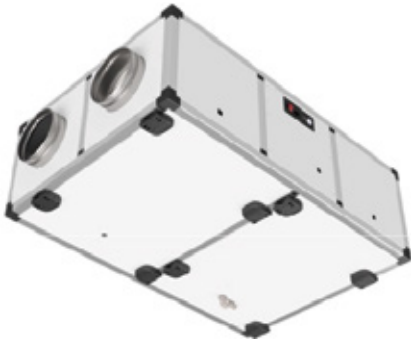


TECHNICAL DATA SHEET



PRODUCT CODE	TYPE OF CONTROLLER	VERSION	DIMENSIONS (WxHxD) mm
701HR05H1EB0002	Smart EB	H1 horizontal, ceiling mounting	1325x411x826
701HR05H13E0000	Easy 3E		
701HR05B1EB1002	Smart EB	B1 horizontal, floor-standing, outdoor	1407x542x1024
701HR05B13E1000	Easy 3E		
701HR05V1EB0002	Smart EB	V1 vertical, floor-standing	1325x926x411
701HR05V13E0000	Easy 3E		
701HR05V1EB1002	Smart EB	V1 vertical, floor-standing, outdoor	1407x612x1142
701HR05V13E1000	Easy 3E		

TECHNICAL DATA

- Flow rate up to 570 m³/h, head up to 605 Pa
- Counterflow heat recovery unit, aluminium, with efficiency >90% (Erp-2018), Eurovent certified
- EC fans, centrifugal backward-curved blades, low consumption
- Low pressure drop filters: F7 (ePM1 70%) for fresh air and M5 (ePM10 50%) for extraction
- Aluminium profile and sandwich panel structure (pre-painted sheet metal outside, galvanised sheet metal inside)
- Rock wool thermal/acoustic insulation, 25 mm thick
- Nominal voltage: 230 V 1F 50-60 Hz Max. absorption: 1,5A 180W
- Overall dimensions excluding ducts and condensate drain (w x d x h): 1209x826x411 mm
- Nominal pipe diameter: Ø 200 mm
- Weight: 107 kg
- Integrated bypass for free-cooling / free-heating (manual, motorised or automatic operation)
- Horizontal or vertical configuration, air duct orientation can be changed on site
- Available with the following controls: 3-speed Easy 3E, electronic with white LCD display Smart EB
- Integrated frost protection
- Operating conditions: ambient temperature between 0 °C and 45 °C, humidity <80%
- Standard indoor installation with possibility of outdoor installation*: fresh air temperature -7 °C** to +40 °C

* supplied with IP55 control panel and rain canopy; condensate drain insulation required.

** for lower temperatures, the use of an antifreeze heater is recommended.

AVAILABLE CONTROLLER



Easy 3E - Electronic control/connection board installed on board the machine; remote control with on/ off, speed selection from 3 preset speeds (speed calibration can be changed using trimmers on the board), opening/ closing signalling (it is possible to modify the speed setting by acting on the trimmers on the board), by-pass opening/closing signalling (with automatic control), anti-blocking protection signalling. Closure by-pass signalling (with automatic control), frost protection signalling (with automatic control by reducing the fan speed). By reducing the speed of the inlet fan), dirty filters signalling (counting of operating hours) and hours of operation) and temperature probe failure. Possibility of controlling the unit through simple digital inputs (on-off and remote speed). The remote control can be installed inside a type 503 horizontal box. Possibility of (automatic) control of a possible antifreeze heater (even 2 stages).



