

# HRA-I SLIM

Air renewal unit with passive heat recovery and active thermodynamic effect through an inverter heat pump



**CONSTANT-VOLUME FANS**

Constant-volume centrifugal fan that automatically adapts to the head losses of the channels.



**HEATING AND COOLING**

Generates an initial power step in heating and cooling mode.



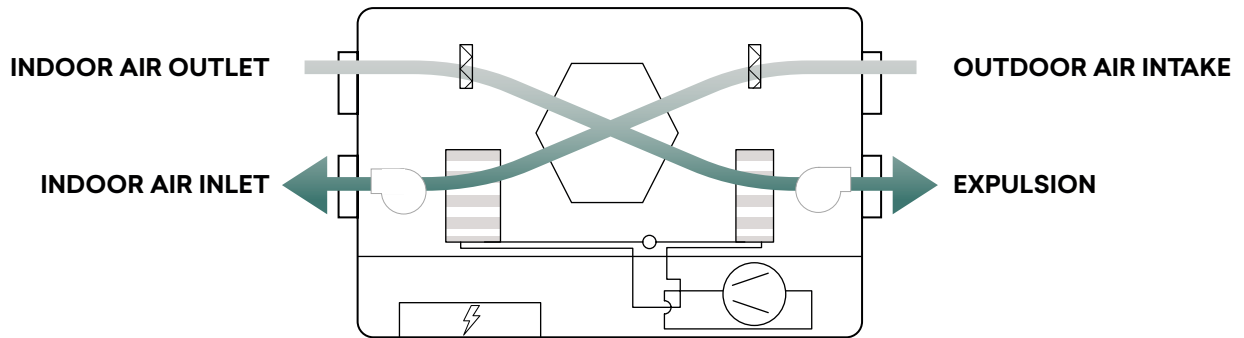
**DC INVERTER COMPRESSOR**



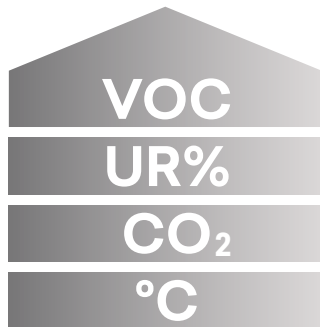
**DEHUMIDIFICATION**

Helps to dehumidify rooms in summer.

### DC INVERTER COMPRESSOR



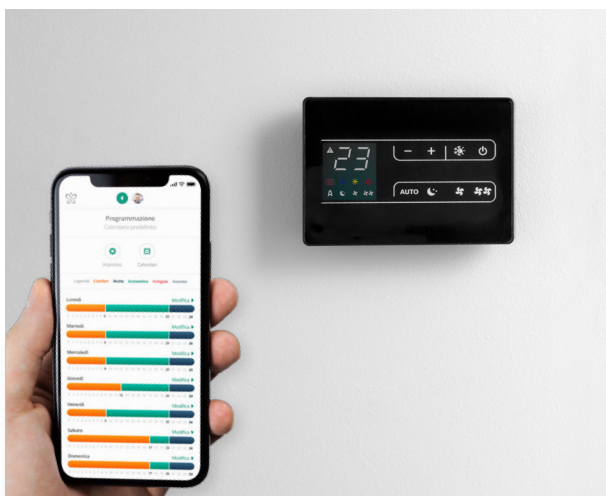
### INTEGRATED AIR QUALITY, HUMIDITY AND TEMPERATURE SENSORS



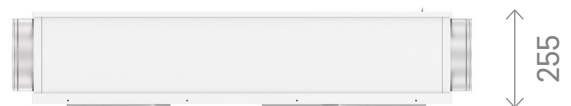
### CONSTANT-VOLUME DC INVERTER FANS



### SIMPLE AND ADVANCED CONTROL UNITS Integrated Wi-Fi



### EXTREMELY SLIM



HRA-I SLIM

# HRV HRA-I SLIM

Ventilation unit with thermodynamic heat recovery.



Maximum flow rate 180-300  
m<sup>3</sup>/h



Horizontal installation



DC Inverter Compressor

<b>VRVA14OC4II</b>	HRA-I SLIM 14 H	Nominal air renewal flow rate: 185 m <sup>3</sup> /h Recovery efficiency: 87%
<b>VRVA20OC4II</b>	HRA-I SLIM 20 H	Nominal air renewal flow rate: 235 m <sup>3</sup> /h Recovery efficiency: 85 %
<b>VRVA30OC4II</b>	HRA-I SLIM 30 H	Nominal air renewal flow rate: 318 m <sup>3</sup> /h Recovery efficiency: 83 %

Note: to ensure correct operation, the ECA031 or ECB031 control unit must be used.



