

# SMMS-e Dual VRF Outdoor Unit MMY-AP2406HT9P-UL - Heat Pump

**TOSHIBA**  
**Carrier**

## Submittal Data

Job Name \_\_\_\_\_ Location \_\_\_\_\_  
Tag \_\_\_\_\_



### SMMS-e VRF Heat Pump Features

- 12 and 8-ton modules are twinned to form a 20-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
- 985 ft (300 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-MAP0966HT9P-UL	
<b>PERFORMANCE</b>		
Rated Cooling Capacity	Btu/h	230,000
Rated Heating Capacity	Btu/h	256,000
Maximum Total Connected Indoor Unit Capacity*		Up to 150%
<b>COOLING EFFICIENCY†</b>		
EER/IEER, Ducted FCUs		12.10 / 20.60
EER/IEER, Ductless FCUs		12.00 / 24.10
<b>HEATING EFFICIENCY†</b>		
COP at 47 F, Ducted FCUs		3.95
COP at 47 F, Ductless FCUs		3.75
Fan Type (Qty)		Propeller (3)
Airflow, Standard Range	CFM	9760 + 7480
Twinned System Sound Pressure, Cooling/Heating	dBA	65.5 / 66
External Static Pressure**	in. wg	0.16
<b>ELECTRICAL</b>		
Power Supply	V/Ph/Hz	208-230/3/60
Minimum Circuit Amps (MCA)††	A	54 + 36
Recommended Fuse Size††	A	60 + 40

<b>COMPRESSORS</b>		
Type (Number)	Inverter Twin Rotary (4)	
Motor Output	kW	2 x 5.4 + 2 x 3.0
<b>FAN MOTOR</b>		
Motor Type (Steps)	Inverter Direct Driven (64)	
Motor Output	kW	1.0 + 1.0 + 1.0
<b>PHYSICAL DATA</b>		
Pipe Connection Size - Liquid (High Pressure)***	in.	3/4 (Flare)
Pipe Connection Size - Gas (Low Pressure)***	in.	1-3/8 (Brazed)
Balance	in.	3/8 (Flare)
Refrigerant	R-410A	
Factory Charge†††	lb	2 x 25.4
External Finish	Munsell 1Y8.5/0.5	
Header Unit/Follower Unit Width	in.	63 / 47-9/16
Header Unit/Follower Unit Height	in.	72-7/8 / 72-7/8
Header Unit/Follower Unit Depth	in.	30-11/16 / 30-11/16
Header Unit/Follower Unit Net Weight	lb	838 + 684
<b>REQUIRED ACCESSORY</b>		
Twinning Kit 1 and 2	RBM-BT14UL	

\*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.

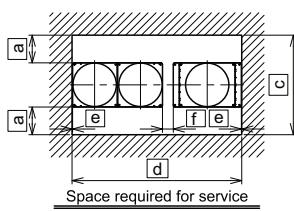
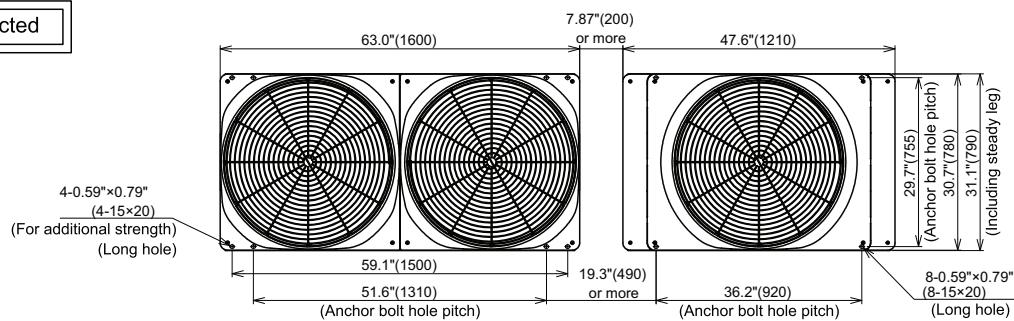
NOTE: Unit cabinet and coil slab shall be capable of withstanding 500-hour salt spray test in accordance with the ASTM (American Society for Testing and Materials, U.S.A.) B-117 Standard.

