



HIGHLY EFFICIENT FRESH AIR SUPPLY

VN heat exchanger



Highlights

- Available with register for heating/cooling function
- Free cooling possible
- Available with optional air humidification



Cross-current heat exchanger for standalone operation or for combination with VRF outdoor units from the MiNi-SMMS-e, SMMS-e, and SHRM-e model series. Perfect heat recovery from the air-conditioned ambient air of up to 75%. Available in three variants: Air/Air heat exchanger, with register of 4.1 to 8.25 kW, with additional humidifier.



Performance

- High energy efficiency
- Heat recovery up to 75%
- Low-noise, 3-stage fan
- Auto diagnostic system



Flexibility

- Suitable for controlled domestic ventilation and for commercial use
- Easy-to-remove & washable heat exchanger element
- External inputs are available with an optional NRB-1HE remote adapter
- Potential-free, digital outputs as standard



Technical details

- Air humidifier, operates according to the vapor permeable film principle
- TCB-DP31HEXE drain pump optionally available
- External receiver kit for infrared remote control possible
- Can be combined with all cable remote controls
- Additional functions available with the RBC-AMS54E-ES remote control
- Automatic restart setting after power outage

VN heat exchanger

Technical data			MMD-VNK502HEX1E
Cooling capacity	kW	❄️	4,10
Heating capacity	kW	🔥	5,53
External static pressure	Pa		85 - 95
Airflow (min./nom./max.)	m ³ /h		440/500/500
Airflow limit			440 - 500
Air connections diameter	mm		200
Sound pressure level (low/med/high)	dB(A)	❄️	33,5/35,5/36,5
Sound pressure level (low/med/high)	dB(A)	🔥	33,5/35,5/36,5
Temperature exchange efficiency (min./nom./max.)	%		70,5/-/71,5
Enthalpy exchange efficiency (min./nom./max.)	%	❄️	56,5/-/57,5
Enthalpy exchange efficiency (min./nom./max.)	%	🔥	68,5/-/69,0
Liquid pipe diameter	mm (inch)		6,4 (¼)
Suction gas pipe diameter	mm (inch)		9,5 (3/8)
Condensate pipe diameter	mm		25
Power supply	V/Ph+N/Hz		220-240/1/50
Heat exchanger mode power consumption (min./nom./max.)	W		240/285/305
Running current	A	❄️	1,03/1,24/1,33
Running current	A	🔥	1,03/1,24/1,33
Humidification capacity	kg/h		3,0
Humidification water pressure	bar		0,2 - 4,9
Water connection	Inch		1/2
Refrigerant			R410A
Dimensions (HxWxD)	mm		430 x 1140 x 1690
Weight	kg		91

❄️ Cooling 🔥 Heating

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



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 ions 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.