

SHRMe VRF Outdoor Unit MMY-AP2886FT6P-UL - Heat Recovery

TOSHIBA
Carrier

Submittal Data

Job Name _____ Location _____
Tag _____



SHRMe VRF Heat Recovery Features

- Two 12-ton modules are combined to form a 24-ton system
- Capable of simultaneous cooling and heating (flow selector boxes required)
- 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
- Up to 3281 ft (1000 m) actual total system piping (liquid line)

- Up to 591 ft (180 m) actual piping length from outdoor unit to furthest fan coil
- Up to 330 ft (100 m) outdoor control wiring
- Up to 6560 ft (2000 m) control wiring between outdoor 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, PC board fuse, inverter overload protection
- 7-year compressor limited warranty, 5-year parts limited warranty

| | | |
|---|--------------------|-----------------|
| Header Unit Model | MMY-MAP1446FT6P-UL | |
| Follower Unit Model | MMY-MAP1446FT6P-UL | |
| PERFORMANCE | | |
| Rated Cooling Capacity | Btu/h | 276,000 |
| Rated Heating Capacity | Btu/h | 308,000 |
| Maximum Total Connected Indoor Unit Capacity | | Up to 150% |
| SIMULTANEOUS COOLING AND HEATING EFFICIENCY* | | |
| SCHE, Ducted FCUs | | 25.90 |
| SCHE, Ductless FCUs | | 28.10 |
| COOLING EFFICIENCY* | | |
| EER/IEER, Ducted FCUs | | 11.00/20.20 |
| EER/IEER, Ductless FCUs | | 11.10/22.80 |
| HEATING EFFICIENCY* | | |
| COP at 47 F, Ducted FCUs | | 3.46 |
| COP at 47 F, Ductless FCUs | | 3.45 |
| Fan Type (Qty) | | Propeller (4) |
| Airflow, Standard Range | CFM | 10,852 + 10,852 |
| Combined System Sound Pressure, Cooling/Heating | dBA | 66/67 |
| External Static Pressure† | in. wg | 0.16 |
| ELECTRICAL | | |
| Power Supply | V/Ph/Hz | 460/3/60 |
| Minimum Circuit Amps (MCA)** | A | 23.4 + 23.4 |
| Recommended Fuse Size** | A | 30 + 30 |

LEGEND

| | | |
|------|---|---|
| db | — | Dry Bulb |
| COP | — | Coefficient of Performance |
| EER | — | Energy Efficiency Ratio |
| FCU | — | Fan Coil Unit |
| IEER | — | Integrated Energy Efficiency Ratio |
| SCHE | — | Simultaneous Cooling and Heating Efficiency |
| wb | — | Wet Bulb |

| | | |
|--|-----|-----------------------------|
| COMPRESSORS | | |
| Type (Number) | | Inverter Twin Rotary (4) |
| Motor Output | kW | 2 x 5.4 + 2 x 5.4 |
| FAN MOTOR | | |
| Motor Type (Steps) | | Inverter Direct Driven (64) |
| Motor Output | kW | 1.0 + 1.0 + 1.0 + 1.0 |
| PHYSICAL DATA | | |
| Main Pipe Connection Size - Liquid (High Pressure)†† | in. | 7/8 (Flare) |
| Main Pipe Connection Size - Gas (Low Pressure)†† | in. | 1-3/8 (Brazed) |
| Main Discharge (High Pressure)†† | in. | 1-1/8 (Flare) |
| Balance | in. | 3/8 (Flare) |
| Refrigerant | | R-410A |
| Factory Charge*** | lb | 2 x 24.3 |
| External Finish | | Munsell 1Y8.5/0.5 |
| Header Unit/Follower Unit Width | in. | 63.0 / 63.0 |
| Header Unit/Follower Unit Height | in. | 72.9 / 72.9 |
| Header Unit/Follower Unit Depth | in. | 30.7 / 30.7 |
| Header Unit/Follower Unit Net Weight | lb | 838 + 838 |
| REQUIRED ACCESSORY | | |
| Connection Kit | | RBM-BT24FUL |

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

Cooling: Indoor 80 F (35 C) db/67 F (27 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 is required. MCA and fuse size for both units are given.

