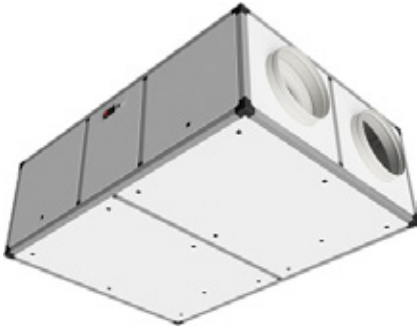


TECHNICAL DATA SHEET



PRODUCT CODE	TYPE OF CONTROLLER	VERSION	DIMENSIONS (WxHxD) mm
701HR10H1EB0002	Smart EB	H1 horizontal, ceiling mounting	1607x521x1100
701HR10H13E0000	Easy 3E		
701HR10B1EB1002	Smart EB	B1 horizontal, floor-standing, outdoor	1690x652x1298
701HR10B13E1000	Easy 3E		
701HR10V1EB0002	Smart EB	V1 vertical, floor-standing	1607x1200x521
701HR10V13E0000	Easy 3E		
701HR10V1EB1002	Smart EB	V1 vertical, floor-standing, outdoor	1690x1415x723
701HR10V13E1000	Easy 3E		

TECHNICAL DATA

- Flow rate up to 1250 m³/h, head up 500 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: 3,0A 470W
- Overall dimensions excluding ducts and condensate drain (w x d x h): 1491x1100x520 mm
- Nominal pipe diameter: Ø 315 mm
- Weight: 186 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



