



HIGHLY EFFICIENT FRESH AIR SUPPLY

## HRV heat exchanger



### Highlights

- Air-to-air cross-flow heat exchanger
- Enthalpy exchange efficiency of up to 88%
- Free cooling possible
- Standard air filter integrated
- Air-Quality CO<sub>2</sub> / PM sensor optional

Cross-flow heat exchanger for stand-alone operation or for integration into VRF systems. Enables heat recovery from the conditioned room air with an enthalpy exchange efficiency of up to 88%. Available in seven performance sizes from 150 to 1000 m<sup>3</sup>/h.



### Performance & Technical Details

- Air-to-air cross-flow heat exchanger for stand-alone operation
- Suitable for controlled residential ventilation and for commercial use
- Easily removable & washable heat exchanger element
- New chassis in four sizes
- DC fan motor
- Wide operating temperature range
- Enthalpy exchange efficiency of up to 88%
- Complies with ENTR LOT 6, Tier 2 requirements
- An optional CO<sub>2</sub> / PM sensor offers fan speed control adapted to the state of the indoor air quality
- Standard air filter integrated
- Optional high-performance air filter
- Ventilation control screen with RBC-AMSU52-E / AWSU52-E remote control
- Display information on indoor air quality, temperatures and humidity
- Convenient operation of all ventilation functions
- The DC motor realizes flexible air volume management as well as automatic, stable air volume adjustment.
- An electric air flap on the fresh air inlet and a wind protection reset flap on the exhaust air side prevent outside air from entering when the unit is switched off.



### Versatile ventilation options when integrated into SMMSu systems

- Delayed operation: The operation of the HRV ventilation unit is delayed by 10 to 60 minutes in 10-minute increments.
- 24-hour ventilation: The HRV ventilation unit operates continuously, even when the air conditioning system is turned off.
- Nighttime heat removal: removes hot air from the room in bypass mode and reduces the cooling load in the morning.
- Automatic ventilation mode: The ventilation mode is automatically switched (cooling, heating, drying, fan or temperature setting) depending on the operating status of the air conditioning system and the information from the room and outside air temperature sensors in the unit.



## HRV heat exchanger

Technical data			VN-U01001SY-E
Airflow	m <sup>3</sup> /h		400/600/800/1000
External static pressure	Pa		30/60/110/170
Airflow (min./nom./max.)	m <sup>3</sup> /h		400/600/800/1000
Airflow limit	m <sup>3</sup> /h		1000
Air connections diameter	mm		250
Sound pressure level (low/med/high)	dB(A)	❄️	24/33/38/41
Sound pressure level (low/med/high)	dB(A)	☀️	24/33/38/41
Temperature exchange efficiency (min./nom./max.)	%		78,0/78,5/80,0/87,0
Enthalpy exchange efficiency (min./nom./max.)	%	❄️	62,0/63,0/68,0/77,0
Enthalpy exchange efficiency (min./nom./max.)	%	☀️	72,0/73,0/75,0/83,0
Power supply	V/Ph+N/Hz		220-240/1+N/50
Heat exchanger mode power consumption (min./nom./max.)	W		74/151/291/541
Current consumption (nom.)	A		2,44
Current consumption (max.)	A		4,18
Dimensions (HxWxD)	mm		1130 x 1230 x 386
Weight	kg		63

❄️ Cooling ☀️ Heating

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

