

SMMS-e Triple VRF Outdoor Unit MMY-AP4086HT9P-UL - Heat Pump

TOSHIBA
Carrier

Submittal Data

Job Name _____ Location _____
Tag _____



SMMS-e VRF Heat Pump Features

- Two 12 and a 10-ton module are twinned to form a 34-ton system
- Modules have 2 inverter-driven twin rotary compressors
- Backup capability due to multiple compressors
- Compressor speed varied in 0.1 Hz increments for comfort and efficiency
- Direct drive, inverter-driven 64-step outdoor motor
- 3281 ft (1000 m) actual total system piping (liquid line)
- 623 ft (190 m) actual piping length from outdoor unit to furthest fan coil

- Up to 330 ft (100 m) control wiring between outdoor units
- Up to 6560 ft (2000 m) control wiring between the outdoor unit and indoor units
- Operating temperature range
Cooling (db): 14 to 122 F (–10 to 50 C)
Heating (wb): –13 to 60 F (–25 to 15.6 C)
- Protection: high pressure switch, low pressure sensor and switch, process controller board fuse, inverter overload protection
- 7-year compressor limited warranty, 5-year parts limited warranty

Header Unit Model	MMY-MAP1446HT9P-UL	
Follower Unit Model	MMY-MAP1446HT9P-UL MMY-MAP1206HT9P-UL	
PERFORMANCE		
Rated Cooling Capacity	Btu/h	390,000
Rated Heating Capacity	Btu/h	435,000
Maximum Total Connected Indoor Unit Capacity*		Up to 150%
COOLING EFFICIENCY†		
EER/IEER, Ducted FCUs		11.00 / 19.60
EER/IEER, Ductless FCUs		10.40 / 21.40
HEATING EFFICIENCY†		
COP at 47 F, Ducted FCUs		3.37
COP at 47 F, Ductless FCUs		3.38
Fan Type (Qty)		Propeller (5)
Airflow, Standard Range	CFM	9760 + 9760 + 7480
Twinned System Sound Pressure, Cooling/Heating	dBA	67.5/68.5
External Static Pressure**	in. wg	0.16
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/3/60
Minimum Circuit Amps (MCA)††	A	54 + 54 + 45.4
Recommended Fuse Size††	A	60 + 60 + 50

LEGEND

db	— Dry Bulb
COP	— Coefficient of Performance
EER	— Energy Efficiency Ratio
FCU	— Fan Coil Unit
IEER	— Integrated Energy Efficiency Ratio
wb	— Wet Bulb

COMPRESSORS		
Type (Number)	Inverter Twin Rotary (6)	
Motor Output	kW	4 x 5.4 + 2 x 4.0
FAN MOTOR		
Motor Type (Steps)	Inverter Direct Driven (64)	
Motor Output	kW	1.0 + 1.0 + 1.0 + 1.0 + 1.0
PHYSICAL DATA		
Pipe Connection Size - Liquid (High Pressure)***	in.	7/8 (Flare)
Pipe Connection Size - Gas (Low Pressure)***	in.	1-5/8 (Brazed)
Balance	in.	3/8 (Flare)
Refrigerant	R-410A	
Factory Charge†††	lb	3 x 25.4
External Finish	Munsell 1Y8.5/0.5	
Header Unit/Follower Unit Width	in.	63 / 63 / 47-9/16
Header Unit/Follower Unit Height	in.	72-7/8 / 72-7/8 x 2
Header Unit/Follower Unit Depth	in.	30-11/16 / 30-11/16 x 2
Header Unit/Follower Unit Net Weight	lb	838 + 838 + 684
REQUIRED ACCESSORY		
Twining Kit (1 and 2, 2 and 3)	RBM-BT24UL x 2	

*When total connected indoor unit capacity exceeds 135%, number and types of indoor units are limited.

†Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 1230 Standard.

Cooling: Indoor 80 F (27 C) db/67 F (20 C) wb; Outdoor 95 F (35 C) db

Heating: Indoor 70 F (21 C) db; Outdoor 47 F (8 C) db/43 F (6 C) wb

**Requires setting by DIP switches.

††Separate power supply required. MCA and fuse size shown for each unit.

***Main pipe size leaving twinning kit.

†††Additional charge required.

