TOSHIBA

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

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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)



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Technical data			MMY-UP5411HT8P-E
Capacity code	HP		54
Combined units			20 + 20 + 14
Cooling capacity	kW	*	152,00
Power consumption (min./nom./max.)	kW	*	50,57
Energy efficiency EER	W/W	*	3,01
Energy efficiency SEER		*	7,49
Heating capacity	kW		152,00
Power consumption (min./nom./max.)	kW	*	39,86
Energy efficiency COP	W/W	*	3,81
Energy efficiency SCOP		*	4,47
Airflow	m³/h		2x 15900 + 11880
External static pressure	Pa		80
Sound pressure level (low/med/high)	dB(A)	*	67.0
Sound pressure level (low/med/high)	dB(A)	*	71.0
Sound power level	dB(A)	*	89.5
Sound power level	dB(A)	*	93.5
Sound pressure level (night operation)	dB(A)		58,5
Liquid pipe diameter	mm (inch)		22,2 (7/8)
Suction gas pipe diameter	mm (inch)		41,3 (1 5/8)
Outdoor temperature operating range (minmax.)	°C	*	-15 / +52
Outdoor temperature operating range (minmax.)	°C	*	-25 / +15,5
Power supply	V/Ph+N/Hz		380-415/3/50
Starting current	A		Softstart
Connectable indoor units (max.)	Pce.		76
Pipe length (max.)	m		1200
Height difference (max.)	m		110
Refrigerant			R410A
Refrigerant charge	kg		9+9+6
Dimensions (HxWxD)	mm		1690 x 3610 x 780
Weight	kg		2x 334 + 228

Reating Heating

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

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TOSHIBA Features - general overview



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 iones 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.