



DECENTRALISED HEAT RECOVERY UNIT

APPLICATION

Decentralised Mechanical Ventilation unit, with alternate flow and heat recovery core ("push-pull" type), **available in 100 and 150**, extremely low energy consumption.

For installation in single room such as living room and bedroom: for a better flow balancing two units are commonly used in parallel operation, having opposite and synchronised flows. Suitable for mounting on perimetral walls.

Ideal solution for removal of CO₂ or any other indoor volatile pollutants and to prevent condensation and mould problems which inevitably damage the building as well as the occupants' health.

SPECIFICATION

Internal ventilation unit made of high quality ABS providing long lasting shock-proof and robust construction. The unit is finished in white RAL 9010 and are UV resistant.

Multi-functional infrared remote control supplied as standard. Made from ABS, RAL 9010.

Unique design winglet-type impeller, providing enhanced aerodynamic properties, low noise and increased efficiency.

High efficient reversible EC motor with integral thermal protection, mounted on sealed for life high quality ball bearings. Designed for continuous running.

Anti-dust filter removable from inside by the tenant for maintenance.

Regenerative heat exchanger with ceramic core; high thermal efficiency.

Telescopic pipe made from 100% recycled ABS, adaptable to the wall thickness.

External grille with anti-insect net and water drip guard.

FEATURES & BENEFITS

IPX4 protection degree.

Aesthetic flat front cover for modern interior design, easily removable for cleaning without the need of tools.

Alternate flow with flow reversal approx. every 70 seconds.

Multi-Speed: operation speed can be selected among 4 options (including 'night' speed).

Night speed manually selectable for extremely quiet operation at night and HY deactivation.

Maximum speed selection via external switch (LS) or remote room sensor.

Integrated smart humidity control.

Free cooling: "extract only" or "intake only" to prevent heat exchange when not needed.

Integral led to indicate when the "free cooling" or humidity control functions are activated.

Simplified synchronisation of the units (up to 10).

Easy maintenance of the parts, heat exchanger included.

Totally recyclable plastic components.

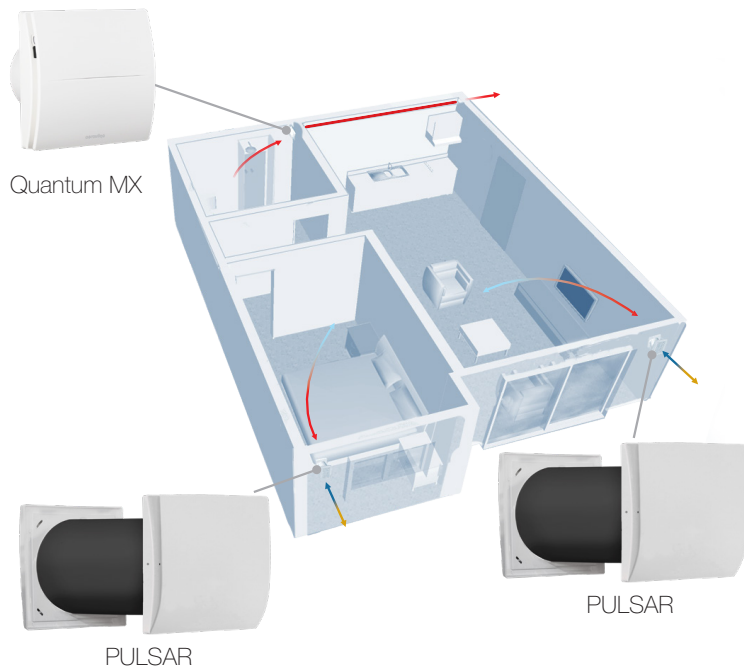
Does not require condensate drainage.

Double insulated: no earth connection is required.

Tested to the latest standards: units are tested in the TÜV Rheinland recognised laboratory at Aerauliga, meaning accurate, up to date information on electrical safety, performance and noise level that can be relied upon. Designed and manufactured in accordance with EN60335-2-80 (Low Voltage Directive) and the EMC Directive (Electromagnetic Compatibility).

PULSAR

Example of a complete ventilation system



Application: ideal solution in case of renovation.

