

# SMMSu VRF u-Series Outdoor Unit MMY-UP4561HT9P-UL—Heat Pump

**TOSHIBA**  
*Carrier*

## Submittal Data

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

Tag \_\_\_\_\_



A230331

### SMMSu VRF Heat Pump Features

- Energy-efficient priority design
- Super-efficient heat exchanger
- Refrigerant cooling inverter system
- Intelligent VRF control
- Less refrigerant
- Space efficient design
- Configuration flexibility
- Wider Operating temperature range
- Comprehensive System construction solution
- Comprehensive Service solution

Header Unit Model	MMY-UP4561HT9P-UL
Outdoor Unit Model Name	MUP1681HT9P-UL + MUP1681HT9P-UL + MUP1201HT9P-UL

PERFORMANCE		
Nominal Cooling Capacity†	Btu/h	456,000
Nominal Heating Capacity†	Btu/h	513,000
Maximum number of indoor units		73
Total Connected Indoor Unit Capacity		684

COOLING EFFICIENCY†		
EER (Non-Ducted)	Btu/Wh	9.80
Power Consumption (Non-Ducted)	kW	43.20
EER (Ducted)	Btu/Wh	9.50
Power Consumption (Ducted)	kW	41.72

HEATING EFFICIENCY†		
COP (Non-Ducted)	Btu/Wh	3.28
Power Consumption (Non-Ducted)	kW	42.51
COP (Ducted)	Btu/Wh	3.33
Power Consumption (Ducted)	kW	38.99

FAN		
Fan Type		Propeller
Airflow	CFM	8670 + 8670 + 7770
Motor Output	kW	0.73 x 2 + 0.73 x 2 + 0.33 x 2

ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/3/60
MCA	A	57.4 + 57.4 + 50.5
MOCP	A	80.0 + 80.0 + 60.0

COMPRESSORS		
Type (Number)		Hermetic Triple Rotary (3)
Motor Output	kW	12.10 + 12.10 + 8.00

PHYSICAL DATA				
Pipe Connection Size - Liquid (High Pressure)	in.	5/8 (Brazing)	5/8 (Brazing)	1/2 (Brazing)
Pipe Connection Size - Gas (Low Pressure)	in.	1-1/8 (Brazing)	1-1/8 (Brazing)	1-1/8 (Brazing)
Refrigerant		R-410A		
Factory Charge††	lb	19.8 + 19.8 + 19.8		
External Finish		Munsell 1Y8.5/0.5		
Unit Width	in.	51.4 + 51.4 + 51.4		
Unit Height	in.	66.5 + 66.5 + 66.5		
Unit Depth	in.	31.1 + 31.1 + 31.1		
Unit Net Weight	lb	778 + 778 + 725		

### LEGEND

EER	—	Energy Efficiency Ratio
COP	—	Coefficient of Performance
MCA	—	Minimum Circuit Amps
MOCP	—	Maximum Overcurrent Protection

†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

††Additional charge required.

Figure 1: Typical layout of a 20' x 20' container yard. The diagram shows a grid of 20' x 20' containers arranged in rows and columns. Dimensions are given in feet and inches. Key dimensions include: 19'7" (500)+1/2 for the width of the container units, 11'8" (300)+2/2 for the width of the aisles, 7'8 1/2" (200) or more for the length of the container units, and 0'39" (10) or more for the width of the aisles. The total width is 28'8" (730.5) and the total length is 170'7" (4335) or more. The diagram also shows the layout of the containers in the yard, with labels for 'Front side' and 'Back side'.

Model name	① Header unit		② Follower unit		③ Follower unit	
MMY-1P4561HT6P-II	MMY-M1P1681HT6P-II		MMY-M1P1681HT6P-II		MMY-M1P1201HT6P-II	

When the obstacle exceeds the specified value

( Header unit① ≥ Follower unit② ≥ Follower unit③ )

1. 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.
2. Draw out the pipe procured locally to the front of the outdoor unit horizontally, and keep 19.1in(500mm) or more between the outdoor unit and traversing pipe if placing pipe transversely.
3. Arrange each outdoor unit in order of its capacity.

**Note)**