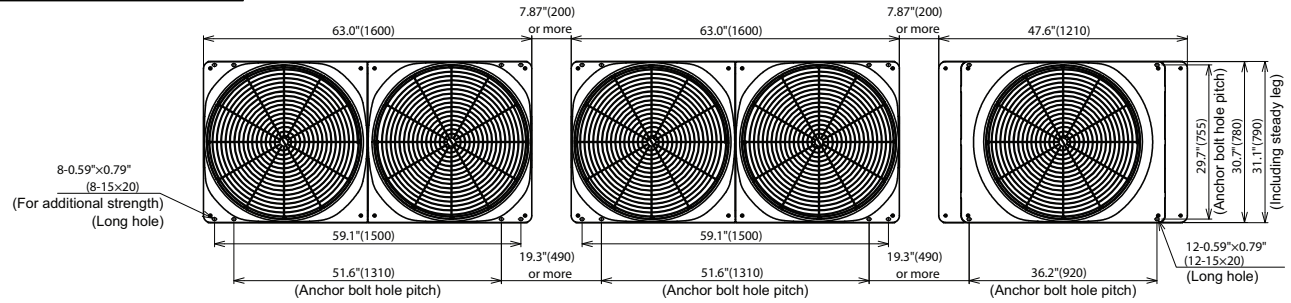
NOTE: Unit cabinet and coil slab shall be capable of withstanding 500-hour salt spray test in accordance with the ASTM (American Society for Testing and Materials, U.S.A.) B-117 Standard.

DIMENSIONAL DRAWING

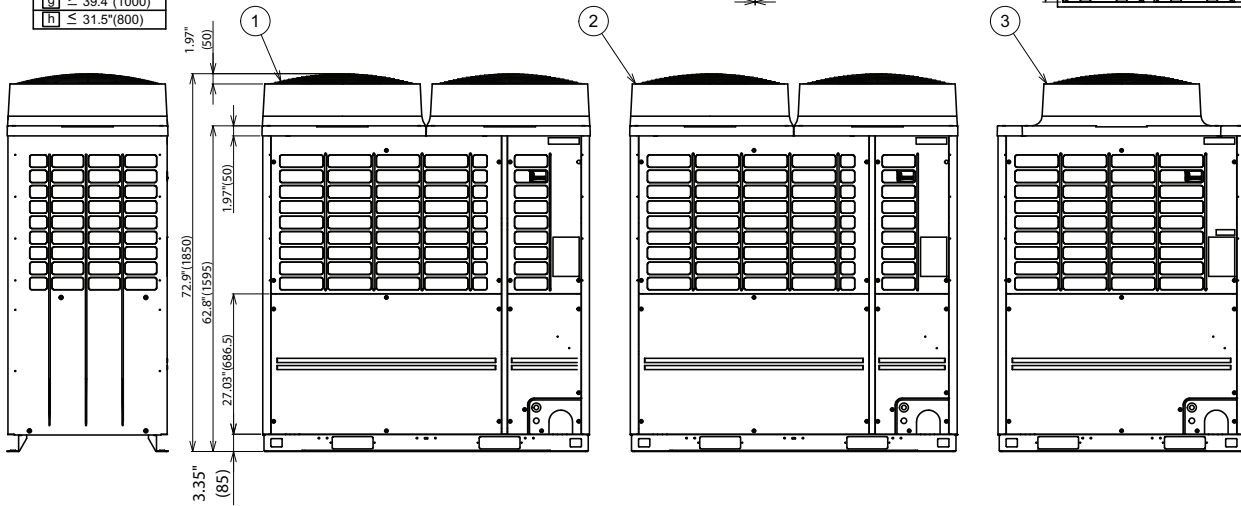
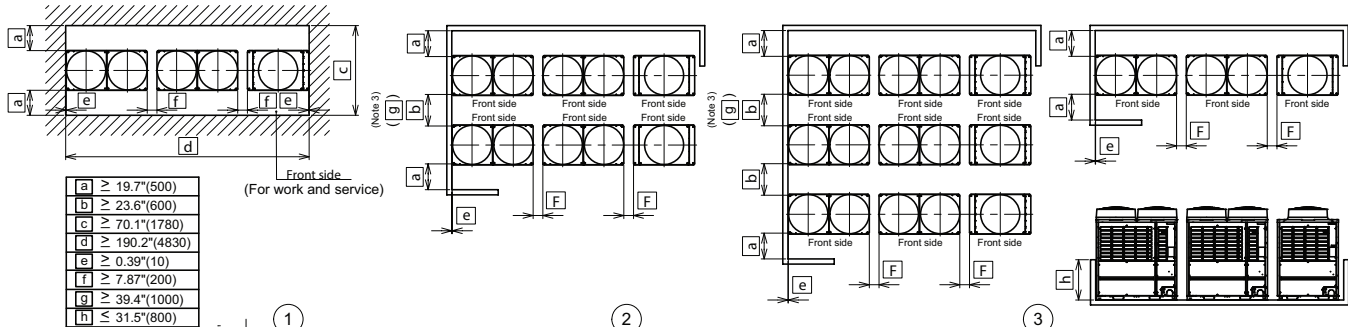
OUTDOOR UNIT COMBINATION: HEAT PUMP/TRIPLE UNIT

