

SHRMi VRF Outdoor Unit MMY-AP1444FT6UL - Heat Recovery

TOSHIBA
Carrier

Submittal Data

Job Data _____ Location _____
 Buyer _____ Buyer PO # _____ Carrier # _____
 Unit Number _____ Model Number _____
 Performance Data Certified By _____ Date _____



SHRMi VRF Heat Recovery Features

- Two 6-ton modules are combined to form a 12-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
- 985 ft (300 m) actual total system piping (liquid line)
- 575 ft (175 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 109 F (-10 to 42.8 C)
Heating (wb): -4 to 60 F (-20 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-MAP0724FT6UL | |
| Follower Unit Model | MMY-MAP0724FT6UL | |
| PERFORMANCE | | |
| Nominal Cooling Capacity | Btu/h | 144,000 |
| Nominal Heating Capacity | Btu/h | 162,000 |
| Maximum Total Connected Indoor Unit Capacity | | Up to 125% |
| SIMULTANEOUS COOLING AND HEATING EFFICIENCY* | | |
| SCHE, Ducted FCUs | | 24.78 |
| SCHE, Ductless FCUs | | 26.20 |
| COOLING EFFICIENCY* | | |
| EER/IEER, Ducted FCUs | | 10.9/16.3 |
| EER/IEER, Ductless FCUs | | 11.3/20.4 |
| HEATING EFFICIENCY* | | |
| COP at 47 F, Ducted FCUs | | 3.20 |
| COP at 47 F, Ductless FCUs | | 3.44 |
| Fan Type (Qty) | | Propeller (2) |
| Airflow, Standard Range | CFM | 5120 + 5120 |
| Combined System Sound Pressure, Cooling/Heating | dBA | 59/61 |
| External Static Pressure† | in. wg | 0.20 |
| ELECTRICAL | | |
| Power Supply | V/Ph/Hz | 460/3/60 |
| Minimum Circuit Amps (MCA)** | A | 19/19 |
| Maximum Overcurrent Protection (MOCP)** | A | 25/25 |

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 2.3 + 2 x 2.3 |
| FAN MOTOR | | |
| Motor Type (Steps) | | Inverter Direct Driven (64) |
| Motor Output | kW | 1.0 + 1.0 |
| PHYSICAL DATA | | |
| Main Pipe Connection Size - Liquid (High Pressure)†† | in. | 5/8 (Flare) |
| Main Pipe Connection Size - Gas (Low Pressure)†† | in. | 1-1/8 (Brazed) |
| Main Discharge (High Pressure)†† | in. | 7/8 (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. | 39 / 39 |
| 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 | 658/658 |
| REQUIRED ACCESSORY | | |
| Connection Kit | | RBM-BT14FUL |

*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 MOCP 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.