### LEGEND

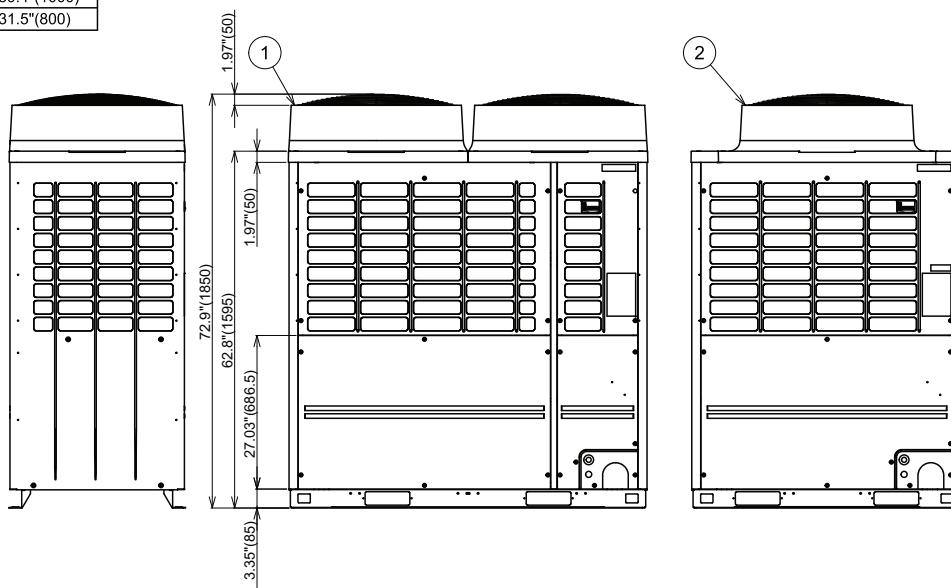
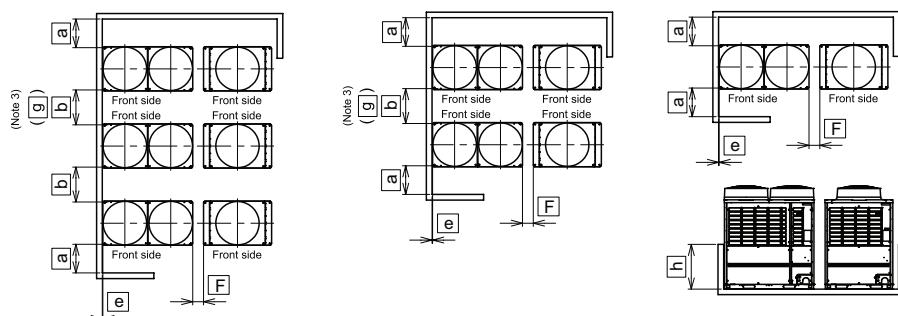
db	Dry Bulb
COP	Coefficient of Performance
EER	Energy Efficiency Ratio
FCU	Fan Coil Unit
IEER	Integrated Energy Efficiency Ratio
wb	Wet Bulb

**DIMENSIONAL DRAWING**  
**OUTDOOR UNIT COMBINATION: HEAT PUMP/DUAL UNIT**  
**MMY-AP2406HT9P-UL**

Two units connected



[a]	$\geq 19.7\text{''}(500)$
[b]	$\geq 23.6\text{''}(600)$
[c]	$\geq 70.1\text{''}(1780)$
[d]	$\geq 119.3\text{''}(3030)$
[e]	$\geq 0.39\text{''}(10)$
[f]	$\geq 7.87\text{''}(200)$
[g]	$\geq 39.4\text{''}(1000)$
[h]	$\leq 31.5\text{''}(800)$