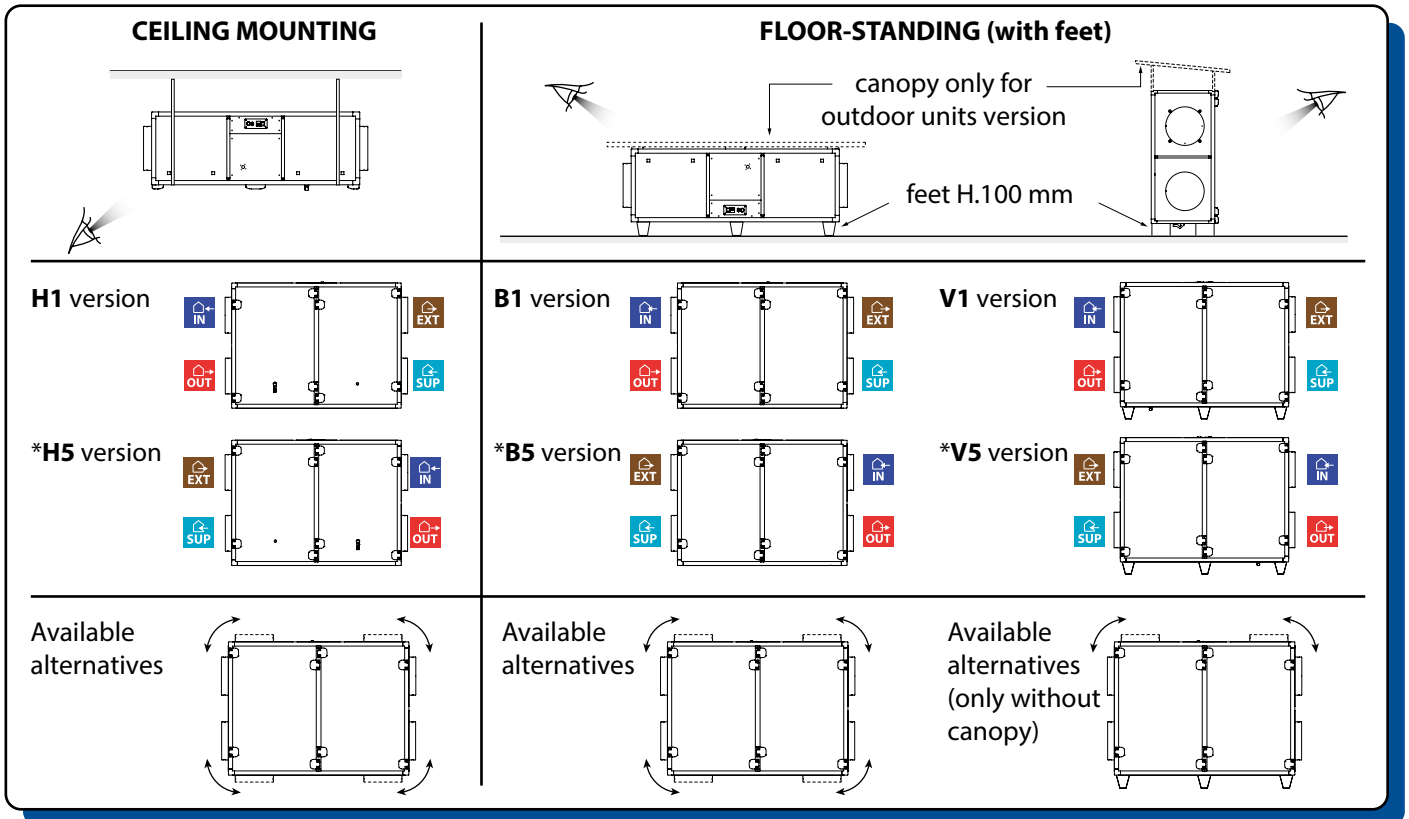
EXHAUST AIR



STALE AIR EXTRACTION

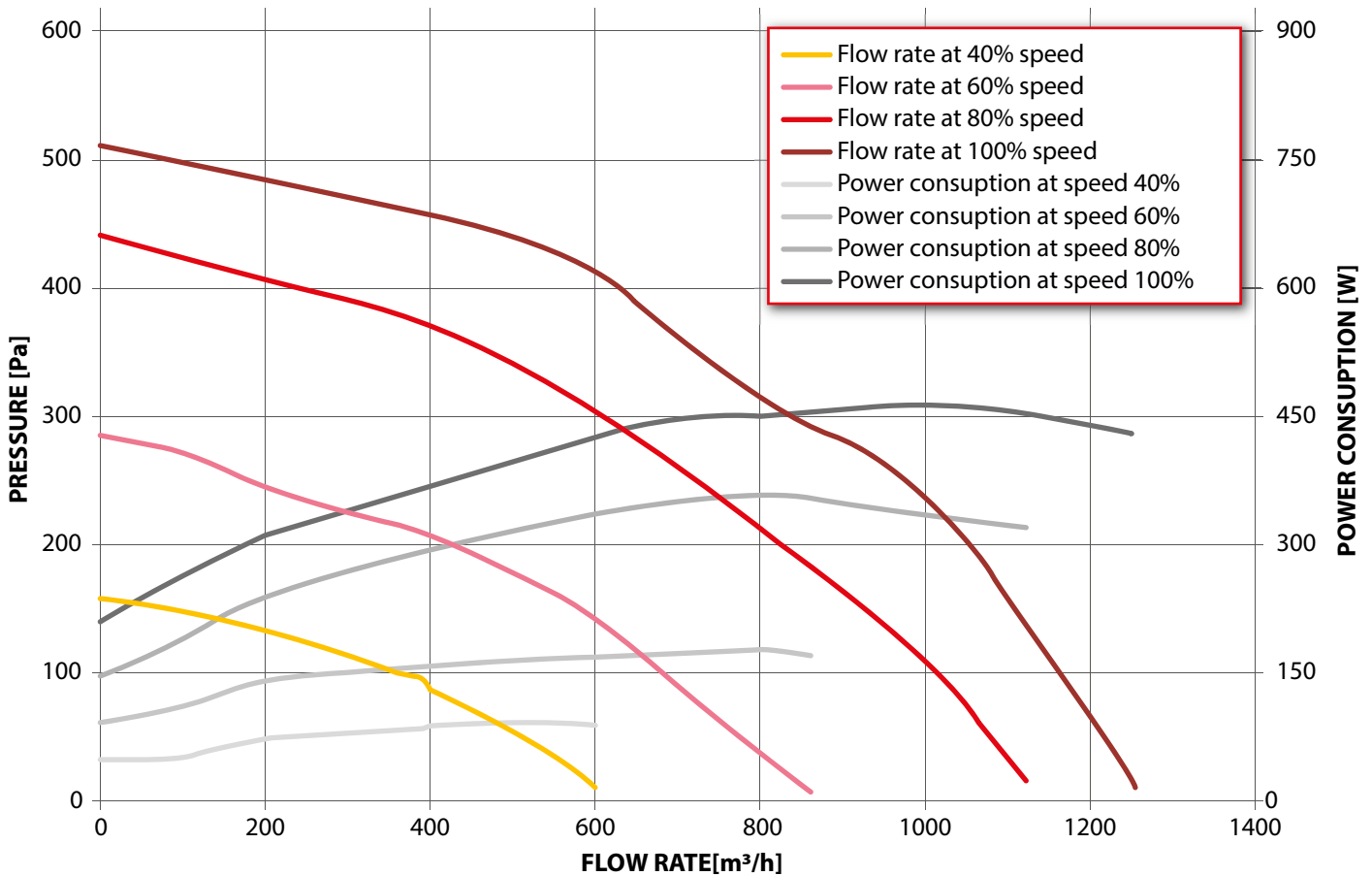