††Main pipe size leaving connection kit.

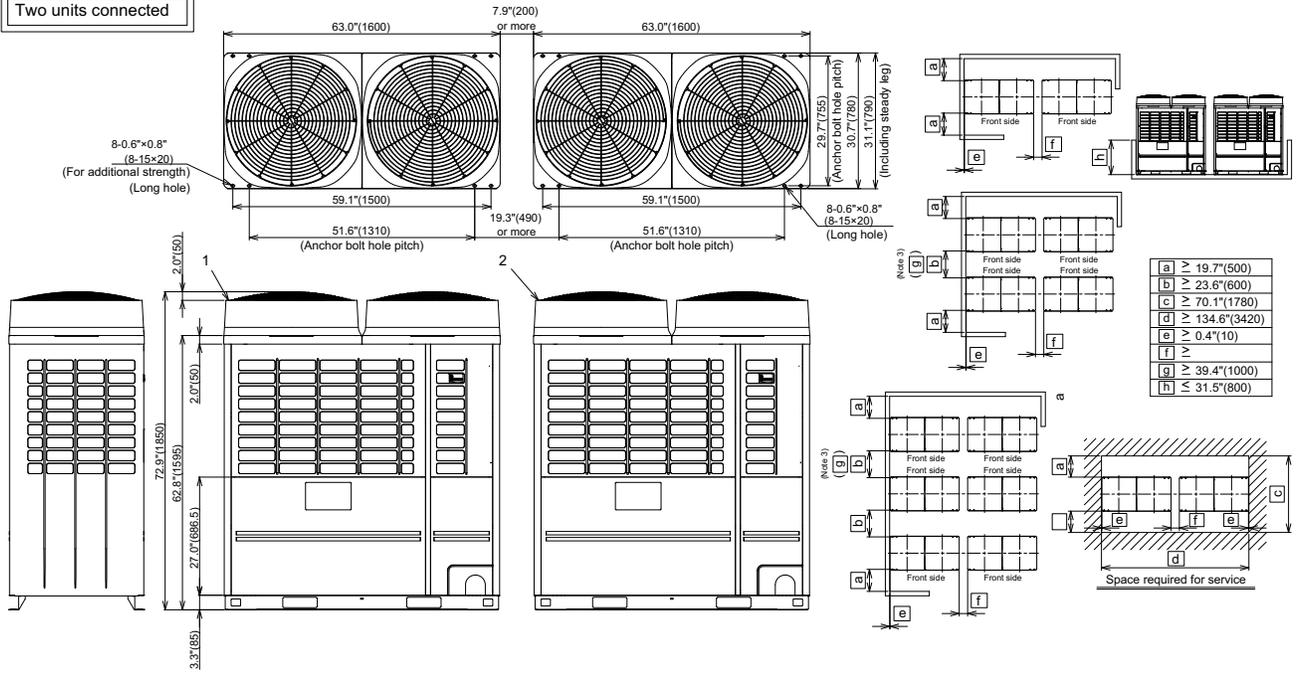
***Additional charges required.

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 RECOVERY MMY-AP2886FT6P-UL

Two units connected



- (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 unit① ≥ Follower unit②)

| MODEL | OUTDOOR UNIT | |
|-------------------|--------------------|--------------------|
| | HEADER UNIT ① | FOLLOWER UNIT ② |
| MMY-AP2886FT6P-UL | MMY-MAP1446FT6P-UL | MMY-MAP1446FT6P-UL |

