

Heat Pump

Model name:

MMY-MAP_6HT6P-UL (460V,60Hz)

MMY-MAP_6HT9P-UL (208/230V, 60Hz)

SMMS
SUPER MODULAR MULTI SYSTEM



**Engineering
Data Book**

Full Version



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.



	Safety caution	2
1	System overview	5
	1-1. Allocation standard of model name	5
	1-2. Summary of system equipments	6
2	Equipment selection procedure	9
	2-1. Selection flow chart	9
	2-2. Combination conditions for indoor unit and outdoor unit	10
	2-3. Cooling/heating capacity characteristics	12
	2-4. Operational temperature range	23
3	Refrigerant piping design	24
	3-1. Free branching system	24
	3-2. Allowable length/height difference of refrigerant piping	25
	3-3. Selection of refrigerant piping	26
	3-4. Charging requirement with additional refrigerant	27
4	Wiring design	29
	4-1. General	29
	4-2. Outdoor unit power supply	29
	4-3. Indoor unit power supply	31
	4-4. Design of control wiring	32
5	Outdoor unit	34
	5-1. Specifications	34
	5-2. Dimensional drawing	62
	5-3. Center of gravity	72
	5-4. Branch header / Branch joint	73
	5-5. Refrigerant cycle diagram	77
	5-6. Wiring diagram	80
	5-7. Connecting diagram	86
	5-8. Applied control for Outdoor Unit	89
	5-9. Optional printed circuit board (PCB) of outdoor unit	90
	5-10. Sound pressure level data	98
	Appendix	104



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

■ Explanation of indications

WARNING

Improper handling of equipment could lead to serious injury or death.

CAUTION

Improper installation of the equipment could lead to minor injury or property damage.

- After installation work is completed, please run the system in test mode for proper operation and explain the maintenance schedules to the customer as outlined in owner's manual. Please ask the customer to retain the installation and owner's manual for future reference.

WARNING

The system should be installed by trained professional contractor by the factory.

Take precaution so that the refrigerant does not exceed the limit concentration even if it leaks when installing the unit in a small room.

Installation site location should be able to support the weight on the unit.

Ensure the room is properly ventilated in case of refrigerant leak during installation.

Leakage test should be performed to ensure there are no refrigerant leaks after installation.

Empty refrigerant cylinder should be used to recover the refrigerant from the system during repair or re-installation work. Do not store system refrigerant at outdoor unit.

Certified electrician should perform all the electrical work in order to comply with national and local codes and regulations.

Use of proper size and type of wires is recommended for electrical and controls communication.

Ensure proper grounding of wire is carried out as needed through out the system.

CAUTION

Avoid installation of the unit close to combustible gas or highly corrosion areas.

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.

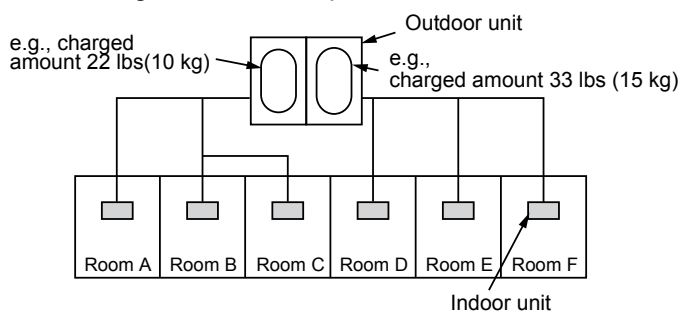
$$\frac{\text{Total amount of refrigerant (lbs (kg))}}{\text{Min. volume of the indoor unit installed room ft}^3(\text{m}^3)} \leq \text{Concentration limit (lbs/ft}^3(\text{kg/m}^3))$$

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).

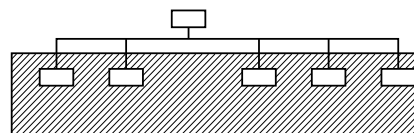
The possible amount of leaked refrigerant gas in rooms D, E and F is 33 lbs (15 kg).

Important

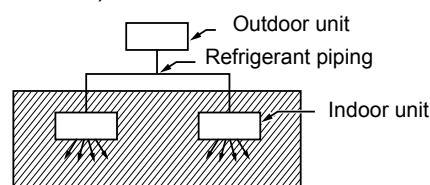
NOTE 2:

The standards for minimum room volume are as follows.

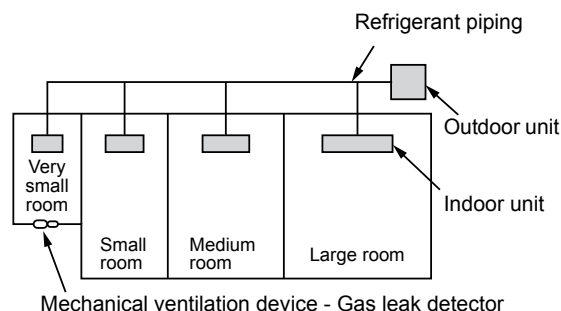
- (1) No partition (shaded portion)



- (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).



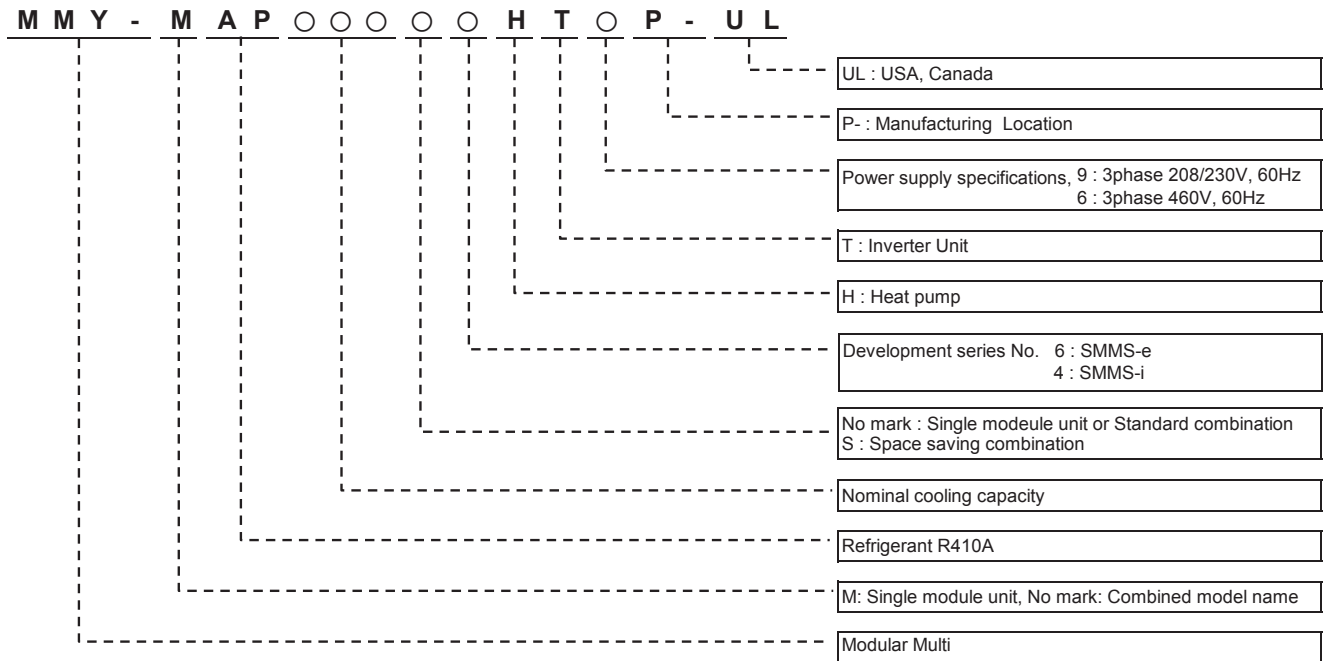
- (3) If an indoor unit is installed in each partitioned room and the refrigerant tubing is interconnected, the smallest room of course becomes the object. But when a mechanical ventilation is installed interlocked with a gas leakage detector in the smallest room where the density limit is exceeded,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





1-1. Allocation standard of model name

SMMS-e



1-2. Summary of system equipments

1-2-1. Outdoor units

Unit type			Inverter unit					Appearance		
Model name	208/230 V, 60 Hz	MMY-	MAP0726HT9P-UL	MAP0966HT9P-UL	MAP1206HT9P-UL	MAP1446HT9P-UL	MAP1686HT9P-UL			
	460 V, 60 Hz	MMY-	MAP0726HT6P-UL	MAP0966HT6P-UL	MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL			
Capacity type			072 type	096 type	120 type	144 type	168 type			
Capacity code			72	96	120	144	168			



■ Combination of outdoor unit

Standard model

Unit type			Inverter unit							
Model name	208/230 V, 60 Hz	MMY-	AP1926HT9P-UL	AP2166HT9P-UL	AP2406HT9P-UL	AP2646HT9P-UL	AP2886HT9P-UL	AP3126HT9P-UL	AP3366HT9P-UL	
	460 V, 60 Hz	MMY-	AP1926HT6P-UL	AP2166HT6P-UL	AP2406HT6P-UL	AP2646HT6P-UL	AP2886HT6P-UL	AP3126HT6P-UL	AP3366HT6P-UL	
Capacity type			192 type	216 type	240 type	264 type	288 type	312 type	336 type	
Capacity code			192	216	240	264	288	312	336	
Combined outdoor units			096 type	120 type	144 type	144 type	144 type	168 type	168 type	
			096 type	096 type	096 type	120 type	144 type	144 type	168 type	

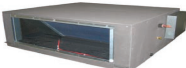
Unit type			Inverter unit				
Model name	208/230 V, 60 Hz	MMY-	AP3606HT9P-UL	AP3846HT9P-UL	AP4086HT9P-UL	AP4326HT9P-UL	AP4566HT9P-UL
	460 V, 60 Hz	MMY-	AP3606HT6P-UL	AP3846HT6P-UL	AP4086HT6P-UL	AP4326HT6P-UL	AP4566HT6P-UL
Capacity type			360 type	384 type	408 type	432 type	456 type
Capacity code			360	384	408	432	456
Combined outdoor units			120 type	144 type	144 type	168 type	168 type
			120 type	120 type	144 type	144 type	168 type
			120 type	120 type	120 type	120 type	120 type

Space saving model

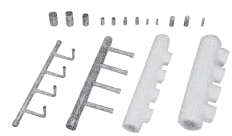
Unit type			Inverter unit		
Model name	208/230 V, 60 Hz	MMY-	AP192S6HT9P-UL	AP240S6HT9P-UL	AP288S6HT9P-UL
	460 V, 60 Hz	MMY-	AP192S6HT6P-UL	AP240S6HT6P-UL	AP288S6HT6P-UL
Capacity type			192 type	240 type	288 type
Capacity code			192	240	288
Combined outdoor units			120 type	120 type	168 type
			072 type	120 type	120 type

Unit type			Inverter unit
Model name	208/230 V, 60 Hz	MMY-	AP408S6HT9P-UL
	460 V, 60 Hz	MMY-	AP408S6HT6P-UL
Capacity type			408 type
Capacity code			408
Combined outdoor units			168 type
			120 type
			120 type

1-2-2. Indoor unit

Type	Appearance	Model name	Capacity type	Capacity code	Cooling capacity (kBTu/h)	Heating capacity (kBTu/h)
4-Way Cassette		MMU-AP0072H2UL	007 type	7.5	7.5	8.5
		MMU-AP0092H2UL	009 type	9.5	9.5	10.5
		MMU-AP0122H2UL	012 type	12	12	13.5
		MMU-AP0152H2UL	015 type	15.4	15.4	17
		MMU-AP0182H2UL	018 type	18	18	20
		MMU-AP0212H2UL	021 type	21	21	24
		MMU-AP0242H2UL	024 type	24	24	27
		MMU-AP0302H2UL	030 type	30	30	34
		MMU-AP0362H2UL	036 type	36	36	40
Compact 4-Way Cassette		MMU-AP0422H2UL	042 type	42	42	47.5
		MMU-AP0071MH2UL	007 type	7.5	7.5	8.5
		MMU-AP0091MH2UL	009 type	9.5	9.5	10.5
		MMU-AP0121MH2UL	012 type	12	12	13.5
		MMU-AP0151MH2UL	015 type	15.4	15.4	17
Ceiling		MMU-AP0181MH2UL	018 type	18	18	20
		MMC-AP0241H2UL	024 type	24	24	27
		MMC-AP0361H2UL	036 type	36	36	40
		MMC-AP0421H2UL	042 type	42	42	47.5
High Wall		MMK-AP0073H2UL	007 type	7.5	7.5	8.5
		MMK-AP0093H2UL	009 type	9.5	9.5	10.5
		MMK-AP0123H2UL	012 type	12	12	13.5
		MMK-AP0153H2UL	015 type	15.4	15.4	17
		MMK-AP0183H2UL	018 type	18	18	20
Slim Ducted		MMK-AP0243H2UL	024 type	24	24	27
		MMD-AP0074SPH2UL	007 type	7.5	7.5	8.5
		MMD-AP0094SPH2UL	009 type	9.5	9.5	10.5
		MMD-AP0124SPH2UL	012 type	12	12	13.5
		MMD-AP0154SPH2UL	015 type	15.4	15.4	17
Medium Static Duct		MMD-AP0184SPH2UL	018 type	18	18	20
		MMD-AP0214BH2UL-1	021 type	21	21	24
		MMD-AP0244BH2UL-1	024 type	24	24	27
		MMD-AP0304BH2UL-1	030 type	30	30	34
		MMD-AP0364BH2UL-1	036 type	36	36	40
		MMD-AP0424BH2UL-1	042 type	42	42	47.5
		MMD-AP0484BH2UL-1	048 type	48	48	54
		MMD-AP0074BH2UL-1	007 type	7.5	7.5	8.5
		MMD-AP0094BH2UL-1	009 type	9.5	9.5	10.5
		MMD-AP0124BH2UL-1	012 type	12	12	13.5
High Static Duct		MMD-AP0154BH2UL-1	015 type	15.4	15.4	17
		MMD-AP0184BH2UL	018 type	18	18	20
		MMD-AP0304H2UL	030 type	30	30	34
		MMD-AP0364H2UL	036 type	36	36	40
		MMD-AP0484H2UL	048 type	48	48	54
Floor console exposed		MMD-AP0726H-UL	072 type	72	72	81
		MMD-AP0966H-UL	096 type	96	96	108
		MML-AP0074H2UL	007 type	7.5	7.5	8.5
		MML-AP0094H2UL	009 type	9.5	9.5	10.5
		MML-AP0124H2UL	012 type	12	12	13.5
		MML-AP0154H2UL	015 type	15.4	15.4	17
Floor console recessed		MML-AP0184H2UL	018 type	18	18	20
		MML-AP0244H2UL	024 type	24	24	27
		MML-AP0074BH2UL	007 type	7.5	7.5	8.5
		MML-AP0094BH2UL	009 type	9.5	9.5	10.5
		MML-AP0124BH2UL	012 type	12	12	13.5
		MML-AP0154BH2UL	015 type	15.4	15.4	17
Outside Air unit		MML-AP0184BH2UL	018 type	18	18	20
		MML-AP0244BH2UL	024 type	24	24	27
		MMD-AP0481HF2UL	048 type	48	48	54
		MMD-AP0721HF2UL	072 type	72	72	81
		MMD-AP0961HF2UL	096 type	96	96	108

1-2-3. Branching joints and headers

Name	Model name	Appearance
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. Remote control

Name	Model name	Remarks
Wired remote control	RBC-AMT32UL	
	RBC-AMS51E-ES	
	RBC-AMS54E-UL	
Simple wired remote control	RBC-AS41UL	
Wireless remote control kit	RBC-AX32U(W)-UL	For 4-Way Cassette type
	RBC-AX33C-UL	For Ceiling type
	TCB-AX32-UL	For Compact 4-Way Cassette type, Medium Static Ducted type, Slim Ducted type, Floor console recessed type
Central remote control	BMS-CM1281TLUL	
Wired remote control with weekly timer	RBC-AMS41UL	

1-2-5. Optional PCB of outdoor unit

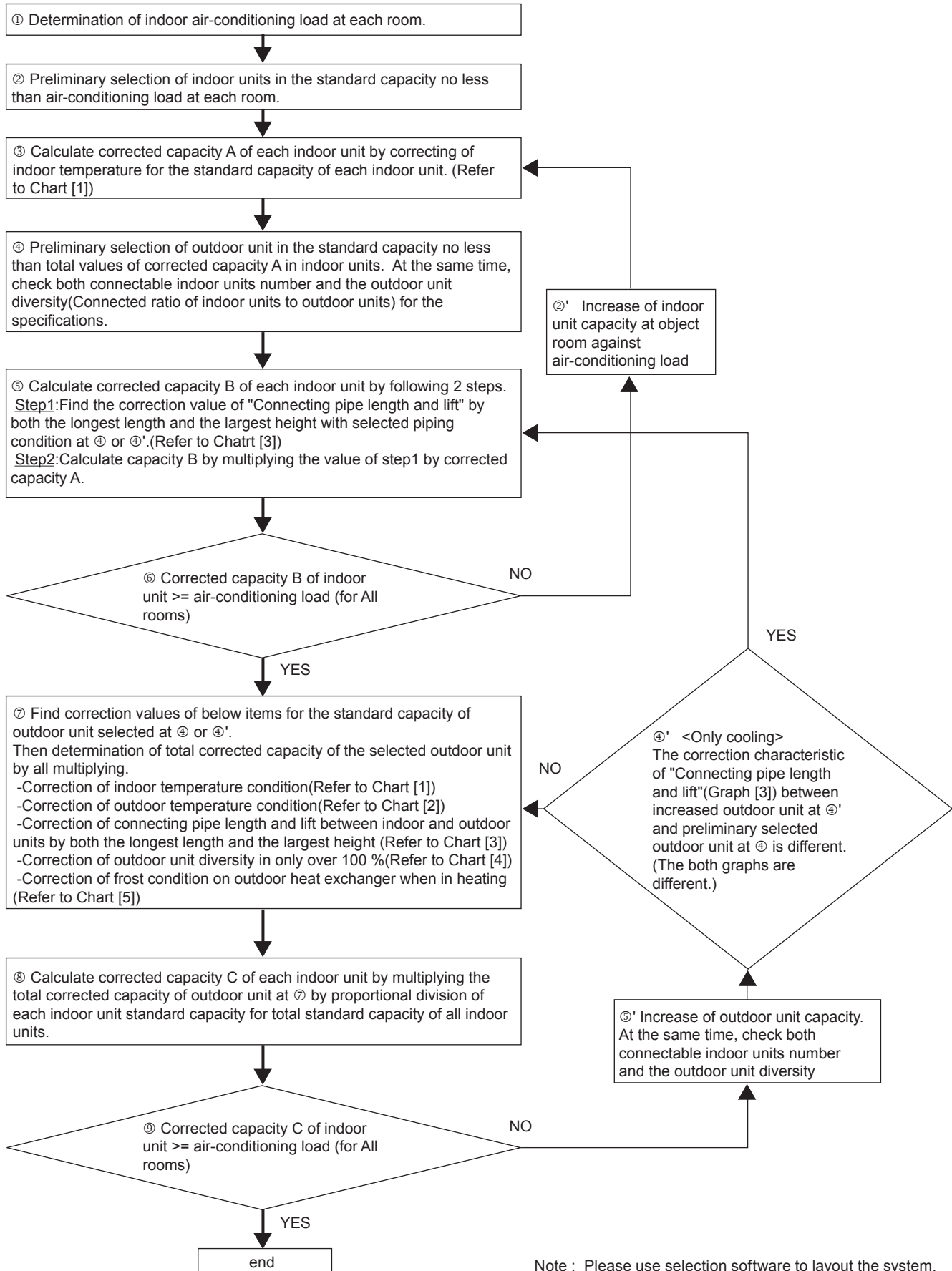
Name	Model name	Remarks
Power peak-cut control board	TCB-PCDM4UL	Power peak-cut control
External master ON/OFF control board	TCB-PCMO4UL	External master ON/OFF control, Night operation control, Operation mode selection control, Snowfall fan control
Output control board	TCB-PCIN4UL	Error / operation output control, Compressor operation output, Operating rate output

1-2-6. Controls

Name	Model name	Remarks
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 system network.
LonWorks LN Interface	TCB-IFLN642TLUL	
Smart BMS manager	BMS-SM1280HTLUL	
Energy Monitoring Relay Interface	BMS-IFWH5UL	
Digital I/O Relay Interface	BMS-IFDD03UL	
BACnet Server	BMS-LSV6UL	
	BMS-STBN10UL	
Relay Interface	BMS-IFLSV4UL	
BN Interface	BMS-IFBN640TLUL	
Touch Screen Controller	BMS-CT5120UL	

"1:1 model" : RAV type indoor unit

2-1. Selection flow chart



Note : Please use selection software to layout the system.

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

2-2-1. The capacity code of indoor unit is decided for each capacity type.

Indoor unit capacity type	007	009	012	015	018	021	024	027	030	036	042	048	054	072	096
Indoor unit capacity code	7.5	9.5	12	15.4	18	21	24	27	30	36	42	48	54	72	96

2-2-2. The capacity code of outdoor unit is decided for each capacity type. The maximum number of connectable indoor units and the total value of capacity codes of the indoor units are also decided.

Outdoor unit capacity type	Outdoor unit capacity code	Maximum number of indoor units	
		Height difference between indoor units	
		49 ft (15 m) or less	Over 49 ft (15 m)
072type	72	12	10
096type	96	16	13
120type	120	21	16
144type	144	25	19
168type	168	30	23
192type	192	34	26
216type	216	38	29
240type	240	42	32
264type	264	46	36
288type	288	50	39
312type	312	55	43
336type	336	60	47
360type	360	63	49
384type	384	64	52
408type	408	64	55
432type	432	64	59
456type	456	64	63

NOTE

Compared with the capacity code of the outdoor unit, the total value of capacity codes of the connectable indoor units differs based on the height difference between the indoor units.

When the height difference between the indoor units is 49 ft (15 m) or less

Total indoor capacity code must be between 50% and 135% of the capacity of the outdoor unit.

When the height difference between the indoor units is over 49 ft (15 m)

Total indoor capacity code must be between 50% and 105% of the capacity of the outdoor unit.

* If MMU-AP0122H2UL is included in the system, total indoor capacity code must be between 80% and 100% of outdoor unit capacity.

* Permanent operation below 80% is not recommended.

In case of Outside Air unit Type connection, connecting limitations are as follows.

- The total capacity of the Outside Air units and the indoor units is restricted to 80 to 100% against the capacity of the outdoor units.
- Up to two Outside Air units can be connected on one line of the multi system.
- The allowable total capacity of Outside Air units shall be 30% or less against the total capacity of the indoor units (including the Outside Air units).
- The Outside Air units only cannot connected.

- If the system includes only the limited indoor unit type shown below, total indoor capacity code up to 150% of the outdoor capacity code is available when the height difference between the indoor units is 49ft(15m) or less.

- Limited indoor unit type for 150% connection

Type	Model name	Capacity type	Capacity code	Total Indoor Capacity code
4-Way Cassette	MMU-AP0152H2UL	015 type	15.4	must be 80% - 150% of the capacity of the outdoor unit
	MMU-AP0182H2UL	018 type	18	
	MMU-AP0212H2UL	021 type	21	
	MMU-AP0242H2UL	024 type	24	
	MMU-AP0302H2UL	030 type	30	
	MMU-AP0362H2UL	036 type	36	
	MMU-AP0422H2UL	042 type	42	
Compact 4-Way Cassette	MMU-AP0071MH2UL	007 type	7.5	
	MMU-AP0091MH2UL	009 type	9.5	
	MMU-AP0121MH2UL	012 type	12	
	MMU-AP0151MH2UL	015 type	15.4	
	MMU-AP0181MH2UL	018 type	18	
Floor console recessed	MML-AP0074BH2UL	007 type	7.5	
	MML-AP0094BH2UL	009 type	9.5	
	MML-AP0124BH2UL	012 type	12	
	MML-AP0154BH2UL	015 type	15.4	
	MML-AP0184BH2UL	018 type	18	
	MML-AP0244BH2UL	024 type	24	
High Static Ducted	MMD-AP0304H2UL	030 type	30	
	MMD-AP0364H2UL	036 type	36	
	MMD-AP0484H2UL	042 type	42	
	MMD-AP0724H2UL	072 type	72	
	MMD-AP0964H2UL	096 type	96	
	MMD-AP0726H-UL	072 type	72	
	MMD-AP0966H-UL	096 type	96	
Slim Ducted	MMD-AP0074SPH2UL	007 type	7.5	
	MMD-AP0094SPH2UL	009 type	9.5	
	MMD-AP0124SPH2UL	012 type	12	
	MMD-AP0154SPH2UL	015 type	15.4	
	MMD-AP0184SPH2UL	018 type	18	

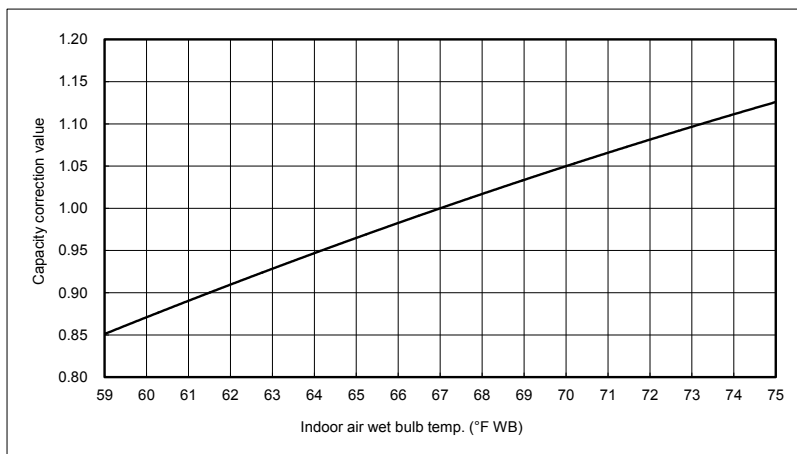
In case of up to 150% connection from 135% with limited indoor unit type, "Maximum number of indoor units" must be as follows.

Outdoor unit capacity type	Outdoor unit capacity code	Maximum number of indoor units	
		Height difference between indoor units	
		49 ft (15 m) or less	Over 49 ft (15 m)
072type	72	10	Not Available
096type	96	14	
120type	120	19	
144type	144	23	
168type	168	28	
192type	192	31	
216type	216	35	
240type	240	39	
264type	264	43	
288type	288	47	
312type	312	52	
336type	336	57	
360type	360	59	
384type	384	60	
408type	408	60	
432type	432	60	
456type	456	60	

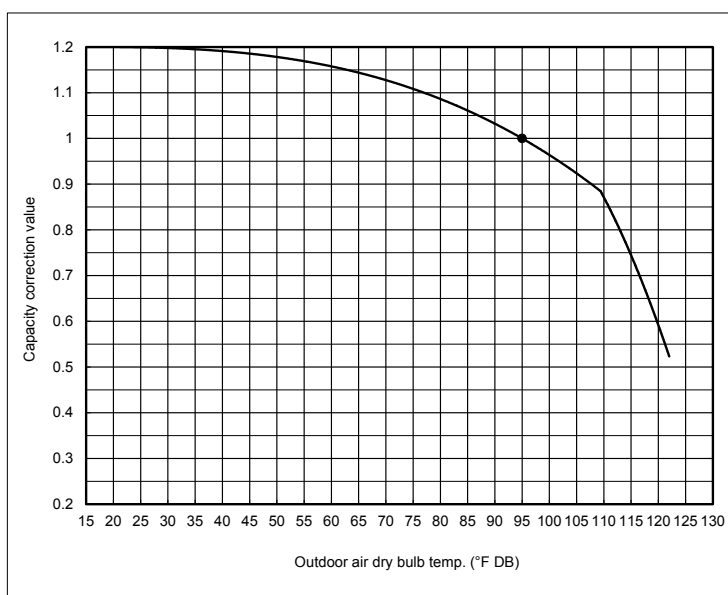
2-3. Cooling/heating capacity characteristics

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

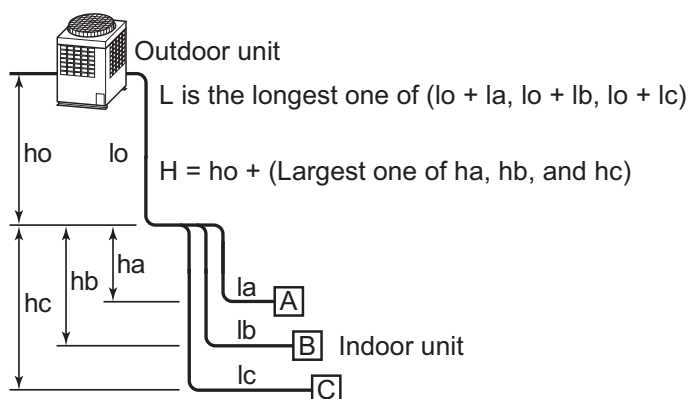
[Chart 1] Indoor air wet bulb temperature vs. capacity correction value

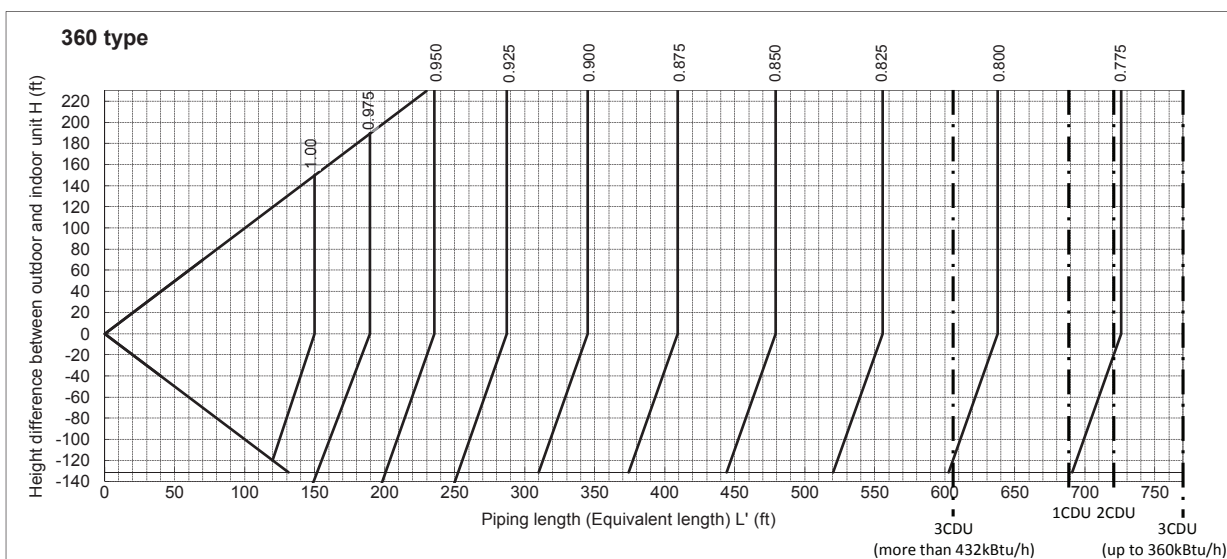
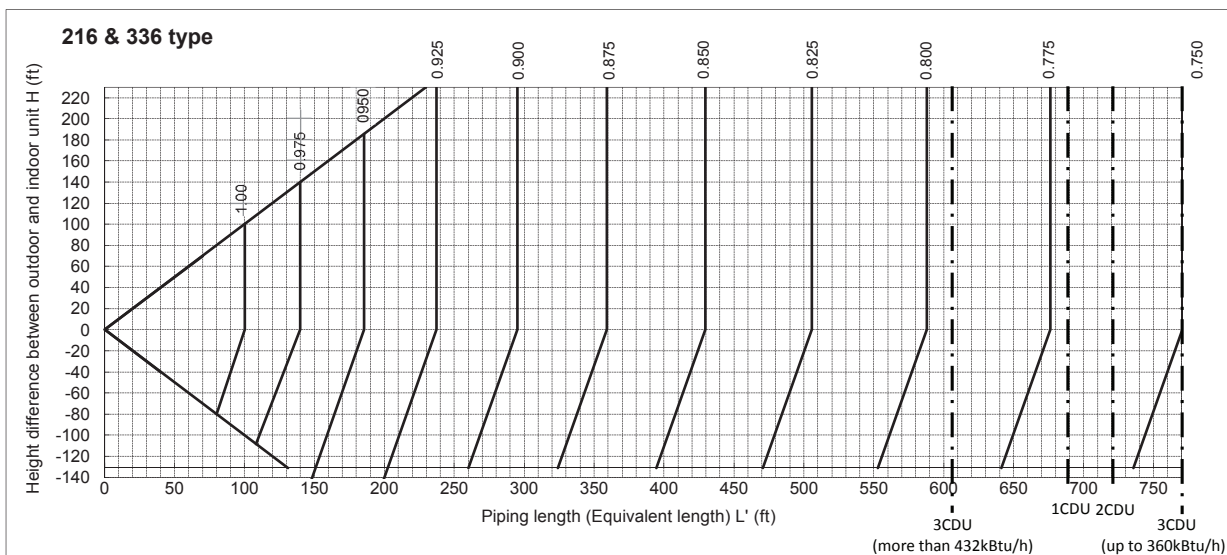
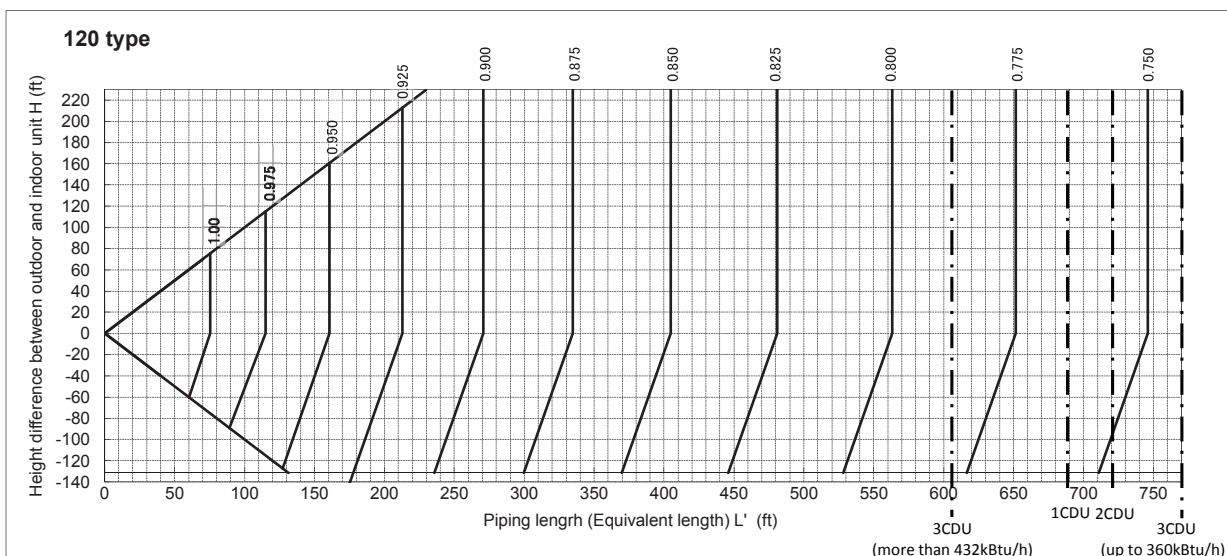


[Chart 2] Outdoor air dry bulb temperature vs. capacity correction value

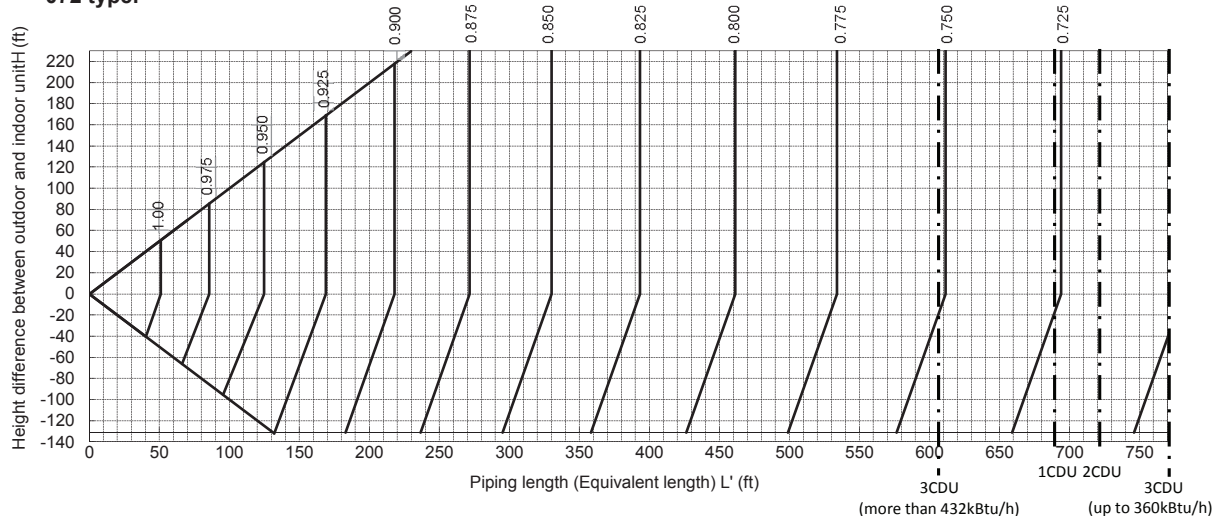


[Chart 3] Connecting pipe length and lift difference between indoor and outdoor units vs. capacity correction value

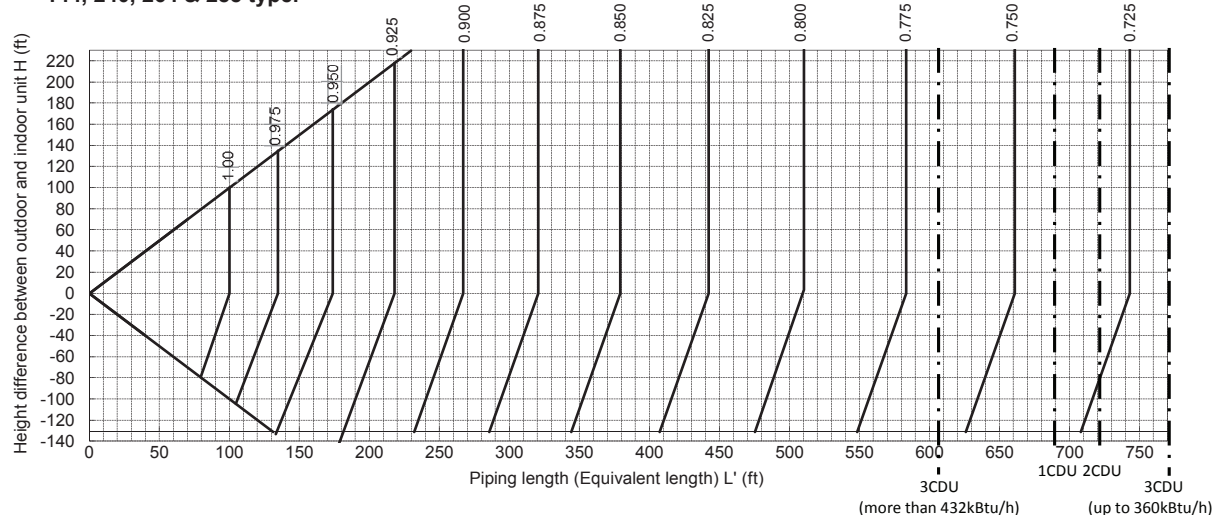




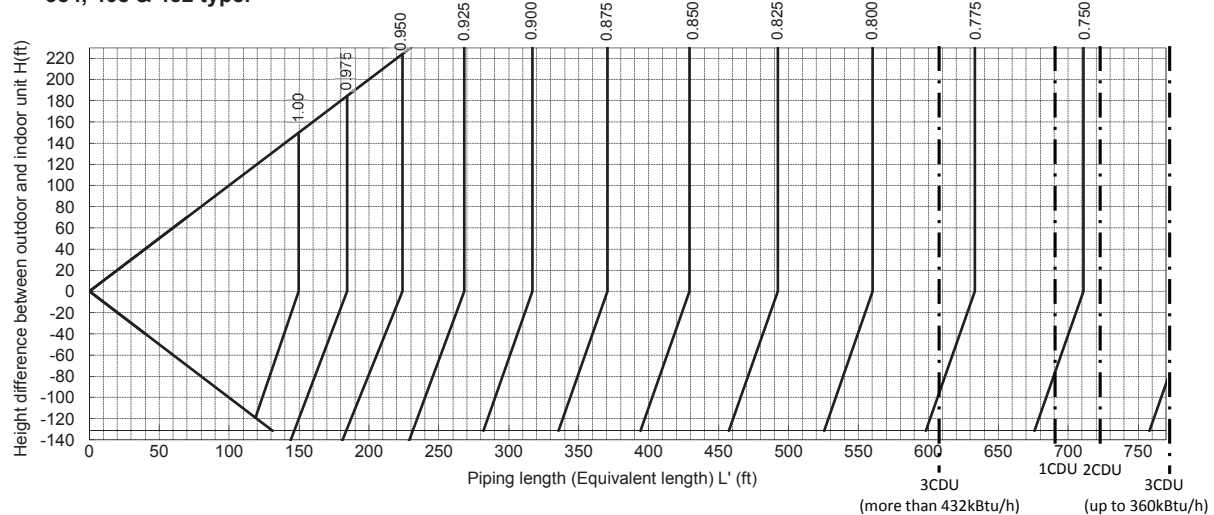
072 type.

