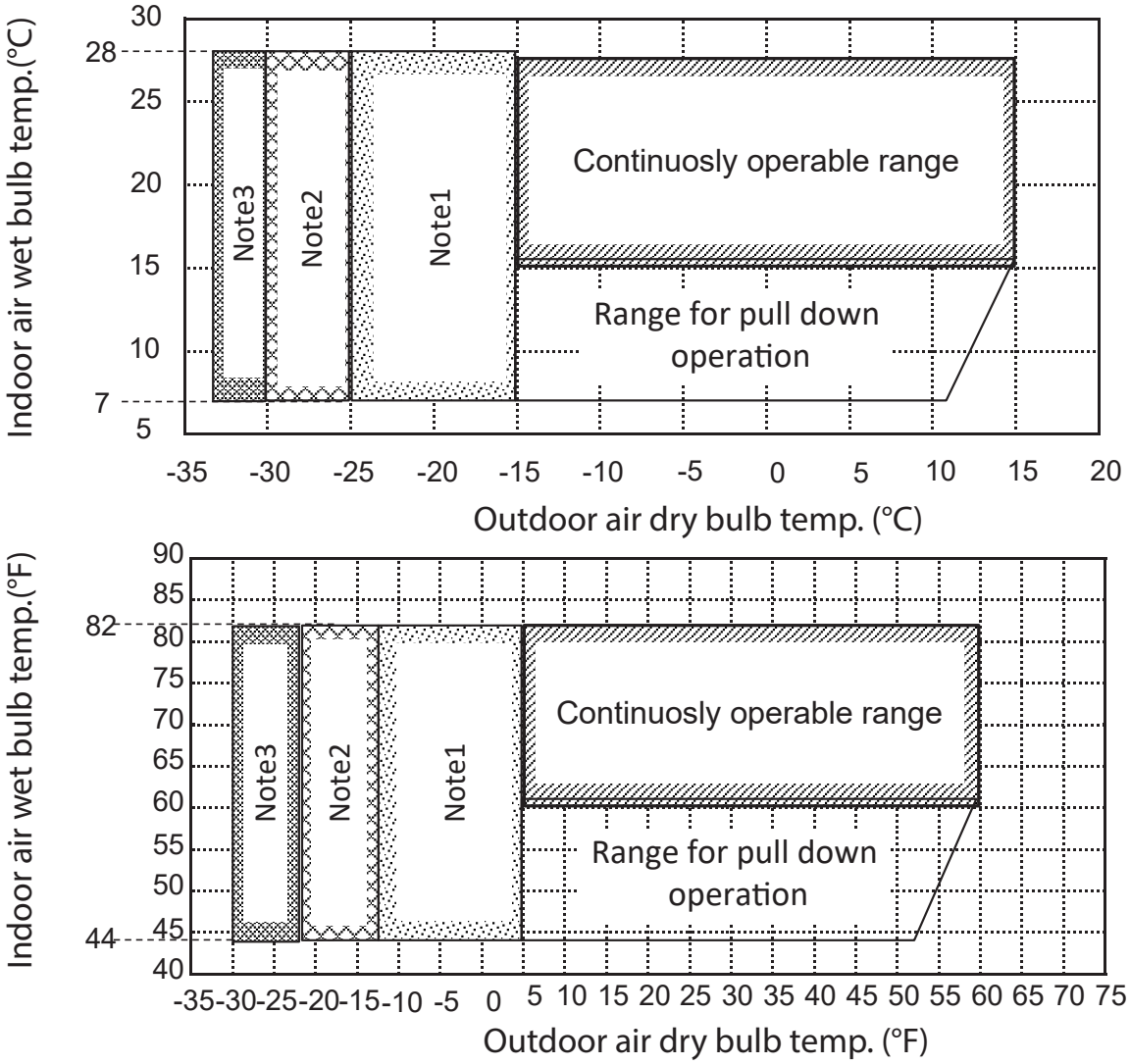


Note1: 1.The unit will operate down to an outdoor temperature of -22°F, however considerable performance decrease will be expected below 5°F. Therefore please consider installation location/surroundings and system design when expected to operate between 5°F and -13°F.
2.Be sure to turn on the main power at least 12 hours before the start of operation. Do not turn off the power during the period of use.

Note2: 1. Standard model : If operated of extended periods of time(Ex. 24hr/7days) below -13°F than it may occur significantly capacity drops.
2. Recommended installation
- Install a snow-proof hood
- The main piping length shall be 164ft or longer and the diversity shall be 100% or higher.
- Change outdoor DN code (O.DN) [05D] to 0001 and the external static pressure should be 0.06 inWG or less.

3. Heated air may not come out, when the room temperature is 79°F or higher.

- High heat



Note1: 1. The unit will operate down to an outdoor temperature of -30°F, however considerable performance decrease will be expected below 5°F. Therefore please consider installation location/surroundings and system design when expected to operate between 5°F and -22°F.
2. Be sure to turn on the main power at least 12 hours before the start of operation. Do not turn off the power during the period of use.

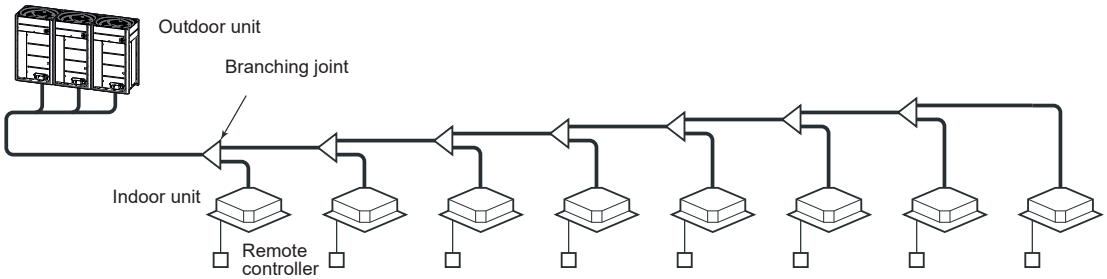
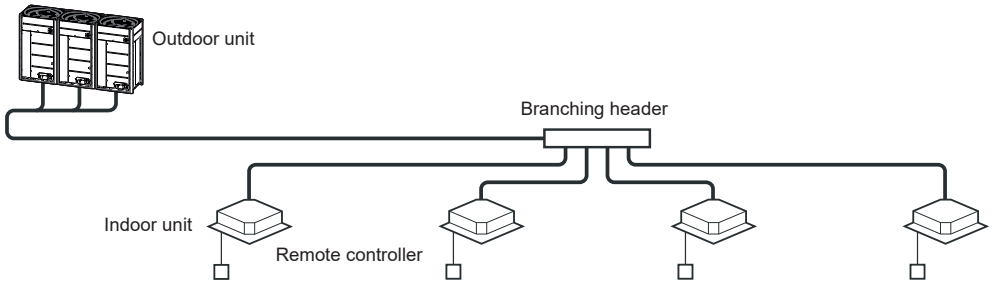
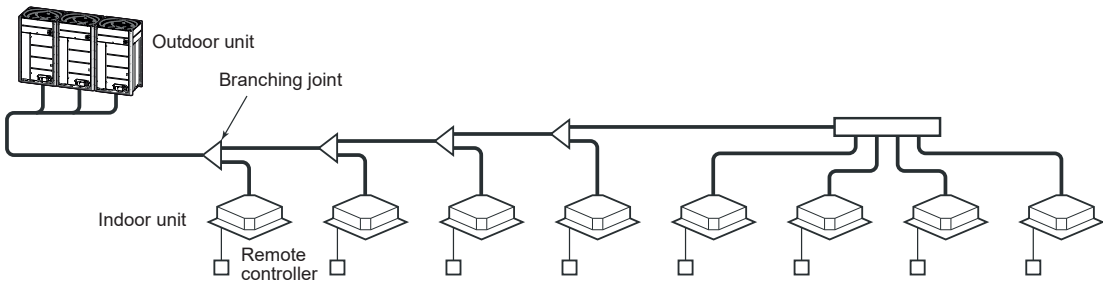
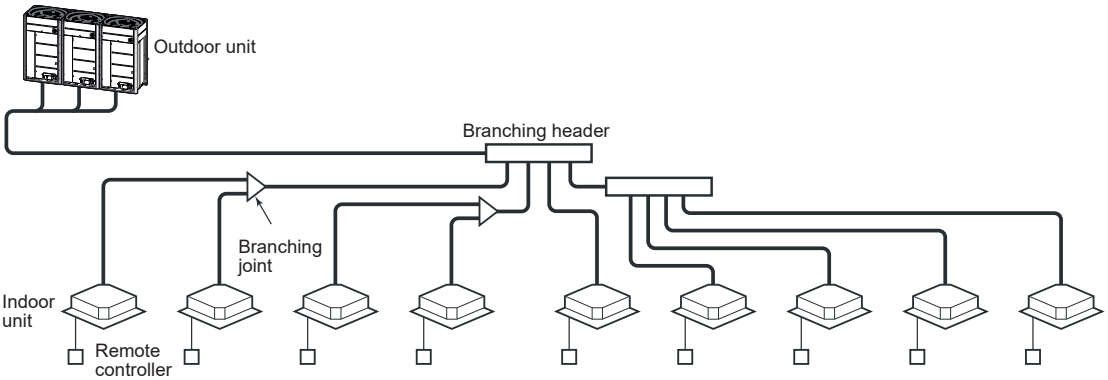
Note2: 1. Recommended installation
- Install a snow-proof hood
- The main piping length shall be 131ft or longer and the diversity shall be 100% or higher.

2. Heated air may not come out, when the room temperature is 79°F or higher.

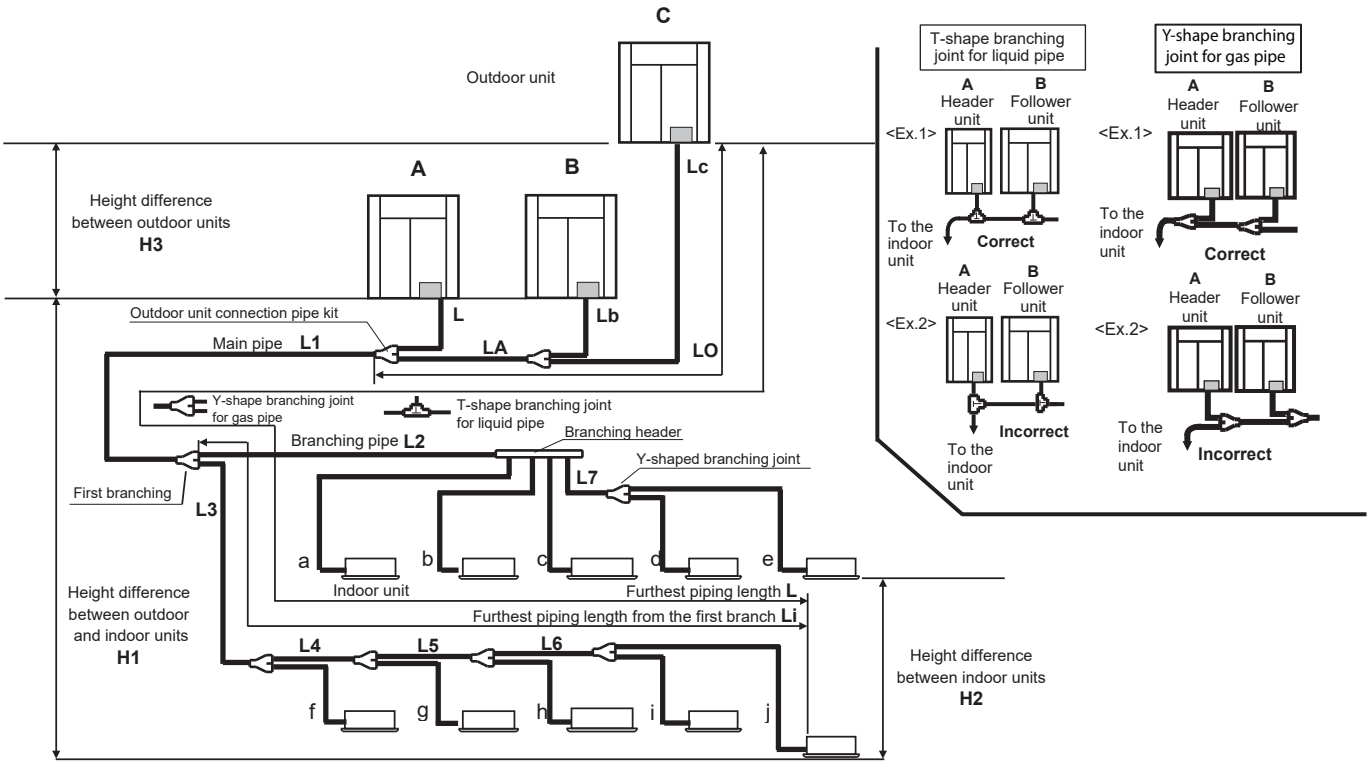
Note3: 1. High Heat model : If operated of extended periods of time(Ex. 24hr/7days) below -22°F than it may occur significantly capacity drops.

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	
Maximum capacity of outdoor units	480 kBtu/h (40 ton)	
Indoor unit connection	74 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※
		Multiple outdoor units system:150% of outdoor units capacity※
	H2 > 49ft (15m)	105% of outdoor units capacity

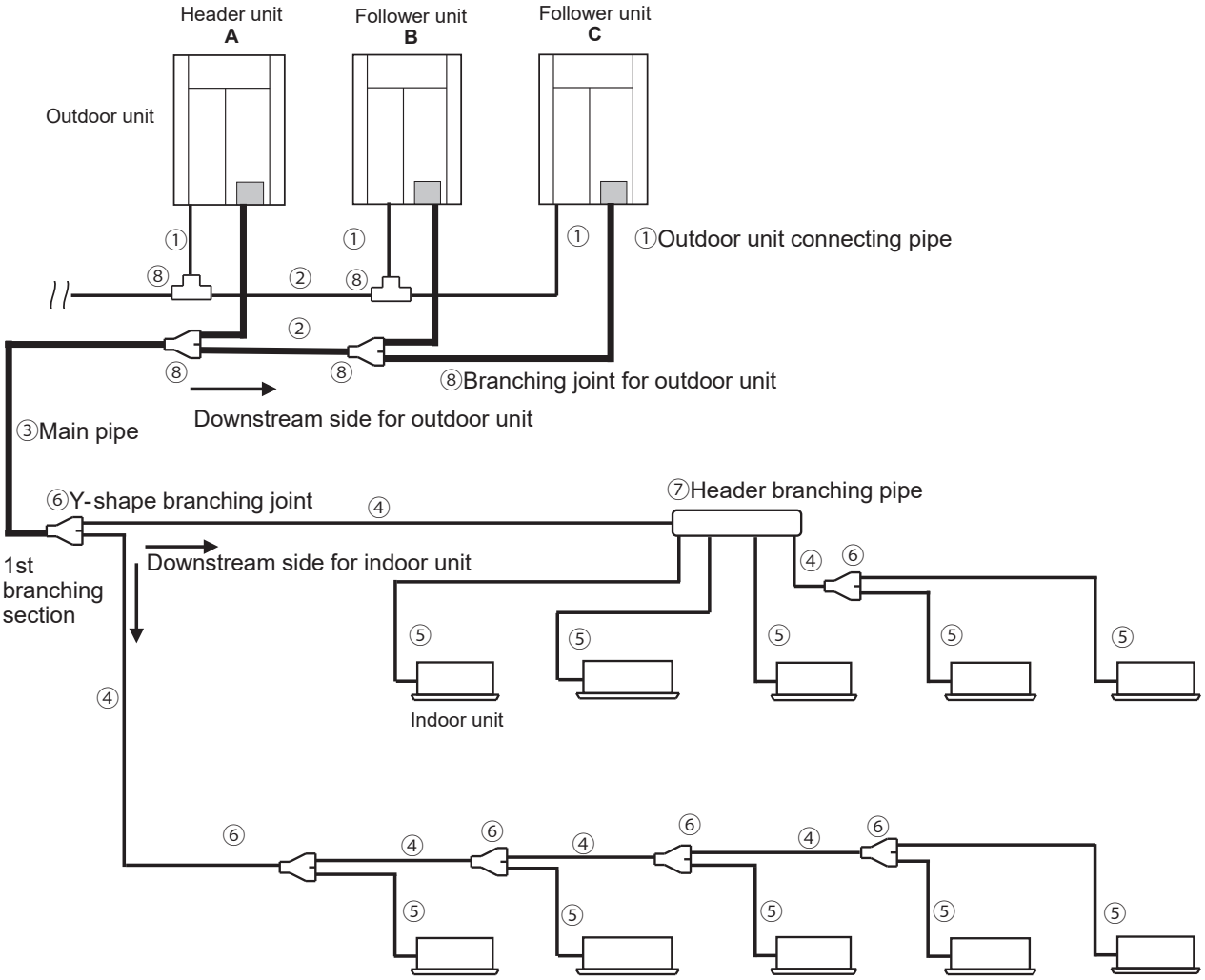
※: Limited number of indoor unit is connected

◆Allowable length and allowable height diffefence of refrigerant piping

Item				Allowable Length ft	Allowable Length m	Piping section
Pipe length	Total extension of pipe (liquid pipe,real length)	Single outdoor unit system		1640	500	LA+La+Lb+Lc+L1+L2+L3+L4+L5+L6+L7+a+b+c+d+e+f+g+h+i+j
		Multiple outdoor unit system		3937(*2)	1200 (*2)	
	Furthest piping length **L**(*1)	Equivalent length		771	235	LA+Lc+L1+L3+L4+L5+L6+j
		Real length		623	190	
	Max.equivalent length of Main piping **L1**	Equivalent length		394(*6)	120(*6)	L1
		Real length		328(*6)	100(*6)	
	Equivalent length of furthest piping from 1 st branching **Li**		H1>9.8ft(3m)	213	65	L3+L4+L5+L6+j
			H1≦9.8ft(3m)	295	90	
	Equivalent length of furthest piping between outdoor units **LO**			82	25	LA + Lb 、LA + Lc
	Equivalent length of outdoor unit connecting piping			33	10	La、Lb、Lc
	Max. real length of indoor unit connecting piping			98	30	a、b、c、d、e、f、g、h、i、j
	Max. equivalent length between branches			164	50	L2、L3、L4、L5、L6、L7
Difference in height	Height difference between outdoor and indoor unit **H1**	Upper outdoor unit	H2>9.8ft(3m)	164	50	-----
			H2≦9.8ft(3m)	230	70	-----
				361(*3)	110(*3)	
		Lower outdoor unit	H2>9.8ft(3m)	98	30	-----
			H2≦9.8ft(3m)	131	40	-----
				361(*3)	110(*3)	
	Height difference between indoor units **H2**	Upper outdoor unit		131(*5)	40(*5)	-----
		Lower outdoor unit				
	Height difference between outdoor units **H3**			16	5	-----

(*1):(C) is outdoor unit furthest from the 1st branch and (j) is the indoor unit furthest from the 1st branch
(*2):Total charging refrigerant is 308lbs(140kg) or less
(*3):Extension up till 361 ft (110 m) is possible with conditions below :
-Single outdoor unit system
-Connected ratio of indoor units to outdoor units is below 105%
-Liquid side has been increased 1 size from standard size
(*4):Extension up till 361 ft (110 m) is possible with conditions below :
-Multiple outdoor unit system
-Connected ratio of indoor units to outdoor units is below 105%
-Minimum capacity of connecting indoor units is more than 27 of total capacity code.
(*5):If the connected ratio of indoor units to outdoor units is more than 105%, set 49ft(15m) or less
(*6):When using SMMS high heat model and the main piping is shorter than 131 ft (40 m), please contact manufacturer's representative for review

3-3. Selection of refrigerant piping



(1)Outdoor unit connecting pipe

Outdoor unit capacity type	Gas side	Liquid side
072type	3/4"	1/2"
096type	7/8"	1/2"
120type	1-1/8"	1/2"
144type	1-1/8"	5/8"
168type	1-1/8"	5/8"
192type	1-1/8"	5/8"

(2)Piping between Outdoor units

Total capacity code of the outdoor units at downstream side(*1)	Gas side	Liquid side
Below 216	1-1/8"	5/8"
216 to below 288	1-3/8"	3/4"
288 or more	1-5/8"	3/4"

(3)Main pipe(*2)

Outdoor unit capacity type	Gas side	Liquid side		
		Standard size	Refrigerant saving size	
				Allowable length
072type	3/4"	1/2"	3/8"	98ft (30m)
096type	7/8"	1/2"	3/8"	98ft (30m)
120type	1-1/8"	1/2"	-	-
144, 168type	1-1/8"	5/8"	1/2"	164ft (50m)
192type	1-1/8"	5/8"	-	-
216 to below 264	1-3/8"	3/4"	5/8"	263ft (80m)
264 to below 336	1-3/8"	3/4"	-	-
336 to below 432	1-5/8"	7/8"	3/4"	263ft (80m)
432 or more	1-5/8"	7/8"	3/4"	164ft (50m)

(4)Branching pipe(*7)(*8)

Total capacity code of indoor units at downstream side(*1)	gas side	Liquid side
Below 23	1/2"	3/8"
23 to below 61	5/8"	3/8"
61 to below 116	7/8"	1/2"
116 to below 155	1-1/8"	5/8"
155 to below 193	1-1/8"	5/8"
193to below 213	1-1/8"	3/4"
213 to below 336	1-3/8"	3/4"
336 or more	1-5/8"	7/8"

(5)Indoor unit connecting pipe

Indoor unit capacity type	Gas side	Liquid side	Real piping length
007 to 012type	3/8"	1/4"	49 ft(15 m) or less
	1/2"	1/4"	Exceeds 49 ft (15 m)
015, 018type	1/2"	1/4"	
021 to 054type	5/8"	3/8"	
072, 096type	7/8"	1/2"	

(6)Y-shaped branching joint(*3)(*4)

Total capacity code of indoor units at downstream side(*1)	Model name
Below 61	RBM-BY55UL
61 to below 134	RBM-BY105UL
134 to below 239	RBM-BY205UL
239 or more	RBM-BY305UL

(7)Branching header(*3)(*4)(*5)(*6)

Number of branches	Total capacity code of indoor units at downstream side(*1)	Model name
For 4 branching	Below 134	RBM-HY1043UL
	134 to below 239	RBM-HY2043UL
For 8 branching	Below 134	RBM-HY1083UL
	134 to below 239	RBM-HY2083UL

(8) Outdoor unit connection piping kit

Total capacity code of outdoor units at downstream side(*1)	Model name
Below 247	RBM-BT14UL
247 or more	RBM-BT24UL

(*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):The branch pipe of the first branch should be selected based on the capacity type of the outdoor unit.
(*4):Select according to the outdoor unit capacity code if the total of the indoor capacity codes exceeds the outdoor unit capacity code.
(*5):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 247 (kBtu/h) or less, use RBM-HY2043UL(4 branches) and RBM-HY2083UL(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.
(*6):It is possible to select up to a maximum capacity code of 57 in total for each one branch of the branching header.
(*7):Use the same size as the main pipe if the piping size is larger than the main pipe.
(*8):When the capacity code of the outdoor unit is 480, it is neccesary to increase one size the gas piping.

3-4. Charging requirement with additional refrigerant

1.Refrigerant in the outdoor unit when shipped from factory

Table 1-1 Standard model

MMY-	MUP***1HT6P-UL MUP***1HT9P-UL	072	096	120	144	168	192
Amount of refrigerant charged in factory	lbs	13.2		19.8			
	kg	6.0		9.0			

Table 1-2 High heat model

MMY-	MUP***H1HT6P-UL MUP***H1HT9P-UL	072	096	120
Amount of refrigerant charged in factory	lbs	19.8		
	kg	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 = [1] + [2] + [3] + [4]
[1] Compensation amount of refrigerant based on outdoor unit capacity type (Table 2)
[2] Additonal amount of refrigerant charge based on liquid pipe size
Real length of liquid pipe × Additional amount of refrigerant charge (Table 3)
[3] Additional amount of refrigerant charge based on indoor unit type (Table 4)
[4] Corrected amount of refrigerant based on outdoor unit diversity (Table 5)

Table 2 Compensation amount of refrigerant based on outdoor unit capacity type
Table 2-1 Standard model

Outdoor unit capacity type	Combination outdoor units			Compensation by outdoor unit capacity type	
	Unit 1	Unit 2	Unit 3	lbs	kg
072	072	-	-	2.20	1.00
096	096	-	-	2.64	1.20
120	120	-	-	-1.10	-0.50
144	144	-	-	0.33	0.15
168	168	-	-	6.16	2.80
192	192	-	-	7.70	3.50
192	096	096	-	5.28	2.40
216	144	072	-	2.53	1.15
240	144	096	-	2.97	1.35
264	168	096	-	8.80	4.00
288	144	144	-	0.66	0.30
312	168	144	-	6.49	2.95
336	168	168	-	12.32	5.60
360	168	096	096	11.44	5.20
384	144	144	096	3.30	1.50
408	168	144	096	9.13	4.15
432	168	168	096	14.96	6.80
456	168	168	120	11.22	5.10
480	168	168	144	12.65	5.75

Table 2-2 High heat model

Outdoor unit capacity type	Combination outdoor units			Compensation by outdoor unit capacity type	
	Unit 1	Unit 2	Unit 3	lbs	kg
072	072	-	-	-2.20	-1.00
096	096	-	-	-1.65	-0.75
120	120	-	-	3.30	1.50
144	072	072	-	-4.40	-2.00
192	096	096	-	-3.30	-1.50
240	120	120	-	6.60	3.00
288	096	096	096	-4.95	-2.25
360	120	120	120	9.90	4.50

Table 3.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 4 Additional amount of refrigerant charge based on indoor unit type

Table 4-1. 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 4-2. 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 4-3. 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						

Table4-4 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

Indoor unit capacity type		144	168	192	216	240	288	312	336	360	384	432	456	480	504
	ton	12	14	16	18	20	24	26	28	30	32	36	38	40	42
Additional amount of refrigerant	lbs /unit	6.26	7.06	7.85	8.84	9.83	12.6	13.4	14.2	15.0	15.8	17.3	18.1	18.9	19.7
	kg / unit	2.84	3.20	3.56	4.01	4.46	5.71	6.07	6.43	6.79	7.15	7.87	8.23	8.59	8.95

Table5 Corrected amount of refrigerant based on outdoor unit diversity

Diversity D (%)	Corrected amount of refrigerant	
	lbs	kg
50% ≦D< 60%	-5.51	-2.5
60% ≦D< 70%	-4.41	-2.0
70% ≦D< 80%	-3.31	-1.5
80% ≦D< 90%	-2.2	-1.0
90% ≦D< 95%	-1.1	-0.5
95% ≦D	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.

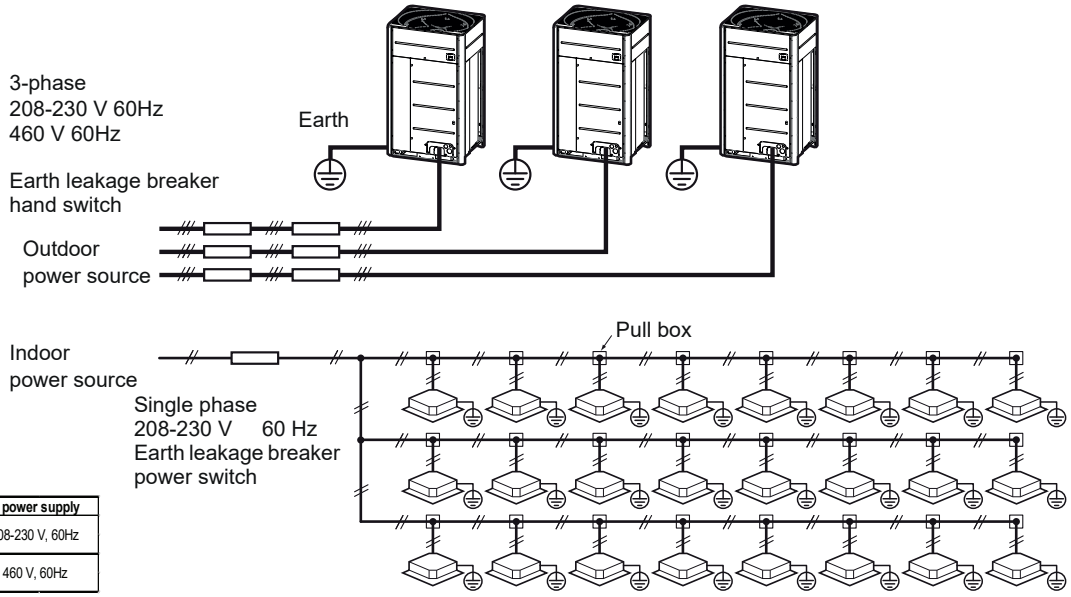
4-2.Summary of wiring design

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.

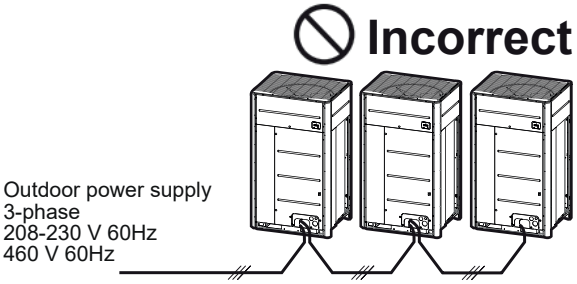
Design of control wiring
- Design each control wiring.
  Between outdoor and indoor units,
  Between indoor units/outdoor units
  Between indoor unit and remote controller, central control, BMS
- Select the wire size and type depending on the length rules.

4-3.Electrical wiring design



Model	Outdoor power supply
MMY-MUP***1HT9P-UL MMY-MUP***H1HT9PUL	3-phase, 208-230 V, 60Hz
MMY-MUP***1HT6P-UL MMY-MUP***H1HT6PUL	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_ Standard model

Unit type	ton	Model MMY-	Power Supply		Voltage Range		Output				MCA	MOCP
							Compressor			Fan Motor		
			Phase and frequency	Nominal Voltage	Min	Max	Unit No.1	Unit No.2	Unit No.3			
					(V)	(V)	(kW)	(kW)	(kW)	(kW)	(A)	(A)
Single unit	6	MUP0721HT6P-UL	3 - 60Hz	460 V	414	506	4.05	—	—	0.43	17.4	20
	8	MUP0961HT6P-UL	3 - 60Hz	460 V	414	506	6.24	—	—	0.59	17.5	20
	10	MUP1201HT6P-UL	3 - 60Hz	460 V	414	506	8.00	—	—	0.33×2	24.2	30
	12	MUP1441HT6P-UL	3 - 60Hz	460 V	414	506	9.69	—	—	0.43×2	24.6	35
	14	MUP1681HT6P-UL	3 - 60Hz	460 V	414	506	12.1	—	—	0.73×2	27.4	40
	16	MUP1921HT6P-UL	3 - 60Hz	460 V	414	506	7.05×2	—	—	0.85×2	31.8	50
Combined modelUnit	16	UP1921HT6P-UL	3 - 60Hz	460 V	414	506	6.24	6.24	—	0.59 + 0.59	17.5+17.5	20+20
	18	UP2161HT6P-UL	3 - 60Hz	460 V	414	506	9.69	4.05	—	0.43×2 + 0.43	24.6+17.4	35+20
	20	UP2401HT6P-UL	3 - 60Hz	460 V	414	506	9.69	6.24	—	0.43×2 + 0.59	24.6+17.5	35+20
	22	UP2641HT6P-UL	3 - 60Hz	460 V	414	506	12.1	6.24	—	0.73×2 + 0.59	27.4+17.5	40+20
	24	UP2881HT6P-UL	3 - 60Hz	460 V	414	506	9.69	9.69	—	0.43×2 + 0.43×2	24.6+24.6	35+35
	26	UP3121HT6P-UL	3 - 60Hz	460 V	414	506	12.1	9.69	—	0.73×2 + 0.43×2	27.4+24.6	40+35
	28	UP3361HT6P-UL	3 - 60Hz	460 V	414	506	12.1	12.1	—	0.73×2 + 0.73×2	27.4+27.4	40+40
	30	UP3601HT6P-UL	3 - 60Hz	460 V	414	506	12.1	6.24	6.24	0.73×2 +0.59 + 0.59	27.4+17.5+17.5	40+20+20
	32	UP3841HT6P-UL	3 - 60Hz	460 V	414	506	9.69	9.69	6.24	0.43×2 + 0.43×2 + 0.59	24.6+24.6+17.5	35+35+20
	34	UP4081HT6P-UL	3 - 60Hz	460 V	414	506	12.1	9.69	6.24	0.73×2 + 0.43×2 + 0.59	27.4+24.6+17.5	40+35+20
	36	UP4321HT6P-UL	3 - 60Hz	460 V	414	506	12.1	12.1	6.24	0.73×2 + 0.73×2 + 0.59	27.4+27.4+17.5	40+40+20
	38	UP4561HT6P-UL	3 - 60Hz	460 V	414	506	12.1	12.1	8.00	0.73×2 + 0.73×2 + 0.33×2	27.4+27.4+24.2	40+40+30
	40	UP4801HT6P-UL	3 - 60Hz	460 V	414	506	12.1	12.1	9.69	0.73×2 + 0.73×2 + 0.43×2	27.4+27.4+246	40+40+35

460V_ High Heat model

Unit type	ton	Model MMY-	Power Supply		Voltage Range		Output				MCA	MOCP
							Compressor			Fan Motor		
			Phase and frequency	Nominal Voltage	Min	Max	Unit No.1	Unit No.2	Unit No.3			
					(V)	(V)	(kW)	(kW)	(kW)	(kW)	(A)	(A)
Single unit	6	MUP072H1HT6PUL	3 - 60Hz	460 V	414	506	4.55	—	—	0.24	18.5	20
	8	MUP096H1HT6PUL	3 - 60Hz	460 V	414	506	6.30	—	—	0.33×2	24.9	30
	10	MUP120H1HT6PUL	3 - 60Hz	460 V	414	506	7.67	—	—	0.38×2	25.4	30
Combined modelUnit	12	UP144H1HT6PUL	3 - 60Hz	460 V	414	506	4.55	4.55	—	0.24 + 0.24	18.5+18.5	20+20
	16	UP192H1HT6PUL	3 - 60Hz	460 V	414	506	6.30	6.30	—	0.33×2 + 0.33×2	24.9+24.9	30+30
	20	UP240H1HT6PUL	3 - 60Hz	460 V	414	506	7.67	7.67	—	0.38×2 + 0.38×2	25.4+25.4	30+30
	24	UP288H1HT6PUL	3 - 60Hz	460 V	414	506	6.30	6.30	6.30	0.33×2 + 0.33×2 + 0.33×2	24.9+24.9+24.9	30+30+30
	30	UP360H1HT6PUL	3 - 60Hz	460 V	414	506	7.67	7.67	7.67	0.38×2 + 0.38×2 + 0.38×2	25.4+25.4+25.4	30+30+30

208-230V_ Standard model

Unit type	ton	Model MMY-	Power Supply		Voltage Range		Output				MCA	MOCP
							Compressor			Fan Motor		
			Phase and frequency	Nominal Voltage	Min	Max	Unit No.1	Unit No.2	Unit No.3			
					(V)	(V)	(kW)	(kW)	(kW)	(kW)	(A)	(A)
Single unit	6	MUP0721HT9P-UL	3 - 60Hz	208-230 V	187	253	4.05	—	—	0.43	36.4	40
	8	MUP0961HT9P-UL	3 - 60Hz	208-230 V	187	253	6.24	—	—	0.59	36.6	45
	10	MUP1201HT9P-UL	3 - 60Hz	208-230 V	187	253	8.00	—	—	0.33×2	50.5	60
	12	MUP1441HT9P-UL	3 - 60Hz	208-230 V	187	253	9.69	—	—	0.43×2	51.5	70
	14	MUP1681HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	—	—	0.73×2	57.4	80
Combined modelUnit	16	UP1921HT9P-UL	3 - 60Hz	208-230 V	187	253	6.24	6.24	—	0.59 + 0.59	36.6+36.6	45+45
	18	UP2161HT9P-UL	3 - 60Hz	208-230 V	187	253	9.69	4.05	—	0.43×2 + 0.43	51.5+36.4	70+40
	20	UP2401HT9P-UL	3 - 60Hz	208-230 V	187	253	9.69	6.24	—	0.43×2 + 0.59	51.5+36.6	70+45
	22	UP2641HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	6.24	—	0.73×2 + 0.59	57.4+36.6	80+45
	24	UP2881HT9P-UL	3 - 60Hz	208-230 V	187	253	9.69	9.69	—	0.43×2 + 0.43×2	51.5+51.5	70+70
	26	UP3121HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	9.69	—	0.73×2 + 0.43×2	57.4+51.5	80+70
	28	UP3361HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	12.1	—	0.73×2 + 0.73×2	57.4+57.4	80+80
	30	UP3601HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	6.24	6.24	0.73×2 +0.59 + 0.59	57.4+36.6+36.6	80+45+45
	32	UP3841HT9P-UL	3 - 60Hz	208-230 V	187	253	9.69	9.69	6.24	0.43×2 + 0.43×2 + 0.59	51.5+51.5+36.6	70+70+45
	34	UP4081HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	9.69	6.24	0.73×2 + 0.43×2 + 0.59	57.4+51.5+36.6	80+70+45
	36	UP4321HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	12.1	6.24	0.73×2 + 0.73×2 + 0.59	57.4+57.4+36.6	80+80+45
	38	UP4561HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	12.1	8.00	0.73×2 + 0.73×2 + 0.33×2	57.4+57.4+50.5	80+80+60
	40	UP4801HT9P-UL	3 - 60Hz	208-230 V	187	253	12.1	12.1	9.69	0.73×2 + 0.73×2 + 0.43×2	57.4+57.4+51.5	80+80+70

208-230V_ High Heat model

Unit type	ton	Model MMY-	Power Supply		Voltage Range		Output				MCA	MOCP
							Compressor			Fan Motor		
			Phase and frequency	Nominal Voltage	Min	Max	Unit No.1	Unit No.2	Unit No.3			
					(V)	(V)	(kW)	(kW)	(kW)	(kW)	(A)	(A)
Single unit	6	MUP072H1HT9PUL	3 - 60Hz	208-230 V	187	253	4.55	—	—	0.24	38.8	45
	8	MUP096H1HT9PUL	3 - 60Hz	208-230 V	187	253	6.30	—	—	0.33×2	52.3	60
	10	MUP120H1HT9PUL	3 - 60Hz	208-230 V	187	253	7.67	—	—	0.38×2	53.1	60
Combined modelUnit	12	UP144H1HT9PUL	3 - 60Hz	208-230 V	187	253	4.55	4.55	—	0.24 + 0.24	38.8+38.8	45+45
	16	UP192H1HT9PUL	3 - 60Hz	208-230 V	187	253	6.30	6.30	—	0.33×2 + 0.33×2	52.3+52.3	60+60
	20	UP240H1HT9PUL	3 - 60Hz	208-230 V	187	253	7.67	7.67	—	0.38×2 + 0.38×2	53.1+53.1	60+60
	24	UP288H1HT9PUL	3 - 60Hz	208-230 V	187	253	6.30	6.30	6.30	0.33×2 + 0.33×2 + 0.33×2	52.3+52.3+52.3	60+60+60
	30	UP360H1HT9PUL	3 - 60Hz	208-230 V	187	253	7.67	7.67	7.67	0.38×2 + 0.38×2 + 0.38×2	53.1+53.1+53.1	60+60+60

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

• Wiring size

Must be independent from the outdoor unit power supply

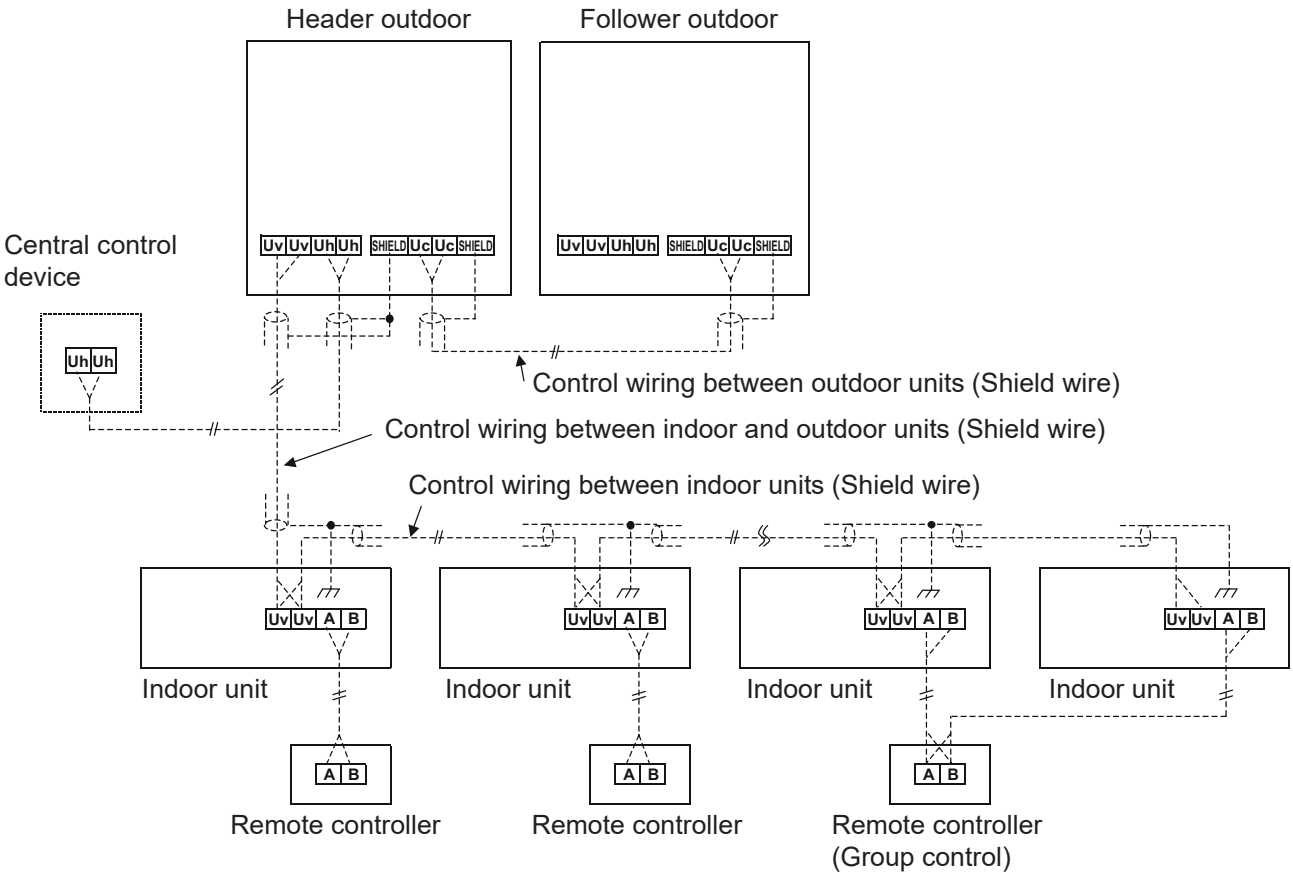
Item / Model	Power supply wiring	
	Wire size	
All models of indoor units	AWG#14 Max. 65.6ft(20m)	AWG#12 Max. 164ft(50m)

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.
  In this case, ends of the communication wire must be grounded.
- Use 2-core non-polarity wire for remote control. (A, B terminals)
  Use 2-core non-polarity wire for wiring of group control. (A, B terminals)

• Restriction of control wiring

Be sure to keep the rule of below tables about size and length of control wiring.

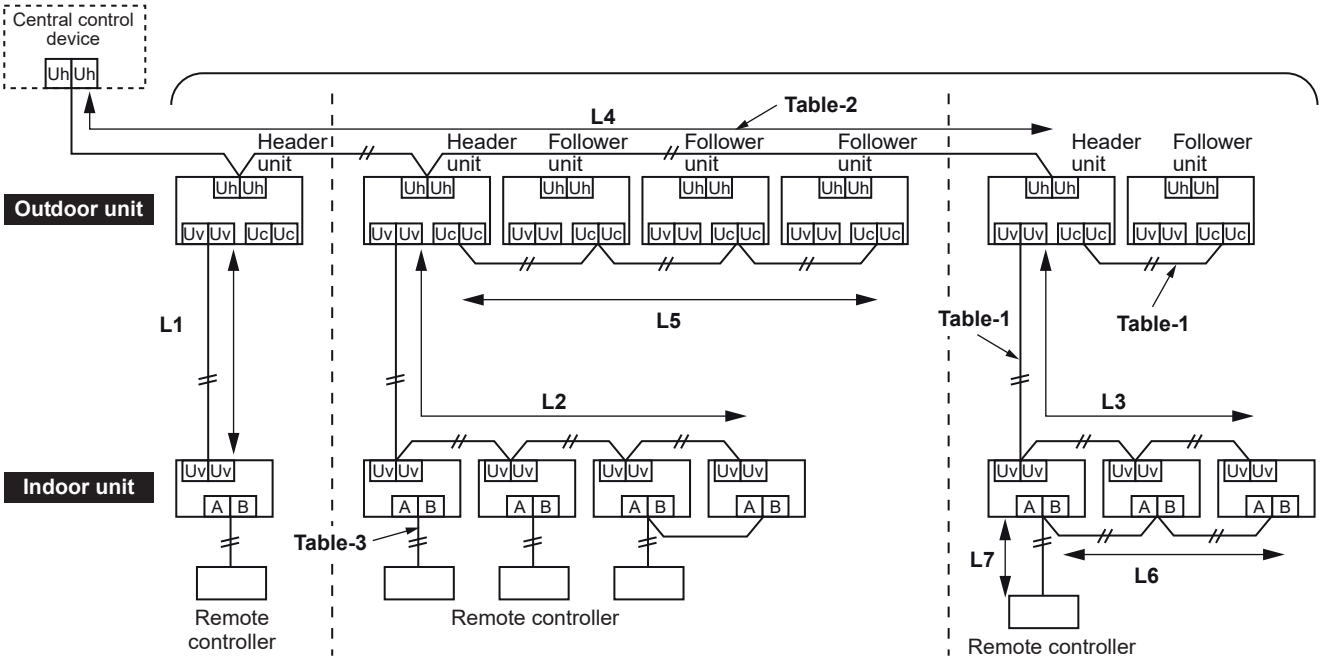


Table-1 Uv Line - Control wiring between indoor and outdoor units (L1, L2, L3) + Uc Line - between outdoor units (L5)

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

Note (*1): Uv + Uc Line are independent from another Refrigerant Line. Each Refrigerant Line are up to 3280ft(1000m). L1 is up to 3280ft(1000m), (L2 + L5) is up to 3280ft(1000m).