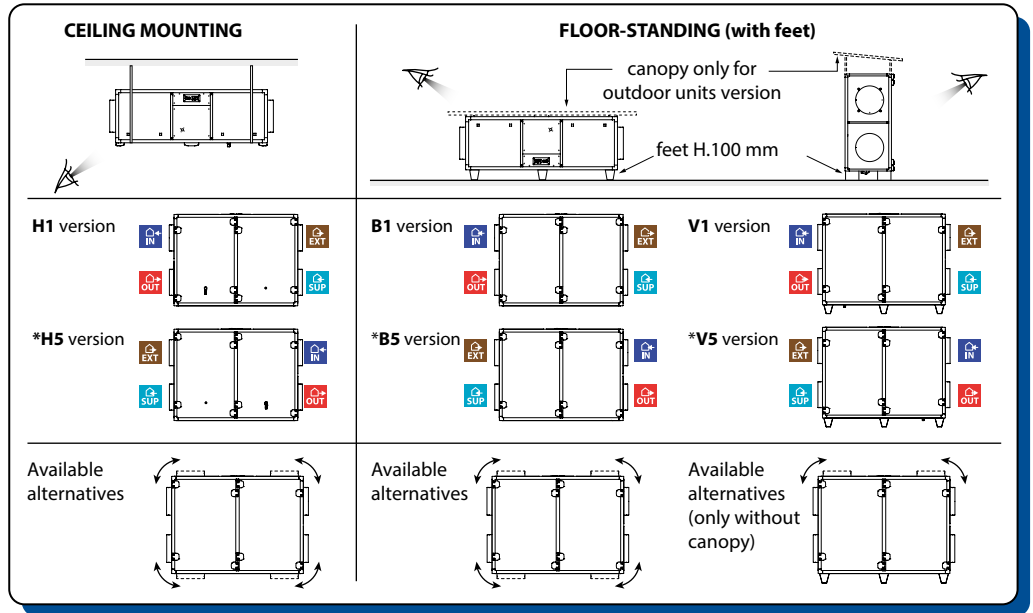
Smart EB - Electronic control/connection board installed on the machine, which can be combined with a thin white LCD display, with integrated humidity and ambient temperature probes (can be installed on a type 503 horizontal box); fan speed can be selected manually from 3 preset speeds (modifiable from 10% to 100%) or managed automatically by the control board (depending on humidity, air quality, temperature and/or other external probes); possibility of differentiating the speed of the inlet fan with respect to the exhaust fan; automatic control of the by-pass, with both free-cooling and free-heating functions; integrated frost protection with reduction in the speed of the inlet fan or, if present, with an anti-freeze resistor; automatic

management of any post-treatment batteries/resistors (both with on/off and 0-10V valves); display of any active alarms and alarm history; filter clogging alarm both with counting of operating hours and with differential pressure switches; hourly/weekly programming. Possibility of controlling the control board with simple digital inputs (remote on/off contacts, speed, summer/winter...) and of combining it with external 0-10V probes (CO2/air quality, humidity, temperature, constant flow rate/pressure control...); ModBus on RS485 for connection to external controllers/supervisors; provision for expansion modules (LAN, RS485, RS232, GSM...), available in the future.