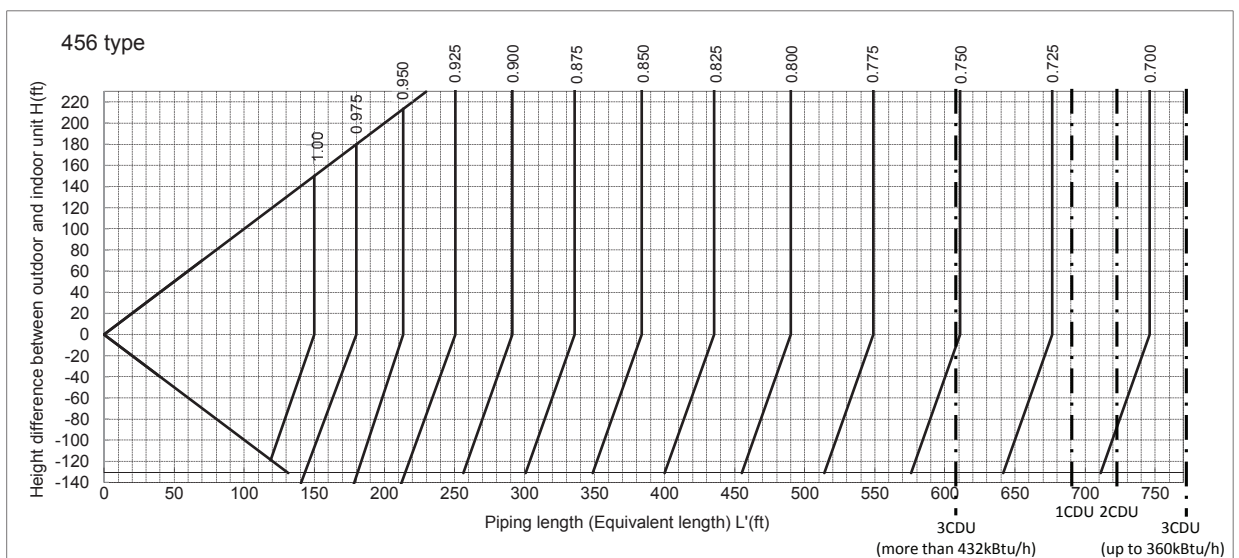
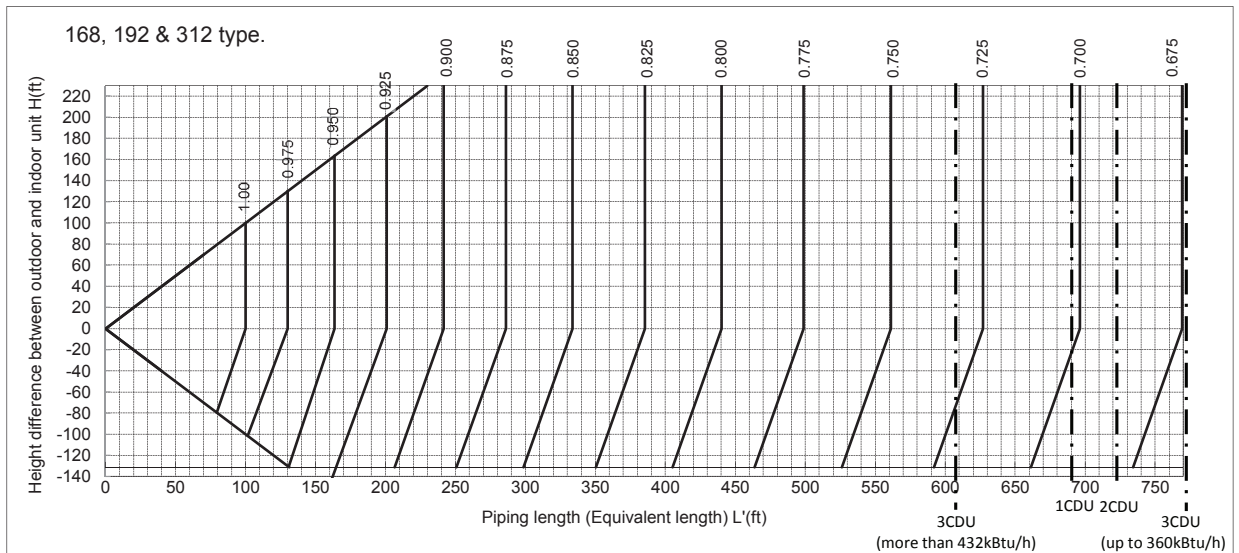
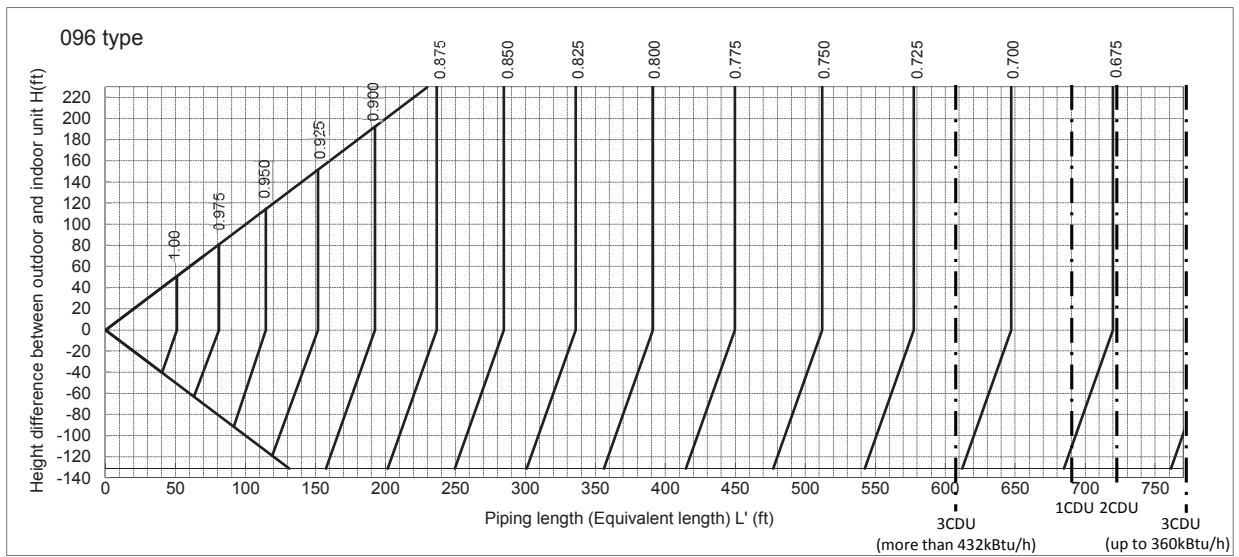


144, 240, 264 & 288 type.

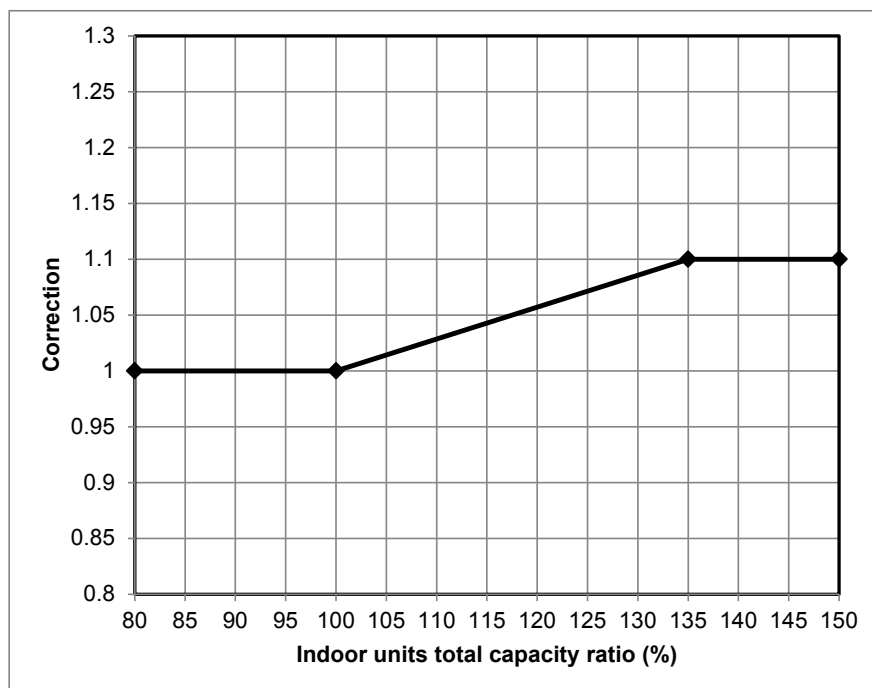


384, 408 & 432 type.





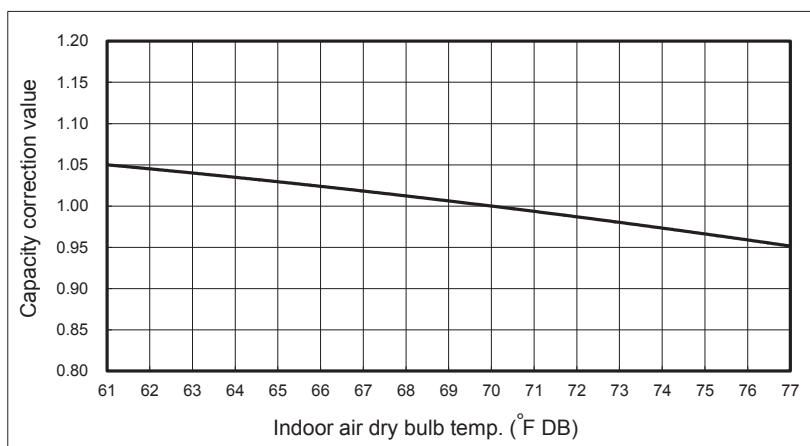
[4]* Correction of outdoor unit diversity



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

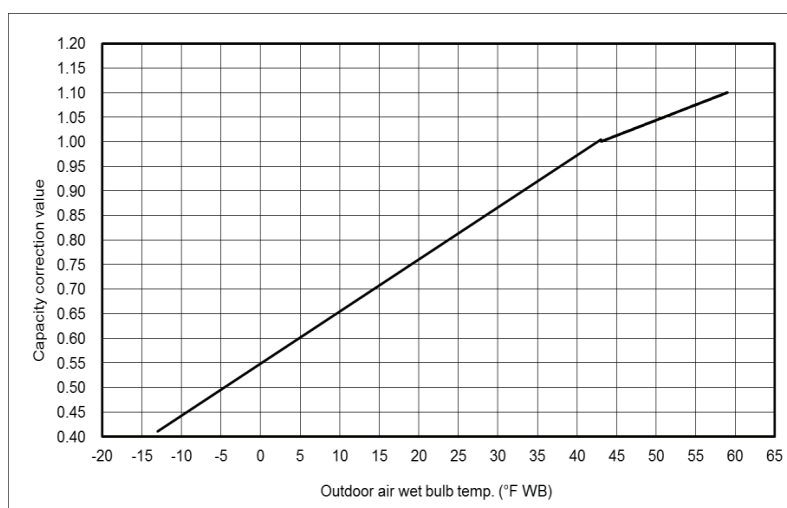
2-3-2. Correction charts for heating capacity calculation

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



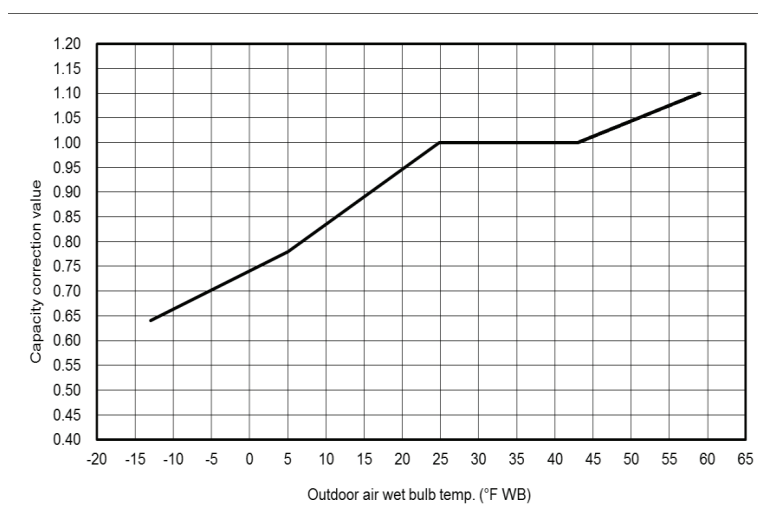
[Chart 2] Outdoor air wet bulb temperature vs. capacity correction value

○ Standard

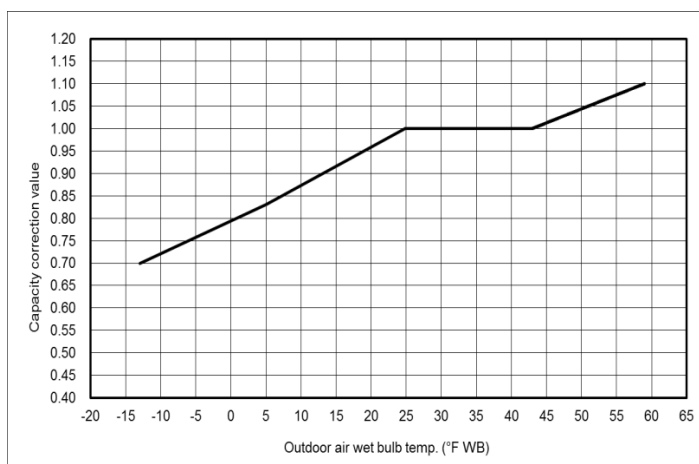


○ High Heating

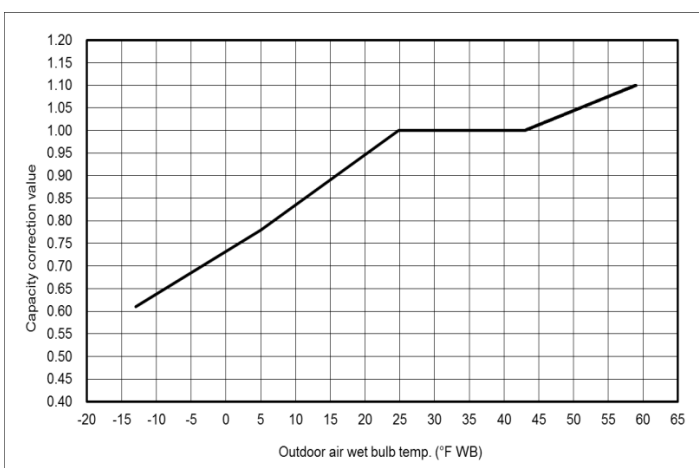
	Model type	Capacity type
1	Standard	072, 144, 192
	Space saving	-



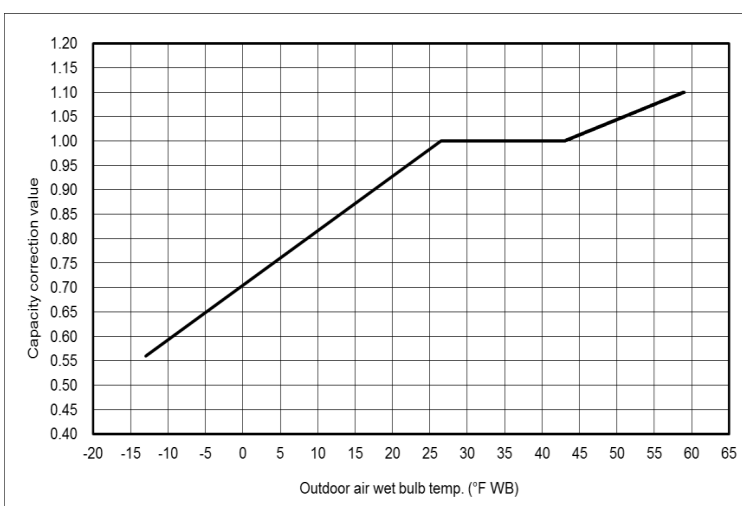
2	Model type	Capacity type
	Standard	096
	Space saving	-



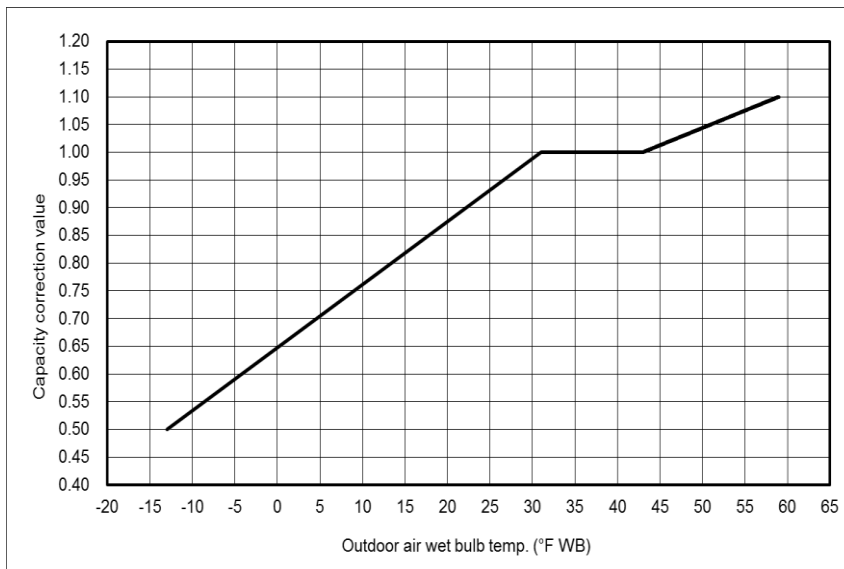
3	Model type	Capacity type
	Standard	120, 240, 288
	Space saving	-



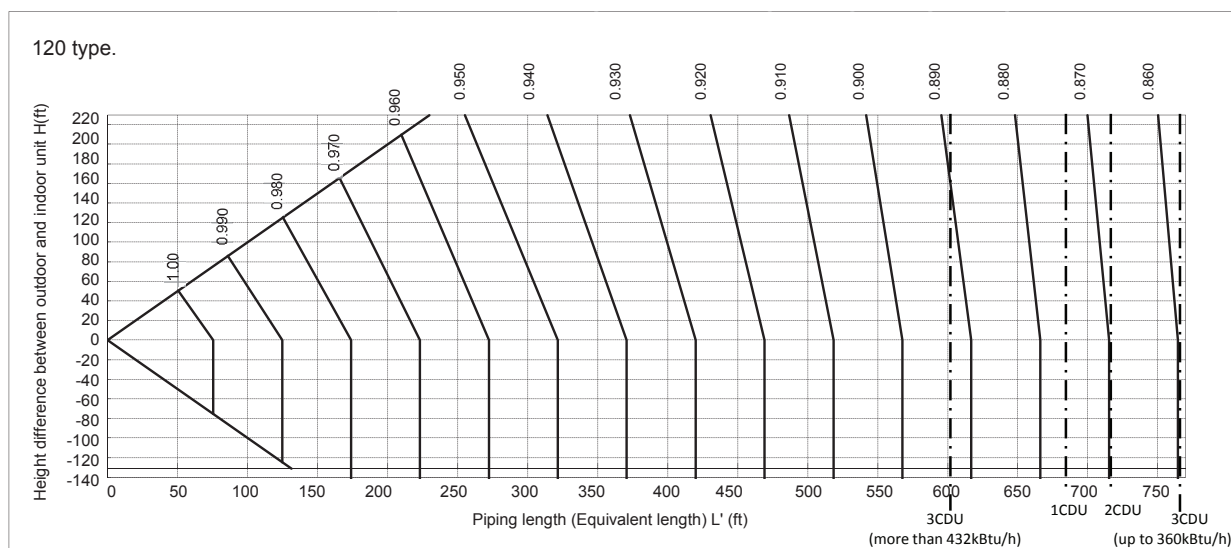
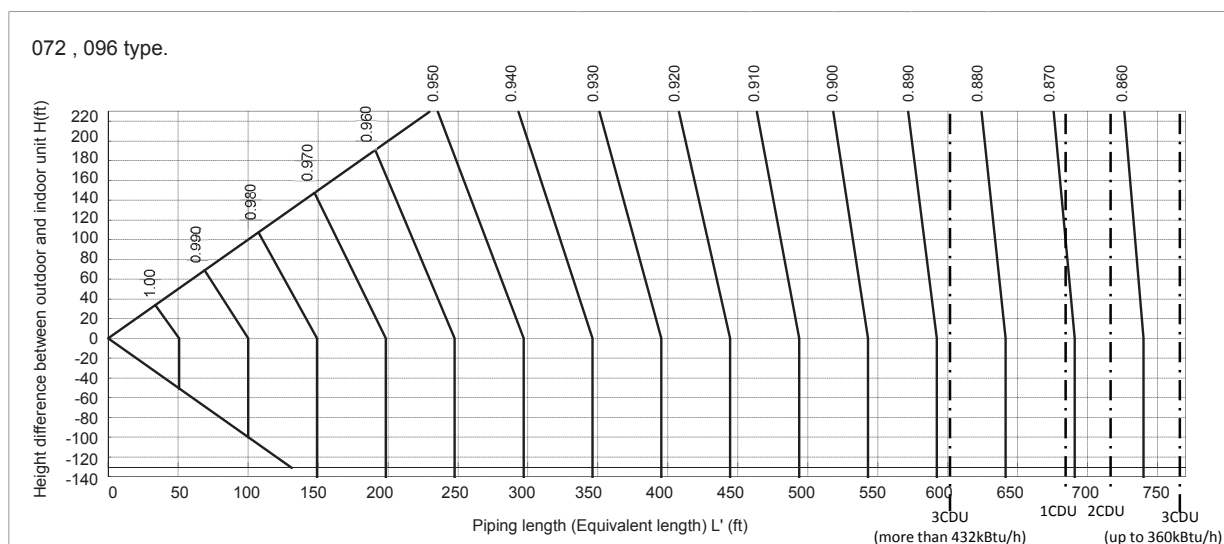
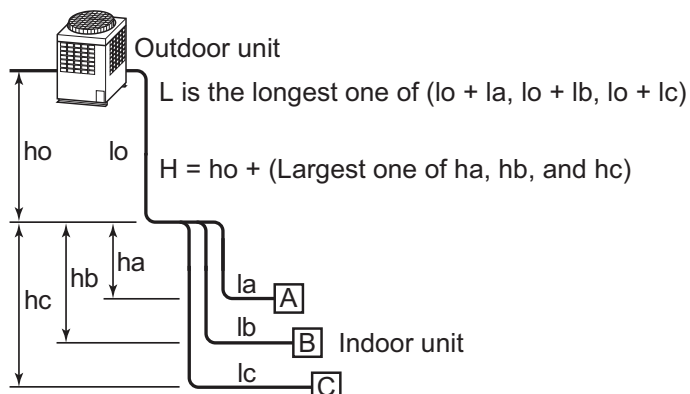
4	Model type	Capacity type
	Standard	168, 216, 264,
	Space saving	192S, 240S



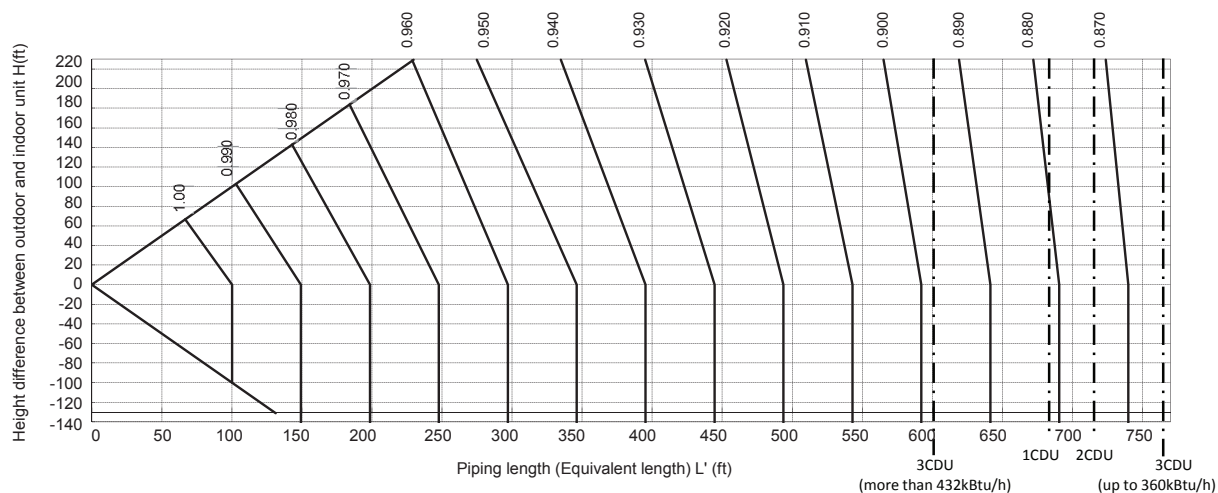
5	Model type	Capacity type
	Standard	312, 336, 360, 384, 408, 432, 456
	Space saving	288S, 408S



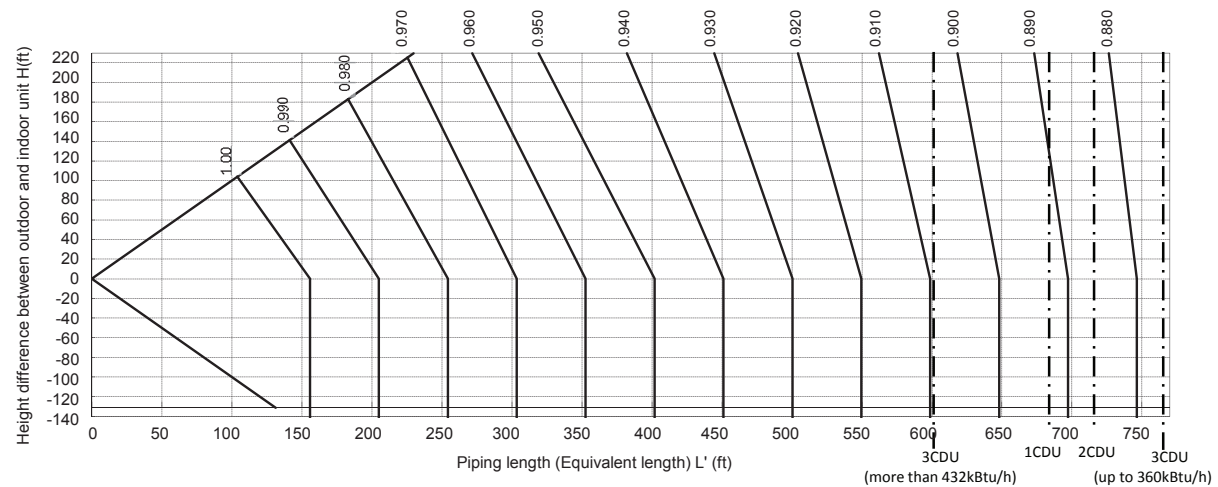
[Chart 3] Connecting pipe length and lift difference between indoor and outdoor units vs. capacity correction value



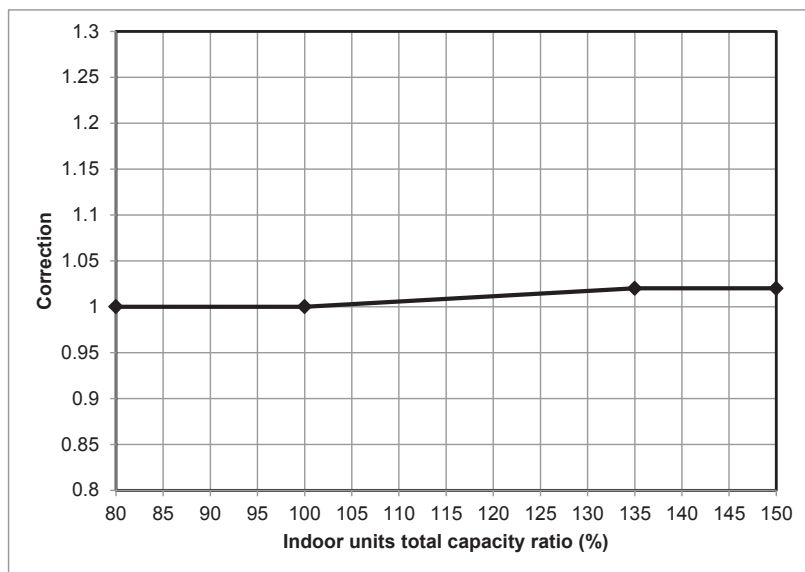
144, 168, 192, 216, 240, 264, 288, 312, 336, 360 type.



384, 408, 432, 456 type.



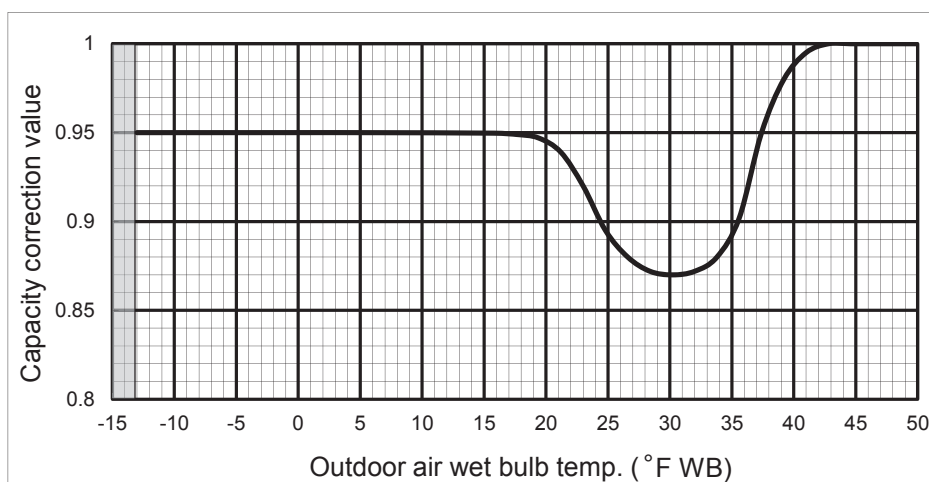
Correction of outdoor unit diversity



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.

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



2-3-4. Rated conditions

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

2-4. Operational temperature range

Cooling

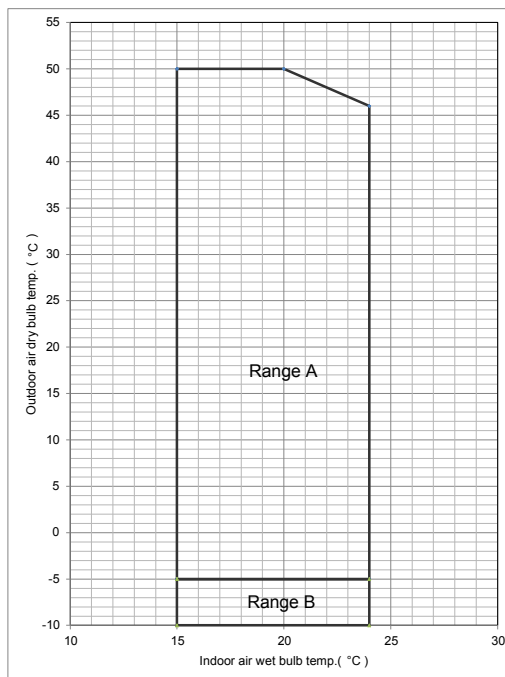
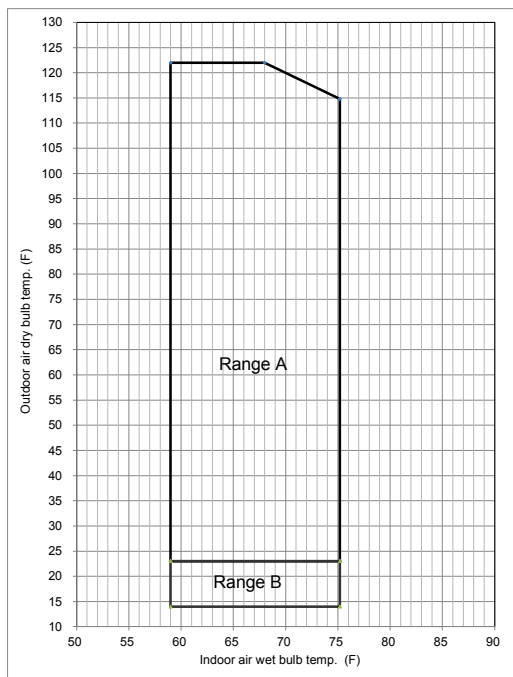
Range A : Range for continuous operation

Range B : Range for continuous operation under specific condition

Note 1-4

Note

1. For Critical cooling applications below 23F it is recommended that a backup cooling source be installed to ensure room temperature is adequately maintained.
2. Single outdoor unit only.
3. No height difference between indoor units in case of upper outdoor unit. Up to 15ft height difference between indoor units in case of lower outdoor unit.
4. Please ensure the cooling load on the system is greater than 3 tons to maintain cooling performance.
5. System does not have a low ambient temperature cooling lock out. System will continue to provide cooling until protective devices are activated.



Heating

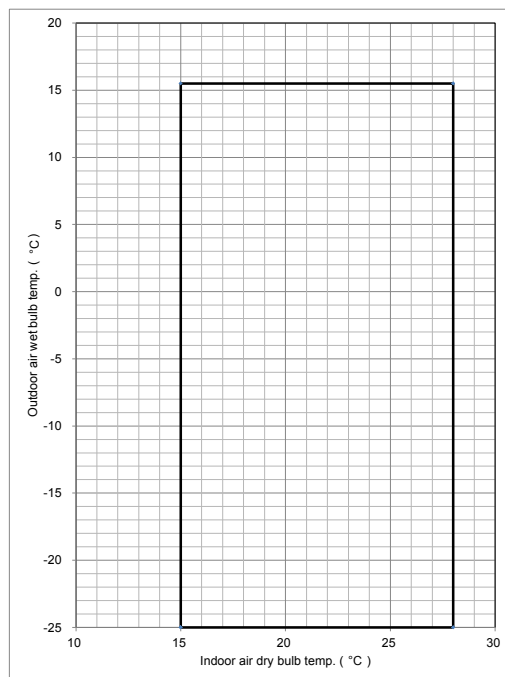
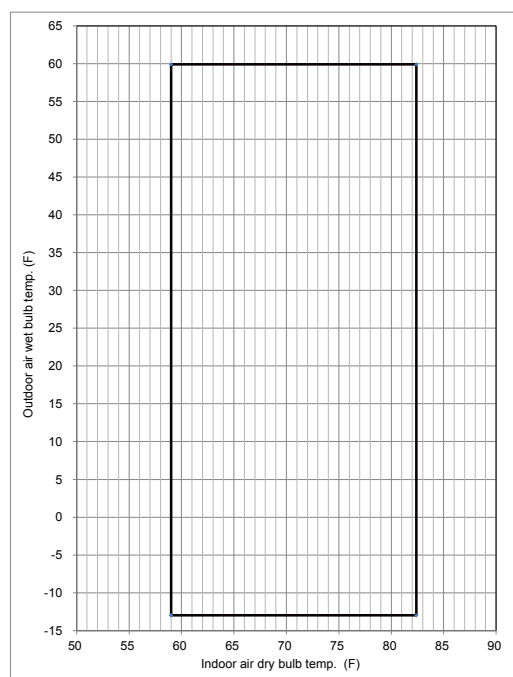
Range A : Range for continuous operation

Range B : Range for continuous operation under specific condition

Note 1

Note

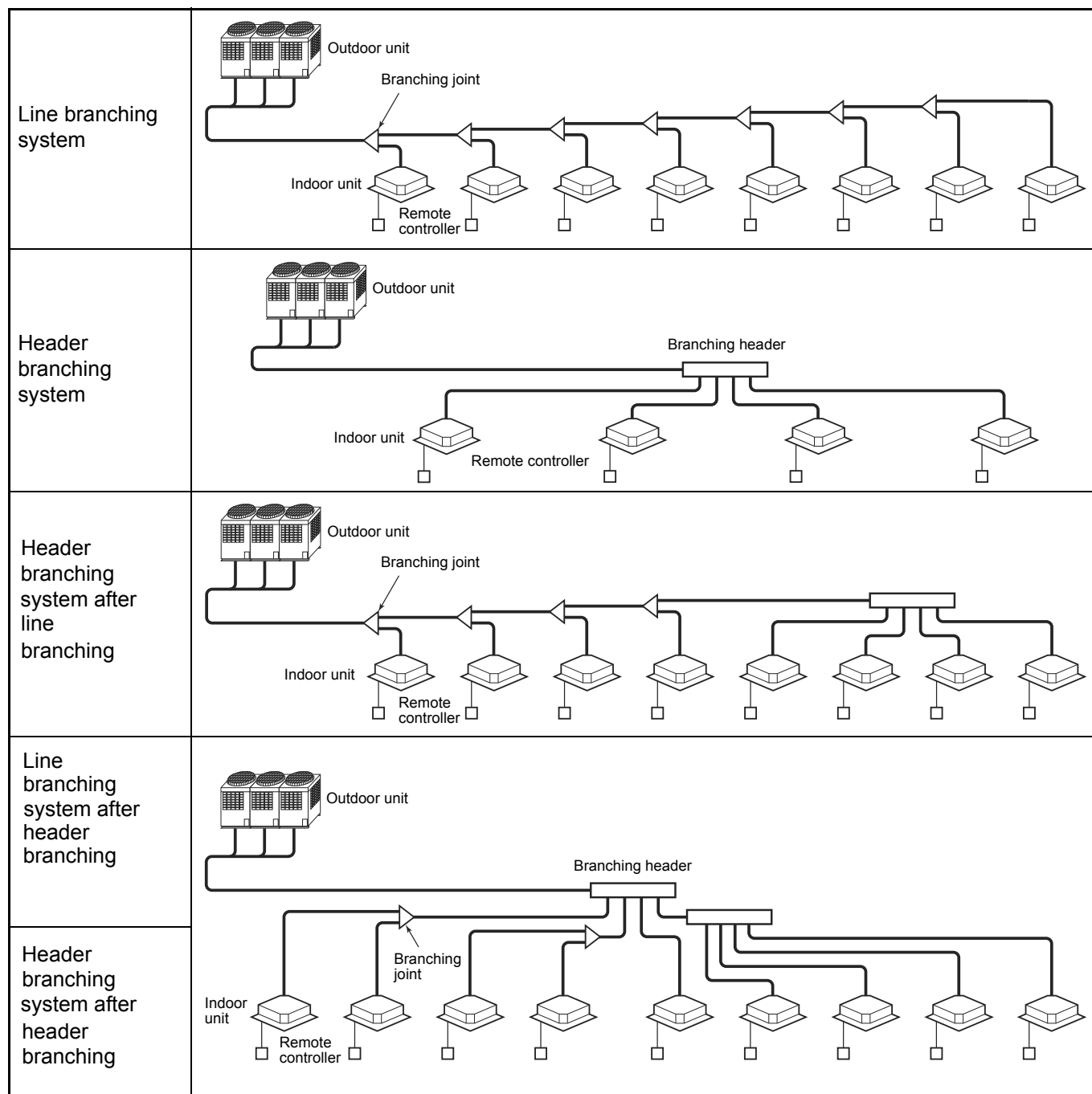
1. The outdoor unit might want to pause for the protection stop. If it is stopped, it will be automatically reset. This is not a malfunction.



3-1. Free branching system

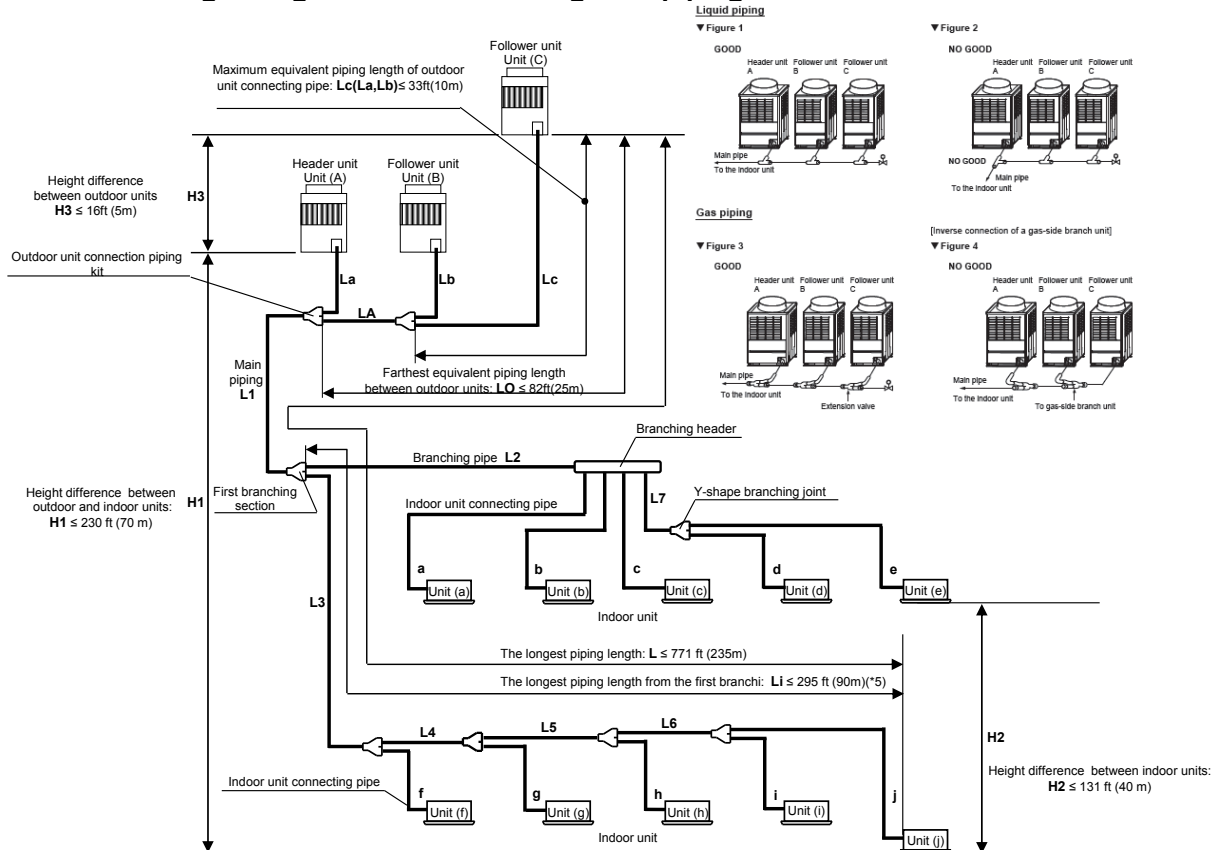
- [1] Line branching system
- [2] Header branching system
- [3] Header branching system after line branching
- [4] Line branching system after header branching
- [5] Header branching system after header branching

The above five branching systems enable to dramatically increase the flexibility of refrigerant piping design.



