

SMMS-e Single VRF Outdoor Unit MMY-MAP1446HT9P-UL - Heat Pump

TOSHIBA
Carrier

Submittal Data

Job Name _____ Location _____
Tag _____



SMMS-e VRF Heat Pump Features

- 6, 8, 10, 12, & 14 ton modules are available
- 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
- Modules can be combined to form larger systems, up to 38 tons
- 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	
PERFORMANCE		
Rated Cooling Capacity	Btu/h	138,000
Rated Heating Capacity	Btu/h	154,000
Maximum Total Connected Indoor Unit Capacity*		Up to 150%
COOLING EFFICIENCY†		
EER/IEER, Ducted FCUs		11.30 / 20.00
EER/IEER, Ductless FCUs		12.40 / 25.60
HEATING EFFICIENCY†		
COP at 47 F, Ducted FCUs		3.91
COP at 47 F, Ductless FCUs		4.12
Fan Type (Qty)		Propeller (2)
Airflow, Standard Range	CFM	9760
Sound Pressure, Cooling/Heating	dBA	63/64
External Static Pressure**	in. wg	0.16
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/3/60
Minimum Circuit Amps (MCA)	A	54
Recommended Fuse Size	A	60

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

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

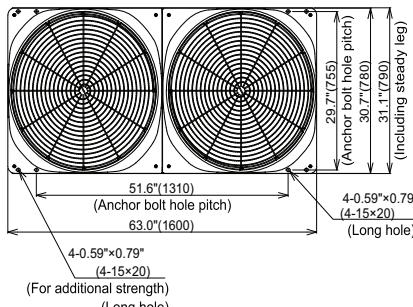
††Additional charge required.

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

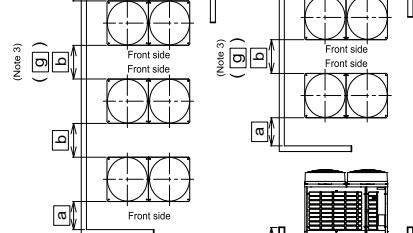
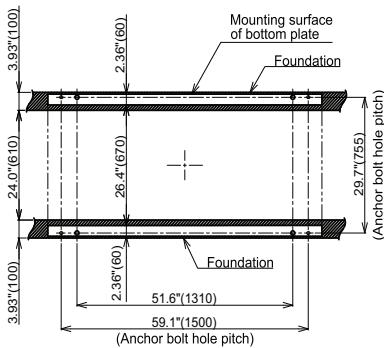
db	— Dry Bulb
COP	— Coefficient of Performance
EER	— Energy Efficiency Ratio
FCU	— Fan Coil Unit
IEER	— Integrated Energy Efficiency Ratio
wb	— Wet Bulb

DIMENSIONAL DRAWING
OUTDOOR UNIT COMBINATION: HEAT PUMP/SINGLE UNIT
MMY-AP1446HT9P-UL

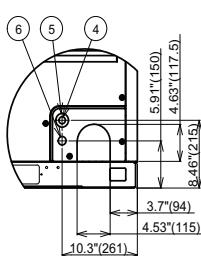


No	Parts name	Remarks
①	Balance pipe connection port	$\phi 3/8" (9.5)$
②	Liquid pipe connection port	$\phi 3/4" (19.1)$
③	Discharge gas pipe connection port	$\phi 1" (25.4)$
④	Knockout hole for power wiring 1	$\phi 0.87" (22.2)$
⑤	Knockout hole for power wiring 2	$\phi 1.72" (43.7)$
⑥	Knockout hole for 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)

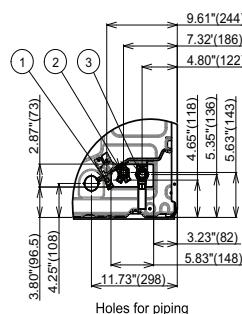
(For additional strength)
 (Long hole)



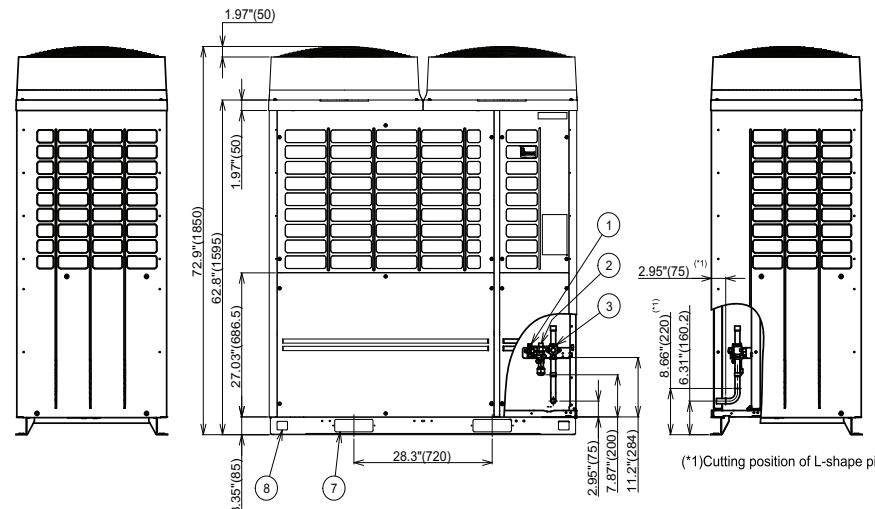
[a]	$\geq 19.7" (500)$
[b]	$\geq 23.6" (600)$
[c]	$\geq 70.1" (1780)$
[d]	$\geq 63.8" (1620)$
[e]	$\geq 0.39" (10)$
[g]	$\geq 39.4" (1000)$
[h]	$\leq 31.5" (800)$



Holes for piping/wiring



Holes for piping
(Plan view)



(*1)Cutting position of L-shape pipe