TECHNICAL DATA SHEET

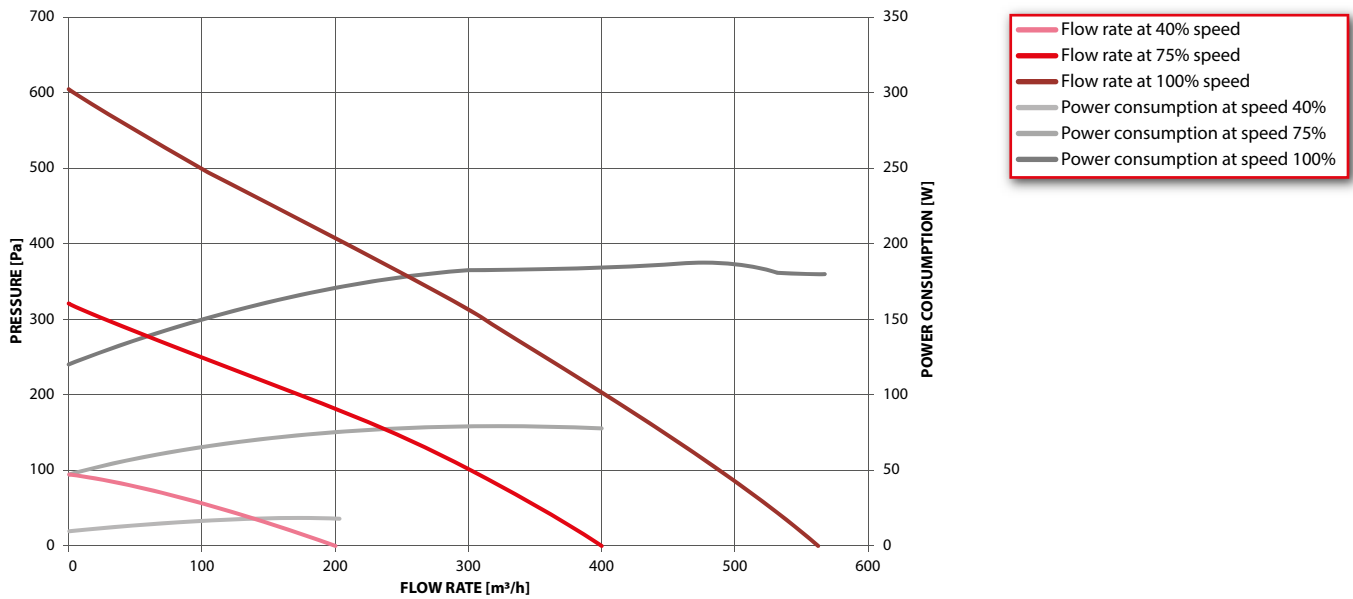
POSSIBLE CONFIGURATIONS

-  FRESH AIR INLET
-  EXHAUST AIR
-  STALE AIR EXTRACTION
-  SUPPLY AIR

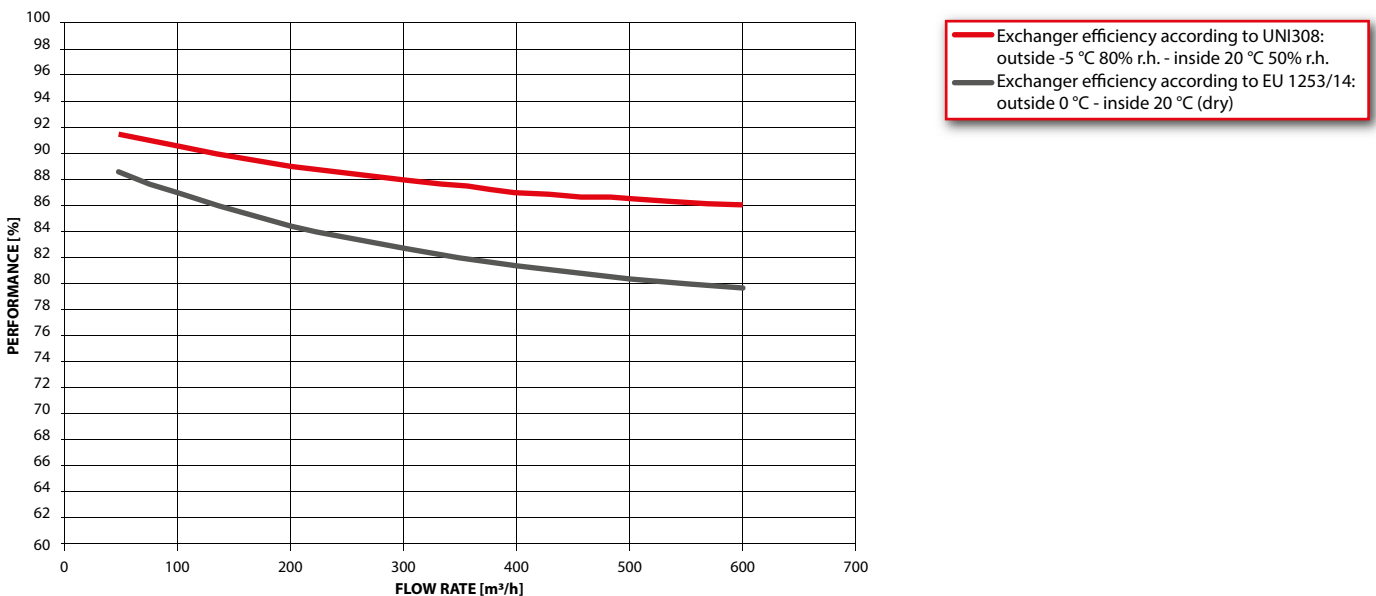


* Versions **H5**, **B5** and **V5** only on order.