SUPPLY AIR



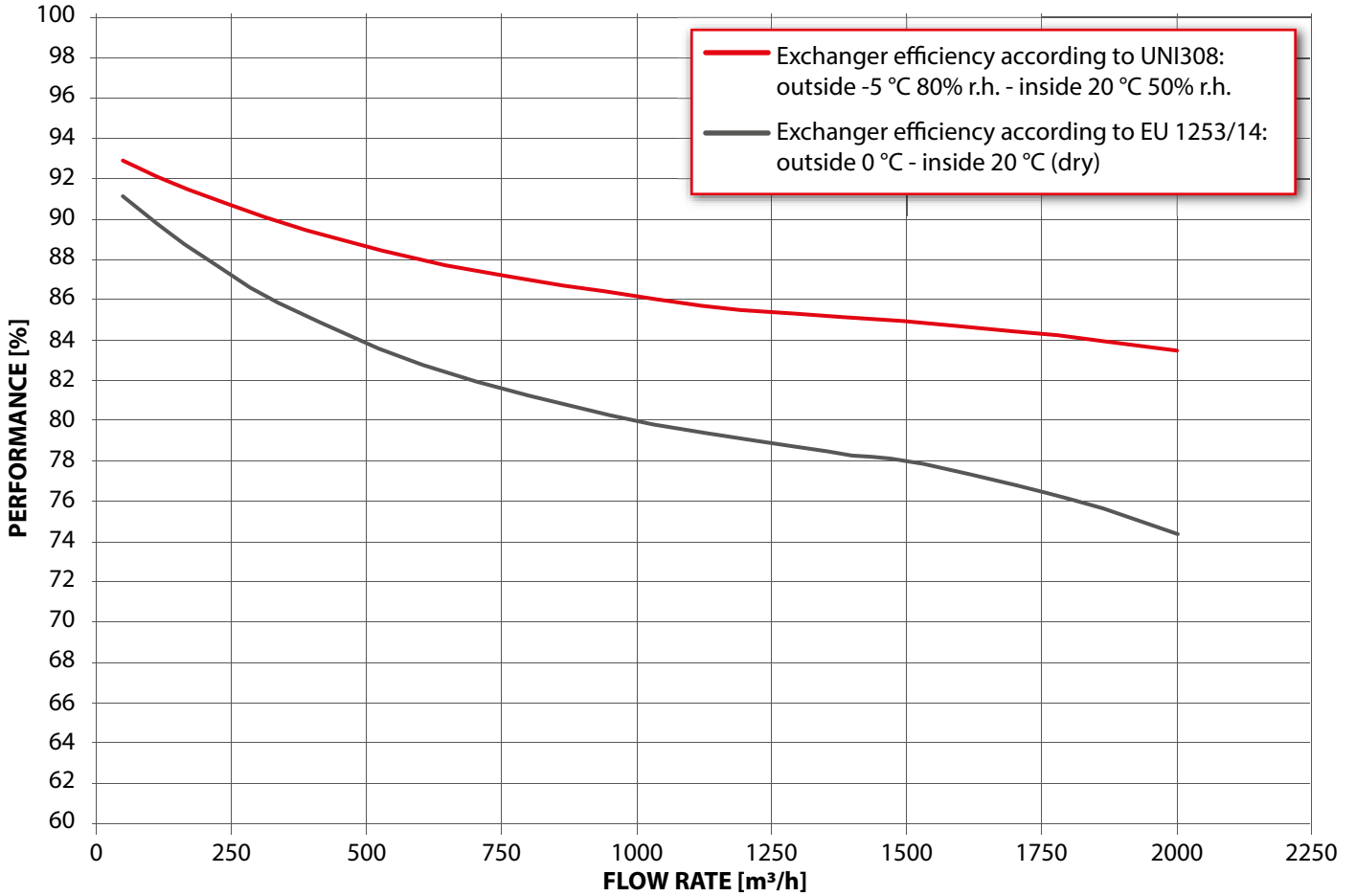
* Versions **H5**, **B5** and **V5** only on order.