Table-2 Uh Line - Central control wiring (L4)

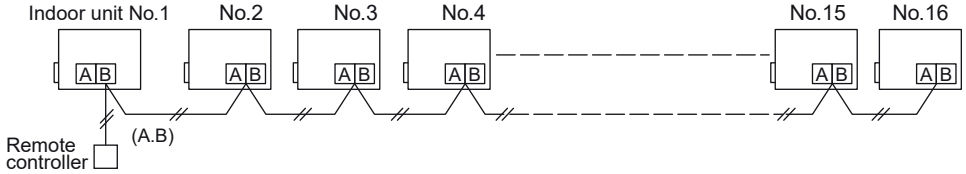
Wiring	2-core, non-polarity
Type	Shield wire
Size/Length	AWG18 to AWG16 : Up to 3280 ft (1000 m) AWG14 : Up to 6561 ft (2000 m)

Table-3 Remote controller wiring (L6, L7)

Wire	2-core, non-polarity
Size	AWG20 to AWG14
Length	• Up to 1640 ft (500 m) (L6 + L7) • Up 1312ft (400m) in case of wireless remote controller in group control. • Up to 656 ft (200m) total length of control wiring between indoor units (L6)

• Group Operation through a Remote Controller

Group operation of multiple indoor units (16 units) through a single remote controller switch



5-1. Specifications

460V Standard model (Non-ducted)

Model name				MMY-MUP0721HT6P-UL	MMY-MUP0961HT6P-UL	MMY-MUP1201HT6P-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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.99	7.6	10.0
	Rated EER (*1)(*2)		Btu/W	13.8	12.1	11.3
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.90	6.96	8.99
	Rated COP (*1)(*2)		Btu/W	4.6	4.3	4.2
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	533.0	533.0	721.0
	Packing		lbs	564.0	564.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.1	6.2	8.0
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 1	0.59 x 1	0.33 x 2
	Air volume		cfm	5650	6180	7770
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.4	17.5	24.2
		MOCP (*6)	A	20.0	20.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	7/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	56.0	58.0
		Heating	dB(A)	56.0	59.0	61.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-MUP1441HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1921HT6P-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	144.0	168.0	192.0
	Rated capacity (*1)		KBtu/h	138.0	160.0	184.0
	Rated power consumption (*1)(*2)		kW	12.1	13.7	16.9
	Rated EER (*1)(*2)		Btu/W	11.3	11.6	10.8
Heating	Nominal capacity (*1)		Btu/h	162.0	189.0	216.0
	Rated capacity (*1)		Btu/h	154.0	180.0	206.0
	Rated power consumption (*1)(*2)		kW	11.17	14.22	17.16
	Rated COP (*1)(*2)		Btu/W	4.0	3.7	3.5
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	721.0	774.0	828.0
	Packing		lbs	756.0	809.0	864.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	9.7	12.1	14.1
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 2	0.73 x 2	0.85 x 2
	Air volume		cfm	8650	8670	9780
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	24.6	27.4	31.8
		MOCP (*6)	A	35.0	40.0	50.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200
	Maximum capacity of combined indoor units			288	336	384
	Maximum number of indoor units			25	30	34
Sound pressure level		Cooling	dB(A)	61.0	61.0	64.0
		Heating	dB(A)	64.0	67.0	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℃)
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP1921HT6P-UL		MMY-UP2161HT6P-UL		MMY-UP2401HT6P-UL		MMY-UP2641HT6P-UL	
Outdoor unit model name			MMY-	MUP0961HT6P-UL	MUP0961HT6P-UL	MUP1441HT6P-UL	MUP0721HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP0961HT6P-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	192.0		216.0		240.0		264.0	
	Rated capacity (*1)		KBtu/h	184.0		206.0		230.0		252.0	
	Rated power consumption (*1)(*2)		kW	17.4		18.5		21.8		23.9	
	Rated EER (*1)(*2)		Btu/W	10.5		11.1		10.5		10.5	
Heating	Nominal capacity (*1)		Btu/h	216.0		243.0		270.0		297.0	
	Rated capacity (*1)		Btu/h	206.0		232.0		258.0		284.0	
	Rated power consumption (*1)(*2)		kW	13.73		16.39		18.39		21.70	
	Rated COP (*1)(*2)		Btu/W	4.4		4.1		4.1		3.8	
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	39.6	39.6	51.4	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	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	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	533.0	533.0	721.0	533.0	721.0	533.0	774.0	533.0
	Packing		lbs	564.0	564.0	756.0	564.0	756.0	564.0	809.0	564.0
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			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	6.2		9.7	4.1	9.7	6.2	12.1	6.2
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.59 x 1		0.43 x 2	0.43 x 1	0.43 x 2	0.59 x 1	0.73 x 2	0.59 x 1
	Air volume		cfm	6180	6180	8650	5650	8650	6180	8670	6180
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube		Finned tube	
Refrigerant	Name			R410A		R410A		R410A		R410A	
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)	(*5)	(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	17.5	17.5	24.6	17.4	24.6	17.5	27.4	17.5
		MOCP (*6)	A	20.0	20.0	35.0	20.0	35.0	20.0	40.0	20.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	1-1/8"	3/4"	1-1/8"	7/8"	1-1/8"	7/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0		225.0	
			ft	738.0		738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0		185.0	
			ft	607.0		607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150		50~150	
	Maximum capacity of combined indoor units			288		324		360		396	
	Maximum number of indoor units			34		38		43		47	
Sound pressure level		Cooling	dB(A)	59.0		61.6		62.2		62.2	
		Heating	dB(A)	62.0		64.6		65.2		67.6	
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℃)	
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP2881HT6P-UL		MMY-UP3121HT6P-UL		MMY-UP3361HT6P-UL	
Outdoor unit model name			MMY-	MUP1441HT6P-UL	MUP1441HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-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	288.0		312.0		336.0	
	Rated capacity (*1)		KBtu/h	276.0		298.0		320.0	
	Rated power consumption (*1)(*2)		kW	27.1		30.4		29.4	
	Rated EER (*1)(*2)		Btu/W	10.20		9.81		10.8	
Heating	Nominal capacity (*1)		Btu/h	324.0		351.0		378.0	
	Rated capacity (*1)		Btu/h	308.0		334.0		360.0	
	Rated power consumption (*1)(*2)		kW	24.33		26.97		29.08	
	Rated COP (*1)(*2)		Btu/W	3.7		3.6		3.6	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	721.0	721.0	774.0	721.0	774.0	774.0
	Packing		lbs	756.0	756.0	809.0	756.0	809.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	9.7	9.7	12.1	9.7	12.1	12.1
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.43 x 2	0.43 x 2	0.73 x 2	0.43 x 2	0.73 x 2	0.73 x 2
	Air volume		cfm	8650	8650	8670	8650	8670	8670
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	24.6	24.6	27.4	24.6	27.4	27.4
		MOCP (*6)	A	35.0	35.0	40.0	35.0	40.0	40.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			432		468		504	
	Maximum number of indoor units			51		56		60	
Sound pressure level		Cooling	dB(A)	64.0		64.0		64.0	
		Heating	dB(A)	67.0		68.8		70.0	
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP3601HT6P-UL			MMY-UP3841HT6P-UL			MMY-UP4081HT6P-UL		
Outdoor unit model name			MMY-	MUP1681HT6P-UL	MUP0961HT6P-UL	MUP0961HT6P-UL	MUP1441HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-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	360.0			384.0			408.0		
	Rated capacity (*1)		KBtu/h	342.0			366.0			390.0		
	Rated power consumption (*1)(*2)		kW	34.7			37.3			38.8		
	Rated EER (*1)(*2)		Btu/W	9.85			9.81			10.03		
Heating	Nominal capacity (*1)		Btu/h	405.0			432.0			459.0		
	Rated capacity (*1)		Btu/h	386.0			412.0			438.0		
	Rated power consumption (*1)(*2)		kW	32.08			34.07			37.48		
	Rated COP (*1)(*2)		Btu/W	3.5			3.5			3.4		
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	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	774.0	533.0	533.0	721.0	721.0	533.0	774.0	721.0	533.0
	Packing		lbs	809.0	564.0	564.0	756.0	756.0	564.0	809.0	756.0	564.0
Color				Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)			Silky shade(Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	6.2	6.2	9.7	9.7	6.2	12.1	9.7	6.2
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2	0.59 x 1	0.59 x 1	0.43 x 2	0.43 x 2	0.59 x 1	0.73 x 2	0.43 x 2	0.59 x 1
	Air volume		cfm	8670	6180	6180	8650	8650	6180	8670	8650	6180
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*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	40.0	20.0	20.0	35.0	35.0	20.0	40.0	35.0	20.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			540			576			612		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	63.1			64.6			64.6		
		Heating	dB(A)	68.2			67.6			69.2		
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP4321HT6P-UL			MMY-UP4561HT6P-UL			MMY-UP4801HT6P-UL		
Outdoor unit model name			MMY-	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP1201HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-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	432.0			456.0			480.0		
	Rated capacity (*1)		KBtu/h	412.0			434.0			456.0		
	Rated power consumption (*1)(*2)		kW	40.1			43.2			44.5		
	Rated EER (*1)(*2)		Btu/W	10.20			10.04			10.23		
Heating	Nominal capacity (*1)		Btu/h	486.0			513.0			540.0		
	Rated capacity (*1)		Btu/h	462.0			488.0			514.0		
	Rated power consumption (*1)(*2)		kW	39.60			42.51			45.88		
	Rated COP (*1)(*2)		Btu/W	3.4			3.4			3.3		
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	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	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	32.6
Weight	Unit		lbs	774.0	774.0	533.0	774.0	774.0	721.0	774.0	774.0	721.0
	Packing		lbs	809.0	809.0	564.0	809.0	809.0	756.0	809.0	809.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	12.1	6.2	12.1	12.1	8.0	12.1	12.1	9.7
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2	0.73 x 2	0.59 x 1	0.73 x 2	0.73 x 2	0.33 x 2	0.73 x 2	0.73 x 2	0.43 x 2
	Air volume		cfm	8670	8670	6180	8670	8670	7770	8670	8670	8650
Maximum external static pressure (*3)			in H2O	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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
High-pressure switch (Protective device)			psi	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)			(*5)		
Power supply wiring		MCA	A	27.4	27.4	17.5	27.4	27.4	24.2	27.4	27.4	24.6
		MOCP (*6)	A	40.0	40.0	20.0	40.0	40.0	30.0	40.0	40.0	35.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			648			684			720		
	Maximum number of indoor units			72			73			74		
Sound pressure level		Cooling	dB(A)	64.6			65.0			65.8		
		Heating	dB(A)	70.3			70.5			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℃)		
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

460V High heat model (Non-ducted)

Model name				MMY-MUP072H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP120H1HT6PUL
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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.91	7.4	9.9
	Rated EER (*1)(*2)		Btu/W	14.0	12.4	11.4
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.83	6.51	8.90
	Rated COP (*1)(*2)		Btu/W	4.7	4.6	4.3
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	611.0	721.0	774.0
	Packing		lbs	646.0	756.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.6	6.3	7.7
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.24 × 1	0.33 x 2	0.38 x 2
	Air volume		cfm	6340	7770	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	24.9	25.4
		MOCP (*6)	A	20.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80~200	80~200	80~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	58.0	58.0
		Heating	dB(A)	56.0	60.0	60.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP144H1HT6PUL		MMY-UP192H1HT6PUL		MMY-UP240H1HT6PUL	
Outdoor unit model name			MMY-	MUP072H1HT6PUL	MUP072H1HT6PUL	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL
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	144.0		192.0		240.0	
	Rated capacity (*1)		KBtu/h	138.0		184.0		230.0	
	Rated power consumption (*1)(*2)		kW	10.9		16.6		18.6	
	Rated EER (*1)(*2)		Btu/W	12.6		11.0		12.3	
Heating	Nominal capacity (*1)		Btu/h	162.0		216.0		270.0	
	Rated capacity (*1)		Btu/h	154.0		206.0		258.0	
	Rated power consumption (*1)(*2)		kW	9.21		13.25		18.73	
	Rated COP (*1)(*2)		Btu/W	4.9		4.6		4.0	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	611.0	611.0	721.0	721.0	774.0	774.0
	Packing		lbs	646.0	646.0	756.0	756.0	809.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	4.6	4.6	6.3	6.3	7.7	7.7
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.24 × 1	0.24 × 1	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	6340	6340	7770	7770	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	18.5	18.5	24.9	24.9	25.4	25.4
		MOCP (*6)	A	20.0	20.0	30.0	30.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	3/4"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			216		288		360	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	56.0		61.0		61.0	
		Heating	dB(A)	59.0		63.0		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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP288H1HT6PUL			MMY-UP360H1HT6PUL		
Outdoor unit model name			MMY-	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL
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	288.0			360.0		
	Rated capacity (*1)		KBtu/h	276.0			342.0		
	Rated power consumption (*1)(*2)		kW	24.4			33.1		
	Rated EER (*1)(*2)		Btu/W	11.30			10.34		
Heating	Nominal capacity (*1)		Btu/h	324.0			405.0		
	Rated capacity (*1)		Btu/h	308.0			386.0		
	Rated power consumption (*1)(*2)		kW	22.95			29.77		
	Rated COP (*1)(*2)		Btu/W	3.9			3.8		
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	31.1	31.1	31.1	31.1	31.1	31.1
	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	774.0	721.0	721.0	721.0	721.0	721.0
	Packing		lbs	809.0	756.0	756.0	756.0	756.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	6.3	6.3	6.3	7.7	7.7	7.7
Fan unit	Type			Propeller fan			Propeller fan		
	Motor output		kW	0.33 x 2	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7770	7770	7770	7415	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)		
Power supply wiring		MCA	A	24.9	24.9	24.9	25.4	25.4	25.4
		MOCP (*6)	A	30.0	30.0	30.0	30.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	7/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0		
			ft	771.0			771.0		
		Real length	m	190.0			190.0		
			ft	623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150		
	Maximum capacity of combined indoor units			432			540		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	62.8			62.8		
		Heating	dB(A)	64.8			64.8		
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℃)		
		Heating	°FWB	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.

Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

460V Standard model (Ducted)

Model name				MMY-MUP0721HT6P-UL	MMY-MUP0961HT6P-UL	MMY-MUP1201HT6P-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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.84	6.83	8.50
	Rated EER (*1)(*2)		Btu/W	14.2	13.4	13.4
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.99	7.04	8.79
	Rated COP (*1)(*2)		Btu/W	4.52	4.28	4.30
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	39.6	39.6	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	41.8	41.8	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	533.0	533.0	721.0
	Packing		lbs	564.0	564.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.1	6.2	8.0
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 1	0.59 x 1	0.33 x 2
	Air volume		cfm	5650	6180	7770
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	17.4	17.5	24.2
		MOCP (*6)	A	20.0	20.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	7/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	56.0	58.0
		Heating	dB(A)	56.0	59.0	61.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-MUP1441HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1921HT6P-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	144.0	168.0	192.0
	Rated capacity (*1)		KBtu/h	138.0	160.0	184.0
	Rated power consumption (*1)(*2)		kW	10.55	13.53	15.78
	Rated EER (*1)(*2)		Btu/W	13.0	11.8	11.6
Heating	Nominal capacity (*1)		Btu/h	162.0	189.0	216.0
	Rated capacity (*1)		Btu/h	154.0	180.0	206.0
	Rated power consumption (*1)(*2)		kW	10.84	13.38	16.02
	Rated COP (*1)(*2)		Btu/W	4.16	3.97	3.76
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	721.0	774.0	828.0
	Packing		lbs	756.0	809.0	864.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	9.7	12.1	14.1
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 2	0.73 x 2	0.85 x 2
	Air volume		cfm	8650	8670	9780
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	24.6	27.4	31.8
		MOCP (*6)	A	35.0	40.0	50.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	70~200	70~200	70~200
	Maximum capacity of combined indoor units			288	336	384
	Maximum number of indoor units			25	30	34
Sound pressure level		Cooling	dB(A)	61.0	61.0	64.0
		Heating	dB(A)	64.0	67.0	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℃)
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP1921HT6P-UL		MMY-UP2161HT6P-UL		MMY-UP2401HT6P-UL		MMY-UP2641HT6P-UL	
Outdoor unit model name			MMY-	MUP0961HT6P-UL	MUP0961HT6P-UL	MUP1441HT6P-UL	MUP0721HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP0961HT6P-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	192.0		216.0		240.0		264.0	
	Rated capacity (*1)		KBtu/h	184.0		206.0		230.0		252.0	
	Rated power consumption (*1)(*2)		kW	14.70		16.0		18.48		22.23	
	Rated EER (*1)(*2)		Btu/W	12.5		12.8		12.4		11.3	
Heating	Nominal capacity (*1)		Btu/h	216.0		243.0		270.0		297.0	
	Rated capacity (*1)		Btu/h	206.0		232.0		258.0		284.0	
	Rated power consumption (*1)(*2)		kW	13.51		15.20		17.43		19.55	
	Rated COP (*1)(*2)		Btu/W	4.46		4.47		4.33		4.25	
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	39.6	39.6	51.4	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	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	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	533.0	533.0	721.0	533.0	721.0	533.0	774.0	533.0
	Packing		lbs	564.0	564.0	756.0	564.0	756.0	564.0	809.0	564.0
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			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	6.2		9.7	4.1	9.7	6.2	12.1	6.2
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.59 x 1		0.43 x 2	0.43 x 1	0.43 x 2	0.59 x 1	0.73 x 2	
	Air volume		cfm	6180	6180	8650	5650	8650	6180	8670	
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	
Heat exchanger				Finned tube		Finned tube		Finned tube		Finned tube	
Refrigerant	Name			R410A		R410A		R410A		R410A	
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)	(*5)	(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	17.5	17.5	24.6	17.4	24.6	17.5	27.4	17.5
		MOCP (*6)	A	20.0	20.0	35.0	20.0	35.0	20.0	40.0	20.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	1-1/8"	3/4"	1-1/8"	7/8"	1-1/8"	7/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0		225.0	
			ft	738.0		738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0		185.0	
			ft	607.0		607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150		50~150	
	Maximum capacity of combined indoor units			288		324		360		396	
	Maximum number of indoor units			34		38		43		47	
Sound pressure level		Cooling	dB(A)	59.0		61.6		62.2		62.2	
		Heating	dB(A)	62.0		64.6		65.2		67.6	
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℃)	
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP2881HT6P-UL		MMY-UP3121HT6P-UL		MMY-UP3361HT6P-UL	
Outdoor unit model name			MMY-	MUP1441HT6P-UL	MUP1441HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-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	288.0		312.0		336.0	
	Rated capacity (*1)		KBtu/h	276.0		298.0		320.0	
	Rated power consumption (*1)(*2)		kW	23.04		26.96		29.0	
	Rated EER (*1)(*2)		Btu/W	11.97		11.05		11.0	
Heating	Nominal capacity (*1)		Btu/h	324.0		351.0		378.0	
	Rated capacity (*1)		Btu/h	308.0		334.0		360.0	
	Rated power consumption (*1)(*2)		kW	21.17		24.65		27.49	
	Rated COP (*1)(*2)		Btu/W	4.26		3.97		3.83	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	721.0	721.0	774.0	721.0	774.0	774.0
	Packing		lbs	756.0	756.0	809.0	756.0	809.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	9.7	9.7	12.1	9.7	12.1	12.1
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.43 x 2	0.43 x 2	0.73 x 2	0.43 x 2	0.73 x 2	0.73 x 2
	Air volume		cfm	8650	8650	8670	8650	8670	8670
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	24.6	24.6	27.4	24.6	27.4	27.4
		MOCP (*6)	A	35.0	35.0	40.0	35.0	40.0	40.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			432		468		504	
	Maximum number of indoor units			51		56		60	
Sound pressure level		Cooling	dB(A)	64.0		64.0		64.0	
		Heating	dB(A)	67.0		68.8		70.0	
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP3601HT6P-UL			MMY-UP3841HT6P-UL			MMY-UP4081HT6P-UL		
Outdoor unit model name			MMY-	MUP1681HT6P-UL	MUP0961HT6P-UL	MUP0961HT6P-UL	MUP1441HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-UL	MUP0961HT6P-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	360.0			384.0			408.0		
	Rated capacity (*1)		KBtu/h	342.0			366.0			390.0		
	Rated power consumption (*1)(*2)		kW	27.52			29.79			33.78		
	Rated EER (*1)(*2)		Btu/W	12.42			12.28			11.54		
Heating	Nominal capacity (*1)		Btu/h	405.0			432.0			459.0		
	Rated capacity (*1)		Btu/h	386.0			412.0			438.0		
	Rated power consumption (*1)(*2)		kW	29.30			31.22			34.26		
	Rated COP (*1)(*2)		Btu/W	3.86			3.86			3.74		
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	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	774.0	533.0	533.0	721.0	721.0	533.0	774.0	721.0	533.0
	Packing		lbs	809.0	564.0	564.0	756.0	756.0	564.0	809.0	756.0	564.0
Color				Silky shade（Munsell 1Y8.5/0.5）			Silky shade（Munsell 1Y8.5/0.5）			Silky shade（Munsell 1Y8.5/0.5）		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	6.2	6.2	9.7	9.7	6.2	12.1	9.7	6.2
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2			0.43 x 2			0.73 x 2		
	Air volume		cfm	8670	6180	6180	8650	8650	6180	8670	8650	6180
Maximum external static pressure (*3)			In.WG	0.32			0.32			0.32		
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*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	40.0	20.0	20.0	35.0	35.0	20.0	40.0	35.0	20.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			540			576			612		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	63.1			64.6			64.6		
		Heating	dB(A)	68.2			67.6			69.2		
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP4321HT6P-UL			MMY-UP4561HT6P-UL			MMY-UP4801HT6P-UL		
Outdoor unit model name			MMY-	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP0961HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP1201HT6P-UL	MUP1681HT6P-UL	MUP1681HT6P-UL	MUP1441HT6P-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	432.0			456.0			480.0		
	Rated capacity (*1)		KBtu/h	412.0			434.0			456.0		
	Rated power consumption (*1)(*2)		kW	37.78			41.72			44.04		
	Rated EER (*1)(*2)		Btu/W	10.90			10.4			10.35		
Heating	Nominal capacity (*1)		Btu/h	486.0			513.0			540.0		
	Rated capacity (*1)		Btu/h	462.0			488.0			514.0		
	Rated power consumption (*1)(*2)		kW	36.46			38.99			42.68		
	Rated COP (*1)(*2)		Btu/W	3.71			3.66			3.52		
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	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	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	32.6
Weight	Unit		lbs	774.0	774.0	533.0	774.0	774.0	721.0	774.0	774.0	721.0
	Packing		lbs	809.0	809.0	564.0	809.0	809.0	756.0	809.0	809.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5）			Silky shade（Munsell 1Y8.5/0.5）			Silky shade（Munsell 1Y8.5/0.5）		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	12.1	6.2	12.1	12.1	8.0	12.1	12.1	9.7
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2			0.73 x 2			0.73 x 2		
	Air volume		cfm	8670	8670	6180	8670	8670	7770	8670	8670	8650
Maximum external static pressure (*3)			In.WG	0.32			0.32			0.32		
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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
High-pressure switch (Protective device)			psi	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)			(*5)		
Power supply wiring		MCA	A	27.4	27.4	17.5	27.4	27.4	24.2	27.4	27.4	24.6
		MOCP (*6)	A	40.0	40.0	20.0	40.0	40.0	30.0	40.0	40.0	35.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			648			684			720		
	Maximum number of indoor units			72			73			74		
Sound pressure level		Cooling	dB(A)	64.6			65.0			65.8		
		Heating	dB(A)	70.3			70.5			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℃)		
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

460V High heat model (Ducted)

Model name				MMY-MUP072H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP120H1HT6PUL
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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.65	6.96	8.42
	Rated EER (*1)(*2)		Btu/W	14.8	13.2	13.5
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.56	6.31	8.56
	Rated COP (*1)(*2)		Btu/W	4.94	4.78	4.41
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	611.0	721.0	774.0
	Packing		lbs	646.0	756.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.6	6.3	7.7
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.24 × 1	0.33 x 2	0.38 x 2
	Air volume		cfm	6340	7770	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	18.5	24.9	25.4
		MOCP (*6)	A	20.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80~200	80~200	80~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	58.0	58.0
		Heating	dB(A)	56.0	60.0	60.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP144H1HT6PUL		MMY-UP192H1HT6PUL		MMY-UP240H1HT6PUL	
Outdoor unit model name			MMY-	MUP072H1HT6PUL	MUP072H1HT6PUL	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL
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	144.0		192.0		240.0	
	Rated capacity (*1)		KBtu/h	138.0		184.0		230.0	
	Rated power consumption (*1)(*2)		kW	10.34		15.46		18.29	
	Rated EER (*1)(*2)		Btu/W	13.3		11.9		12.5	
Heating	Nominal capacity (*1)		Btu/h	162.0		216.0		270.0	
	Rated capacity (*1)		Btu/h	154.0		206.0		258.0	
	Rated power consumption (*1)(*2)		kW	9.16		12.36		16.89	
	Rated COP (*1)(*2)		Btu/W	4.92		4.88		4.47	
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	31.1	31.1	31.1	31.1	31.1	31.1
	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	611.0	611.0	721.0	721.0	774.0	774.0
	Packing		lbs	646.0	646.0	756.0	756.0	809.0	809.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	4.6	4.6	6.3	6.3	7.7	7.7
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.24 × 1	0.24 × 1	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	6340	6340	7770	7770	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	18.5	18.5	24.9	24.9	25.4	25.4
		MOCP (*6)	A	20.0	20.0	30.0	30.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	3/4"	7/8"	7/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			216		288		360	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	56.0		61.0		61.0	
		Heating	dB(A)	59.0		63.0		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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP288H1HT6PUL			MMY-UP360H1HT6PUL		
Outdoor unit model name			MMY-	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP096H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL	MUP120H1HT6PUL
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	288.0			360.0		
	Rated capacity (*1)		KBtu/h	276.0			342.0		
	Rated power consumption (*1)(*2)		kW	22.12			28.65		
	Rated EER (*1)(*2)		Btu/W	12.47			11.93		
Heating	Nominal capacity (*1)		Btu/h	324.0			405.0		
	Rated capacity (*1)		Btu/h	308.0			386.0		
	Rated power consumption (*1)(*2)		kW	19.60			26.75		
	Rated COP (*1)(*2)		Btu/W	4.60			4.22		
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	31.1	31.1	31.1	31.1	31.1	31.1
	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	774.0	721.0	721.0	721.0	721.0	721.0
	Packing		lbs	809.0	756.0	756.0	756.0	756.0	756.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	6.3	6.3	6.3	7.7	7.7	7.7
Fan unit	Type			Propeller fan			Propeller fan		
	Motor output		kW	0.33 x 2	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7770	7770	7770	7415	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)		
Power supply wiring		MCA	A	24.9	24.9	24.9	25.4	25.4	25.4
		MOCP (*6)	A	30.0	30.0	30.0	30.0	30.0	30.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	7/8"	1-1/8"	1-1/8"	7/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	235.0			235.0		
			ft	771.0			771.0		
		Real length	m	190.0			190.0		
			ft	623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150		
	Maximum capacity of combined indoor units			432			540		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	62.8			62.8		
		Heating	dB(A)	64.8			64.8		
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℃)		
		Heating	°FWB	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

208-230V Standard model (Non-ducted)

Model name				MMY-MUP0721HT9P-UL	MMY-MUP0961HT9P-UL	MMY-MUP1201HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP1681HT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230V,3-Phase,60Hz	208-230V,3-Phase,61Hz	208-230V,3-Phase,62Hz	208-230V,3-Phase,63Hz	208-230V,3-Phase,64Hz
	Voltage range		V	187-253V	187-253V	187-253V	187-253V	187-253V
Cooling	Nominal capacity (*1)		KBtu/h	72.0	96.0	120.0	144.0	168.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0	138.0	160.0
	Rated power consumption (*1)(*2)		kW	4.99	7.6	10.0	12.1	13.7
	Rated EER (*1)(*2)		Btu/W	13.8	12.1	11.3	11.3	11.6
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0	162.0	189.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0	154.0	180.0
	Rated power consumption (*1)(*2)		kW	4.90	6.96	8.99	11.17	14.22
	Rated COP (*1)(*2)		Btu/W	4.6	4.3	4.2	4.0	3.7
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	31.1	31.1	31.1	31.1	31.1
	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	521.0	521.0	725.0	725.0	778.0
	Packing		lbs	551.0	551.0	761.0	761.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.6)	Silky shade（Munsell 1Y8.5/0.7)	Silky shade（Munsell 1Y8.5/0.8)	Silky shade（Munsell 1Y8.5/0.9)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.1	6.2	8.0	9.7	12.1
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 1	0.59 x 1	0.33 x 2	0.43 x 2	0.73 x 2
	Air volume		cfm	5650	6180	7770	8650	8670
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R411A	R412A	R413A	R414A
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*6)	(*7)	(*8)	(*9)
Power supply wiring		MCA	A	36.4	36.6	50.5	51.5	57.4
		MOCP (*6)	A	40.0	45.0	60.0	70.0	80.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0	210.0	210.0
			ft	689.0	689.0	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0	180.0	180.0
			ft	591.0	591.0	591.0	591.0	591.0
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	192	240	288	336
	Maximum number of indoor units			12	17	21	25	30
Sound pressure level		Cooling	dB(A)	53.0	56.0	58.0	61.0	61.0
		Heating	dB(A)	56.0	59.0	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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP1921HT9P-UL		MMY-UP2161HT9P-UL		MMY-UP2401HT9P-UL		MMY-UP2641HT9P-UL	
Outdoor unit model name			MMY-	MUP0961HT9P-UL	MUP0961HT9P-UL	MUP1441HT9P-UL	MUP0721HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP0961HT9P-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	192.0		216.0		240.0		264.0	
	Rated capacity (*1)		KBtu/h	184.0		206.0		230.0		252.0	
	Rated power consumption (*1)(*2)		kW	17.4		18.5		21.8		23.9	
	Rated EER (*1)(*2)		Btu/W	10.5		11.1		10.5		10.5	
Heating	Nominal capacity (*1)		Btu/h	216.0		243.0		270.0		297.0	
	Rated capacity (*1)		Btu/h	206.0		232.0		258.0		284.0	
	Rated power consumption (*1)(*2)		kW	13.73		16.39		18.39		21.70	
	Rated COP (*1)(*2)		Btu/W	4.4		4.1		4.1		3.8	
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	39.6	39.6	51.4	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	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	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	521.0	521.0	725.0	521.0	725.0	521.0	778.0	521.0
	Packing		lbs	551.0	551.0	761.0	551.0	761.0	551.0	814.0	551.0
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			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	6.2	6.2	9.7	4.1	9.7	6.2	12.1	6.2
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.59 x 1	0.59 x 1	0.43 x 2	0.43 x 1	0.43 x 2	0.59 x 1	0.73 x 2	0.59 x 1
	Air volume		cfm	6180	6180	8650	5650	8650	6180	8670	6180
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube		Finned tube	
Refrigerant	Name			R410A		R410A		R410A		R410A	
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)	(*5)	(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	36.6	36.6	51.5	36.4	51.5	36.6	57.4	36.6
		MOCP (*6)	A	45.0	45.0	70.0	40.0	70.0	45.0	80.0	45.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	1-1/8"	3/4"	1-1/8"	7/8"	1-1/8"	7/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0		225.0	
			ft	738.0		738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0		185.0	
			ft	607.0		607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150		50~150	
Indoor units	Maximum capacity of combined indoor units			288		324		360		396	
	Maximum number of indoor units			34		38		43		47	
Sound pressure level		Cooling	dB(A)	59.0		61.6		62.2		62.2	
		Heating	dB(A)	62.0		64.6		65.2		67.6	
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℃)	
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP2881HT9P-UL		MMY-UP3121HT9P-UL		MMY-UP3361HT9P-UL	
Outdoor unit model name			MMY-	MUP1441HT9P-UL	MUP1441HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-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	288.0		312.0		336.0	
	Rated capacity (*1)		KBtu/h	276.0		298.0		320.0	
	Rated power consumption (*1)(*2)		kW	27.1		30.4		29.4	
	Rated EER (*1)(*2)		Btu/W	10.20		9.81		10.80	
Heating	Nominal capacity (*1)		Btu/h	324.0		351.0		378.0	
	Rated capacity (*1)		Btu/h	308.0		334.0		360.0	
	Rated power consumption (*1)(*2)		kW	24.33		26.97		29.08	
	Rated COP (*1)(*2)		Btu/W	3.7		3.6		3.6	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	725.0	725.0	778.0	725.0	778.0	778.0
	Packing		lbs	761.0	761.0	814.0	761.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	9.7	9.7	12.1	9.7	12.1	12.1
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.43 x 2	0.43 x 2	0.73 x 2	0.43 x 2	0.73 x 2	0.73 x 2
	Air volume		cfm	8650	8650	8670	8650	8670	8670
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)	(*5)	(*5)		(*5)	
Power supply wiring		MCA	A	51.5	51.5	57.4	51.5	57.4	57.4
		MOCP (*6)	A	70.0	70.0	80.0	70.0	80.0	80.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			432		468		504	
	Maximum number of indoor units			51		56		60	
Sound pressure level		Cooling	dB(A)	64.0		64.0		64.0	
		Heating	dB(A)	67.0		68.8		70.0	
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.

Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP3601HT9P-UL			MMY-UP3841HT9P-UL			MMY-UP4081HT9P-UL		
Outdoor unit model name			MMY-	MUP1681HT9P-UL	MUP0961HT9P-UL	MUP0961HT9P-UL	MUP1441HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-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	360.0			384.0			408.0		
	Rated capacity (*1)		KBtu/h	342.0			366.0			390.0		
	Rated power consumption (*1)(*2)		kW	34.7			37.3			38.8		
	Rated EER (*1)(*2)		Btu/W	9.85			9.81			10.03		
Heating	Nominal capacity (*1)		Btu/h	405.0			432.0			459.0		
	Rated capacity (*1)		Btu/h	386.0			412.0			438.0		
	Rated power consumption (*1)(*2)		kW	32.08			34.07			37.48		
	Rated COP (*1)(*2)		Btu/W	3.5			3.5			3.4		
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	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	778.0	521.0	521.0	725.0	725.0	521.0	778.0	725.0	521.0
	Packing		lbs	814.0	551.0	551.0	761.0	761.0	551.0	814.0	761.0	551.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	6.2	6.2	9.7	9.7	6.2	12.1	9.7	6.2
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2	0.59 x 1	0.59 x 1	0.43 x 2	0.43 x 2	0.59 x 1	0.73 x 2	0.43 x 2	0.59 x 1
	Air volume		cfm	8670	6180	6180	8650	8650	6180	8670	8650	6180
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*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	80.0	45.0	45.0	70.0	70.0	45.0	80.0	70.0	45.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			540			576			612		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	63.1			64.6			64.6		
		Heating	dB(A)	68.2			67.6			69.2		
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP4321HT9P-UL			MMY-UP4561HT9P-UL			MMY-UP4801HT9P-UL		
Outdoor unit model name			MMY-	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP1201HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-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	432.0			456.0			480.0		
	Rated capacity (*1)		KBtu/h	412.0			434.0			456.0		
	Rated power consumption (*1)(*2)		kW	40.1			43.2			44.5		
	Rated EER (*1)(*2)		Btu/W	10.20			10.04			10.23		
Heating	Nominal capacity (*1)		Btu/h	486.0			513.0			540.0		
	Rated capacity (*1)		Btu/h	462.0			488.0			514.0		
	Rated power consumption (*1)(*2)		kW	39.60			42.51			45.88		
	Rated COP (*1)(*2)		Btu/W	3.4			3.4			3.3		
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	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	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	32.6
Weight	Unit		lbs	778.0	778.0	521.0	778.0	778.0	725.0	778.0	778.0	725.0
	Packing		lbs	814.0	814.0	551.0	814.0	814.0	761.0	814.0	814.0	761.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	12.1	6.2	12.1	12.1	8.0	12.1	12.1	9.7
Fan unit	Type			Propeller fan			Propeller fan			Propeller fan		
	Motor output		kW	0.73 x 2	0.73 x 2	0.59 x 1	0.73 x 2	0.73 x 2	0.33 x 2	0.73 x 2	0.73 x 2	0.43 x 2
	Air volume		cfm	8670	8670	6180	8670	8670	7770	8670	8670	8650
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube			Finned tube		
Refrigerant	Name			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
High-pressure switch (Protective device)			psi	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)			(*5)		
Power supply wiring		MCA	A	57.4	57.4	36.6	57.4	57.4	50.5	57.4	57.4	51.5
		MOCP (*6)	A	80.0	80.0	45.0	80.0	80.0	60.0	80.0	80.0	70.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			648			684			720		
	Maximum number of indoor units			72			73			74		
Sound pressure level		Cooling	dB(A)	64.6			65.0			65.8		
		Heating	dB(A)	70.3			70.5			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℃)		
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

208-230V High heat model (Non-ducted)

Model name				MMY-MUP072H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP120H1HT9PUL
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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.91	7.4	9.9
	Rated EER (*1)(*2)		Btu/W	14.0	12.4	11.4
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.83	6.51	8.90
	Rated COP (*1)(*2)		Btu/W	4.7	4.6	4.3
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	597.0	725.0	778.0
	Packing		lbs	633.0	761.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5）	Silky shade（Munsell 1Y8.5/0.5）	Silky shade（Munsell 1Y8.5/0.5）
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.6	6.3	7.7
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.24 x 1	0.33 x 2	0.38 x 2
	Air volume		cfm	6340	7770	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	38.8	52.3	53.1
		MOCP (*6)	A	45.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80~200	80~200	80~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	58.0	58.0
		Heating	dB(A)	56.0	60.0	60.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP144H1HT9PUL		MMY-UP192H1HT9PUL		MMY-UP240H1HT9PUL	
Outdoor unit model name			MMY-	MUP072H1HT9PUL	MUP072H1HT9PUL	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL
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	144.0		192.0		240.0	
	Rated capacity (*1)		KBtu/h	138.0		184.0		230.0	
	Rated power consumption (*1)(*2)		kW	10.9		16.6		18.6	
	Rated EER (*1)(*2)		Btu/W	12.6		11.0		12.3	
Heating	Nominal capacity (*1)		Btu/h	162.0		216.0		270.0	
	Rated capacity (*1)		Btu/h	154.0		206.0		258.0	
	Rated power consumption (*1)(*2)		kW	9.21		13.25		18.73	
	Rated COP (*1)(*2)		Btu/W	4.9		4.6		4.0	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	597.0	597.0	725.0	725.0	778.0	778.0
	Packing		lbs	633.0	633.0	761.0	761.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	4.6	4.6	6.3	6.3	7.7	7.7
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.24 x 1	0.24 x 1	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	6340	6340	7770	7770	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	38.8	38.8	52.3	52.3	53.1	53.1
		MOCP (*6)	A	45.0	45.0	60.0	60.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	3/4"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	216.0		288.0		360.0	
	Maximum capacity of combined indoor units			216		288		360	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	56.0		61.0		61.0	
		Heating	dB(A)	59.0		63.0		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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP288H1HT9PUL			MMY-UP360H1HT9PUL		
Outdoor unit model name			MMY-	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL
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	288.0			360.0		
	Rated capacity (*1)		KBtu/h	276.0			342.0		
	Rated power consumption (*1)(*2)		kW	24.4			33.1		
	Rated EER (*1)(*2)		Btu/W	11.30			10.34		
Heating	Nominal capacity (*1)		Btu/h	324.0			405.0		
	Rated capacity (*1)		Btu/h	308.0			386.0		
	Rated power consumption (*1)(*2)		kW	22.95			29.77		
	Rated COP (*1)(*2)		Btu/W	3.9			3.8		
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	31.1	31.1	31.1	31.1	31.1	31.1
	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	725.0	725.0	725.0	778.0	778.0	778.0
	Packing		lbs	761.0	761.0	761.0	814.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	6.3	6.3	6.3	7.7	7.7	7.7
Fan unit	Type			Propeller fan			Propeller fan		
	Motor output		kW	0.33 x 2	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7770	7770	7770	7415	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)		
Power supply wiring		MCA	A	52.3	52.3	52.3	53.1	53.1	53.1
		MOCP (*6)	A	60.0	60.0	60.0	60.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0		
			ft	771.0			771.0		
		Real length	m	190.0			190.0		
			ft	623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150		
	Maximum capacity of combined indoor units			432			540		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	62.8			62.8		
		Heating	dB(A)	64.8			64.8		
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℃)		
		Heating	°FWB	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.

Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

208-230V Standard model (Ducted)

Model name				MMY-MUP0721HT9P-UL	MMY-MUP0961HT9P-UL	MMY-MUP1201HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP1681HT9P-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	72.0	96.0	120.0	144.0	168.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0	138.0	160.0
	Rated power consumption (*1)(*2)		kW	4.84	6.83	8.66	10.55	13.53
	Rated EER (*1)(*2)		Btu/W	14.2	13.4	13.1	13.0	11.8
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0	162.0	189.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0	154.0	180.0
	Rated power consumption (*1)(*2)		kW	4.99	7.04	8.79	10.84	13.26
	Rated COP (*1)(*2)		Btu/W	4.52	4.28	4.30	4.16	3.97
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	31.1	31.1	31.1	31.1	31.1
	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	521.0	521.0	725.0	725.0	778.0
	Packing		lbs	551.0	551.0	761.0	761.0	814.0
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			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.1	6.2	8.0	9.7	12.1
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 1	0.59 x 1	0.33 x 2	0.43 x 2	0.73 x 2
	Air volume		cfm	5650	6180	7770	8650	8670
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube	Finned tube	Finned tube
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	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.4	36.6	50.5	51.5	57.4
		MOCP (*6)	A	40.0	45.0	60.0	70.0	80.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	7/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0	210.0	210.0
			ft	689.0	689.0	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0	180.0	180.0
			ft	591.0	591.0	591.0	591.0	591.0
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	192	240	288	336
	Maximum number of indoor units			12	17	21	25	30
Sound pressure level		Cooling	dB(A)	53.0	56.0	58.0	61.0	61.0
		Heating	dB(A)	56.0	59.0	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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP1921HT9P-UL		MMY-UP2161HT9P-UL		MMY-UP2401HT9P-UL		MMY-UP2641HT9P-UL	
Outdoor unit model name			MMY-	MUP0961HT9P-UL	MUP0961HT9P-UL	MUP1441HT9P-UL	MUP0721HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP0961HT9P-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	192.0		216.0		240.0		264.0	
	Rated capacity (*1)		KBtu/h	184.0		206.0		230.0		252.0	
	Rated power consumption (*1)(*2)		kW	14.70		16.0		18.48		22.23	
	Rated EER (*1)(*2)		Btu/W	12.5		12.8		12.4		11.3	
Heating	Nominal capacity (*1)		Btu/h	216.0		243.0		270.0		297.0	
	Rated capacity (*1)		Btu/h	206.0		232.0		258.0		284.0	
	Rated power consumption (*1)(*2)		kW	13.51		15.20		17.43		19.55	
	Rated COP (*1)(*2)		Btu/W	4.46		4.47		4.33		4.25	
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	39.6	39.6	51.4	39.6	51.4	39.6	51.4	39.6
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	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	53.6	41.8
		Depth	In	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Weight	Unit		lbs	521.0	521.0	725.0	521.0	725.0	521.0	778.0	521.0
	Packing		lbs	551.0	551.0	761.0	551.0	761.0	551.0	814.0	551.0
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			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	6.2	6.2	9.7	4.1	9.7	6.2	12.1	6.2
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.59 x 1	0.59 x 1	0.43 x 2	0.43 x 1	0.43 x 2	0.59 x 1	0.73 x 2	0.59 x 1
	Air volume		cfm	6180	6180	8650	5650	8650	6180	8670	6180
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
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
	Charged refrigerant amount (*4)		lbs	13.2	13.2	19.8	13.2	19.8	13.2	19.8	13.2
High-pressure switch (Protective device)			psi	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
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	36.6	36.6	51.5	36.4	51.5	36.6	57.4	36.6
		MOCP (*6)	A	45.0	45.0	70.0	40.0	70.0	45.0	80.0	45.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	7/8"	7/8"	1-1/8"	3/4"	1-1/8"	7/8"	1-1/8"	7/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0		225.0	
			ft	738.0		738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0		185.0	
			ft	607.0		607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150		50~150	
	Maximum capacity of combined indoor units			288		324		360		396	
	Maximum number of indoor units			34		38		43		47	
Sound pressure level		Cooling	dB(A)	59.0		61.6		62.2		62.2	
		Heating	dB(A)	62.0		64.6		65.2		67.6	
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℃)	
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP2881HT9P-UL		MMY-UP3121HT9P-UL		MMY-UP3361HT9P-UL	
Outdoor unit model name			MMY-	MUP1441HT9P-UL	MUP1441HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-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	288.0		312.0		336.0	
	Rated capacity (*1)		KBtu/h	276.0		298.0		320.0	
	Rated power consumption (*1)(*2)		kW	23.04		26.96		29.0	
	Rated EER (*1)(*2)		Btu/W	11.92		11.05		11.0	
Heating	Nominal capacity (*1)		Btu/h	324.0		351.0		378.0	
	Rated capacity (*1)		Btu/h	308.0		334.0		360.0	
	Rated power consumption (*1)(*2)		kW	21.17		24.65		27.79	
	Rated COP (*1)(*2)		Btu/W	4.26		3.97		3.83	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	725.0	725.0	778.0	725.0	778.0	778.0
	Packing		lbs	761.0	761.0	814.0	761.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	9.7	9.7	12.1	9.7	12.1	12.1
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.43 x 2	0.43 x 2	0.73 x 2	0.43 x 2	0.73 x 2	0.73 x 2
	Air volume		cfm	8650	8650	8670	8650	8670	8670
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
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	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Power supply wiring		MCA	A	51.5	51.5	57.4	51.5	57.4	57.4
		MOCP (*6)	A	70.0	70.0	80.0	70.0	80.0	80.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			432		468		504	
	Maximum number of indoor units			51		56		60	
Sound pressure level		Cooling	dB(A)	64.0		64.0		64.0	
		Heating	dB(A)	67.0		68.8		70.0	
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP3601HT9P-UL			MMY-UP3841HT9P-UL			MMY-UP4081HT9P-UL		
Outdoor unit model name			MMY-	MUP1681HT9P-UL	MUP0961HT9P-UL	MUP0961HT9P-UL	MUP1441HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-UL	MUP0961HT9P-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	360.0			384.0			408.0		
	Rated capacity (*1)		KBtu/h	342.0			366.0			390.0		
	Rated power consumption (*1)(*2)		kW	27.52			29.79			33.78		
	Rated EER (*1)(*2)		Btu/W	12.42			12.28			11.54		
Heating	Nominal capacity (*1)		Btu/h	405.0			432.0			459.0		
	Rated capacity (*1)		Btu/h	386.0			412.0			438.0		
	Rated power consumption (*1)(*2)		kW	29.30			31.22			34.26		
	Rated COP (*1)(*2)		Btu/W	3.86			3.86			3.74		
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	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	778.0	521.0	521.0	725.0	725.0	521.0	778.0	725.0	521.0
	Packing		lbs	814.0	551.0	551.0	761.0	761.0	551.0	814.0	761.0	551.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	6.2	6.2	9.7	9.7	6.2	12.1	9.7	6.2
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.73 x 2	0.59 x 1	0.59 x 1	0.43 x 2	0.43 x 2	0.59 x 1	0.73 x 2	0.43 x 2	0.59 x 1
	Air volume		cfm	8670	6180	6180	8650	8650	6180	8670	8650	6180
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
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		
	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	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*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	80.0	45.0	45.0	70.0	70.0	45.0	80.0	70.0	45.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	1/2"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			540			576			612		
	Maximum number of indoor units			64			69			70		
Sound pressure level		Cooling	dB(A)	63.1			64.6			64.6		
		Heating	dB(A)	68.2			67.6			69.2		
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP4321HT9P-UL			MMY-UP4561HT9P-UL			MMY-UP4801HT9P-UL		
Outdoor unit model name			MMY-	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP0961HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP1201HT9P-UL	MUP1681HT9P-UL	MUP1681HT9P-UL	MUP1441HT9P-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	432.0			456.0			480.0		
	Rated capacity (*1)		KBtu/h	412.0			434.0			456.0		
	Rated power consumption (*1)(*2)		kW	37.78			41.72			44.04		
	Rated EER (*1)(*2)		Btu/W	10.90			10.4			10.35		
Heating	Nominal capacity (*1)		Btu/h	486.0			513.0			540.0		
	Rated capacity (*1)		Btu/h	462.0			488.0			514.0		
	Rated power consumption (*1)(*2)		kW	36.46			38.99			42.68		
	Rated COP (*1)(*2)		Btu/W	3.71			3.66			3.52		
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	51.4	39.6	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
	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	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	32.6
Weight	Unit		lbs	778.0	778.0	521.0	778.0	778.0	725.0	778.0	778.0	725.0
	Packing		lbs	814.0	814.0	551.0	814.0	814.0	761.0	814.0	814.0	761.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	12.1	12.1	6.2	12.1	12.1	8.0	12.1	12.1	9.7
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.73 x 2	0.73 x 2	0.59 x 1	0.73 x 2	0.73 x 2	0.33 x 2	0.73 x 2	0.73 x 2	0.43 x 2
	Air volume		cfm	8670	8670	6180	8670	8670	7770	8670	8670	8650
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
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		
	Charged refrigerant amount (*4)		lbs	19.8	19.8	13.2	19.8	19.8	19.8	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464			OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)			(*5)		
Power supply wiring		MCA	A	57.4	57.4	36.6	57.4	57.4	50.5	57.4	57.4	51.5
		MOCP (*6)	A	80.0	80.0	45.0	80.0	80.0	60.0	80.0	80.0	70.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		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"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	5/8"	5/8"	1/2"	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0			235.0		
			ft	771.0			771.0			771.0		
		Real length	m	190.0			190.0			190.0		
			ft	623.0			623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150			50~150		
	Maximum capacity of combined indoor units			648			684			720		
	Maximum number of indoor units			72			73			74		
Sound pressure level		Cooling	dB(A)	64.6			65.0			65.8		
		Heating	dB(A)	70.3			70.5			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℃)		
		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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

208-230V High heat model (Ducted)

Model name				MMY-MUP072H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP120H1HT9PUL
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	72.0	96.0	120.0
	Rated capacity (*1)		KBtu/h	69.0	92.0	114.0
	Rated power consumption (*1)(*2)		kW	4.65	6.96	8.42
	Rated EER (*1)(*2)		Btu/W	14.8	13.2	13.5
Heating	Nominal capacity (*1)		Btu/h	81.0	108.0	135.0
	Rated capacity (*1)		Btu/h	77.0	103.0	129.0
	Rated power consumption (*1)(*2)		kW	4.56	6.31	8.56
	Rated COP (*1)(*2)		Btu/W	4.94	4.78	4.41
Starting Current			A	Soft Start	Soft Start	Soft Start
Dimension	Unit	Height	In	66.5	66.5	66.5
		Width	In	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1
	Packing	Height	In	69.6	69.6	69.6
		Width	In	53.6	53.6	53.6
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	597.0	725.0	778.0
	Packing		lbs	633.0	761.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)	Silky shade（Munsell 1Y8.5/0.5)
Compressor	Type			Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor
	Motor output		kW	4.6	6.3	7.7
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	0.24 x 1	0.33 x 2	0.38 x 2
	Air volume		cfm	6340	7770	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	19.8	19.8	19.8
High-pressure switch (Protective device)			psi	OFF:601 ON:464	OFF:601 ON:464	OFF:601 ON:464
Protective devices				(*5)	(*5)	(*5)
Power supply wiring		MCA	A	38.8	52.3	53.1
		MOCP (*6)	A	45.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing
		Diameter	In	3/4"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	5/8"
Furthest piping Length		Equivalent length	m	210.0	210.0	210.0
			ft	689.0	689.0	689.0
		Real length	m	180.0	180.0	180.0
			ft	591.0	591.0	591.0
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	80~200	80~200	80~200
	Maximum capacity of combined indoor units			144	192	240
	Maximum number of indoor units			12	17	21
Sound pressure level		Cooling	dB(A)	53.0	58.0	58.0
		Heating	dB(A)	56.0	60.0	60.0
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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP144H1HT9PUL		MMY-UP192H1HT9PUL		MMY-UP240H1HT9PUL	
Outdoor unit model name			MMY-	MUP072H1HT9PUL	MUP072H1HT9PUL	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL
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	144.0		192.0		240.0	
	Rated capacity (*1)		KBtu/h	138.0		184.0		230.0	
	Rated power consumption (*1)(*2)		kW	10.34		15.46		18.29	
	Rated EER (*1)(*2)		Btu/W	13.3		11.9		12.5	
Heating	Nominal capacity (*1)		Btu/h	162.0		216.0		270.0	
	Rated capacity (*1)		Btu/h	154.0		206.0		258.0	
	Rated power consumption (*1)(*2)		kW	9.16		12.36		16.89	
	Rated COP (*1)(*2)		Btu/W	4.92		4.88		4.47	
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	51.4	51.4	51.4	51.4	51.4	51.4
		Depth	In	31.1	31.1	31.1	31.1	31.1	31.1
	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	597.0	597.0	725.0	725.0	778.0	778.0
	Packing		lbs	633.0	633.0	761.0	761.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)		Silky shade（Munsell 1Y8.5/0.5)	
Compressor	Type			Hermetic twin rotary compressor		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output		kW	4.6	4.6	6.3	6.3	7.7	7.7
Fan unit	Type			Propeller fan		Propeller fan		Propeller fan	
	Motor output		kW	0.24 x 1	0.24 x 1	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	6340	6340	7770	7770	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube		Finned tube		Finned tube	
Refrigerant	Name			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	OFF:601 ON:464		OFF:601 ON:464		OFF:601 ON:464	
Protective devices				(*5)		(*5)		(*5)	
Power supply wiring		MCA	A	38.8	38.8	52.3	52.3	53.1	53.1
		MOCP (*6)	A	45.0	45.0	60.0	60.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	3/4"	3/4"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	225.0		225.0		225.0	
			ft	738.0		738.0		738.0	
		Real length	m	185.0		185.0		185.0	
			ft	607.0		607.0		607.0	
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150		50~150		50~150	
	Maximum capacity of combined indoor units			216		288		360	
	Maximum number of indoor units			25		34		43	
Sound pressure level		Cooling	dB(A)	56.0		61.0		61.0	
		Heating	dB(A)	59.0		63.0		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	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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%.

Model name				MMY-UP288H1HT9PUL			MMY-UP360H1HT9PUL		
Outdoor unit model name			MMY-	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP096H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL	MUP120H1HT9PUL
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	288.0			360.0		
	Rated capacity (*1)		KBtu/h	276.0			342.0		
	Rated power consumption (*1)(*2)		kW	22.12			28.65		
	Rated EER (*1)(*2)		Btu/W	12.47			11.93		
Heating	Nominal capacity (*1)		Btu/h	324.0			405.0		
	Rated capacity (*1)		Btu/h	308.0			386.0		
	Rated power consumption (*1)(*2)		kW	19.60			26.75		
	Rated COP (*1)(*2)		Btu/W	4.60			4.22		
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	31.1	31.1	31.1	31.1	31.1	31.1
	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	725.0	725.0	725.0	778.0	778.0	778.0
	Packing		lbs	761.0	761.0	761.0	814.0	814.0	814.0
Color				Silky shade（Munsell 1Y8.5/0.5)			Silky shade（Munsell 1Y8.5/0.5)		
Compressor	Type			Hermetic twin rotary compressor			Hermetic twin rotary compressor		
	Motor output		kW	6.3	6.3	6.3	7.7	7.7	7.7
Fan unit	Type			Propeller fan			Propeller fan		
	Motor output		kW	0.33 x 2	0.33 x 2	0.33 x 2	0.38 x 2	0.38 x 2	0.38 x 2
	Air volume		cfm	7770	7770	7770	7415	7415	7415
Maximum external static pressure (*3)			In.WG	0.32	0.32	0.32	0.32	0.32	0.32
Heat exchanger				Finned tube			Finned tube		
Refrigerant	Name			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	OFF:601 ON:464			OFF:601 ON:464		
Protective devices				(*5)			(*5)		
Power supply wiring		MCA	A	52.3	52.3	52.3	53.1	53.1	53.1
		MOCP (*6)	A	60.0	60.0	60.0	60.0	60.0	60.0
Piping connections	Gas	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"
	Liquid	Type		Brasing	Brasing	Brasing	Brasing	Brasing	Brasing
		Diameter	In	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"
Furthest piping Length		Equivalent length	m	235.0			235.0		
			ft	771.0			771.0		
		Real length	m	190.0			190.0		
			ft	623.0			623.0		
Indoor units	Total capacity	% of outdoor unit capacity (*7)	%	50~150			50~150		
	Maximum capacity of combined indoor units			432			540		
	Maximum number of indoor units			51			64		
Sound pressure level		Cooling	dB(A)	62.8			62.8		
		Heating	dB(A)	64.8			64.8		
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℃)		
		Heating	°FWB	-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 °FDry Bulb / 67 °FWet Bulb , Outdoor air tempreture 95 °FDry Bulb.
Heating : Indoor air temperature 70 °FDry Bulb, Outdoor air tempreture 47 °FDry Bulb / 43 °FWet 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

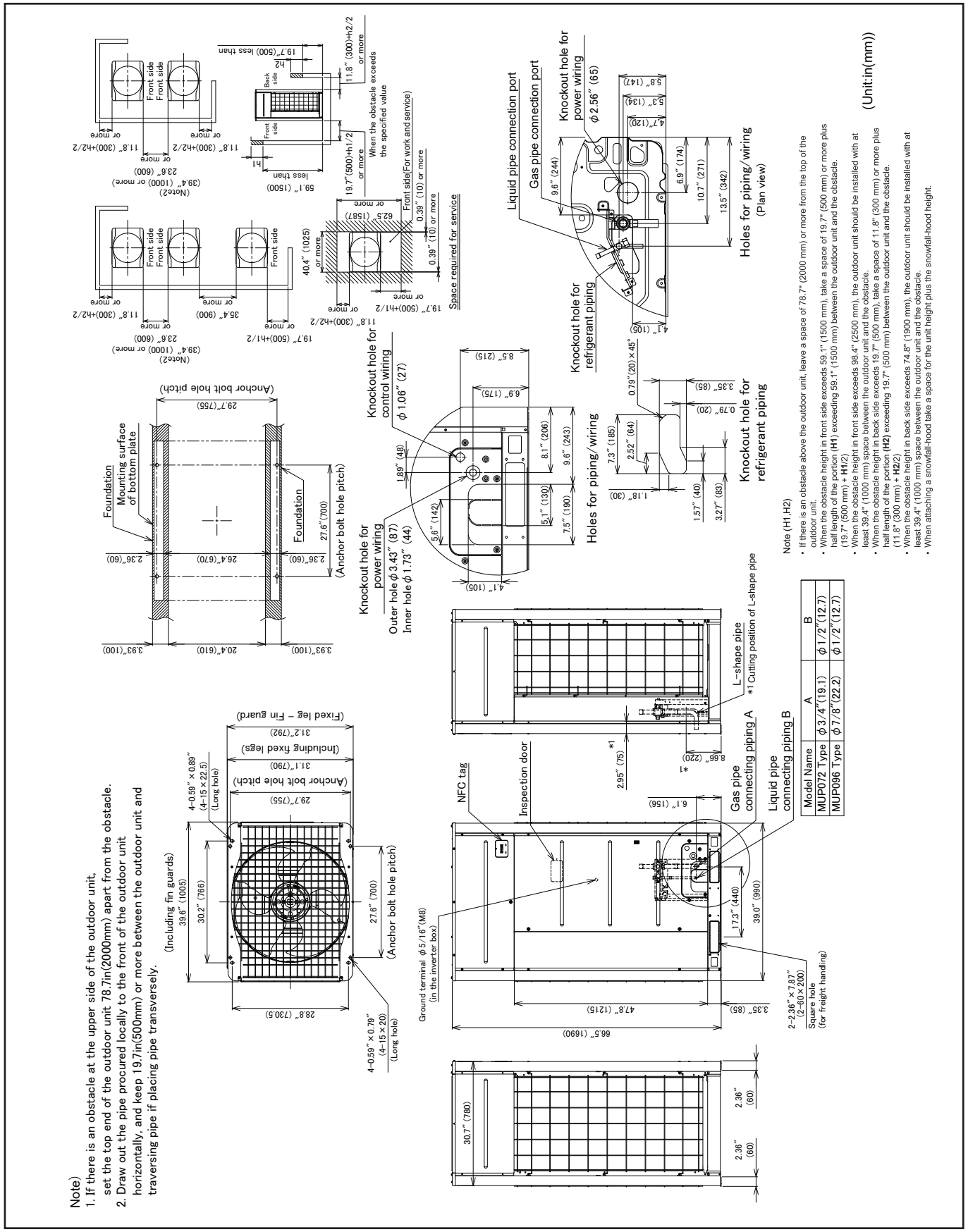
(*6) MOCP : Maximum Overcurrent Protection(Amps)

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

5-2. Dimensional drawing

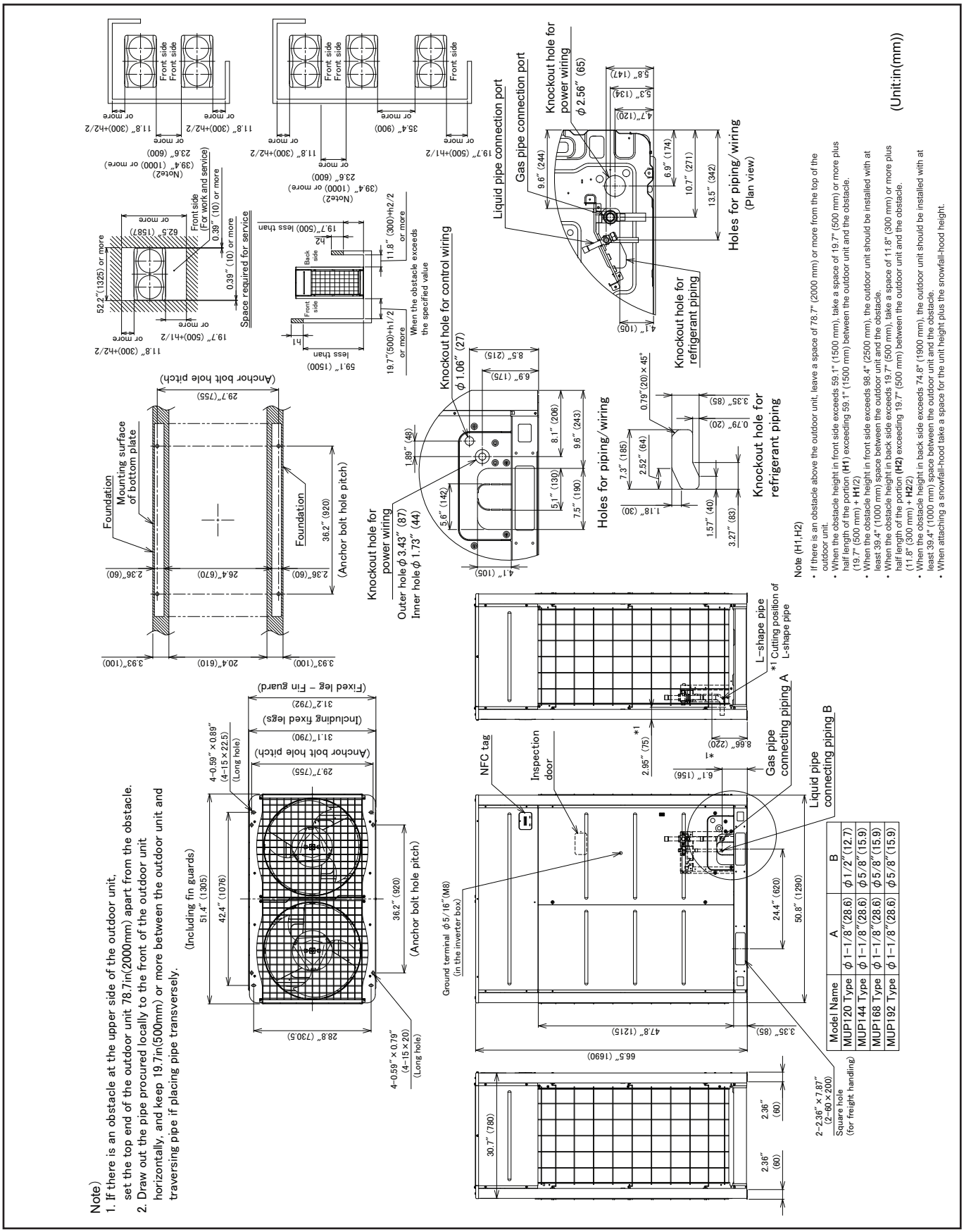
Single unit

Model : MMY-MUP0721HT6P-UL, MMY-MUP0961HT6P-UL, MMY-MUP0721HT9P-UL, MMY-MUP0961HT9P-UL

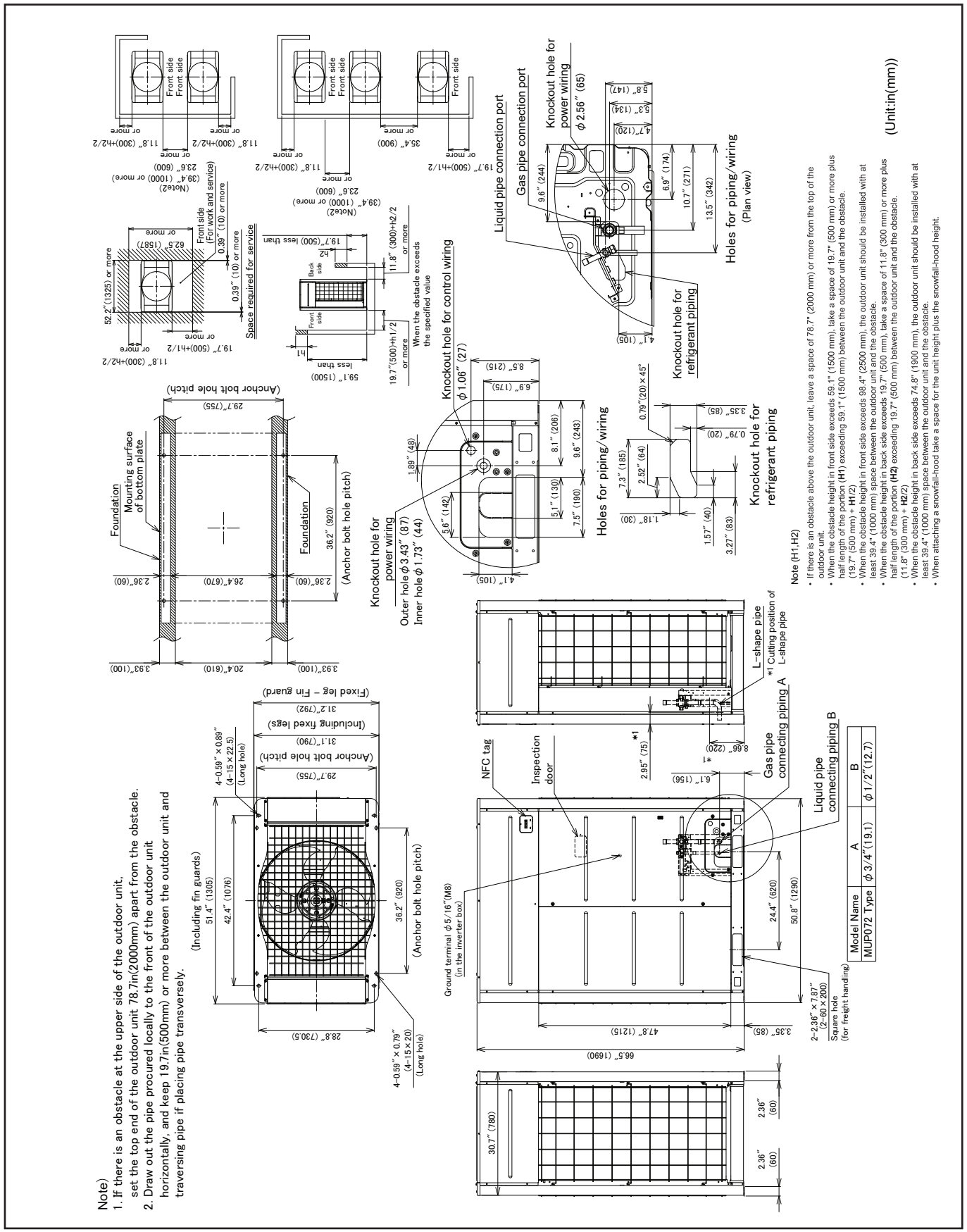


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing pipe if placing pipe transversely.

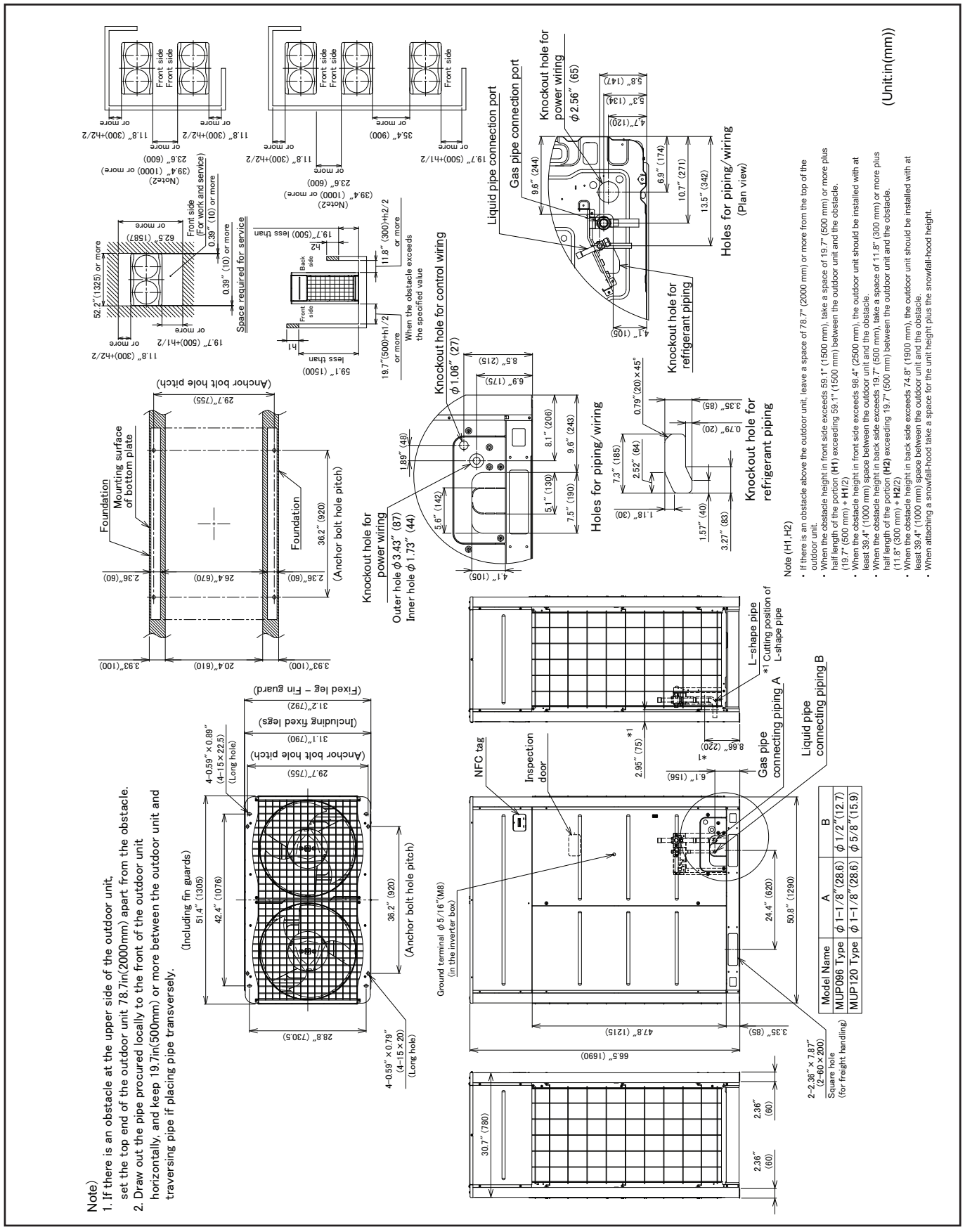
Model : MMY-MUP1201HT6P-UL, MMY-MUP1441HT6P-UL, MMY-MUP1681HT6P-UL, MMY-MUP1921HT6P-UL, MMY-MUP1201HT9P-UL, MMY-MUP1441HT9P-UL, MMY-MUP1681HT9P-UL



Model : MMY-MUP072H1HT6PUL, MMY-MUP072H1HT9PUL

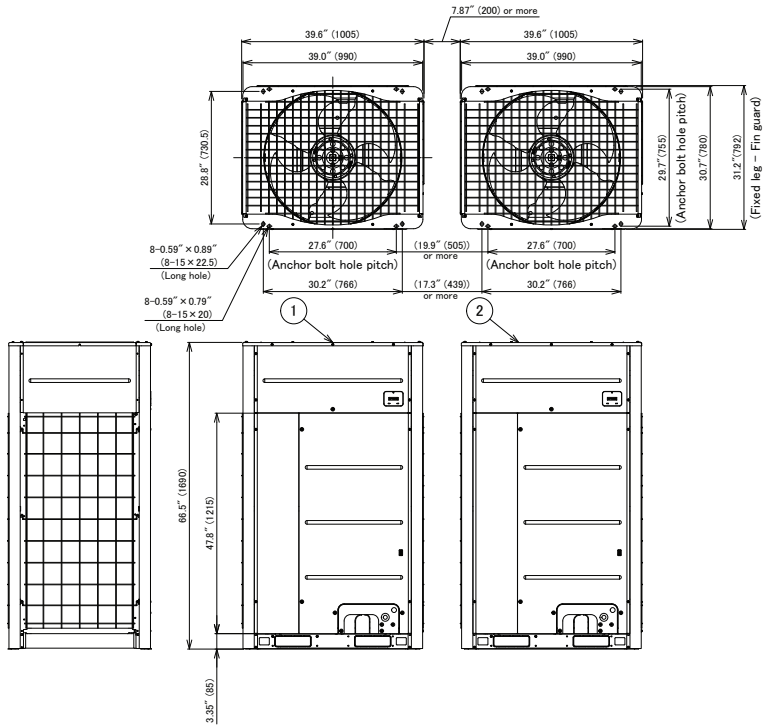


Model : MMY-MUP096H1HT6PUL, MMY-MUP120H1HT6PUL, MMY-MUP096H1HT9PUL, MMY-MUP120H1HT9PUL



Combination

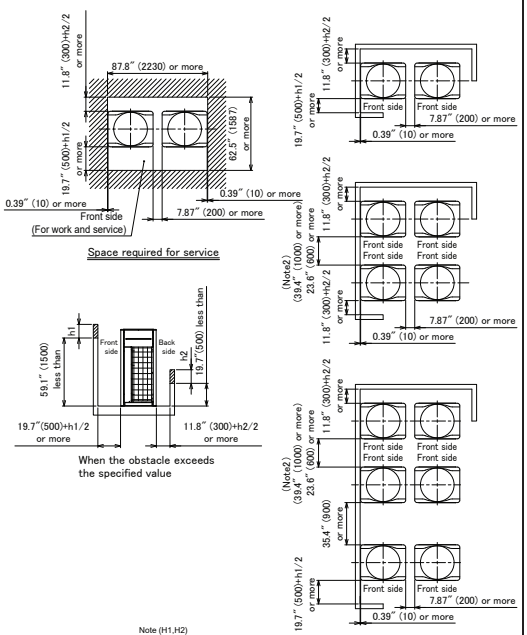
Two units connected



Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP1921HT6P-UL	MMY-MUP0961HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP1921HT9P-UL	MMY-MUP0961HT9P-UL	MMY-MUP0961HT9P-UL

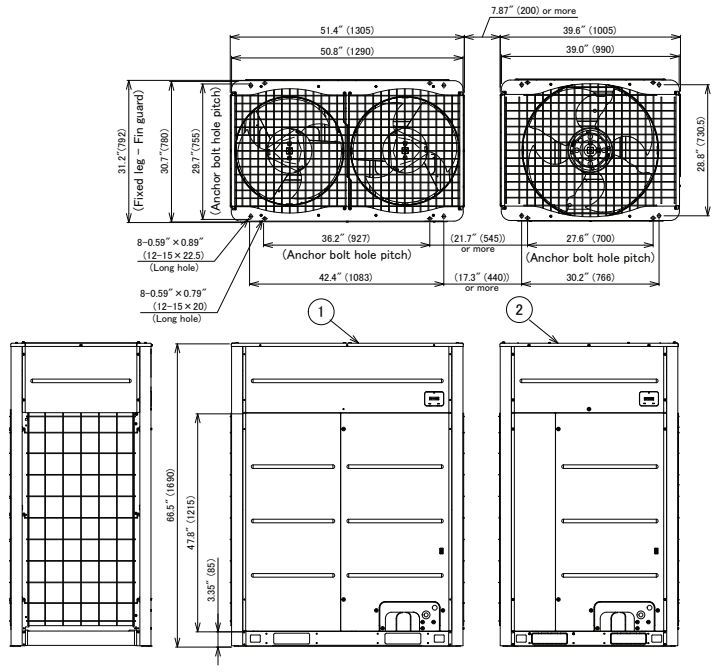
(Unit:in(mm))

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)



Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

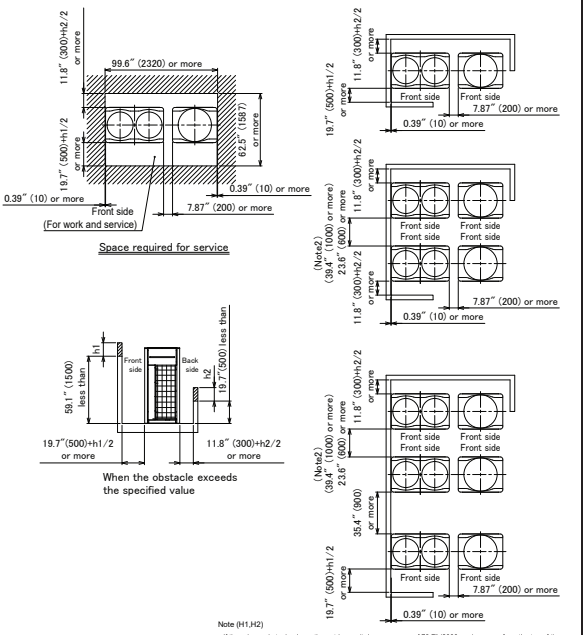
Two units connected



Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP2161HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0721HT6P-UL
MMY-UP2401HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP2641HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP2161HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0721HT9P-UL
MMY-UP2401HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL
MMY-UP2641HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL

(Unit:in(mm))

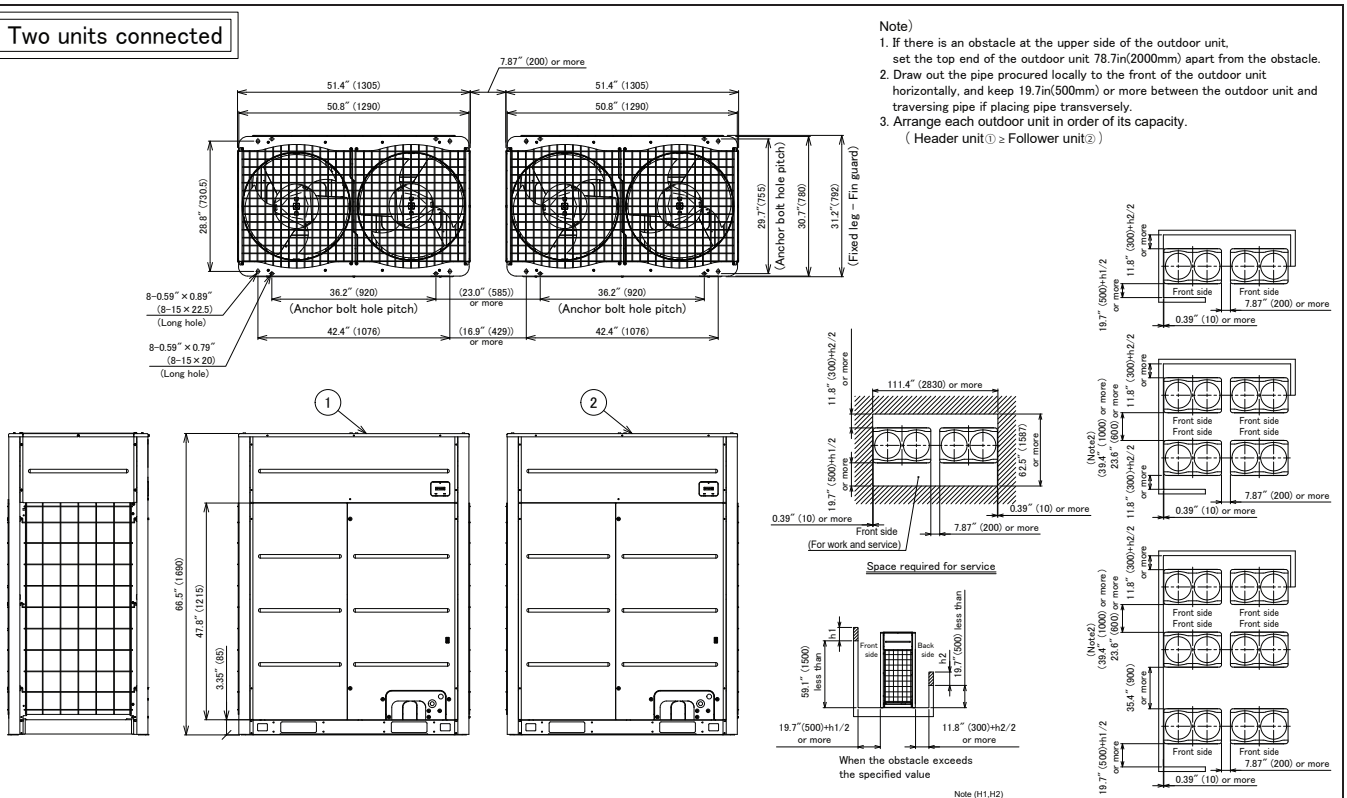
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing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



Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Combination

Two units connected



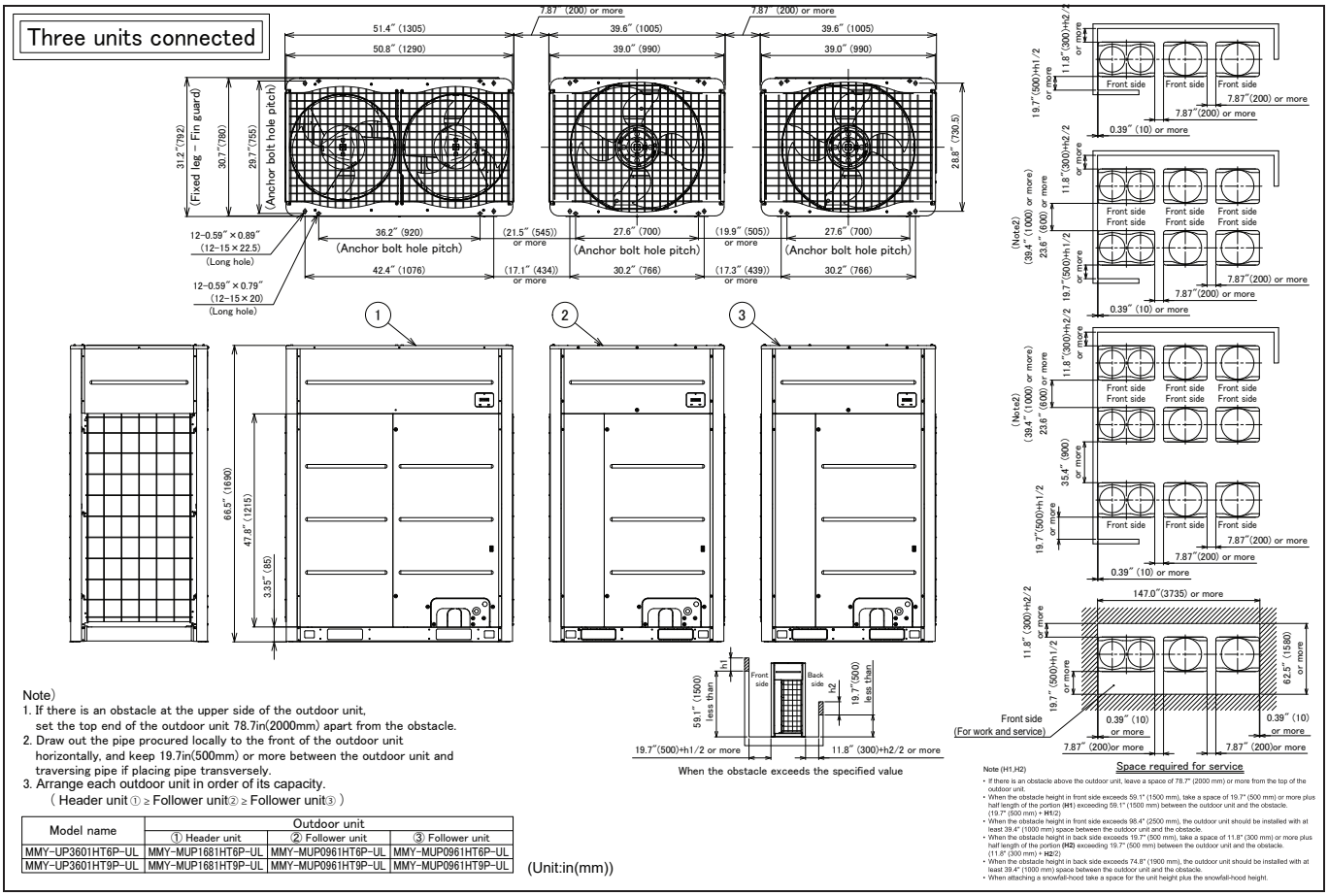
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing 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-UP2881HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP1441HT6P-UL
MMY-UP3121HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL
MMY-UP3361HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL
MMY-UP2881HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP1441HT9P-UL
MMY-UP3121HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL
MMY-UP3361HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL

(Unit:in(mm))

Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Three units connected



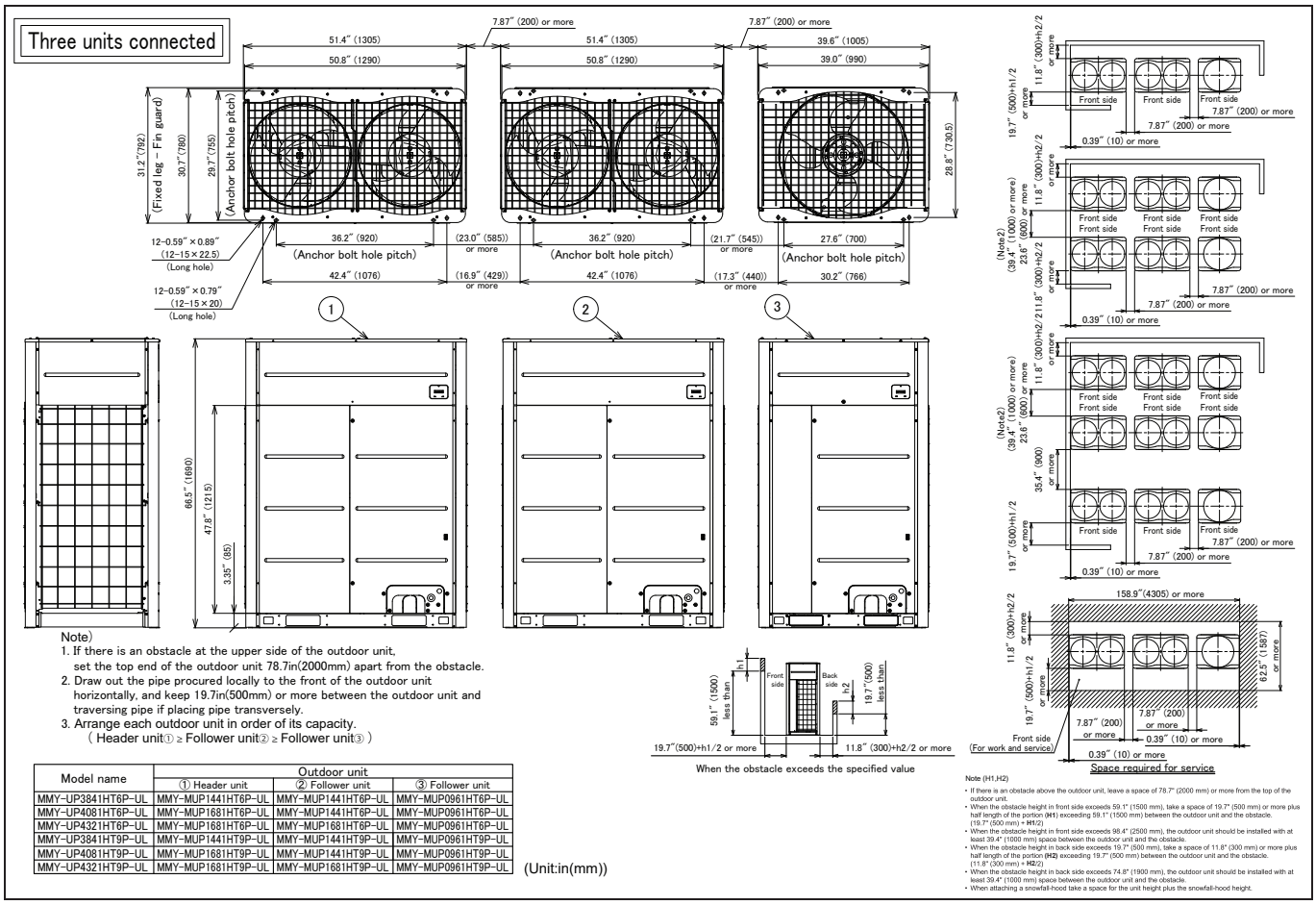
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing 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-UP3601HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP3601HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL	MMY-MUP0961HT9P-UL

(Unit:in(mm))

Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Combination

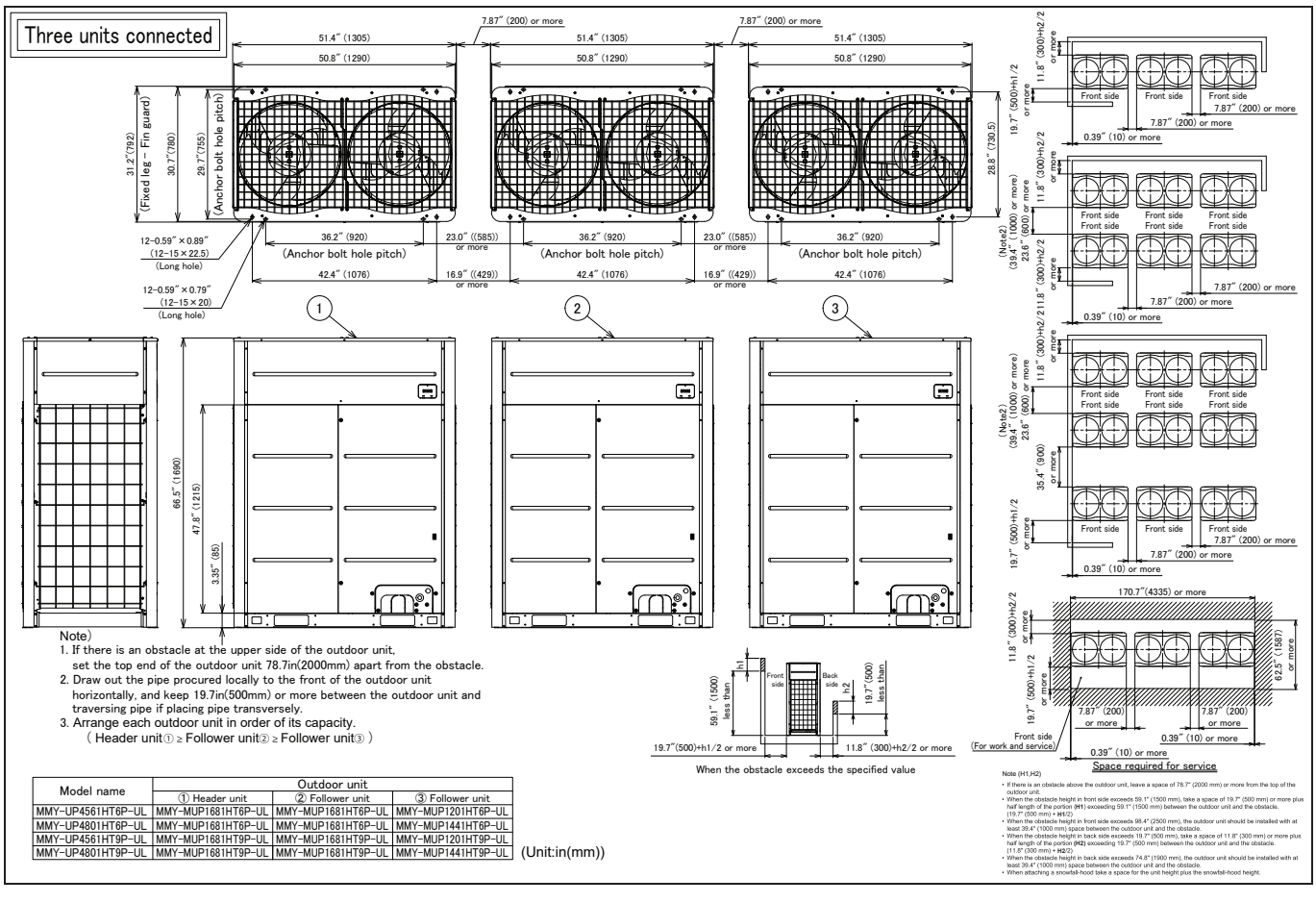


Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing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

Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP3841HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP4081HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP4321HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP0961HT6P-UL
MMY-UP3841HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL
MMY-UP4081HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL	MMY-MUP0961HT9P-UL
MMY-UP4321HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP0961HT9P-UL

(Unit:in(mm))



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)

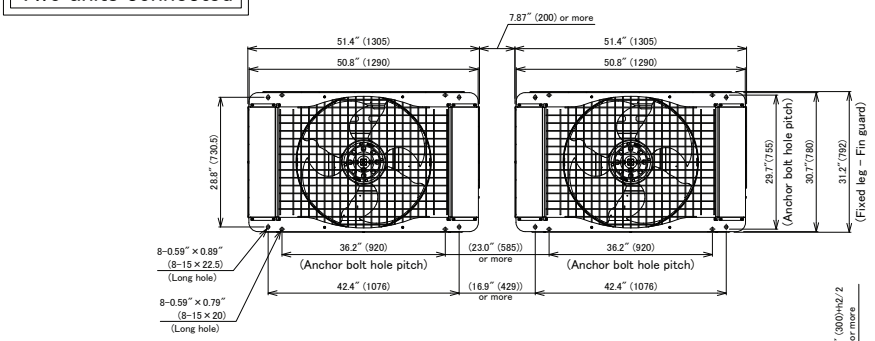
Note (H1,H2)
- If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit.
- When the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

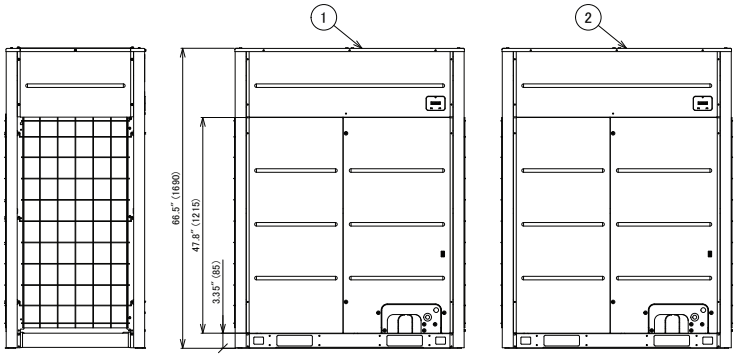
Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP4561HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1201HT6P-UL
MMY-UP4801HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1681HT6P-UL	MMY-MUP1441HT6P-UL
MMY-UP4561HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1201HT9P-UL
MMY-UP4801HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1681HT9P-UL	MMY-MUP1441HT9P-UL

(Unit:in(mm))

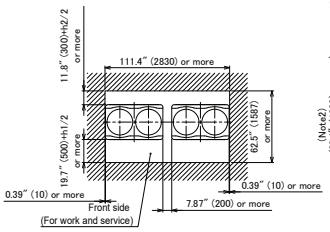
Combination

Two units connected

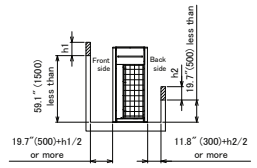




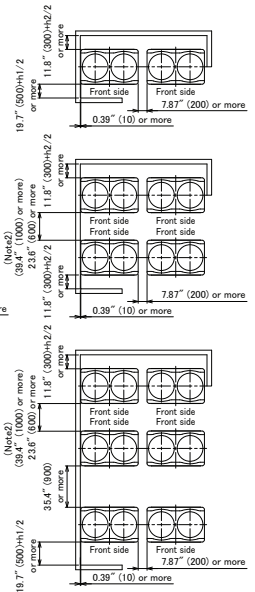
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing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



Space required for service



When the obstacle exceeds the specified value

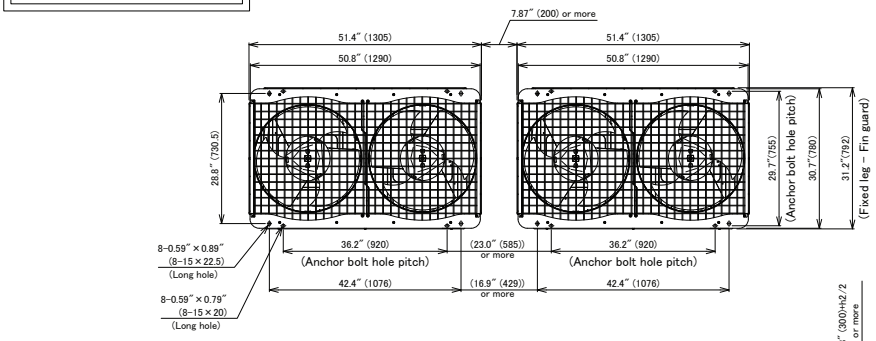


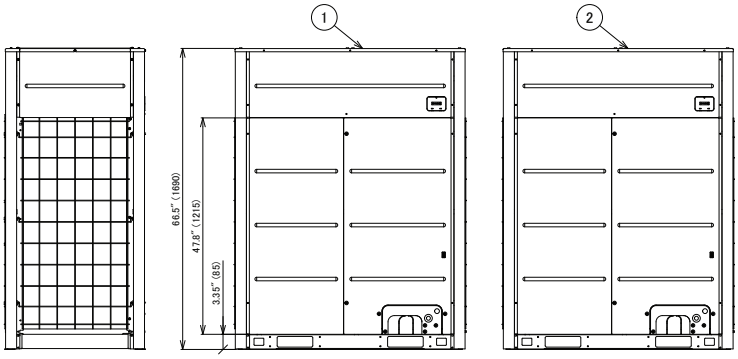
Note (H1,H2)
- If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit.
- When the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP144H1HT6PUL	MMY-MUP072H1HT6PUL	MMY-MUP072H1HT6PUL
MMY-UP144H1HT9PUL	MMY-MUP072H1HT9PUL	MMY-MUP072H1HT9PUL

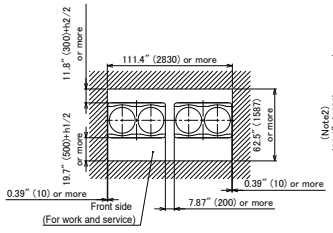
(Unit:in(mm))

Two units connected

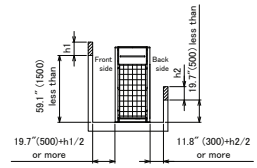




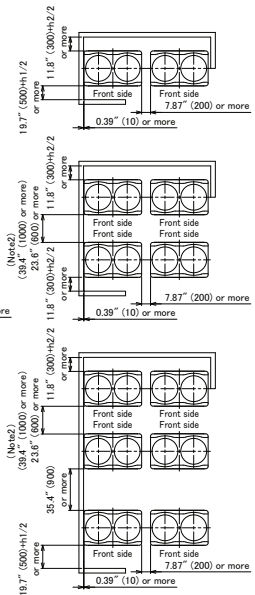
Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7in(2000mm) apart from the obstacle.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.7in(500mm) or more between the outdoor unit and traversing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



Space required for service



When the obstacle exceeds the specified value

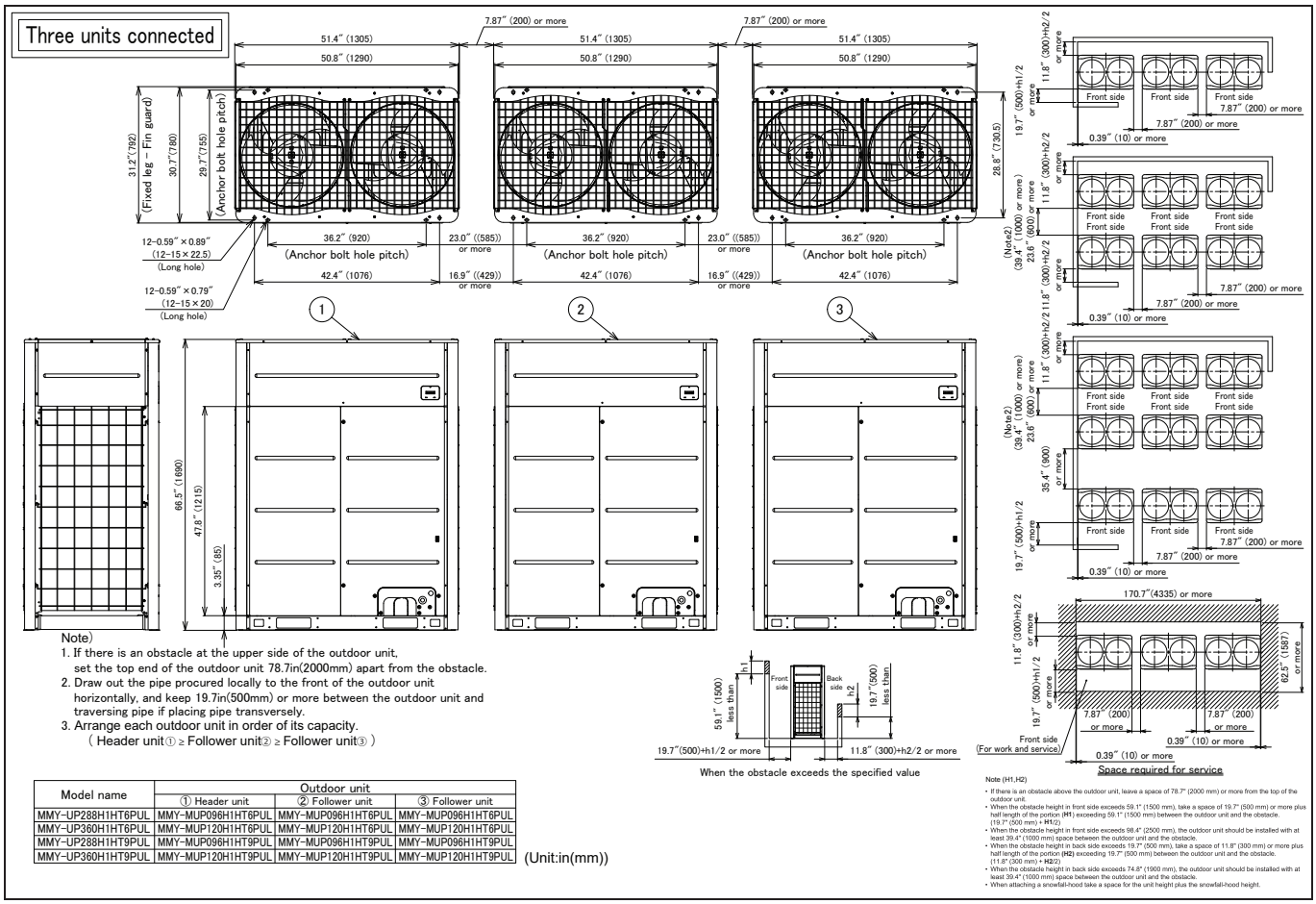


Note (H1,H2)
- If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit.
- When the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + **H1**/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + **H2**/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Model name	Outdoor unit	
	① Header unit	② Follower unit
MMY-UP192H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL
MMY-UP240H1HT6PUL	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL
MMY-UP192H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL
MMY-UP240H1HT9PUL	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL

(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)

When the obstacle exceeds the specified value

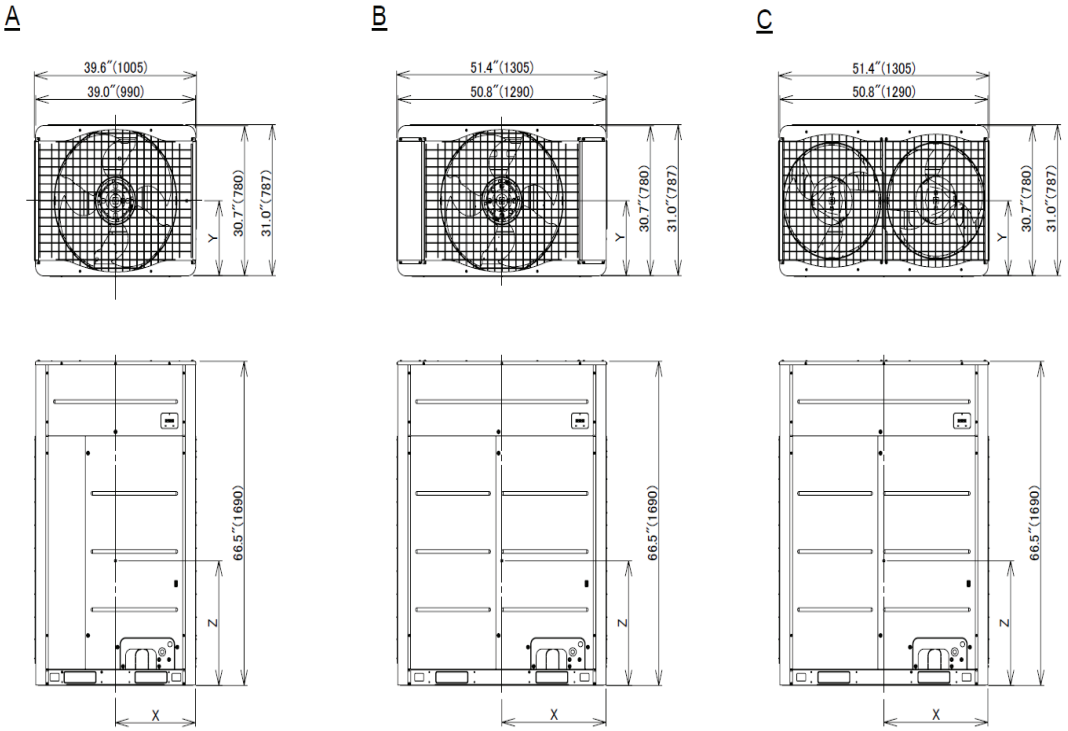
Space required for service

Note (H1,H2)
- 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 the obstacle height in front side exceeds 59.1" (1500 mm), take a space of 19.7" (500 mm) or more plus half length of the portion (**H1**) exceeding 59.1" (1500 mm) between the outdoor unit and the obstacle. (19.7" (500 mm) + H1/2)
- When the obstacle height in front side exceeds 98.4" (2500 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When the obstacle height in back side exceeds 19.7" (500 mm), take a space of 11.8" (300 mm) or more plus half length of the portion (**H2**) exceeding 19.7" (500 mm) between the outdoor unit and the obstacle. (11.8" (300 mm) + H2/2)
- When the obstacle height in back side exceeds 74.8" (1900 mm), the outdoor unit should be installed with at least 39.4" (1000 mm) space between the outdoor unit and the obstacle.
- When attaching a snowfall-hood take a space for the unit height plus the snowfall-hood height.

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-UP288H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL	MMY-MUP096H1HT6PUL
MMY-UP360H1HT6PUL	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL	MMY-MUP120H1HT6PUL
MMY-UP288H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL	MMY-MUP096H1HT9PUL
MMY-UP360H1HT9PUL	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL	MMY-MUP120H1HT9PUL

(Unit:in(mm))

5-3. Center of gravity

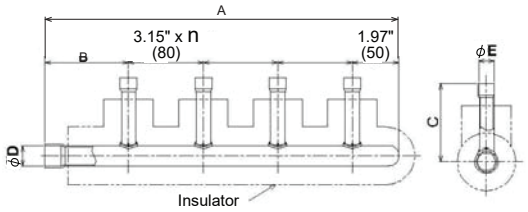


No.	Model type	X [in(mm)]	Y [in(mm)]	Z [in(mm)]	Weight [lbs(kg)]
A	MMY-MUP0721HT6P-UL	20.6" (523)	13.0" (330)	28.0" (710)	533 (242)
	MMY-MUP0961HT6P-UL				
	MMY-MUP0721HT9P-UL	19.7" (500)	15.7" (400)	26.6" (675)	521 (236)
	MMY-MUP0961HT9P-UL				
B	MMY-MUP072H1HT6PUL	25.4" (645)	13.8" (350)	27.6" (700)	611 (277)
	MMY-MUP072H1HT9PUL	25.4" (645)	13.8" (350)	27.0" (685)	597 (271)
C	MMY-MUP1201HT6P-UL	26.7" (677)	13.2" (335)	31.1" (790)	721 (327)
	MMY-MUP1441HT6P-UL				
	MMY-MUP1681HT6P-UL				774 (351)
	MMY-MUP1921HT6P-UL	26.0" (660)	13.4" (340)	32.9" (835)	828 (376)
	MMY-MUP1201HT9P-UL	25.6" (650)	14.6" (370)	23.8" (605)	725 (329)
	MMY-MUP1441HT9P-UL				
	MMY-MUP1681HT9P-UL				778 (353)
	MMY-MUP096H1HT6PUL	26.7" (677)	13.2" (335)	31.1" (790)	721 (327)
	MMY-MUP120H1HT6PUL				774 (351)
	MMY-MUP096H1HT9PUL	25.6" (650)	14.6" (370)	23.8" (605)	725 (329)
	MMY-MUP120H1HT9PUL				778 (353)

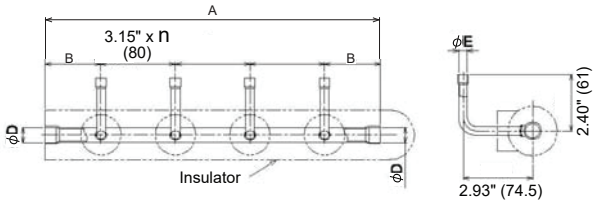
5-4. Branch header / branch joint

• Branch header (Heat pump)
RBM-HY1043UL, HY1083UL, HY2043UL, HY2083UL

Gas side



Liquid side

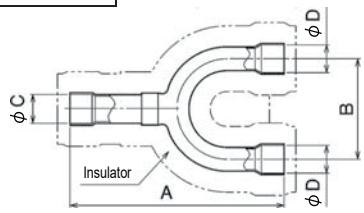


Unit: in (mm)

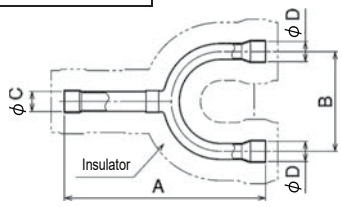
Model		A	B	C	ϕD	ϕE	n	Accessory socket Qty	Accessory sealed pipe Qty
RBM-HY1043UL	Gas side	15.0" (380)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	3	⑥ × 4, ⑨ × 4, ⑭ × 1, ⑱ × 1, ⑦⓪ × 1	5/8" x1
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	① × 4, ⑥ × 1, ⑨ × 1	5/8" x1, 3/8" x1
RBM-HY1083UL	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	5/8" x3
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	① × 8, ⑥ × 1, ⑨ × 1	5/8" x1, 3/8" x3
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	5/8" x1
	Liquid side	13.0" (330)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	3	① × 2	5/8" x1, 3/8" x1
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	5/8" x3
	Liquid side	25.6" (650)	1.77" (45)	–	5/8" (15.9)	3/8" (9.5)	7	① × 7	5/8" x1, 3/8" x3

• Y-shape branch joint (Heat pump)
RBM-BY55UL, BY105UL, BY205UL , BY305UL

Gas side



Liquid side



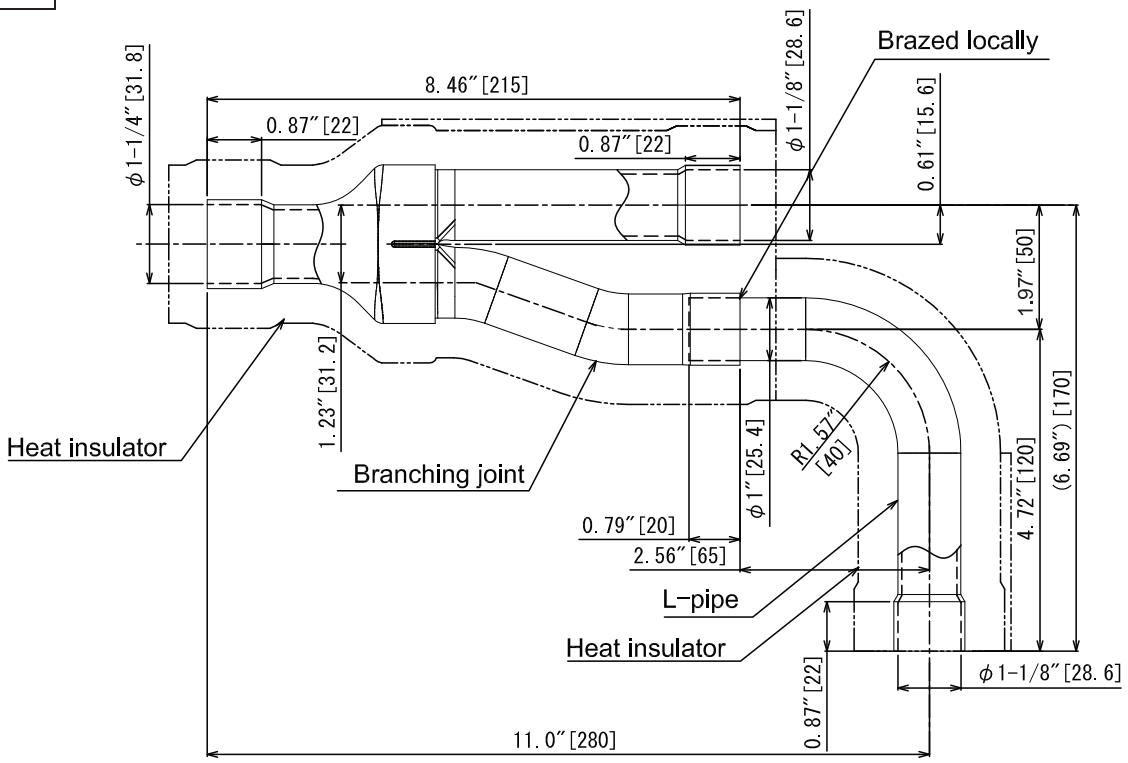
Unit: in (mm)

RBM-		A	B	C	ϕD	Accessory socket Qty
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
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
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
BY305UL	Gas side	8.66"(220)	3.15" (80)	11-1/2"(38.1)	1-1/2"(38.1)	④③x1, ⑥① x3, ⑥②x2 , ⑦① x2, ⑦⑤x1, ⑨① x1
	Liquid side	6.69"(170)	3.15"(80)	7/8"(22.2)	7/8"(22.2)	⑨②x1, ⑨④x3

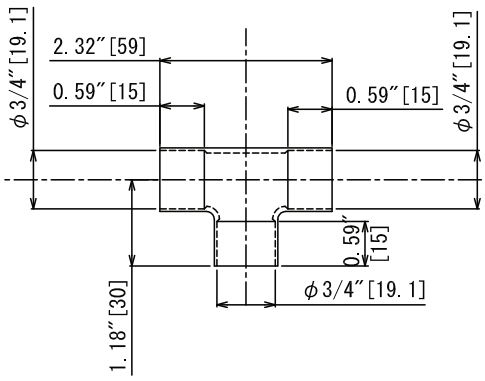
• Branching joint for connection of outdoor units (Set of three joints) (Heat pump)
RBM-BT14UL

Gas side

Unit: in (mm)



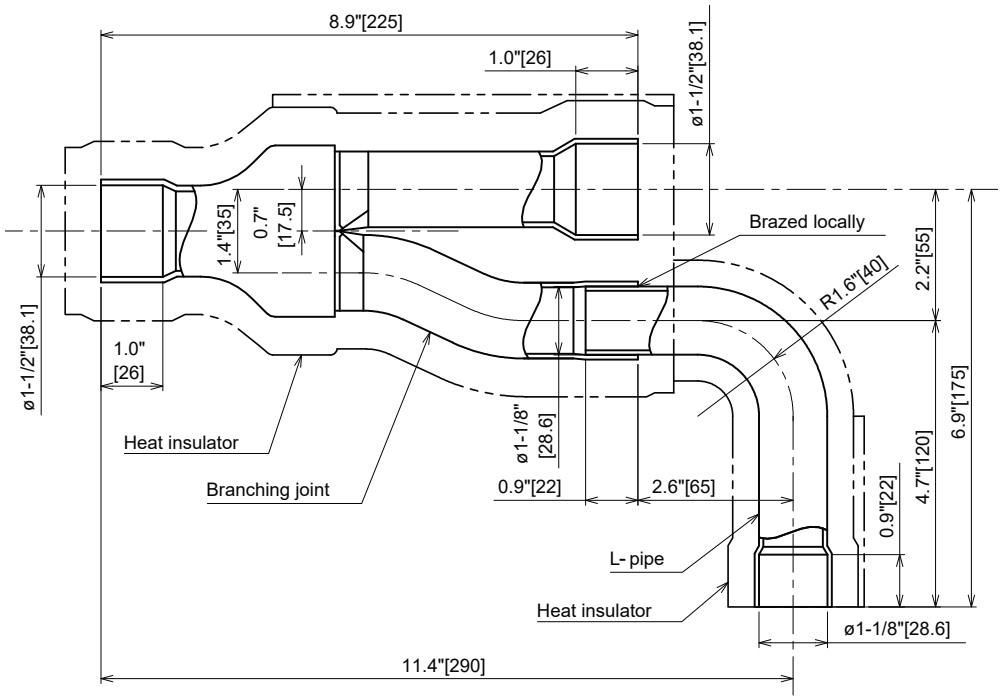
Liquid side



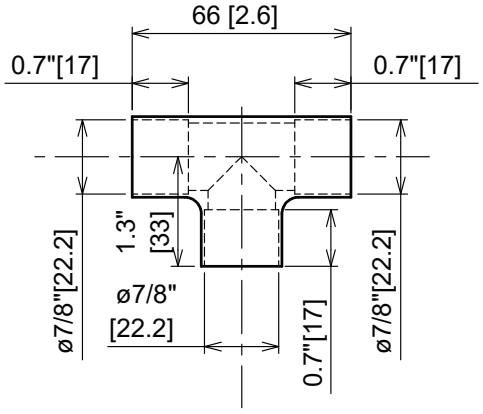
RBM-BT14UL	
	Accessory socket Qty
Gas side	⑳ × 2, ㉗ × 1, ㊸ × 2, ㊾ × 1
Liquid side	⑩ × 3, ⑬ × 2

● Branching joint for connection of outdoor units (Set two joints)(Heat pump)
RBM-BT24UL

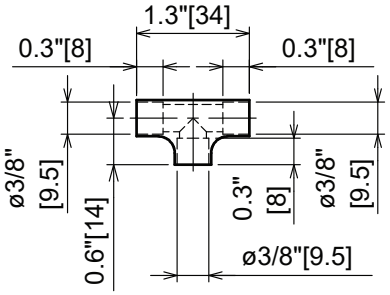
Gas side



Liquid side



Balance pipe side



RBM-BT24UL	
	Accessory socket Q'ty
Gas side	㊸x 1 ,㊶x 2 ,㊷x 2 ,㊼x 1 ,㊾x 1
Liquid side	⑭x 2 ,⑱x 2 ,㊺x 1

• Accessory socket

Unit:in(mm)

① φ1/4" (6.4), 0.94" (24), φ3/8" (9.5) Outer dia.

⑥⑨⑤1 φB, A, φ5/8" (15.9) Outer dia.

	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 φB, A, φ3/4" (19.1) Outer dia.

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

⑭⑱⑦0⑧5 φB, A, φ7/8" (22.2) Outer dia.

	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 φB, A, φ1-1/8" (28.6) Outer dia.

	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 φB, A, φ1-1/4" (31.8) Outer dia.

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

⑨1 φ3/8" (9.5), φ1/2" (12.7), φ5/8" (15.9), 2.28" (58) Outer dia.

⑨2 φ1/4" (6.4), φ3/8" (9.5), φ1/2" (12.7), φ5/8" (15.9), 3.15" (80) Outer dia.

⑨④ φ5/8" (15.9), φ3/4" (19.1), φ7/8" (22.2), 2.8" (71)

⑥1⑥2⑦1⑦3 φB, A, φ1-1/2" (38.1) Outer dia.

	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 φ1-1/2" (38.1), 2.52" (64), φ5/8" (15.9)

Sealed pipe

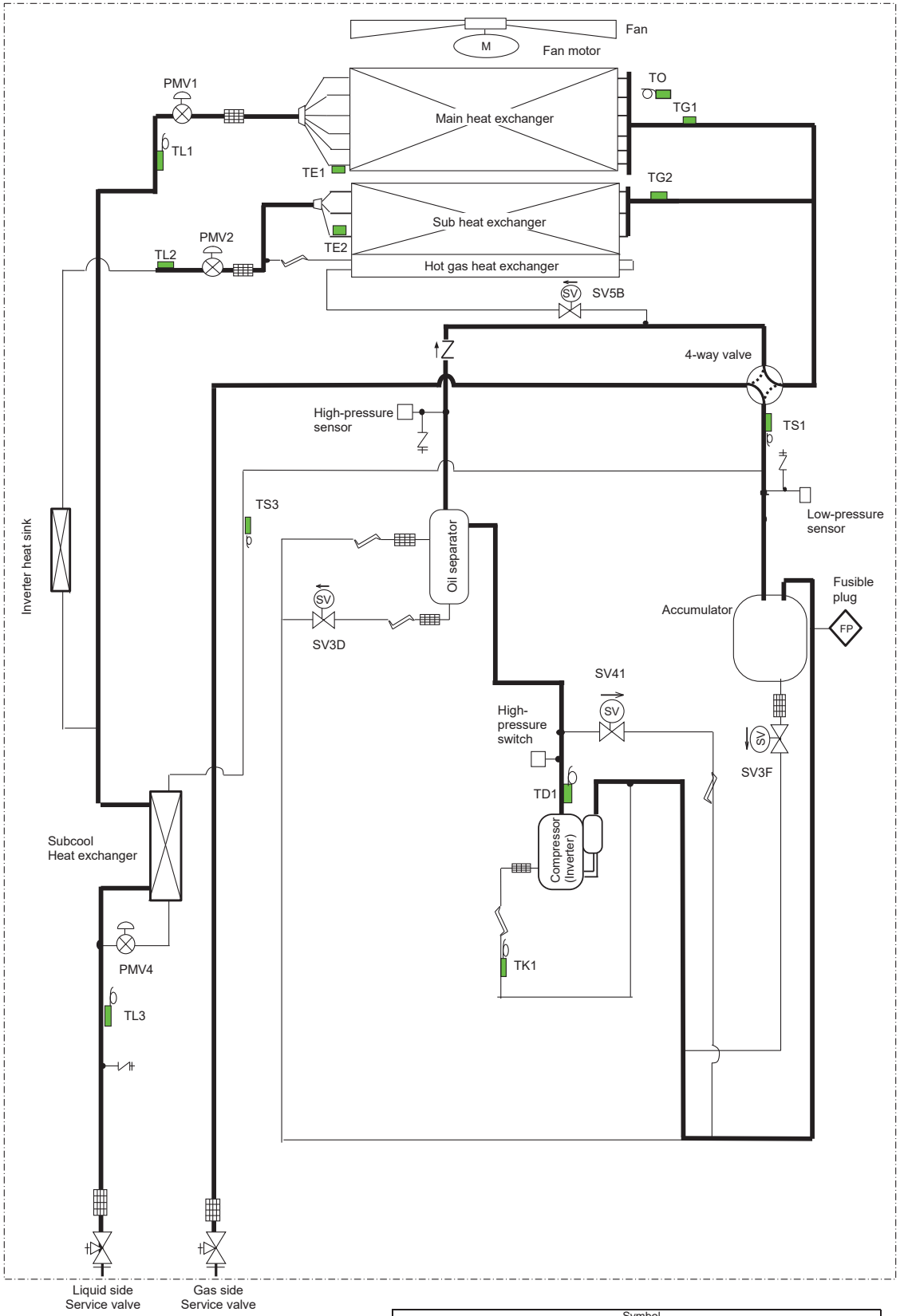
1.71" (43.5), 1.38" (35), 5/8" (15.9) Outer dia.

1.58" (40.2), 1.38" (35), φ3/8" (9.5) Outer dia.

1.65" (41.9), φ1/2" (12.7) Outer dia.

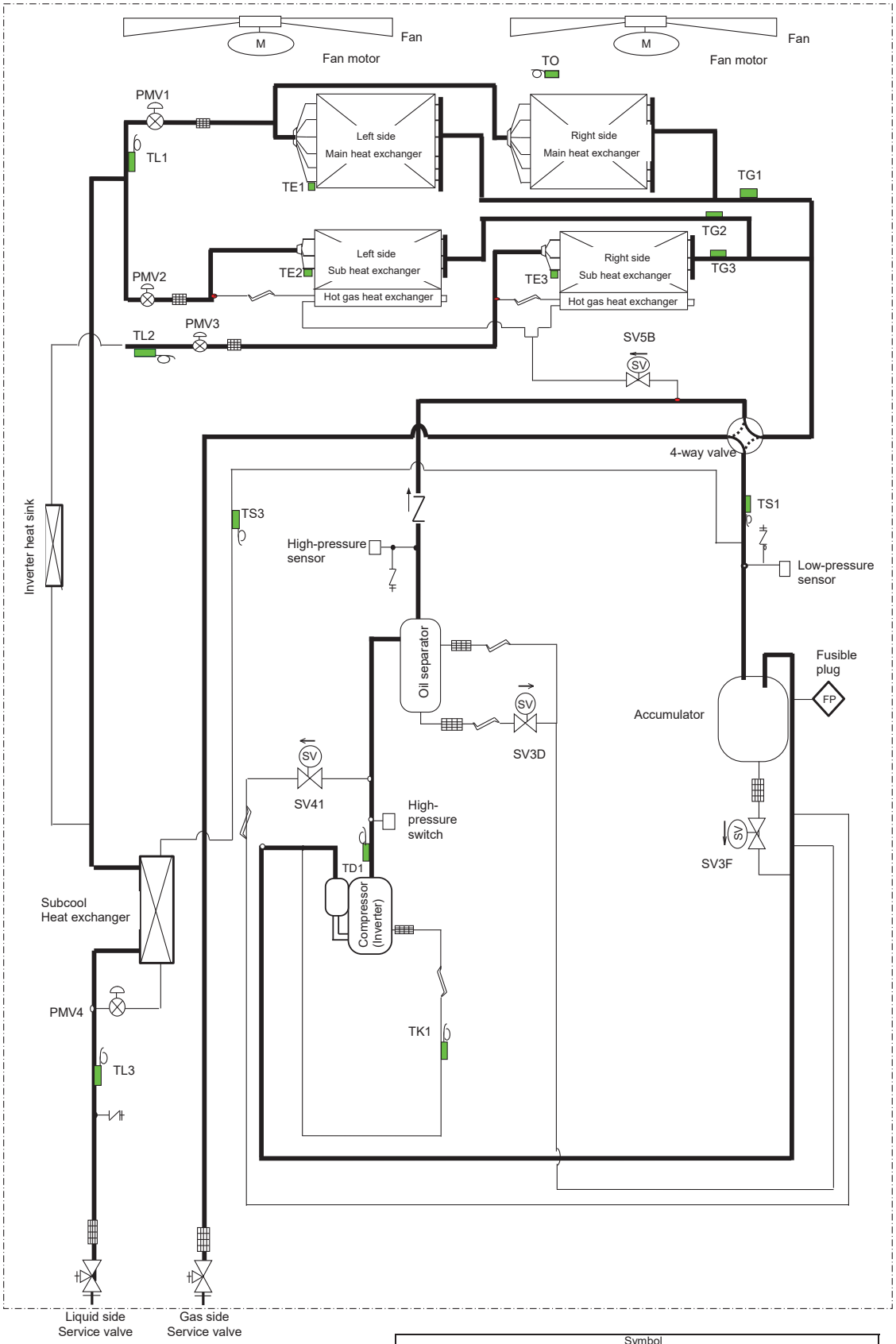
5-5. Refrigerant cycle diagram

Model: MMY-MUP0721*, MUP0961*, MUP072H1*



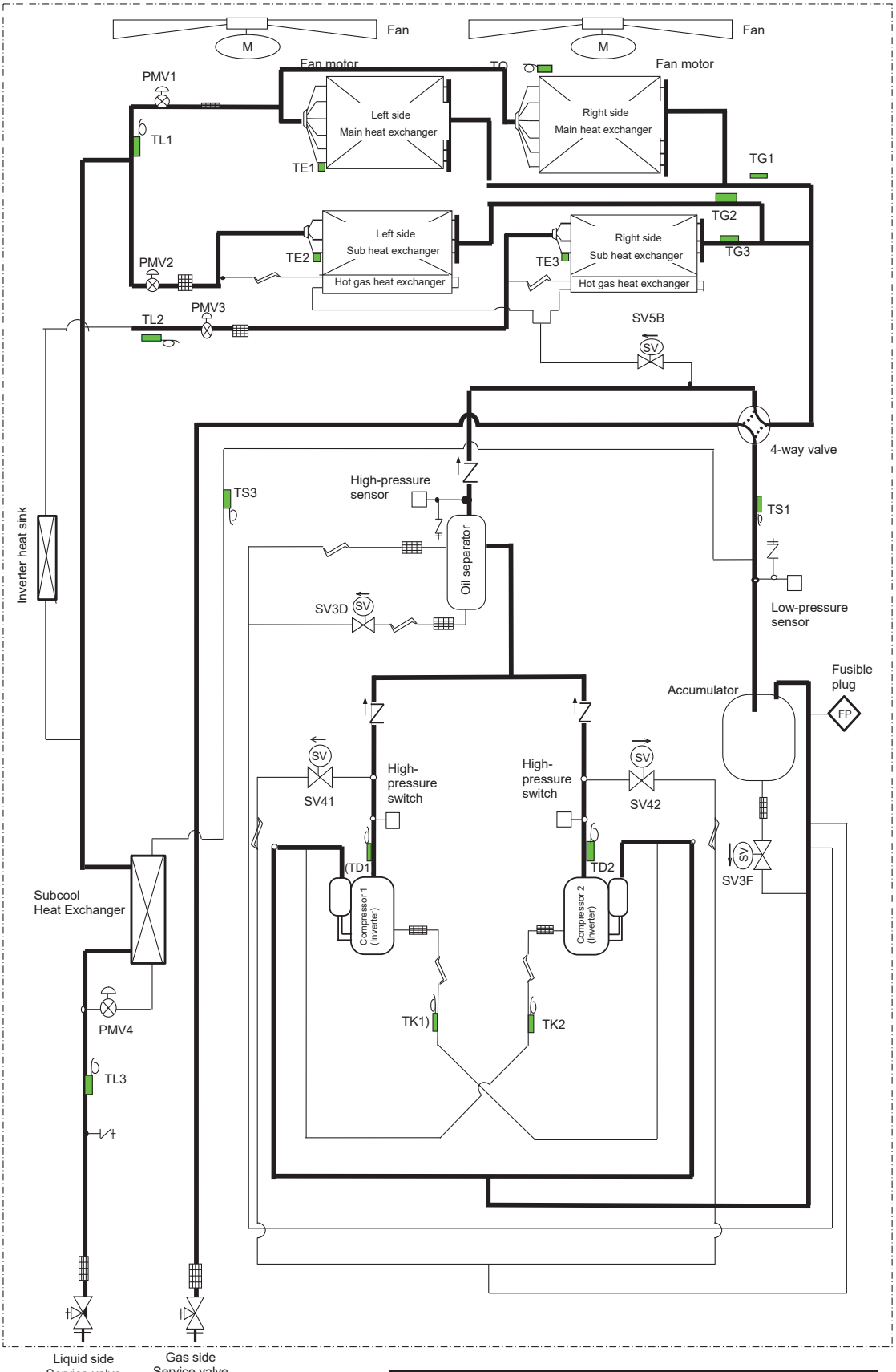
Symbol						
Solenoid valve	Capillary tube	Check valve	Check joint	Strainer	Temperature sensor	Distributor

Model : MMY-MUP1201*, MUP1441*, MUP1681*,MUP096H1*, MUP120H1*



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

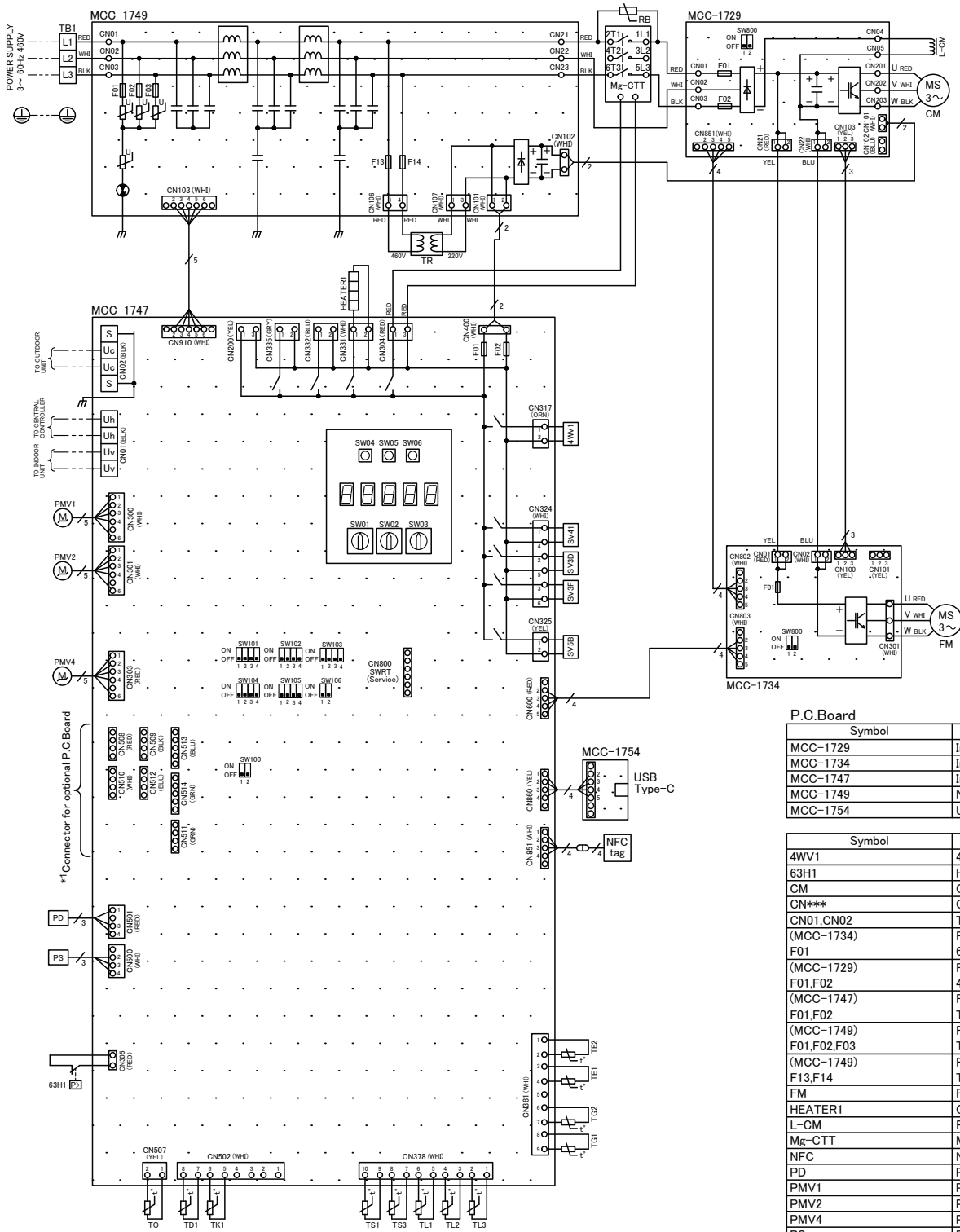
Model : MMY-MUP1921*



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

5-6. Wiring diagram

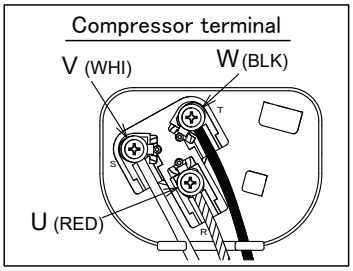
Model :MMY-MUP0721HT6P-UL, MMY-MUP0961HT6P-UL, MMY-MUP072H1HT6PUL