AERAUIC PERFORMANCES



EXCHANGER THERMAL EFFICIENCY



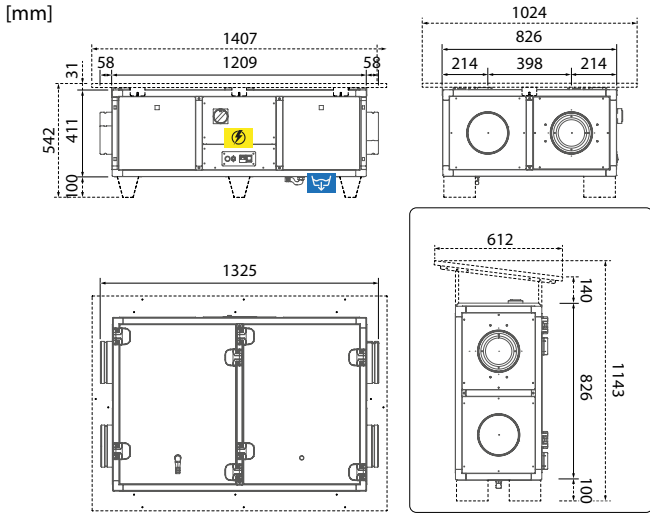
TECHNICAL DATA SHEET

NOISE

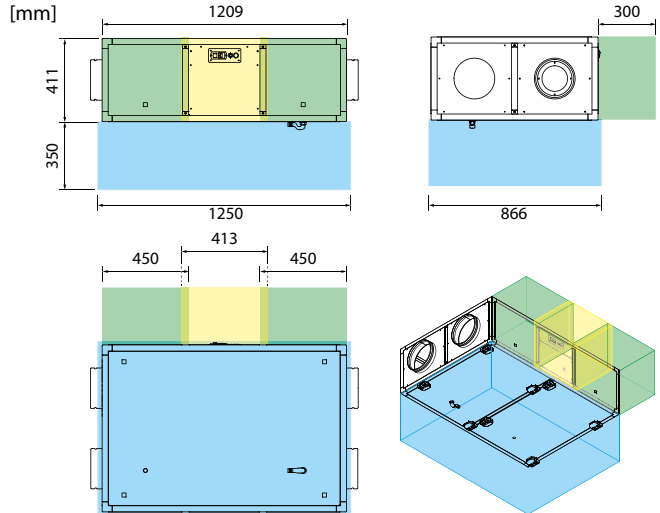
FAN SPEED	FAN FLOW RATE (m ³ /h)	NOISE RADIATED BY THE BOX (dB)									NOISE TRANSMITTED TO AIR DUCTS (outside air) (dB)								
		L _w dB (A)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L _w dB (A)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
40%	198	41	29	32	34	36	35	35	32	29	45	33	36	38	40	39	39	35	33
40%	173	40	29	32	35	36	35	34	31	28	44	33	36	39	40	39	38	35	32
40%	147	42	32	35	38	39	36	35	31	29	46	35	39	42	43	40	39	35	32
40%	121	43	34	37	41	41	37	35	32	29	48	38	41	46	46	42	40	35	32
40%	96	44	35	38	42	41	38	36	32	29	48	39	43	47	46	43	40	36	33
40%	71	44	36	39	43	41	39	37	32	29	49	41	44	48	46	43	41	36	33
40%	47	45	38	41	44	42	39	37	33	30	49	42	46	49	46	44	42	37	33
40%	23	45	39	42	45	41	40	38	33	30	50	43	47	50	46	44	42	37	33
40%	0	45	40	43	46	42	40	38	33	30	50	44	48	51	47	45	43	37	34
75%	456	53	43	45	47	47	47	48	44	43	59	48	50	52	53	53	53	50	48
75%	406	52	40	43	45	46	46	46	43	41	57	45	49	50	52	52	52	48	46
75%	362	52	40	43	45	47	46	46	43	40	57	45	48	51	52	51	51	48	45
75%	317	52	40	43	46	47	46	46	42	40	57	45	48	51	53	51	51	47	44
75%	271	53	43	46	49	50	47	46	43	40	59	48	51	55	56	53	52	48	45
75%	225	55	45	48	53	53	49	47	43	40	60	51	54	59	59	55	52	48	45
75%	179	55	47	50	54	53	50	48	44	41	61	52	55	60	59	55	53	49	46
75%	133	56	48	51	55	53	50	48	44	41	62	54	57	61	59	56	54	49	46
75%	88	57	49	53	56	53	51	49	45	42	63	55	59	63	60	57	55	50	47
75%	44	57	51	54	57	54	52	50	45	42	63	57	60	64	60	58	56	50	47
75%	0	58	52	55	58	54	52	50	46	43	64	58	62	65	60	59	56	51	48
100%	661	60	50	52	53	54	53	54	51	50	66	56	58	60	60	60	60	57	56
100%	575	57	47	50	51	44	52	52	49	48	63	52	55	57	49	58	58	55	53
100%	540	57	45	49	50	52	51	51	48	46	63	51	54	56	58	57	57	54	52
100%	480	57	45	49	51	52	51	51	48	46	63	51	54	57	58	57	57	54	51
100%	421	57	46	48	51	52	51	51	48	45	63	51	54	57	59	57	57	53	50
100%	360	58	48	51	54	55	53	51	48	45	64	54	57	61	62	59	57	54	51
100%	301	60	51	53	58	58	54	52	48	46	66	57	60	65	65	61	58	54	51
100%	240	61	52	55	59	58	55	53	49	46	67	58	62	66	65	62	59	55	52
100%	180	61	54	57	60	59	56	54	50	47	68	60	63	67	65	62	60	55	52
100%	120	62	55	58	62	59	57	55	50	47	69	61	65	69	66	63	61	56	53
100%	60	63	56	60	63	59	57	56	51	48	70	63	67	70	66	64	62	57	53
100%	0	64	58	61	64	60	58	56	52	48	71	65	69	72	67	65	63	58	54

