

RePuro

Heat recovery unit

Variable Multi Flow®

VMF



REPURO is an innovative system for recovering heat in counter-flow, which ensures the correct exchange of air in closed environments.

Thanks to the adoption of high efficiency heat exchangers up to 90%, REPURO allows the introduction of fresh air at a temperature close to that of the room concerned, reducing energy costs that you would incur if having to assure air exchange in the traditional way or by mechanical ventilation alone.

Features

- Available in 5 sizes
- 2 versions:
 - standard, self-protected against frost formation at temperature > -10°C
 - **R**, with pre-heating electric heater for continuous operation in cold climates < -10°C
- Vertical installation
- High efficiency also up to 90% (UNI EN 308)
- Free-cooling during spring and autumn thanks to automatic by-pass function
- **By-pass** no frost (Repuro 450-550-650)
- Flow rate regulation 0-100% of nominal air flow rate
- Centrifugal fans, directly coupled to "Brushless" EC electric motors with high efficiency variable speed (ERP2015)
- Microprocessor electronic card interfaced with the VMF system
- Monitoring of the units with wired control panel (supplied as standard). Innovative design, extremely slim and inexpensive, allows control of functions via a capacitive touch keypad with LCD display. The panel cable is 6 metres long. It also allows the activation of the electrical heating element in R versions PANTONE COOL GRAY 1C light grey colour front
- Heat recovery unit with hexagonal shape to increase the exchange surface
- Heat recovery unit can be easily removed on the front for cleaning or replacement
- Self-supporting galvanized steel metal panels with internal insulation
- Easy to install with standard wall mounting plate or anti-vibration mounts (AVM accessory)
- Simple to configure
- Adaptability to the existing system
- Compact size
- Quiet operation
- Standard filter on outlet G4
- Standard filter on inlet G2
- The filters can be removed for cleaning or replacement
- The installation requires the condensate discharge system

Accessories

- **AVM** : Anti-vibration mounts
- **FF7** : Air filters for fresh air with F7 efficiency
- **KSAE** : External air sensor
- **PLS** : Plenum with acoustic cladding equipped with multi-flange to ensure a uniform distribution in all treated areas. The plenum is configured with:
 - Electric heater
 - Germicidal UV Lamp
 - Hot water coil.
- **VCF41** : The kit contains a motorised 3-way valve with insulating shell, plus coupling and pipes in insulated copper. For PLS accessory with hot water coil. Power supply 230V~50Hz.
- **VMF-E5B** : white recessed panel, with backlit graphic LCD and capacitive keyboard allows the centralised command/control of a complete hydronic system consisting of:
 - Recovery units: up to 3 per programmable recovery units based on the timing and/or by measuring the air quality obtained with the VMF-VOC accessory;
 - Fan coils: up to 64 fan coil zones comprising 1 master + maximum 5 slaves;
 - Chiller/heat pump equipped with controls Modu_Control, GR3 and pCO₂ / PCO₃ (required accessory RS 485 interface respectively MODU-485A, AER485, AER485P2 / AER485P1),
 - Circulators: maximum of 12 configurable zone circulators;
 - Boiler: boiler consensus management for hot water production;
- Domestic hot water module: complete management of the production of domestic hot water through the control of diverting valve/circulator, supplementary heater, accumulation temperature sensor, anti-legionella circuit
- **VMF-E5N** : this is the variant of the previous code, but with black plastic
- **VMF-VOC** : accessories for measuring air quality (see relevant point in the description of the VMF-E5B)