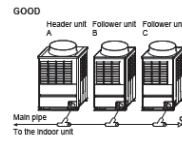
3-2. Allowable length/height difference of refrigerant piping

■ Allowable length/height difference of refrigerant piping

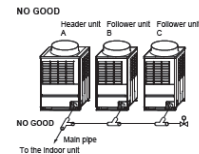


Liquid piping

▼ Figure 1

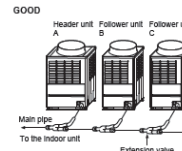


▼ Figure 2



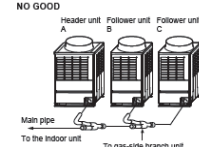
Gas piping

▼ Figure 3



[Inverse connection of a gas-side branch unit]

▼ Figure 4



System restrictions

Max. No. of combined outdoor units	3	units
Max. capacity of combined outdoor units	38	ton
Max. No. of combined indoor units	64	units
Max. capacity of combined indoor units	H2 ≤ 49ft (15m)	135% of outdoor units' capacity
	H2 > 49ft (15m)	150% of outdoor units' capacity(*1)
		105% of outdoor units' capacity

(*1): If the system configure only the limited indoor unit type and limited number of connection indoor unit, total indoor capacity code up to 150% of the outdoor capacity code is available when the height difference between the indoor units is 49ft(15m) or less.

Cautions for installation

- Set the outdoor unit first connected to the bridging pipe to the indoor units as the header unit.
- Install the outdoor units in order of their capacity codes: (A) header unit) ≥ (B) ≥ (C)
- Y-shaped branching joint must be installed horizontally.
- When piping to outdoor units using Outdoor unit connection piping kits, intersect the pipes to the outdoor unit and those to indoor units at a right angle as shown in figure 1 on "6. Installation of the outdoor unit". Do not connect them as in figure 2 on "6. Installation of the outdoor unit".

Allowable length and height difference of refrigerant piping

Pipe length	Total extension of pipe (Liquid pipe)	Actual length	Allowable value		Pipes
			ft	m	
Pipe length	Farthest piping length L (*1)	Equivalent length	771	235	La + Lb + Lc + LA + L1 + L2 + L3 + L4 + L5 + L6 + L7 + a + b + c + d + e + f + g + h + i + j
	Main piping length	Actual length	623	190	
	Farthest equivalent piping length from the first branching section Li (*2)	Equivalent length	394	120	Lc + LA + L1 + L3 + L4 + L5 + L6 + j
		Below 432 kbtu/h	230	70	
		432 kbtu/h or more	328	100	
		Actual length	164	50	
	Farthest equivalent piping length between outdoor units L0	Equivalent length	213	65	L3 + L4 + L5 + L6 + L7 + j
		H1 > 9.8ft (3m)	295	90	
	Maximum equivalent piping length of outdoor unit connecting pipe	Equivalent length	82	25	LA + Lc (LA + Lb)
	Maximum actual length of pipes connected to indoor units	Equivalent length	33	10	
Height difference	Maximum equivalent length between branching sections	Equivalent length	98	30	La, Lb, Lc
	Height between outdoor and indoor units H1	Equivalent length	164	50	
	Height between indoor units H2	Upper outdoor units	164	50	a, b, c, d, e, f, g, h, i, j L2, L3, L4, L5, L6, L7
		Lower outdoor units	98	30	
		Upper outdoor units	230(*3)	70(*3)	
		Lower outdoor units	131	40	
	Height between outdoor units H3	Equivalent length	131	40	—
		Equivalent length	16	5	
			—	—	—
			—	—	
			—	—	—
			—	—	

(*1): Farthest outdoor unit from the first branching section is the follower unit (C). Farthest indoor unit from the first branching section is the indoor unit (j).

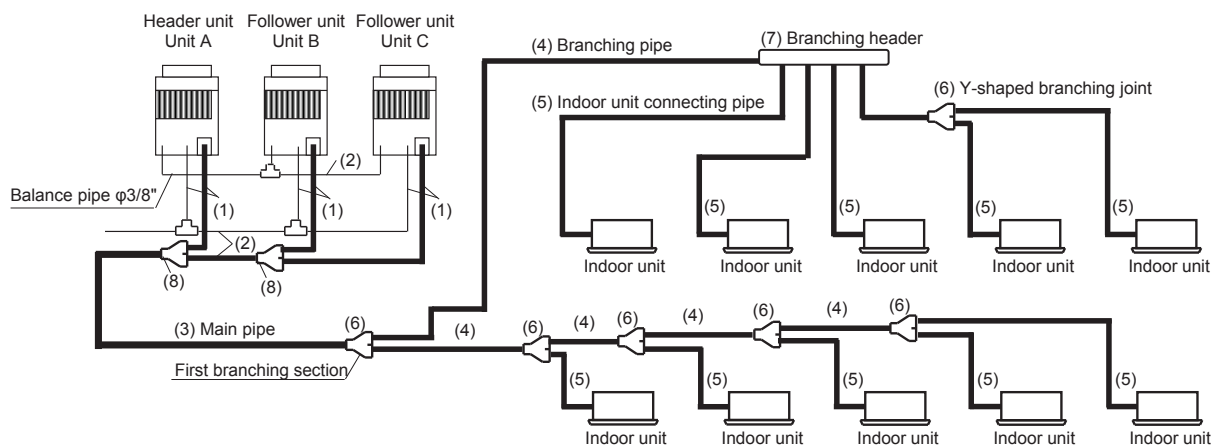
(*2): Total refrigerant amount in the system is restricted according to capacity type. Refer to the table below.

(*3): Extension up to 295ft(90m) is possible please contact manufacturers representative for review.

Standard model	Capacity type	072	096	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	
	Applicable total refrigerant amount (lbs)	88	107	110	150	153	204	207	254	257	287	290	308	308	308	308	308	308	
Space saving model	Capacity type	192	240	288	408														
	Applicable total refrigerant amount	177	210	260	308														

3-3. Selection of refrigerant piping

3-3-2. Heat pump



(1) Outdoor unit connecting pipe (Table 1)

Outdoor unit capacity type	Gas side	Liquid side
072 type , 096 type	φ7/8"	φ1/2"
120 type	φ1-1/8"	φ1/2"
144 type , 168 type	φ1-1/8"	φ5/8"

(2) Main connecting pipe between outdoor units (Table 2)

Total capacity code of the outdoor units at downstream side (*1)(*2)	Gas side	Liquid side	Balance pipe
240 or more	φ1-3/8"	φ3/4"	φ3/8"

(3) Main pipe (Table 3)

Total capacity code of all outdoor units (*1)	Gas side	Liquid side
72 to below 120	φ7/8"	φ1/2"
120 to below 144	φ1-1/8"	φ1/2"
144 to below 216	φ1-1/8"	φ5/8"
216 to below 336	φ1-3/8"	φ3/4"
336 or more	φ1-5/8"	φ7/8"

(4) Branching pipe (Table 4)

Total capacity code of the indoor units on the downstream side (*1)(*5)	Gas side	Liquid side
Below 23	φ1/2"	φ3/8"
23 to below 61	φ5/8"	φ3/8"
61 to below 116	φ7/8"	φ1/2"
116 to below 192	φ1-1/8"	φ5/8"
192 to below 213	φ1-1/8"	φ3/4"
213 to below 336	φ1-3/8"	φ3/4"
336 or more	φ1-5/8"	φ7/8"

(5) Indoor unit connection pipe (Table 5)

Indoor unit capacity code		Gas side	Liquid side
7.5 to 12	Pipe length (Actual length)	49 ft length	Over 49 ft
		φ3/8"	φ1/4"
		φ1/2"	φ1/4"
	15.4 to 18	φ1/2"	φ1/4"
	21 to 48	φ5/8"	φ3/8"
	72 to 96	φ7/8"	φ1/2"

(6) Y-shaped branching joint (Table 6)

Total capacity code of the indoor units on the downstream side from Y-shaped branching joint(*3) (*4) (*7)	Model name
Below 61	RBM-BY 55UL
61 to below 134	RBM-BY105UL
134 to below 239	RBM-BY205UL
239 or more	RBM-BY305UL

(7) Branching header (Table 7)

Total capacity code of the indoor units on downstream side from branching header(*3)(*4) (*6)(*7)	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 (Table 8)

Total capacity code of the outdoor units on the downstream side(*1)(*8)	Model name
Below 247	RBM-BT14UL
247 or more	RBM-BT24UL

CAUTION

Please use the appropriate pipe when the pipe size is φ3/4 or more.(Table 9)

Outer diameter		Minimum wall thickness	Temper	
Inch	mm		Soft	Hard, Semi hard
φ1/4"	6.35	0.80	OK	OK
φ3/8"	9.52	0.80	OK	OK
φ1/2"	12.7	1.00	OK	OK
φ5/8"	15.88	1.00	OK	OK
φ3/4"	19.05	1.00	NG	OK
φ7/8"	22.2	1.00	NG	OK
φ1-1/8"	28.58	1.00	NG	OK
φ1-3/8"	34.92	1.20	NG	OK
φ1-5/8"	41.28	1.40	NG	OK

*1: Code is determined according to the capacity type.

*2: The start point of the downstream side is the main connecting pipe between outdoor units.

The total capacity code of the outdoor units on the downstream side.

Example: The total capacity code of Unit B and Unit C

*3: When using a branching joint for the first branch, select according to capacity code of the outdoor unit.

*4: For 1 line after branching header indoor units with a maximum capacity code of 57 in total can be connected.

*5: If the piping size becomes over main piping size, select the size same as main piping.

*6: When the first branch is a header with the outdoor total capacity of 120 to 247, apply the model RBM-HY2043UL(4-branch) or RBM-HY2083UL(8-branch) regardless of the total capacity codes of the down-stream indoor units.

*7: When the sum of capacity code of indoor units exceeds the capacity code of outdoor units, select according to capacity code of the outdoor units.

*8: The start point of the downstream side is the outdoor unit connection piping kit.

The total capacity code of the outdoor units on the downstream side.

Example1: The total capacity code of Unit A, B and Unit C

3-4. Charging requirement with additional refrigerant

■ Adding refrigerant

After the system has been vacuumed, replace the vacuum pump with a refrigerant cylinder and charge the system with additional refrigerant

1.Refrigerant in the ODU when shipped from the factory.

Model name		Refrigerant amount charged in factory
MMY-MAP	0726HT6P-UL	0726HT9P-UL
	0966HT6P-UL	0966HT9P-UL
	1206HT6P-UL	1206HT9P-UL
	1446HT6P-UL	1446HT9P-UL
	1686HT6P-UL	1686HT9P-UL
		25.4lbs

When the ODU is charged with refrigerant from the factory, the amount of refrigerant needed for the pipes at the site is not included. Therefore, calculate the additional amount needed using below steps and add the required amount to the system in field.

■ Calculation of additional refrigerant charge amount

Additional refrigerant charge amount(lbs) = [1] + [2] + [3]

[1]. Compensation base on ODU capacity (Table1)

[2]. Additional refrigerant charge based on IDU type (Table2)

[3]. (Actual length of liquid pipe × Additional refrigerant charge amount per liquid pipe 1ft(Table3)) × 1.2

NOTE

If the additional refrigerant amount indicates minus as the result of calculation, do not remove refrigerant from the system.

Example:

Additional charge amount R (kg) = [1] + [2] + ([3] × 1.2)
= (-3.3) + 36.1 + (26.26×1.2) = 59.06 lbs

System HP : 384 kBTu/h

Indoor unit (Other indoor unit) : 380 lbs/kbtu/h

Liquid pipe : 7/8" 100 in

3/4" 10 in

5/8" 10 in

[1]. Compensation by system HP = 384 type = -3.3lbs

[2]. Additional refrigerant charge amount Indoor unit = 0.095x380 = 36.1 lbs

[3]. Actual length of liquid pipe × Additional refrigerant charge amount per liquid pipe
(0.235x100)+(0.168x10)+(0.108x10) = 23.5+1.68+1.08 = 26.26

(Table1) Compensation by capacity of outdoor unit

Outdoor unit capacity type	Unit1 Header unit	Unit2 Follower unit	Unit3 Follower unit	Compensation by capacity type outdoor unit (lbs)	Applicable total refrigerant amount (lbs)
072 type	072 type	-	-	-7.7	88
096 type	096 type	-	-	-2.2	107
120 type	120 type	-	-	-2.2	110
144 type	144 type	-	-	7.7	150
168 type	168 type	-	-	7.7	153
192 type	096 type	096 type	-	-6.6	204
216 type	120 type	096 type	-	-6.6	207
240 type	144 type	096 type	-	0.0	254
264 type	144 type	120 type	-	0.0	257
288 type	144 type	144 type	-	6.6	287
312 type	168 type	144 type	-	6.6	290
336 type	168 type	168 type	-	6.6	308
360 type	120 type	120 type	120 type	-9.9	308
384 type	144 type	120 type	120 type	-3.3	308
408 type	144 type	144 type	120 type	5.5	308
432 type	168 type	144 type	120 type	5.5	308
456 type	168 type	168 type	120 type	5.5	308

Space saving model

192 type	120 type	072 type	-	-11.0	177
240 type	120 type	120 type	-	-6.6	210
288 type	168 type	120 type	-	0.0	260
408 type	168 type	120 type	120 type	-3.3	308

Note : Applicable total refrigerant amount in the system is restricted according to Outdoor unit capacity code.

(Table2) Additional refrigerant charge based on IDU type

4-Way cassette type	MMU-AP0122H2UL	lbs/kBtu/h	0.181
Outside Air indoor unit		lbs/kBtu/h	0.046
Other indoor unit		lbs/kBtu/h	0.095

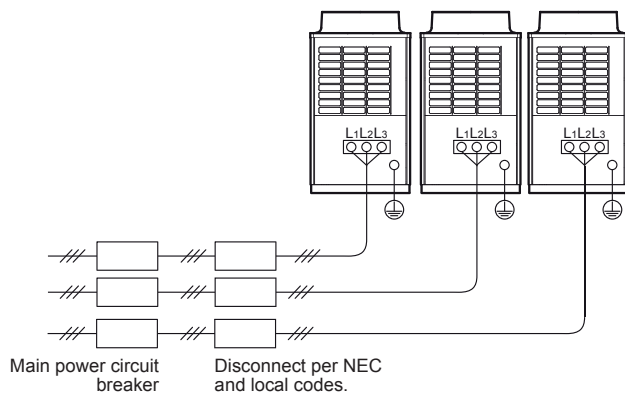
(Table3) Actual length of liquid pipe × Additional refrigerant charge amount per liquid pipe 1ft

Liquid pipe outer diameter (in)	φ1/4"	φ3/8"	φ1/2"	φ5/8"	φ3/4"	φ7/8"
Additional refrigerant amount lbs/ft	0.017	0.037	0.071	0.108	0.168	0.235

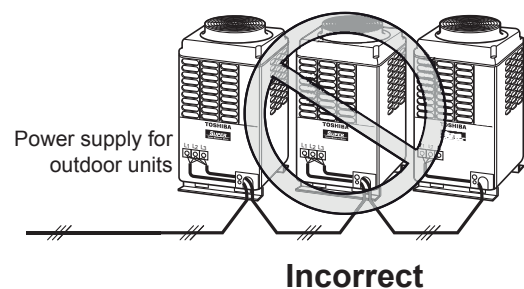
4-1. General

- The equipment shall be installed in compliance with NEC and local codes.
- Do not connect high voltage power wires to the control terminal blocks (U1, U2, U3, U4, U5, U6).
- All field wiring insulation rating must comply with NEC and local codes.
- All wiring must be strained relieved as specified by NEC and local codes.
- Do not energize the indoor units until leak check and vacuuming are completed.
- Use copper supply wire.
- Use UL wires rated 600 V for the system interconnection wires.
- Use UL wires rated 300 V for remote control wires.

4-2. Outdoor unit power supply



Every outdoor unit must have a dedicated power supply.



4-2-1. Heat Pump

Outdoor unit data

208/230 V model

Unit type	Capacity type	Model name MMY-	Power supply		Voltage Range		Compressor			Fan Motor (kW)	MCA (A)	MOCP (A)
			Phase and frequency	Nominal Voltage	Min. (V)	Max. (V)	Unit No.1 (kW)	Unit No.2 (kW)	Unit No.3 (kW)			
Single unit	72	MAP0726HT9UL	3 ~ 60 Hz	208/230 V	187	253	2.1 x 2	—	—	1.0	27	30
	96	MAP0966HT9UL	3 ~ 60 Hz	208/230 V	187	253	3.0 x 2	—	—	1.0	36	40
	120	MAP1206HT9UL	3 ~ 60 Hz	208/230 V	187	253	4.0 x 2	—	—	1.0	45.4	50
	144	MAP1446HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	—	—	2.0 (1.0x2)	54	60
	168	MAP1686HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	—	—	2.0 (1.0x2)	69	80
Combined model	192	AP1926HT9UL	3 ~ 60 Hz	208/230 V	187	253	3.0 x 2	3.0 x 2	—	1.0 + 1.0	36+36	40+40
	192S	AP192S6HT9UL	3 ~ 60 Hz	208/230 V	187	253	4.0 x 2	2.1 x 2	—	1.0 + 1.0	45.4+27	50+30
	216	AP2166HT9UL	3 ~ 60 Hz	208/230 V	187	253	4.0 x 2	3.0 x 2	—	1.0 + 1.0	45.4+36	50+40
	240	AP2406HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	3.0 x 2	—	2.0 + 1.0	54+36	60+40
	240S	AP240S6HT9UL	3 ~ 60 Hz	208/230 V	187	253	4.0 x 2	4.0 x 2	—	1.0 + 1.0	45.4+45.4	50+50
	264	AP2646HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	4.0 x 2	—	2.0 + 1.0	54+45.4	60+50
	288	AP2886HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	5.4 x 2	—	2.0 + 2.0	54+54	60+60
	288S	AP288S6HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	4.0 x 2	—	2.0 + 1.0	69+45.4	80+50
	312	AP3126HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	5.4 x 2	—	2.0 + 2.0	69+54	80+60
	336	AP3366HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	6.5 x 2	—	2.0 + 2.0	69+69	80+80
	360	AP3606HT9UL	3 ~ 60 Hz	208/230 V	187	253	4.0 x 2	4.0 x 2	4.0 x 2	1.0 + 1.0 + 1.0	45.4+45.4+45.4	50+50+50
	384	AP3846HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	4.0 x 2	4.0 x 2	2.0 + 1.0 + 1.0	54+45.4+45.4	60+50+50
	408	AP4086HT9UL	3 ~ 60 Hz	208/230 V	187	253	5.4 x 2	5.4 x 2	4.0 x 2	2.0 + 2.0 + 1.0	54+54+45.4	60+60+50
	408S	AP408S6HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	4.0 x 2	4.0 x 2	2.0 + 1.0 + 1.0	69+45.4+45.4	80+50+50
	432	AP4326HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	5.4 x 2	4.0 x 2	2.0 + 2.0 + 1.0	69+54+45.4	80+60+50
	456	AP4566HT9UL	3 ~ 60 Hz	208/230 V	187	253	6.5 x 2	6.5 x 2	4.0 x 2	2.0 + 2.0 + 1.0	69+69+45.4	80+80+50

460 V model

Unit type	Capacity type	Model name MMY-	Power supply		Voltage Range		Compressor			Fan	MCA	MOCP
			Phase and frequency	Nominal Voltage	Min. (V)	Max. (V)	Unit No.1 (kW)	Unit No.2 (kW)	Unit No.3 (kW)	Motor (kW)	(A)	(A)
Single unit	72	MAP0726HT6UL	3 ~ 60 Hz	460 V	414	506	2.1 x 2	—	—	1.0	12.9	15
	96	MAP0966HT6UL	3 ~ 60 Hz	460 V	414	506	3.0 x 2	—	—	1.0	20.0	25
	120	MAP1206HT6UL	3 ~ 60 Hz	460 V	414	506	4.0 x 2	—	—	1.0	23.0	25
	144	MAP1446HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	—	—	2.0 (1.0x2)	25.0	30
	168	MAP1686HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	—	—	2.0 (1.0x2)	31.0	35
Combined model	192	AP1926HT6UL	3 ~ 60 Hz	460 V	414	506	3.0 x 2	3.0 x 2	—	1.0 + 1.0	20 + 20	25 + 25
	192S	AP192S6HT6UL	3 ~ 60 Hz	460 V	414	506	4.0 x 2	2.1 x 2	—	1.0 + 1.0	23 + 12.9	25 + 15
	216	AP2166HT6UL	3 ~ 60 Hz	460 V	414	506	4.0 x 2	3.0 x 2	—	1.0 + 1.0	23 + 20	25 + 25
	240	AP2406HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	3.0 x 2	—	2.0 + 1.0	25 + 20	30 + 25
	240S	AP240S6HT6UL	3 ~ 60 Hz	460 V	414	506	4.0 x 2	4.0 x 2	—	1.0 + 1.0	23 + 23	25 + 25
	264	AP2646HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	4.0 x 2	—	2.0 + 1.0	25 + 23	30 + 25
	288	AP2886HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	5.4 x 2	—	2.0 + 2.0	25 + 25	30 + 30
	288S	AP288S6HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	4.0 x 2	—	2.0 + 1.0	31 + 23	35 + 25
	312	AP3126HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	5.4 x 2	—	2.0 + 2.0	31 + 25	35 + 30
	336	AP3366HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	6.5 x 2	—	2.0 + 2.0	31 + 31	35 + 35
	360	AP3606HT6UL	3 ~ 60 Hz	460 V	414	506	4.0 x 2	4.0 x 2	4.0 x 2	1.0 + 1.0 + 1.0	23 + 23 + 23	25 + 25 + 25
	384	AP3846HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	4.0 x 2	4.0 x 2	2.0 + 1.0 + 1.0	25 + 23 + 23	30 + 25 + 25
	408	AP4086HT6UL	3 ~ 60 Hz	460 V	414	506	5.4 x 2	5.4 x 2	4.0 x 2	2.0 + 2.0 + 1.0	25 + 25 + 23	30 + 30 + 25
	408S	AP408S6HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	4.0 x 2	4.0 x 2	2.0 + 1.0 + 1.0	31 + 23 + 23	35 + 25 + 25
	432	AP4326HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	5.4 x 2	4.0 x 2	2.0 + 2.0 + 1.0	31 + 25 + 23	35 + 30 + 25
	456	AP4566HT6UL	3 ~ 60 Hz	460 V	414	506	6.5 x 2	6.5 x 2	4.0 x 2	2.0 + 2.0 + 1.0	31 + 31 + 23	35 + 35 + 25

4-3. Indoor unit power supply

Type	Model name	Nominal Voltage (V-Ph-Hz)	Voltage Range (V)		FLA A	MCA A	MOCP A
			Min	Max			
4-way Cassette	MMU-AP0072H2UL	208/230-1-60	187	253	0.6	0.8	15
	MMU-AP0092H2UL	208/230-1-60	187	253	0.6	0.8	15
	MMU-AP0122H2UL	208/230-1-60	187	253	0.6	0.8	15
	MMU-AP0152H2UL	208/230-1-60	187	253	0.6	0.8	15
	MMU-AP0182H2UL	208/230-1-60	187	253	0.6	0.8	15
	MMU-AP0212H2UL	208/230-1-60	187	253	0.8	1.0	15
	MMU-AP0242H2UL	208/230-1-60	187	253	0.8	1.0	15
	MMU-AP0302H2UL	208/230-1-60	187	253	0.8	1.0	15
Compact 4-way Cassette	MMU-AP0362H2UL	208/230-1-60	187	253	1.0	1.3	15
	MMU-AP0422H2UL	208/230-1-60	187	253	1.0	1.3	15
	MMU-AP0071MH2UL	208/230-1-60	187	253	0.4	0.5	15
	MMU-AP0091MH2UL	208/230-1-60	187	253	0.4	0.5	15
	MMU-AP0121MH2UL	208/230-1-60	187	253	0.4	0.5	15
Under Ceiling	MMU-AP0151MH2UL	208/230-1-60	187	253	0.5	0.7	15
	MMU-AP0181MH2UL	208/230-1-60	187	253	0.5	0.7	15
	MMC-AP0181H2UL	208/230-1-60	187	253	0.4	0.5	15
	MMC-AP0241H2UL	208/230-1-60	187	253	0.5	0.7	15
High Wall	MMC-AP0361H2UL	208/230-1-60	187	253	0.8	1.0	15
	MMC-AP0421H2UL	208/230-1-60	187	253	0.9	1.2	15
	MMK-AP0073HP2UL	208/230-1-60	187	253	0.2	0.3	15
	MMK-AP0093HP2UL	208/230-1-60	187	253	0.2	0.3	15
Slim Duct	MMK-AP0123HP2UL	208/230-1-60	187	253	0.2	0.3	15
	MMK-AP0153HP2UL	208/230-1-60	187	253	0.4	0.5	15
	MMK-AP0183HP2UL	208/230-1-60	187	253	0.4	0.5	15
	MMK-AP0243HP2UL	208/230-1-60	187	253	0.4	0.5	15
	MMD-AP0074SPH2UL	208/230-1-60	187	253	0.6	0.7	15
Medium Static Duct	MMD-AP0094SPH2UL	208/230-1-60	187	253	0.6	0.7	15
	MMD-AP0124SPH2UL	208/230-1-60	187	253	0.6	0.8	15
	MMD-AP0154SPH2UL	208/230-1-60	187	253	0.7	0.9	15
	MMD-AP0184SPH2UL	208/230-1-60	187	253	0.8	1.0	15
	MMD-AP0074BH2UL-1	208/230-1-60	187	253	0.8	1.0	15
High Static Duct	MMD-AP0094BH2UL-1	208/230-1-60	187	253	0.8	1.0	15
	MMD-AP0124BH2UL-1	208/230-1-60	187	253	0.8	1.0	15
	MMD-AP0154BH2UL-1	208/230-1-60	187	253	0.9	1.2	15
	MMD-AP0184BH2UL-1	208/230-1-60	187	253	0.9	1.2	15
	MMD-AP0214BH2UL-1	208/230-1-60	187	253	1.4	1.8	15
	MMD-AP0244BH2UL-1	208/230-1-60	187	253	1.4	1.8	15
	MMD-AP0304BH2UL-1	208/230-1-60	187	253	1.4	1.8	15
	MMD-AP0364BH2UL-1	208/230-1-60	187	253	1.8	2.3	15
	MMD-AP0424BH2UL-1	208/230-1-60	187	253	2.2	2.8	15
	MMD-AP0484BH2UL-1	208/230-1-60	187	253	2.2	2.8	15
Floor console exposed	MMD-AP0304H2UL	208/230-1-60	187	253	2.3	2.9	15
	MMD-AP0364H2UL	208/230-1-60	187	253	2.3	2.9	15
	MMD-AP0304H2UL	208/230-1-60	187	253	7.12	8.21	15
	MMD-AP0726H-UL	208/230-1-60	187	253	4.6	5.7	15
	MMD-AP0966H-UL	208/230-1-60	187	253	5.9	7.4	15
Floor console recessed	MML-AP0074H2UL	208/230-1-60	187	253	0.3	0.4	15
	MML-AP0094H2UL	208/230-1-60	187	253	0.3	0.4	15
	MML-AP0124H2UL	208/230-1-60	187	253	0.5	0.6	15
	MML-AP0154H2UL	208/230-1-60	187	253	0.5	0.6	15
	MML-AP0184H2UL	208/230-1-60	187	253	0.6	0.7	15
Outside Air unit	MML-AP0244H2UL	208/230-1-60	187	253	0.6	0.7	15
	MML-AP0074BH2UL	208/230-1-60	187	253	0.3	0.4	15
	MML-AP0094BH2UL	208/230-1-60	187	253	0.3	0.4	15
	MML-AP0124BH2UL	208/230-1-60	187	253	0.3	0.4	15
	MML-AP0154BH2UL	208/230-1-60	187	253	0.6	0.7	15
Outside Air unit	MML-AP0184BH2UL	208/230-1-60	187	253	0.6	0.7	15
	MML-AP0244BH2UL	208/230-1-60	187	253	0.6	0.7	15
	MMD-AP0481HF2UL	208/230-1-60	187	253	1.84	2.3	15
Outside Air unit	MMD-AP0721HF2UL	208/230-1-60	187	253	3.43	4.29	15
	MMD-AP0961HF2UL	208/230-1-60	187	253	3.8	4.76	15

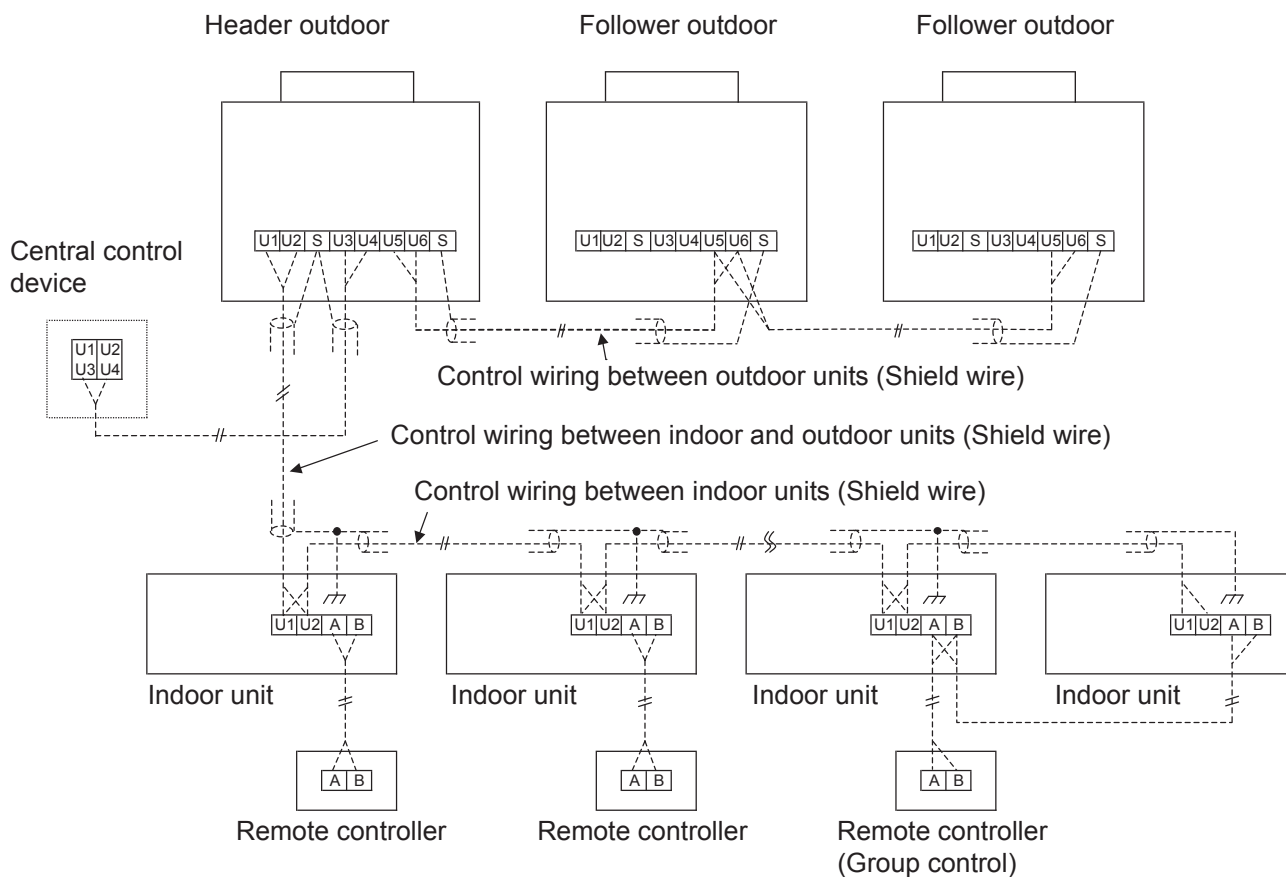
MCA: Minimum Circuit Amps @208V

FLA: Full Load Amps @208V

MOCP: Maximum Overcurrent Protection (Amps)

4-4. Design of control wiring

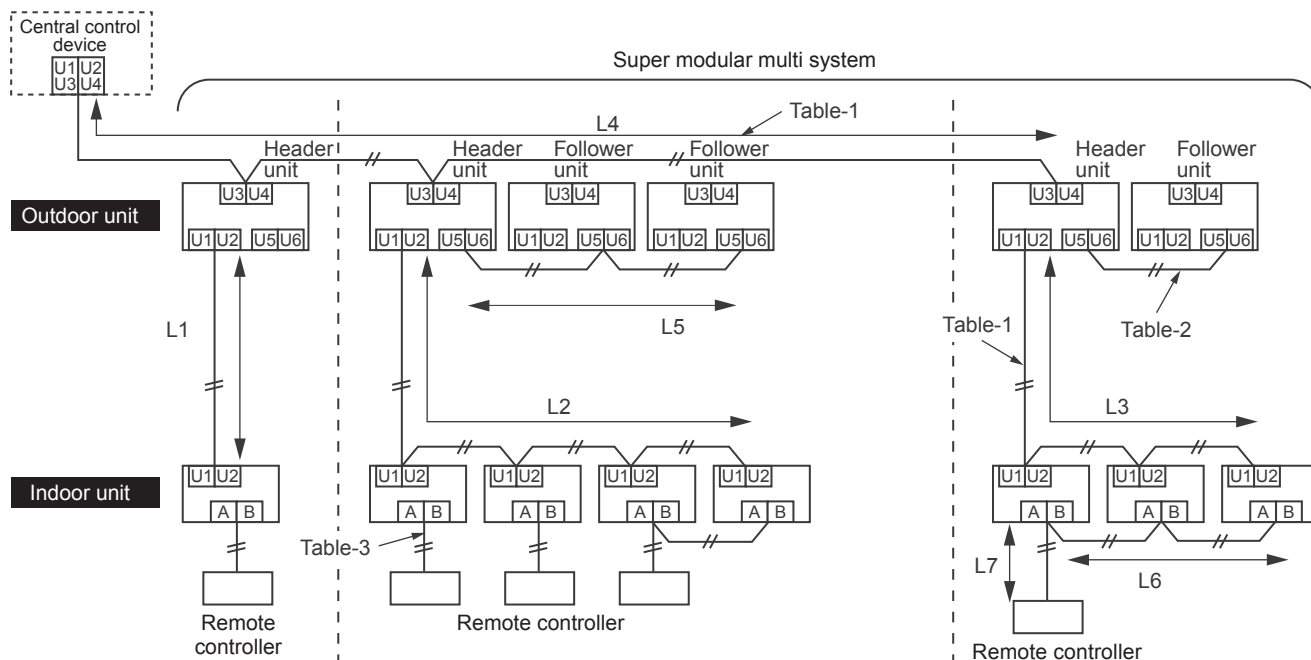
• Summary of control wiring



1. All system interconnecting and central control wiring should be 2 conductor shielded cable.
2. On the header unit the control wire shield and the central control wire shield should both be connected to the same ground screw in the header unit.
3. The remote control wiring can be 2 conductor un-shielded cable.
4. All system interconnecting and control wiring should be sized per table 1, 2 and 3.

• Restriction of control wiring

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



**Table-1 Control wiring between indoor and outdoor units (L1, L2, L3),
Central control wiring (L4)**

Wiring	2-core, non-polarity
Type	Shield wire
Size/Length	AWG16: Up to 3280 ft (1000m) AWG14 : Up to 6560 ft (2000m) (*1)

Note (*1): Total length of control wiring length for all refrigerant circuits (L1 + L2 + L3 + L4)

Table-2 Control wiring between outdoor units (L5)

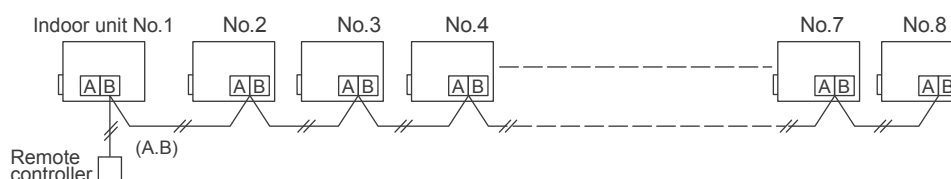
Wiring	2-core, non-polarity
Type	Shield wire
Size/Length	AWG 16 to AWG14/Up to 330ft (100m)(L5)

Table-3 Remote controller wiring (L6, L7)

Wire	2-core
Size	AWG20 to AWG14
Length	- Up to 1640ft (500 m)(L6+L7) - Up to 1310 ft (400m) in case of wireless remote control in group control. - Up to 660 ft (200m) total length of control wiring between indoor units (L6)

• Group Operation through a Remote Controller

Group operation of multiple indoor units (8 units) through a single remote controller switch





5-1. Specifications

Heat Pump 460 V Model

Standard model

System with Non-ducted indoor units

Model name			MMY-MAP0726HT6P-UL	MMY-MAP0966HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	72,000	96,000	120,000
	Rated capacity (*1)	Btu/h	69,000	92,000	114,000
	Rated power consumption (*1)(*2)	kW	4.49	7.12	8.65
	Rated EER(*1)(*2)	(Btu/h)/W	15.4	12.9	13.2
Heating	Nominal capacity (*1)	Btu/h	81,000	108,000	135,000
	Rated capacity (*1)	Btu/h	77,000	103,000	129,000
	Rated power consumption (*1)(*2)	kW	5.17	6.53	9.22
	Rated COP (*1)(*2)	W/W	4.37	4.62	4.10
Dimension	Unit	Height	In	72.9	72.9
		Width	In	47.6	47.6
		Depth	In	30.7	30.7
	Packing	Height	In	76.3	76.3
		Width	In	50.5	50.5
		Depth	In	32.6	32.6
Weight	Unit	lbs	574.0	684.0	684.0
	Packing	lbs	609	724	724
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	2.1 x 2	3.0 x 2	4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0	1.0	1.0
	Air volume	cfm	6700	7480	7480
Maximum external static pressure (*3)			In.WG	0.24	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4	25.4	25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	12.9	20.0	23.0
	MOCP (*6)	A	15.0	25.0	25.0
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	In	1/2"	1/2"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	In	7/8"	1-1/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Maximum capacity of combined indoor units		50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		12	16	21
Sound pressure level	Cooling	dB(A)	56.0	61.0	61.0
	Heating	dB(A)	58.0	61.0	62.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling : Indoor air temperature 80 °F Dry Bulb / 67 °F Wet Bulb , Outdoor air temperature 95 °F Dry Bulb.

Heating : Indoor air temperature 70 °F Dry Bulb , Outdoor air temperature 47 °F Dry Bulb / 43 °F Wet Bulb.

