### **TOSHIBA**

2-pipe powerhouse next generation

# **SMMSu**





### 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 and iOS 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)



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Technical data			MMY-MUP2201HT8P- E
Capacity code	НР		22
Cooling capacity	kW	*	61,50
Power consumption (min./nom./max.)	kW	*	20,43
Energy efficiency EER	W/W	*	3,01
Energy efficiency SEER		*	7,23
Energy efficiency ESEER		*	7,23
Energy efficiency ETAs	%	*	286,2
Running current	A	*	31,4
Heating capacity	kW	*	61,50
Power consumption (min./nom./max.)	kW	*	16,18
Energy efficiency COP	W/W	*	3,80
Energy efficiency SCOP		*	4,44
Energy efficiency ETAs	%	<b>*</b>	174,6
Running current	A	*	24,8
Airflow	m³/h		16500
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, @ 1m)	dB(A)	*	54
Compressor type			2x Twin-Rotary
Liquid pipe diameter	mm (inch)		19,1 (¾)
Suction gas pipe diameter	mm (inch)		28,6 (1 1/8)
Outdoor temperature operating range (minmax.)	°C	*	-15 / +52
Outdoor temperature operating range (minmax.)	°C	*	-25 / +15,5
Power supply	V/Ph+N/Hz		380-415/3+N/50
Recommended fusing	А		3x 63
Recommended power supply line type			H07RN-F 5G10,0
Communication line			YSLCY 2x1,5
Current consumption (nom.)	А		31,40 / 24,80
Current consumption (max.)	A		3x 57
Connectable indoor units (max.)	Pce.		49
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		356

<sup>\*</sup> Cooling \* Heating

The measuring conditions for this product can be found at https://www.toshiba-aircondition.com/en/measuring-conditions.html