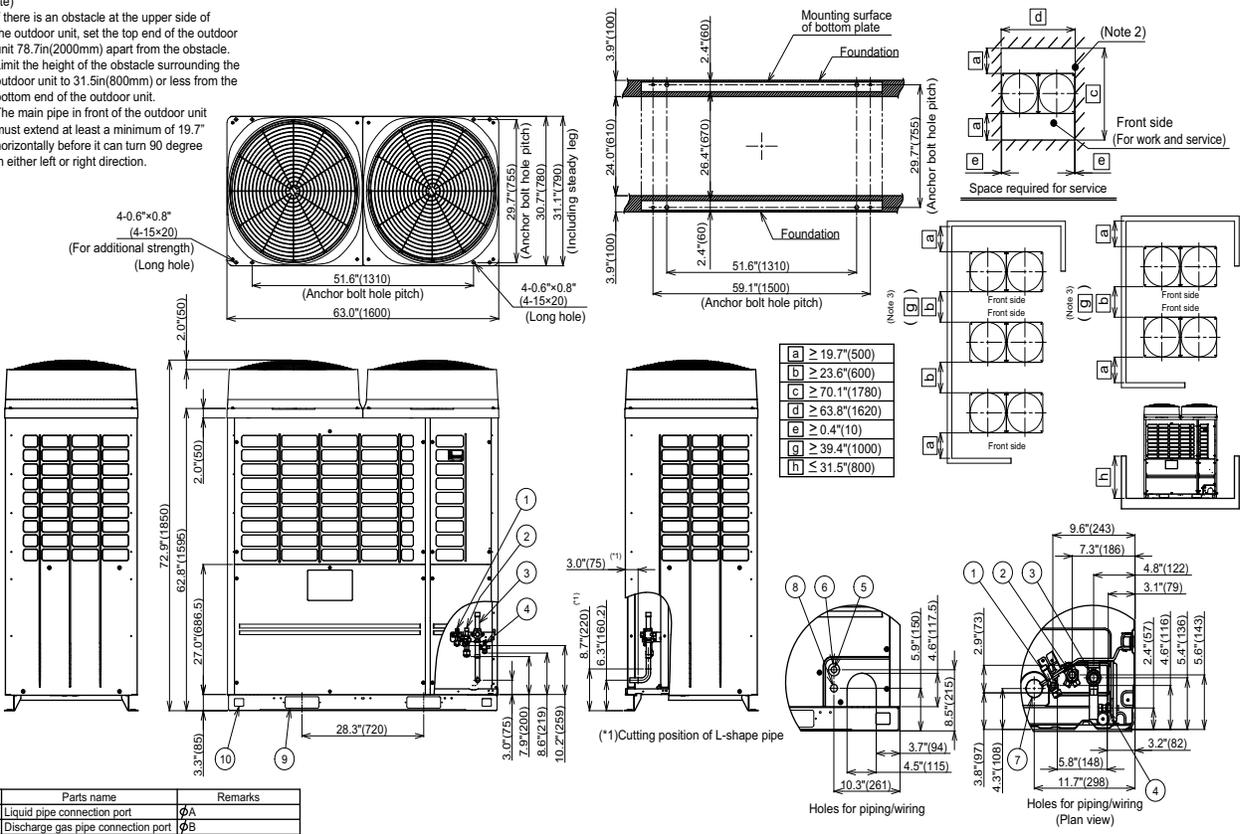
All dimensions are shown in inches.

DIMENSIONAL DRAWING

OUTDOOR UNIT HEAT RECOVERY/SINGLE UNIT MMY-MAP1446FT6P-UL

(Note)

- 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.
- Limit the height of the obstacle surrounding the outdoor unit to 31.5in(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.



| No | Parts name | Remarks |
|----|------------------------------------|------------------------|
| ① | Liquid pipe connection port | ∅A |
| ② | Discharge gas pipe connection port | ∅B |
| ③ | Suction gas pipe connection port | ∅1-1/8" (28.6) |
| ④ | Balance pipe connection port | ∅3/8" (9.5) |
| ⑤ | Knockout hole for power wiring 1 | ∅0.9" (22.2) |
| ⑥ | Knockout hole for power wiring 2 | ∅1.7" (43.7) |
| ⑦ | Knockout hole for power wiring 2 | ∅1.9" (48) |
| ⑧ | Knockout hole for control wiring | ∅1.1" (27) |
| ⑨ | Square hole (for freight handling) | 4-2.4"×7.9" (4-60×200) |
| ⑩ | Square hole (for hanging) | 4-1.6"×2.2" (4-40×55) |

| Model Name | A | B |
|---------------|-------------|-------------|
| MAP 1446 type | 5/8" (15.9) | 7/8" (22.2) |
| MAP 1686 type | 3/4" (19.1) | 7/8" (22.2) |

All dimensions are shown in inches.