AERAUIC PERFORMANCES



TECHNICAL DATA SHEET

EXCHANGER THERMAL EFFICIENCY

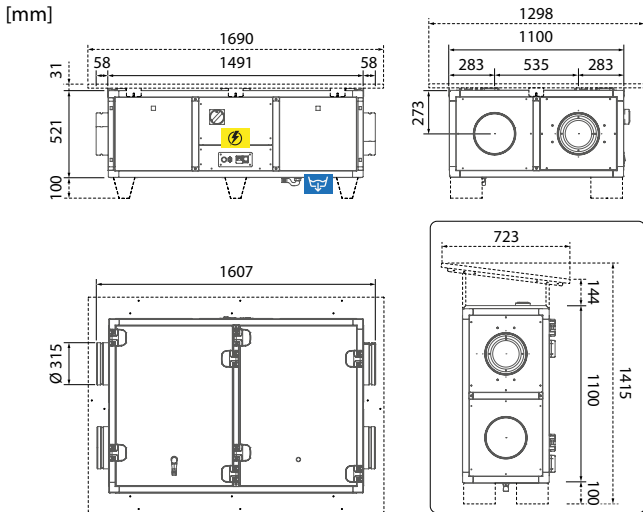


NOISE

FAN SPEED	FAN FLOW RATE (m³/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%	550	42	46	44	42	39	37	33	28	19	46	51	49	47	44	41	37	31	21
40%	100	49	53	52	51	46	43	39	33	23	54	59	58	57	52	49	44	37	25
80%	800	61	61	61	64	58	54	51	47	43	67	68	68	71	65	60	57	53	48
100%	1500	58	57	56	56	55	52	50	48	43	64	64	63	62	61	58	56	54	49
100%	1320	58	57	57	57	55	52	49	47	42	64	64	64	63	61	58	55	53	47
100%	200	68	68	68	69	66	62	59	56	50	76	76	76	78	74	70	66	63	56

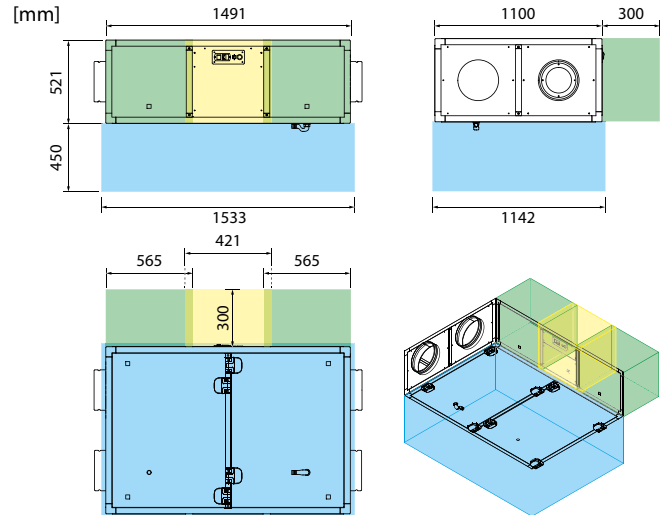
TECHNICAL DATA SHEET

DIMENSIONS



- Wiring box
- Aeration connections \varnothing 315 mm
- Condensation drain
- Condensate drain \varnothing 20 mm

SPACE ALLOWANCES FOR MAINTENANCE/INSPECTION



- 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 1000	
Type of product	UVNR, bidirectional	
Type of motorisation	Variable speed	
Heat recovery system	Countercurrent recuperator	
Heat recovery system thermal efficiency*	79%	
Nominal flow rate (m ³ /s)	0,347 m ³ /s	
Effective electric power input (kW)	0,431 kW	
Specific internal ventilation power SFPint (W/(m ³ /s)*	1154 W/(m ³ /s)	
Frontal speed at nominal flow rate (m/s)*	1,77 m/s	
Nominal outside pressure $\Delta p_{s,ext}$ (Pa)	15 Pa	
Internal pressure drop of ventilation components $\Delta p_{s,int}$ (Pa)*	267 Pa	
Fan static efficiency η_s , Fan**	47,8%	
Drawing rate (%)	inside	6,2%
	external	5,0%
	recirculation	not applicable
Filter classification	Rinewal: 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))*	64 dB(A)	
Internet address with pre-assembly and disassembly instructions	www.rdz.it	

*as per EU Regulation No. 1253/2014

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



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05/2024

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