072, 096 type : Equivalent piping length : 50 ft, Height difference : 0 ft , 120 type : Equivalent piping length : 75 ft, Height difference : 0 ft

(*2) Value for only outdoor unit

(*3) Setting is necessary

(*4) 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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name				MMY-MAP1446HT6P-UL		MMY-MAP1686HT6P-UL	
Power Supply	Nominal voltage		V/Ph/Hz	460 / 3 / 60		460 / 3 / 60	
	Voltage range		V	414Minimum / 506 Maximum		414Minimum / 506 Maximum	
Cooling	Nominal capacity (*1)		Btu/h	144,000		168,000	
	Rated capacity (*1)		Btu/h	138,000		160,000	
	Rated power consumption (*1)(*2)		kW	10.85		14.26	
	Rated EER (*1)(*2)		(Btu/h)/W	12.7		11.2	
Heating	Nominal capacity (*1)		Btu/h	162,000		189,000	
	Rated capacity (*1)		Btu/h	154,000		180,000	
	Rated power consumption (*1)(*2)		kW	10.68		13.82	
	Rated COP (*1)(*2)		W/W	4.23		3.82	
Dimension	Unit	Height	In	72.9		72.9	
		Width	In	63.0		63.0	
		Depth	In	30.7		30.7	
	Packing	Height	In	76.3		76.3	
		Width	In	65.8		65.8	
		Depth	In	32.6		32.6	
Weight	Unit		lbs	838.0		838.0	
	Packing		lbs	880		880	
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	5.4 x 2		6.5 x 2	
Fan unit	Type			Propeller fan		Propeller fan	
	Motor output		kW	1.0+1.0		1.0+1.0	
	Air volume		cfm	9760		10080	
Maximum external static pressure (*3)			In.WG	0.16		0.16	
Heat exchanger				Finned tube		Finned tube	
Refrigerant	Name			R410A		R410A	
	Charged refrigerant amount (*4)		lbs	25.4		25.4	
High-pressure switch (Protective device)			psi	OFF:464 ON:601		OFF:464 ON:601	
Protective devices				(*5)		(*5)	
Power supply wiring		MCA	A	25.0		31.0	
		MOCP (*6)	A	30.0		35.0	
Piping connections	Liquid	Type		Flare		Flare	
		Diameter	In	5/8"		5/8"	
	Gas	Type		Brazing		Brazing	
		Diameter	In	1-1/8"		1-1/8"	
	Balance	Type		Flare		Flare	
		Diameter	In	3/8"		3/8"	
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)		50 to 150% (*7)	
	Maximum number of indoor units			25		30	
Sound pressure level		Cooling	dB(A)	63.0		64.0	
		Heating	dB(A)	64.0		65.0	
Operation temperature range		Cooling	°FDB	14.0 to 122.0		14.0 to 122.0	
		Heating	°FWB	-13.0 to 60.0		-13.0 to 60.0	

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP1926HT6P-UL	MMY-AP2166HT6P-UL	MMY-AP2406HT6P-UL	MMY-AP2646HT6P-UL
Outdoor unit model name			MMY-MAP0966HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	216,000	240,000	264,000
	Rated capacity (*1)	Btu/h	184,000	206,000	230,000	252,000
	Rated power consumption (*1)(*2)	kW	13.97	16.75	18.63	21.56
	Rated EER (*1)(*2)	(Btu/h)/W	13.2	12.3	12.3	11.7
Heating	Nominal capacity (*1)	Btu/h	216,000	243,000	270,000	297,000
	Rated capacity (*1)	Btu/h	206,000	232,000	256,000	282,000
	Rated power consumption (*1)(*2)	kW	14.50	17.01	19.47	22.09
	Rated COP (*1)(*2)	W/W	4.16	4.00	3.85	3.74
Weight	Unit	lbs	684 + 684	684 + 684	838 + 684	838 + 684
	Packing	lbs	724 + 724	724 + 724	880 + 724	880 + 724
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	3.0 x 2 + 3.0 x 2	4.0 x 2 + 3.0 x 2	5.4 x 2 + 3.0 x 2	5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480	7480 + 7480	9760 + 7480	9760 + 7480
Maximum external static pressure (*3)			0.16	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)	(*5)
Power supply wiring	MCA	A	20 + 20	23 + 20	25 + 20	25 + 23
	MOCP (*6)	A	25 + 25	25 + 25	30 + 25	30 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	38	42	46
Sound pressure level	Cooling	dB(A)	64.0	64.0	65.5	65.5
	Heating	dB(A)	64.0	64.5	66.0	66.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP2886HT6P-UL	MMY-AP3126HT6P-UL	MMY-AP3366HT6P-UL
Outdoor unit model name			MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	288,000	312,000	336,000
	Rated capacity (*1)	Btu/h	276,000	298,000	320,000
	Rated power consumption (*1)(*2)	kW	24.19	27.97	30.27
	Rated EER (*1)(*2)	(Btu/h)/W	11.4	10.7	10.6
Heating	Nominal capacity (*1)	Btu/h	324,000	351,000	378,000
	Rated capacity (*1)	Btu/h	308,000	334,000	360,000
	Rated power consumption (*1)(*2)	kW	24.40	27.94	30.70
	Rated COP (*1)(*2)	W/W	3.70	3.50	3.44
Weight	Unit	lbs	838 + 838	838 + 838	838 + 838
	Packing	lbs	880 + 880	880 + 880	880 + 880
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	5.4 x 2 + 5.4 x 2	6.5 x 2 + 5.4 x 2	6.5 x 2 + 6.5 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0
	Air volume	cfm	9760 + 9760	10080 + 9760	10080 + 10080
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	25 + 25	31 + 25	31 + 31
	MOCP (*6)	A	30 + 30	35 + 30	35 + 35
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	3/4"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	1-3/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		50	55	60
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.0
	Heating	dB(A)	67.0	67.5	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP360HT6P-UL	MMY-AP3846HT6P-UL	MMY-AP4086HT6P-UL
Outdoor unit model name			MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	360,000	384,000	408,000
	Rated capacity (*1)	Btu/h	342,000	366,000	390,000
	Rated power consumption (*1)(*2)	kW	28.67	33.60	36.55
	Rated EER (*1)(*2)	(Btu/h)/W	11.9	10.9	10.7
Heating	Nominal capacity (*1)	Btu/h	405,000	432,000	459,000
	Rated capacity (*1)	Btu/h	386,000	412,000	436,000
	Rated power consumption (*1)(*2)	kW	31.33	34.58	36.86
	Rated COP (*1)(*2)	W/W	3.61	3.49	3.47
Weight	Unit	lbs	684 + 684 + 684	838 + 684 + 684	838 + 838 + 684
	Packing	lbs	724 + 724 + 724	880 + 724 + 724	880 + 880 + 724
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	4.0 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0 + 1.0	1.0+1.0 + 1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480 + 7480	9760 + 7480 + 7480	9760 + 9760 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	23 + 23 + 23	25 + 23 + 23	25 + 25 + 23
	MOCP (*6)	A	25 + 25 + 25	30 + 25 + 25	30 + 30 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	7/8"	7/8"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	1-5/8"	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		63	64	64
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.5
	Heating	dB(A)	67.0	67.5	68.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 150 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP4326HT6P-UL	MMY-AP4566HT6P-UL
Outdoor unit model name			MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	432,000	456,000
	Rated capacity (*1)	Btu/h	412,000	434,000
	Rated power consumption (*1)(*2)	kW	40.14	44.58
	Rated EER (*1)(*2)	(Btu/h)/W	10.3	9.7
Heating	Nominal capacity (*1)	Btu/h	486,000	513,000
	Rated capacity (*1)	Btu/h	462,000	488,000
	Rated power consumption (*1)(*2)	kW	40.22	43.60
	Rated COP (*1)(*2)	W/W	3.37	3.28
Weight	Unit	lbs	838 + 838 + 684	838 + 838 + 684
	Packing	lbs	880 + 880 + 724	880 + 880 + 724
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	6.5 x 2 + 5.4 x 2 + 4.0 x 2	6.5 x 2 + 6.5 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	10080 + 9760 + 7480	10080 + 10080 + 7480
Maximum external static pressure (*3)			In.WG	0.16
Heat exchanger			Finned tube	Finned tube
Refrigerant	Name		R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601
Protective devices			(*5)	(*5)
Power supply wiring	MCA	A	31 + 25 + 23	31 + 31 + 23
	MOCP (*6)	A	35 + 30 + 25	35 + 35 + 25
Piping connections	Liquid	Type	Flare	Flare
		Diameter	In	7/8"
	Gas	Type	Brazing	Brazing
		Diameter	In	1-5/8"
	Balance	Type	Flare	Flare
		Diameter	In	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		64	64
Sound pressure level	Cooling	dB(A)	68.0	68.0
	Heating	dB(A)	69.0	69.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Space saving model

System with Non-ducted indoor units

Model name			MMY-AP192S6HT6P-UL	MMY-AP240S6HT6P-UL	MMY-AP288S6HT6P-UL	MMY-AP408S6HT6P-UL
Outdoor unit model name			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP0726HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
			-	-	-	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	240,000	288,000	408,000
	Rated capacity (*1)	Btu/h	184,000	230,000	276,000	390,000
	Rated power consumption (*1)(*2)	kW	14.19	19.29	24.65	37.29
	Rated EER (*1)(*2)	(Btu/h)/W	13.0	11.9	11.2	10.5
Heating	Nominal capacity (*1)	Btu/h	216,000	270,000	324,000	459,000
	Rated capacity (*1)	Btu/h	206,000	256,000	308,000	436,000
	Rated power consumption (*1)(*2)	kW	14.87	19.74	25.12	37.77
	Rated COP (*1)(*2)	W/W	4.06	3.80	3.59	3.38
Weight	Unit	lbs	684 + 574	684 + 684	838 + 684	838 + 684 + 684
	Packing	lbs	724 + 609	724 + 724	880 + 724	880 + 724 + 724
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	4.0 x 2 + 2.1 x 2	4.0 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0 + 1.0
	Air volume	cfm	7480 + 6700	7480 + 7480	10080 + 7480	10080 + 7480 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A	23 + 12.9	23 + 23	31 + 23	31 + 23 + 23
	MOCP (*6)	A	25 + 15	25 + 25	35 + 25	35 + 25 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	42	50	64
Sound pressure level	Cooling	dB(A)	62.5	64.0	66.0	67.0
	Heating	dB(A)	63.5	65.0	67.0	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 192, 240, 288 type: Equivalent piping length: 100 ft, Height difference: 0 ft, 408 type: Equivalent piping length: 150 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name				MMY-MAP0726HT6P-UL	MMY-MAP0966HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz		460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V		414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h		72,000	96,000	120,000
	Rated capacity (*1)	Btu/h		69,000	92,000	114,000
	Rated power consumption (*1)(*2)	kW		4.69	6.28	8.81
	Rated EER (*1)(*2)	(Btu/h)/W		14.7	14.6	12.9
Heating	Nominal capacity (*1)	Btu/h		81,000	108,000	135,000
	Rated capacity (*1)	Btu/h		77,000	103,000	129,000
	Rated power consumption (*1)(*2)	kW		5.47	6.83	9.04
	Rated COP (*1)(*2)	W/W		4.13	4.42	4.18
Dimension	Unit	Height	In	72.9	72.9	72.9
		Width	In	39.0	47.6	47.6
		Depth	In	30.7	30.7	30.7
	Packing	Height	In	76.3	76.3	76.3
		Width	In	41.8	50.5	50.5
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	574.0	684.0	684.0
	Packing		lbs	609	724	724
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		2.1 x 2	3.0 x 2	4.0 x 2
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output	kW		1.0	1.0	1.0
	Air volume	cfm		6700	7480	7480
Maximum external static pressure (*3)			In.WG	0.24	0.16	0.16
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs		25.4	25.4	25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A		12.9	20.0	23.0
	MOCP (*6)	A		15.0	25.0	25.0
Piping connections	Liquid	Type		Flare	Flare	Flare
		Diameter	In	1/2"	1/2"	1/2"
	Gas	Type		Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	1-1/8"
	Balance	Type		Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units			12	16	21
Sound pressure level	Cooling	dB(A)		56.0	61.0	61.0
	Heating	dB(A)		58.0	61.0	62.0
Operation temperature range	Cooling	°FDB		14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB		-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling : Indoor air temperature 80 °F Dry Bulb / 67 °F Wet Bulb , Outdoor air temperature 95 °F Dry Bulb.
 Heating : Indoor air temperature 70 °F Dry Bulb, Outdoor air temperature 47 °F Dry Bulb / 43 °F Wet Bulb.
 Equivalent piping length : 25 ft, Height difference : 0 ft.

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name				MMY-MAP1446HT6P-UL		MMY-MAP1686HT6P-UL	
Power Supply	Nominal voltage		V/Ph/Hz	460 / 3 / 60		460 / 3 / 60	
	Voltage range		V	414Minimum / 506 Maximum		414Minimum / 506 Maximum	
Cooling	Nominal capacity (*1)		Btu/h	144,000		168,000	
	Rated capacity (*1)		Btu/h	138,000		160,000	
	Rated power consumption (*1)(*2)		kW	11.09		13.39	
	Rated EER (*1)(*2)		(Btu/h)/W	12.4		11.9	
Heating	Nominal capacity (*1)		Btu/h	162,000		189,000	
	Rated capacity (*1)		Btu/h	154,000		180,000	
	Rated power consumption (*1)(*2)		kW	10.47		13.36	
	Rated COP (*1)(*2)		W/W	4.31		3.95	
Dimension	Unit	Height	In	72.9		72.9	
		Width	In	63.0		63.0	
		Depth	In	30.7		30.7	
	Packing	Height	In	76.3		76.3	
		Width	In	65.8		65.8	
		Depth	In	32.6		32.6	
Weight	Unit		lbs	838.0		838.0	
	Packing		lbs	880		880	
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	5.4 x 2		6.5 x 2	
Fan unit	Type			Propeller fan		Propeller fan	
	Motor output		kW	1.0+1.0		1.0+1.0	
	Air volume		cfm	9760		10080	
Maximum external static pressure (*3)			In.WG	0.16		0.16	
Heat exchanger				Finned tube		Finned tube	
Refrigerant	Name			R410A		R410A	
	Charged refrigerant amount (*4)		lbs	25.4		25.4	
High-pressure switch (Protective device)			psi	OFF:464 ON:601		OFF:464 ON:601	
Protective devices				(*5)		(*5)	
Power supply wiring		MCA	A	25.0		31.0	
		MOCP (*6)	A	30.0		35.0	
Piping connections	Liquid	Type		Flare		Flare	
		Diameter	In	5/8"		5/8"	
	Gas	Type		Brazing		Brazing	
		Diameter	In	1-1/8"		1-1/8"	
	Balance	Type		Flare		Flare	
		Diameter	In	3/8"		3/8"	
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)		50 to 150% (*7)	
	Maximum number of indoor units			25		30	
Sound pressure level		Cooling	dB(A)	63.0		64.0	
		Heating	dB(A)	64.0		65.0	
Operation temperature range		Cooling	°FDB	14.0 to 122.0		14.0 to 122.0	
		Heating	°FWB	-13.0 to 60.0		-13.0 to 60.0	

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP1926HT6P-UL	MMY-AP2166HT6P-UL	MMY-AP2406HT6P-UL	MMY-AP2646HT6P-UL
Outdoor unit model name			MMY-MAP0966HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL
			MMY-MAP0966HT6P-UL	MMY-MAP0966HT6P-UL	MMY-MAP0966HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	216,000	240,000	264,000
	Rated capacity (*1)	Btu/h	184,000	206,000	230,000	252,000
	Rated power consumption (*1)(*2)	kW	13.40	15.39	17.46	19.57
	Rated EER (*1)(*2)	(Btu/h)/W	13.7	13.4	13.2	12.9
Heating	Nominal capacity (*1)	Btu/h	216,000	243,000	270,000	297,000
	Rated capacity (*1)	Btu/h	206,000	232,000	256,000	282,000
	Rated power consumption (*1)(*2)	kW	13.64	15.91	17.67	19.83
	Rated COP (*1)(*2)	W/W	4.43	4.27	4.25	4.17
Weight	Unit	lbs	684 + 684	684 + 684	838 + 684	838 + 684
	Packing	lbs	724 + 724	724 + 724	880 + 724	880 + 724
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	3.0 x 2 + 3.0 x 2	4.0 x 2 + 3.0 x 2	5.4 x 2 + 3.0 x 2	5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480	7480 + 7480	9760 + 7480	9760 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A	20 + 20	23 + 20	25 + 20	25 + 23
	MOCP (*6)	A	25 + 25	25 + 25	30 + 25	30 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	38	42	46
Sound pressure level	Cooling	dB(A)	64.0	64.0	65.5	65.5
	Heating	dB(A)	64.0	64.5	66.0	66.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP2886HT6P-UL	MMY-AP3126HT6P-UL	MMY-AP3366HT6P-UL
Outdoor unit model name			MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	288,000	312,000	336,000
	Rated capacity (*1)	Btu/h	276,000	298,000	320,000
	Rated power consumption (*1)(*2)	kW	22.88	25.94	29.04
	Rated EER (*1)(*2)	(Btu/h)/W	12.1	11.5	11.0
Heating	Nominal capacity (*1)	Btu/h	324,000	351,000	378,000
	Rated capacity (*1)	Btu/h	308,000	334,000	360,000
	Rated power consumption (*1)(*2)	kW	22.33	25.31	28.82
	Rated COP (*1)(*2)	W/W	4.04	3.87	3.66
Weight	Unit	lbs	838 + 838	838 + 838	838 + 838
	Packing	lbs	880 + 880	880 + 880	880 + 880
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	5.4 x 2 + 5.4 x 2	6.5 x 2 + 5.4 x 2	6.5 x 2 + 6.5 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0
	Air volume	cfm	9760 + 9760	10080 + 9760	10080 + 10080
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	25 + 25	31 + 25	31 + 31
	MOCP (*6)	A	30 + 30	35 + 30	35 + 35
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	3/4"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	1-3/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		50	55	60
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.0
	Heating	dB(A)	67.0	67.5	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP3606HT6P-UL	MMY-AP3846HT6P-UL	MMY-AP4086HT6P-UL
Outdoor unit model name			MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1446HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	360,000	384,000	408,000
	Rated capacity (*1)	Btu/h	342,000	366,000	390,000
	Rated power consumption (*1)(*2)	kW	27.32	31.47	33.58
	Rated EER (*1)(*2)	(Btu/h)/W	12.5	11.6	11.6
Heating	Nominal capacity (*1)	Btu/h	405,000	432,000	459,000
	Rated capacity (*1)	Btu/h	386,000	412,000	436,000
	Rated power consumption (*1)(*2)	kW	29.40	32.52	36.34
	Rated COP (*1)(*2)	W/W	3.85	3.71	3.52
Weight	Unit	lbs	684 + 684 + 684	838 + 684 + 684	838 + 838 + 684
	Packing	lbs	724 + 724 + 724	880 + 724 + 724	880 + 880 + 724
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	4.0 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0 + 1.0	1.0+1.0 + 1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480 + 7480	9760 + 7480 + 7480	9760 + 9760 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)
Power supply wiring	MCA	A	23 + 23 + 23	25 + 23 + 23	25 + 25 + 23
	MOCP (*6)	A	25 + 25 + 25	30 + 25 + 25	30 + 30 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	In	7/8"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	In	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		63	64	64
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.5
	Heating	dB(A)	67.0	67.5	68.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 75 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP4326HT6P-UL	MMY-AP4566HT6P-UL
Outdoor unit model name			MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1446HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	432,000	456,000
	Rated capacity (*1)	Btu/h	412,000	434,000
	Rated power consumption (*1)(*2)	kW	38.35	42.06
	Rated EER (*1)(*2)	(Btu/h)/W	10.7	10.3
Heating	Nominal capacity (*1)	Btu/h	486,000	513,000
	Rated capacity (*1)	Btu/h	462,000	488,000
	Rated power consumption (*1)(*2)	kW	39.15	42.27
	Rated COP (*1)(*2)	W/W	3.46	3.38
Weight	Unit	lbs	838 + 838 + 684	838 + 838 + 684
	Packing	lbs	880 + 880 + 724	880 + 880 + 724
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	6.5 x 2 + 5.4 x 2 + 4.0 x 2	6.5 x 2 + 6.5 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	10080 + 9760 + 7480	10080 + 10080 + 7480
Maximum external static pressure (*3)		In.WG	0.16	0.16
Heat exchanger			Finned tube	Finned tube
Refrigerant	Name		R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)
Power supply wiring	MCA	A	31 + 25 + 23	31 + 31 + 23
	MOCP (*6)	A	35 + 30 + 25	35 + 35 + 25
Piping connections	Liquid	Type	Flare	Flare
		Diameter	7/8"	7/8"
	Gas	Type	Brazing	Brazing
		Diameter	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare
		Diameter	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		64	64
Sound pressure level	Cooling	dB(A)	68.0	68.0
	Heating	dB(A)	69.0	69.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 75 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Space saving model

System with Ducted indoor units

Model name			MMY-AP192S6HT6P-UL	MMY-AP240S6HT6P-UL	MMY-AP288S6HT6P-UL	MMY-AP408S6HT6P-UL
Outdoor unit model name			MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
			MMY-MAP0726HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
			-	-	-	MMY-MAP1206HT6P-UL
Power Supply	Nominal voltage	V/Ph/Hz	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
	Voltage range	V	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum	414Minimum / 506 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	240,000	288,000	408,000
	Rated capacity (*1)	Btu/h	184,000	230,000	276,000	390,000
	Rated power consumption (*1)(*2)	kW	13.87	17.61	23.09	34.87
	Rated EER (*1)(*2)	(Btu/h)/W	13.3	13.1	12.0	11.2
Heating	Nominal capacity (*1)	Btu/h	216,000	270,000	324,000	459,000
	Rated capacity (*1)	Btu/h	206,000	256,000	308,000	436,000
	Rated power consumption (*1)(*2)	kW	14.31	17.90	22.64	36.90
	Rated COP (*1)(*2)	W/W	4.22	4.19	3.99	3.46
Weight	Unit	lbs	684 + 574	684 + 684	838 + 684	838 + 684 + 684
	Packing	lbs	724 + 609	724 + 724	880 + 724	880 + 724 + 724
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	4.0 x 2 + 2.1 x 2	4.0 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0 + 1.0
	Air volume	cfm	7480 + 6700	7480 + 7480	10080 + 7480	10080 + 7480 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A	23 + 12.9	23 + 23	31 + 23	31 + 23 + 23
	MOCP (*6)	A	25 + 15	25 + 25	35 + 25	35 + 25 + 25
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	42	50	64
Sound pressure level	Cooling	dB(A)	62.5	64.0	66.0	67.0
	Heating	dB(A)	63.5	65.0	67.0	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb

Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb

192, 240, 288 type: Equivalent piping length: 50 ft, Height difference: 0 ft, 408 type: Equivalent piping length: 75 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Heat Pump 208/230 V Model

Standard model

System with Non-ducted indoor units

Model name				MMY-MAP0726HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz		208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V		187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h		72,000	96,000	120,000
	Rated capacity (*1)	Btu/h		69,000	92,000	114,000
	Rated power consumption (*1)(*2)	kW		4.49	7.12	8.65
	Rated EER (*1)(*2)	(Btu/h)/W		15.4	12.9	13.2
Heating	Nominal capacity (*1)	Btu/h		81,000	108,000	135,000
	Rated capacity (*1)	Btu/h		77,000	103,000	129,000
	Rated power consumption (*1)(*2)	kW		5.17	6.53	9.22
	Rated COP (*1)(*2)	W/W		4.37	4.62	4.10
Dimension	Unit	Height	In	72.9	72.9	72.9
		Width	In	39.0	47.6	47.6
		Depth	In	30.7	30.7	30.7
	Packing	Height	In	76.3	76.3	76.3
		Width	In	41.8	50.5	50.5
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	574.0	684.0	684.0
	Packing		lbs	609	724	724
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	2.1 x 2	3.0 x 2	4.0 x 2
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output		kW	1.0	1.0	1.0
	Air volume		cfm	6700	7480	7480
Maximum external static pressure (*3)				In.WG	0.16	0.16
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)		lbs	25.4	25.4	25.4
High-pressure switch (Protective device)				psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices					(*5)	(*5)
Power supply wiring	MCA		A	27.0	36.0	45.4
	MOCP (*6)		A	30.0	40.0	50.0
Piping connections	Liquid	Type		Flare	Flare	Flare
		Diameter	In	1/2"	1/2"	1/2"
	Gas	Type		Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	1-1/8"
	Balance	Type		Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units			12	16	21
Sound pressure level	Cooling		dB(A)	56.0	61.0	61.0
	Heating		dB(A)	58.0	61.0	62.0
Operation temperature range	Cooling		°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating		°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft.

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name				MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range		V	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)		Btu/h	144,000	168,000
	Rated capacity (*1)		Btu/h	138,000	160,000
	Rated power consumption (*1)(*2)		kW	10.85	14.26
	Rated EER (*1)(*2)		(Btu/h)/W	12.7	11.2
Heating	Nominal capacity (*1)		Btu/h	162,000	189,000
	Rated capacity (*1)		Btu/h	154,000	180,000
	Rated power consumption (*1)(*2)		kW	10.68	13.82
	Rated COP (*1)(*2)		W/W	4.23	3.82
Dimension	Unit	Height	In	72.9	72.9
		Width	In	63.0	63.0
		Depth	In	30.7	30.7
	Packing	Height	In	76.3	76.3
		Width	In	65.8	65.8
		Depth	In	32.6	32.6
Weight	Unit		lbs	838.0	838.0
	Packing		lbs	880	880
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	5.4 x 2	6.5 x 2
Fan unit	Type			Propeller fan	Propeller fan
	Motor output		kW	1.0+1.0	1.0+1.0
	Air volume		cfm	9760	10100
Maximum external static pressure (*3)			In.WG	0.16	0.16
Heat exchanger				Finned tube	Finned tube
Refrigerant	Name			R410A	R410A
	Charged refrigerant amount (*4)		lbs	25.4	25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)
Power supply wiring		MCA	A	54.0	69.0
		MOCP (*6)	A	60.0	80.0
Piping connections	Liquid	Type		Flare	Flare
		Diameter		In	5/8"
	Gas	Type		Brazing	Brazing
		Diameter		In	1-1/8"
	Balance	Type		Flare	Flare
		Diameter		In	3/8"
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units			25	30
Sound pressure level		Cooling	dB(A)	63.0	64.0
		Heating	dB(A)	64.0	65.0
Operation temperature range		Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
		Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP1926HT9P-UL	MMY-AP2166HT9P-UL	MMY-AP2406HT9P-UL	MMY-AP2646HT9P-UL
Outdoor unit model name			MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP0966HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	216,000	240,000	264,000
	Rated capacity (*1)	Btu/h	184,000	206,000	230,000	252,000
	Rated power consumption (*1)(*2)	kW	13.97	16.75	18.63	21.56
	Rated EER (*1)(*2)	(Btu/h)/W	13.2	12.3	12.3	11.7
Heating	Nominal capacity (*1)	Btu/h	216,000	243,000	270,000	297,000
	Rated capacity (*1)	Btu/h	206,000	232,000	256,000	282,000
	Rated power consumption (*1)(*2)	kW	14.50	17.01	19.47	22.09
	Rated COP (*1)(*2)	W/W	4.16	4.00	3.85	3.74
Weight	Unit	lbs	684 + 684	684 + 684	838 + 684	838 + 684
	Packing	lbs	724 + 724	724 + 724	880 + 724	880 + 724
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	3.0 x 2 + 3.0 x 2	4.0 x 2 + 3.0 x 2	5.4 x 2 + 3.0 x 2	5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480	7480 + 7480	9760 + 7480	9760 + 7480
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)	(*5)
Power supply wiring	MCA	A	36 + 36	45.4 + 36	54 + 36	54 + 45.4
	MOCP (*6)	A	40 + 40	50 + 40	60 + 40	60 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	5/8"	3/4"	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	1-1/8"	1-1/8"	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	3/8"	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	80 to 150% (*7)
	Maximum number of indoor units		34	38	42	46
Sound pressure level	Cooling	dB(A)	64.0	64.0	65.5	65.5
	Heating	dB(A)	64.0	64.5	66.0	66.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP2886HT9P-UL	MMY-AP3126HT9P-UL	MMY-AP3366HT9P-UL
Outdoor unit model name			MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	288,000	312,000	336,000
	Rated capacity (*1)	Btu/h	276,000	298,000	320,000
	Rated power consumption (*1)(*2)	kW	24.19	27.97	30.27
	Rated EER (*1)(*2)	(Btu/h)/W	11.4	10.7	10.6
Heating	Nominal capacity (*1)	Btu/h	324,000	351,000	378,000
	Rated capacity (*1)	Btu/h	308,000	334,000	360,000
	Rated power consumption (*1)(*2)	kW	24.40	27.94	30.70
	Rated COP (*1)(*2)	W/W	3.70	3.50	3.44
Weight	Unit	lbs	838 + 838	838 + 838	838 + 838
	Packing	lbs	880 + 880	880 + 880	880 + 880
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	5.4 x 2 + 5.4 x 2	6.5 x 2 + 5.4 x 2	6.5 x 2 + 6.5 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0
	Air volume	cfm	9760 + 9760	10100 + 9760	10100 + 10100
Maximum external static pressure (*3)			In.WG	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	54 + 54	69 + 54	69 + 69
	MOCP (*6)	A	60 + 60	80 + 60	80 + 80
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	In	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	In	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		50	55	60
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.0
	Heating	dB(A)	67.0	67.5	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 100 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP3606HT9P-UL	MMY-AP3846HT9P-UL	MMY-AP4086HT9P-UL
Outdoor unit model name			MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	360,000	384,000	408,000
	Rated capacity (*1)	Btu/h	342,000	366,000	390,000
	Rated power consumption (*1)(*2)	kW	28.67	33.60	36.55
	Rated EER (*1)(*2)	(Btu/h)/W	11.9	10.9	10.7
Heating	Nominal capacity (*1)	Btu/h	405,000	432,000	459,000
	Rated capacity (*1)	Btu/h	386,000	412,000	436,000
	Rated power consumption (*1)(*2)	kW	31.33	34.58	36.86
	Rated COP (*1)(*2)	W/W	3.61	3.49	3.47
Weight	Unit	lbs	684 + 684 + 684	838 + 684 + 684	838 + 838 + 684
	Packing	lbs	724 + 724 + 724	880 + 724 + 724	880 + 880 + 724
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	4.0 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0 + 1.0	1.0+1.0 + 1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480 + 7480	9760 + 7480 + 7480	9760 + 9760 + 7480
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	45.4 + 45.4 + 45.4	54 + 45.4 + 45.4	54 + 54 + 45.4
	MOCP (*6)	A	50 + 50 + 50	60 + 50 + 50	60 + 60 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	In	7/8"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	In	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		63	64	64
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.5
	Heating	dB(A)	67.0	67.5	68.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 150 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Non-ducted indoor units

Model name			MMY-AP4326HT9P-UL	MMY-AP4566HT9P-UL
Outdoor unit model name			MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	432,000	456,000
	Rated capacity (*1)	Btu/h	412,000	434,000
	Rated power consumption (*1)(*2)	kW	40.14	44.58
	Rated EER (*1)(*2)	(Btu/h)/W	10.3	9.7
Heating	Nominal capacity (*1)	Btu/h	486,000	513,000
	Rated capacity (*1)	Btu/h	462,000	488,000
	Rated power consumption (*1)(*2)	kW	40.22	43.60
	Rated COP (*1)(*2)	W/W	3.37	3.28
Weight	Unit	lbs	838 + 838 + 684	838 + 838 + 684
	Packing	lbs	880 + 880 + 724	880 + 880 + 724
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	6.5 x 2 + 5.4 x 2 + 4.0 x 2	6.5 x 2 + 6.5 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	10100 + 9760 + 7480	10100 + 10100 + 7480
Maximum external static pressure (*3)			In.WG	0.16
Heat exchanger			Finned tube	Finned tube
Refrigerant	Name		R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601
Protective devices			(*5)	(*5)
Power supply wiring	MCA	A	69 + 54 + 45.4	69 + 69 + 45.4
	MOCP (*6)	A	80 + 60 + 50	80 + 80 + 50
Piping connections	Liquid	Type	Flare	Flare
		Diameter	In	7/8"
	Gas	Type	Brazing	Brazing
		Diameter	In	1-5/8"
	Balance	Type	Flare	Flare
		Diameter	In	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		64	64
Sound pressure level	Cooling	dB(A)	68.0	68.0
	Heating	dB(A)	69.0	69.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions
Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
Equivalent piping length: 150 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Space saving model

System with Non-ducted indoor units

Model name			MMY-AP192S6HT9P-UL	MMY-AP240S6HT9P-UL	MMY-AP288S6HT9P-UL	MMY-AP408S6HT9P-UL
Outdoor unit model name			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP0726HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
			-	-	-	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	240,000	288,000	408,000
	Rated capacity (*1)	Btu/h	184,000	230,000	276,000	390,000
	Rated power consumption (*1)(*2)	kW	14.19	19.29	24.65	37.29
	Rated EER (*1)(*2)	(Btu/h)/W	13.0	11.9	11.2	10.5
Heating	Nominal capacity (*1)	Btu/h	216,000	270,000	324,000	459,000
	Rated capacity (*1)	Btu/h	206,000	256,000	308,000	436,000
	Rated power consumption (*1)(*2)	kW	14.87	19.74	25.12	37.77
	Rated COP (*1)(*2)	W/W	4.06	3.80	3.59	3.38
Weight	Unit	lbs	684 + 574	684 + 684	838 + 684	838 + 684 + 684
	Packing	lbs	724 + 609	724 + 724	880 + 724	880 + 724 + 724
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	4.0 x 2 + 2.1 x 2	4.0 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0 + 1.0
	Air volume	cfm	7480 + 6700	7480 + 7480	10100 + 7480	10100 + 7480 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A	45.4 + 27	45.4 + 42	69 + 45.4	69 + 45.4 + 45.4
	MOCP (*6)	A	50 + 35	50 + 50	80 + 50	80 + 50 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	42	50	64
Sound pressure level	Cooling	dB(A)	62.5	64.0	66.0	67.0
	Heating	dB(A)	63.5	65.0	67.0	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

- (*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
192, 240, 288 type: Equivalent piping length: 100 ft, Height difference: 0 ft, 408 type: Equivalent piping length: 150 ft, Height difference: 0 ft
- (*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name				MMY-MAP0726HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz		208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V		187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h		72,000	96,000	120,000
	Rated capacity (*1)	Btu/h		69,000	92,000	114,000
	Rated power consumption (*1)(*2)	kW		4.69	6.28	8.81
	Rated EER (*1)(*2)	(Btu/h)/W		14.7	14.6	12.9
Heating	Nominal capacity (*1)	Btu/h		81,000	108,000	135,000
	Rated capacity (*1)	Btu/h		77,000	103,000	129,000
	Rated power consumption (*1)(*2)	kW		5.47	6.83	9.04
	Rated COP (*1)(*2)	W/W		4.13	4.42	4.18
Dimension	Unit	Height	In	72.9	72.9	72.9
		Width	In	39.0	47.6	47.6
		Depth	In	30.7	30.7	30.7
	Packing	Height	In	76.3	76.3	76.3
		Width	In	41.8	50.5	50.5
		Depth	In	32.6	32.6	32.6
Weight	Unit		lbs	574.0	684.0	684.0
	Packing		lbs	609	724	724
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		2.1 x 2	3.0 x 2	4.0 x 2
Fan unit	Type			Propeller fan	Propeller fan	Propeller fan
	Motor output	kW		1.0	1.0	1.0
	Air volume	cfm		6700	7480	7480
Maximum external static pressure (*3)				In.WG	0.24	0.16
Heat exchanger				Finned tube	Finned tube	Finned tube
Refrigerant	Name			R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs		25.4	25.4	25.4
High-pressure switch (Protective device)				psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A		27.0	36.0	45.4
	MOCP (*6)	A		30.0	40.0	50.0
Piping connections	Liquid	Type		Flare	Flare	Flare
		Diameter	In	1/2"	1/2"	1/2"
	Gas	Type		Brazing	Brazing	Brazing
		Diameter	In	7/8"	7/8"	1-1/8"
	Balance	Type		Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units			12	16	21
Sound pressure level	Cooling		dB(A)	56.0	61.0	61.0
	Heating		dB(A)	58.0	61.0	62.0
Operation temperature range	Cooling		°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating		°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling : Indoor air temperature 80 °F Dry Bulb / 67 °F Wet Bulb , Outdoor air temperature 95 °F Dry Bulb.

Heating : Indoor air temperature 70 °F Dry Bulb, Outdoor air temperature 47 °F Dry Bulb / 43 °F Wet Bulb.

072, 096 type : Equivalent piping length : 25 ft, Height difference : 0 ft , 120 type : Equivalent piping length : 25 ft, Height difference : 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name				MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL
Power Supply	Nominal voltage		V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range		V	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)		Btu/h	144,000	168,000
	Rated capacity (*1)		Btu/h	138,000	160,000
	Rated power consumption (*1)(*2)		kW	11.09	13.39
	Rated EER (*1)(*2)		(Btu/h)/W	12.4	11.9
Heating	Nominal capacity (*1)		Btu/h	162,000	189,000
	Rated capacity (*1)		Btu/h	154,000	180,000
	Rated power consumption (*1)(*2)		kW	10.47	13.36
	Rated COP (*1)(*2)		W/W	4.31	3.95
Dimension	Unit	Height	In	72.9	72.9
		Width	In	63.0	63.0
		Depth	In	30.7	30.7
	Packing	Height	In	76.3	76.3
		Width	In	65.8	65.8
		Depth	In	32.6	32.6
Weight	Unit		lbs	838.0	838.0
	Packing		lbs	880	880
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	5.4 x 2	6.5 x 2
Fan unit	Type			Propeller fan	Propeller fan
	Motor output		kW	1.0+1.0	1.0+1.0
	Air volume		cfm	9760	10100
Maximum external static pressure (*3)			In.WG	0.16	0.16
Heat exchanger				Finned tube	Finned tube
Refrigerant	Name			R410A	R410A
	Charged refrigerant amount (*4)		lbs	25.4	25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)
Power supply wiring		MCA	A	54.0	69.0
		MOCP (*6)	A	60.0	80.0
Piping connections	Liquid	Type		Flare	Flare
		Diameter	In	5/8"	5/8"
	Gas	Type		Brazing	Brazing
		Diameter	In	1-1/8"	1-1/8"
	Balance	Type		Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Maximum capacity of combined indoor units			50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units			25	30
Sound pressure level		Cooling	dB(A)	63.0	64.0
		Heating	dB(A)	64.0	65.0
Operation temperature range		Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
		Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP1926HT9P-UL	MMY-AP2166HT9P-UL	MMY-AP2406HT9P-UL	MMY-AP2646HT9P-UL
Outdoor unit model name			MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP0966HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	216,000	240,000	264,000
	Rated capacity (*1)	Btu/h	184,000	206,000	230,000	252,000
	Rated power consumption (*1)(*2)	kW	13.40	15.39	17.46	19.57
	Rated EER (*1)(*2)	(Btu/h)/W	13.7	13.4	13.2	12.9
Heating	Nominal capacity (*1)	Btu/h	216,000	243,000	270,000	297,000
	Rated capacity (*1)	Btu/h	206,000	232,000	256,000	282,000
	Rated power consumption (*1)(*2)	kW	13.64	15.91	17.67	19.83
	Rated COP (*1)(*2)	Btu/W	4.43	4.27	4.25	4.17
Weight	Unit	lbs	684 + 684	684 + 684	838 + 684	838 + 684
	Packing	lbs	724 + 724	724 + 724	880 + 724	880 + 724
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	3.0 x 2 + 3.0 x 2	4.0 x 2 + 3.0 x 2	5.4 x 2 + 3.0 x 2	5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480	7480 + 7480	9760 + 7480	9760 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)	(*5)
Power supply wiring	MCA	A	36 + 36	45.4 + 36	54 + 36	54 + 45.4
	MOCP (*6)	A	40 + 40	50 + 40	60 + 40	60 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	38	42	46
Sound pressure level	Cooling	dB(A)	64.0	64.0	65.5	65.5
	Heating	dB(A)	64.0	64.5	66.0	66.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

- (*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
Equivalent piping length: 50 ft, Height difference: 0 ft
- (*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP2886HT9P-UL	MMY-AP3126HT9P-UL	MMY-AP3366HT9P-UL
Outdoor unit model name			MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1446HT9P-UL	MMY-MAP1486HT9P-UL	MMY-MAP1686HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	288,000	312,000	336,000
	Rated capacity (*1)	Btu/h	276,000	298,000	320,000
	Rated power consumption (*1)(*2)	kW	22.88	25.94	29.04
	Rated EER (*1)(*2)	(Btu/h)/W	12.1	11.5	11.0
Heating	Nominal capacity (*1)	Btu/h	324,000	351,000	378,000
	Rated capacity (*1)	Btu/h	308,000	334,000	360,000
	Rated power consumption (*1)(*2)	kW	22.33	25.31	28.82
	Rated COP (*1)(*2)	W/W	4.04	3.87	3.66
Weight	Unit	lbs	838 + 838	838 + 838	838 + 838
	Packing	lbs	880 + 880	880 + 880	880 + 880
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	5.4 x 2 + 5.4 x 2	6.5 x 2 + 5.4 x 2	6.5 x 2 + 6.5 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0	1.0+1.0 + 1.0+1.0
	Air volume	cfm	9760 + 9760	10100 + 9760	10100 + 10100
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	54 + 54	69 + 54	69 + 69
	MOCP (*6)	A	60 + 60	80 + 60	80 + 80
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	3/4"	3/4"	3/4"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	1-3/8"	1-3/8"	1-3/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		50	55	60
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.0
	Heating	dB(A)	67.0	67.5	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 50 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP3606HT9P-UL	MMY-AP3846HT9P-UL	MMY-AP4086HT9P-UL
Outdoor unit model name			MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1446HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	360,000	384,000	408,000
	Rated capacity (*1)	Btu/h	342,000	366,000	390,000
	Rated power consumption (*1)(*2)	kW	27.32	31.47	33.58
	Rated EER (*1)(*2)	W/W	12.5	11.6	11.6
Heating	Nominal capacity (*1)	Btu/h	405,000	432,000	459,000
	Rated capacity (*1)	Btu/h	386,000	412,000	436,000
	Rated power consumption (*1)(*2)	kW	29.40	32.52	36.34
	Rated COP (*1)(*2)	W/W	3.85	3.71	3.52
Weight	Unit	lbs	684 + 684 + 684	838 + 684 + 684	838 + 838 + 684
	Packing	lbs	724 + 724 + 724	880 + 724 + 724	880 + 880 + 724
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	4.0 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 4.0 x 2 + 4.0 x 2	5.4 x 2 + 5.4 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0 + 1.0	1.0+1.0 + 1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	7480 + 7480 + 7480	9760 + 7480 + 7480	9760 + 9760 + 7480
Maximum external static pressure (*3)		In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)	(*5)
Power supply wiring	MCA	A	45.4 + 45.4 + 45.4	54 + 45.4 + 45.4	54 + 54 + 45.4
	MOCP (*6)	A	50 + 50 + 50	60 + 50 + 50	60 + 60 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare
		Diameter	In	7/8"	7/8"
	Gas	Type	Brazing	Brazing	Brazing
		Diameter	In	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		63	64	64
Sound pressure level	Cooling	dB(A)	66.0	66.5	67.5
	Heating	dB(A)	67.0	67.5	68.5
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 75 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Standard model

System with Ducted indoor units

Model name			MMY-AP4326HT9P-UL	MMY-AP4566HT9P-UL
Outdoor unit model name			MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1446HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	432,000	456,000
	Rated capacity (*1)	Btu/h	412,000	434,000
	Rated power consumption (*1)(*2)	kW	38.35	42.06
	Rated EER (*1)(*2)	(Btu/h)/W	10.7	10.3
Heating	Nominal capacity (*1)	Btu/h	486,000	513,000
	Rated capacity (*1)	Btu/h	462,000	488,000
	Rated power consumption (*1)(*2)	kW	39.15	42.27
	Rated COP (*1)(*2)	W/W	3.46	3.38
Weight	Unit	lbs	838 + 838 + 684	838 + 838 + 684
	Packing	lbs	880 + 880 + 724	880 + 880 + 724
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	6.5 x 2 + 5.4 x 2 + 4.0 x 2	6.5 x 2 + 6.5 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan
	Motor output	kW	1.0+1.0 + 1.0+1.0 + 1.0	1.0+1.0 + 1.0+1.0 + 1.0
	Air volume	cfm	10100 + 9760 + 7480	10100 + 10100 + 7480
Maximum external static pressure (*3)		In.WG	0.16	0.16
Heat exchanger			Finned tube	Finned tube
Refrigerant	Name		R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)		psi	OFF:464 ON:601	OFF:464 ON:601
Protective devices			(*5)	(*5)
Power supply wiring	MCA	A	69 + 54 + 45.4	69 + 69 + 45.4
	MOCP (*6)	A	80 + 60 + 50	80 + 80 + 50
Piping connections	Liquid	Type	Flare	Flare
		Diameter	7/8"	7/8"
	Gas	Type	Brazing	Brazing
		Diameter	1-5/8"	1-5/8"
	Balance	Type	Flare	Flare
		Diameter	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		64	64
Sound pressure level	Cooling	dB(A)	68.0	68.0
	Heating	dB(A)	69.0	69.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions Cooling: Indoor air temperature 80 °F DryBulb/67 °F WetBulb, Outdoor air temperature 95 °F DryBulb
 Heating: Indoor air temperature 70 °F DryBulb, Outdoor air temperature 47 °F DryBulb/43 °F WetBulb
 Equivalent piping length: 75 ft, Height difference: 0 ft

(*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) Permanent operation below 80% is not recommended.

