### **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-UP8411HT8P-E
Capacity code	HP		84
Cooling capacity	kW	*	234,50
Power consumption (min./nom./max.)	kW	*	82,91
Energy efficiency EER	W/W	*	2,83
Energy efficiency SEER		*	6,95
Heating capacity	kW	*	234,50
Power consumption (min./nom./max.)	kW	*	64,71
Energy efficiency COP	W/W	*	3,62
Energy efficiency SCOP		*	4,26
Airflow	m³/h		3x 16500 + 11700
External static pressure	Pa		80
Sound pressure level (low/med/high)	dB(A)	*	68.5
Sound pressure level (low/med/high)	dB(A)	*	72.5
Sound power level	dB(A)	*	91.5
Sound power level	dB(A)	*	95.0
Sound pressure level (night operation, @ 1m)	dB(A)	*	59,3
Liquid pipe diameter	mm (inch)		22,2 (7/8)
Suction gas pipe diameter	mm (inch)		54,0 (2 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
Connectable indoor units (max.)	Pce.		94
Pipe length (max.)	m		1200
Height difference (max.)	m		110
Refrigerant			R410A
Refrigerant charge	kg		9+9+9+6
Dimensions (HxWxD)	mm		1690 x 4620 x 780
Weight	kg		3x 356 + 228

\* Cooling • Heating

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