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

———	Field wiring
⏚	Protective earth
▭	Terminal block
—o—	Terminal
▭	Connector
┈┈┈	P.C.Board

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

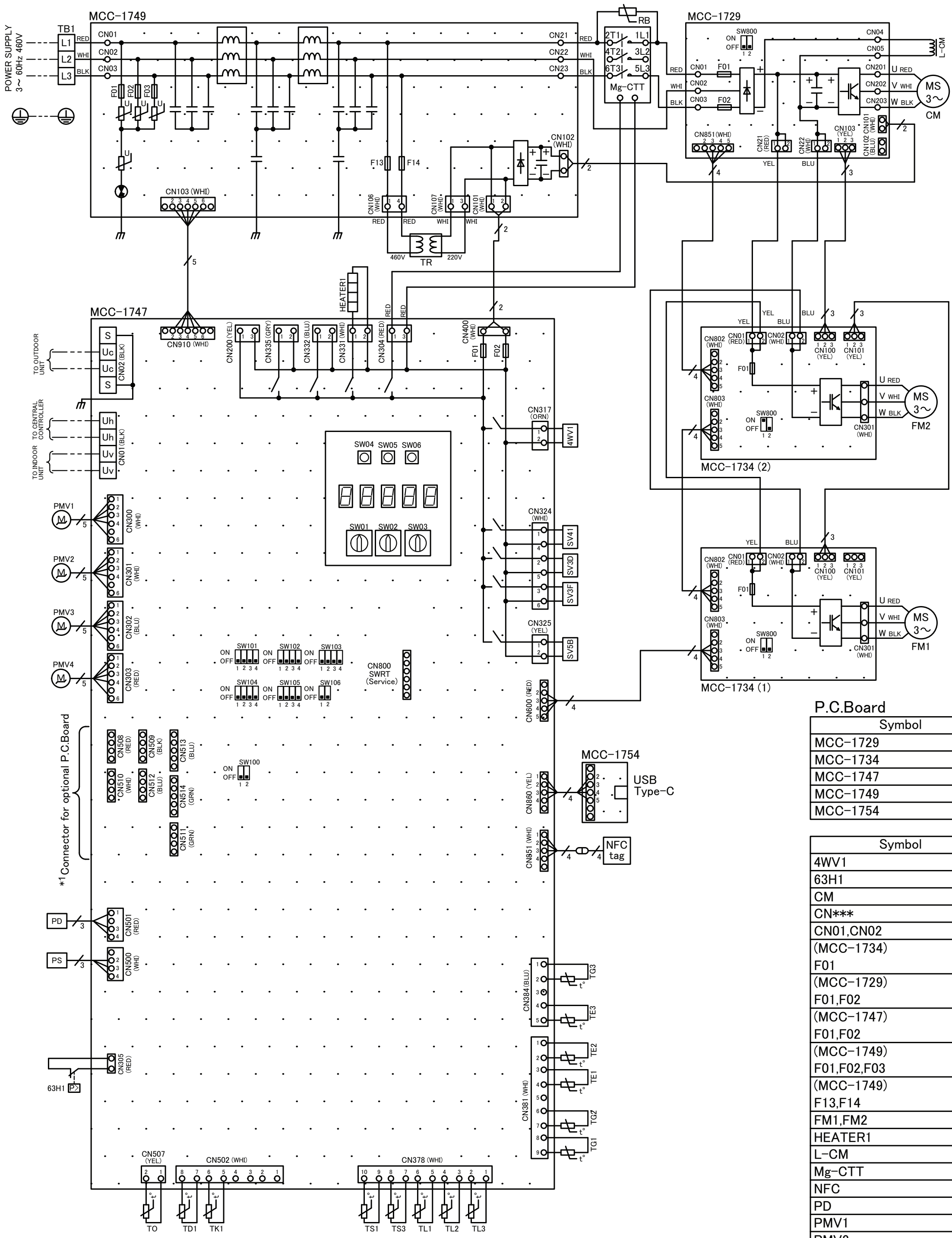


P.C.Board

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	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734) F01	Fuse (Fan) 6.3A 750VDC
(MCC-1729) F01,F02	Fuse (Compressor) 40A 500VAC
(MCC-1747) F01,F02	Fuse (Interface) T6.3A 250VAC
(MCC-1749) F01,F02,F03	Fuse (Noise filter) T6.3A 250VAC
(MCC-1749) F13,F14	Fuse (Noise filter) 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
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,TS3	Suction temp. sensor
TR	Trans

Model :MMY-MUP1201HT6P-UL, MMY-MUP1441HT6P-UL, MMY-MUP1681HT6P-UL, MMY-MUP096H1HT6PUL, MMY-MUP120H1HT6PUL



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

P.C.Board

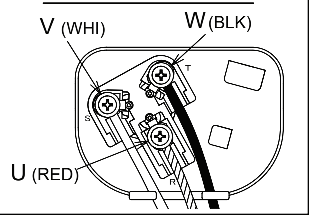
Symbol	Parts name
MCC-1729	Inverter P.C.Board (Compressor)
MCC-1734	Inverter P.C.Board (Fan)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(MCC-1734) F01	Fuse (Fan) 6.3A 750VDC
(MCC-1729) F01,F02	Fuse (Compressor) 63A 600VAC
(MCC-1747) F01,F02	Fuse (Interface) T6.3A 250VAC
(MCC-1749) F01,F02,F03	Fuse (Noise filter) T6.3A 250VAC
(MCC-1749) F13,F14	Fuse (Noise filter) 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
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,TS3	Suction temp. sensor
TR	Trans

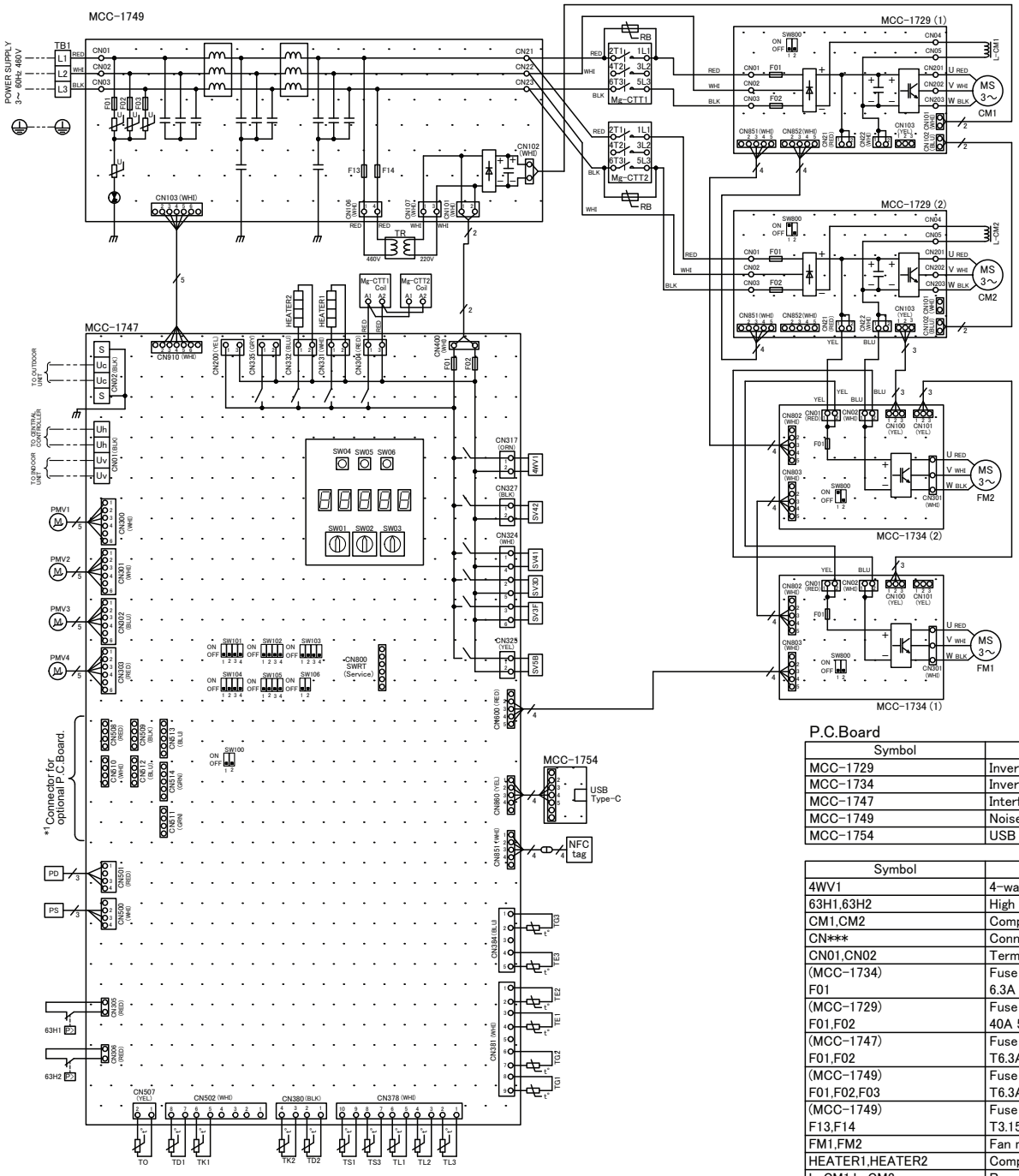
	Field wiring
	Protective earth
	Terminal block
	Terminal
	Connector
	P.C.Board

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

Compressor terminal



Model :MMY-MUP1921HT6P-UL



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

P.C.Board

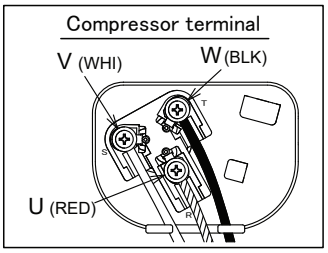
Symbol	Parts name
MCC-1729	Inverter P.C.Board (Compressor)
MCC-1734	Inverter P.C.Board (Fan)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1	4-way valve coil
63H1,63H2	High pressure switch
CM1,CM2	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)
F13,F14	T3.15A 600VAC
FM1,FM2	Fan motor
HEATER1,HEATER2	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
SV3D,SV3F,SV41,SV42,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,TD2	Discharge temp. sensor
TE1,TE2,TE3	Heat exchange temp. sensor
TG1,TG2,TG3	Gas temp. sensor
TK1,TK2	Oil temp. sensor
TL1,TL2,TL3	Liquid temp. sensor
TO	Air temp. sensor
TS1,TS3	Suction temp. sensor
TR	Trans

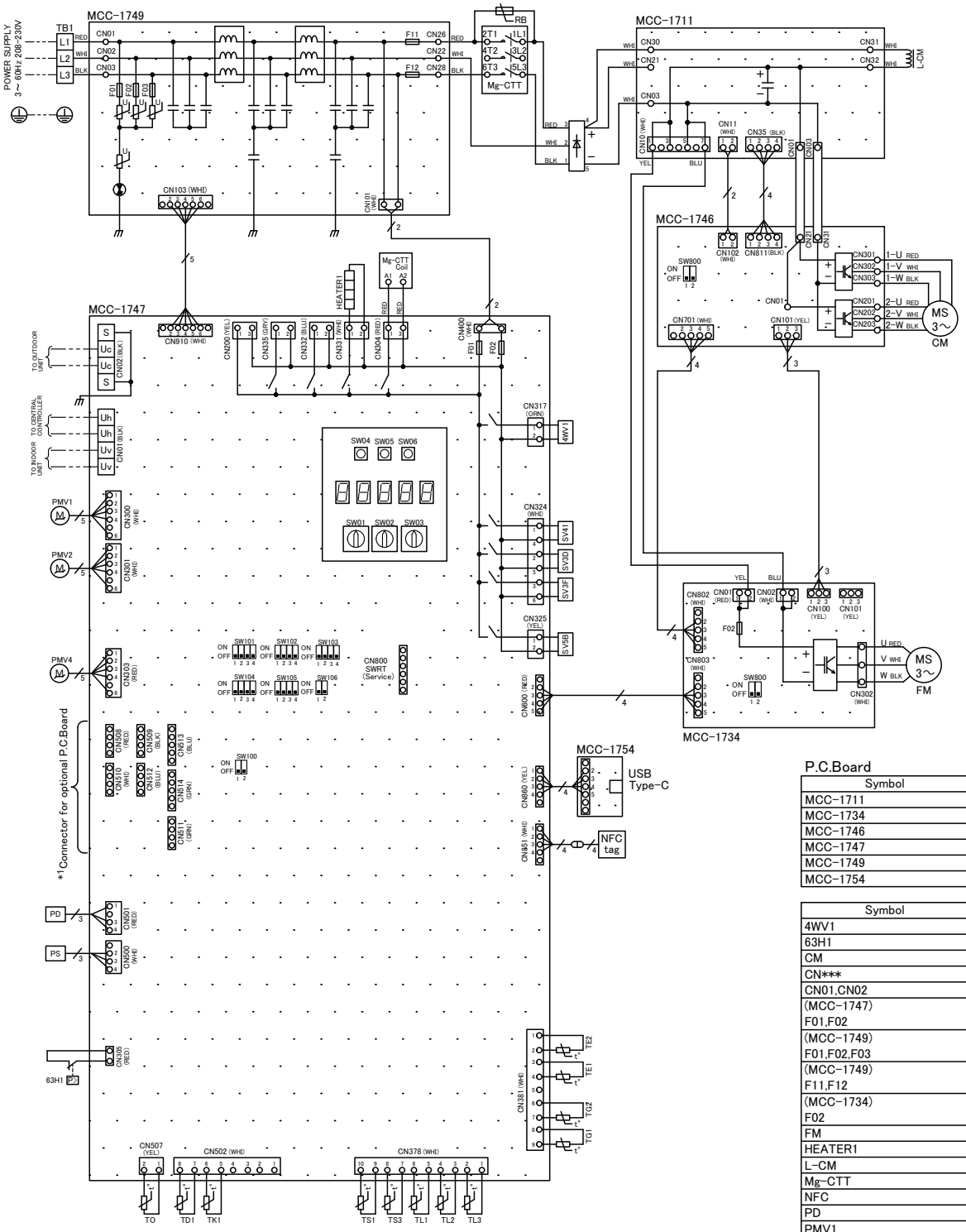
—·—·—	Field wiring
⏚	Protective earth
□□	Terminal block
—○—	Terminal
○○	Connector
▭	P.C.Board

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

Compressor terminal



Model :MMY-MUP0721HT9P-UL, MMY-MUP0961HT9P-UL, MMY-MUP072H1HT9PUL



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

P.C.Board

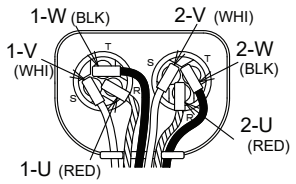
Symbol	Parts name
MCC-1711	Capacitor P.C.Board
MCC-1734	Inverter P.C.Board (Fan)
MCC-1746	Inverter P.C.Board (Compressor)
MCC-1747	Interface Control P.C.Board
MCC-1749	Noise filter P.C.Board
MCC-1754	USB isolate P.C.Board

Symbol	Parts name
4WV1	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(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
(MCC-1734) F02	Fuse (Fan) 12.5A 450VDC
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
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,TS3	Suction temp. sensor

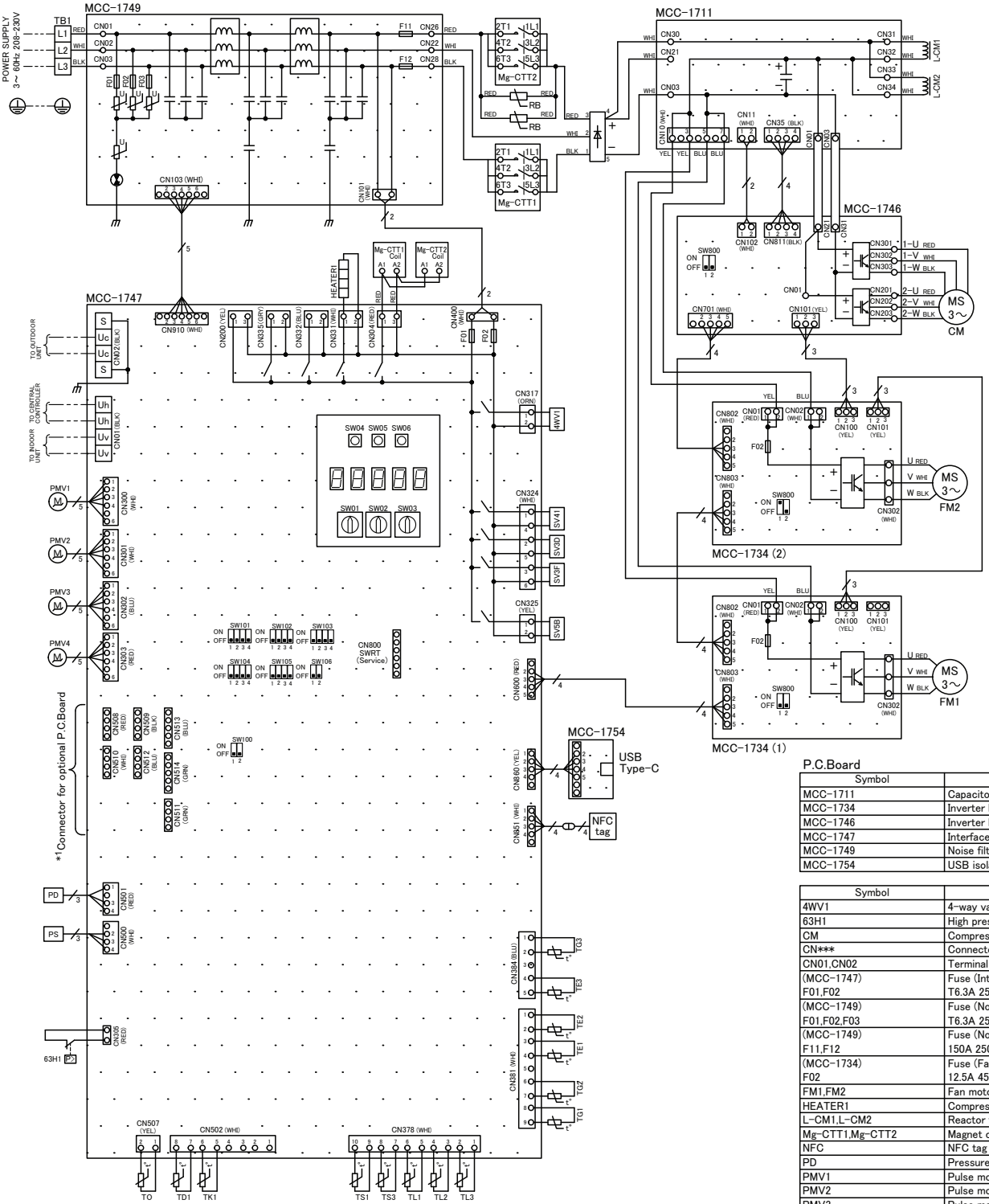
—·—·—	Field wiring
⏚	Protective earth
□□	Terminal block
—○—	Terminal
○○	Connector
·····	P.C.Board

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

Compressor terminal



Model :MMY-MUP1201HT9P-UL, MMY-MUP1441HT9P-UL, MMY-MUP1681HT9P-UL, MMY-MUP096H1HT9PUL, MMY-MUP120H1HT9PUL



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

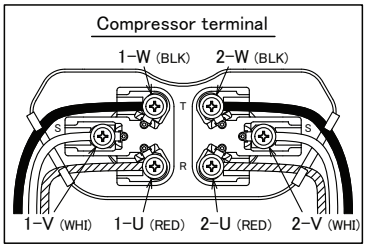
P.C.Board

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	4-way valve coil
63H1	High pressure switch
CM	Compressor
CN***	Connector
CN01,CN02	Terminal block(control wiring)
(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
(MCC-1734) F02	Fuse (Fan) 12.5A 450VDC
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
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,TS3	Suction temp. sensor

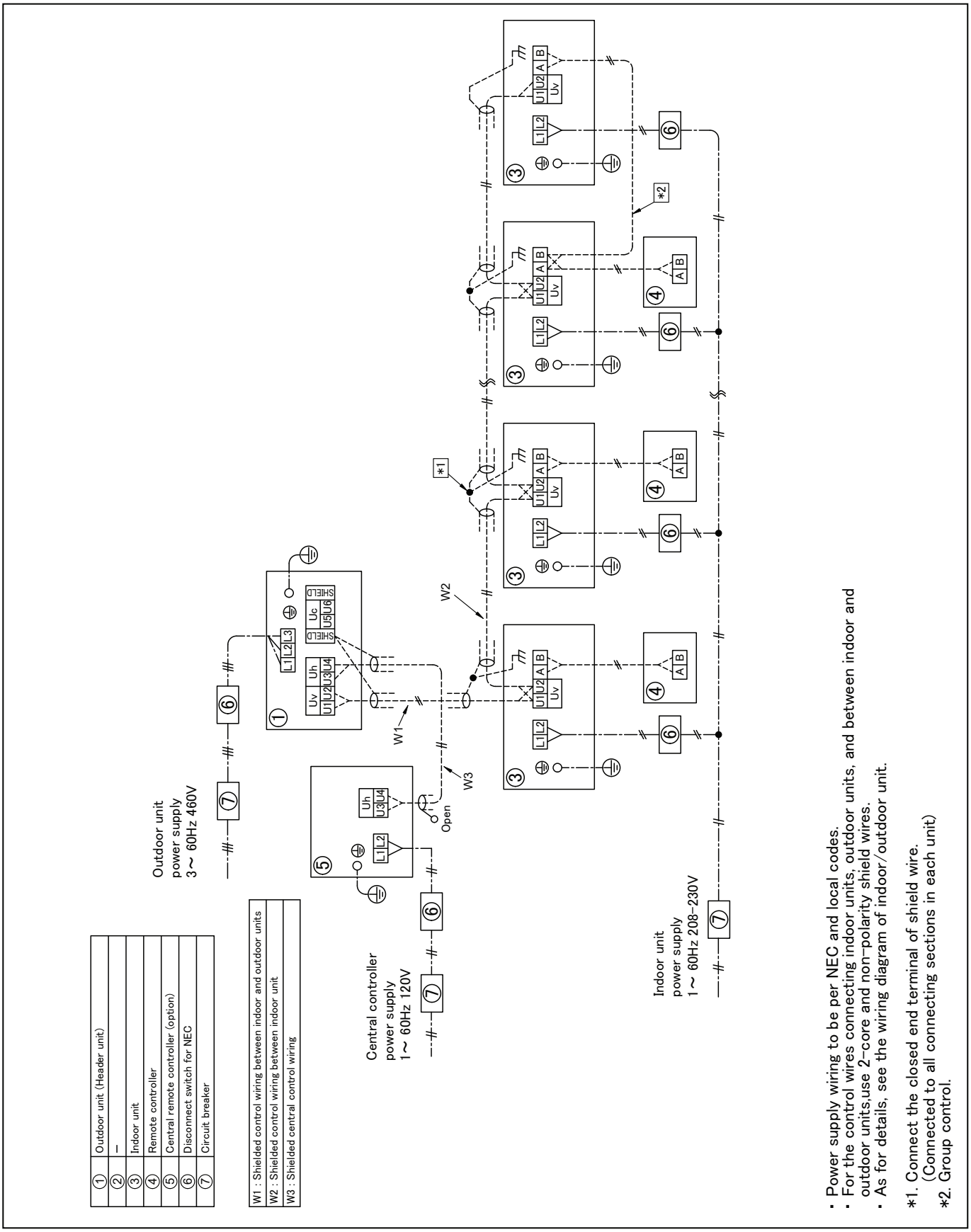
———	Field wiring
⏚	Protective earth
□□	Terminal block
—○—	Terminal
○○	Connector
┈┈	P.C.Board

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

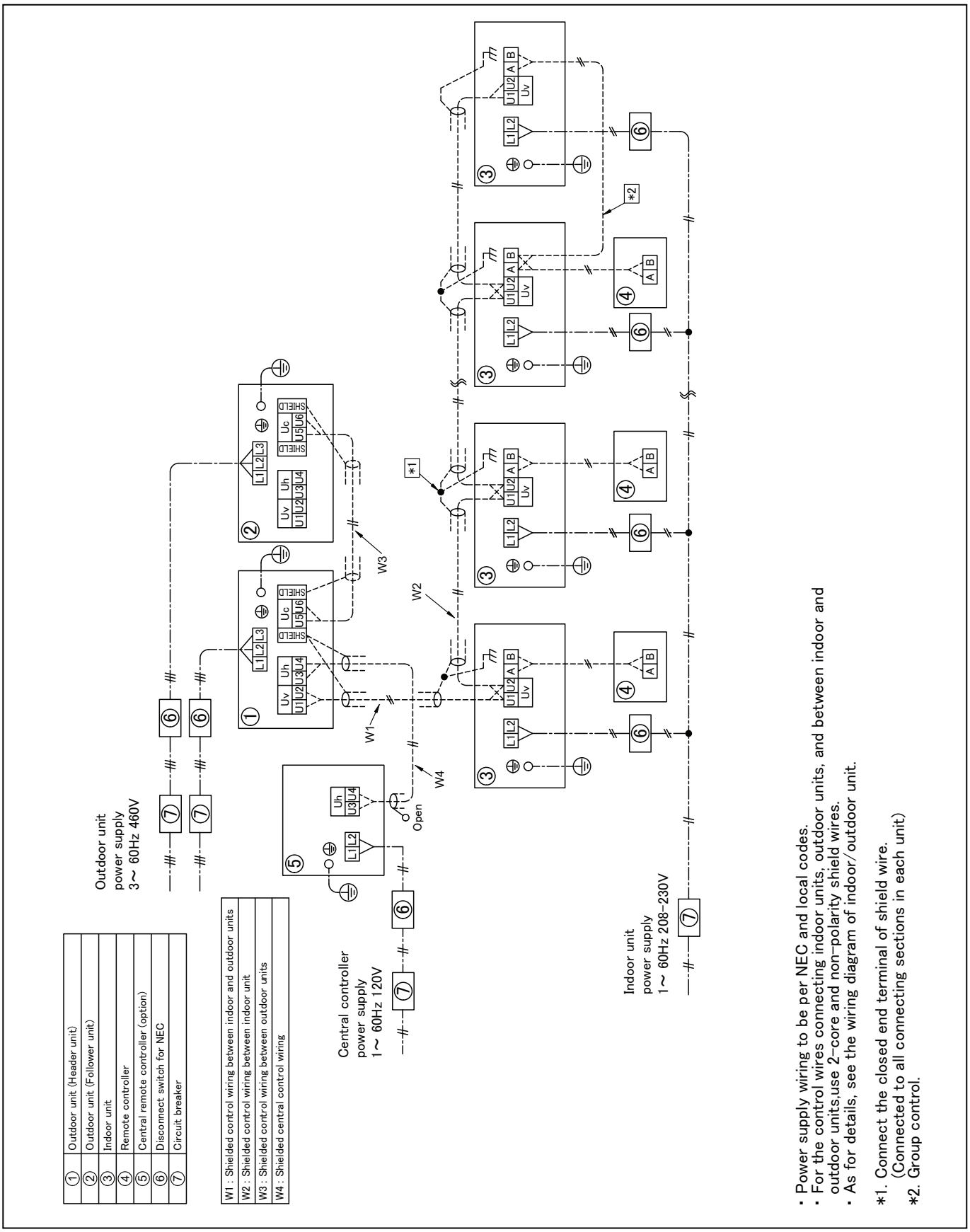


5-7. Connecting diagram

Model : MMY-MUP0721HT6P-UL, MMY-MUP0961HT6P-UL, MMY-MUP1201HT6P-UL, MMY-MUP1441HT6P-UL, MMY-MUP1681HT6P-UL, MMY-MUP1921HT6P-UL, MMY-MUP072H1HT6PUL, MMY-MUP096H1HT6PUL, MMY-MUP120H1HT6PUL



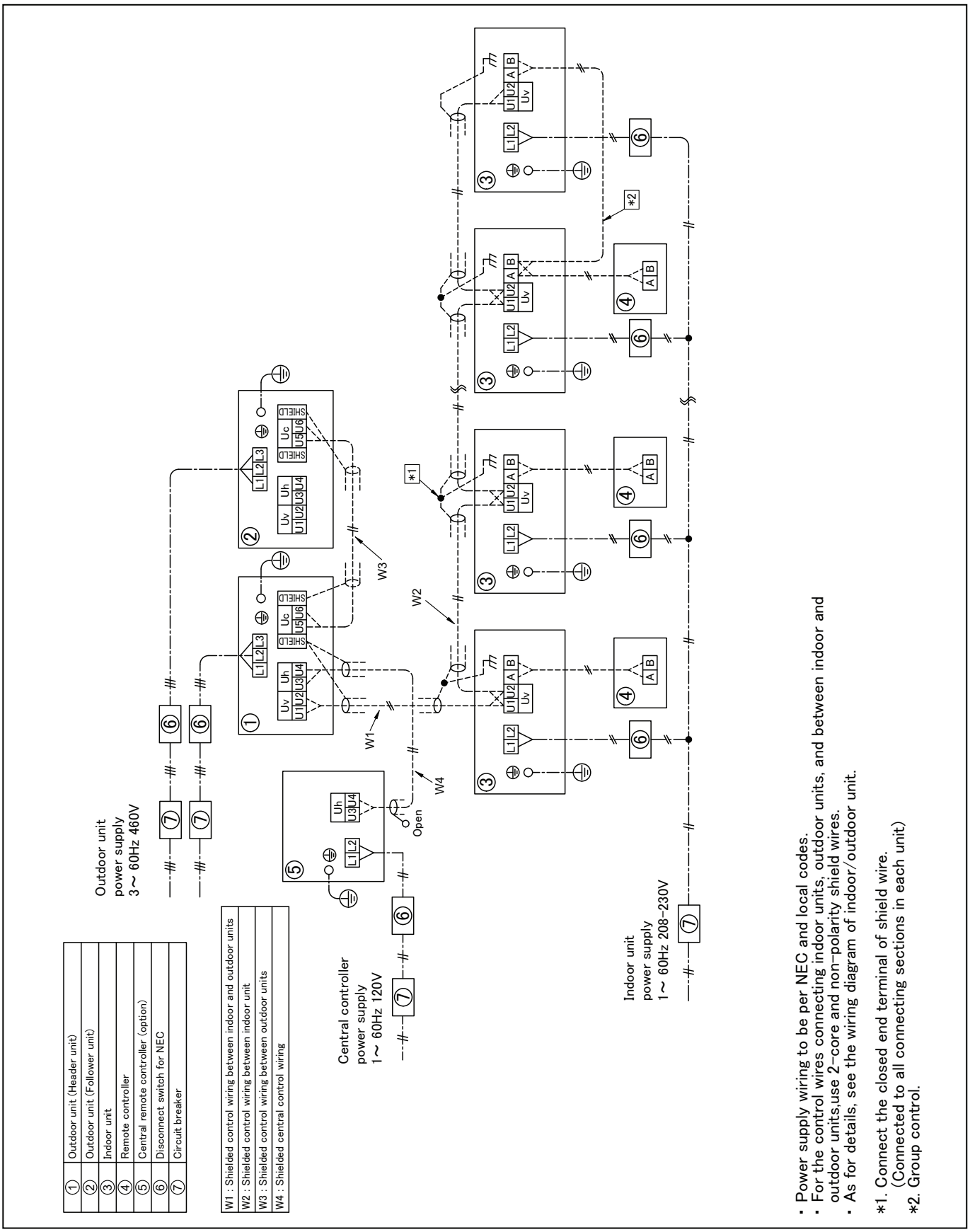
Model : MMY-UP1921HT6P-UL, MMY-UP2161HT6P-UL, MMY-UP2401HT6P-UL, MMY-UP2641HT6P-UL, MMY-UP2881HT6P-UL, MMY-UP3121HT6P-UL, MMY-UP3361HT6P-UL, MMY-UP144H1HT6PUL, MMY-UP192H1HT6PUL, MMY-UP240H1HT6PUL



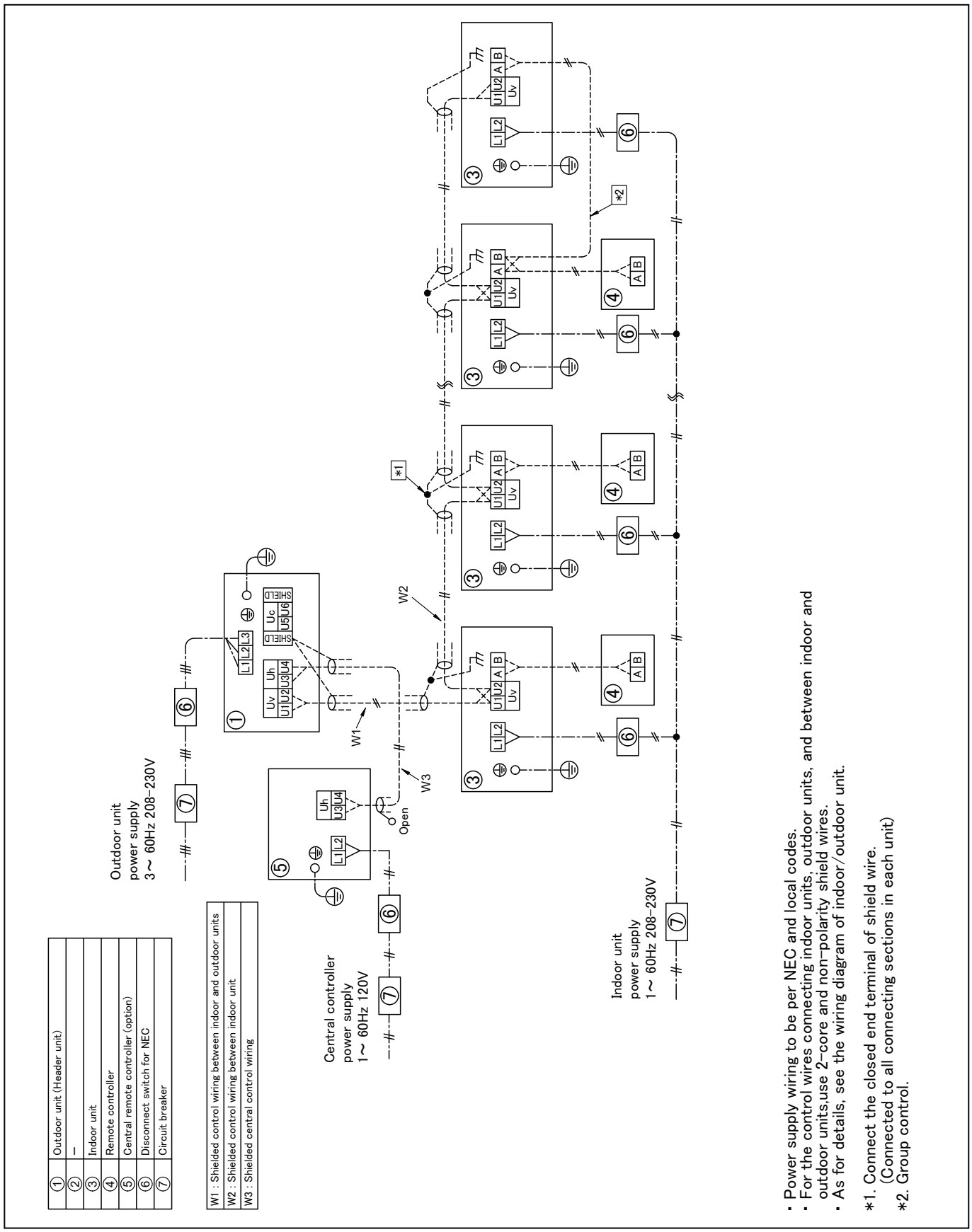
- Power supply wiring to be per NEC and local codes.
- For the control wires connecting indoor units, outdoor units, and between indoor and outdoor units,use 2-core and non-polarity shield wires.
- As for details, see the wiring diagram of indoor/outdoor unit.

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

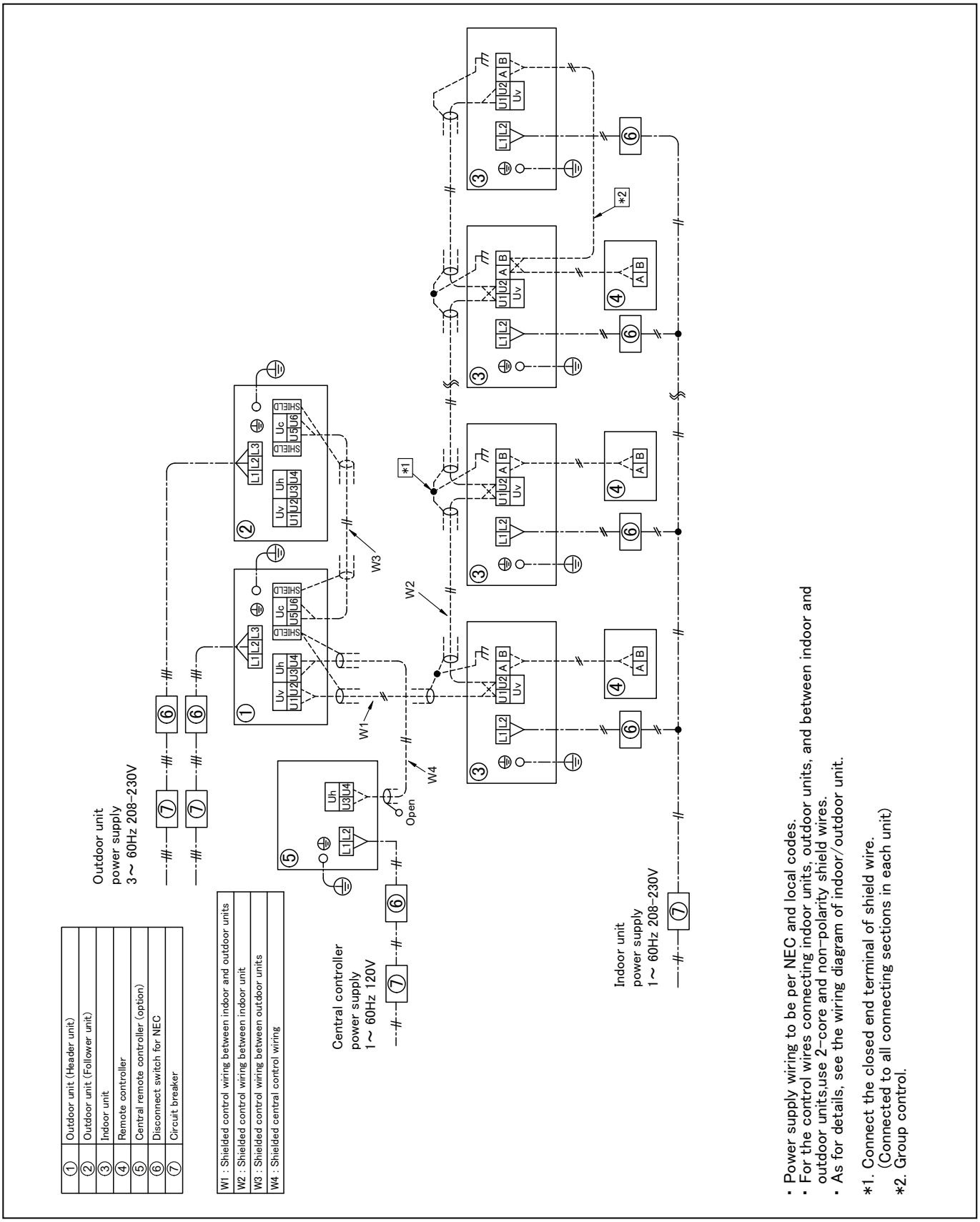
Model : MMY-UP3601HT6P-UL, MMY-UP3841HT6P-UL, MMY-UP4081HT6P-UL, MMY-UP4321HT6P-UL, MMY-UP4561HT6P-UL, MMY-UP4801HT6P-UL, MMY-UP288H1HT6PUL, MMY-UP360H1HT6PUL



Model : MMY-MUP0721HT9P-UL, MMY-MUP0961HT9P-UL, MMY-MUP1201HT9P-UL, MMY-MUP1441HT9P-UL, MMY-MUP1681HT9P-UL, MMY-MUP072H1HT9PUL, MMY-MUP096H1HT9PUL, MMY-MUP120H1HT9PUL



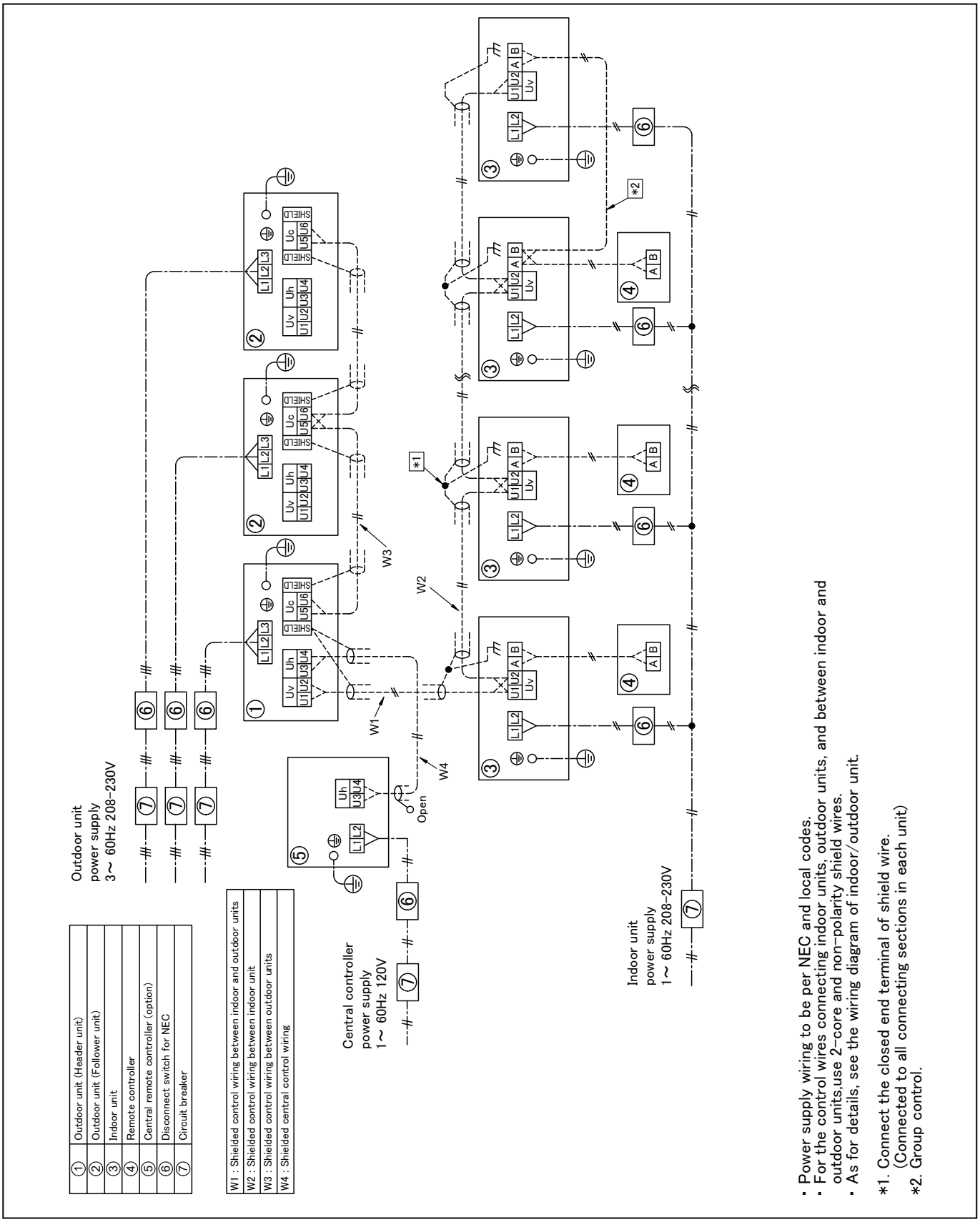
Model : MMY-UP1921HT9P-UL, MMY-UP2161HT9P-UL, MMY-UP2401HT9P-UL, MMY-UP2641HT9P-UL, MMY-UP2881HT9P-UL, MMY-UP3121HT9P-UL, MMY-UP3361HT9P-UL, MMY-UP144H1HT9PUL, MMY-UP192H1HT9PUL, MMY-UP240H1HT9PUL



- 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 unit.

