## **HAORI**





Highlights

Can be connected to one indoor unit Piping lengths up to max. 25 m Compact, quiet & durable



Compact and quiet outdoor units with low-GWP refrigerant R32 for 1:1 combination with HAORI, SHORAI EDGE or CONSOLES indoor units. In a robust, weatherproof housing, can be set up flexibly.



### Economical & reliable

- Very high energy efficiency (A +++)
- DC hybrid inverter technology
- Single (07 to 16) or twin rotary compressor (18 to 24)
- Particularly high efficiency in part load range
- Complies with the ECODESIGN Lot10 guideline
- Wide operating temperature range
- Housing made of galvanized sheet steel with a creamcolored stove enamel finish
- Large curved heat exchanger for a small footprint
- Automatic restart after power failure adjustable



### Saving resources

- Inverter control minimizes power consumption
- Eco mode
- Environmentally friendly low-GWP refrigerant R32 prefilled
- Air as an energy source in heating mode
- Inconspicuous design adapts to any environment
- SILENT whisper mode



### Comfort and economy functions

- Operation via comfort IR remote control (included with the indoor unit)
- Clear & simple operation
- Automatic mode
- Hi power
- Comfort sleep
- Weekly timer with 4 freely programmable settings / day
- 28 time programs per week
- SILENT operating mode
- 8 ° C frost protection function
- Power Select
- Optional APP control via smartphone and tablet



# **TOSHIBA**

# **HAORI / SET**

Indoor unit			RAS-B13N4KVRG-E
Outdoor unit			RAS-13J2AVSG-E1
Cooling capacity	kW	*	3,5
Cooling range (minmax.)	kW	*	1,00 - 4,10
Power consumption (min./nom./max.)	kW	*	0,25/0,80/1,12
Pdesign c	kW		3,5
Energy efficiency EER	W/W	*	4,38
Energy efficiency SEER		*	8,70
Energy efficiency class		*	A+++
Annual electricity consumption	kWh/a	*	142
Outdoor temperature operating range (minmax.)	°C	*	-15/+46
Heating capacity	kW	*	4,2
Heating range (minmax.)	kW	*	1,00 - 5,30
Power consumption (min./nom./max.)	kW	*	0,20/1,08/1,55
Pdesign h	kW		3,2
Energy efficiency COP	W/W	*	3,89
Energy efficiency SCOP		*	5,10
Energy efficiency class		*	A+++
Annual electricity consumption	kWh/a	*	876
Outdoor temperature operating range (minmax.)	°C	*	-15/+24

Indoor unit			RAS-B13N4KVRG-E
Sound pressure level (low/med/high)	dB(A)	*	19/-/43
Sound pressure level (low/med/high)	dB(A)	*	19/-/43
Sound power level	dB(A)	*	56
Sound power level	dB(A)	*	56
Airflow	m³/h		320-670
Dimensions (HxWxD)	mm		300 x 987 x 210
Weight	kg		11

\* Cooling Heating

## **TOSHIBA**

# **HAORI / SET**

Outdoor unit			RAS-13J2AVSG-E1
Power supply	V/Ph+N/Hz		230/1/50
Recommended fusing	А		10
Sound pressure level (low/med/high)	dB(A)	*	-/-/46
Sound pressure level (low/med/high)	dB(A)	*	-/-/48
Sound power level	dB(A)	*	-/-/59
Sound power level	dB(A)	*	-/-/61
Suction gas pipe diameter	mm (inch)		9,5 (3/8)
Liquid pipe diameter	mm (inch)		6,3 (1/4)
Pipe length (min.)	m		2
Pipe length (max.)	m		20
Height difference (max.)	m		12
Airflow	m³/h		1950
Compressor type			Rotary
Refrigerant			R32
Refrigerant charge	kg		0,80
Pre-charged up to	m		15
Added refrigerant charge	g/m		20
Dimensions (HxWxD)	mm		550 x 780 x 290
Weight	kg		30

\* Cooling Heating

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