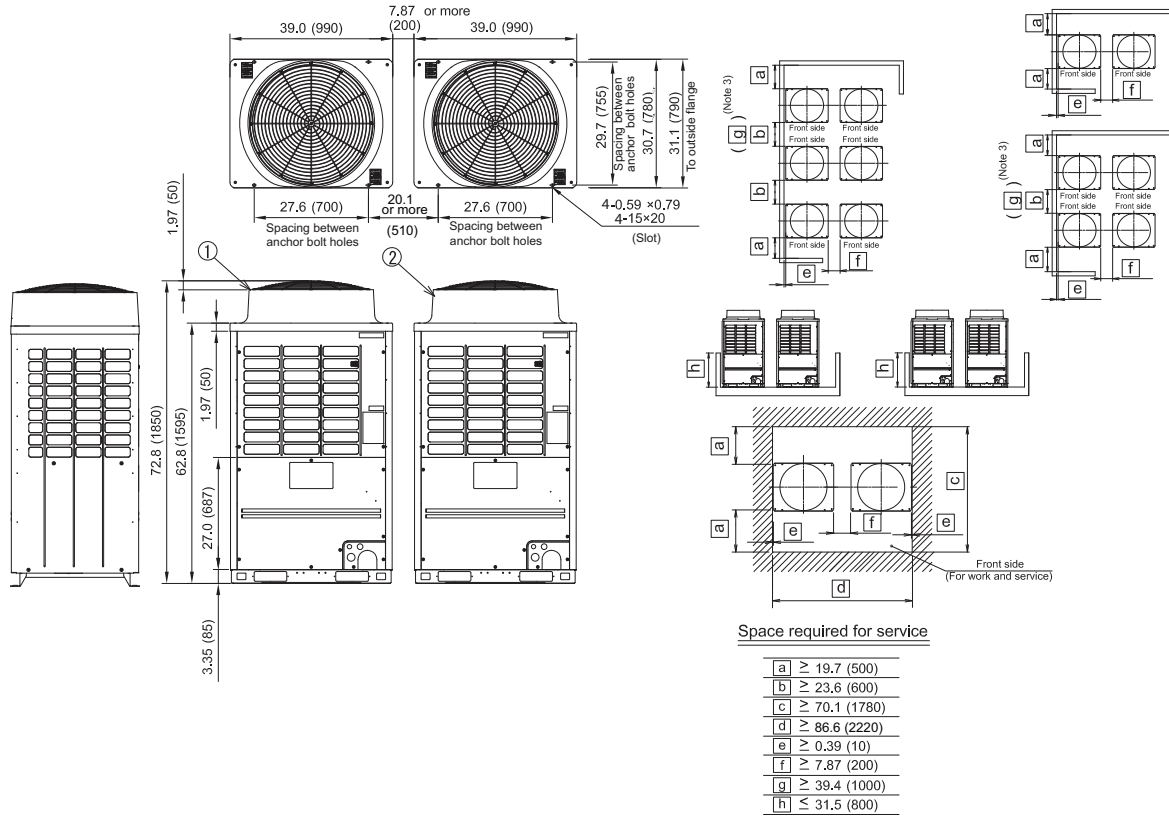
Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

DIMENSIONAL DRAWING

OUTDOOR UNIT COMBINATION HEAT RECOVERY MMY-AP1444FT6UL

NOTES:

1. A minimum clearance of 78.7" (2000 mm) is required above the unit.
2. Any wall or barrier should not exceed 31.5" (800 mm) from the bottom of the unit.
3. If the interconnecting pipe exits the front of outdoor unit, it must extend at least a minimum of 19.7" (500 mm) before it can turn 90 degrees in either left or right direction.
4. Outdoor units are identified based on capacity: Header Unit (1) ≥ Follower Unit (2)
5. Dimensions are in inches (mm).



