### 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.

### $\longrightarrow$

#### Performance

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

# $\rightarrow$

#### **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

#### 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**

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Technical data			MMY-AP5616HT8P-
Capacity code	НР		56
Combined units			20 + 20 + 16
Cooling capacity	kW	*	157,00
Ower consumption (min./nom./max.)	kW	*	48,90
Partial load efficiency @ 80%/60%/40%	W/W	*	4,03/4,96/5,98
nergy efficiency EER	W/W	*	3,21
nergy efficiency ESEER		*	7,28
Running current	A	*	76,00
leating capacity	kW	*	176,00
ower consumption (min./nom./max.)	kW	*	46,90
artial load efficiency @ 80%/60%/40%	W/W	*	4,39/5,96/5,37
nergy efficiency SCOP		*	4,81
unning current	A	*	72,40
irflow	m³/h		17900 + 17900 + 12600
xternal static pressure	Pa		40
ound pressure level (low/med/high)	dB(A)	*	66,5
ound pressure level (low/med/high)	dB(A)	*	67,5
ound power level	dB(A)	*	86,5
ound power level	dB(A)	*	88,5
ound pressure level (night operation)	dB(A)		56,0
ompressor type			3x2 Twin Rotary
iquid pipe diameter	mm (inch)		22,2 (7/8)
uction gas pipe diameter	mm (inch)		41,3 (1 5/8)
il 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
ower supply	V/Ph+N/Hz		380-415/3/50
tarting current	A		Softstart
onnectable indoor units (max.)	Pce.		64
ipe length (max.)	m		1000
leight difference (max.)	m		90
efrigerant			R410A
lefrigerant charge	kg		3x 11,50
imensions (HxWxD)	mm		1830 x 4450 x 780
Veight	kg		371+371+300

☆ Cooling ★ Heating

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

## **TOSHIBA**

## 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.