MMY-AP4086HT9P-UL

Three units connected



Space required for service



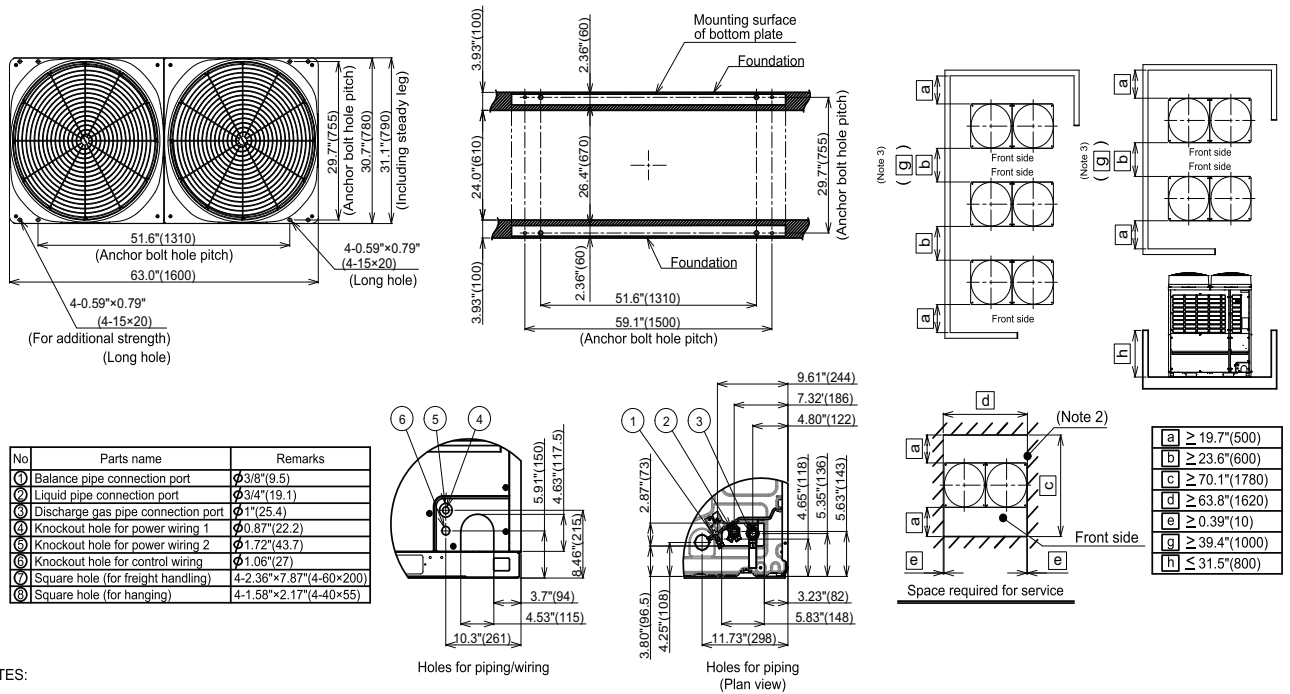
NOTES:

1. A minimum clearance of 78.7 in. (2000 mm) is required above the unit.
2. Any wall or barrier should not exceed 31.5 in. (800 mm) from the bottom of the unit.
3. The main pipe in front of the unit must extend at least a minimum of 19.7 in. (500 mm) before it can turn 90 degrees 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)
5. Dimensions in parentheses are in millimeters.

Model name	Outdoor unit		
	① Header unit	② Follower unit	③ Follower unit
MMY-AP4086HT9P-UL	MMY-AP1446HT9P-UL	MMY-AP1446HT9P-UL	MMY-AP1206HT9P-UL