Space saving model

System with Ducted indoor units

Model name			MMY-AP192S6HT9P-UL	MMY-AP240S6HT9P-UL	MMY-AP288S6HT9P-UL	MMY-AP408S6HT9P-UL
Outdoor unit model name			MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL
			MMY-MAP0726HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
			-	-	-	MMY-MAP1206HT9P-UL
Power Supply	Nominal voltage	V/Ph/Hz	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60	208-230 / 3 / 60
	Voltage range	V	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum	187Minimum / 253 Maximum
Cooling	Nominal capacity (*1)	Btu/h	192,000	240,000	288,000	408,000
	Rated capacity (*1)	Btu/h	184,000	230,000	276,000	390,000
	Rated power consumption (*1)(*2)	kW	13.87	17.61	23.09	34.87
	Rated EER (*1)(*2)	(Btu/h)/W	13.3	13.1	12.0	11.2
Heating	Nominal capacity (*1)	Btu/h	216,000	270,000	324,000	459,000
	Rated capacity (*1)	Btu/h	206,000	256,000	308,000	436,000
	Rated power consumption (*1)(*2)	kW	14.31	17.90	22.64	36.90
	Rated COP (*1)(*2)	W/W	4.22	4.19	3.99	3.46
Weight	Unit	lbs	684 + 574	684 + 684	838 + 684	838 + 684 + 684
	Packing	lbs	724 + 609	724 + 724	880 + 724	880 + 724 + 724
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	4.0 x 2 + 2.1 x 2	4.0 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 2 + 4.0 x 2
Fan unit	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor output	kW	1.0 + 1.0	1.0 + 1.0	1.0+1.0 + 1.0	1.0+1.0 + 1.0 + 1.0
	Air volume	cfm	7480 + 6700	7480 + 7480	10100 + 7480	10100 + 7480 + 7480
Maximum external static pressure (*3)			In.WG	0.16	0.16	0.16
Heat exchanger			Finned tube	Finned tube	Finned tube	Finned tube
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charged refrigerant amount (*4)	lbs	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4	25.4 + 25.4 + 25.4
High-pressure switch (Protective device)			psi	OFF:464 ON:601	OFF:464 ON:601	OFF:464 ON:601
Protective devices				(*5)	(*5)	(*5)
Power supply wiring	MCA	A	45.4 + 27	45.4 + 45.4	69 + 45.4	69 + 45.4 + 45.4
	MOCP (*6)	A	50 + 30	50 + 50	80 + 50	80 + 50 + 50
Piping connections	Liquid	Type	Flare	Flare	Flare	Flare
		Diameter	In	5/8"	3/4"	7/8"
	Gas	Type	Brazing	Brazing	Brazing	Brazing
		Diameter	In	1-1/8"	1-3/8"	1-5/8"
	Balance	Type	Flare	Flare	Flare	Flare
		Diameter	In	3/8"	3/8"	3/8"
Indoor units	Total capacity	% of outdoor unit capacity	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)	50 to 150% (*7)
	Maximum number of indoor units		34	42	50	64
Sound pressure level	Cooling	dB(A)	62.5	64.0	66.0	67.0
	Heating	dB(A)	63.5	65.0	67.0	68.0
Operation temperature range	Cooling	°FDB	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0	14.0 to 122.0
	Heating	°FWB	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0	-13.0 to 60.0

Note

(*1) Rated conditions

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

192, 240, 288 type: Equivalent piping length: 50 ft, Height difference: 0 ft, 408 type: Equivalent piping length: 75 ft, Height difference: 0 ft

(*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

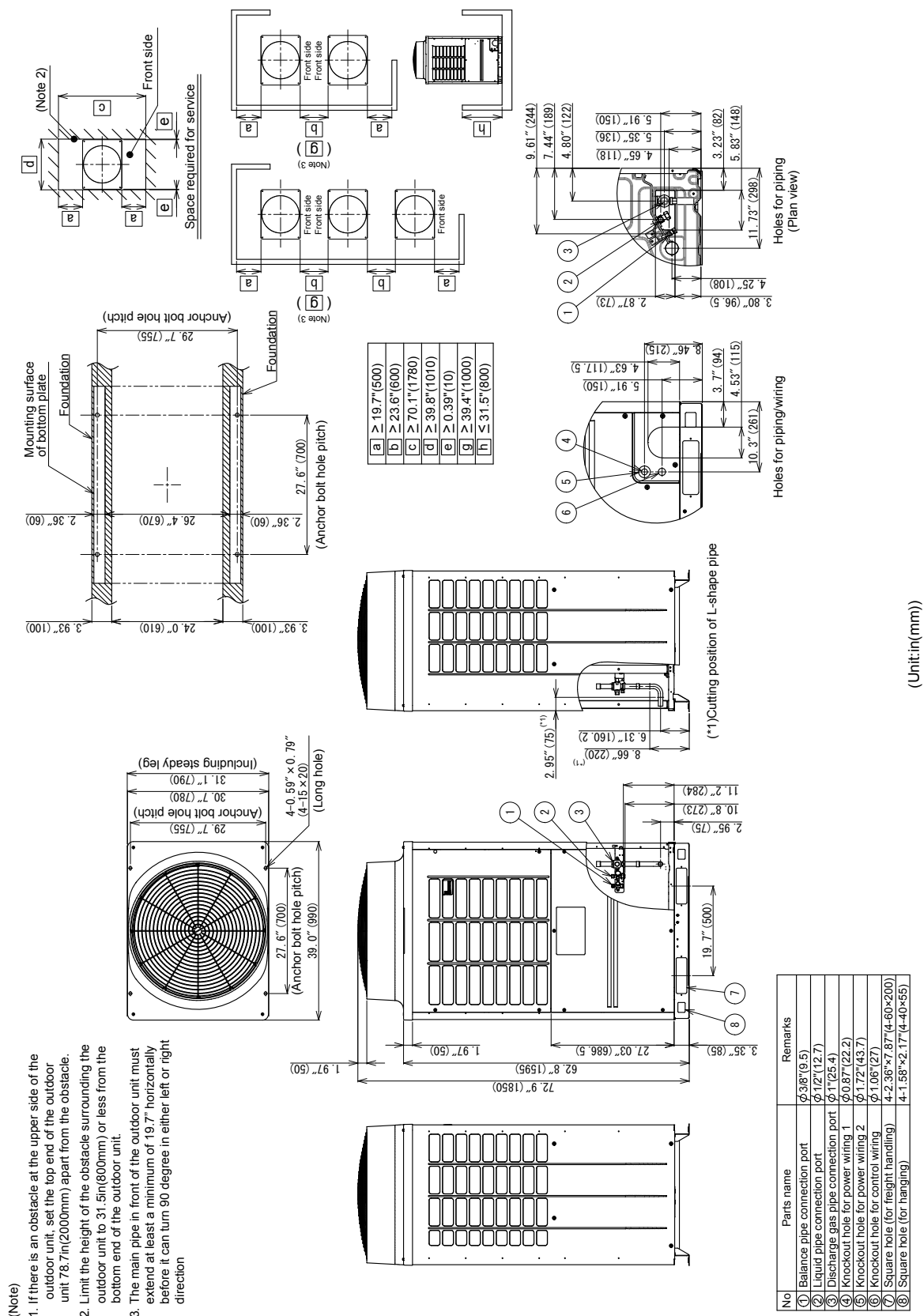
(*6) MOCP : Maximum Overcurrent Protection(Amps)

(*7) Permanent operation below 80% is not recommended.

5-2. Dimensional drawing

Single unit

Model : MMY-MAP0726HT6P-UL , MAP0726HT9P-UL

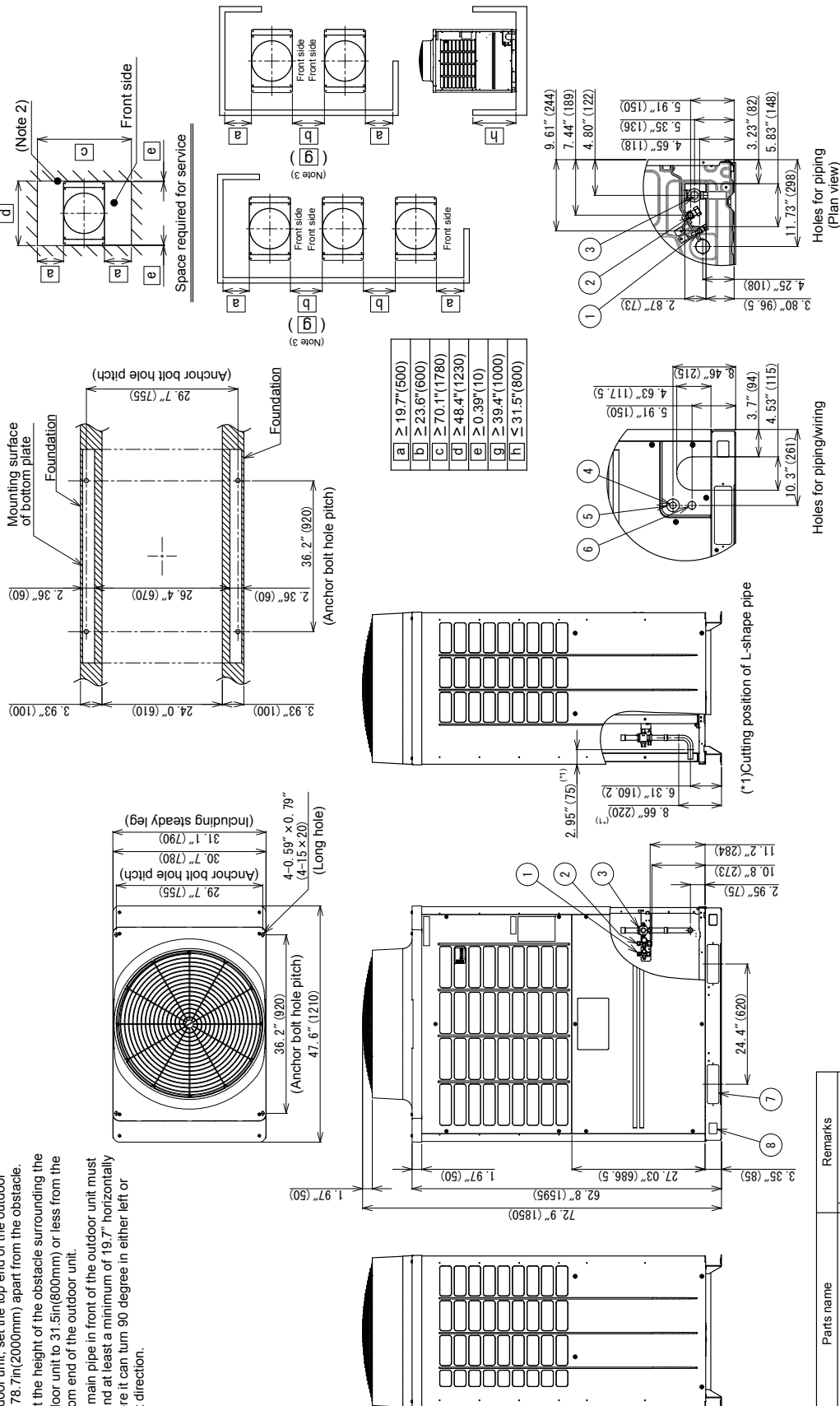


Single unit

Model : MMY-MAP0966HT6P-UL, MAP1206HT6P-UL, MAP0966HT9P-UL, MAP1206HT9P-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. Limit the height of the obstacle surrounding the outdoor unit to 31.5in(800mm) or less from the bottom end of the outdoor unit.
3. The main pipe in front of the outdoor unit must extend at least a minimum of 19.7" horizontally before it can turn 90 degree in either left or right direction.



No	Parts name	Remarks
①	Balance pipe connection port	Ø3/8"(9.5)
②	Liquid pipe connection port	Ø1/2"(12.7)
③	Discharge gas pipe connection port	Ø1"(25.4)
④	Knockout hole for power wiring 1	Ø0.87"(22.2)
⑤	Knockout hole for power wiring 2	Ø1.72"(43.7)
⑥	Knockout hole for control wiring	Ø1.06"(27)
⑦	Square hole (for freight handling)	4.2 3/8" x 7.87" (4.60 x 200)
⑧	Square hole (for hanging)	4.1 5/8" x 2.17" (4.40 x 55)

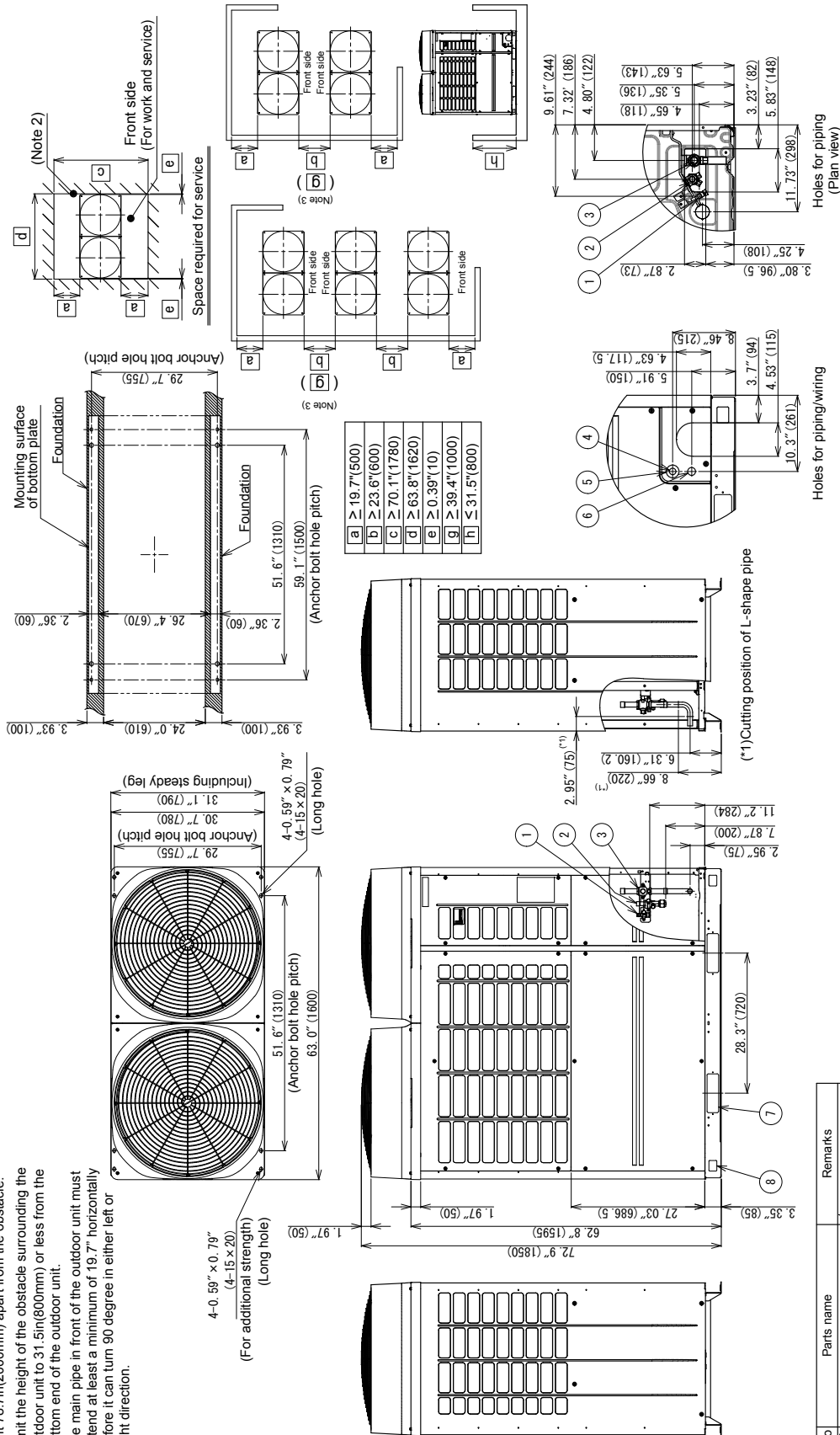
(Unit:in(mm))

Single unit

Model : MMY-MAP1446HT6P-UL, MAP1686HT6P-UL, MAP1446HT9P-UL, MAP1686HT9P-UL

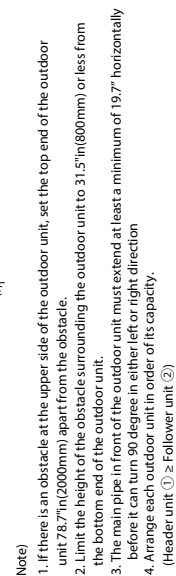
(Note)

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. Limit the height of the obstacle surrounding the outdoor unit to 31.5in(800mm) or less from the bottom end of the outdoor unit.
3. The main pipe in front of the outdoor unit must extend at least a minimum of 19.7" horizontally before it can turn 90 degree in either left or right direction.



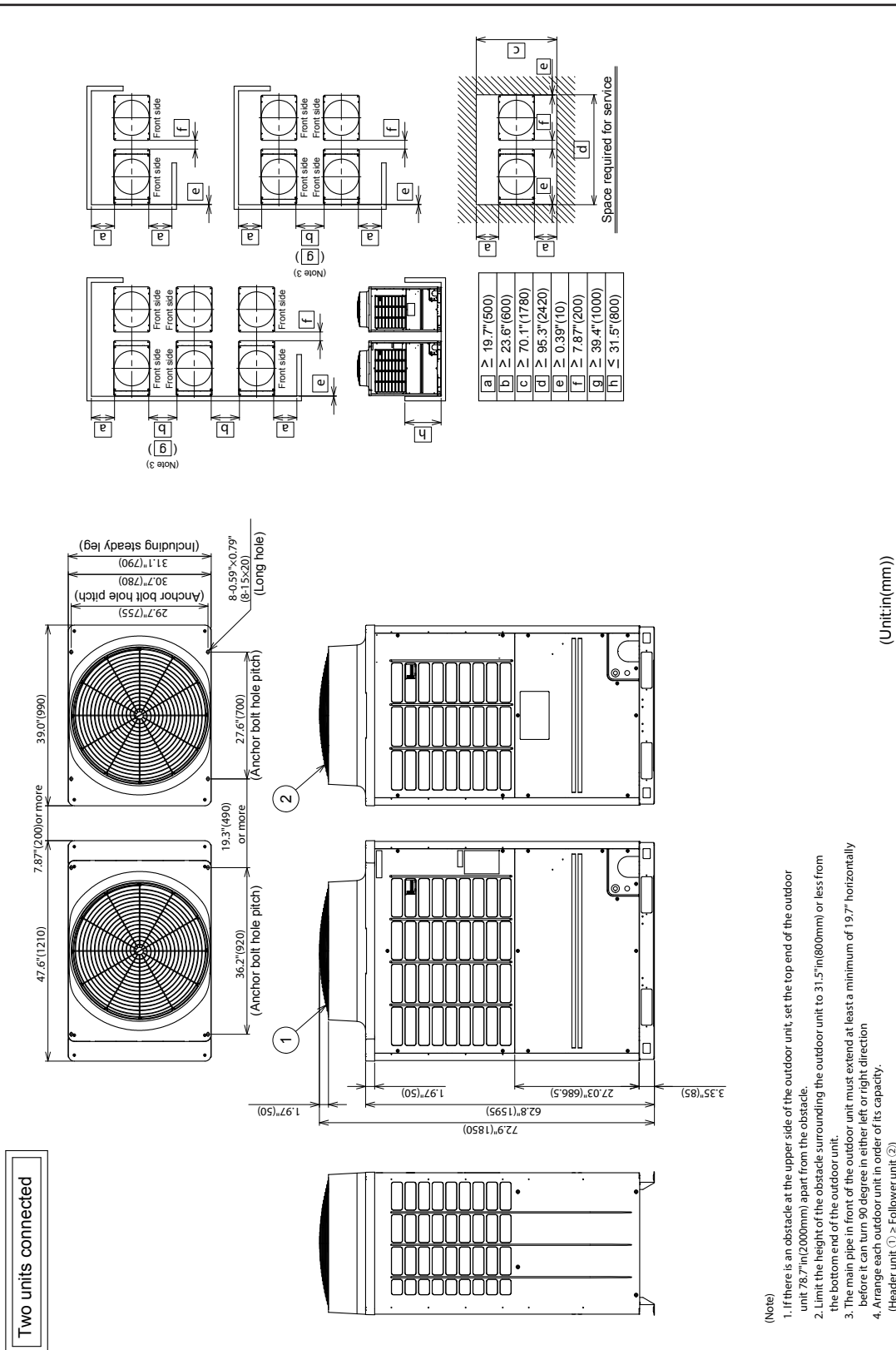
(Unit:in(mm))

Model	Outdoor unit	
	(1) Header unit	(2) Follower unit
MMY-AP1926HT6P-UL	MMY-MAP0966HT6P-UL	MMY-MAP0966HT6P-UL
MMY-AP2166HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP0966HT6P-UL
MMY-AP240S6HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP1926HT9P-UL	MMY-MAP0966HT9P-UL	MMY-MAP0966HT9P-UL
MMY-AP2166HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP0966HT9P-UL
MMY-AP240S6HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL



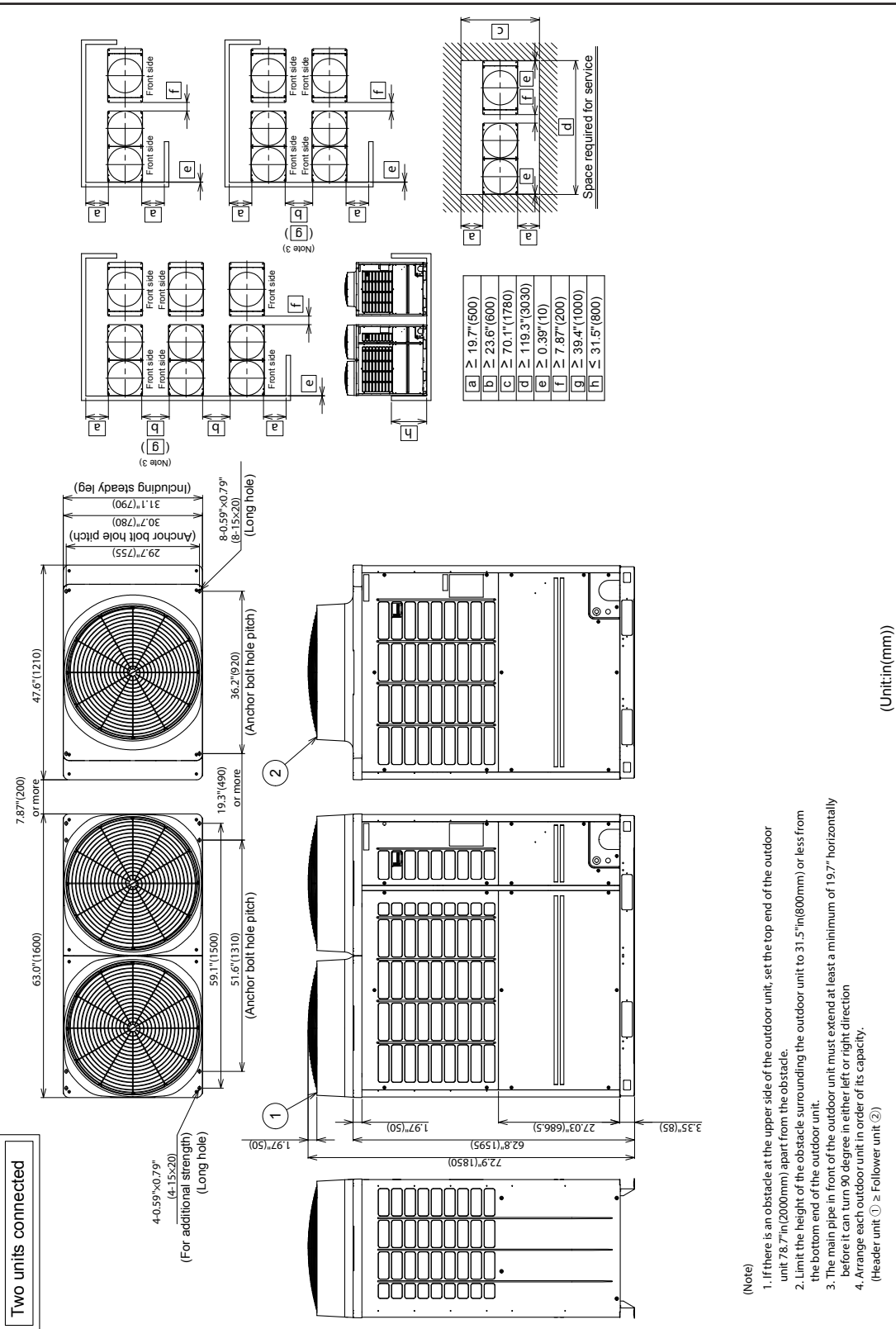
Combination

Model	Outdoor unit	
	(1) Header unit	(2) Follower unit
MMY-AP192S6HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP0726HT6P-UL
MMY-AP192S6HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP0726HT9P-UL

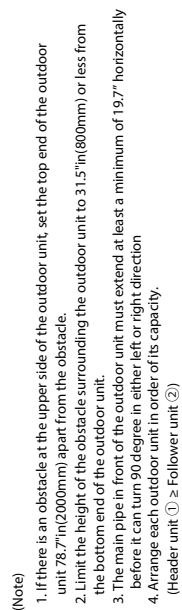


Combination

Model	Outdoor unit	
	(1) Header unit	(2) Follower unit
MMY-AP2406HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP0966HT6P-UL
MMY-AP2646HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP288S6HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP2406HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP0966HT9P-UL
MMY-AP2646HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1206HT9P-UL
MMY-AP288S6HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1206HT9P-UL

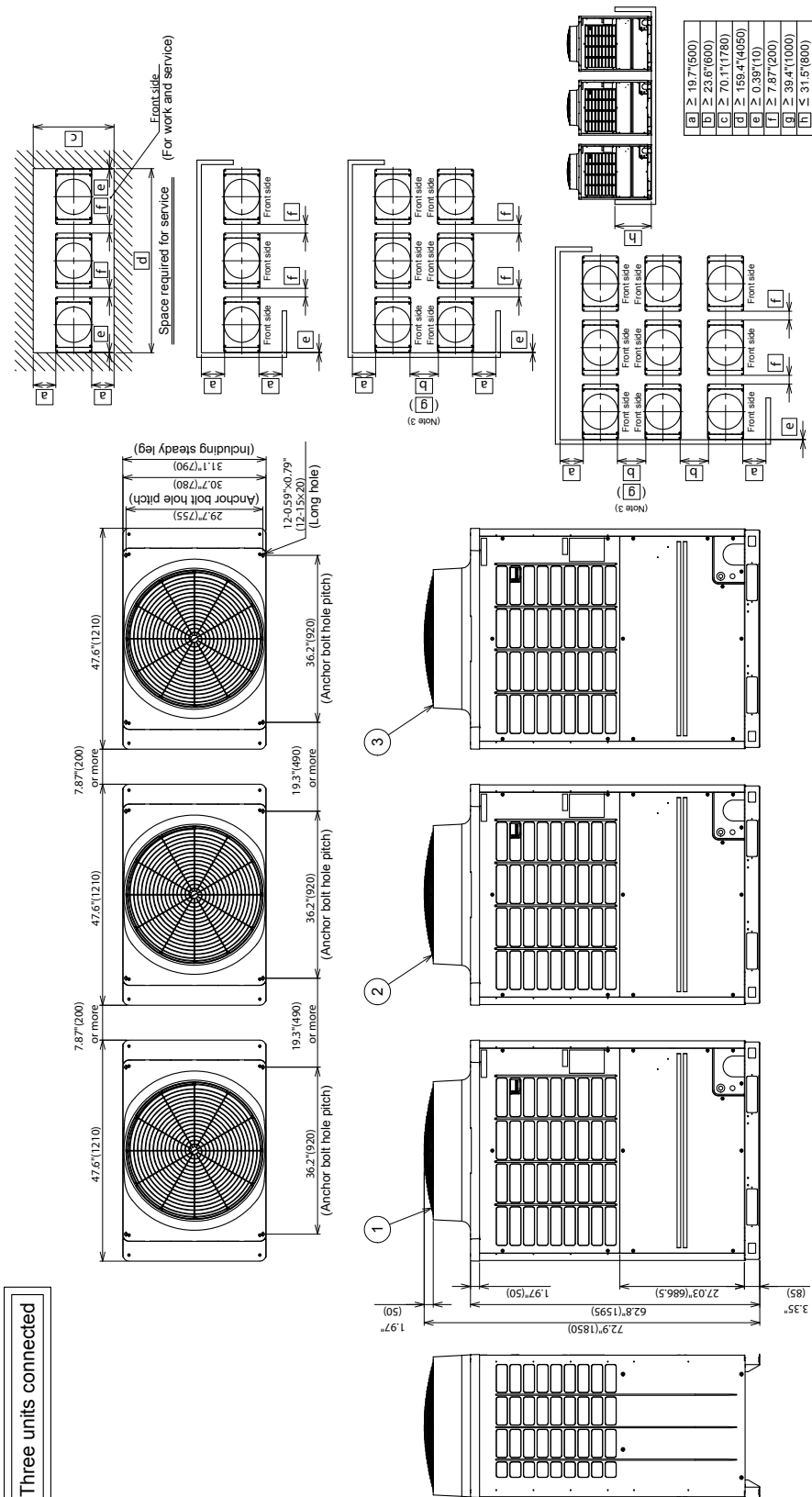


Model	Outdoor unit	
	(1) Header unit	(2) Follower unit
MMY-AP2886HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL
MMY-AP3126HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1446HT6P-UL
MMY-AP3366HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL
MMY-AP2886HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL
MMY-AP3126HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1446HT9P-UL
MMY-AP3366HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL



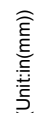
Combination

Model	Outdoor unit		
	(1) Header unit	(2) Follower unit	(3) Follower unit
MMY-AP3606HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP3606HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL



- (Note)
1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7\"/>
 - 2. Limit the height of the obstacle surrounding the outdoor unit to 31.5\"/>
 - 3. The main pipe in front of the outdoor unit must extend at least a minimum of 19.7\"/>
 - 4. Arrange each outdoor unit in order of its capacity.
(Header unit ① ≥ Follower unit ② ≥ Follower unit ③)

Model	Outdoor unit		
	(1) Header unit	(2) Follower unit	(3) Follower unit
MMY-AP3846HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP408S6HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1206HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP3846HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL
MMY-AP408S6HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1206HT9P-UL	MMY-MAP1206HT9P-UL

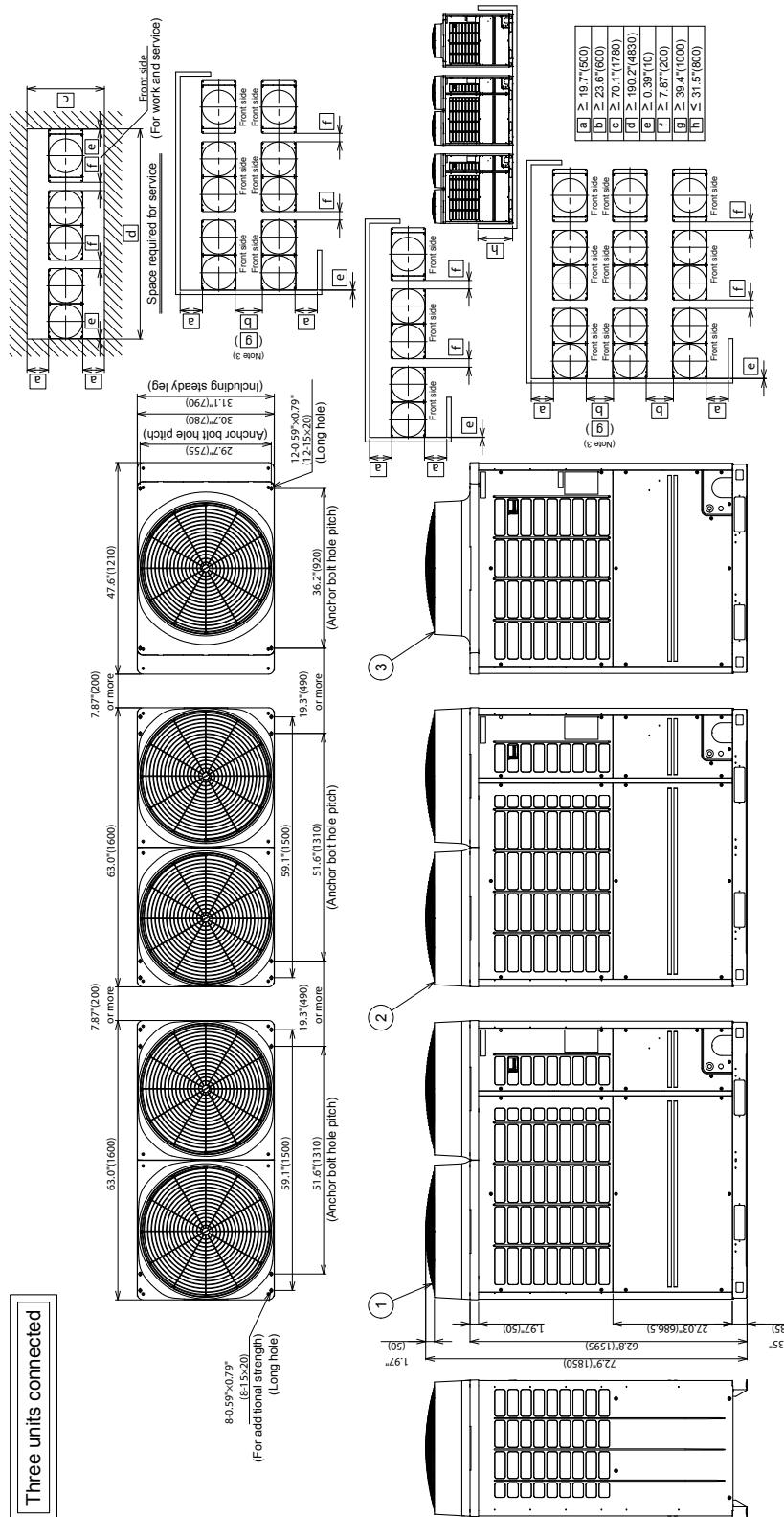


Note)

1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7" (in)(2000mm) apart from the obstacle.
2. Limit the height of the obstacle surrounding the outdoor unit to 31.5" (in)(800mm) or less from the bottom end of the outdoor unit.
3. The main pipe in front of the outdoor unit must extend at least a minimum of 19.7" horizontally before it can turn 90 degree in either left or right direction
4. Arrange each outdoor unit in order of its capacity.
(Header unit ① > Follower unit ② > Follower unit ③)

Combination

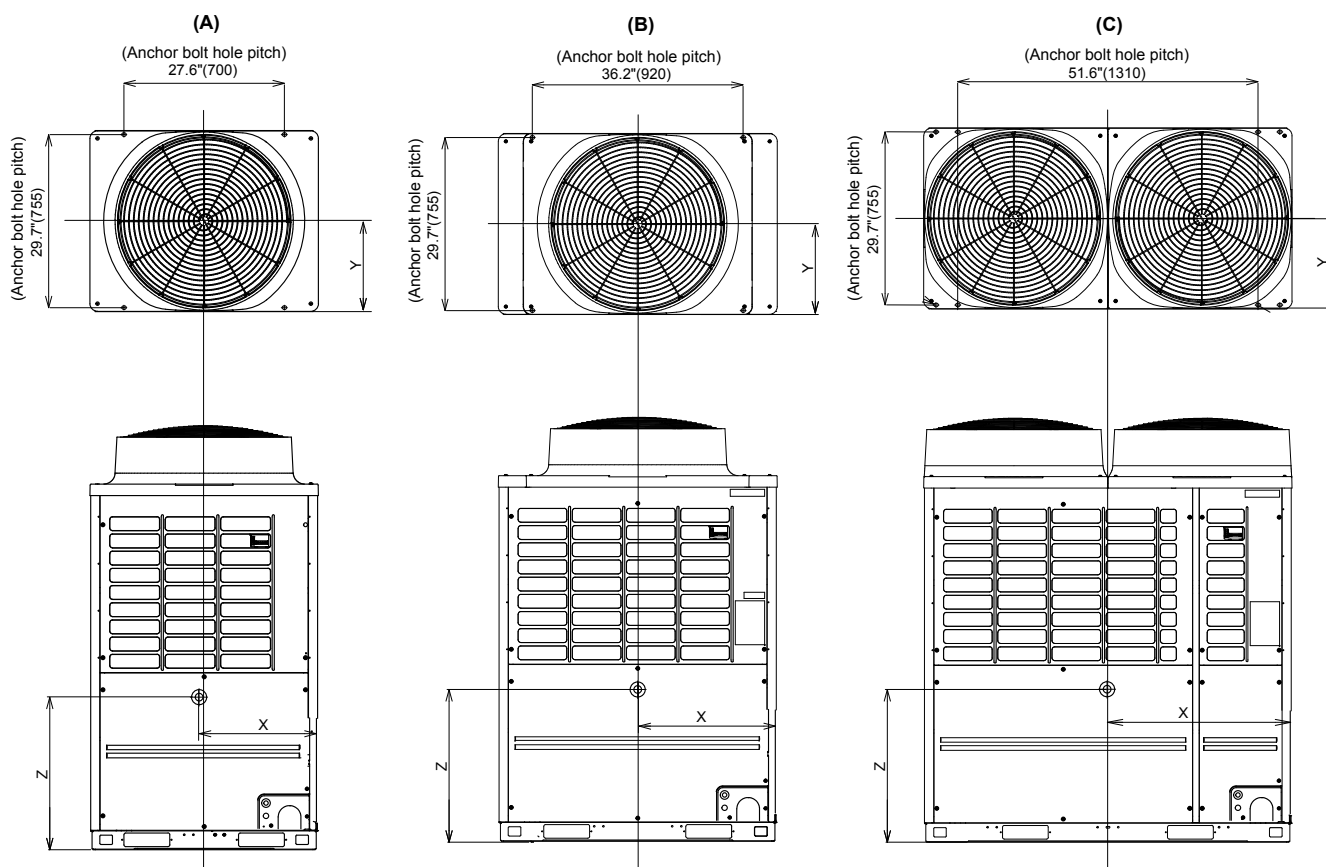
Model	Outdoor unit		
	(1) Header unit	(2) Follower unit	(3) Follower unit
MMY-AP4086HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP4326HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1446HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP4566HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1686HT6P-UL	MMY-MAP1206HT6P-UL
MMY-AP4086HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1206HT9P-UL
MMY-AP4326HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP1206HT9P-UL
MMY-AP4566HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1686HT9P-UL	MMY-MAP1206HT9P-UL



(Unit: in (mm))

- (Note)
- If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 78.7" (2000mm) apart from the obstacle.
 - Limit the height of the obstacle surrounding the outdoor unit to 31.5" (800mm) or less from the bottom end of the outdoor unit.
 - The main pipe in front of the outdoor unit must extend at least a minimum of 19.7" horizontally before it can turn 90 degree in either left or right direction.
 - Arrange each outdoor unit in order of its capacity.
(Header unit ① ≥ Follower unit ② ≥ Follower unit ③)

5.3 Center of gravity



Heat Pump

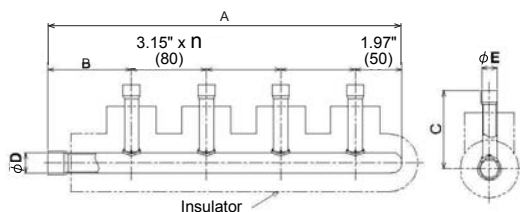
No.	Model type	X (In(mm))	Y (In(mm))	Z (In(mm))	Weight (Lbs(Kg))
A	MAP0726HT9P-UL	20.1"(510)	16.5"(420)	24.0"(610)	574(260)
	MAP0726HT6P-UL				
B	MAP0966HT9P-UL	22.8"(580)	13.8"(350)	21.7"(550)	684(310)
	MAP1206HT9P-UL				
	MAP0966HT6P-UL				
	MAP1206HT6P-UL				
C	MAP1446HT9P-UL	31.9"(810)	14.6"(370)	19.7"(500)	838(380)
	MAP1686HT9P-UL				
	MAP1446HT6P-UL				
	MAP1686HT6P-UL				

5-4. Branch header / branch joint

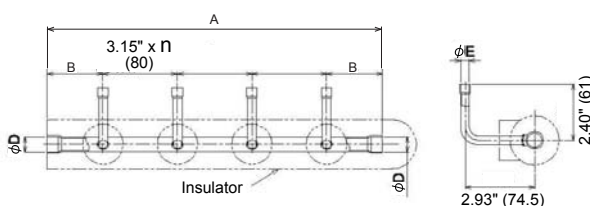
• Branch header (Heat pump)

RBM-HY1043UL, HY1083UL, HY2043UL, HY2083UL

Gas side



Liquid side



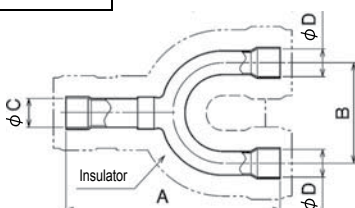
Unit: in (mm)

Model		A	B	C	φD	φE	n	Accessory socket Qty
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, ⑰ × 1, ⑳ × 1
	Liquid side	13.0" (330)	1.77" (45)	—	5/8" (15.9)	3/8" (9.5)	3	① × 4, ⑥ × 1, ⑨ × 1
RBM-HY1083UL	Gas side	27.6" (700)	3.54" (90)	3.29" (83.6)	7/8" (22.2)	5/8" (15.9)	7	⑥ × 8, ⑨ × 8, ⑭ × 1, ⑰ × 1, ⑳ × 1
	Liquid side	25.6" (650)	1.77" (45)	—	5/8" (15.9)	3/8" (9.5)	7	① × 8, ⑥ × 1, ⑨ × 1
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, ⑳ × 1, ㉑ × 1
	Liquid side	13.0" (330)	1.77" (45)	—	5/8" (15.9)	3/8" (9.5)	3	① × 2
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, ⑳ × 1, ㉑ × 1
	Liquid side	25.6" (680)	1.77" (45)	—	5/8" (15.9)	3/8" (9.5)	7	① × 7

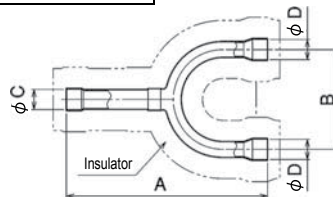
• Y-shape branch joint (Heat pump)

RBM-BY55UL, BY105UL, BY205UL, BY305UL

Gas side



Liquid side



Unit: in (mm)