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

Model : MMY-UP3601HT9P-UL, MMY-UP3841HT9P-UL, MMY-UP4081HT9P-UL, MMY-UP4321HT9P-UL, MMY-UP4561HT9P-UL, MMY-UP4801HT9P-UL, MMY-UP288H1HT9PUL, MMY-UP360H1HT9PUL



- 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 unit.

*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 support and priority operation mode setting (cooling / heating / number of units / or priority indoor unit) functions are made available by setting relevant switches provided on the interface P.C. board of the outdoor unit.

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

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 Operation
This function must be enabled with every discharge duct connected outdoor unit both of the header and follower 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 specified in the table below. If a discharge duct with a resistance greater than 0.06inH20 (15Pa) is to be used, enable this function. The maximum external static pressures of base units are shown below (Table 1). In the case of combined use of multiple outdoor units, set all the units to the same maximum external static pressure as the one with the lowest pressure (see Table 2).

Table 1: Maximum External Static Pressure of Base Outdoor Units

MMY-MUP	0721HT*P-UL	0961HT*P-UL	1201HT*P-UL	1441HT*P-UL	1681HT*P-UL	1921HT6P-UL
inH20	0.321	0.321	0.321	0.321	0.321	0.321
cfm	5650	6180	7770	8650	8670	9780

MMY-MUP	072H1HT* PUL	096H1HT* PUL	120H1HT* PUL
inH20	0.321	0.321	0.321
cfm	6340	7770	7415

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

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

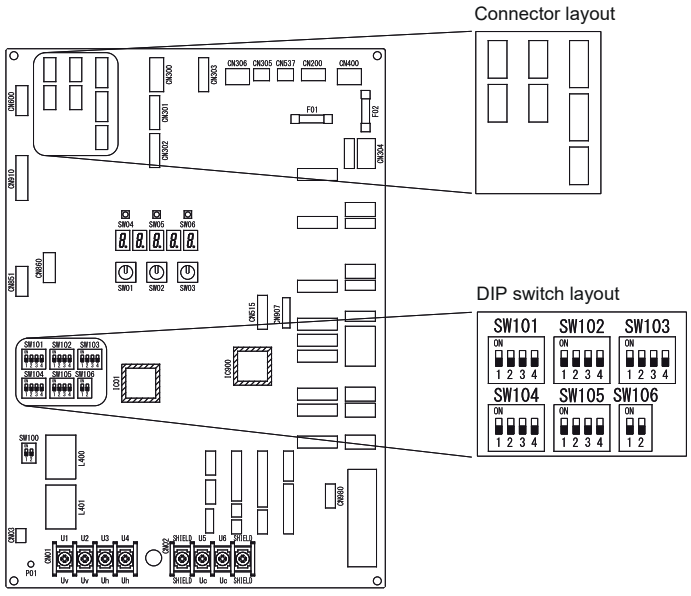
Outdoor unit DN Code (O.DN)	[00C]	[00D]
Value	19	35

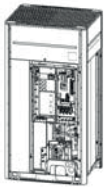
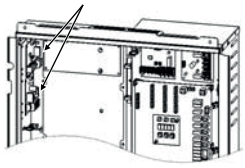
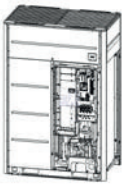
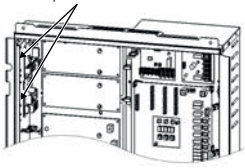
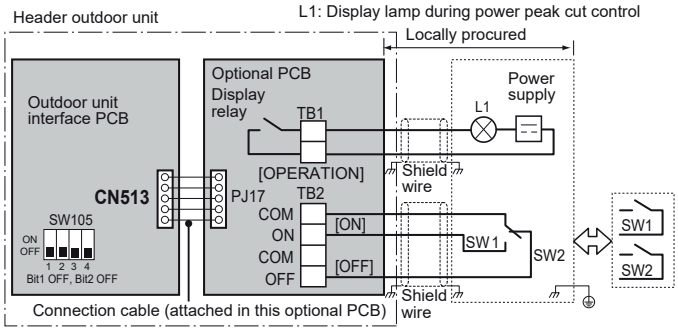
Outdoor unit DN Code (O.DN) [00A], [00B]
Criteria value setting for a maximum heating power
(e.g.) When the maximum standard value of heating power consumption is set as 14.00 kW = 14.00kW

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 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 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 >**

	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)

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

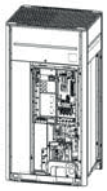
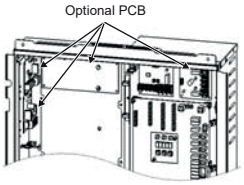
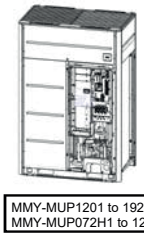
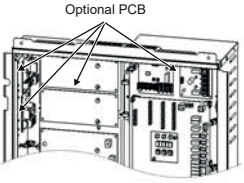
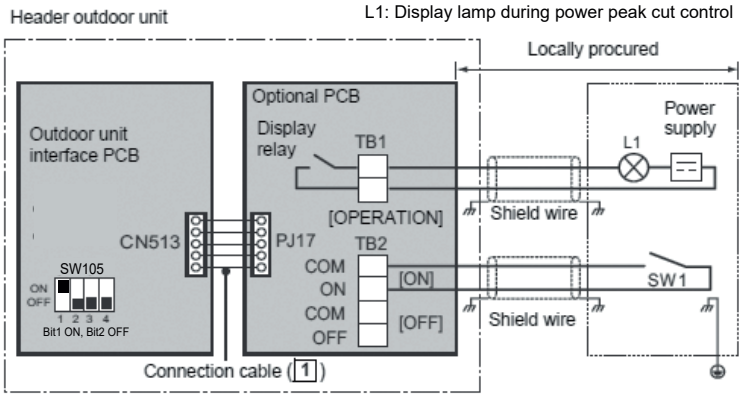
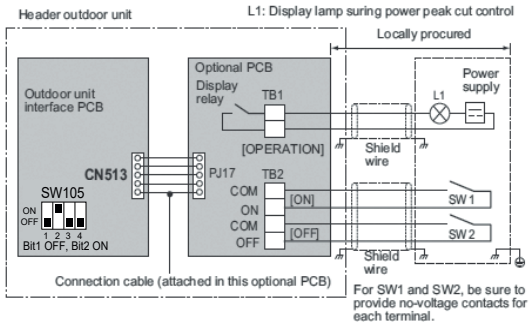
Outdoor unit DN Code (O.DN) [00E]	X
0	100%
1	95%
2	90%
3	85%
4	80%
5	75%
6	70%
7	65%
8	60%
9	55%
10	50%
15 (factory default)	0% (forced stop)

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  Optional PCB  MMY-MUP1201 to 1921, MMY-MUP072H1 to 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 SMMS-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

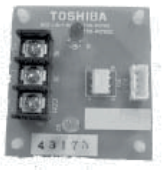
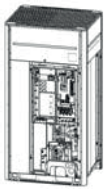
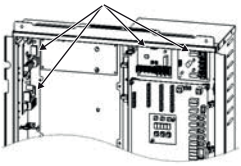
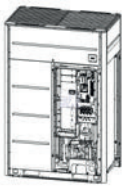
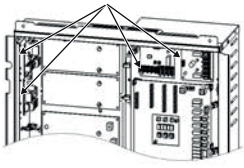
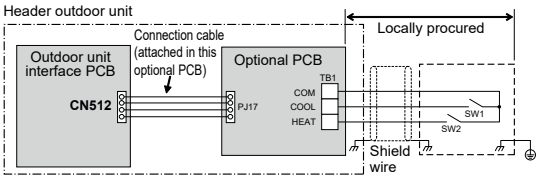
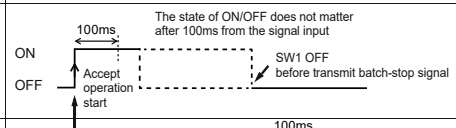
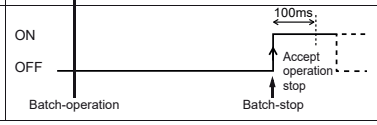
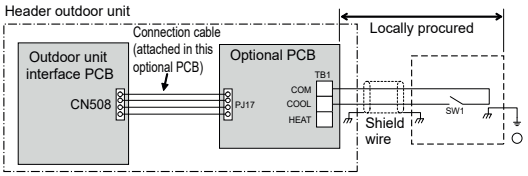
Outdoor DN Code (O.DN)	[00A]	[00B]
Value	14	00

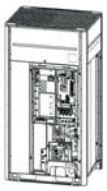
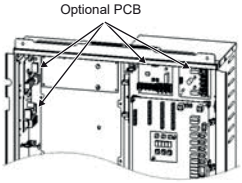
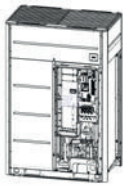
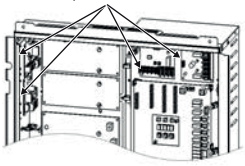
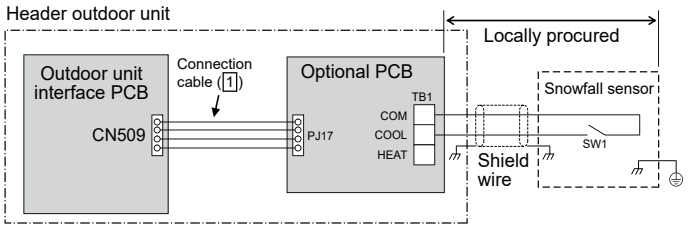
[3] When an ON signal is input from the optional PCB, peak cut control by power consumption is enabled.
The way to input the ON signal is the same as with normal peak cut control. Refer to the sections on “Standard Specifications”, “For one input function” and “Enhanced Specifications”.

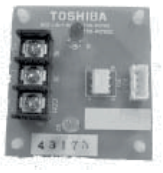
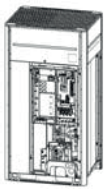
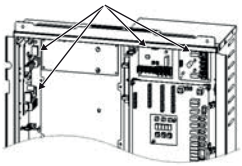
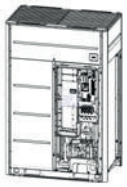
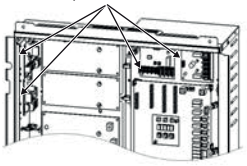
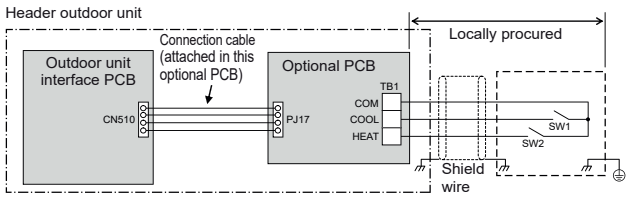
Based on the upper power limit reference values registered in [2], the outdoor unit capacity is adjusted so that the upper limit control value set with Outdoor DN Code (O.DN) [00E], [00F], and [010] is not exceeded.

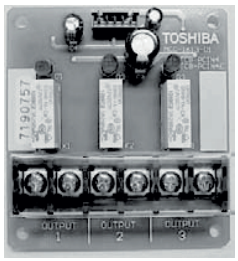
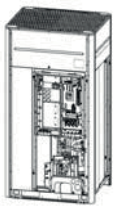
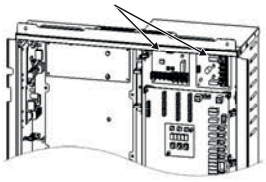
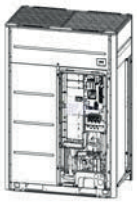
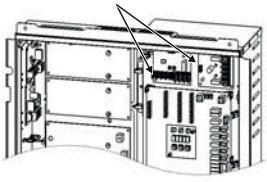
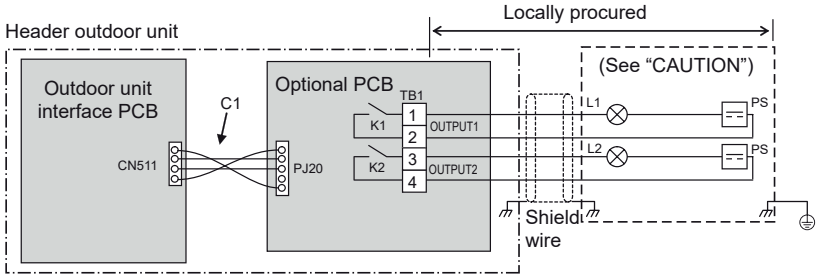
NOTE:

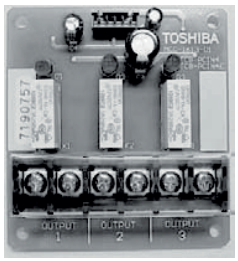
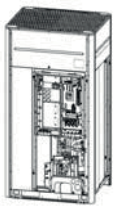
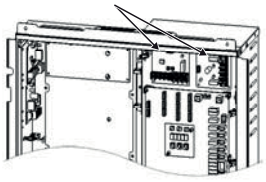
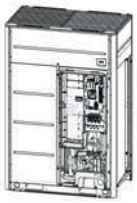
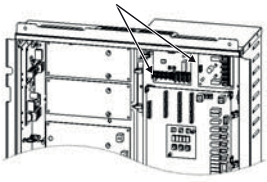
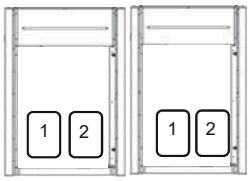
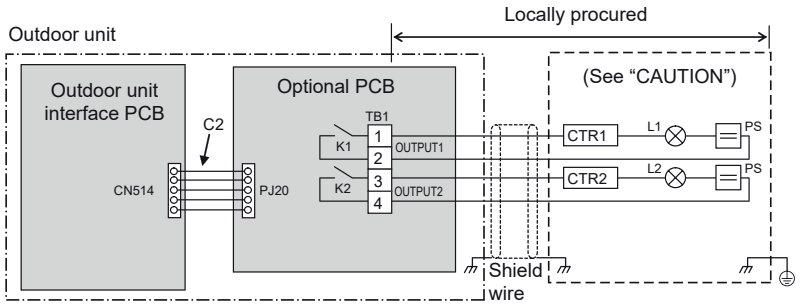
* To protect the cycle, peak cut control by power consumption may not be carried out. (During defrosting operation, oil recovery operation, coolant recovery operation, etc.)
* The value of power consumption is computed by estimation, so an error of about ±5% from the actual value occurs.
  If you want 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 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 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 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 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.) Cooling (SW1) — 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 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 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.

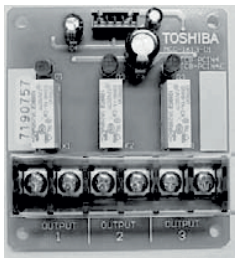
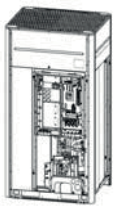
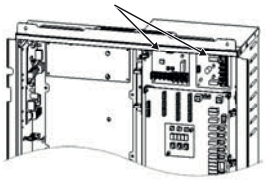
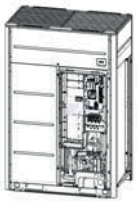
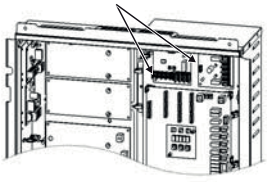
Model name	Appearance	Function
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in) **Application**  MMY-MUP0721,0961 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[6] Error / Operation Output** • Feature Operation 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 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 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**  Outdoor unit Locally procured 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.

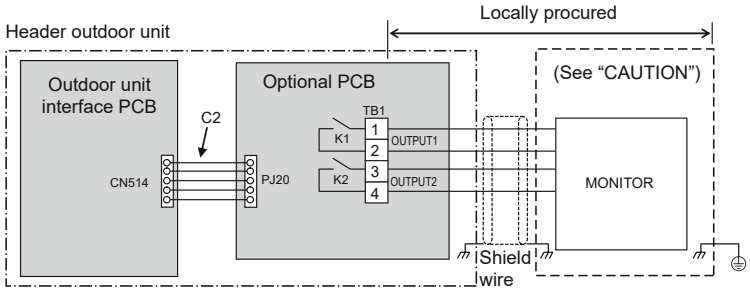
<Electrical Rating>
208 to 230VAC, 10 mA or more, 1 A or less
24 VAC, 10 mA or more, 1 A or less (non-conductive load)

Model name	Appearance	Function
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in) **Application**  MMY-MUP0721,0961 Optional PCB   MMY-MUP1201 to 1921, MMY-MUP072H1 to 120H1 Optional PCB  (max. number installed: 1pc) * Install the optional PCB in the outdoor header unit.	**[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

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.

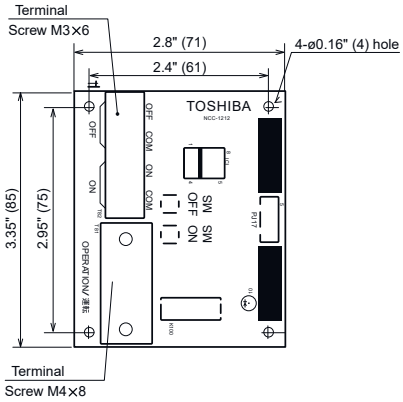
Note1: Output Relay (K1, K2) Contact Specifications
- Output terminals (OUTPUT1, 2) must satisfy the following electrical rating.
- When connecting a conductive load (e.g. relay coil) to loads K1 and K2, insert a surge killer CR (for an AC power supply) or a diode for preventing back electromotive force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

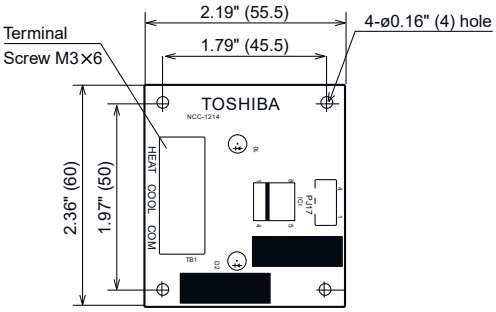
Dimensions of P.C. board

Unit: in (mm)

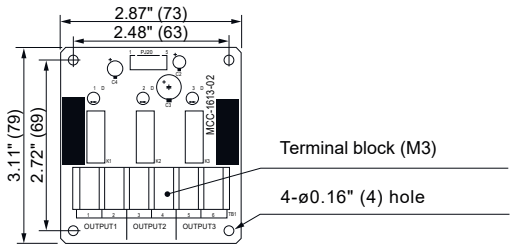
TCB-PCDM4UL



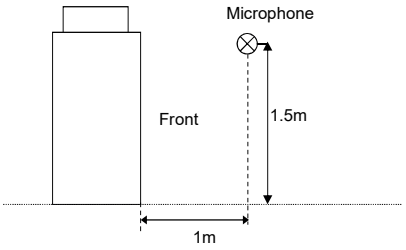
TCB-PCMO4UL



TCB-PCIN4UL



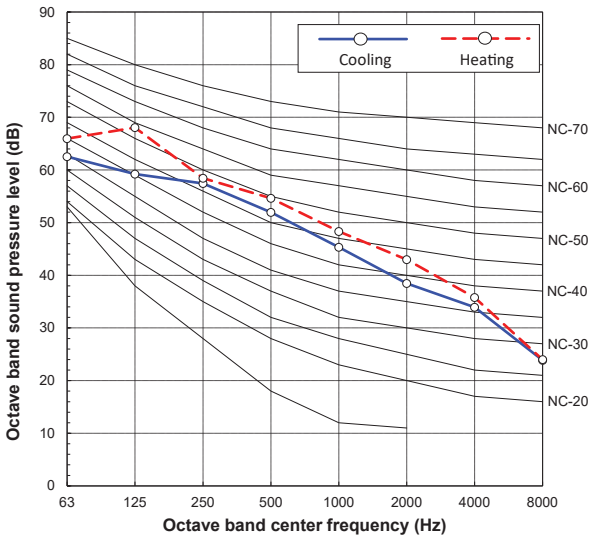
5-10. Sound data (NC curve)



Standard model

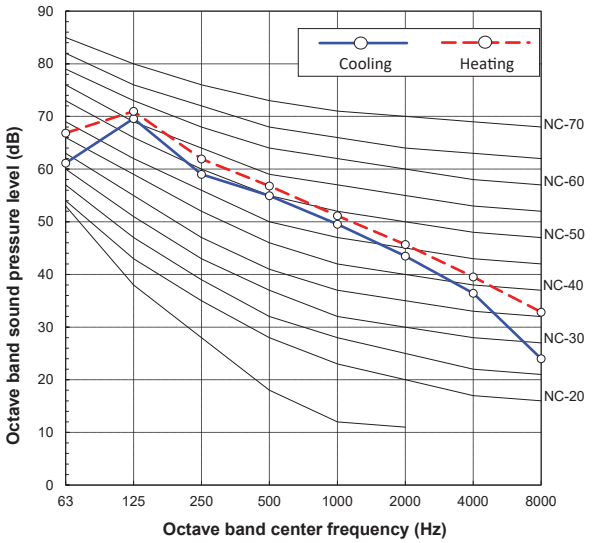
MMY-MUP0721HT6P-UL / MMY-MUP0721HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	53.0	56.0



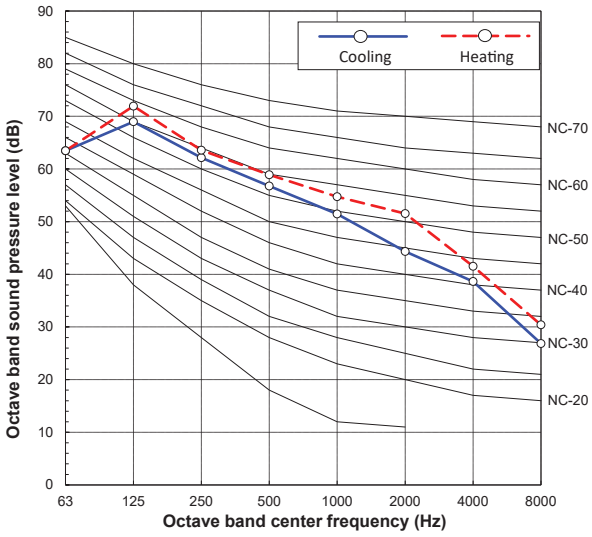
MMY-MUP0961HT6P-UL / MMY-MUP0961HT9P-UL

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



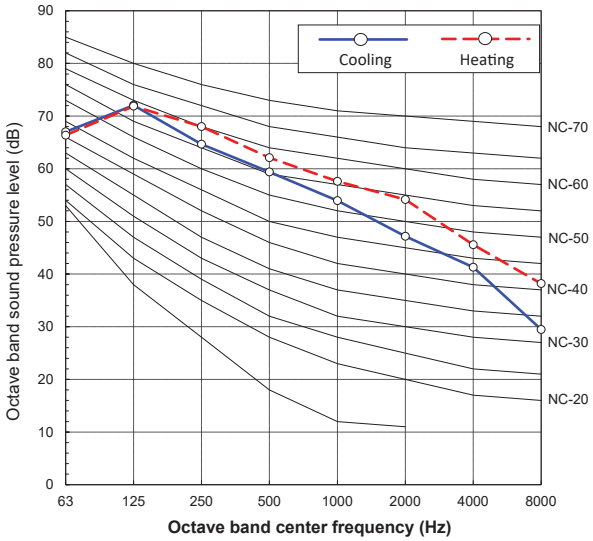
MMY-MUP1201HT6P-UL / MMY-MUP1201HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	61.0



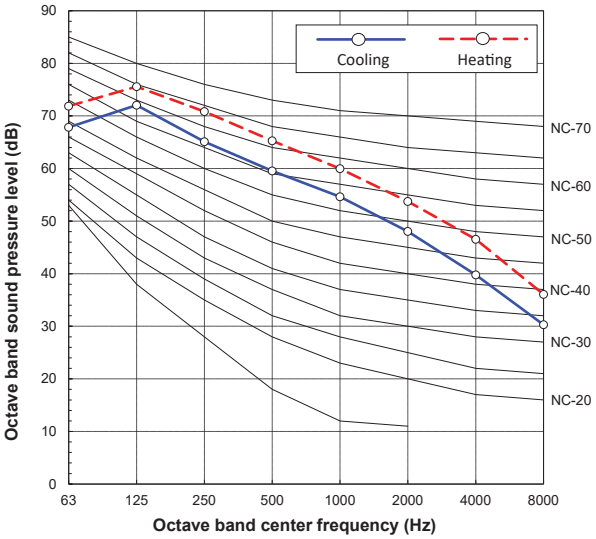
MMY-MUP1441HT6P-UL / MMY-MUP1441HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	64.0



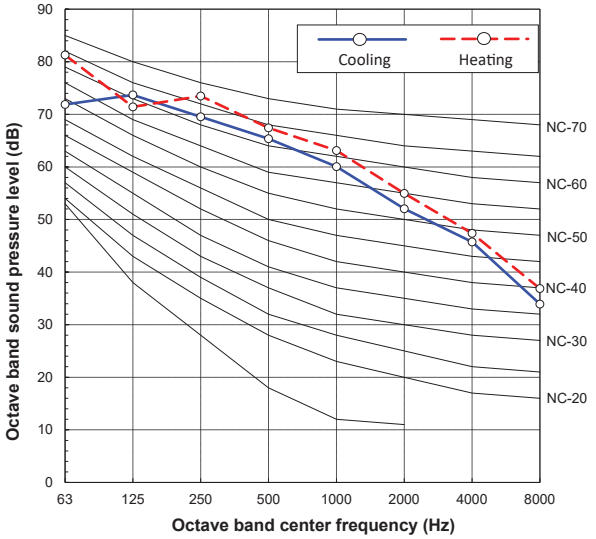
MMY-MUP1681HT6P-UL / MMY-MUP1681HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	67.0



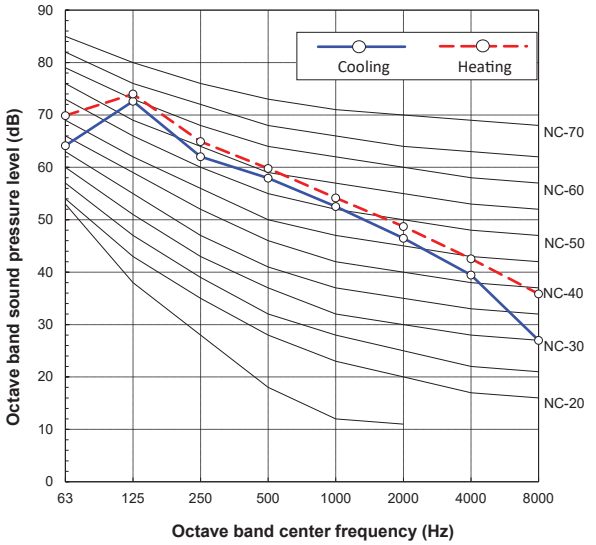
MMY-MUP1921HT6P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	67.0



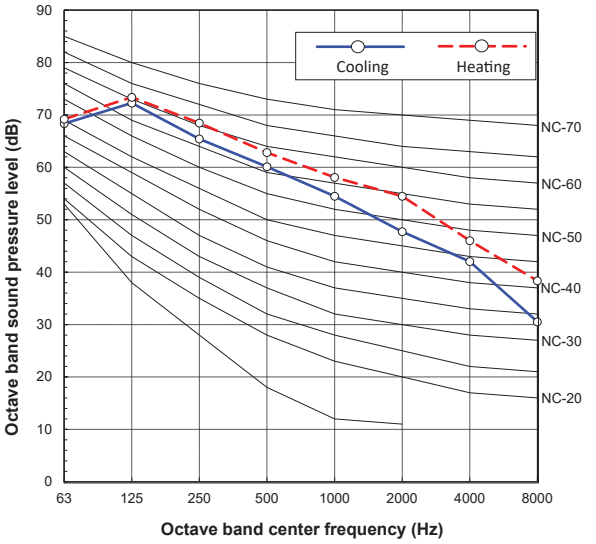
MMY-UP1921HT6P-UL / MMY-UP1921HT9P-UL

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



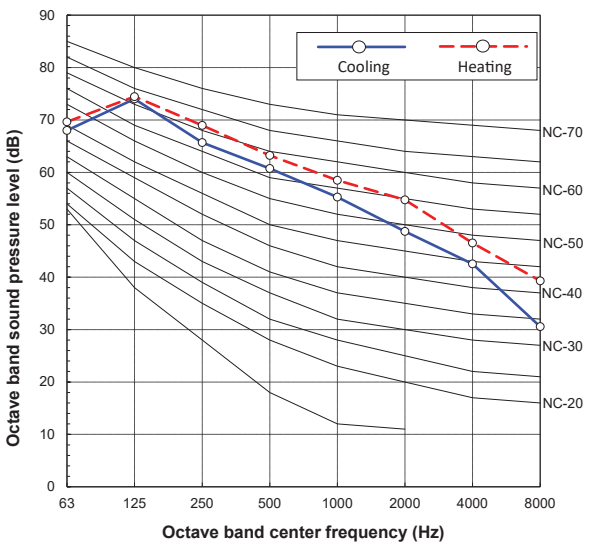
MMY-UP2161HT6P-UL / MMY-UP2161HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	61.6	64.6



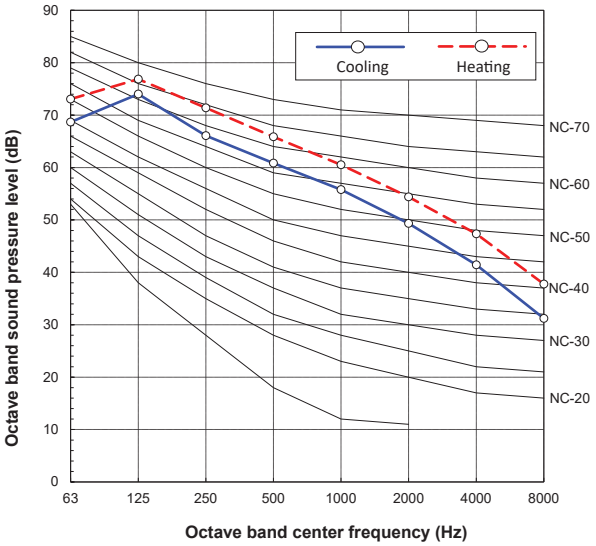
MMY-UP2401HT6P-UL / MMY-UP2401HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	62.2	65.2



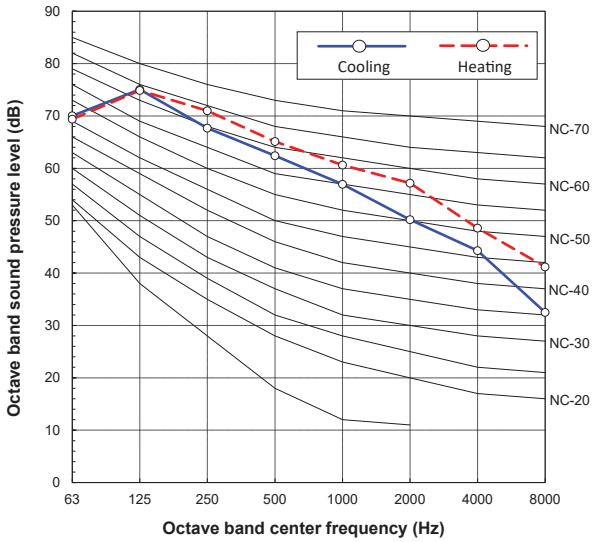
MMY-UP2641HT6P-UL / MMY-UP2641HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	62.2	67.6



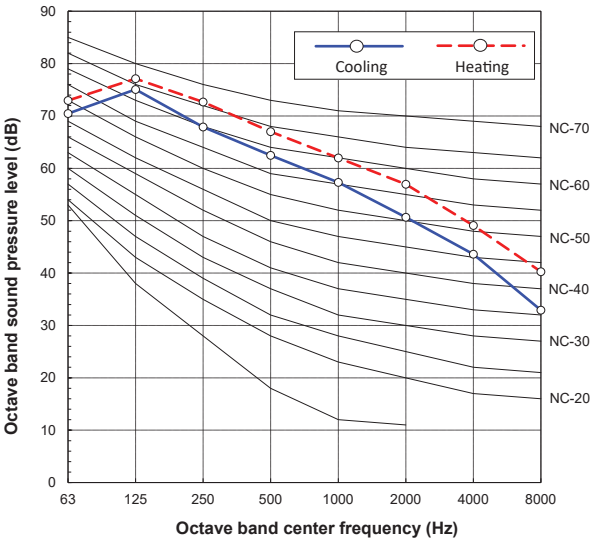
MMY-UP2881HT6P-UL / MMY-UP2881HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	67.0



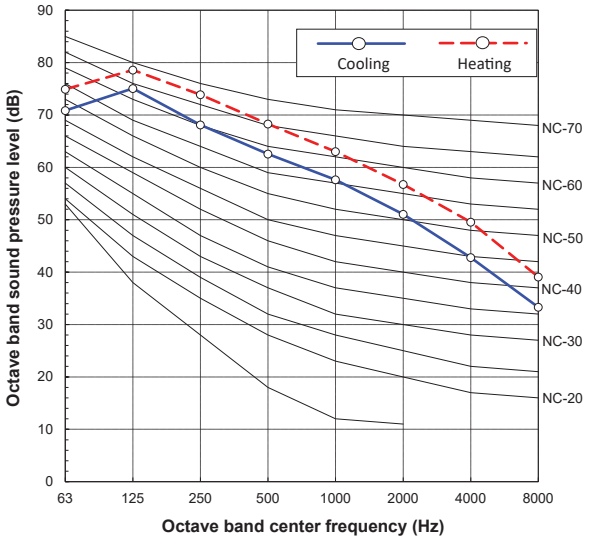
MMY-UP3121HT6P-UL / MMY-UP3121HT9P-UL

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



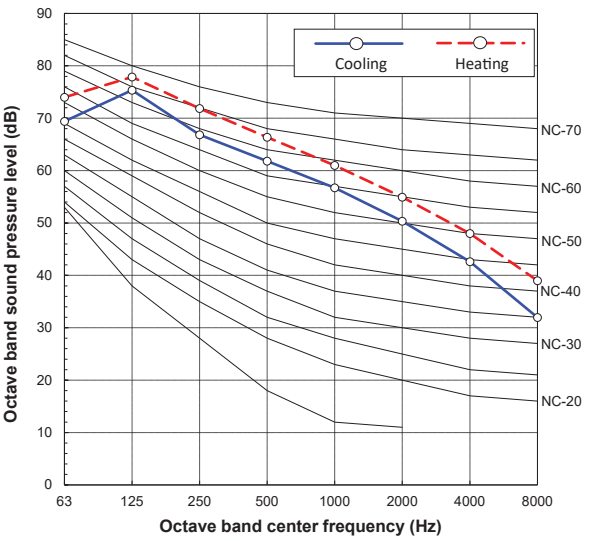
MMY-UP3361HT6P-UL / MMY-UP3361HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.0	67.0



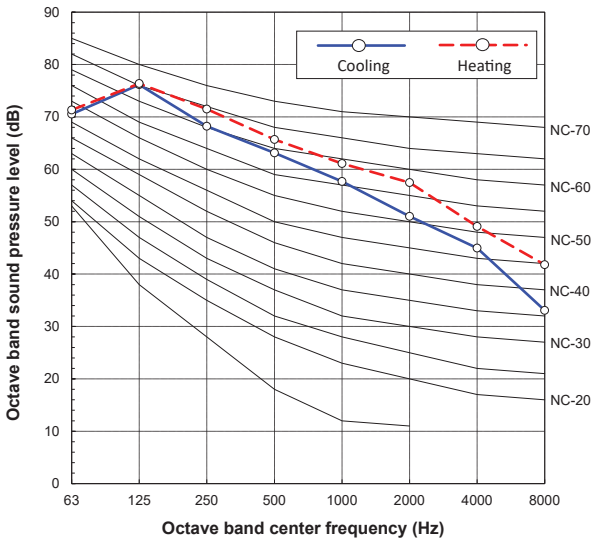
MMY-UP3601HT6P-UL / MMY-UP3601HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	63.1	68.2



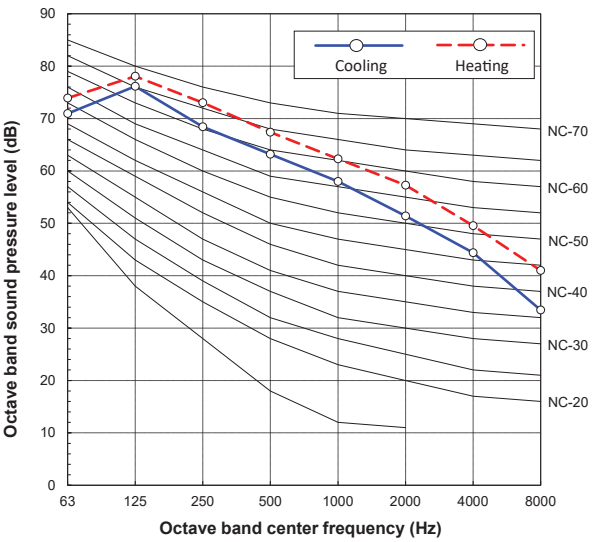
MMY-UP3841HT6P-UL / MMY-UP3841HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.6	67.6



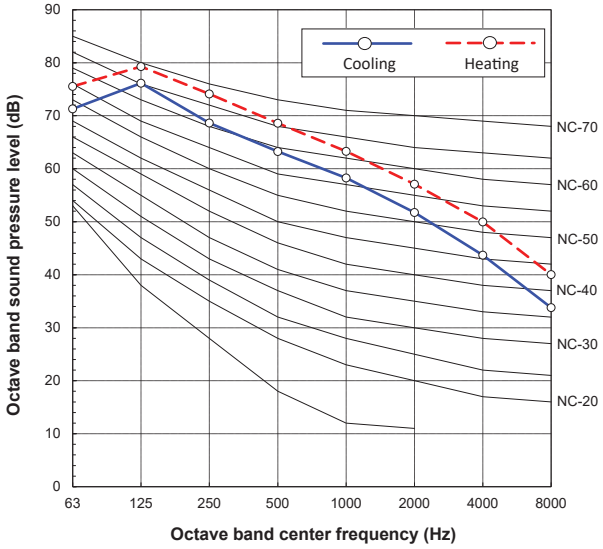
MMY-UP4081HT6P-UL / MMY-UP4081HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.6	69.2



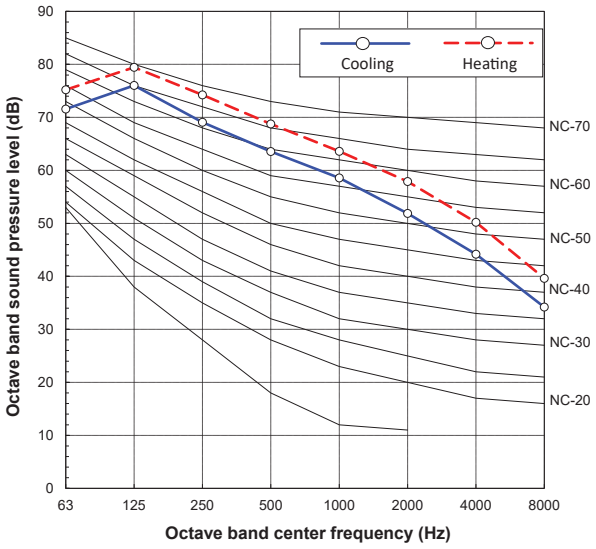
MMY-UP4321HT6P-UL / MMY-UP4321HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	64.6	70.3



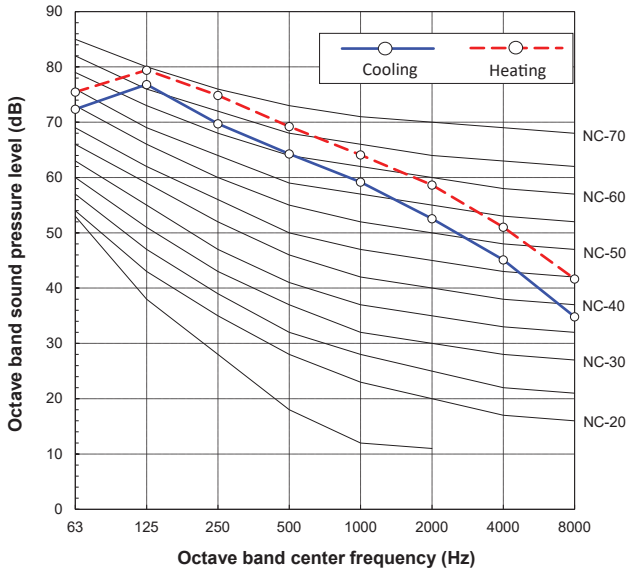
MMY-UP4561HT6P-UL / MMY-UP4561HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	65.0	70.5



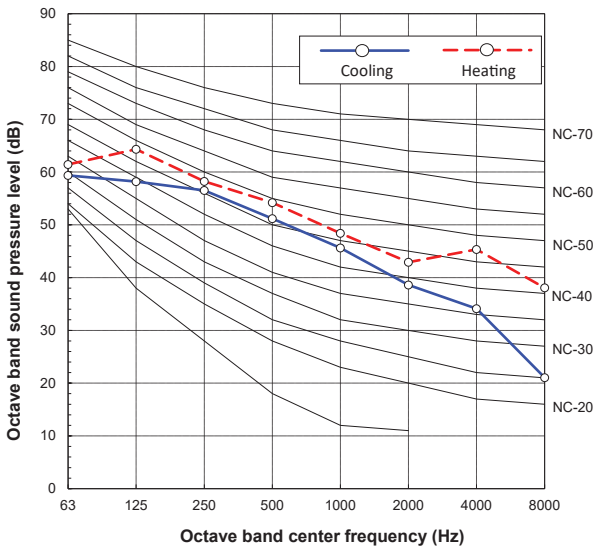
MMY-UP4801HT6P-UL / MMY-UP4801HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	65.8	71.0



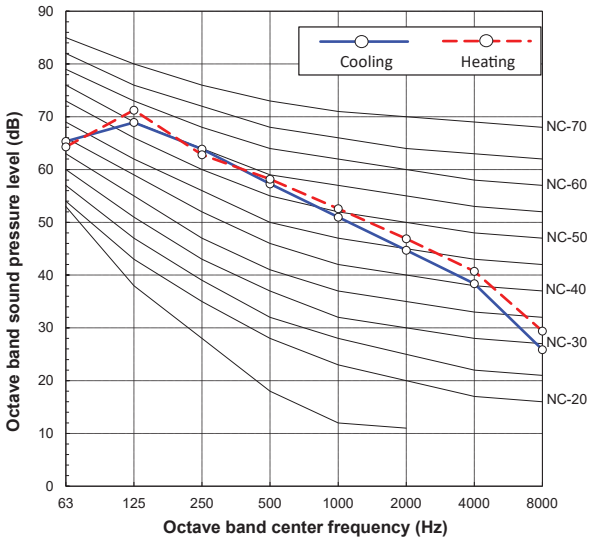
MMY-MUP072H1HT6PUL / MMY-MUP072H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	53.0	56.0



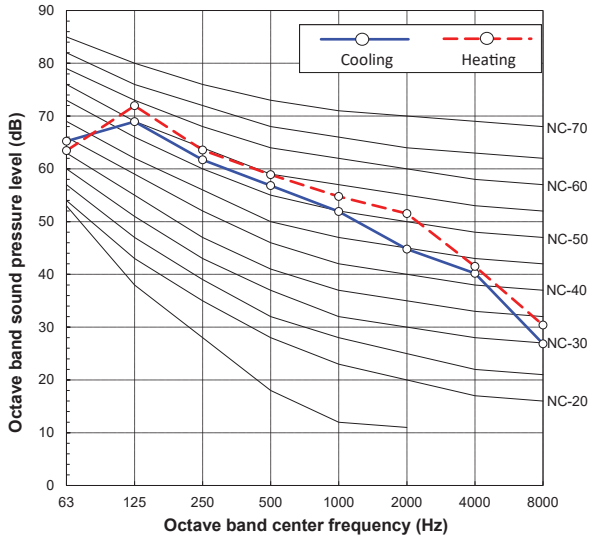
MMY-MUP096H1HT6PUL / MMY-MUP096H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	60.0



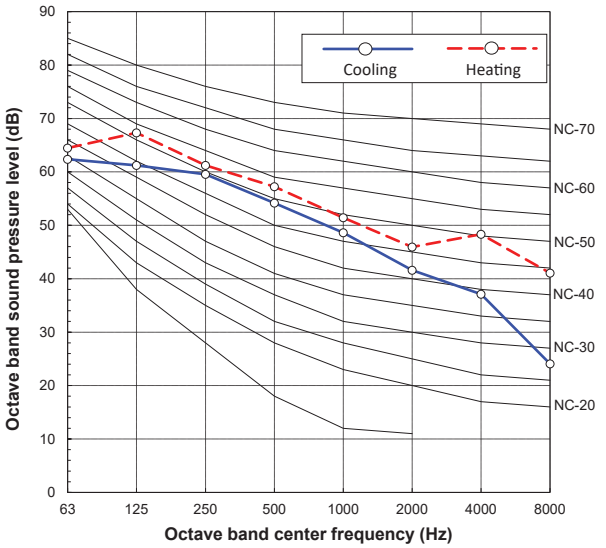
MMY-MUP120H1HT6PUL / MMY-MUP120H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.0	60.0