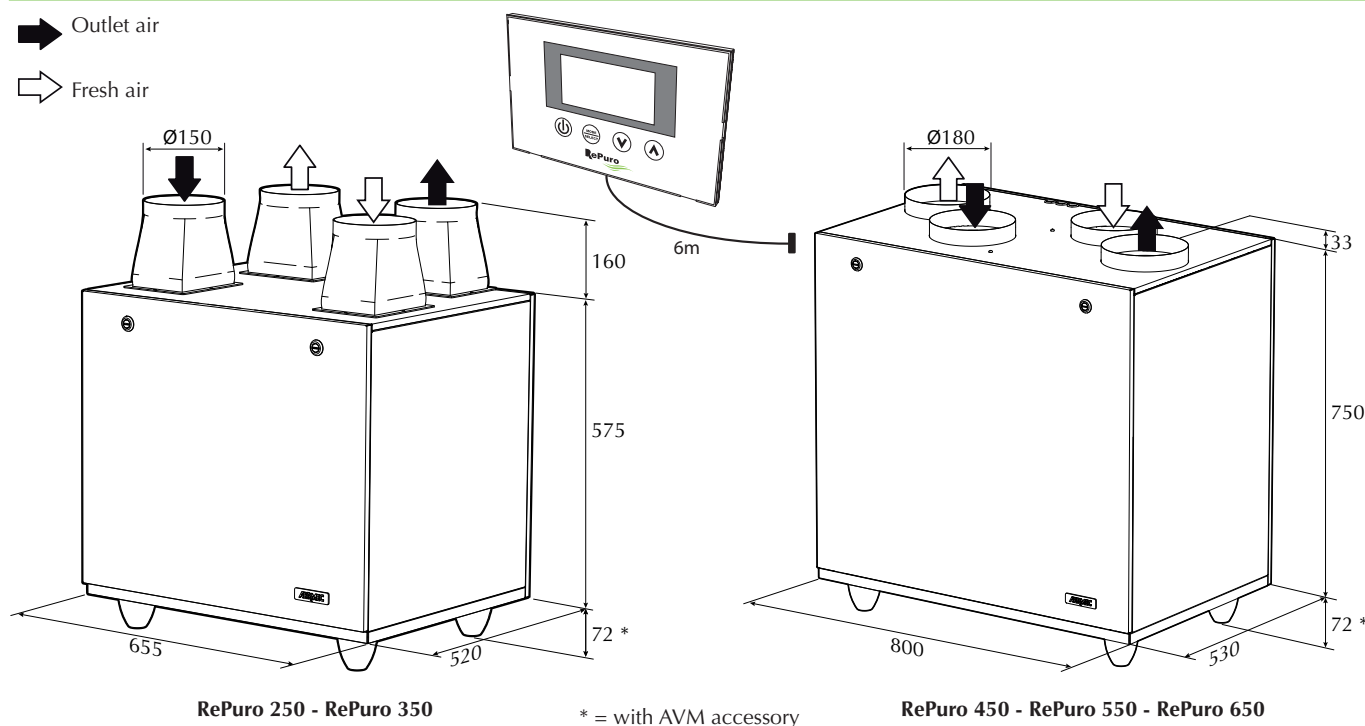
Technical data

		RePuro 250	RePuro 350	RePuro 450	RePuro 550	RePuro 650
Nominal air flow rate	m ³ /h	250	350	450	550	650
Useful static pressure	Pa	170	100	130	120	100
Efficiency heating recovery	%	91,9	89,4	90,3	88,6	87
Recovered heating capacity	W	2329	3171	4118	4940	5734
Efficiency heating recovery (*)	%	86,3	82,2	83,7	81	78,4
Recovered heating capacity (*)	W	1433	1910	2500	2957	3386
Efficiency cooling recovery	%	86,4	82,2	83,7	81	78,5
Recovered cooling capacity	W	430	573	750	887	1015
Air flow rate (2)	m ³ /h	150	200	300	350	450
Useful static pressure	Pa	320	360	300	380	400
Efficiency heating recovery	%	94,8	93,3	93	92,1	90,3
Recovered heating capacity	W	1441	1891	2830	3267	4118
Efficiency heating recovery (*)	%	91,1	88,6	88,2	86,6	83,7
Recovered heating capacity (*)	W	908	1177	1758	2014	2500
Efficiency cooling recovery	%	91,2	88,7	88,3	86,7	83,7
Recovered cooling capacity	W	272	353	527	604	750
Air flow rate (1)	m ³ /h	75	100	150	175	200
Useful static pressure	Pa	420	520	420	520	680
Efficiency heating recovery	%	97,2	96,4	96,2	95,7	95,1
Recovered heating capacity	W	739	977	1463	1697	1928
Efficiency heating recovery (*)	%	95,3	93,9	93,6	92,7	91,7
Recovered heating capacity(*)	W	475	623	932	1077	1218
Efficiency cooling recovery	%	95,3	93,9	93,6	92,7	91,7
Recovered cooling capacity	W	142	187	280	323	365
Max. input power	W	160	180	170	220	360
Power supply	V/ph/Hz	230/1/50				

Heating recovery conditions	* Heating recovery conditions	UNI EN 308	Cooling recovery conditions
Outlet air	20°C b.s	25°C b.s	26°C b.s
	50% u.r.	27% u.r.	50% u.r.
Fresh air	-10°C b.s	5°C b.s	32°C b.s
	80% u.r.	50% u.r.	50% u.r.

The useful static pressure can differ from the nominal value due to the antifreeze

Dimensions (mm)



The technical data given in this documentation are not binding. Aermec S.p.A. reserves the right to apply at any time all the modifications deemed necessary for improving the product.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293730
www.aermec.com