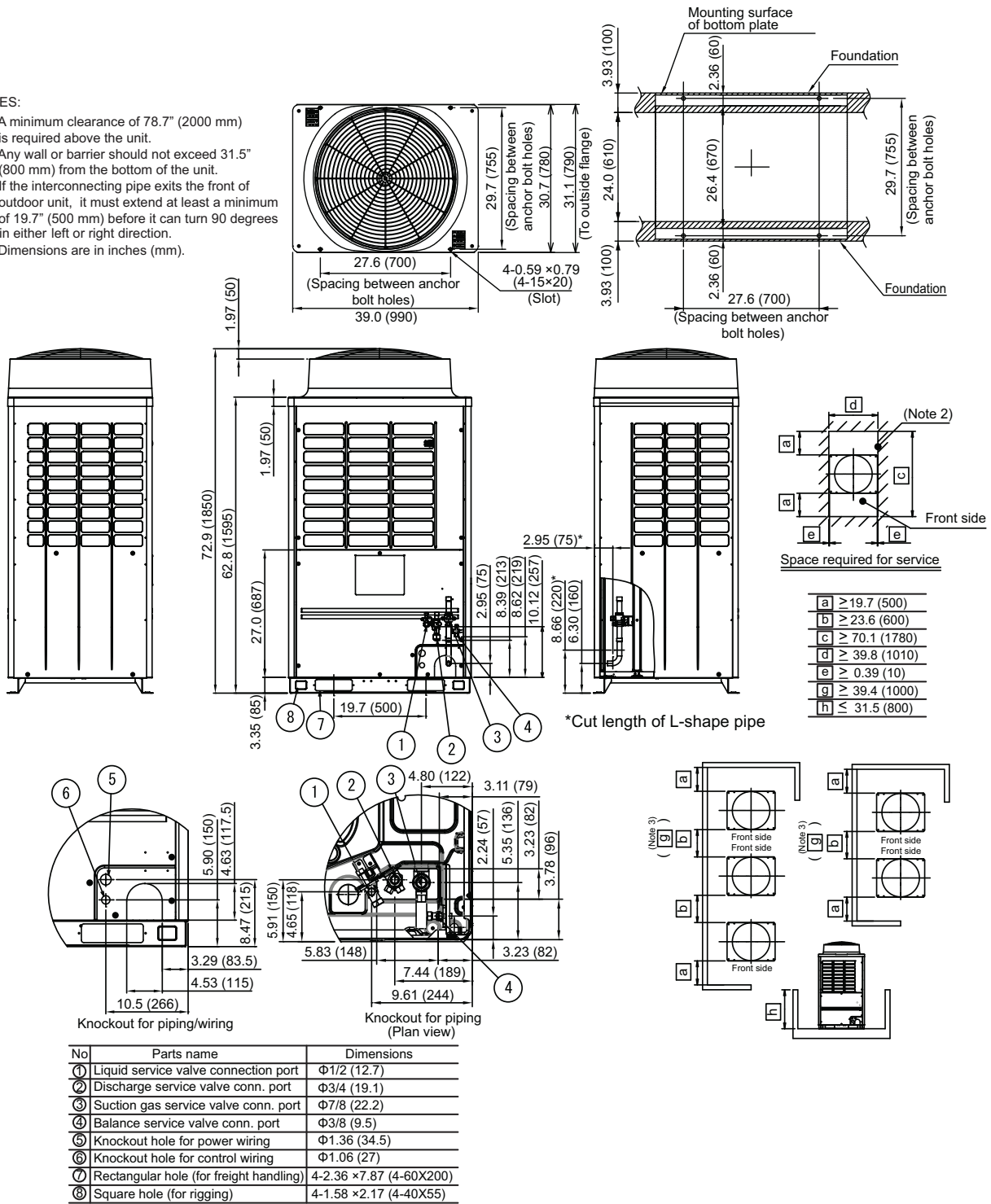
| MODEL | OUTDOOR UNIT | |
|-----------------|------------------|-------------------|
| | HEADER UNIT (1) | FOLLOWER UNIT (2) |
| MMY-AP1444FT6UL | MMY-MAP0724FT6UL | MMY-MAP0724FT6UL |

DIMENSIONAL DRAWING

OUTDOOR UNIT HEAT RECOVERY/SINGLE UNIT MMY-MAP0724FT6UL

NOTES:

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



| No | Parts name | Dimensions |
|----|---|--------------------------|
| ① | Liquid service valve connection port | Φ1/2 (12.7) |
| ② | Discharge service valve conn. port | Φ3/4 (19.1) |
| ③ | Suction gas service valve conn. port | Φ7/8 (22.2) |
| ④ | Balance service valve conn. port | Φ3/8 (9.5) |
| ⑤ | Knockout hole for power wiring | Φ1.36 (34.5) |
| ⑥ | Knockout hole for control wiring | Φ1.06 (27) |
| ⑦ | Rectangular hole (for freight handling) | 4-2.36 × 7.87 (4-60X200) |
| ⑧ | Square hole (for rigging) | 4-1.58 × 2.17 (4-40X55) |

| | |
|---|---------------|
| a | ≥ 19.7 (500) |
| b | ≥ 23.6 (600) |
| c | ≥ 70.1 (1780) |
| d | ≥ 39.8 (1010) |
| e | ≥ 0.39 (10) |
| g | ≥ 39.4 (1000) |
| h | ≤ 31.5 (800) |