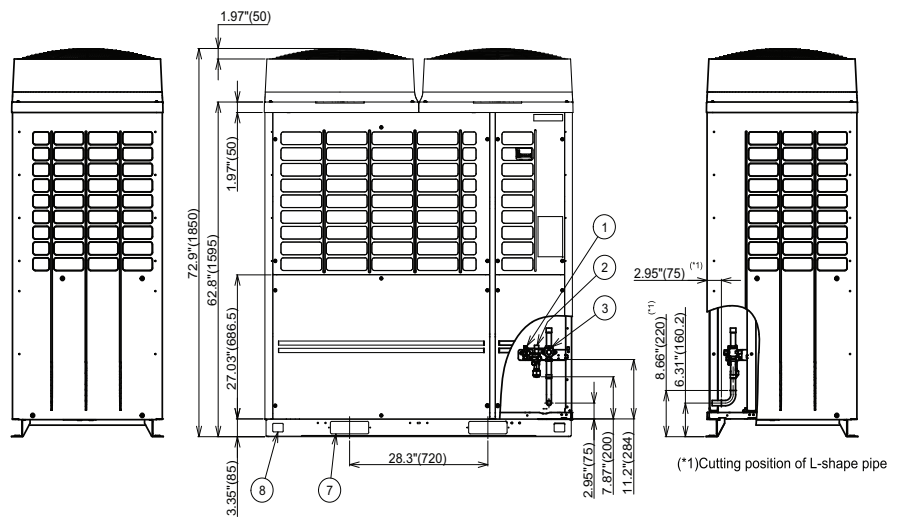
DIMENSIONAL DRAWING

OUTDOOR UNIT: HEAT PUMP/SINGLE UNIT MMY-MAP1446HT9P-UL



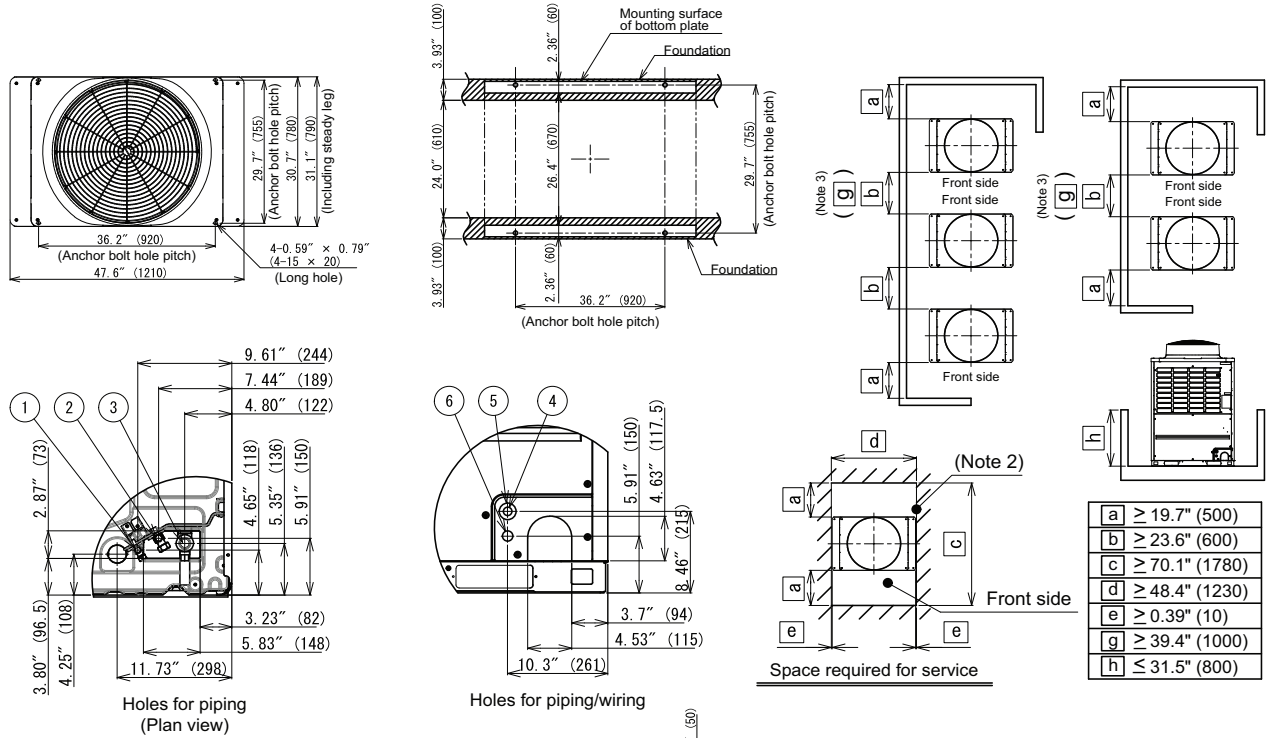
NOTES:

1. A minimum clearance of 78.7 in. (2000 mm) is required above the unit.
2. Any wall or barrier should not exceed 31.5 in. (800 mm) from the bottom of the unit.
3. The main pipe in front of the unit must extend at least a minimum of 19.7 in. (500 mm) before it can turn 90 degrees in either left or right direction.
4. Dimensions in parentheses are in millimeters.



DIMENSIONAL DRAWING

OUTDOOR UNIT: HEAT PUMP/SINGLE UNIT MMY-MAP1206HT9P-UL



No	Parts name	Remarks
①	Balance pipe connection port	Φ3/8" (9.5)
②	Liquid pipe connection port	Φ1/2" (12.7)
③	Discharge gas pipe connection port	Φ1" (25.4)
④	Knockout hole for power wiring 1	Φ0.87" (22.2)
⑤	Knockout hole for power wiring 2	Φ1.72" (43.7)
⑥	Knockout hole for control wiring	Φ1.06" (27)
⑦	Square hole (for freight handling)	4-2.36" × 7.87" (4-60×200)
⑧	Square hole (for hanging)	4-1.58" × 2.17" (4-40×55)

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