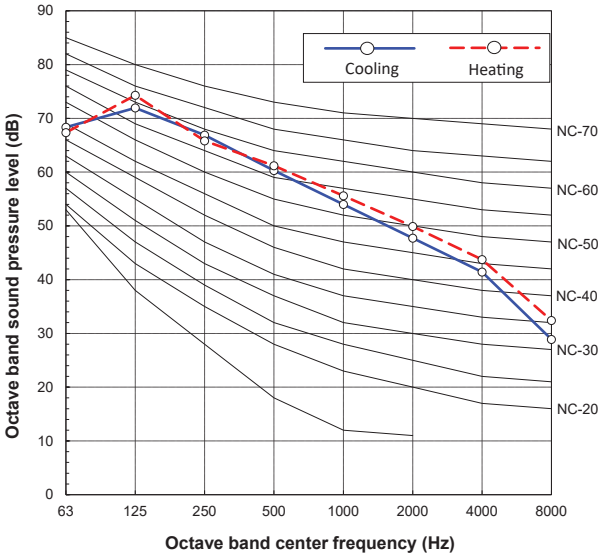
MMY-UP144H1HT6PUL / MMY-UP144H1HT9PUL

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



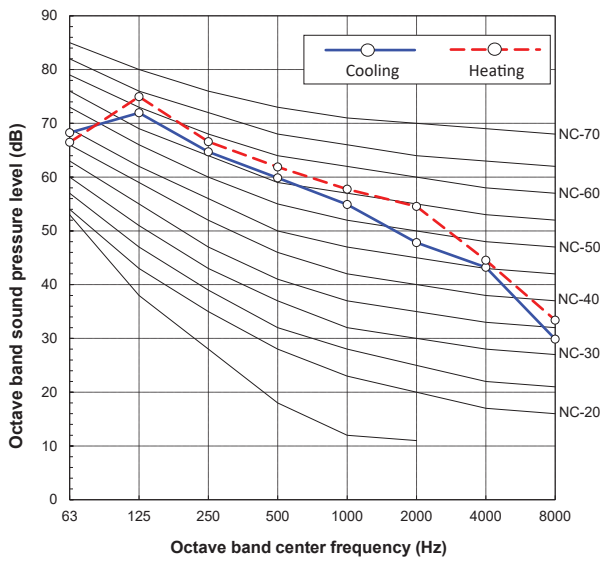
MMY-UP192H1HT6PUL / MMY-UP192H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	63.0



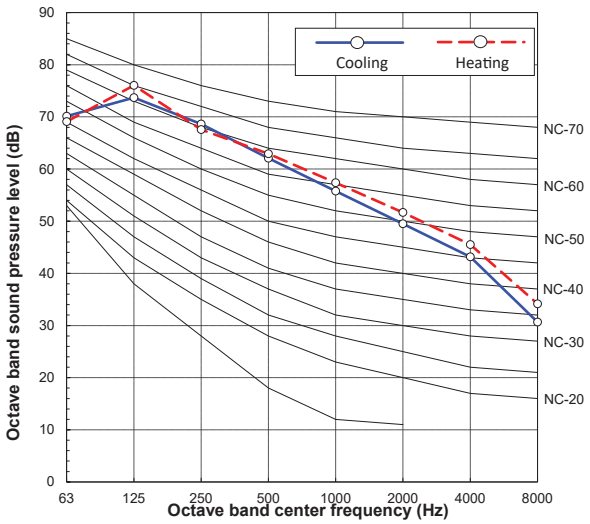
MMY-UP240H1HT6PUL / MMY-UP240H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	61.0	63.0



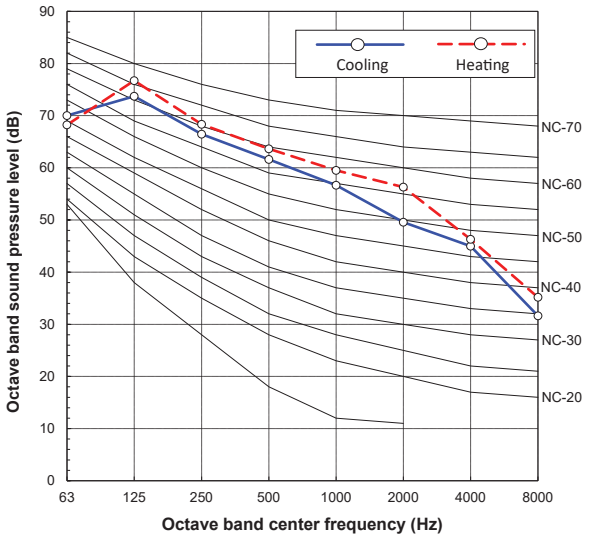
MMY-UP288H1HT6PUL / MMY-UP288H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	62.8	64.8

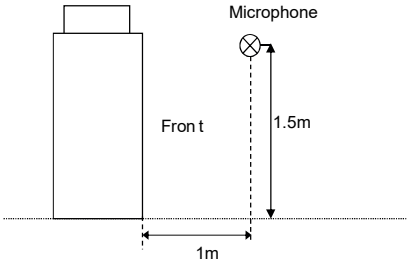


MMY-UP360H1HT6PUL / MMY-UP360H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	62.8	64.8



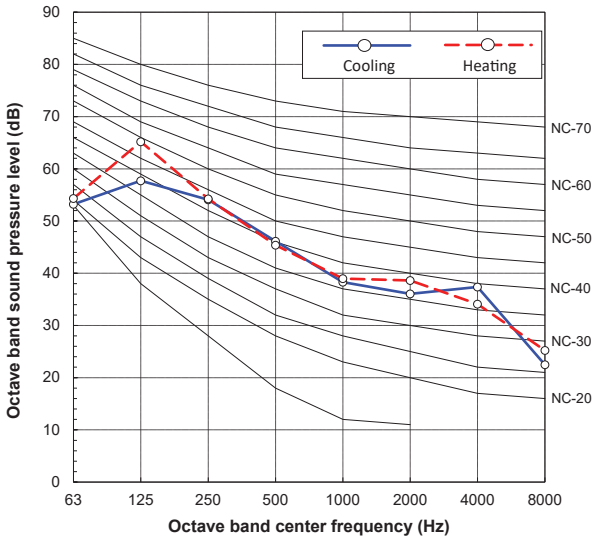
5-11. Sound data (NC curve - Night operation mode)



Standard model

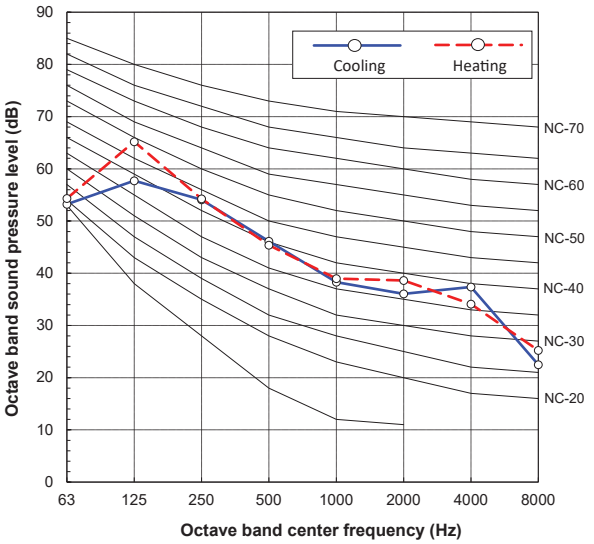
MMY-MUP0721HT6P-UL / MMY-MUP0721HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	50.0	50.0



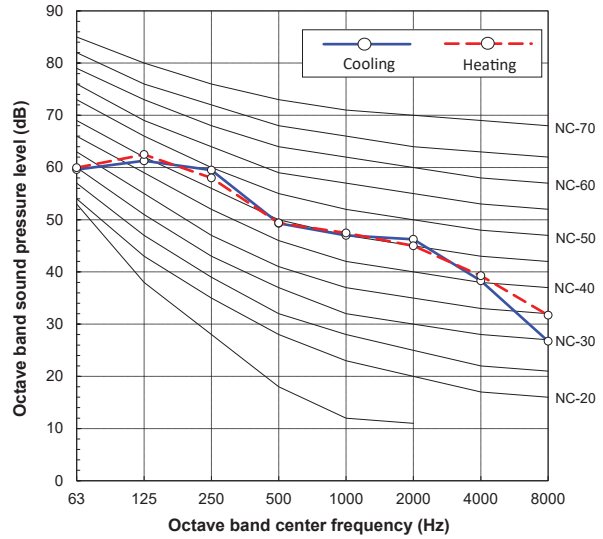
MMY-MUP0961HT6P-UL / MMY-MUP0961HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	50.0	50.0



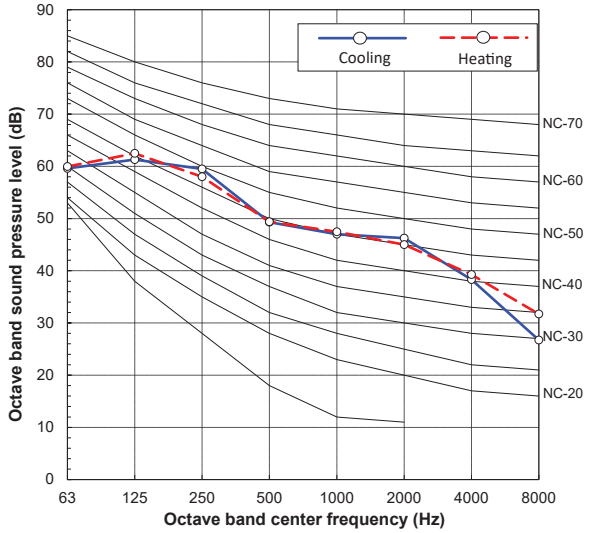
MMY-MUP1201HT6P-UL / MMY-MUP1201HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	53.0



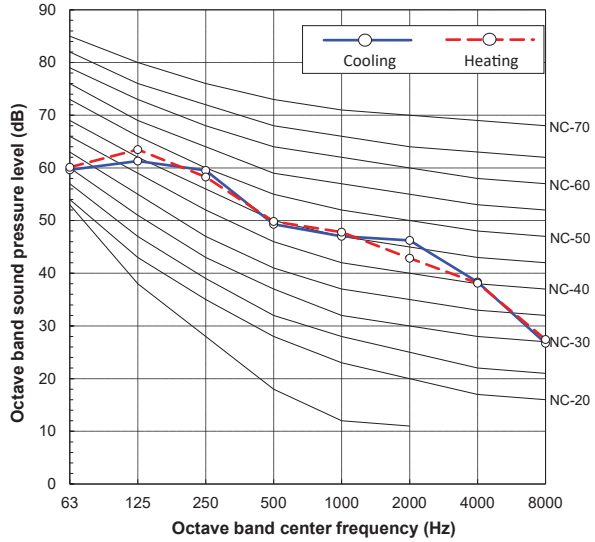
MMY-MUP1441HT6P-UL / MMY-MUP1441HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	53.0



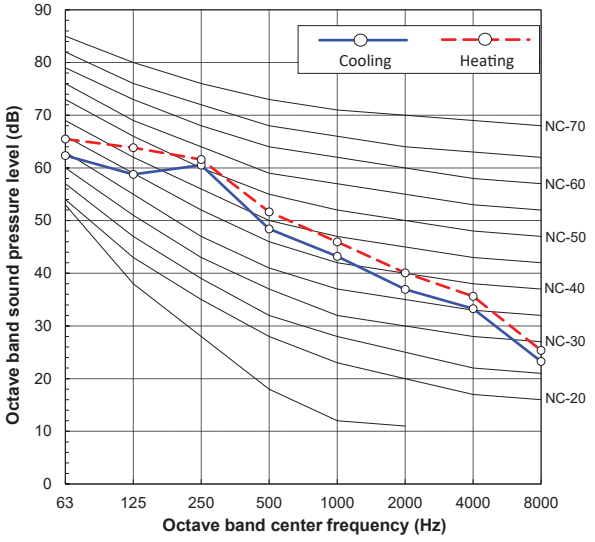
MMY-MUP1681HT6P-UL / MMY-MUP1681HT9P-UL

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



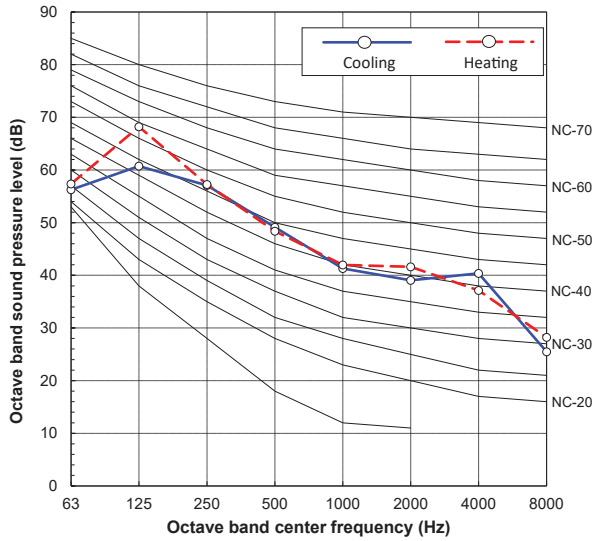
MMY-MUP1921HT6P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	52.0	54.0



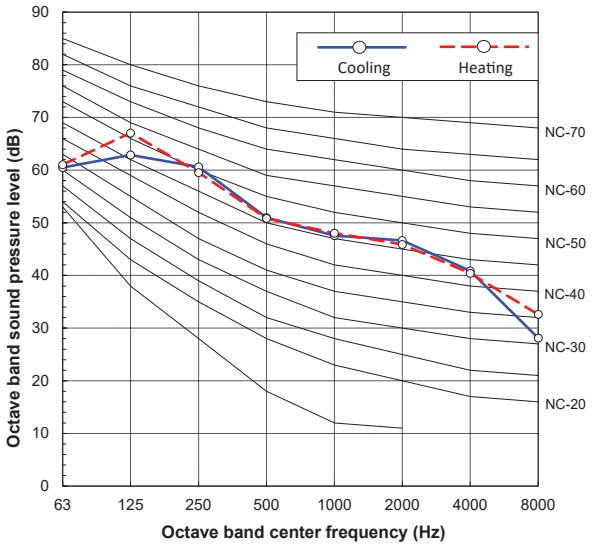
MMY-UP1921HT6P-UL / MMY-UP1921HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	53.0	53.0



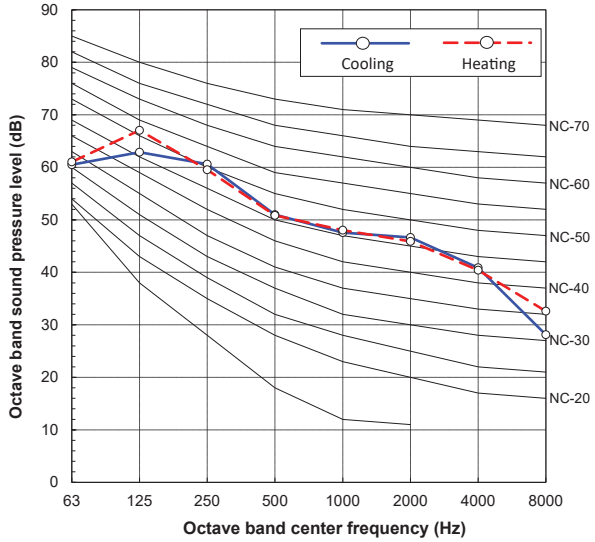
MMY-UP2161HT6P-UL / MMY-UP2161HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.5	54.8



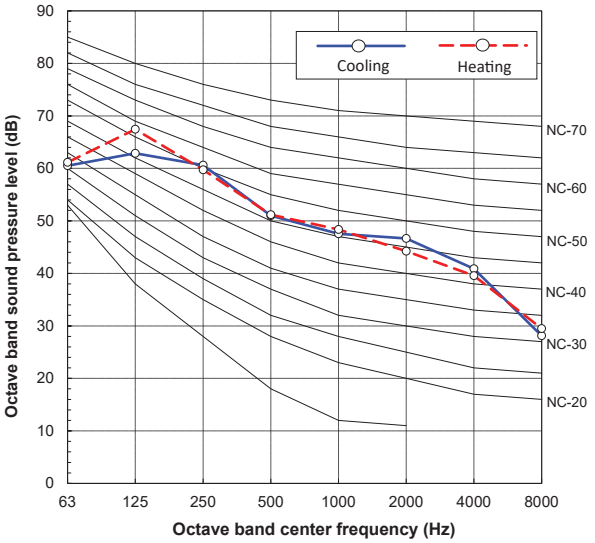
MMY-UP2401HT6P-UL / MMY-UP2401HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.5	54.8



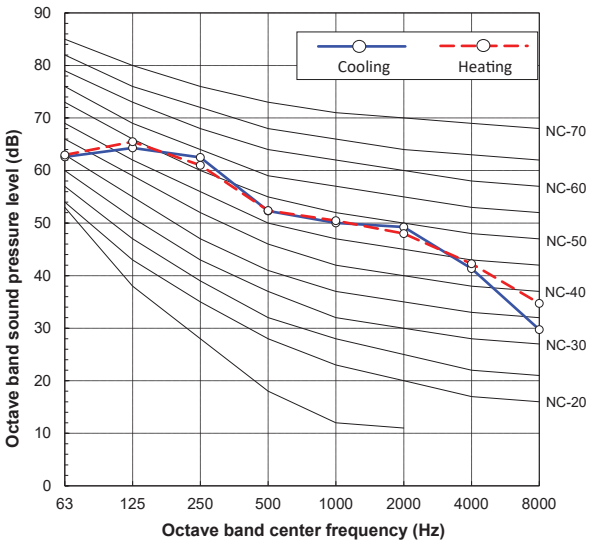
MMY-UP2641HT6P-UL / MMY-UP2641HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	55.5	55.5



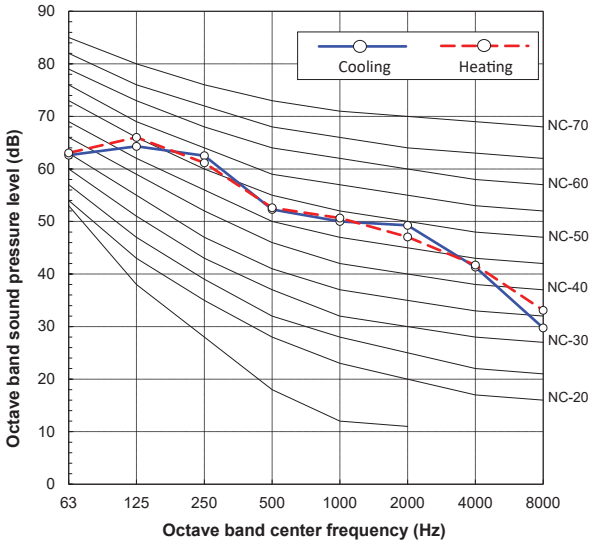
MMY-UP2881HT6P-UL / MMY-UP2881HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	56.0



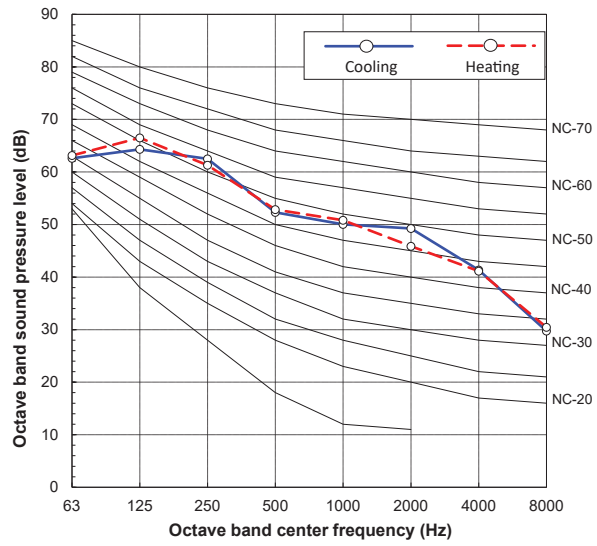
MMY-UP3121HT6P-UL / MMY-UP3121HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	56.5



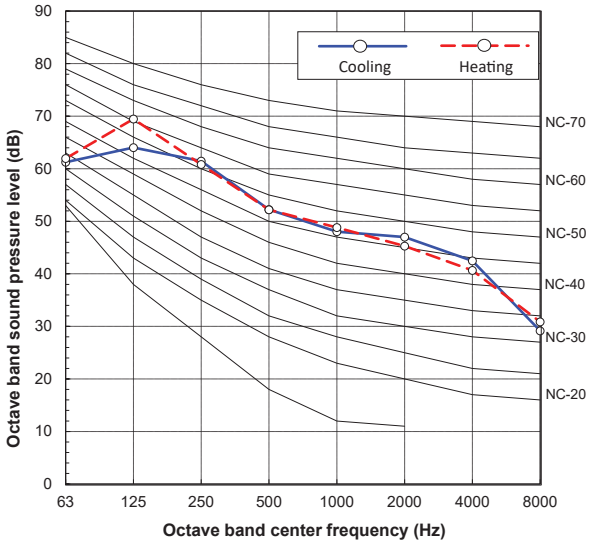
MMY-UP3361HT6P-UL / MMY-UP3361HT9P-UL

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



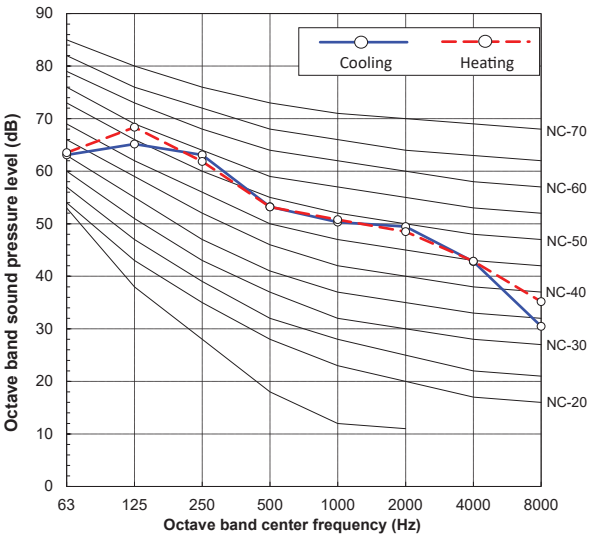
MMY-UP3601HT6P-UL / MMY-UP3601HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	56.5	56.5



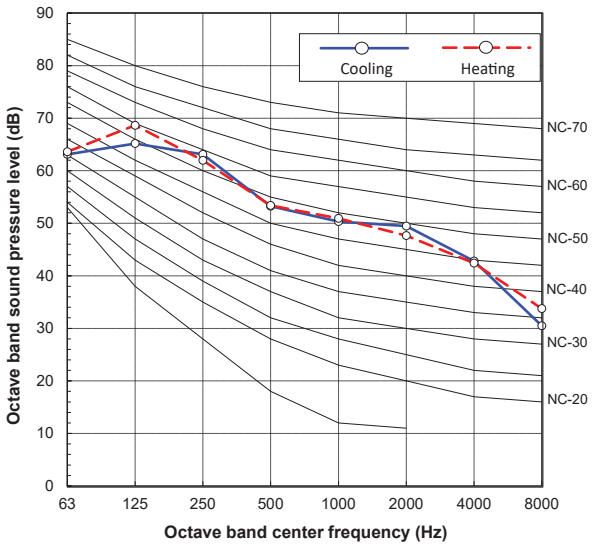
MMY-UP3841HT6P-UL / MMY-UP3841HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.8	57.0



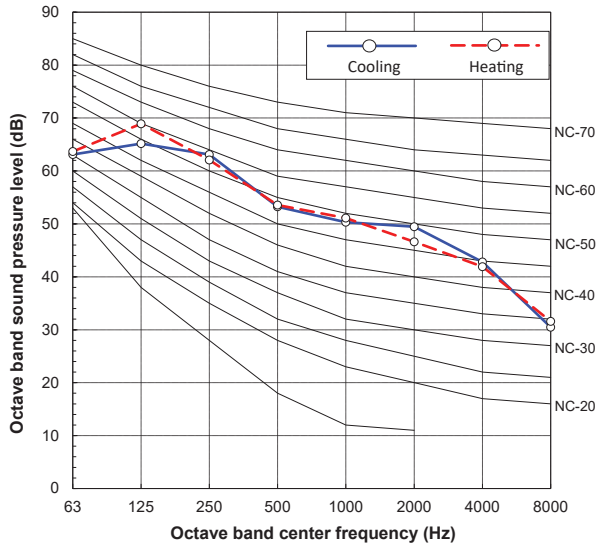
MMY-UP4081HT6P-UL / MMY-UP4081HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.8	57.4



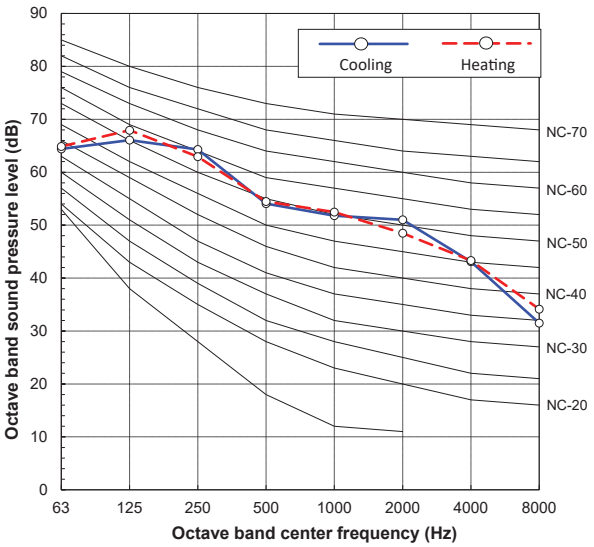
MMY-UP4321HT6P-UL / MMY-UP4321HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	57.8	57.8



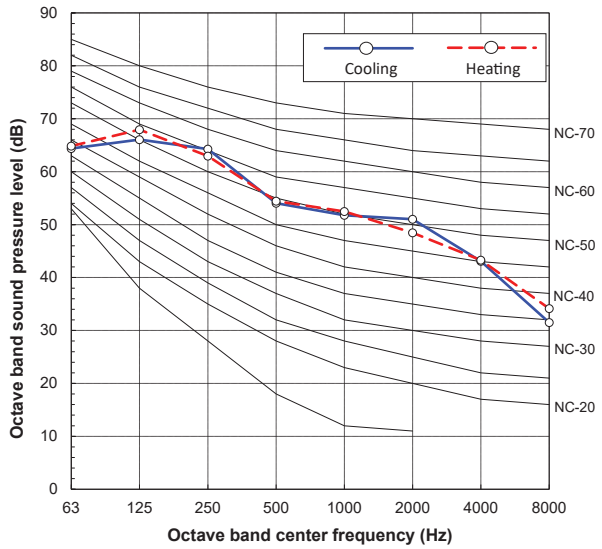
MMY-UP4561HT6P-UL / MMY-UP4561HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	58.5



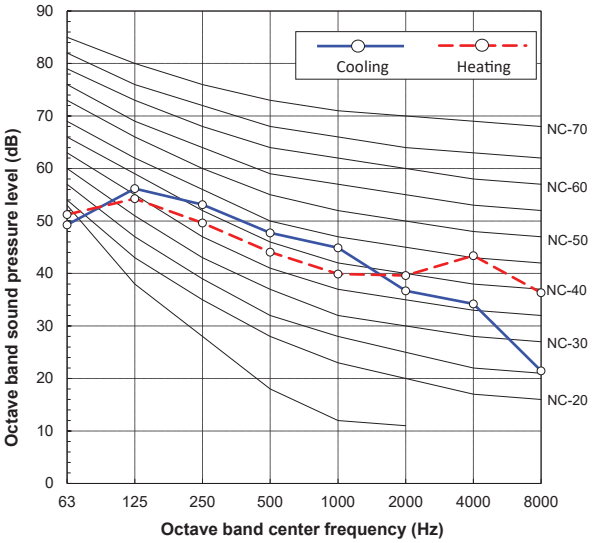
MMY-UP4801HT6P-UL / MMY-UP4801HT9P-UL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	58.5



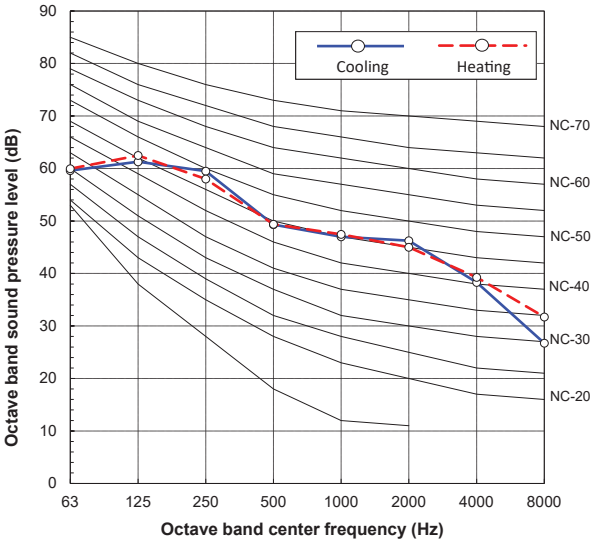
MMY-MUP072H1HT6PUL / MMY-MUP072H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	50.0	50.0



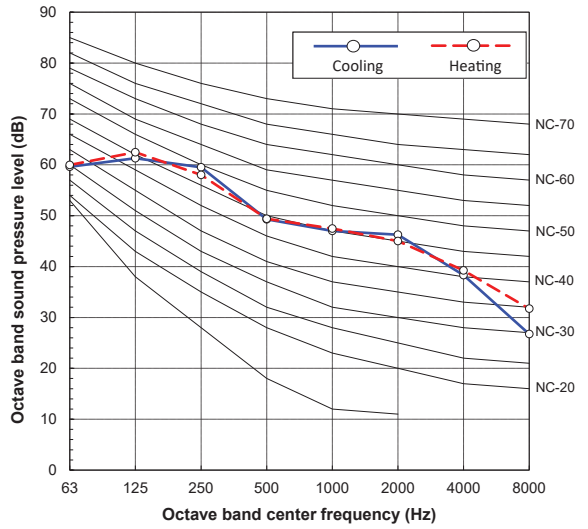
MMY-MUP096H1HT6PUL / MMY-MUP096H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	53.0



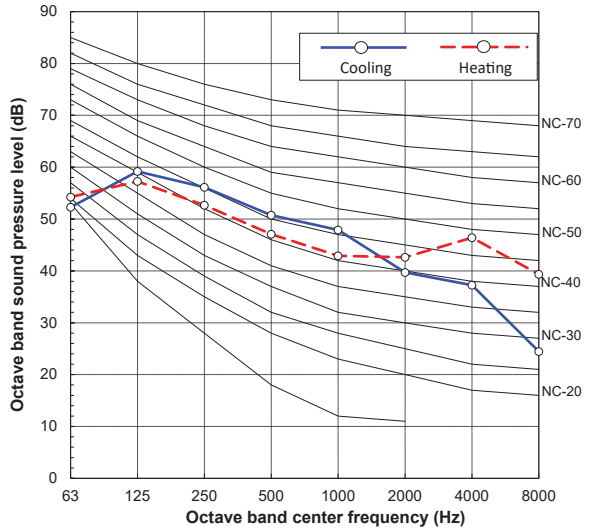
MMY-MUP120H1HT6PUL / MMY-MUP120H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	54.0	53.0



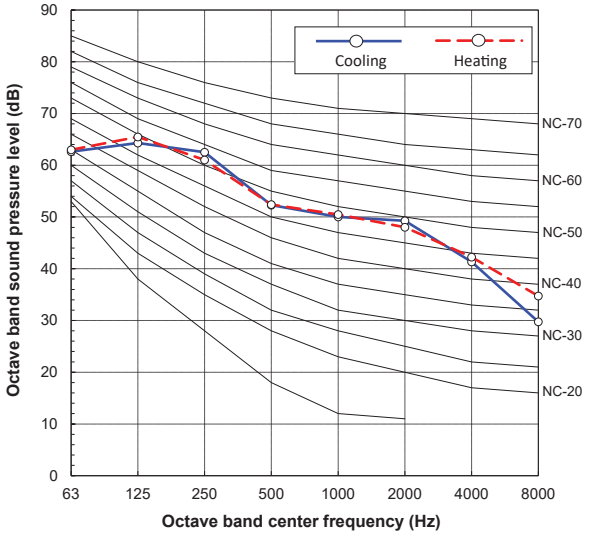
MMY-UP144H1HT6PUL / MMY-UP144H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	53.0	53.0



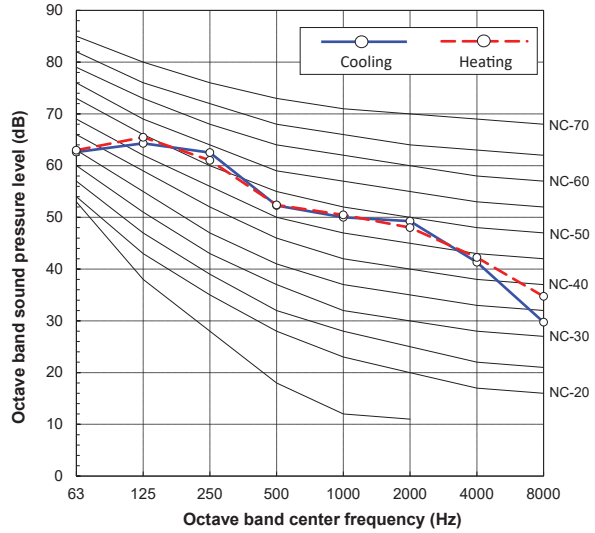
MMY-UP192H1HT6PUL / MMY-UP192H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	56.0



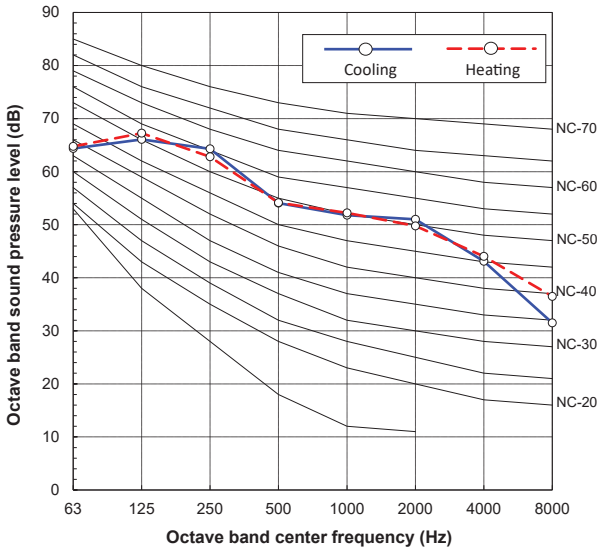
MMY-UP240H1HT6PUL / MMY-UP240H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	57.0	56.0



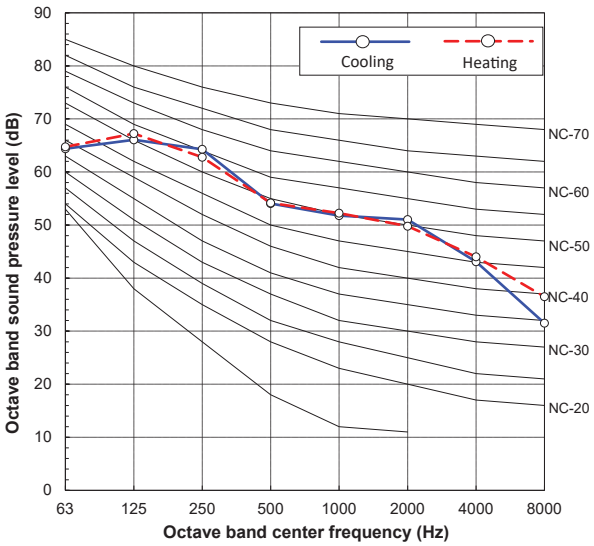
MMY-UP288H1HT6PUL / MMY-UP288H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	57.8



MMY-UP360H1HT6PUL / MMY-UP360H1HT9PUL

Sound pressure Level(dB(A))	Cooling	Heating
	58.8	57.8



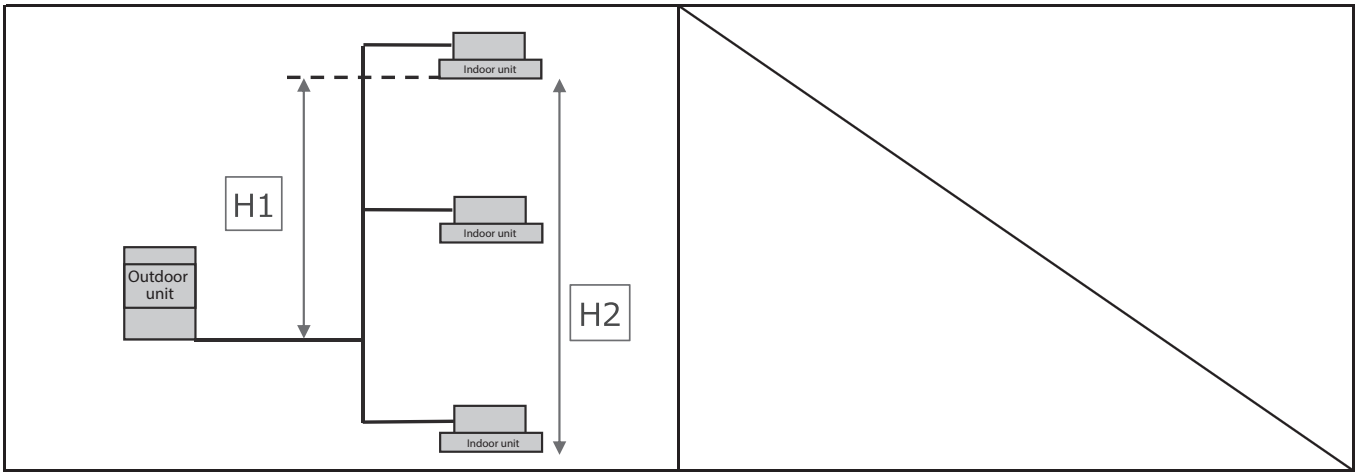
APPENDIX

6-1. Special Installation guide

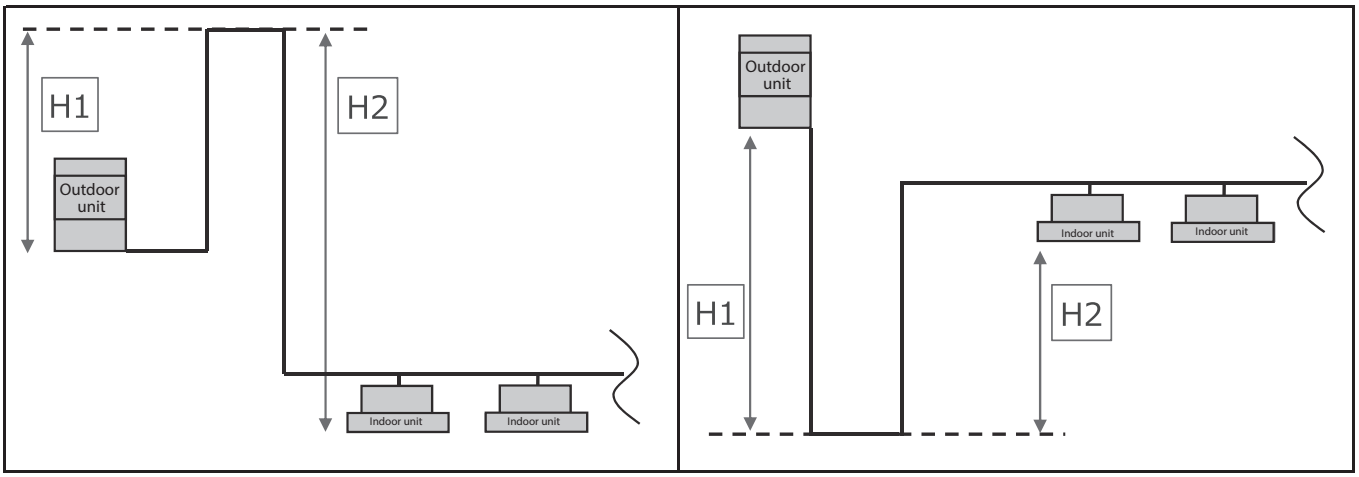
●Special piping construction conditions

※ H1, H2:Refer to Refrigerant piping design

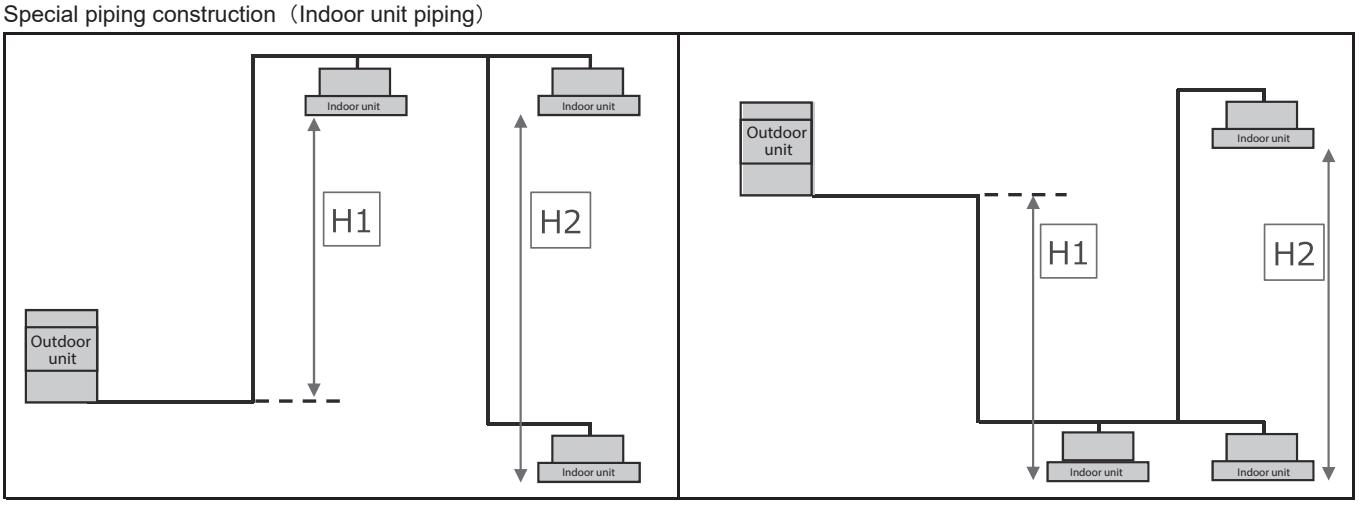
Mid-floor installation



Special piping construction (Main piping)



Special piping construction（Indoor unit piping）



• For the same refrigerant piping group

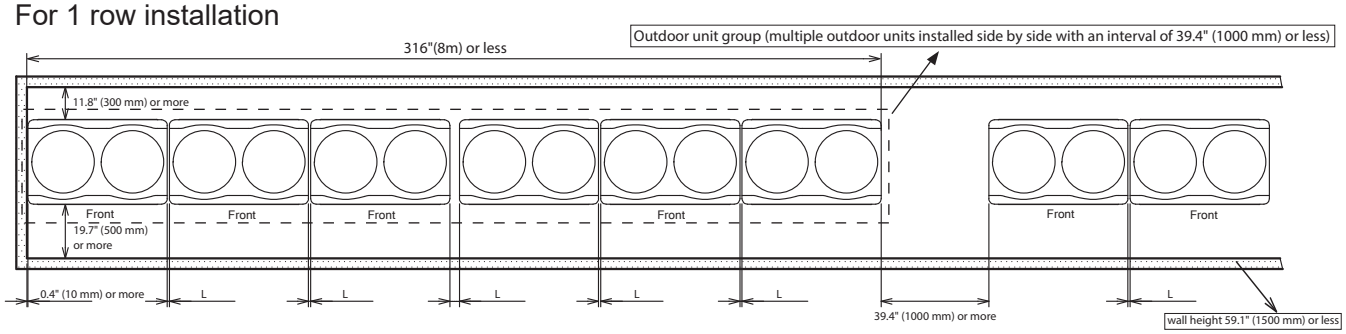
Low ambient temperature in area	L
32°F (0°C) ~ 5°F (-15°C)	7.9" (200 mm), at least 0.8" (20 mm) or more.
5°F (-15°C) ~ -30°F (-34.4°C)	7.9" (200 mm) or more.
	*5°F (-15°C) ~ -13°F (-25°C) : With Outdoor Unit Function Code setting (O.DN : 058 / Setting value : 2), Available at least 0.8" (20 mm) or more. 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.

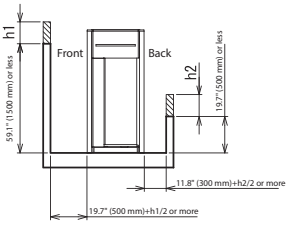
• For other refrigerant piping groups, keep at least 7.9" (200 mm) apart.