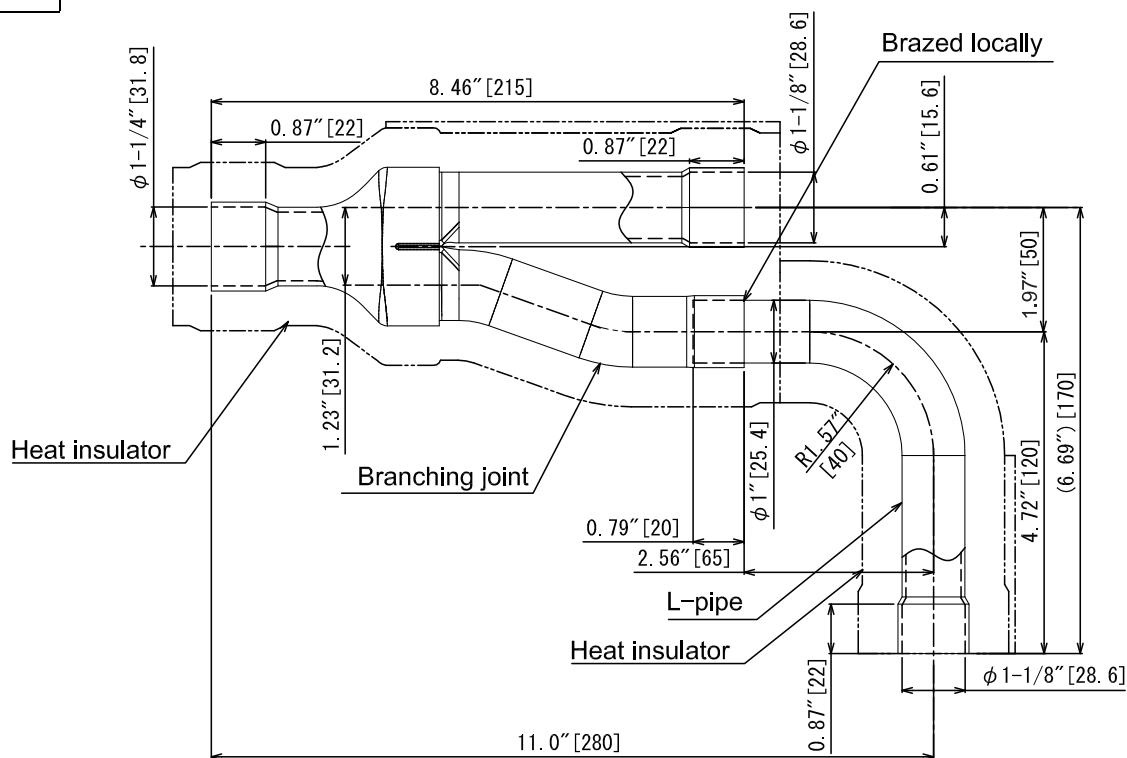
RBM-		A	B	φC	φD	Accessory socket Qty
BY55UL	Gas side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	⑨ × 1, ⑪ × 2, ⑫ × 1
	Liquid side	5.12" (130)	2.76" (70)	3/8" (9.5)	3/8" (9.5)	① × 2
BY105UL	Gas side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	⑭ × 21, ⑰ × 2, ⑱ × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	⑨ × 1, ⑪ × 1, ⑫ × 1
BY205UL	Gas side	7.87" (200)	3.15" (80)	1-1/4" (31.8)	1-1/8" (28.6)	⑬ × 1, ⑰ × 1, ⑱ × 2, ㉑ × 1, ㉒ × 1, ㉓ × 1
	Liquid side	6.30" (160)	3.15" (80)	5/8" (15.9)	5/8" (15.9)	⑨ × 1, ⑪ × 2, ⑫ × 1
BY305UL	Gas side	8.66" (220)	3.15" (80)	1-1/2" (38.1)	1-1/2" (38.1)	⑬ x1, ⑰ x3, ⑱ x2, ㉑ x2, ㉒ x1, ㉓ x1
	Liquid side	6.69" (170)	3.15" (80)	7/8" (22.2)	7/8" (22.2)	⑫ x1, ⑬ x2

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

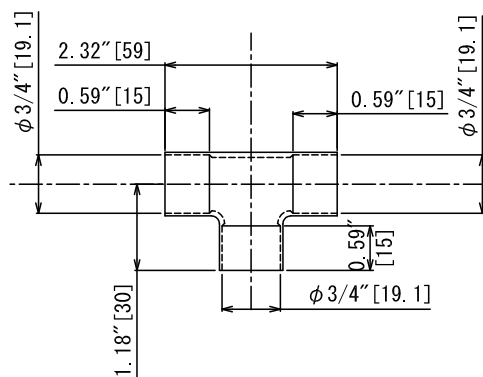
RBM-BT14UL

Gas side

Unit: in (mm)



Liquid side

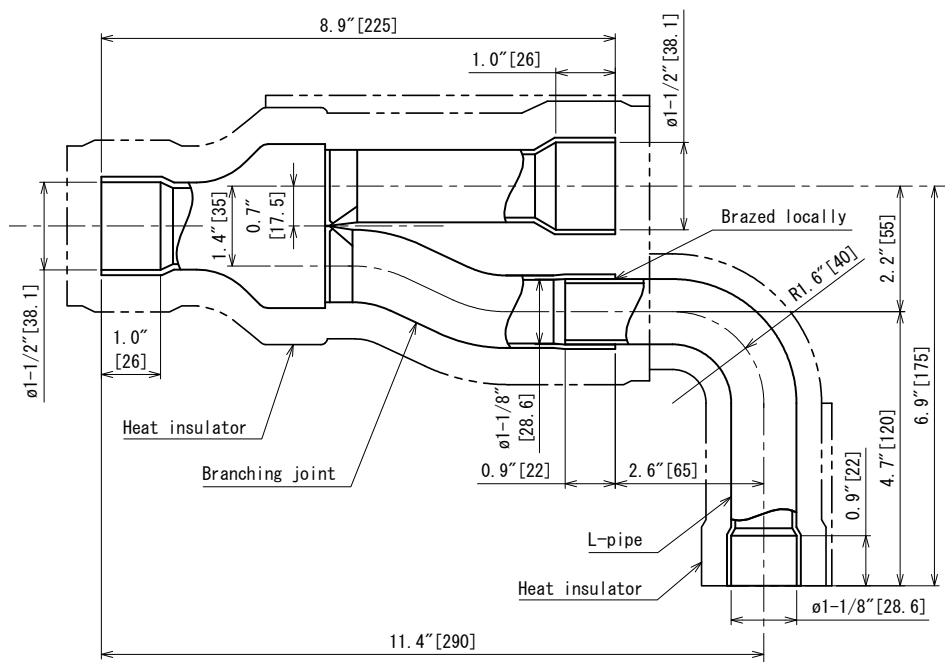


RBM-BT14UL	
Accessory socket Qty	
Gas side	⑦ × 1, ④ × 2, ⑤ × 1,
Liquid side	⑩ × 2, ⑬ × 1

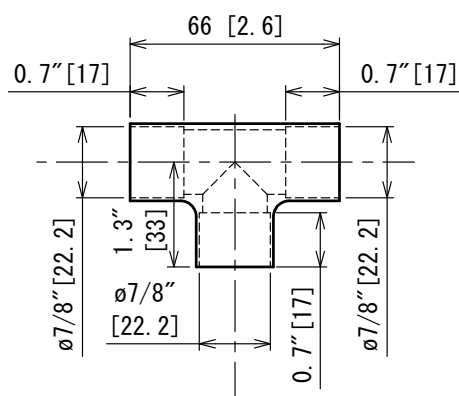
- Branching joint for connection of outdoor units (Set two joints)(Heat pump)

RBM-BT24UL

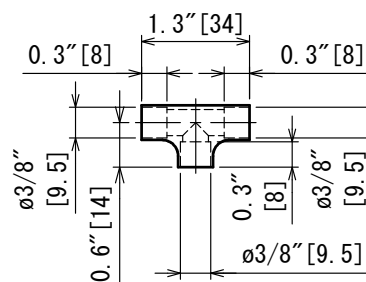
Gas side



Liquid side



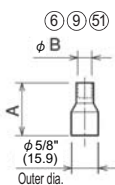
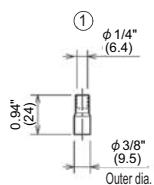
Balance pipe side



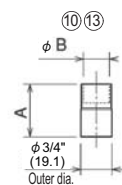
RBM-BT24UL	
Accessory socket Q'ty	
Gas side	⑬x 1, ⑥①x 2, ⑥②x 2, ⑦①x 1, ⑦③x 1
Liquid side	⑭x 2, ①⑧x 2, ⑧⑤x 1

• Accessory socket

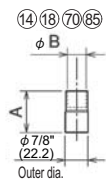
Unit:in(mm)



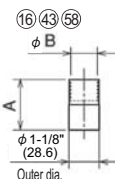
	A	ϕB
6	1.26" (32)	3/8" (9.5)
9	1.10" (28)	1/2" (12.7)
51	1.48" (37.5)	3/4" (19.1)



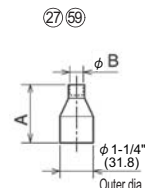
	A	ϕB
10	1.42" (36)	1/2" (12.7)
13	1.30" (33)	5/8" (15.9)



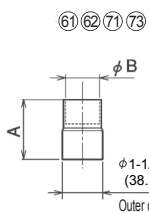
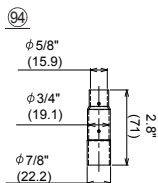
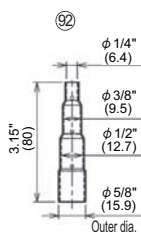
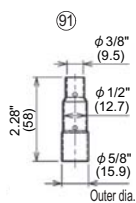
	A	ϕB
14	1.57" (40)	5/8" (15.9)
18	1.57" (40)	3/4" (19.1)
70	2.13" (54)	1-1/8" (28.6)
85	1.61" (41)	1/2" (12.7)



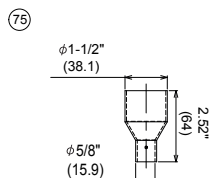
	A	ϕB
16	1.97" (50)	5/8" (15.9)
43	1.97" (50)	7/8" (22.2)
58	2.44" (62)	1-3/8" (34.9)



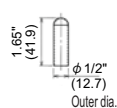
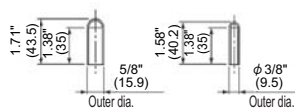
	A	ϕB
27	1.93" (49)	1-1/8" (28.6)
59	2.32" (59)	1-3/8" (34.9)



	A	ϕB
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)



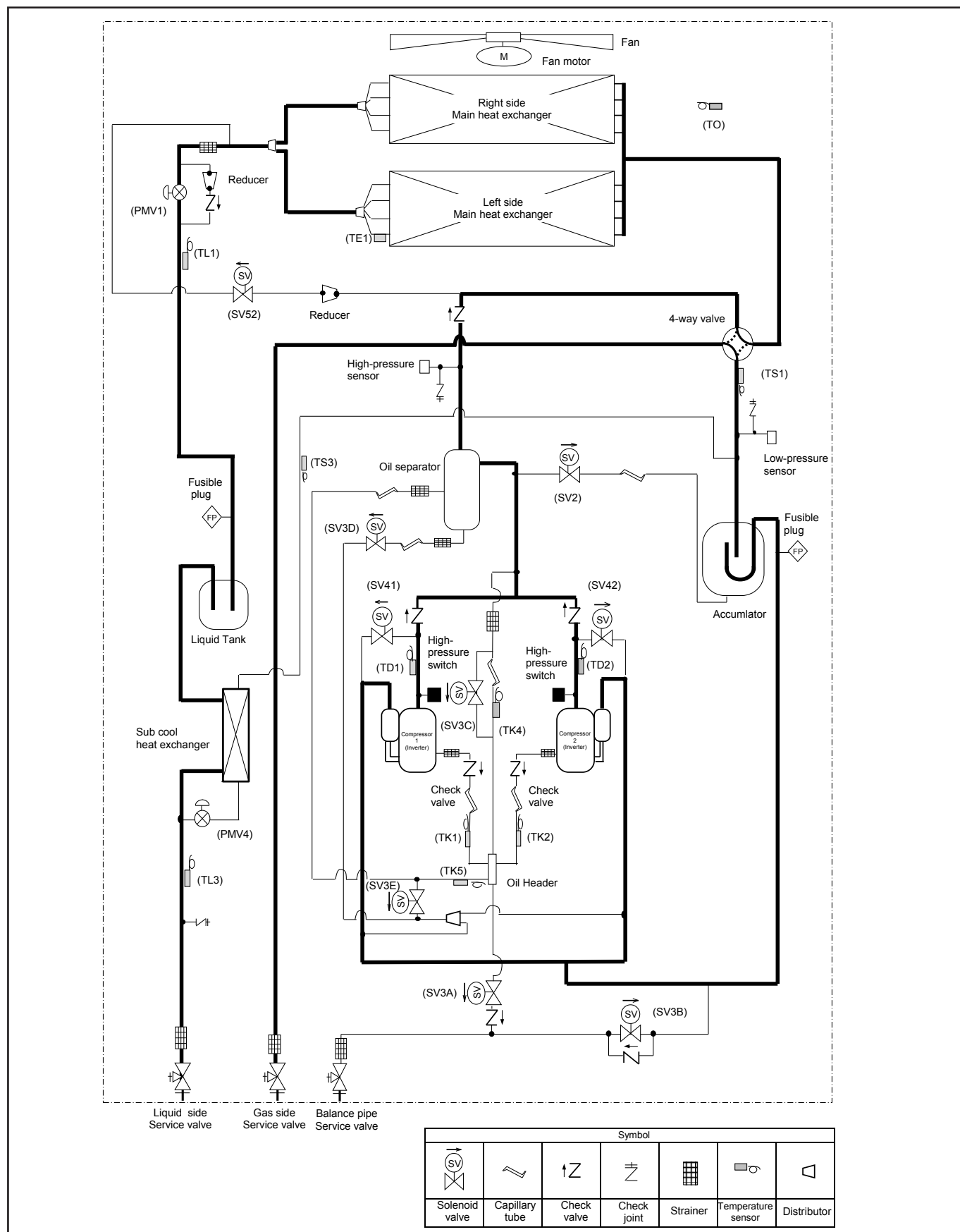
Sealed pipe



5-5. Refrigerant cycle diagram

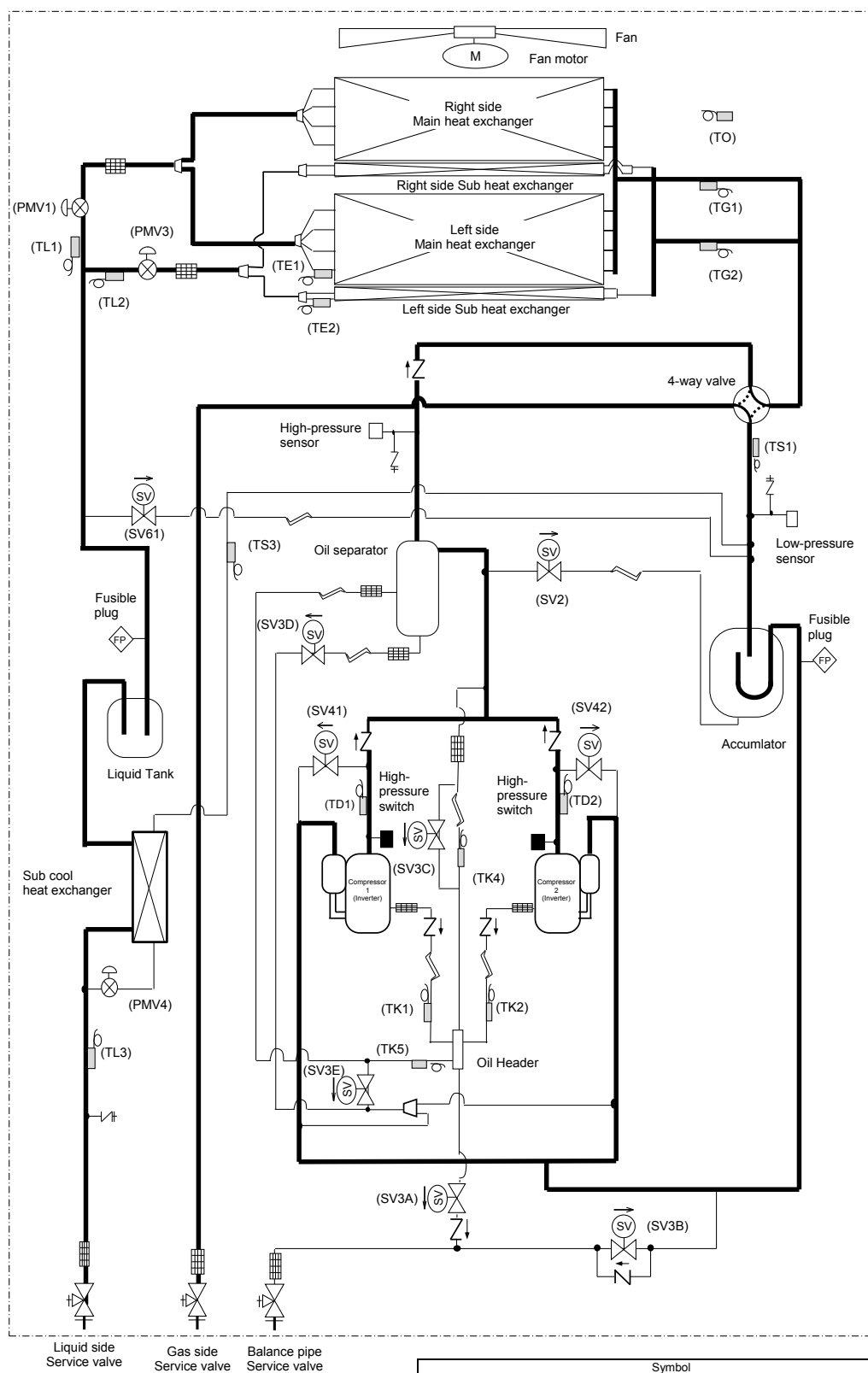
Outdoor Unit (6 ton)

Model : MMY-MAP0726*



Outdoor Unit (8, 10ton)

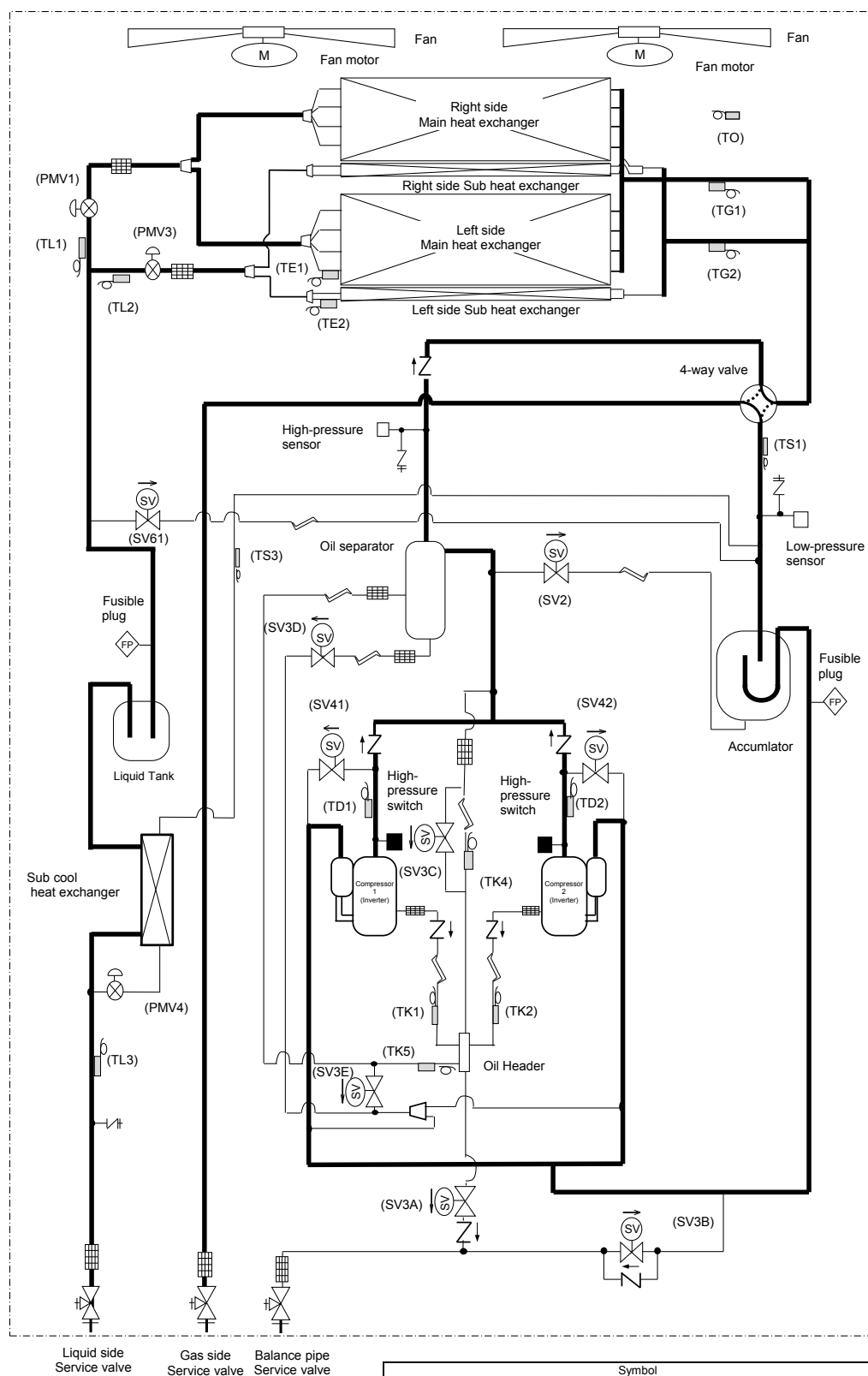
Model : MMY-MAP0966* , MMY-MAP1206*



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

Outdoor Unit (12, 16 ton)

Model : MMY-MAP1446* , MMY-MAP1686*



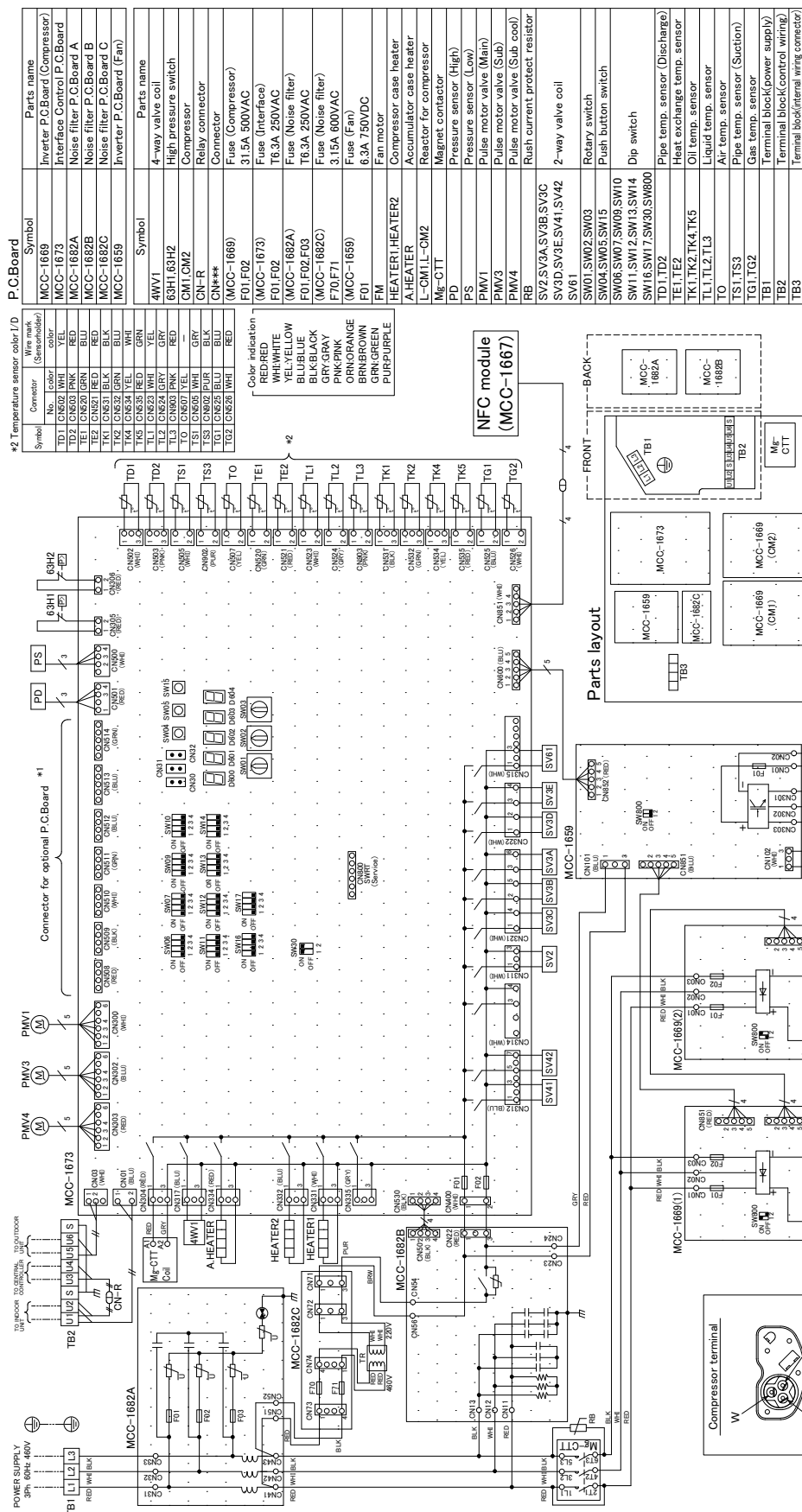
Symbol						
Solenoid valve	Capillary tube	Check valve	Check joint	Strainer	Temperature sensor	Distributor

Model : MMY-MAP0726HT6P-UL

Model : MMY-MAP0726HT6P-UL



Model : MMY-MAP0966HT6P-UL , MMY-MAP1206HT6P-UL

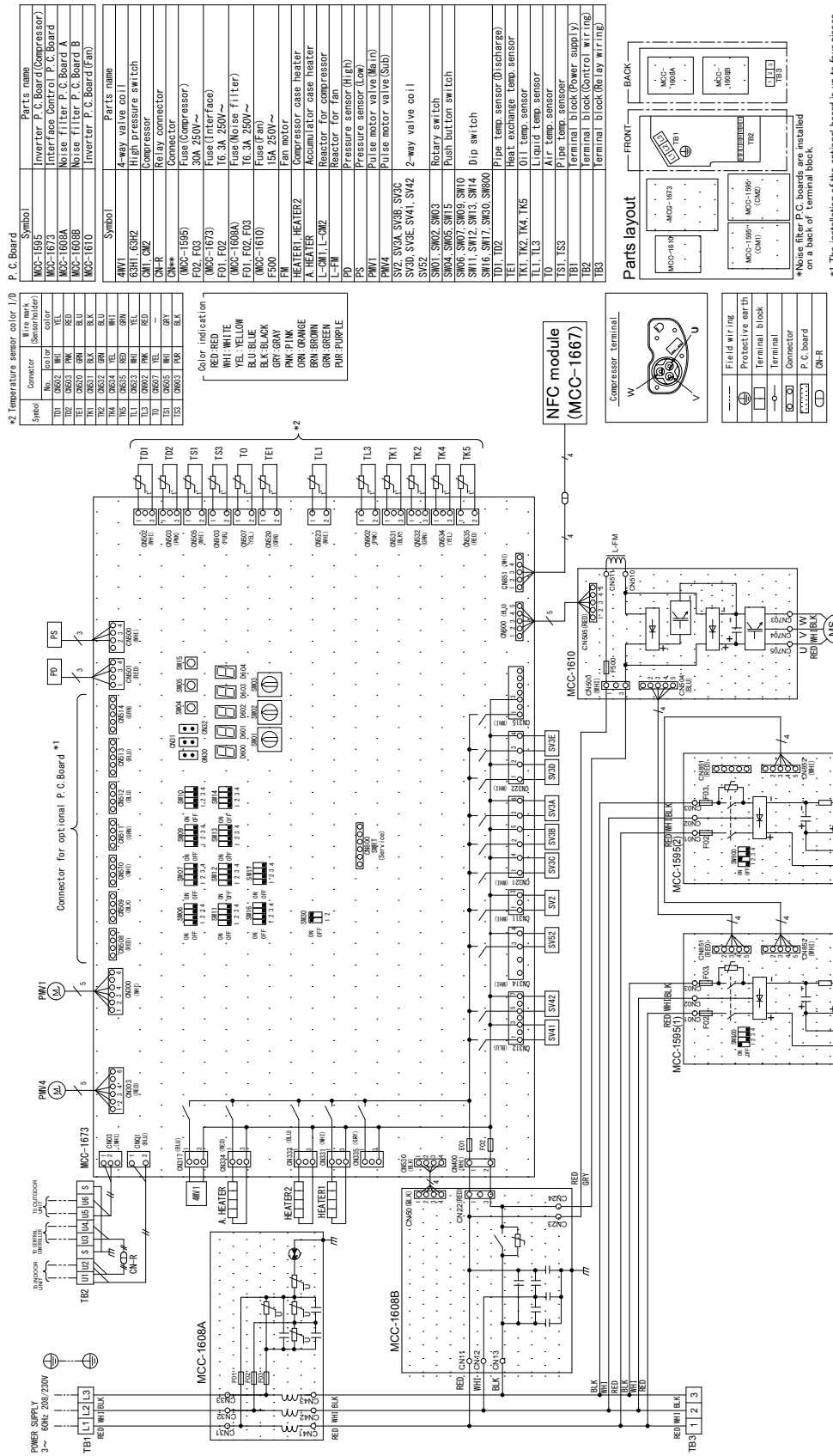


42 Temperature sensor color 1/D

Symbol	Connector No.	Wire mark color	Parts name
MCC-1669	CM1	RED	Inverter P.C Board (Compressor)
MCC-1673	CM2	RED	Interface Control P.C Board
MCC-1682A	CM3	RED	Noise filter P.C Board A
MCC-1682B	CM4	RED	Noise filter P.C Board B
MCC-1682C	CM5	RED	Noise filter P.C Board C
MCC-1689	CM6	RED	Inverter P.C Board (Fan)

Symbol	Connector No.	Wire mark color	Parts name
4WV1	CM7	RED	4-way valve coil
6SH1.63H2	CM8	RED	High pressure switch
CM1.0M2	CM9	RED	Compressor
CM1.0R	CM10	RED	Relay connector
CM1.0M	CM11	RED	Connector
CM1.0M	CM12	RED	Fuse (Compressor)
F01.F02	CM13	RED	Fuse (Interface)
F01.F02	CM14	RED	Fuse (Noise filter)
F01.F02.F03	CM15	RED	Fuse (Noise filter)
F01.F02.F03	CM16	RED	Fuse (Noise filter)
F01.F02.F03	CM17	RED	Fuse (Noise filter)
F01.F02.F03	CM18	RED	Fuse (Noise filter)
F01.F02.F03	CM19	RED	Fuse (Noise filter)
F01.F02.F03	CM20	RED	Fuse (Noise filter)
F01.F02.F03	CM21	RED	Fuse (Noise filter)
F01.F02.F03	CM22	RED	Fuse (Noise filter)
F01.F02.F03	CM23	RED	Fuse (Noise filter)
F01.F02.F03	CM24	RED	Fuse (Noise filter)
F01.F02.F03	CM25	RED	Fuse (Noise filter)
F01.F02.F03	CM26	RED	Fuse (Noise filter)
F01.F02.F03	CM27	RED	Fuse (Noise filter)
F01.F02.F03	CM28	RED	Fuse (Noise filter)
F01.F02.F03	CM29	RED	Fuse (Noise filter)
F01.F02.F03	CM30	RED	Fuse (Noise filter)
F01.F02.F03	CM31	RED	Fuse (Noise filter)
F01.F02.F03	CM32	RED	Fuse (Noise filter)
F01.F02.F03	CM33	RED	Fuse (Noise filter)
F01.F02.F03	CM34	RED	Fuse (Noise filter)
F01.F02.F03	CM35	RED	Fuse (Noise filter)
F01.F02.F03	CM36	RED	Fuse (Noise filter)
F01.F02.F03	CM37	RED	Fuse (Noise filter)
F01.F02.F03	CM38	RED	Fuse (Noise filter)
F01.F02.F03	CM39	RED	Fuse (Noise filter)
F01.F02.F03	CM40	RED	Fuse (Noise filter)
F01.F02.F03	CM41	RED	Fuse (Noise filter)
F01.F02.F03	CM42	RED	Fuse (Noise filter)
F01.F02.F03	CM43	RED	Fuse (Noise filter)
F01.F02.F03	CM44	RED	Fuse (Noise filter)
F01.F02.F03	CM45	RED	Fuse (Noise filter)
F01.F02.F03	CM46	RED	Fuse (Noise filter)
F01.F02.F03	CM47	RED	Fuse (Noise filter)
F01.F02.F03	CM48	RED	Fuse (Noise filter)
F01.F02.F03	CM49	RED	Fuse (Noise filter)
F01.F02.F03	CM50	RED	Fuse (Noise filter)
F01.F02.F03	CM51	RED	Fuse (Noise filter)
F01.F02.F03	CM52	RED	Fuse (Noise filter)
F01.F02.F03	CM53	RED	Fuse (Noise filter)
F01.F02.F03	CM54	RED	Fuse (Noise filter)
F01.F02.F03	CM55	RED	Fuse (Noise filter)
F01.F02.F03	CM56	RED	Fuse (Noise filter)
F01.F02.F03	CM57	RED	Fuse (Noise filter)
F01.F02.F03	CM58	RED	Fuse (Noise filter)
F01.F02.F03	CM59	RED	Fuse (Noise filter)
F01.F02.F03	CM60	RED	Fuse (Noise filter)
F01.F02.F03	CM61	RED	Fuse (Noise filter)
F01.F02.F03	CM62	RED	Fuse (Noise filter)
F01.F02.F03	CM63	RED	Fuse (Noise filter)
F01.F02.F03	CM64	RED	Fuse (Noise filter)
F01.F02.F03	CM65	RED	Fuse (Noise filter)
F01.F02.F03	CM66	RED	Fuse (Noise filter)
F01.F02.F03	CM67	RED	Fuse (Noise filter)
F01.F02.F03	CM68	RED	Fuse (Noise filter)
F01.F02.F03	CM69	RED	Fuse (Noise filter)
F01.F02.F03	CM70	RED	Fuse (Noise filter)
F01.F02.F03	CM71	RED	Fuse (Noise filter)
F01.F02.F03	CM72	RED	Fuse (Noise filter)
F01.F02.F03	CM73	RED	Fuse (Noise filter)
F01.F02.F03	CM74	RED	Fuse (Noise filter)
F01.F02.F03	CM75	RED	Fuse (Noise filter)
F01.F02.F03	CM76	RED	Fuse (Noise filter)
F01.F02.F03	CM77	RED	Fuse (Noise filter)
F01.F02.F03	CM78	RED	Fuse (Noise filter)
F01.F02.F03	CM79	RED	Fuse (Noise filter)
F01.F02.F03	CM80	RED	Fuse (Noise filter)
F01.F02.F03	CM81	RED	Fuse (Noise filter)
F01.F02.F03	CM82	RED	Fuse (Noise filter)
F01.F02.F03	CM83	RED	Fuse (Noise filter)
F01.F02.F03	CM84	RED	Fuse (Noise filter)
F01.F02.F03			

Model : MMY-MAP0726HT9P-UL



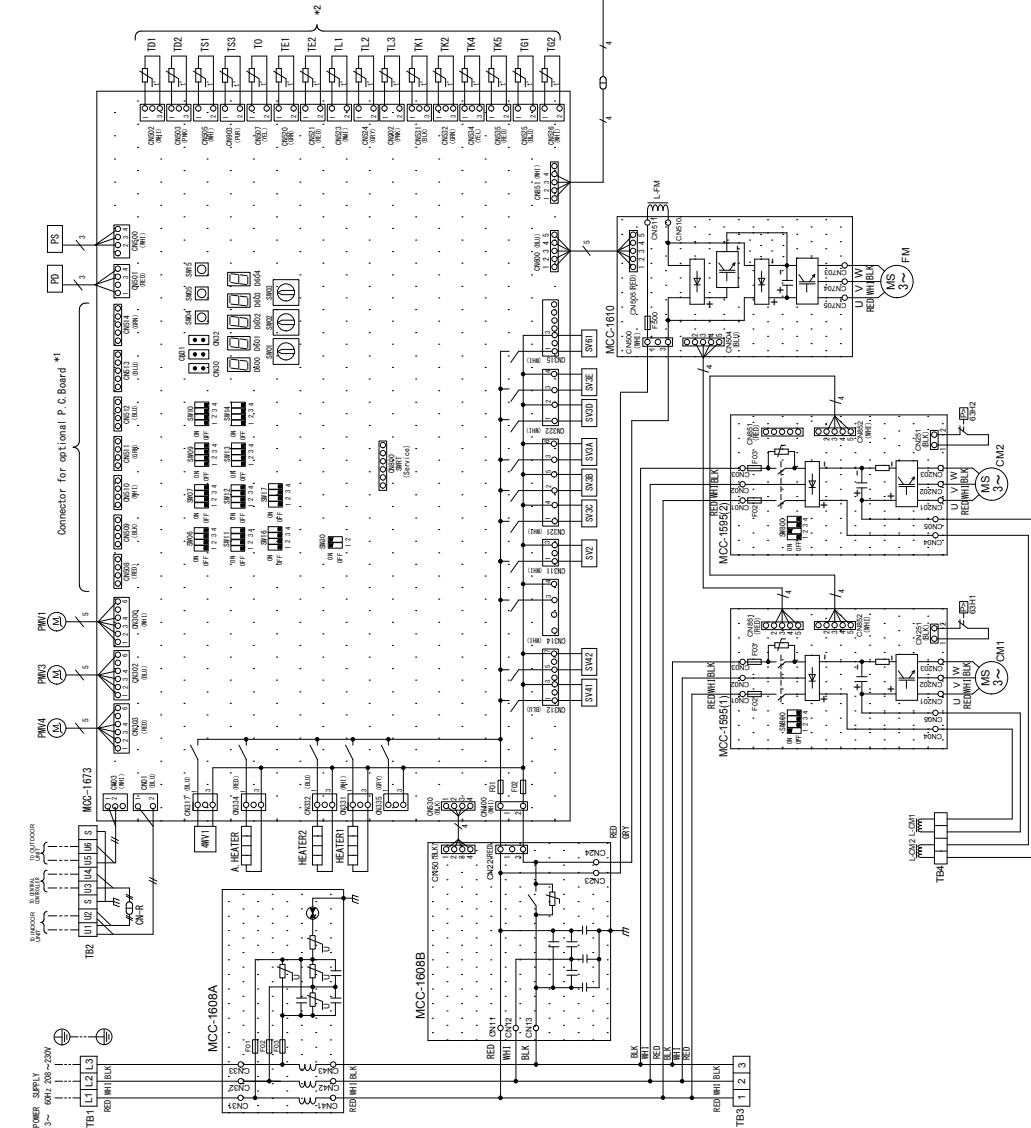
Model : MMY-MAP0966HT9P-UL , MMY-MAP1206HT9P-UL

*2 Temperature sensor color 1/0

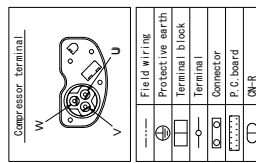
Symbol	Connector	Wire mark color	Parts name
T01	CM202	WHI	Interface Control P.C. Board
T02	CM203	PNK	Noise filter P.C. Board A
T03	CM204	RED	Noise filter P.C. Board B
T04	CM205	BLU	Inverter P.C. Board (Fan)
T05	CM206	RED	4-way valve coil
T06	CM207	BLK	High pressure switch
T07	CM208	YEL	Compressor
T08	CM209	RED	Relay connector
T09	CM210	GRN	Connector
T10	CM211	RED	Fuse (Compressor)
T11	CM212	YEL	Fuse (Interface)
T12	CM213	GRY	Fuse (Noise filter)
T13	CM214	BLK	Fuse (Noise filter)
T14	CM215	BLU	Fuse (Fan)
T15	CM216	RED	Fuse (Fan)

Color indication

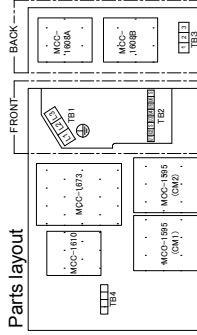
RED: RED
WHI: WHITE
YEL: YELLOW
BLK: BLACK
GRY: GRAY
PNK: PINK
BRN: BROWN
GRN: GREEN
PUR: PURPLE



NFC module (MCC-1667)



Parts layout



*Noise filter P.C. boards are installed on a back of terminal block.