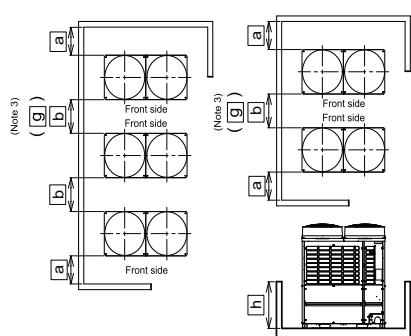
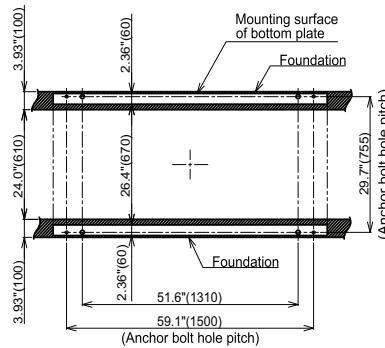
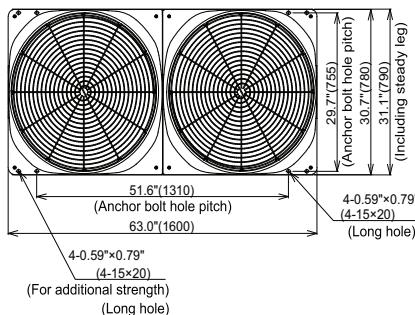
NOTES:

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  $\geq$  Follower Unit ②)
5. Dimensions in parentheses are in millimeters.

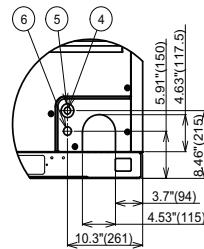
Model name	Outdoor Unit	
	① Header unit	② Follower unit
MMY-AP2406HT9P-UL	MMY-MAP1446HT9P-UL	MMY-MAP0966HT9P-UL

# DIMENSIONAL DRAWING

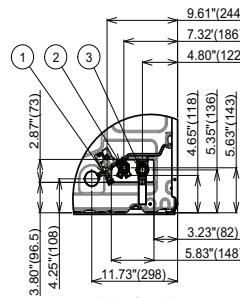
## OUTDOOR UNIT: HEAT PUMP/SINGLE UNIT MMY-MAP1446HT9P-UL



No	Parts name	Remarks
①	Balance pipe connection port	$\phi 3/8"$ (9.5)
②	Liquid pipe connection port	$\phi 3/4"$ (19.1)
③	Discharge gas pipe connection port	$\phi 1"$ (25.4)
④	Knockout hole for power wiring 1	$\phi 0.87"$ (22.2)
⑤	Knockout hole for power wiring 2	$\phi 1.72"$ (43.7)
⑥	Knockout hole for control wiring	$\phi 1.06"$ (27)
⑦	Square hole (for freight handling)	4.236" x 7.87"(460 x 200)
⑧	Square hole (for hanging)	4.158" x 2.17"(440 x 55)



Holes for piping/wiring

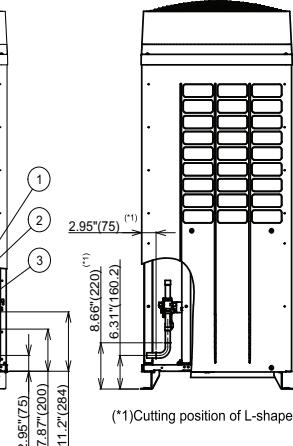
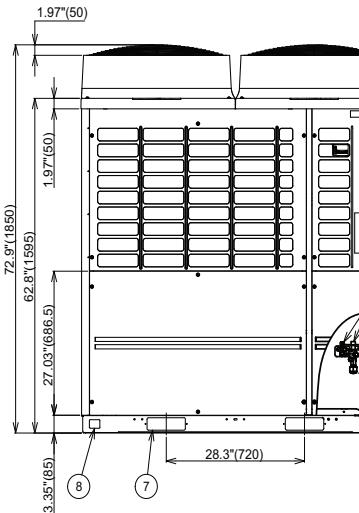
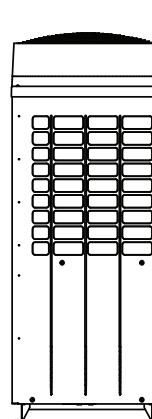


Holes for piping (Plan view)

[a]	$\geq 19.7"$ (500)
[b]	$\geq 23.6"$ (600)
[c]	$\geq 70.1"$ (1780)
[d]	$\geq 63.8"$ (1620)
[e]	$\geq 0.39"$ (10)
[g]	$\geq 39.4"$ (1000)
[h]	$\leq 31.5"$ (800)

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.



(\*1)Cutting position of L-shape pipe

# DIMENSIONAL DRAWING

## OUTDOOR UNIT: HEAT PUMP/SINGLE UNIT MMYMAP0966HT9P-UL