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



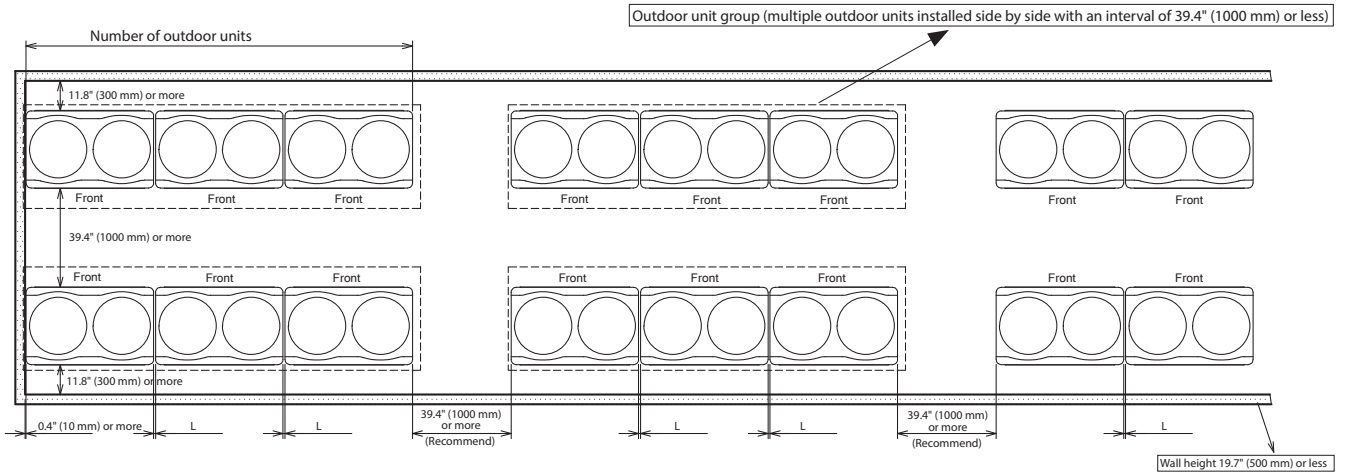


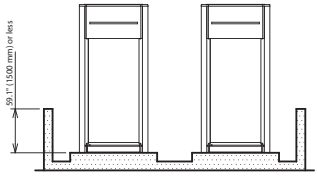
※ When attaching a snow hood take a space for the unit right and left side for snow hood.

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



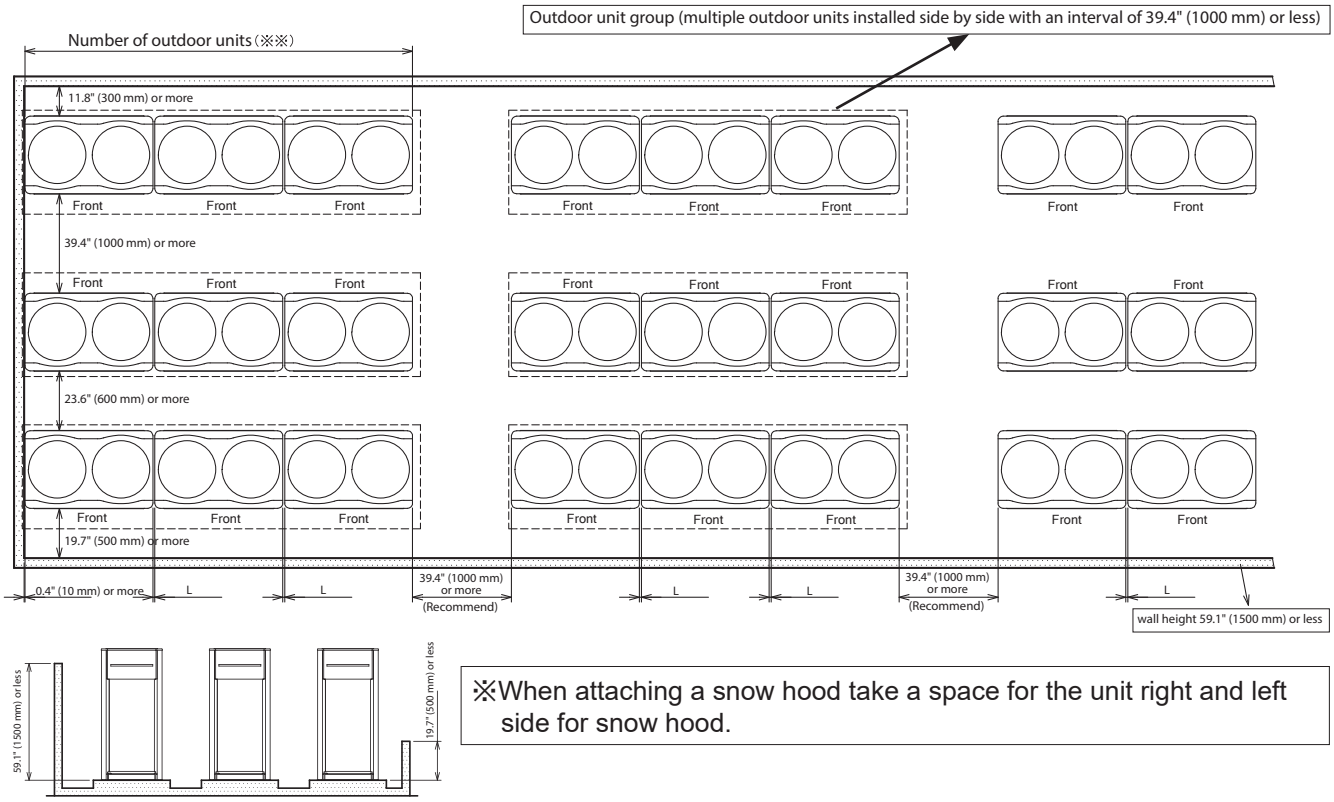


※When attaching a snow hood take a space for the unit right and left side for snow hood.

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

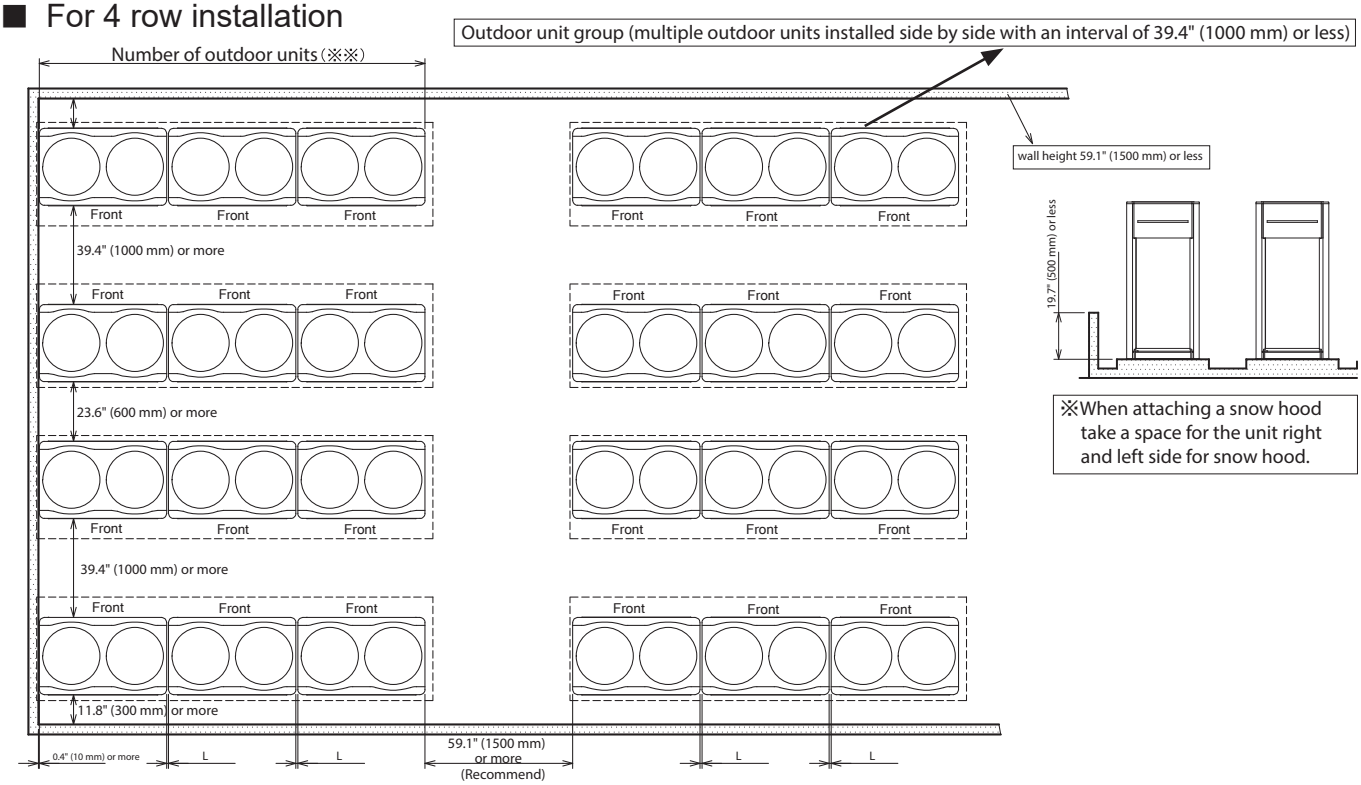
※If there is an obstacle above the outdoor unit, leave a space of 78.7" (2000 mm) or more from the top of the outdoor unit. (When attaching a snow hood take a space for the unit height plus the snow hood height.)

■ For 3 row installation



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

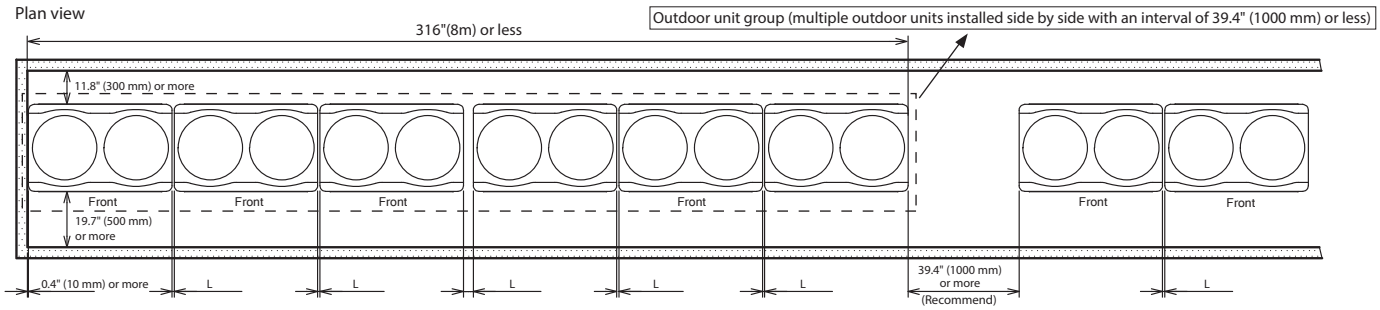
■ For 4 row installation



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

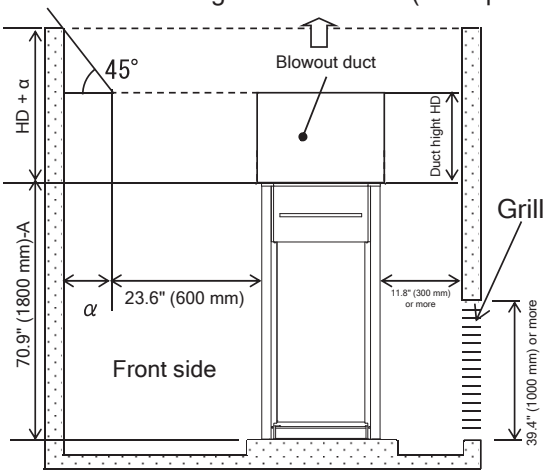
② When the outer wall is higher than the outdoor unit

※Do not put obstacle above the outdoor unit



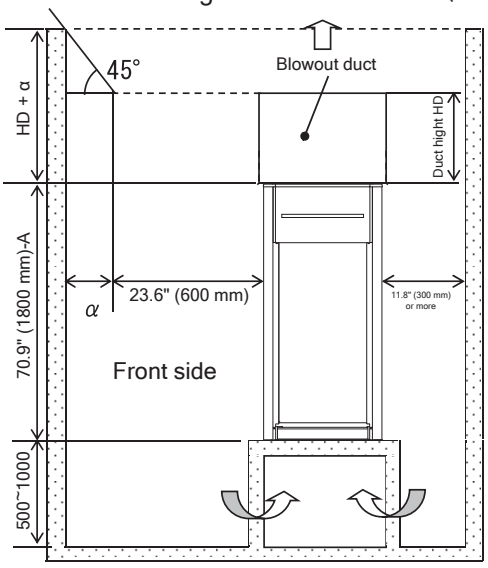
※When attaching a snow hood take a space for the unit height plus the snow hood height.

■ 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）

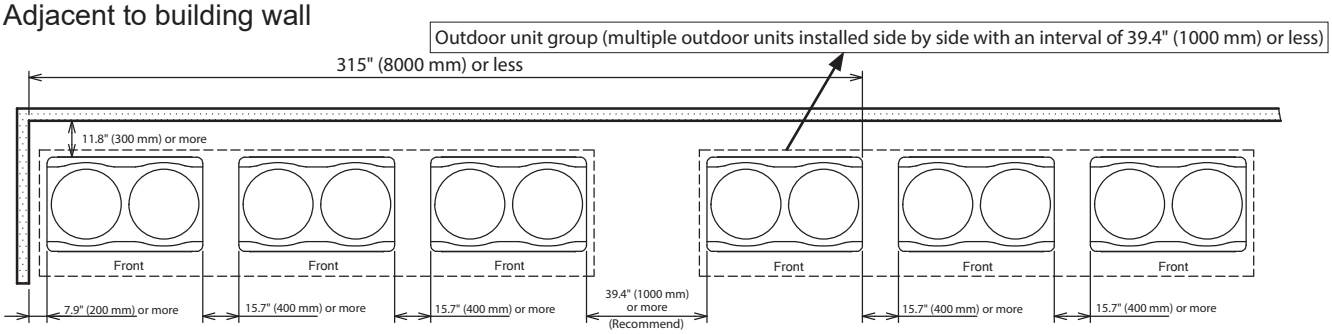


※ Duct hight HD 39.4" (1000 mm) or less

③ Walls without height restrictions

※Walls without height restrictions

■ Adjacent to building wall

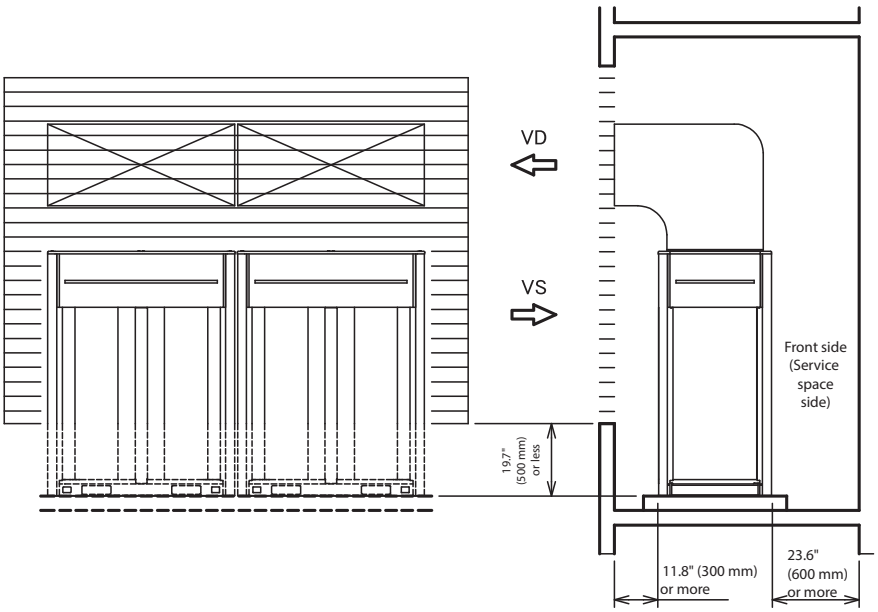


※ Outdoor unit group should be designed to line up a maximum of three outdoor units. A minimum separation of 1000 mm is recommended between groups. Number of groups is recommended up to 2 groups. For single row installation only.

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	0721HT*P-UL	0961HT*P-UL	1201HT*P-UL	1441HT*P-UL	1681HT*P-UL	1921HT6P-UL
inH20	0.321	0.321	0.321	0.321	0.321	0.321
cfm	5650	6180	7770	8650	8670	9780

MMY-MUP	072H1HT*PUL	096H1HT*PUL	1201H1HT*PUL
inH20	0.321	0.321	0.321
cfm	6340	7770	7415

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

6-2. Reuse of existing piping

When reusing the existing piping of an R410A product

Caution: Existing piping for R22 and R407C cannot be used.

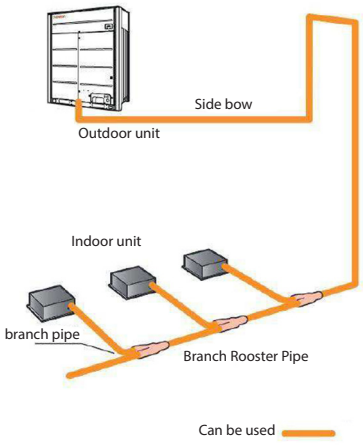
■ Primary check:

■ If the following two conditions are not met, the existing piping cannot be reused

Condition 1	The piping was not left in the state with the equipment detached or in the state with a gas leak (refrigerant escaping).
Reason	If rain water or air containing moisture has entered inside the piping, the inside of the piping may have corroded and deteriorated, resulting in insufficient pressure capacity.
Condition 2	The length, diameter, and height difference of the piping are within the ranges specified by Toshiba Carrier.
Reason	If they are not within the allowable ranges, the reliability of the equipment cannot be guaranteed due to reasons such as refrigerant overcharging and insufficient refrigerating machine oil.

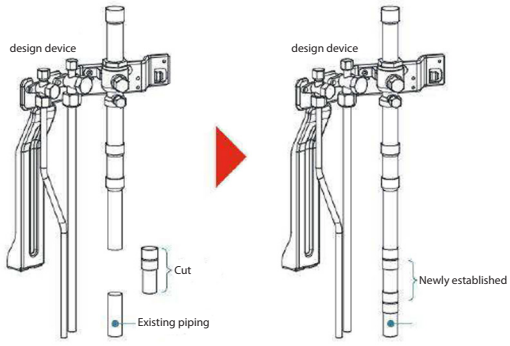
■Checking the existing piping for gas leaks and reliability related to the piping strength is the responsibility of the contractor on site as usual. Toshiba Carrier makes no guarantees with regards to such checks.

■This is our view with respect to Toshiba Carrier's multi-unit air conditioning systems, and is not a guarantee with respect to installation and other work using existing piping for another company's multi-unit air conditioning system employing new refrigerant.



A section that requires welded parts to be repeatedly welded cannot be used because the strength will be reduced.Cut off the welded section and add new piping in the place of the cut off section.

Caution: Repeated welding of welded parts is prohibited.



■ Secondary check workflow: If the primary check conditions are met, carry out the checks in the following workflow.

Is the existing product an R410A multi-unit air conditioning system for buildings?
- No
- Yes

Is the existing product broken or does it require frequent refrigerant charging due to a gas leak or other problem?
- Yes
- No

Is there any branch pipe without an indoor unit connected?
- Yes
- No

Does the existing piping have cracks or dents?
- Yes
- No

Is the piping size appropriate for the capacity rank of the product to be newly installed? Check only the size of the main piping.
* Refer to Table 1 Pipe size compatibility table
- No
- Yes

Can the existing product perform the cooling operation?
- No
- Yes

Is the existing product Toshiba Carrier's multi-unit air conditioning system for buildings?
- No
- Yes

Is the pressure capacity of branch pipes 540 psi (3.73 Mpa) or higher?
- No
- Yes

Is the oil type of the existing product as follows?
- Synthetic oil: Alkyl benzene based (HAB, BARREL Freeze) general oils, ester based general oils, ether based PVE and PAG (HP-5S only) oils

* If you are unsure of the oil type, contact the manufacturer of the existing product.
- No
- Yes

The existing piping can be reused.

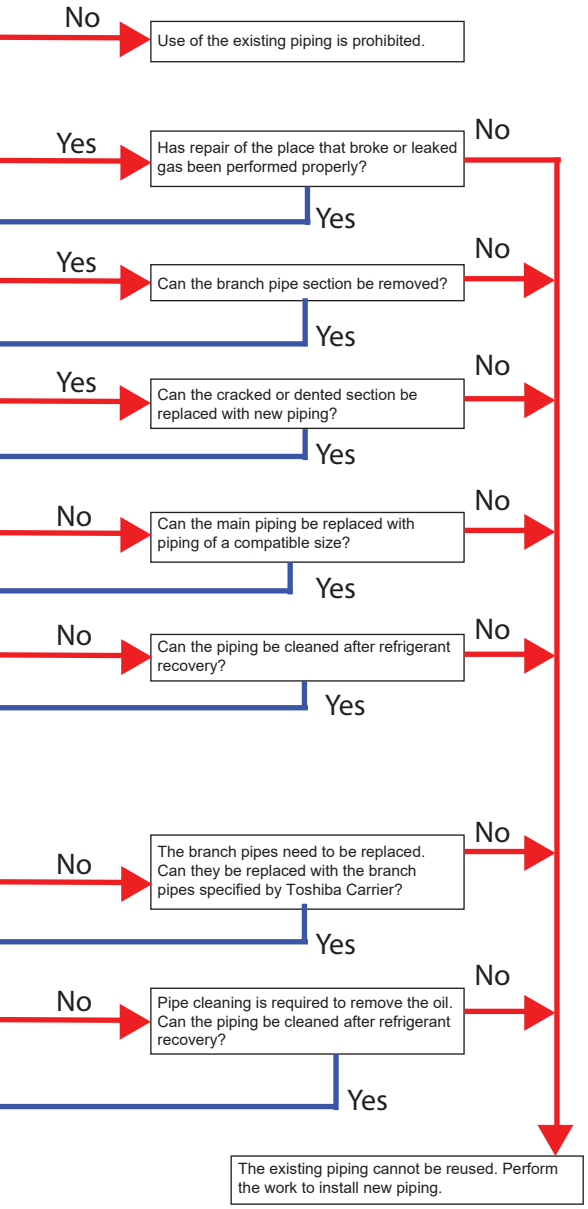
(A) If the existing product can perform the cooling operation:
Perform the cooling operation for at least 30 minutes for pipe cleaning and oil recovery with the existing product.
After performing the cooling operation, recover the refrigerant using a refrigerant recovery device.
* Pumping down to the outdoor units is prohibited.

(B) If the existing product cannot perform the cooling operation:
Recover the refrigerant using a refrigerant recovery device and then clean the piping.

Remove any unnecessary branch pipes, and if any piping is cracked or dented or the main piping is not the appropriate size, replace some of the piping with new piping.

Perform the subsequent work according to the product installation procedure and the standard installation described in the instruction manual supplied with the equipment.

Determine suitability.



Existing piping size (Outer diameter)		New system capacity (ton)																	
Gas pipe	Liquid pipe	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Φ19.1	Φ9.5	○*1	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	Φ12.7	◎	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Φ22.2	Φ9.5	○*1	○*1	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	Φ12.7	○	◎	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Φ28.6	Φ12.7	×	○	◎	○*2	○*2	×	×	×	×	×	×	×	×	×	×	×	×	×
	Φ15.9	×	○	○	◎	◎	◎	○*3	○*3	×	×	×	×	×	×	×	×	×	×
	Φ19.1	×	×	×	○	○	○	○	○	×	×	×	×	×	×	×	×	×	×
Φ34.9	Φ15.9	×	×	×	×	×	○	○*3	○*3	○*3	×	×	×	×	×	×	×	×	×
	Φ19.1	×	×	×	×	×	○	◎	◎	◎	◎	◎	×	×	×	×	×	×	×
	Φ22.2	×	×	×	×	×	×	○	○	○	○	○	×	×	×	×	×	×	×
Φ38.1	Φ15.9	×	×	×	×	×	○	○*3	○*3	×	×	×	×	×	×	×	×	×	×
	Φ19.1	×	×	×	×	×	○	○	○	○	○	○	○*3	○*3	○*3	○*3	○*3	○*2	○*2
	Φ22.2	×	×	×	×	×	×	○	○	○	○	○	○	○	○	○	○	○	○
Φ41.3	Φ19.1	×	×	×	×	×	×	×	×	×	×	×	○*3	○*3	○*3	○*3	○*2	○*2	○*2
	Φ22.2	×	×	×	×	×	×	×	×	×	×	×	◎	◎	◎	◎	◎	◎	◎
Φ44.4	Φ19.1	×	×	×	×	×	×	×	×	×	×	×	○*3	○*3	○*3	○*2	○*2	○*2	○*2
	Φ22.2	×	×	×	×	×	×	×	×	×	×	×	○	○	○	○	○	○	○
Φ50.8	Φ22.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

◎: available (Standard size)　○: available　×: not available

*1 Not available for main piping and vertical piping lengths exceeding 30 meters.
*2 Not available for main piping and vertical piping lengths exceeding 50 meters.
*3 Not available for main piping and vertical piping lengths exceeding 80 meters.

Caution
Be sufficiently careful because existing piping that is not compatible with the specified piping sizes cannot be reused.
When reusing existing piping, observe the following.

1. For details on the power supply and other equipment (e.g., power line and breaker for wiring), check the information on the page about power supply wiring.
2. When reusing the existing wiring between outdoor and indoor units and remote controller wires, check "Flow for check when reusing communication wiring."
3. Check that there is no damage, deterioration, or other problem with the wiring, remote controller wires, and power supply and other equipment (e.g., power line and breaker for wiring) to be reused.
4. Measure between the power line and ground with a 500 V megohmmeter and check that the insulation resistance is 100 MΩ or higher.
5. Check that the breaker for the wiring is a harmonics compatible product.
6. Checking the reliability of the control wiring and power supply and other equipment (e.g., power line and breaker for wiring) to be reused is the responsibility of the contractor on site. Toshiba Carrier makes no guarantees with regards to such checks so they should be performed under the responsibility of the contractor on site as usual.
7. Be sure to supply power to the equipment for at least 12 hours to ensure the reliability of sliding parts.

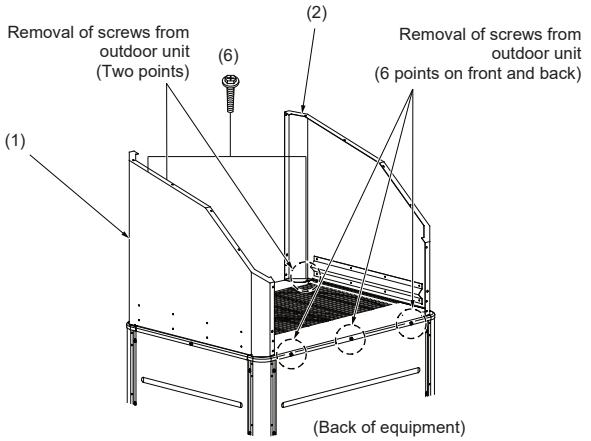
6-3. Snow hood Installation procedure

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

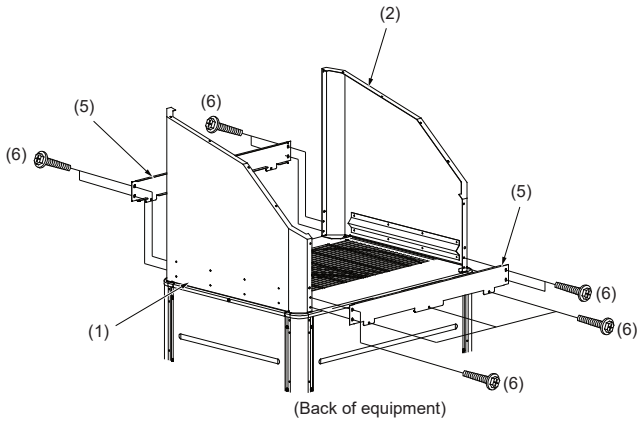
⚠CAUTION

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

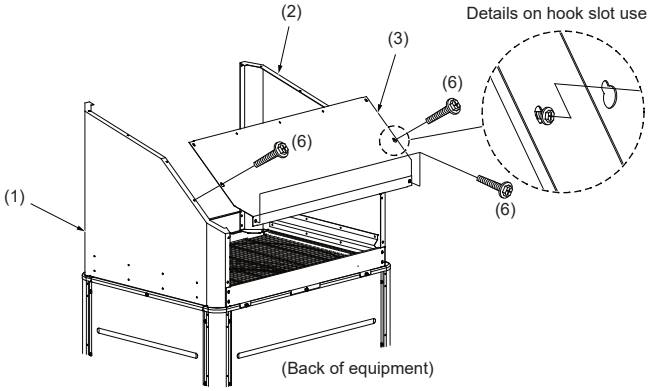
1 **Remove the 2 screws that hold the upper cabinet of the outdoor unit, and the 6 screws that hold the front and rear cabinets.**
Next, attach (1) Side plate R and (2) Side plate L to the upper surface of the outdoor unit with 2 of the (6) S-TITE screws included.



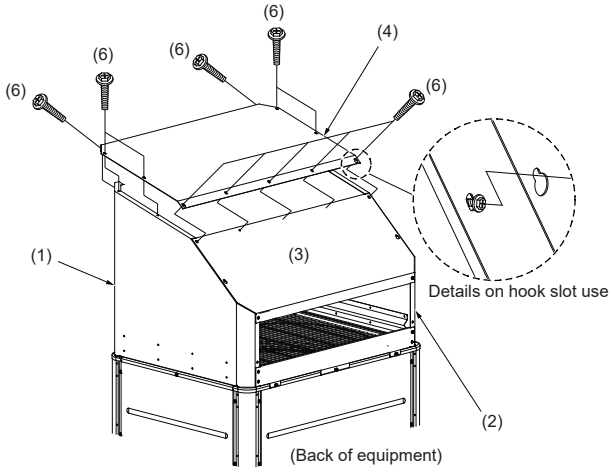
2 **Attach the (5) Front and rear crosspieces to (1) Side plate R and (2) Side plate L with 8 of the (6) S-TITE screws included, as well as the 6 S-TITE screws removed from the front and back of the outdoor unit in Step *1*.**



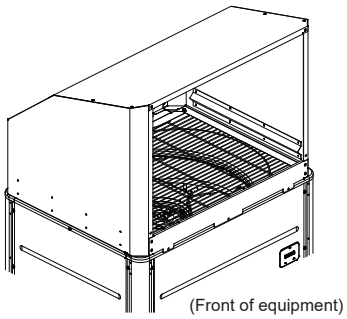
3 **Attach (3) Face plate 1 to (1) Side plate R and (2) Side plate L with four of the (6) S-TITE screws included.**
Use the hook slot for installation.
* (4) Face plate 2 overlaps the topmost hole of the face plate, so do not fasten it at this point.



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

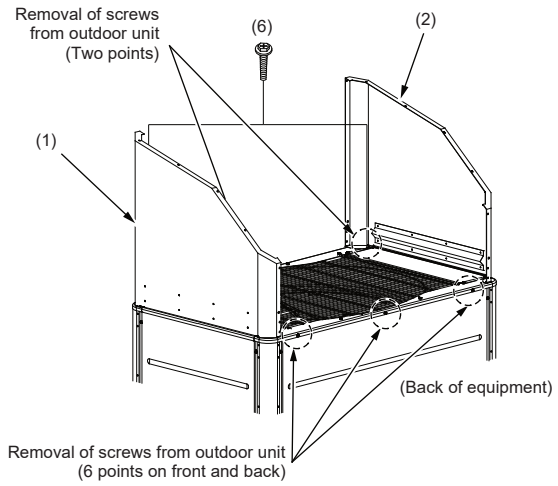
Tighten the screws used for installation securely so that there is no looseness. If screws are not tight, there is a risk of parts falling off in strong winds, etc.

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

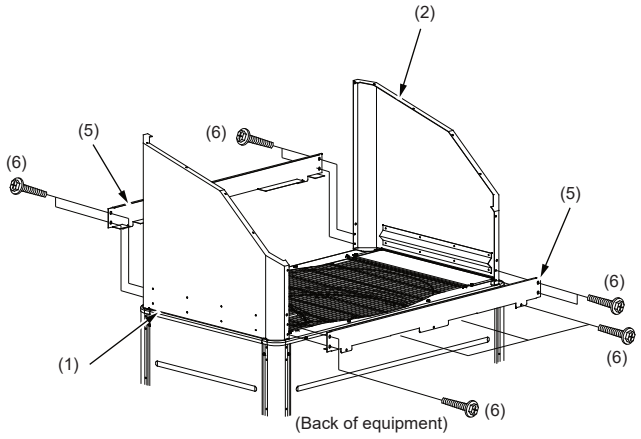
⚠CAUTION

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

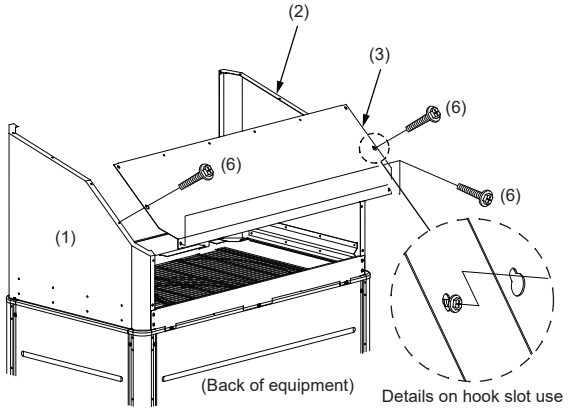
1 **Remove the 2 screws that hold the upper cabinet of the outdoor unit, and the 6 screws that hold the front and rear cabinets.**
Next, attach (1) Side plate R and (2) Side plate L to the upper surface of the outdoor unit with 2 of the (6) S-TITE screws included.



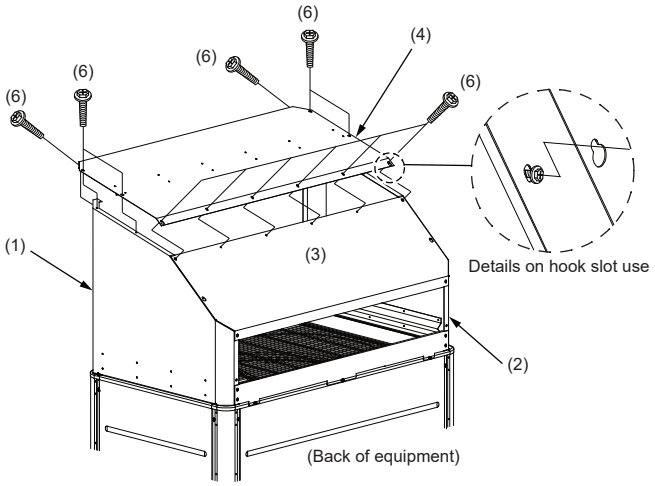
2 **Attach the (5) Front and rear crosspieces to (1) Side plate R and (2) Side plate L with 8 of the (6) S-TITE screws included, as well as the 6 S-TITE screws removed from the front and back of the outdoor unit in Step 1.**



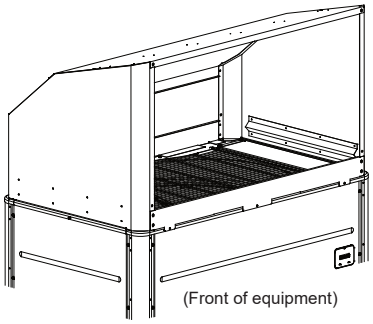
3 **Attach (3) Face plate 1 to (1) Side plate R and (2) Side plate L with four of the (6) S-TITE screws included.**
Use the hook slot for installation.
* (4) Face plate 2 overlaps the topmost hole of the face plate, so do not fasten it at this point.



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.

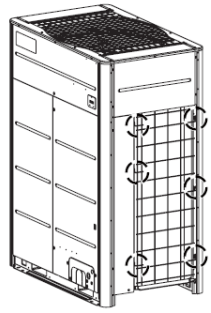
Snowfall hood (Right and Left side), Snow hood (Rear side)

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

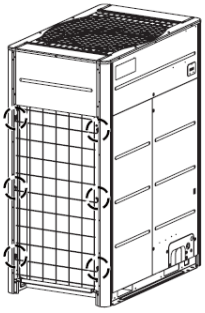
Installation procedure

Preparations before installation procedure

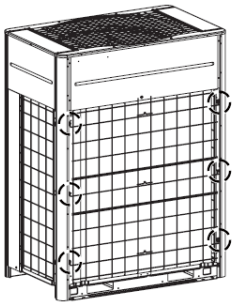
- If a Fin guard is attached to the product, remove the Fin guard before attaching Snow hood to prevent snow from accumulating on the heat exchanger. After removing the fin guard mounting screws, be sure to reattach all screws to the product.
- The illustration below shows the 51 inches width type, but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



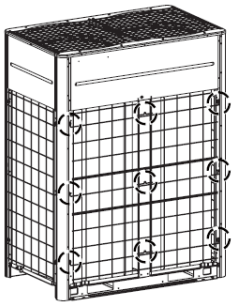
Right side of 1 fan model
(6 mounting screws)



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.

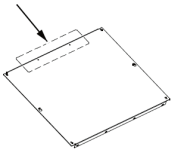
* The diagram shows the right side intake port. The left side intake port is installed in the same way.

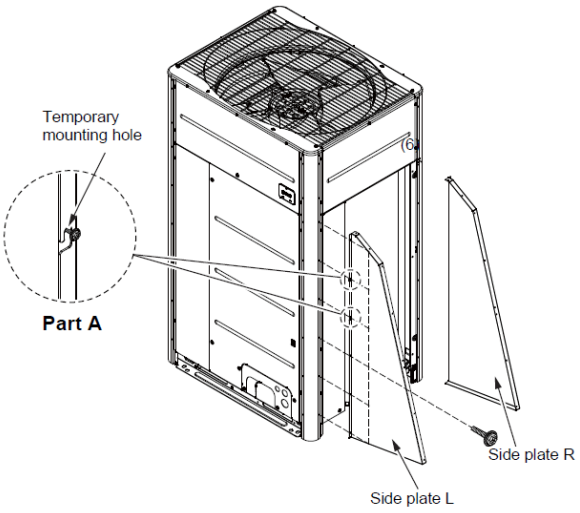
<Since the lower plate and mid plate have similar shapes, exercise care when installing them.>

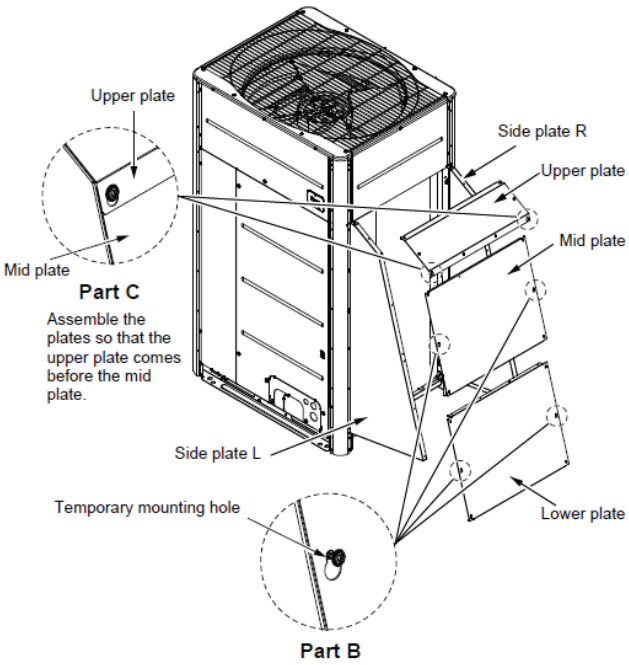
Lower plate

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.**

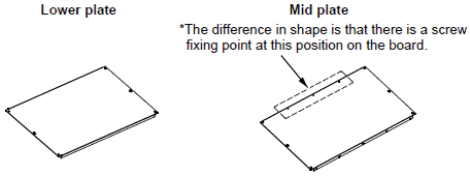
* When installing the mid plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the 5th hole from the bottom of the Side plate R and Side plate L. (See Part E.)

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.**

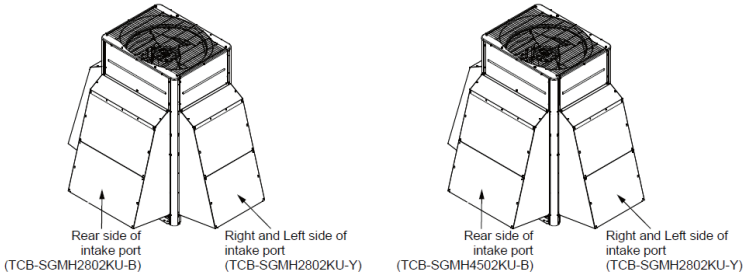
* When installing the upper plate, it can be temporarily mounted by inserting the (4) S-TITE screws halfway into the two points on the upper left and right of the mid plate. (Detail of Part F)

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

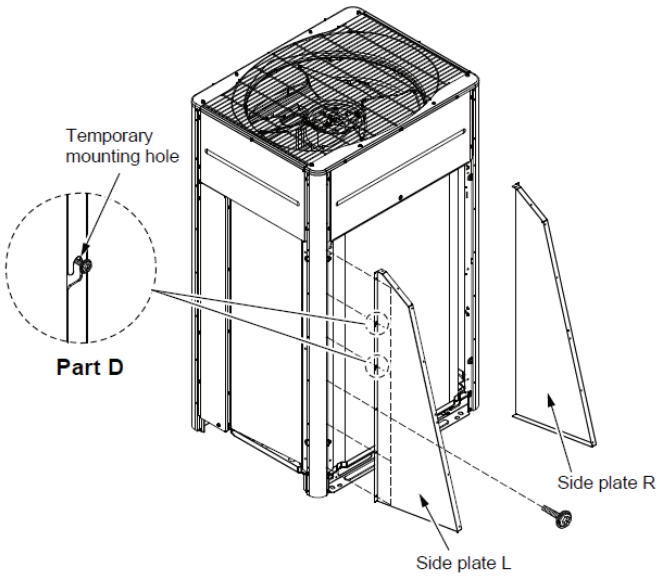
<Since the lower plate and mid plate have similar shapes, exercise care when installing them.>

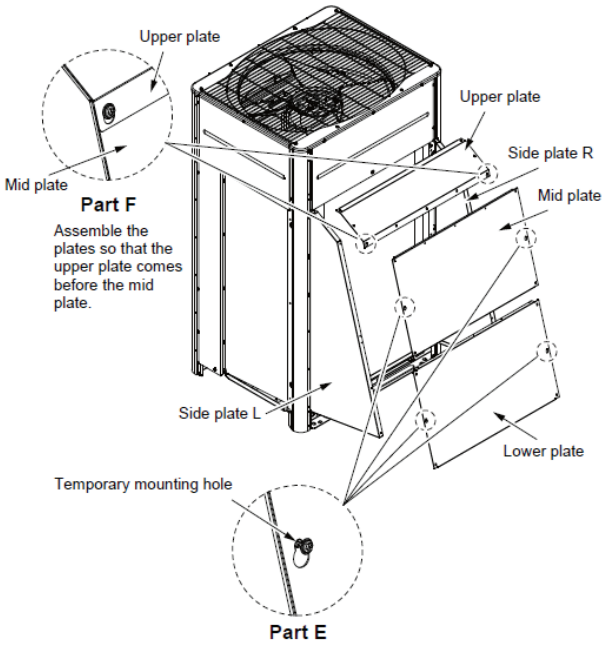


Installed unit diagrams



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.

6-4. Efficiency Ratings

	Ducted			Non Ducted		
Model name	**EER**	**IEER**	**COP47F**	**EER**	**IEER**	**COP47F**
MMY-MUP0721HT*P-UL	12.6	22.1	4.01	13.4	24.1	4.46
MMY-MUP0961HT*P-UL	12.0	21.9	3.83	11.8	23.7	4.21
MMY-MUP1201HT*P-UL	11.7	21.2	3.83	11.1	22.8	4.09
MMY-MUP1441HT*P-UL	11.4	21.6	3.64	11.1	22.7	3.93
MMY-MUP1681HT*P-UL	10.6	21.0	3.56	11.4	21.7	3.63
MMY-MUP1921HT6P-UL	10.6	20.1	3.43	10.6	22.7	3.43
MMY-UP1921HT*P-UL	11.3	22.4	4.00	10.3	22.2	4.26
MMY-UP2161HT*P-UL	11.6	20.9	4.01	10.9	21.7	4.04
MMY-UP2401HT*P-UL	11.2	19.9	3.88	10.3	21.4	3.99
MMY-UP2641HT*P-UL	10.3	21.0	3.82	10.3	20.2	3.74
MMY-UP2881HT*P-UL	10.8	21.4	3.81	9.95	20.6	3.61
MMY-UP3121HT*P-UL	10.1	20.4	3.60	9.60	20.0	3.54
MMY-UP3361HT*P-UL	10.0	18.4	3.46	10.6	20.8	3.53
MMY-UP3601HT*P-UL	11.2	19.4	3.50	9.63	18.4	3.44
MMY-UP3841HT*P-UL	11.0	18.9	3.48	9.57	18.4	3.45
MMY-UP4081HT*P-UL	10.4	18.4	3.38	9.80	17.9	3.34
MMY-UP4321HT*P-UL	9.87	17.6	3.35	10.0	18.5	3.33
MMY-UP4561HT*P-UL	9.50	17.3	3.33	9.80	17.6	3.28
MMY-UP4801HT*P-UL	9.50	17.3	3.23	9.97	17.9	3.20
MMY-MUP072H1HT*PUL	12.7	22.8	4.23	13.6	24.4	4.52
MMY-MUP096H1HT*PUL	11.8	20.0	4.22	12.1	23.4	4.49
MMY-MUP120H1HT*PUL	12.0	21.4	3.92	11.2	22.7	4.13
MMY-UP144H1HT*PUL	11.6	22.3	4.21	12.3	23.9	4.74
MMY-UP192H1HT*PUL	10.8	21.0	4.33	10.8	21.6	4.41
MMY-UP240H1HT*PUL	11.3	20.1	3.99	12.0	22.5	3.92
MMY-UP288H1HT*PUL	11.2	18.8	4.08	11.0	19.3	3.82
MMY-UP360H1HT*PUL	10.8	19.5	3.80	10.1	19.3	3.70

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

SMMS-u Engineering Data Book

Model name:

MMY-MUP___1HT6P-UL (460V,60Hz)
MMY-MUP___1HT9P-UL (208-230V,60Hz)
MMY-MUP___H1HT6PUL(460V, 60Hz)
MMY-MUP___H1HT9PUL(208-230V, 60Hz)

January, 2024

Toshiba Carrier Corporation

Revision 05 : 240122