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

Wire ext. (Seasonal den)	Symbol	Parts name
W02-1687A	W02-1687A	Inverter P.C. Board (Comp.essor)
W02-1687B	W02-1687B	Inverter C. Board
W02-1687C	W02-1687C	Inverter Control P.C. Board
W02-1689	W02-1689	Noise filter P.C. Board
W02-1610	W02-1610	Inverter P.C. Board (Fan)

Symbol	Parts name
4WV1	4-way valve coil
G3H1, G3H2	High pressure coil
CM1, CM2	High compressor
CR-R	Relay compressor
CR**	Connector
F01, F02	Fuse (Compressor)
F01, F02	70A 250V ~
F02 (Comp)	Fuse (Interface)
F01, F02	16.3A 250V ~
F02 (Noise filter)	Fuse (Noise filter)
F01, F03	16.3A 250V ~
F01, F03	Fuse (Fan)
F500	15A 250V ~
FMI, FMI2	Fan motor
HEATER1, HEATER2	Compressor case heater
A, HEATER	Accumulator case heater
L-OM1, L-OM2	Reactor for compressor
L-PM1, L-PM2	Reactor for fan
MG-OT11, MG-OT12	Magnet contactor
PD	Pressure sensor (High ph)
PS	Pressure sensor (Low)
PMW1	Pulse motor valve (Main)
PMW3	Pulse motor valve (Sub)
PMW4	Pulse motor valve (Sub coil)
RB	Brush current protect resistor
SV2, SV3A, SV3B, SV3C	2-way valve coil
SV3, SV3E, SV41, SV42	Relay switch
SVR1	Push button switch
SWP1, SWP2, SWP3	Relay switch
SWP4, SWP5, SWP6	Relay switch
SWP7, SWP8, SWP9	Relay switch
SWP1, SWP12, SWP13, SWP14	Relay switch
SWP15, SWP17, SWP20, SWP21	Relay switch
4J55, 4J56, 4J57, 4J58	Setting jumper
TD1, TD2	Pipe temp. sensor (Discharge)
TE1, TE2	Heat exchanger temp. sensor
TL1, TL2, TL3	Oil temp. sensor
TL1, TL2, TL3	Load temp. sensor
TS1, TS2	Pipe temp. sensor (Suction)
TS3, TS4	Gas temp. sensor
TR1, TR2	Terminal block (Power supply)
TR3	Terminal block (Control wiring)

Wire ext. (Seasonal den)	Symbol	Parts name
W02-1687A	W02-1687A	Inverter P.C. Board (Comp.essor)
W02-1687B	W02-1687B	Inverter C. Board
W02-1687C	W02-1687C	Inverter Control P.C. Board
W02-1689	W02-1689	Noise filter P.C. Board
W02-1610	W02-1610	Inverter P.C. Board (Fan)

Symbol	Parts name
4WV1	4-way valve coil
G3H1, G3H2	High pressure coil
CM1, CM2	High compressor
CR-R	Relay compressor
CR**	Connector
F01, F02	Fuse (Compressor)
F01, F02	70A 250V ~
F02 (Comp)	Fuse (Interface)
F01, F02	16.3A 250V ~
F02 (Noise filter)	Fuse (Noise filter)
F01, F03	16.3A 250V ~
F01, F03	Fuse (Fan)
F500	15A 250V ~
FMI, FMI2	Fan motor
HEATER1, HEATER2	Compressor case heater
A, HEATER	Accumulator case heater
L-OM1, L-OM2	Reactor for compressor
L-PM1, L-PM2	Reactor for fan
MG-OT11, MG-OT12	Magnet contactor
PD	Pressure sensor (High ph)
PS	Pressure sensor (Low)
PMW1	Pulse motor valve (Main)
PMW3	Pulse motor valve (Sub)
PMW4	Pulse motor valve (Sub coil)
RB	Brush current protect resistor
SV2, SV3A, SV3B, SV3C	2-way valve coil
SV3, SV3E, SV41, SV42	Relay switch
SVR1	Push button switch
SWP1, SWP2, SWP3	Relay switch
SWP4, SWP5, SWP6	Relay switch
SWP7, SWP8, SWP9	Relay switch
SWP1, SWP12, SWP13, SWP14	Relay switch
SWP15, SWP17, SWP20, SWP21	Relay switch
4J55, 4J56, 4J57, 4J58	Setting jumper
TD1, TD2	Pipe temp. sensor (Discharge)
TE1, TE2	Heat exchanger temp. sensor
TL1, TL2, TL3	Oil temp. sensor
TL1, TL2, TL3	Load temp. sensor
TS1, TS2	Pipe temp. sensor (Suction)
TS3, TS4	Gas temp. sensor
TR1, TR2	Terminal block (Power supply)
TR3	Terminal block (Control wiring)

Wire ext. (Seasonal den)	Symbol	Parts name
W02-1687A	W02-1687A	Inverter P.C. Board (Comp.essor)
W02-1687B	W02-1687B	Inverter C. Board
W02-1687C	W02-1687C	Inverter Control P.C. Board
W02-1689	W02-1689	Noise filter P.C. Board
W02-1610	W02-1610	Inverter P.C. Board (Fan)

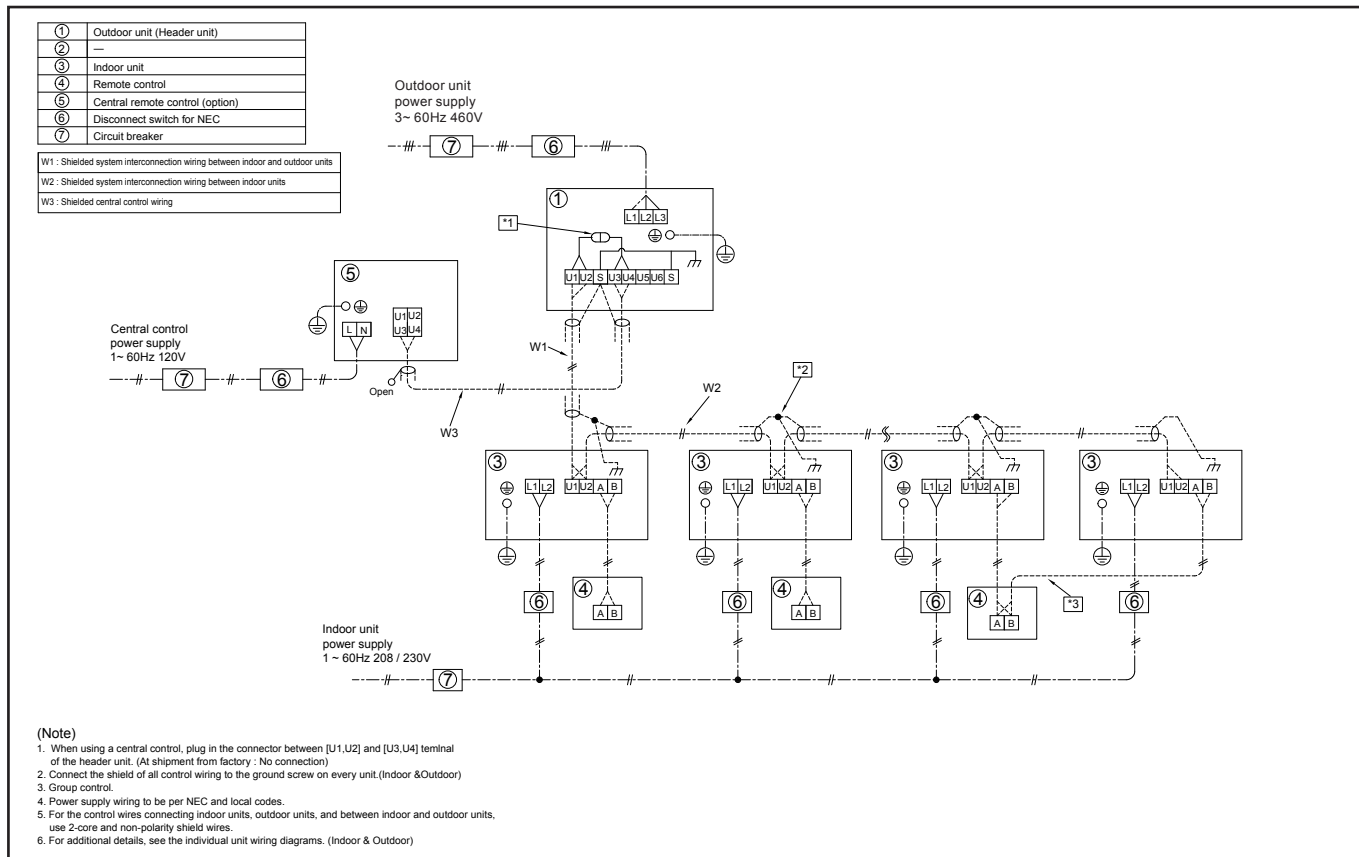
Symbol	Parts name
4WV1	4-way valve coil
G3H1, G3H2	High pressure coil
CM1, CM2	High compressor
CR-R	Relay compressor
CR**	Connector
F01, F02	Fuse (Compressor)
F01, F02	70A 250V ~
F02 (Comp)	Fuse (Interface)
F01, F02	16.3A 250V ~
F02 (Noise filter)	Fuse (Noise filter)
F01, F03	16.3A 250V ~
F01, F03	Fuse (Fan)
F500	15A 250V ~
FMI, FMI2	Fan motor
HEATER1, HEATER2	Compressor case heater
A, HEATER	Accumulator case heater
L-OM1, L-OM2	Reactor for compressor
L-PM1,	



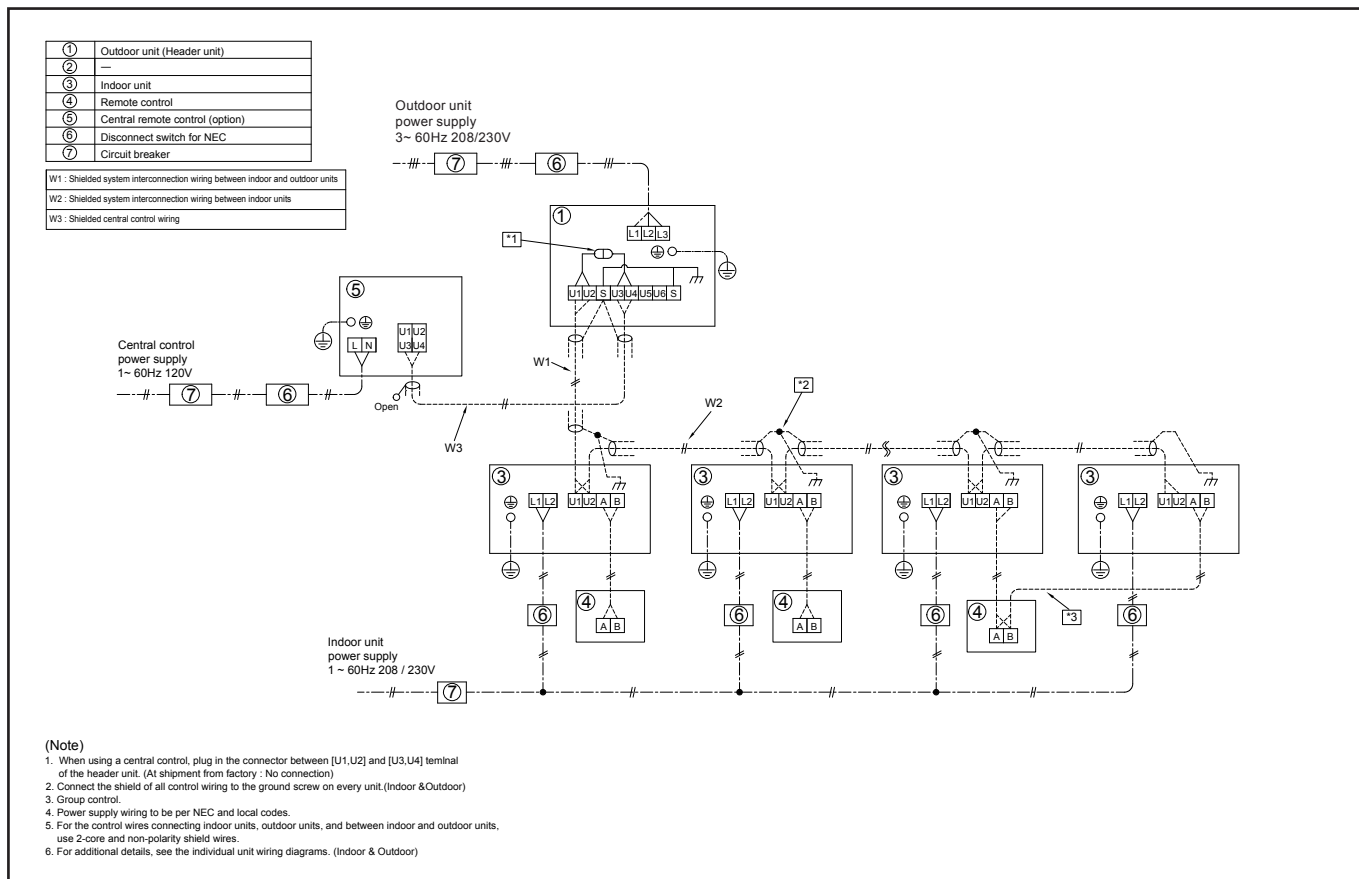
5-7. Connecting Diagrams

Single Unit connected

Model : MMY-MAP***6HT6P-UL

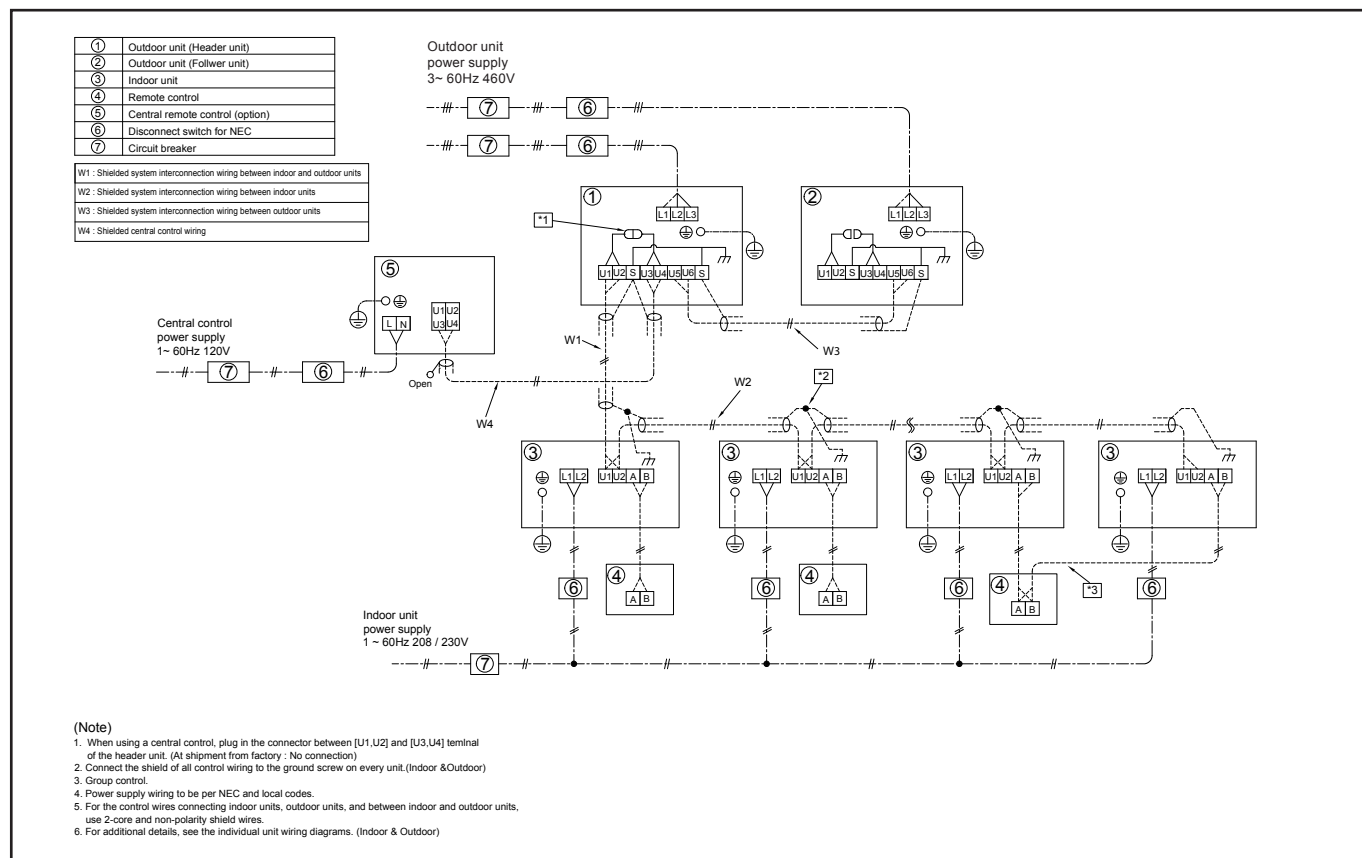


Model : MMY-MAP***6HT9P-UL

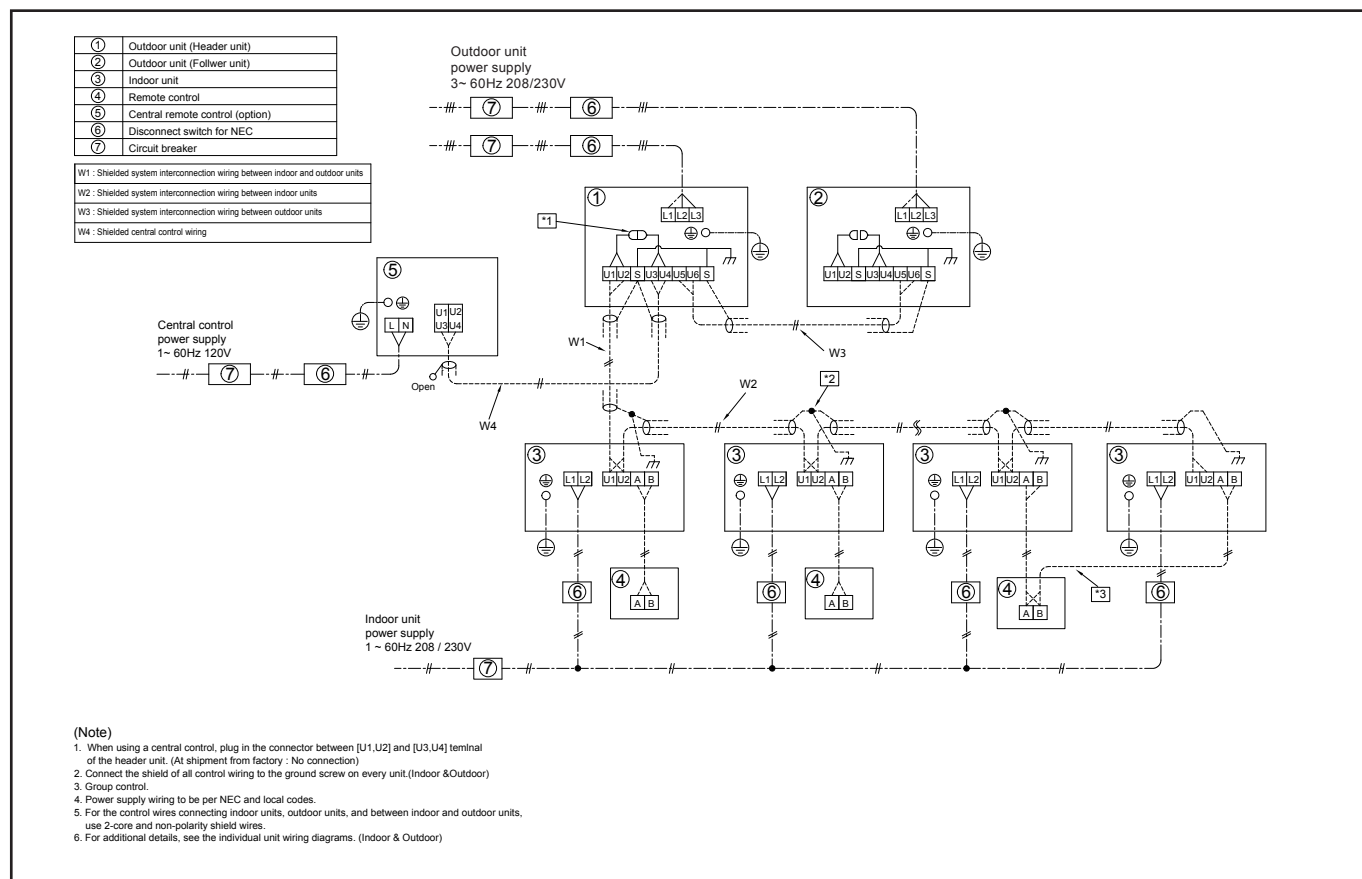


Two Units connected

Model : MMY-AP***6HT6P-UL

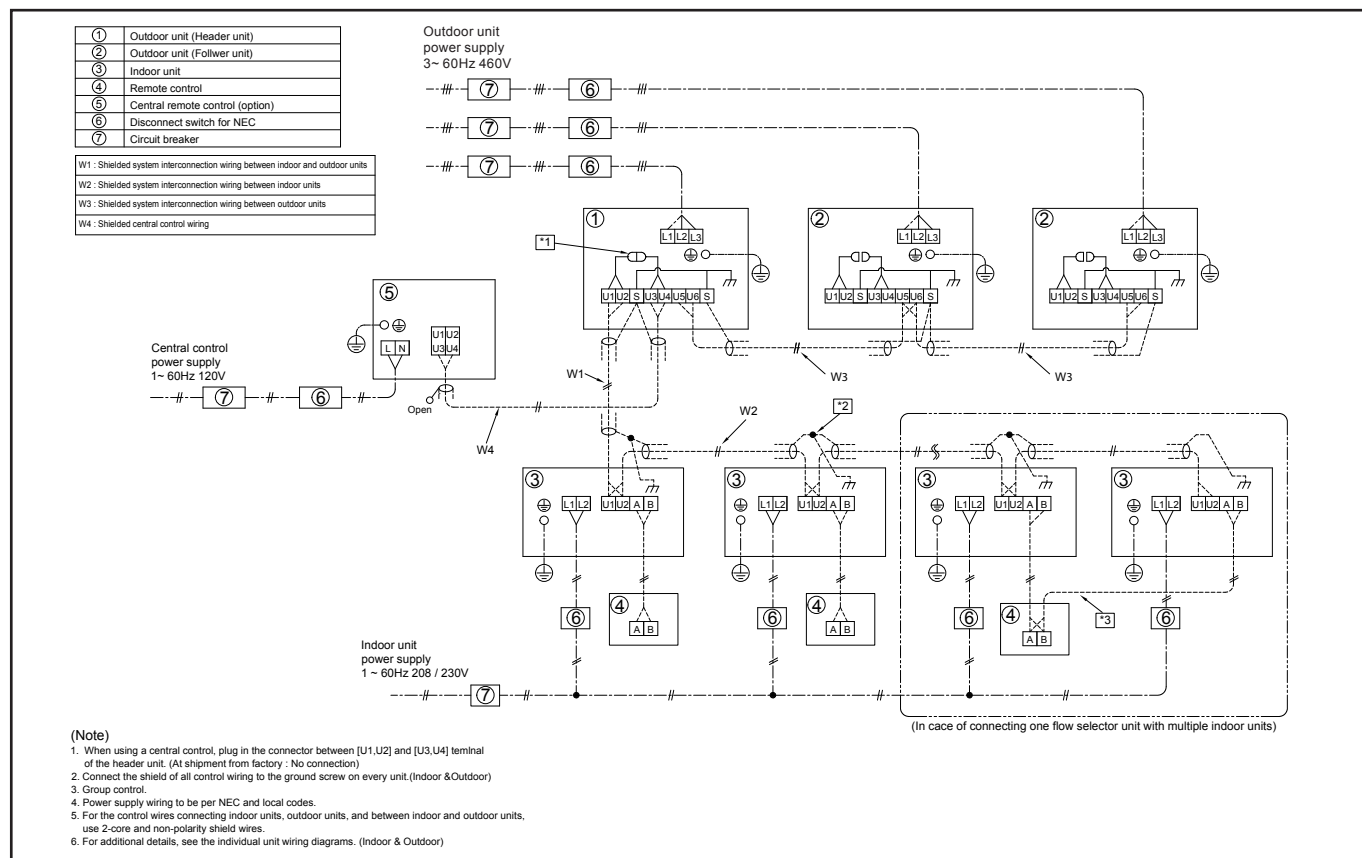


Model : MMY-AP***6HT9P-UL

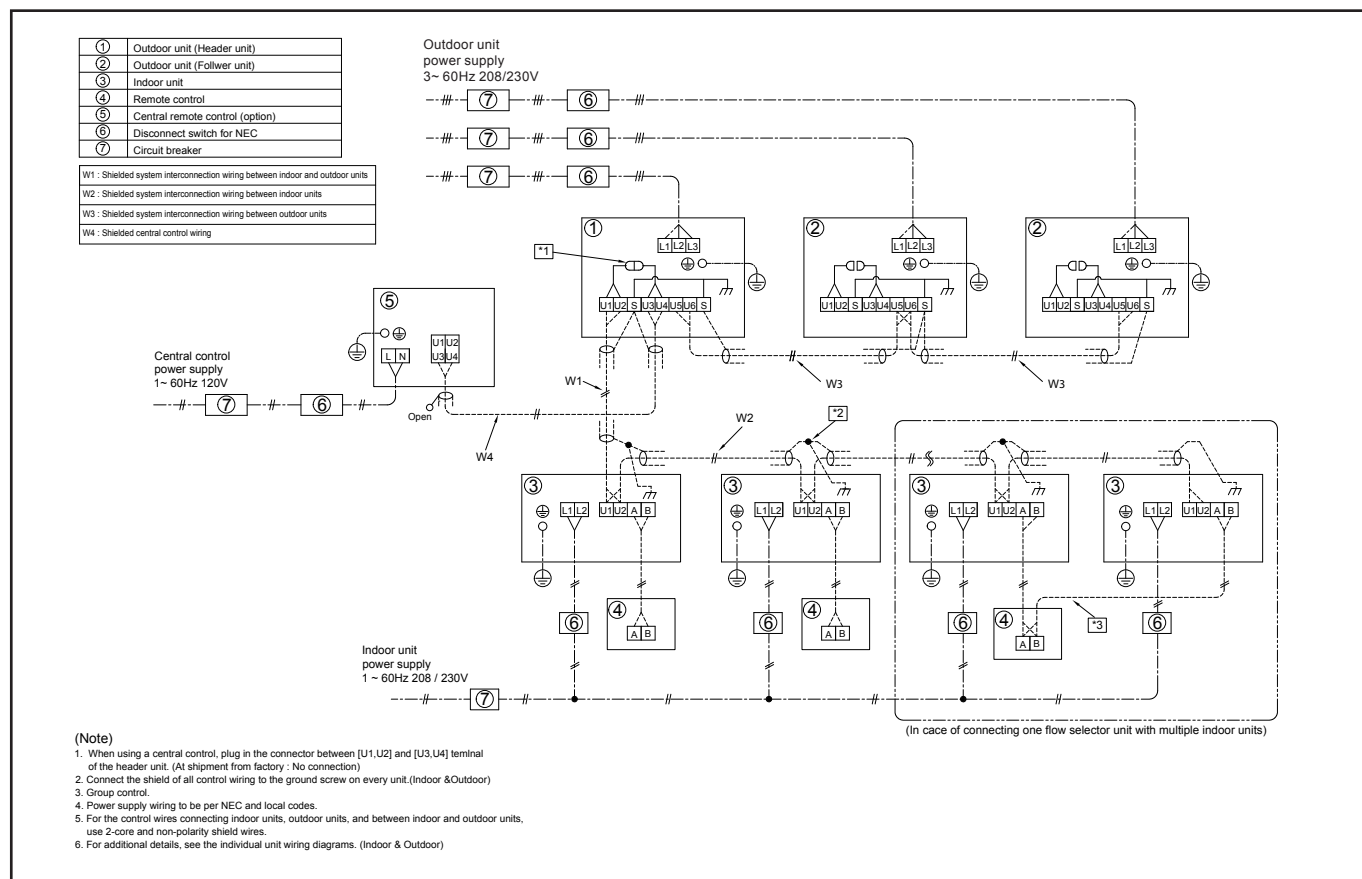


Three Units connected

Model : MMY-AP***6HT6P-UL



Model : MMY-AP***6HT9P-UL



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

Turn ON the DIP switch [SW10, Bit 2] provided on the interface P.C. board of the outdoor unit.

This function must be enabled with every discharge duct connected outdoor unit for both of the header and follower units.

Specification

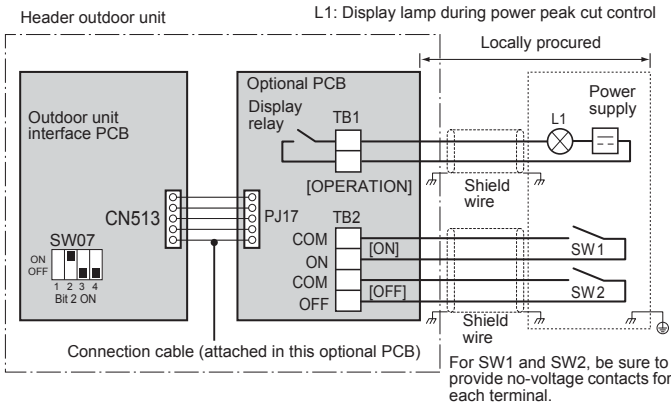
Increase the speed of the propeller fan units on the outdoor fan to allow the installation of a duct with a maximum external static pressure not greater than specified in the table below. If a discharge duct with a resistance greater than 0.06inWG (1.5 mmAq) is to be used,enable this function. The maximum 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 maximum external static pressure (see Table 2).

(Table 1.) Maximum external static pressures of base outdoor units

Model name	Maximum external static pressure (inWG)	Outdoor unit air flow (CFM)
MMY-MAP0726HT6P-UL MMY-MAP0726HT9P-UL	0.24	6700
MMY-MAP0966HT6P-UL MMY-MAP0966HT9P-UL	0.16	7480
MMY-MAP1206HT6P-UL MMY-MAP1206HT9P-UL	0.16	7480
MMY-MAP1446HT6P-UL MMY-MAP1446HT9P-UL	0.16	9760
MMY-MAP1686HT6P-UL MMY-MAP1686HT9P-UL	0.16	10080

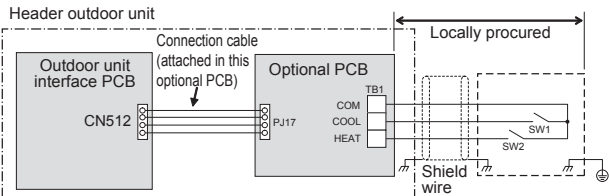
(Table 2.) Maximum external static pressures for combined use of base unit

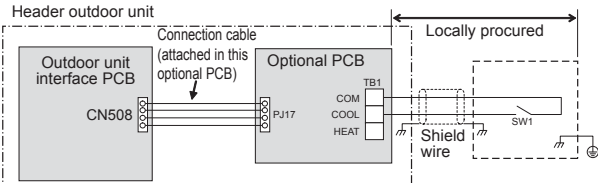
Outdoor unit capacity type	Combination				Maximum external static pressure (inWG)
	Header outdoor unit	Follower outdoor unit1	Follower outdoor unit2		
072 type	072 type	-	-	Standard Model	0.24
096 type	096 type	-	-	Standard Model	0.16
120 type	120 type	-	-	Standard Model	0.16
144 type	144 type	-	-	Standard Model	0.16
168 type	168 type	-	-	Standard Model	0.16
192 type	096 type	096 type	-	Standard Model	0.16
	120 type	072 type	-	Space Saving Model	0.16
216 type	120 type	096 type	-	Standard Model	0.16
240 type	144 type	096 type	-	Standard Model	0.16
	120 type	120 type	-	Space Saving Model	0.16
264 type	144 type	120 type	-	Standard Model	0.16
288 type	144 type	144 type	-	Standard Model	0.16
	168 type	120 type	-	Space Saving Model	0.16
312 type	168 type	144 type	-	Standard Model	0.16
336 type	168 type	168 type	-	Standard Model	0.16
360 type	120 type	120 type	120 type	Standard Model	0.16
384 type	144 type	120 type	120 type	Standard Model	0.16
408 type	144 type	144 type	120 type	Standard Model	0.16
	168 type	120 type	120 type	Space Saving Model	0.16
432 type	168 type	144 type	120 type	Standard Model	0.16
456 type	168 type	168 type	120 type	Standard Model	0.16

Model name	Appearance	Function																													
TCB-PCDM4UL	 Size: 2.80 × 3.35 (in)	<u>Enhanced Specifications</u> (Wiring example)  <SW07 (bit 2) ON [4-stage switching]> <table><thead><tr><th colspan="2">Input</th><th colspan="2">SW07 (bit 1)</th><th rowspan="2">Display relay (L1)</th></tr><tr><th>SW1</th><th>SW2</th><th>Bit 1 OFF</th><th>Bit 1 ON</th></tr></thead><tbody><tr><td>OFF</td><td>OFF</td><td>100% (normal operation)</td><td>100% (normal operation)</td><td>OFF</td></tr><tr><td>ON</td><td>OFF</td><td>Approx. 80% (upper limit regulated)</td><td>Approx. 85% (upper limit regulated)</td><td>ON</td></tr><tr><td>OFF</td><td>ON</td><td>Approx. 60% (upper limit regulated)</td><td>Approx. 75% (upper limit regulated)</td><td>ON</td></tr><tr><td>ON</td><td>ON</td><td>0% (forced stop)</td><td>Approx. 60% (upper limit regulated)</td><td>ON</td></tr></tbody></table>	Input		SW07 (bit 1)		Display relay (L1)	SW1	SW2	Bit 1 OFF	Bit 1 ON	OFF	OFF	100% (normal operation)	100% (normal operation)	OFF	ON	OFF	Approx. 80% (upper limit regulated)	Approx. 85% (upper limit regulated)	ON	OFF	ON	Approx. 60% (upper limit regulated)	Approx. 75% (upper limit regulated)	ON	ON	ON	0% (forced stop)	Approx. 60% (upper limit regulated)	ON
	Input		SW07 (bit 1)		Display relay (L1)																										
SW1	SW2	Bit 1 OFF	Bit 1 ON																												
OFF	OFF	100% (normal operation)	100% (normal operation)	OFF																											
ON	OFF	Approx. 80% (upper limit regulated)	Approx. 85% (upper limit regulated)	ON																											
OFF	ON	Approx. 60% (upper limit regulated)	Approx. 75% (upper limit regulated)	ON																											
ON	ON	0% (forced stop)	Approx. 60% (upper limit regulated)	ON																											
	Application  * Install the optional PCB in the inverter assembly of the outdoor header unit.																														

Model name	Appearance
	 Size: 2.19 × 2.35 (in)
	Application
	 * Install the optional PCB in the inverter assembly of the outdoor header unit.

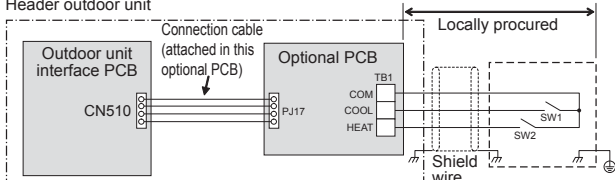
TCB-PCMO4UL

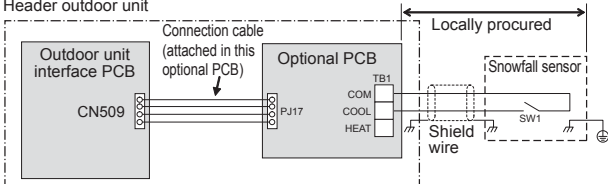
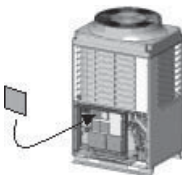
Function									
[1] External master ON/OFF control ▼ Function By connecting the cable (attached in this optional PCB) to the interface PC board on an outdoor unit, all indoor units connected to the outdoor unit enable to operate simultaneously. ▼ Operation The outdoor unit connection is for the header unit (U1).  SW1: Operation input switch SW2: Stop input switch <table> <tr> <th>Terminal</th><th>Input Signal</th><th>Operation</th></tr> <tr> <td>COOL (SW1)</td><td>ON OFF</td><td>All indoor units operate together</td></tr> <tr> <td>HEAT (SW2)</td><td>ON OFF</td><td>All indoor units stop together</td></tr> </table> Provide no-voltage pulse contacts for each terminal. Hold the ON state for at least 100 msec. Do not turn SW1 and SW2 ON simultaneously	Terminal	Input Signal	Operation	COOL (SW1)	ON OFF	All indoor units operate together	HEAT (SW2)	ON OFF	All indoor units stop together
Terminal	Input Signal	Operation							
COOL (SW1)	ON OFF	All indoor units operate together							
HEAT (SW2)	ON OFF	All indoor units stop together							

[2] Night time operation (sound reduction) control ▼ 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 <table> <tr> <th>Terminal</th><th>Input Signal</th><th>Operation</th></tr> <tr> <td rowspan="2">COOL (SW1)</td><td>ON OFF</td><td>Night time operation control</td></tr> <tr> <td>ON OFF</td><td>Normal operation</td></tr> </table> Each terminal should be connected to dry contact. ▼ Sound reduction and approximation capacity (reference) <table> <tr> <th rowspan="2">Outdoor unit (base unit)</th><th rowspan="2">During low noise mode dB(A)</th><th colspan="2">Capacity</th></tr> <tr> <th>Cooling</th><th>Heating</th></tr> <tr> <td>072 type</td><td>50</td><td>Approx. 85%</td><td>Approx. 80%</td></tr> <tr> <td>096 type</td><td>53</td><td>Approx. 85%</td><td>Approx. 85%</td></tr> <tr> <td>120 type</td><td>53</td><td>Approx. 80%</td><td>Approx. 80%</td></tr> <tr> <td>144 type</td><td>54</td><td>Approx. 70%</td><td>Approx. 70%</td></tr> <tr> <td>168 type</td><td>54</td><td>Approx. 65%</td><td>Approx. 65%</td></tr> </table>	Terminal	Input Signal	Operation	COOL (SW1)	ON OFF	Night time operation control	ON OFF	Normal operation	Outdoor unit (base unit)	During low noise mode dB(A)	Capacity		Cooling	Heating	072 type	50	Approx. 85%	Approx. 80%	096 type	53	Approx. 85%	Approx. 85%	120 type	53	Approx. 80%	Approx. 80%	144 type	54	Approx. 70%	Approx. 70%	168 type	54	Approx. 65%	Approx. 65%
Terminal	Input Signal	Operation																																
COOL (SW1)	ON OFF	Night time operation control																																
	ON OFF	Normal operation																																
Outdoor unit (base unit)	During low noise mode dB(A)	Capacity																																
		Cooling	Heating																															
072 type	50	Approx. 85%	Approx. 80%																															
096 type	53	Approx. 85%	Approx. 85%																															
120 type	53	Approx. 80%	Approx. 80%																															
144 type	54	Approx. 70%	Approx. 70%																															
168 type	54	Approx. 65%	Approx. 65%																															

* Position of noise measuring device:
3.3 ft (1 m) from the front face of the set and 4.9 ft (1.5 m) above ground (anechoic sound)

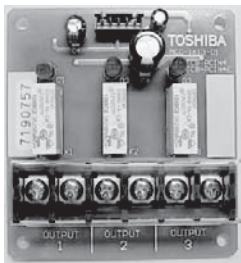
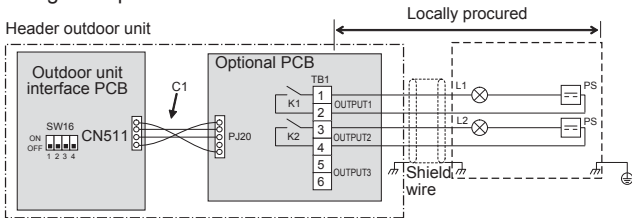
TCB-PCMO4UL

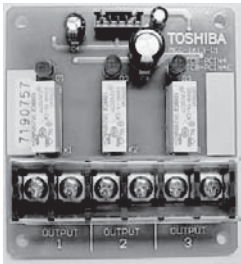
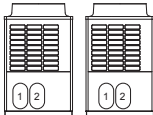
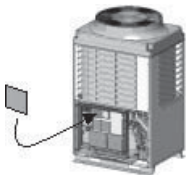
Model name	Appearance	Function																															
	 Size: 2.19 × 2.35 (in)	[3] Operation mode selection control ▼ Function The heating/cooling mode of the system can be selected by connecting to the interface PCB of outdoor units. ▼ Operation The outdoor unit connection is for the header unit (U1). Header outdoor unit  SW1: Cooling mode specified input switch SW2: Heating mode specified input switch <table><tr><th colspan="2">Input Signal</th><th rowspan="2">Operation: Selected operation mode</th></tr><tr><th>Cooling (SW1)</th><th>Heating (SW2)</th></tr><tr><td>ON</td><td>OFF</td><td>Cooling operation only</td></tr><tr><td>OFF</td><td>ON</td><td>Heating operation only</td></tr><tr><td>OFF</td><td>OFF</td><td>Normal operation</td></tr></table> Each terminal should be connected to dry contact.	Input Signal		Operation: Selected operation mode	Cooling (SW1)	Heating (SW2)	ON	OFF	Cooling operation only	OFF	ON	Heating operation only	OFF	OFF	Normal operation																	
Input Signal		Operation: Selected operation mode																															
Cooling (SW1)	Heating (SW2)																																
ON	OFF	Cooling operation only																															
OFF	ON	Heating operation only																															
OFF	OFF	Normal operation																															
Application																																	
 * Install the optional PCB in the inverter assembly of the outdoor header unit.	The 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 jumper lead (J01) of the header outdoor unit interface PCB. <table><tr><th>Jumper lead</th><th colspan="3">Details of Processing</th></tr><tr><td rowspan="5">J01 connected (factory default)</td><td colspan="3">Unallowed indoor units in a mode other than the selected operation mode are not treated as priority (thermo OFF state). (Unallowed indoor units)</td></tr><tr><td>Operation Mode</td><td>Operation State</td><td>Remote control</td></tr><tr><td>Cooling unit</td><td>Air blow operation at blow rate set on remote control</td><td rowspan="5"> indicator is displayed.</td></tr><tr><td>Heating unit</td><td>Air blow operation at super-slow blow rate</td></tr><tr><td>Air blow unit</td><td>Regular air blow operation at blow rate set on remote control</td></tr><tr><td rowspan="5">J01 cut</td><td colspan="3">Indoor units in a mode other than the selected operation mode are forcibly switched to the selected operation mode.</td></tr><tr><td>PC board selection mode</td><td colspan="2">Remote control operation/display</td></tr><tr><td>Normal</td><td>*, Δ, * or * can be selected</td><td rowspan="3">When using the remote control,  (mode select control) indicator is displayed.</td></tr><tr><td>Cool</td><td>Only *, Δ, or * can be selected</td></tr><tr><td>Heat</td><td>Only * or * can be selected</td></tr></table>	Jumper lead	Details of Processing			J01 connected (factory default)	Unallowed indoor units in a mode other than the selected operation mode are not treated as priority (thermo OFF state). (Unallowed indoor units)			Operation Mode	Operation State	Remote control	Cooling unit	Air blow operation at blow rate set on remote control	 indicator is displayed.	Heating unit	Air blow operation at super-slow blow rate	Air blow unit	Regular air blow operation at blow rate set on remote control	J01 cut	Indoor units in a mode other than the selected operation mode are forcibly switched to the selected operation mode.			PC board selection mode	Remote control operation/display		Normal	*, Δ, * or * can be selected	When using the remote control,  (mode select control) indicator is displayed.	Cool	Only *, Δ, or * can be selected	Heat	Only * or * can be selected
Jumper lead	Details of Processing																																
J01 connected (factory default)	Unallowed indoor units in a mode other than the selected operation mode are not treated as priority (thermo OFF state). (Unallowed indoor units)																																
	Operation Mode	Operation State	Remote control																														
	Cooling unit	Air blow operation at blow rate set on remote control	 indicator is displayed.																														
	Heating unit	Air blow operation at super-slow blow rate																															
	Air blow unit	Regular air blow operation at blow rate set on remote control																															
J01 cut	Indoor units in a mode other than the selected operation mode are forcibly switched to the selected operation mode.																																
	PC board selection mode	Remote control operation/display																															
	Normal	*, Δ, * or * can be selected	When using the remote control,  (mode select control) indicator is displayed.																														
	Cool	Only *, Δ, or * can be selected																															
	Heat	Only * or * can be selected																															

Model name	Appearance	Function
TCB-PCMO4UL		[4] Snowfall fan control ▼ Function The outdoor unit fan operates at snowfall by connecting to the outdoor unit interface PCB. ▼ Operation
	Size: 2.19 × 2.35 (in)	
	Application	 * Install the optional PCB in the inverter assembly of the outdoor header unit.

