## TOSHIBA



### 2-pipe powerhouse

# SMMS-e

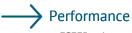
#### Highlights

Outstanding energy efficiency values

Combinations of up to 168 kW of cooling capacity and 178 kW of heating capacity Two twin-rotary compressors per unit



VRF 2-pipe outdoor unit for cooling or heating with a wide performance spectrum. For combination with VRF indoor units, valve kits, hot water modules and VN heat exchangers.



- ESEER values over 7 for all units
- Excellent energy and cost efficiency
- Suitable for monovalent heating operation

### ightarrow Flexibility

- Max. pipe lengths up to 1000 m (starting from 34 PS)
- Max. height differences up to 90 m
- Up to 64 indoor units can be connected (starting from 30 PS)
- Capacities up to 22 PS available with only one outdoor unit module
- Flexible control options for all applications
- Optimal ratio of unit capacity to installation surface
- Quiet operation protects people and the environment
- System diversity to 135%
- Simple system design with SelectionTool software

### -> Tech

#### Technical details

- Next generation of perfected A3 compressors
- Two inverter-controlled compressors per unit module
- At 64 cc, enlarged compressor compression chamber (starting from 14 PS)
- Shared vane technology with a carbon coating
- Two twin-rotary compressors in all units
- Compressor backup
- Outdoor unit modulation for maximum dependability and durability
- Shared heat exchangers
- Advanced fan design enables maximum capacity with minimum noise generation and current consumption
- Continuous heating for short defrost cycles without any comfort losses during heating operation
- Intelligent refrigerant management ensures an optimal supply to all indoor units, regardless of their position in the building
- Wireless wave tool function simplifies commissioning, servicing, and system monitoring with Android smartphones



# **TOSHIBA** SMMS-e

Technical data			MMY-AP5416HT8P-E
Capacity code	HP		54
Combined units			22 + 16 + 16
Cooling capacity	kW	*	151,50
Power consumption (min./nom./max.)	kW	*	51,80
Partial load efficiency @ 80%/60%/40%	W/W	*	3,79/4,89/6,20
Energy efficiency EER	W/W	*	2,92
Energy efficiency ESEER		*	7,38
Running current	А	*	80,40
Heating capacity	kW	۲	164,00
Power consumption (min./nom./max.)	kW	۲	42,90
Partial load efficiency @ 80%/60%/40%	W/W	*	4,52/5,15/5,47
Energy efficiency SCOP		*	4,86
Running current	А	۲	66,90
Airflow	m³/h		18500 + 12600 + 12600
External static pressure	Pa		40
Sound pressure level (low/med/high)	dB(A)	*	66,5
Sound pressure level (low/med/high)	dB(A)	*	68,5
Sound power level	dB(A)	*	86,5
Sound power level	dB(A)	÷	88,5
Sound pressure level (night operation)	dB(A)		57,0
Compressor type			3x2 Twin Rotary
Liquid pipe diameter	mm (inch)		22,2 (7/8)
Suction gas pipe diameter	mm (inch)		41,3 (1 5/8)
Oil equalization pipe diameter	mm (inch)		9,5 (3/8)
Outdoor temperature operating range (minmax.)	°C	*	-15 / +46
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25
Power supply	V/Ph+N/Hz		380-415/3/50
Starting current	А		Softstart
Connectable indoor units (max.)	Pce.		64
Pipe length (max.)	m		1000
Height difference (max.)	m		90
Refrigerant			R410A
Refrigerant charge	kg		3x 11,50
Dimensions (HxWxD)	mm		1830 x 4060 x 780
Weight	kg		371+300+300

🏶 Cooling 📜 Heating

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

## 'OSHIBA

### **TOSHIBA Features - general overview**



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



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



Hybrid inverter control: Smooth capacity regulation.



Rotary compressor: Reliability and high efficiency.



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



R410A: Used refrigerant: R410A.



R32: Used refrigerant: R32.



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



KNX: Optional KNX bus connection.





Dust filter: Washable filter against coarse contamination.



IAQ filter: Fine mesh filter with natural substances.



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



Plasma filter: Pure Mode: Electrostatic filter system.



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



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



Auto Mode: Automatic selection between cooling and heating.



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



Auto diagnostic: Check of system for flawless operation.



Eco Mode: Energy saving function.



Quiet Mode: Particularly low noise level - whispering mode.



白 27 Comfort Sleep: Gradual increase of temperature by 2 °C until morning.



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



Floor Mode: Natural floor warming effect for greater comfort.



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



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



Timer: Individual programming of on-/off times.



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



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



Automatic Restart: After a power blackout.



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



Louver: Flexible setting of louvers.



3D 4 3D Airflow: 6 different airflow patterns in all directions.