TECHNICAL DATA SHEET

DIMENSIONS



SPACE ALLOWANCES FOR MAINTENANCE/INSPECTION



- Wiring box
- Condensation drain
- Aeraulic connections Ø 200 mm
- Condensate drain Ø 20 mm

- Unit inspection / exchanger and filter maintenance
- Inspection/maintenance of wiring box
- Filter inspection

PRODUCT SHEET

According to Regulations (EU) No. 1253/2014 and No. 1254/2014 - Data referring to maximum nominal flow rate (for other operating points check the aeraulic performance graph).

Supplier's brand	RDZ S.p.A.	
Model identifier	HR 90 500	
Type of product	UVNR, bidirectional	
Type of motorisation	Variable speed	
Heat recovery system	Countercurrent recuperator	
Heat recovery system thermal efficiency*	80,4%	
Nominal flow rate (m ³ /s)	0,147 m ³ /s	
Effective electric power input (kW)	0,182 kW	
Specific internal ventilation power SFPint (W/(m ³ /s)*	971 W/(m ³ /s)	
Frontal speed at nominal flow rate (m/s)*	1,4 m/s	
Nominal outside pressure Δps,ext (Pa)	46 Pa	
Internal pressure drop of ventilation components Δps,int (Pa)*	185 Pa	
Fan static efficiency ηs,Fan**	39,4%	
Drawing rate (%)	inside	6,3%
	external	5,4%
	recirculation	not applicable
Filter classification	Renewal: F7 (ePM1 70%) Revival: M5 (ePM10 50%)	
Location and description of visual signal filter warning signal	Version 3E: signalling LED on remote control	
	Lcd EB version: Alarm shown on remote display	
Sound power level (Lwa in dB(A))*	57 dB(A)	
Internet address with pre-assembly and disassembly instructions	www.rdz.it	

* as per EU Regulation n° 1253/2014

** calculated in accordance with EU Regulation No. 327/2011



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 QUALITY SYSTEM
 CERTIFIED BY DNV
 ISO 9001