	ACCESSORY DESCRIPTION	COMBINABLE PRODUCTS	CODE
<b>WALL-MOUNTED CONTROL PANELS</b>			
<b>CONTROL PANELS</b>			
	Smart-touch electronic wall-mounted control panel with thermostat, room probe and integrated Wi-Fi module (supplied with 8 m connecting cable), BLACK version	All	ECA031II
	Smart-touch electronic wall-mounted control panel with thermostat, room probe and integrated Wi-Fi module (supplied with 8 m connecting cable), WHITE version	All	ECB031II
	Smart-touch electronic wall-mounted control panel with thermostat, room probe and integrated Modbus port (supplied with 8 m connecting cable), BLACK version	All	ECA032II
	Smart-touch electronic wall-mounted control panel with thermostat, room probe and integrated Modbus port (supplied with 8 m connecting cable), WHITE version	All	ECB032II
<b>ACCESSORIES SUPPLIED SEPARATELY</b>			
<b>ELECTRIC BATTERY</b>			
	Electric heating battery complete with adjustment device / DN 200 mm. 1 kW	All	GR1090II
<b>SERVICES</b>			
<b>INITIAL START-UP</b>			
	Initial start-up not included (NET AMOUNT)	All	
	Configuration and initial start-up of the MVHR unit with BUTLER Web server (NET AMOUNT)	All	

# TECHNICAL DATA

TECHNICAL DATA		HRA-ISLIM		
Size		14 H	20 H	30 H
<b>AIR FLOW RATE</b>				
Nominal fresh air flow rate	m <sup>3</sup> /h	185	235	318
Static pressure available	Pa	135	100	100
<b>HEATING PERFORMANCE</b>				
Recovery efficiency (1)	%	87	85	83
Total heat capacity (1)	kW	3,58	3,98	5,15
Space heating capacity without fresh air load (1) (4)	kW	2,01	1,98	2,45
Static recovery heat output (1)	kW	1,53	1,69	2,23
Thermodynamic recovery heat capacity (1)	kW	2,05	2,29	2,92
Total input power (1)	kW	0,64	0,75	0,95
Total COP (1)		5,6	5,3	5,4
<b>COOLING PERFORMANCE</b>				
Total cooling capacity (2)	kW	2,18	2,46	2,99
Space cooling capacity without fresh air load (2)	kW	1,03	1,12	1,37
Static recovery cooling power (2)	kW	0,43	0,48	0,62
Thermodynamic recovery cooling capacity (2)	kW	1,75	1,98	2,37
Total input power (2)	kW	0,59	0,68	0,84
Total EER (2)		3,7	3,6	3,6
<b>GENERAL CHARACTERISTICS</b>				
Fan		Constant-volume centrifugal		
Number of fans	Nr	2		
Static heat recovery device		Counter-flow plates - polypropylene		
Summer by-pass		no		
Compressor		Rotary Inverter DC		
Filters		Flat filters - 2 x ePM1 80%		
Sound pressure (3)	dB(A)	37	38	40
<b>REFRIGERATOR FITTINGS</b>				
Refrigerant		R410a		
<b>ELECTRICAL DATA</b>				
Max fans power input	kW	0,28	0,28	0,28
Max power input compressors	kW	1,4	1,4	1,4
Max total input power	kW	1,7	1,7	1,7
Max current absorbed	A	7,8	7,8	7,8
Power Supply	V/ph/Hz	230/1/50		



**DIMENSIONS**

Width	mm	850	850	850
Height	mm	255	255	255
Depth	mm	1150	1150	1150
Diameter of fittings	mm	200	200	200
Condensate discharge outlet	mm	16	16	16
Weight	kg	82	82	82

**OPERATING LIMITS**

Heating - Indoor air min/max	°C	10/25
Heating - Outdoor air min/max	°C	-20/20
Cooling - Indoor air min/max	°C	18/28
Cooling - Outdoor air min/max	°C	15/38

(1) Outdoor air temperature -5°C, relative humidity 80%. Room temperature 20°C; relative humidity 50%, nominal air flow

(2) Outdoor air temperature 35°, 50% relative humidity. Room temperature 27°C; relative humidity 60%, nominal air flow

(3) Free-field sound pressure at a distance of 3 m as per UNI EN3744

(4) Space heating capacity = Total heating capacity - Ventilation load

Ventilation load = capacity to heat nominal fresh air flow of the unit from -5°C outdoor air to 20°C indoor air

Example for **HRA-i SLIM 30H**: Space heating capacity = Total heating capacity - Fresh air load = 5,15 - (Q x c x DT) = 5,15 - (320x0.34 x 25/1000) = 5,15 - 2.72 = 2,45 kW

Q = nominal air flow; DT = delta T = indoor air temp. - outdoor air temp.