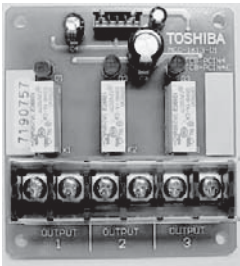
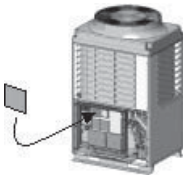
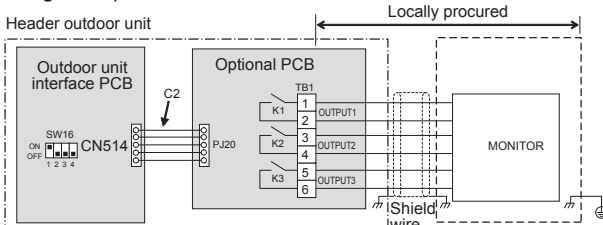
Terminal	Input Signal	Operation
Cooling (SW1)	ON OFF	Snowfall fan control (Fan in outdoor unit operates.)
	ON OFF	Normal operation

Provide no-voltage continuous contacts for each terminal.

Model name	Appearance	Function																				
TCB-PCIN4UL		[1] Error / Operation Output ▼ 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.																				
	Size: 2.87 × 3.11 (in)																					
	Application	 * Install the optional PCB in the inverter assembly of the outdoor header unit.	Wiring example  <table><tr><td>C1</td><td>Attached connection cable 1 (4wires)</td></tr><tr><td>CN511</td><td>Connector on interface side (green)</td></tr><tr><td>K1, K2</td><td>Relays</td></tr><tr><td>L1</td><td>Error indication Lamp</td></tr><tr><td>L2</td><td>Operation indication Lamp</td></tr><tr><td>OUTPUT1</td><td>Error output</td></tr><tr><td>OUTPUT2</td><td>Operation output</td></tr><tr><td>PJ20</td><td>Connector on optional PCB side</td></tr><tr><td>PS</td><td>Power supply unit</td></tr><tr><td>TB1</td><td>Terminal block</td></tr></table> * [OUTPUT3] is displayed when power is turned on.	C1	Attached connection cable 1 (4wires)	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
C1	Attached connection cable 1 (4wires)																					
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																					

Model name	Appearance	Function
TCB-PCIN4UL		[2] Compressor Operation Output ▼ Function While each compressor in the outdoor unit is running, the compressor operation signal is displayed. This function can also be used to measure the elapsed time for the compressor operation. ▼ Operation During a compressor is in operation, the relay of the output terminal corresponding to that compressor turns on (closed) and turns OFF (opens) . When operation stops. As shown in the figure, the output terminals “OUTPUT1”, “OUTPUT2” from the left compressors facing to the front of the outdoor unit. 
	Size: 2.87 × 3.11 (in)	
	Application	 * Install the optional PCB in the inverter assembly of individual outdoor unit.

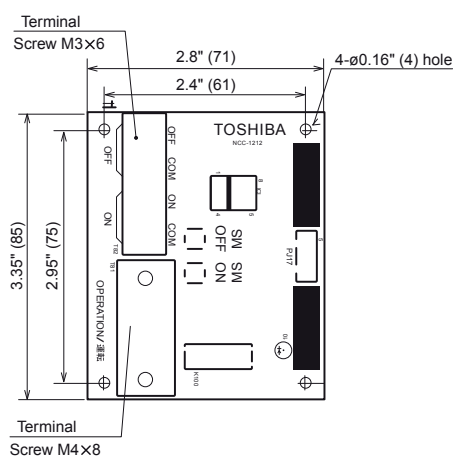
C2	Connection cable 2 ([2])
CN514	Connector on interface side (green)
CTR1	Elapsed operation counter 1
CTR2	Elapsed operation counter 2
K1, K2	Relays
L1, L2, L3	Operation indication LEDs
OUTPUT1	Compressor 1 operation output terminal
OUTPUT2	Compressor 2 operation output terminal
PJ20	Connector on optional PCB side
PS	Power supply unit
TB1	Terminal block

Model name	Appearance	Function																																															
TCB-PCIN4UL	 Size: 2.87 × 3.11 (in)	[3] Operating Rate Output ▼ Function The state of operation is available to check remotely as the signal of system operation rate enable to output. ▼ Operation As shown in the table, each of the output terminals turns ON (relay closes) and OFF (relay opens) depending on the system operating rate. <table border="1"> <thead> <tr> <th>Functions</th><th>SW16</th><th>OUTPUT1</th><th>OUTPUT2</th><th>OUTPUT3</th><th>Operating rate FA</th></tr> </thead> <tbody> <tr> <td rowspan="8">System operating rate output</td><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>FA = 0%</td></tr> <tr> <td>OFF</td><td>ON</td><td>OFF</td><td>OFF</td><td>0% < FA < 20%</td></tr> <tr> <td>ON</td><td>ON</td><td>OFF</td><td>OFF</td><td>20% ≤ FA < 35%</td></tr> <tr> <td>OFF</td><td>OFF</td><td>ON</td><td>OFF</td><td>35% ≤ FA < 50%</td></tr> <tr> <td>ON</td><td>OFF</td><td>ON</td><td>OFF</td><td>50% ≤ FA < 65%</td></tr> <tr> <td>OFF</td><td>ON</td><td>ON</td><td>OFF</td><td>65% ≤ FA < 80%</td></tr> <tr> <td>ON</td><td>ON</td><td>ON</td><td>OFF</td><td>80% ≤ FA < 95%</td></tr> <tr> <td>OFF</td><td>ON</td><td>ON</td><td>ON</td><td>95% ≤ FA</td></tr> </tbody> </table> OFF=relay open ON=relay closed	Functions	SW16	OUTPUT1	OUTPUT2	OUTPUT3	Operating rate FA	System operating rate output	ON	OFF	OFF	OFF	FA = 0%	OFF	ON	OFF	OFF	0% < FA < 20%	ON	ON	OFF	OFF	20% ≤ FA < 35%	OFF	OFF	ON	OFF	35% ≤ FA < 50%	ON	OFF	ON	OFF	50% ≤ FA < 65%	OFF	ON	ON	OFF	65% ≤ FA < 80%	ON	ON	ON	OFF	80% ≤ FA < 95%	OFF	ON	ON	ON	95% ≤ FA
Functions	SW16	OUTPUT1	OUTPUT2	OUTPUT3	Operating rate FA																																												
System operating rate output	ON	OFF	OFF	OFF	FA = 0%																																												
	OFF	ON	OFF	OFF	0% < FA < 20%																																												
	ON	ON	OFF	OFF	20% ≤ FA < 35%																																												
	OFF	OFF	ON	OFF	35% ≤ FA < 50%																																												
	ON	OFF	ON	OFF	50% ≤ FA < 65%																																												
	OFF	ON	ON	OFF	65% ≤ FA < 80%																																												
	ON	ON	ON	OFF	80% ≤ FA < 95%																																												
	OFF	ON	ON	ON	95% ≤ FA																																												
Application	 * Install the optional PCB in the inverter assembly of the outdoor header unit.	Wiring example 																																															
		<table border="1"> <tbody> <tr> <td>C2</td><td>Attached connection cable 2 (5wires)</td></tr> <tr> <td>CN514</td><td>Connector on interface side (green)</td></tr> <tr> <td>K1, K2, K3</td><td>Relays</td></tr> <tr> <td>MONITOR</td><td>Monitoring device</td></tr> <tr> <td>OUTPUT1</td><td>Output terminal for each function</td></tr> <tr> <td>OUTPUT2</td><td>Output terminal for each function</td></tr> <tr> <td>OUTPUT3</td><td>Output terminal for each function</td></tr> <tr> <td>PJ20</td><td>Connector on optional PCB side</td></tr> <tr> <td>TB1</td><td>Terminal block</td></tr> </tbody> </table>	C2	Attached connection cable 2 (5wires)	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																													
C2	Attached connection cable 2 (5wires)																																																
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																																																

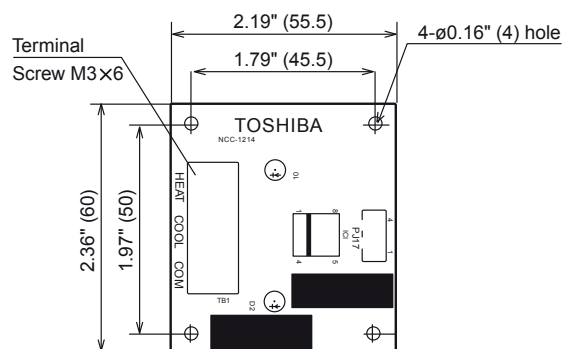
Dimensions of P.C. board

Unit: in (mm)

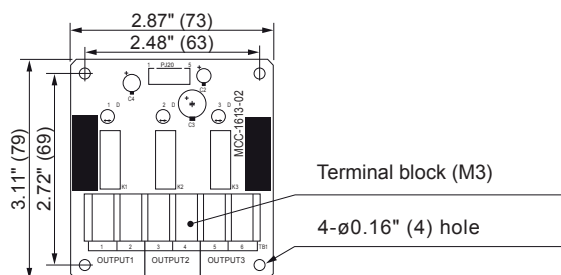
TCB-PCDM4UL



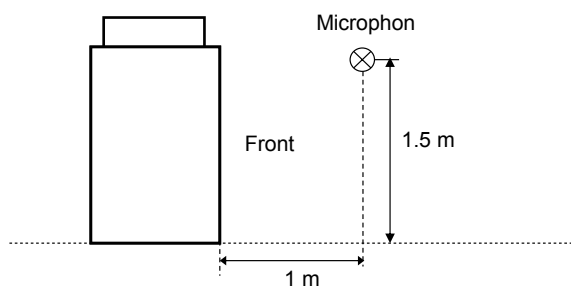
TCB-PCMO4UL



TCB-PCIN4UL



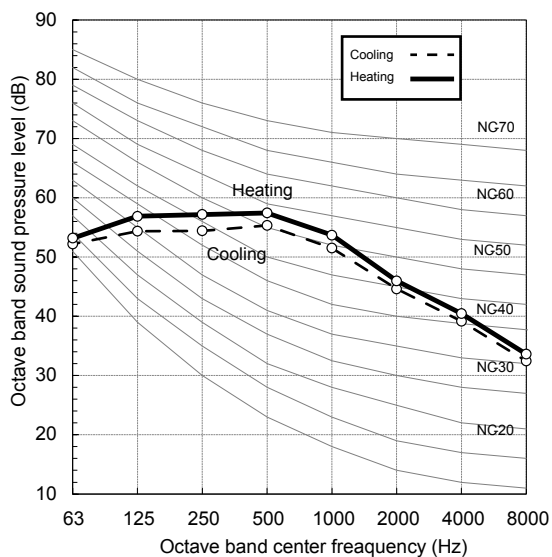
5-10. Sound Pressure level data



Standard model

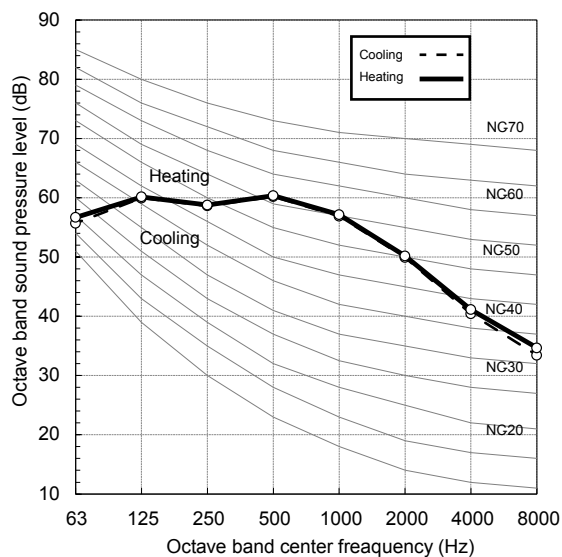
MMY-MAP0726HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	56.0	58.0



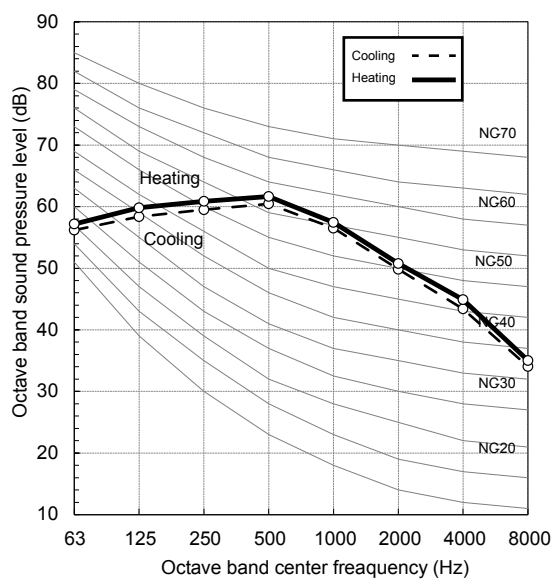
MMY-MAP0966HT6P/6HT9P-UL

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



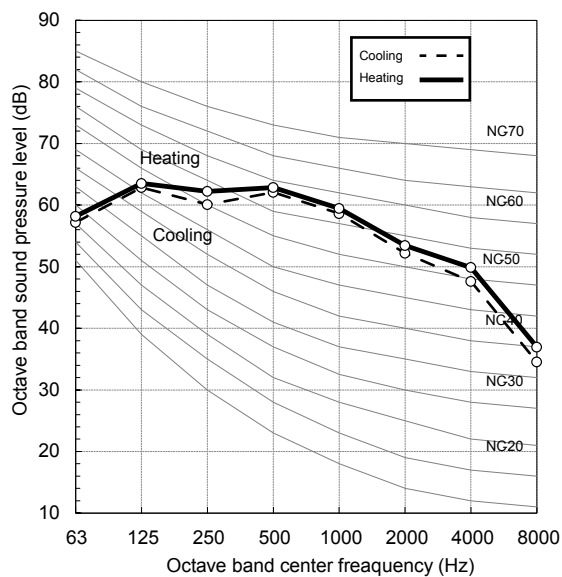
MMY-MAP1206HT6P/6HT9P-UL

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



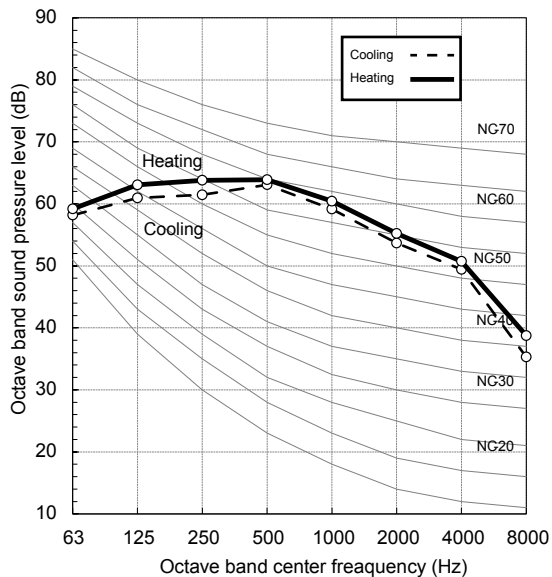
MMY-MAP1446HT6P/6HT9P-UL

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



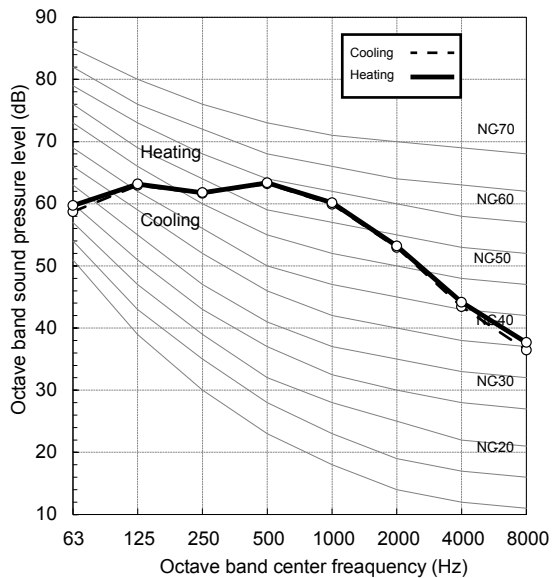
MMY-MAP1686HT6P/6HT9P-UL

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



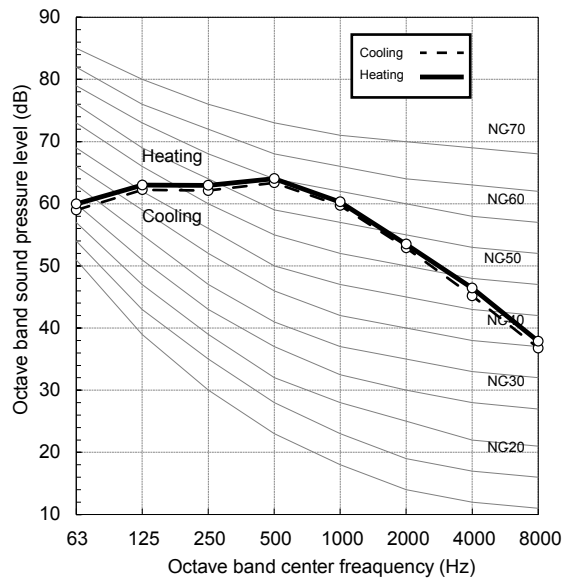
MMY-AP1926HT6P/6HT9P-UL

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



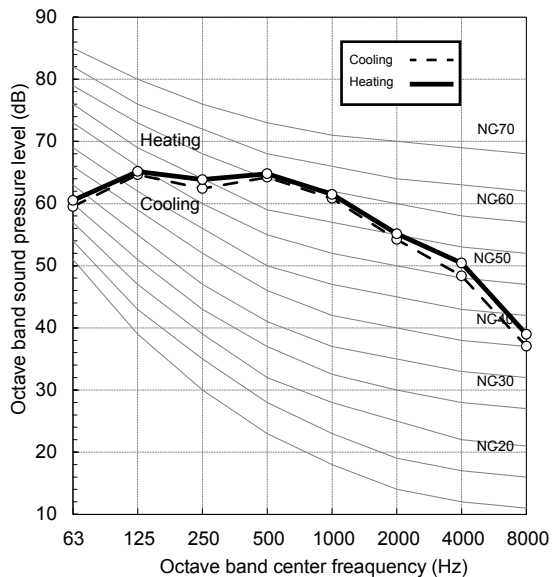
MMY-AP2166HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	64.0	64.5



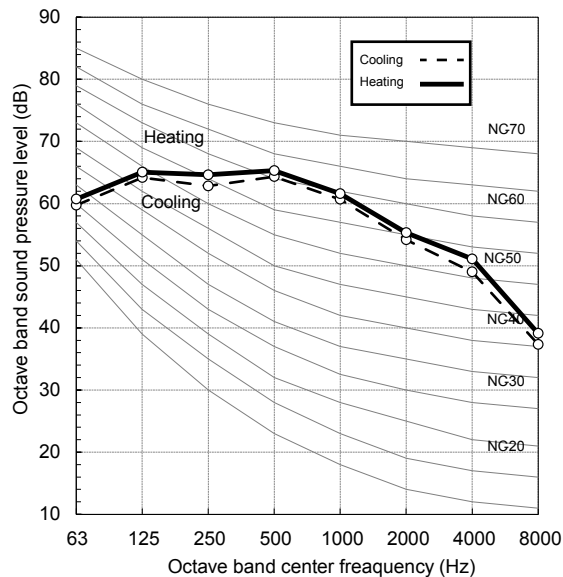
MMY-AP2406HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	65.5	66.0



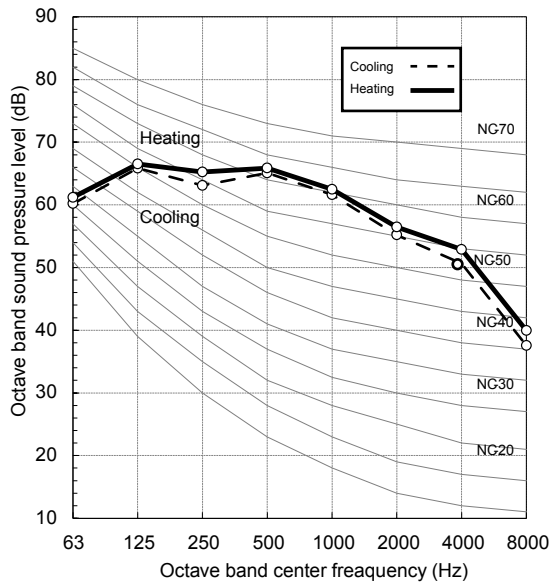
MMY-AP2646HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	65.5	66.5



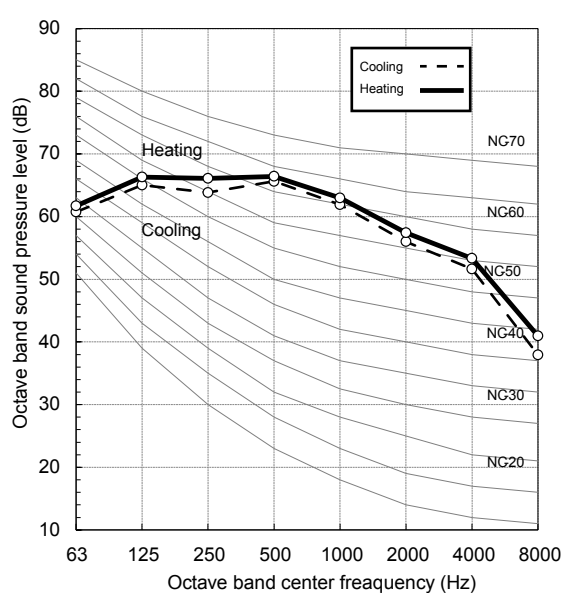
MMY-AP2886HT6P/6HT9P-UL

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



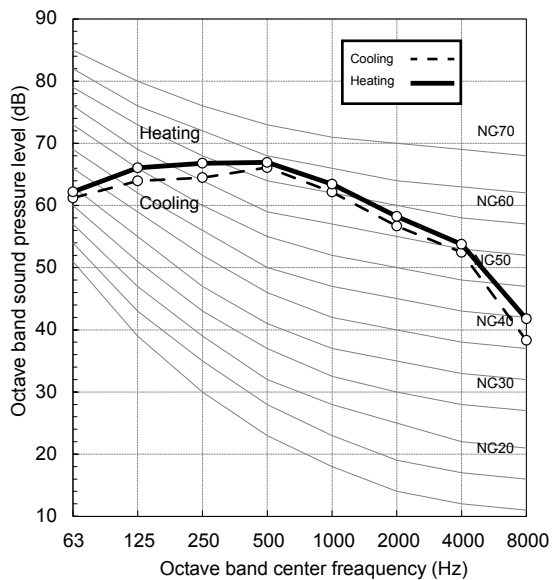
MMY-AP3126HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	66.5	67.5



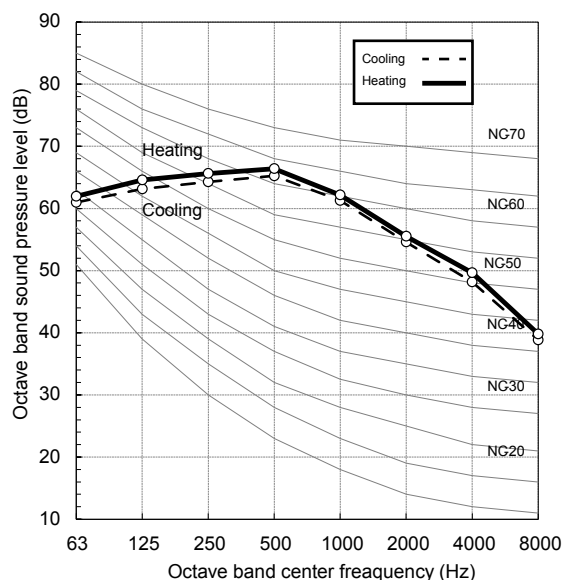
MMY-AP3366HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	67.0	68.0



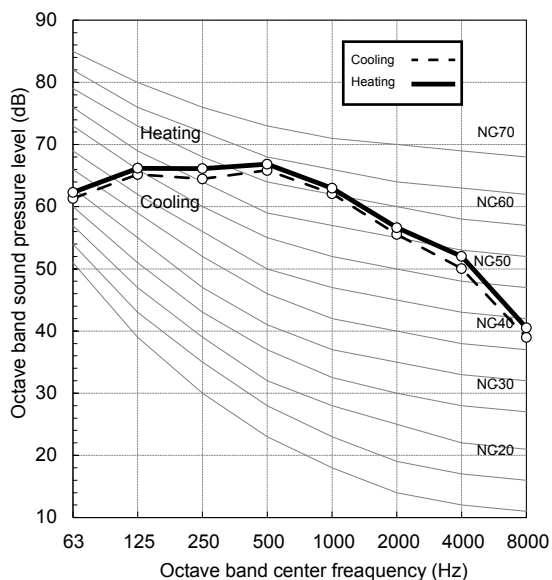
MMY-AP3606HT6P/6HT9P-UL

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



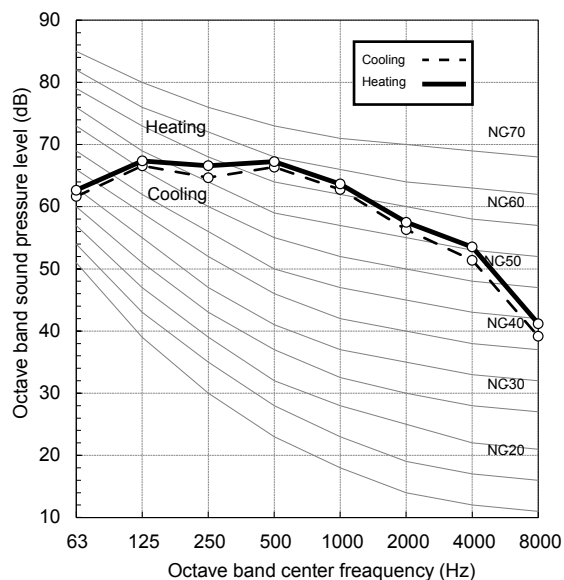
MMY-AP3846HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	66.5	67.5



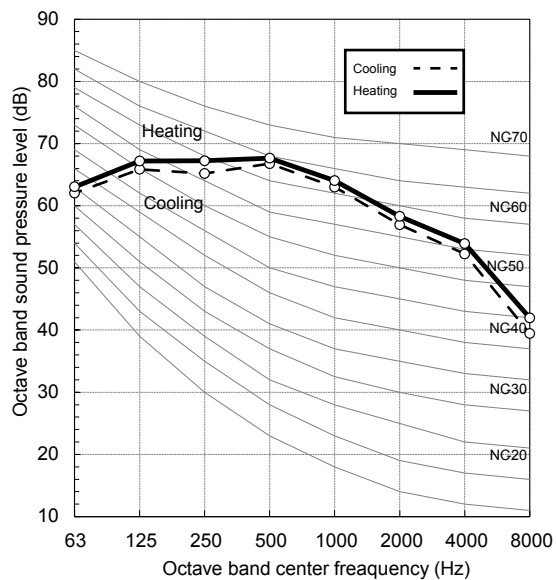
MMY-AP4086HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	67.5	68.5



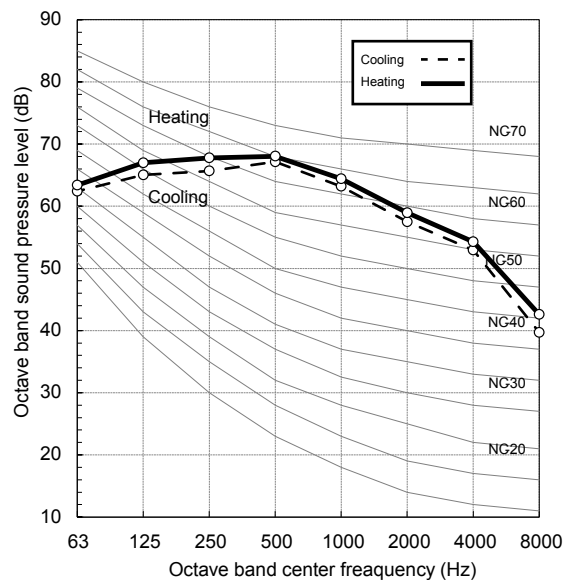
MMY-AP4326HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	68.0	69.0



MMY-AP4566HT6P/6HT9P-UL

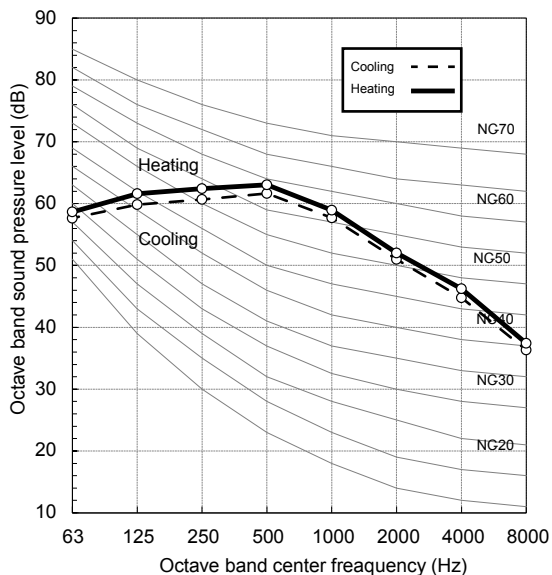
Sound pressure Level (dB(A))	Cooling	Heating
	68.0	69.0



Space Saving model

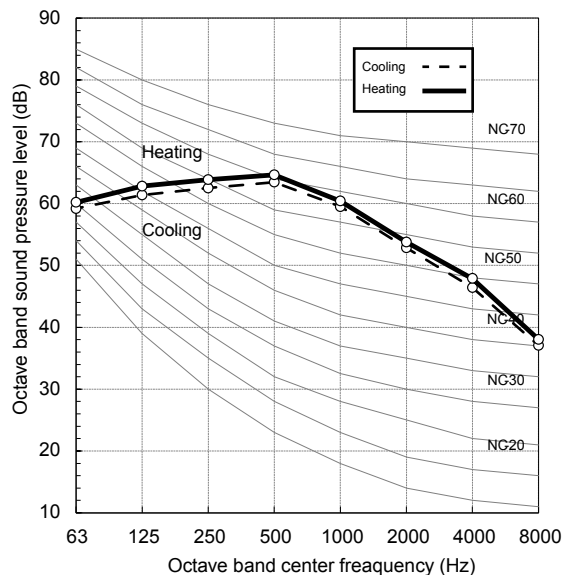
MMY-AP192S6HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	62.5	63.5



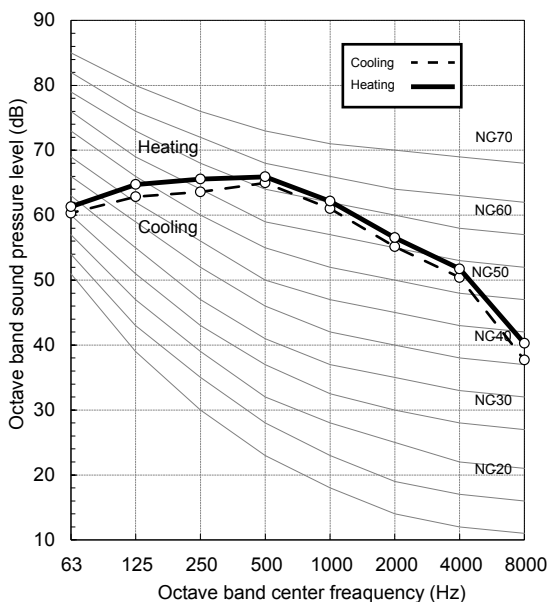
MMY-AP240S6HT6P/6HT9P-UL

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



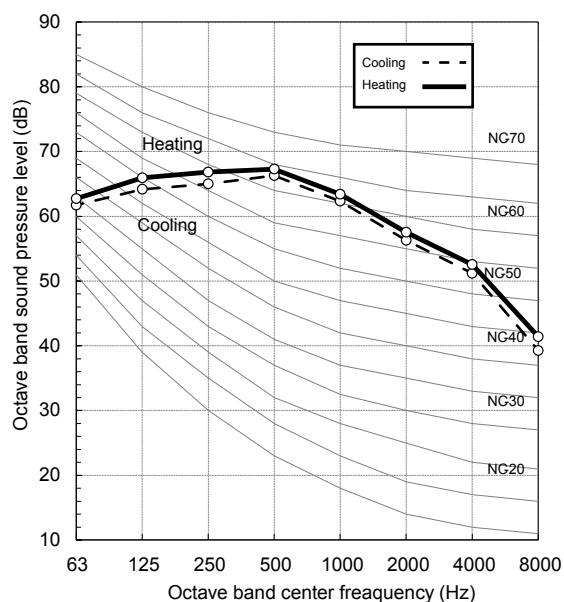
MMY-AP288S6HT6P/6HT9P-UL

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



MMY-AP408S6HT6P/6HT9P-UL

Sound pressure Level (dB(A))	Cooling	Heating
	67.0	68.0



APPENDIX

208/230 V Model

Efficiency Ratings

System with Non-ducted indoor units

Model name		
MMY-MAP0726HT9P-UL	EER	14.8
	IEER	29.0
	COP(47F)	4.23
MMY-MAP0966HT9P-UL	EER	12.6
	IEER	28.0
	COP(47F)	4.50
MMY-MAP1206HT9P-UL	EER	12.8
	IEER	25.1
	COP(47F)	3.99
MMY-MAP1446HT9P-UL	EER	12.4
	IEER	25.6
	COP(47F)	4.12
MMY-MAP1686HT9P-UL	EER	11.0
	IEER	23.8
	COP(47F)	3.74
MMY-AP1926HT9P-UL	EER	12.8
	IEER	25.5
	COP(47F)	4.05
MMY-AP2166HT9P-UL	EER	12.0
	IEER	24.6
	COP(47F)	3.90
MMY-AP2406HT9P-UL	EER	12.0
	IEER	24.1
	COP(47F)	3.75
MMY-AP2646HT9P-UL	EER	11.4
	IEER	22.8
	COP(47F)	3.65
MMY-AP2886HT9P-UL	EER	11.1
	IEER	22.5
	COP(47F)	3.60
MMY-AP3126HT9P-UL	EER	10.4
	IEER	22.1
	COP(47F)	3.42
MMY-AP3366HT9P-UL	EER	10.3
	IEER	22.0
	COP(47F)	3.35
MMY-AP3606HT9P-UL	EER	11.6
	IEER	22.4
	COP(47F)	3.52
MMY-AP3846HT9P-UL	EER	10.6
	IEER	21.8
	COP(47F)	3.40
MMY-AP4086HT9P-UL	EER	10.4
	IEER	21.4
	COP(47F)	3.38
MMY-AP4326HT9P-UL	EER	10.0
	IEER	21.3
	COP(47F)	3.28
MMY-AP4566HT9P-UL	EER	9.5
	IEER	20.9
	COP(47F)	3.20

System with Non-ducted indoor units

Model name		
MMY-AP192S6HT9P-UL	EER	12.6
	IEER	25.1
	COP(47F)	3.95
MMY-AP240S6HT9P-UL	EER	11.6
	IEER	23.6
	COP(47F)	3.70
MMY-AP288S6HT9P-UL	EER	10.9
	IEER	22.2
	COP(47F)	3.50
MMY-AP408S6HT9P-UL	EER	10.2
	IEER	21.0
	COP(47F)	3.30

System with Ducted indoor units

Model name		
MMY-MAP0726HT9P-UL	EER	13.7
	IEER	23.4
	COP(47F)	3.88
MMY-MAP0966HT9P-UL	EER	13.5
	IEER	23.1
	COP(47F)	4.10
MMY-MAP1206HT9P-UL	EER	12.2
	IEER	22.3
	COP(47F)	3.95
MMY-MAP1446HT9P-UL	EER	11.6
	IEER	22.1
	COP(47F)	4.00
MMY-MAP1686HT9P-UL	EER	11.2
	IEER	21.0
	COP(47F)	3.70
MMY-AP1926HT9P-UL	EER	12.7
	IEER	23.0
	COP(47F)	4.10
MMY-AP2166HT9P-UL	EER	12.5
	IEER	22.5
	COP(47F)	4.00
MMY-AP2406HT9P-UL	EER	12.4
	IEER	22.2
	COP(47F)	4.00
MMY-AP2646HT9P-UL	EER	12.2
	IEER	21.6
	COP(47F)	3.95
MMY-AP2886HT9P-UL	EER	11.5
	IEER	21.2
	COP(47F)	3.85
MMY-AP3126HT9P-UL	EER	11.0
	IEER	20.9
	COP(47F)	3.70
MMY-AP3366HT9P-UL	EER	10.6
	IEER	20.7
	COP(47F)	3.52

System with Ducted indoor units

Model name		
MMY-AP3606HT9P-UL	EER	12.0
	IEER	21.4
	COP(47F)	3.70
MMY-AP3846HT9P-UL	EER	11.2
	IEER	20.8
	COP(47F)	3.58
MMY-AP4086HT9P-UL	EER	11.2
	IEER	20.6
	COP(47F)	3.40
MMY-AP4326HT9P-UL	EER	10.4
	IEER	20.0
	COP(47F)	3.35
MMY-AP4566HT9P-UL	EER	10.0
	IEER	19.8
	COP(47F)	3.28
MMY-AP192S6HT9P-UL	EER	12.3
	IEER	22.6
	COP(47F)	3.92
MMY-AP240S6HT9P-UL	EER	12.3
	IEER	21.8
	COP(47F)	3.95
MMY-AP288S6HT9P-UL	EER	11.4
	IEER	20.8
	COP(47F)	3.80
MMY-AP408S6HT9P-UL	EER	10.8
	IEER	20.2
	COP(47F)	3.35

Efficiency values based on AHRI 1230 test method.

460 V Model

Efficiency Ratings

System with Non-ducted indoor units

Model name		
MMY-MAP0726HT6P-UL	EER	14.8
	IEER	29.0
	COP(47F)	4.23
MMY-MAP0966HT6P-UL	EER	12.6
	IEER	28.0
	COP(47F)	4.50
MMY-MAP1206HT6P-UL	EER	12.8
	IEER	25.1
	COP(47F)	3.99
MMY-MAP1446HT6P-UL	EER	12.4
	IEER	25.6
	COP(47F)	4.12
MMY-MAP1686HT6P-UL	EER	11.0
	IEER	23.8
	COP(47F)	3.74
MMY-AP1926HT6P-UL	EER	12.8
	IEER	25.5
	COP(47F)	4.05
MMY-AP2166HT6P-UL	EER	12.0
	IEER	24.6
	COP(47F)	3.90
MMY-AP2406HT6P-UL	EER	12.0
	IEER	24.1
	COP(47F)	3.75
MMY-AP2646HT6P-UL	EER	11.4
	IEER	22.8
	COP(47F)	3.65
MMY-AP2886HT6P-UL	EER	11.1
	IEER	22.5
	COP(47F)	3.60
MMY-AP3126HT6P-UL	EER	10.4
	IEER	22.1
	COP(47F)	3.42
MMY-AP3366HT6P-UL	EER	10.3
	IEER	22.0
	COP(47F)	3.35
MMY-AP3606HT6P-UL	EER	11.6
	IEER	22.4
	COP(47F)	3.52
MMY-AP3846HT6P-UL	EER	10.6
	IEER	21.8
	COP(47F)	3.40
MMY-AP4086HT6P-UL	EER	10.4
	IEER	21.4
	COP(47F)	3.38
MMY-AP4326HT6P-UL	EER	10.0
	IEER	21.3
	COP(47F)	3.28
MMY-AP4566HT6P-UL	EER	9.5
	IEER	20.9
	COP(47F)	3.20

System with Non-ducted indoor units

Model name		
MMY-AP192S6HT6P-UL	EER	12.6
	IEER	25.1
	COP(47F)	3.95
MMY-AP240S6HT6P-UL	EER	11.6
	IEER	23.6
	COP(47F)	3.70
MMY-AP288S6HT6P-UL	EER	10.9
	IEER	22.2
	COP(47F)	3.50
MMY-AP408S6HT6P-UL	EER	10.2
	IEER	21.0
	COP(47F)	3.30

System with Ducted indoor units

Model name		
MMY-MAP0726HT6P-UL	EER	13.7
	IEER	23.4
	COP(47F)	3.88
MMY-MAP0966HT6P-UL	EER	13.5
	IEER	23.1
	COP(47F)	4.10
MMY-MAP1206HT6P-UL	EER	12.2
	IEER	22.3
	COP(47F)	3.95
MMY-MAP1446HT6P-UL	EER	11.6
	IEER	22.1
	COP(47F)	4.00
MMY-MAP1686HT6P-UL	EER	11.2
	IEER	21.0
	COP(47F)	3.70
MMY-AP1926HT6P-UL	EER	12.7
	IEER	23.0
	COP(47F)	4.10
MMY-AP2166HT6P-UL	EER	12.5
	IEER	22.5
	COP(47F)	4.00
MMY-AP2406HT6P-UL	EER	12.4
	IEER	22.2
	COP(47F)	4.00
MMY-AP2646HT6P-UL	EER	12.2
	IEER	21.6
	COP(47F)	3.95
MMY-AP2886HT6P-UL	EER	11.5
	IEER	21.2
	COP(47F)	3.85
MMY-AP3126HT6P-UL	EER	11.0
	IEER	20.9
	COP(47F)	3.70
MMY-AP3366HT6P-UL	EER	10.6
	IEER	20.7
	COP(47F)	3.52

System with Ducted indoor units

Model name		
MMY-AP3606HT6P-UL	EER	12.0
	IEER	21.4
	COP(47F)	3.70
MMY-AP3846HT6P-UL	EER	11.2
	IEER	20.8
	COP(47F)	3.58
MMY-AP4086HT6P-UL	EER	11.2
	IEER	20.6
	COP(47F)	3.40
MMY-AP4326HT6P-UL	EER	10.4
	IEER	20.0
	COP(47F)	3.35
MMY-AP4566HT6P-UL	EER	10.0
	IEER	19.8
	COP(47F)	3.28

Model name		
MMY-AP192S6HT6P-UL	EER	12.3
	IEER	22.6
	COP(47F)	3.92
MMY-AP240S6HT6P-UL	EER	12.3
	IEER	21.8
	COP(47F)	3.95
MMY-AP288S6HT6P-UL	EER	11.4
	IEER	20.8
	COP(47F)	3.80
MMY-AP408S6HT6P-UL	EER	10.8
	IEER	20.2
	COP(47F)	3.35

Efficiency values based on AHRI 1230 test method.

SMMS-e Engineering Data Book

Model name:

MMY-MAP_6HT6P-UL

MMY-MAP_6HT9P-UL

December, 2017 Full version