



2-pipe powerhouse next generation

## SMMS-u

### → Highlights

- Pointing the way in connectivity, efficiency, reliability and service friendliness
- Single modules up to 24 HP / 67 kW cooling capacity available
- Combinations of up to 335 kW cooling- and 345 kW heating-capacity
- Unique triple-rotary compressor (16-20 HP)

VRF 2-pipe outdoor unit for cooling or heating operation with a wide performance spectrum. For combination with VRF indoor units, DX-kits, hot water modules and VN heat exchangers according to the Selection Tool design software.

### → Performance

- SEER values up to 7,73
- SCOP values up to 4,79
- Optimized R410A refrigeration circuit enables the smallest amount of refrigerant
- Outstanding energy and cost efficiency
- Suitable for monovalent heating operation
- Hi-Power fan unit optimizes the airflow
- Super efficient split heat exchanger
- Defrosting in heating mode without sacrificing comfort
- Maximum operational reliability through auto backup

### → Flexibility

- Maximum piping lengths up to 1,200 m (from 26 HP)
- Maximum height differences up to 110 m
- Up to 128 indoor units can be connected to each individual system
- Capacities up to 24 HP available with just one outdoor unit module
- Combinations of up to 120 HP / 335 kW cooling capacity possible
- Free combination concept, according to priority efficiency or installation space
- Flexible control options for all applications
- Night Operation: quiet operation protects humans and the environment
- System diversity up to 200%
- Easy system design with SelectionTool software
- Combination with existing systems possible

### → Technical details

- Perfected A3 twin-rotary compressor (8-14 HP)
- Two A3 twin-rotary compressors (22-24 HP)
- Unique K4 triple-rotary compressor (16-20 HP)
- Double-vane technology with carbon coating
- Auto-Backup operation
- Uninterrupted heating operation for up to 5 hours
- Ultra-short defrosting cycles of up to 3.5 minutes
- Intelligent refrigerant management ensures the best possible supply for all indoor units, regardless of their position in the building
- Shortest oil return cycles thanks to intelligent oil management algorithms
- Fast TU2C-Link system bus with 19,200 bps
- The wireless NFC WaveTool function simplifies commissioning, service and system monitoring with Android smartphones
- The DynaDoctor service tool for convenient recording, monitoring and diagnosis as a PC application can be connected to outdoor or indoor devices via USB
- Optional service link adapter TCB-SS1UU-E enables data logging even without a PC on micro SDHC card (included, 8 GB)

Technical data			MMY-MUP2001HT8P-E
Capacity code	HP		20
Cooling capacity	kW	❄️	56,00
Power consumption (min./nom./max.)	kW	❄️	18,01
Energy efficiency EER	W/W	❄️	3,11
Energy efficiency SEER		❄️	7,62
Energy efficiency ESEER		❄️	7,62
Running current	A	❄️	27,7
Heating capacity	kW	🔥	56,00
Power consumption (min./nom./max.)	kW	🔥	14,93
Energy efficiency COP	W/W	🔥	3,75
Energy efficiency SCOP		🔥	4,43
Running current	A	🔥	22,9
Airflow	m <sup>3</sup> /h		15900
External static pressure	Pa		80
Sound pressure level (low/med/high)	dB(A)	❄️	63
Sound pressure level (low/med/high)	dB(A)	🔥	67
Sound power level	dB(A)	❄️	86
Sound power level	dB(A)	🔥	90
Sound pressure level (night operation)	dB(A)		54
Compressor type			1x Triple-Rotary
Liquid pipe diameter	mm (inch)		15,9 (5/8)
Suction gas pipe diameter	mm (inch)		28,6 (1 1/8)
Outdoor temperature operating range (min.-max.)	°C	❄️	-15 / +52
Outdoor temperature operating range (min.-max.)	°C	🔥	-25 / +15,5
Power supply	V/Ph+N/Hz		380-415/3/50
Recommended fusing	A		3x 50
Recommended power supply line type			H07RN-F 5G6,0
Communication line			YSLCY 2x1,5
Current consumption (nom.)	A		22,9
Current consumption (max.)	A		27,2
Starting current	A		Softstart
Connectable indoor units (max.)	Pce.		45
Pipe length (max.)	m		500
Height difference (max.)	m		110
Refrigerant			R410A
Refrigerant charge	kg		9,00
Dimensions (HxWxD)	mm		1690 x 1290 x 780
Weight	kg		334

❄️ Cooling 🔥 Heating

The measuring conditions for this product can be found at <http://www.toshiba-klima.at/en/measuring-conditions.html>



**Energy Label:** Energy label **A+ to A+++**, indicates the power consumption and energy efficiency class.



**HI POWER:** Particularly strong airflow for quickly reaching the requested temperature.



**ErP Ecodesign:** All criteria of **ECODESIGN**-guideline are fulfilled and confirm highest system efficiency.



**Auto diagnostic:** Check of system for flawless operation.



**Hybrid inverter control:** Smooth capacity regulation.



**Eco Mode:** Energy saving function.



**Rotary compressor:** Reliability and high efficiency.



**Quiet Mode:** Particularly low noise level - whispering mode.



**Twin rotary compressor:** Long-lasting, smoothly running and highest efficiency.



**Comfort Sleep:** Gradual increase of temperature by 2 °C until morning.



**R410A:** Used refrigerant: R410A.



**Power Selection:** Capacity regulation and therefore power savings of up to 25, 50 or 75%.



**R32:** Used refrigerant: R32.



**Floor Mode:** Natural floor warming effect for greater comfort.



**Wifi ready:** Optional control of the system via a smartphone.



**Preset Mode:** Activates individual settings at the touch of a button.



**KNX:** Optional KNX bus connection.



**One Touch Mode:** Fully automatic operation adapted to your needs.



**Dust filter:** Washable filter against coarse contamination.



**Timer:** Individual programming of on-/off times.



**IAQ filter:** Fine mesh filter with natural substances.



**Off Timer:** Shutdown of the unit at chosen times (30 min to 12 h).



**Active carbon-catechin filter:** Cleansing filter with enzymes from green tea.



**Week Timer:** Up to four settings per day and seven per week.



**Plasma filter: Pure Mode:** Electrostatic filter system.



**Automatic Restart:** After a power blackout.



**Air ionizer:** Negative ions cover polluted particles in the air. Dust, pollen and smoke are neutralized.



**8 °C frost protection function:** Frost protection for uninhabited rooms.



**Self-cleaning function:** Usage of condensate water for cleaning.



**Louver:** Flexible setting of louvers.



**Auto Mode:** Automatic selection between cooling and heating.



**3D Airflow:** 6 different airflow patterns in all directions.