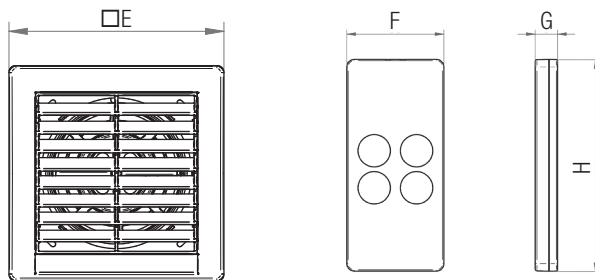
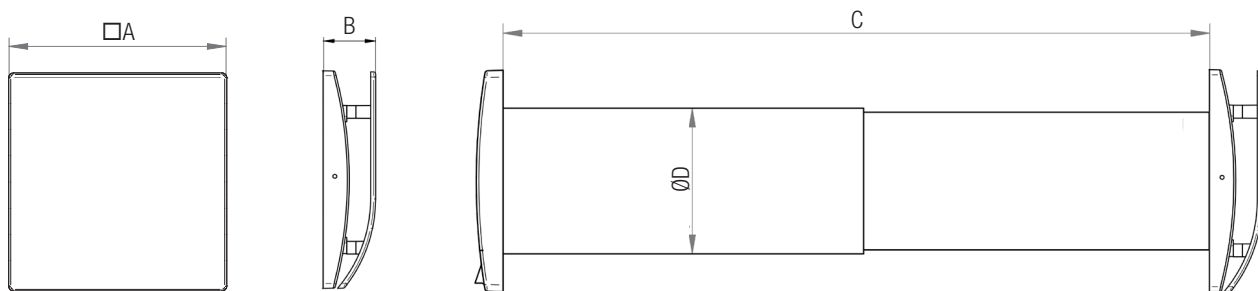
How it works: the continuous running decentralised heat recovery units (PULSAR) transfer thermal energy from air extracted from indoor rooms to incoming fresh air. Two units can work synchronised with balanced air flows and top acoustic comfort.

The system can also include a single flow decentralised unit (Quantum MX) mounted in the wet room. No air distribution system is needed.

Energy saving: the preheated supplied fresh air and continuous air changes reduce the demand for additional heating. PULSAR and Quantum MX are equipped with EC brushless motors which significantly reduce the electricity consumption.

Indoor Air Quality: a correctly specified mechanical ventilation system can ensure the quality of the indoor air is constantly maintained for the health and well-being of the occupants as well as of the building. Duly maintained filters on PULSAR ensure that incoming air is suitably filtered before it enters the home.

Dimensions (mm) and Weight (kg)



External grille

Remote controller

Model	PULSAR 100	PULSAR 150
Weight	2,3	3,9
A	164	218
B	46	51
C	300÷570	300÷570
ØD	110	159
E	164	218
F	39	39
G	9	9
H	85	85

Scheda prodotto - Direttiva ErP, Regolamenti 1253/2014 - 1254/2014

a)	Mark	-	AERAULIQA	
b)	Model	-	PULSAR 100	PULSAR 150
c)	SEC class	-	A	A+
c1)	SEC warm climates	kWh/m ² .a	-15,6	-16,2
c2)	SEC average climates	kWh/m ² .a	-37,5	-38,2
c3)	SEC cold climates	kWh/m ² .a	-75,6	-76,4
	Energy label	-	Si	Si
d)	Unit typology	-	Residential - bidirectional	
e)	Type of drive	-	Multi-speed drive	
f)	Type of Heat Recovery System	-	Heat recovery	
g)	Thermal efficiency of heat recovery	%	74	
h)	Maximum flow rate @ 0 Pa	m ³ /h	25	60
i)	Electric power input @ maximum flow rate	W	2,6	3,8
j)	Sound power level (L _{WA})	dB(A)	32	37
k)	Reference flow rate	m ³ /h	17	41
l)	Reference pressure difference	Pa	10	10
m)	Specific power input (SPI)	W/m ³ /h	0,071	0,054
n1)	Control factor	-	1	
n2)	Control typology	-	Manual control (no DCV)	
o1)	Maximum internal leakage rate	%	N/A	
o2)	Maximum external leakage rate	%	1	
p1)	Internal mixing rate	%	N/A	
p2)	External mixing rate	%	N/A	
q)	Visual filter warning	-	N/A	
r)	Instructions to install regulated grilles	-	N/A	
s)	Internet address for pre/disassembly instructions	-	www.aerauliqa.com	
t)	Airflow sensitivity to pressure variations	%	N/A	
u)	Indoor/outdoor air tightness	m ³ /h	21	60
v1)	AEC - Annual electricity consumption - warm climates	kWh	1	0,7
v2)	AEC - Annual electricity consumption - average climates	kWh	1	0,7
v3)	AEC - Annual electricity consumption - cold climates	kWh	1	0,7
w1)	AHS - Annual heating saved - warm climates	kWh	18	18,1
w2)	AHS - Annual heating saved - average climates	kWh	39,9	40
w3)	AHS - Annual heating saved - cold climates	kWh	78	78,2
	Air-flow at different speed	m ³ /h	25/15/10	60/40/20
	Power consumption at different speed	W	2,5/1,7/1,2	3,5/2,3/1,4
	Sound pressure @ 3m ⁽¹⁾ at different speed	dB(A)	29/15/10	26/18/10
	Thermal efficiency ^l	%	70/74,3/82	70/74,3/82
	Ambient temperature max	°C	-20°C ÷ +50°C	-20°C ÷ +50°C
	Degree of protection IP	-	X4	X4
	Marking/Mark	-	CE	

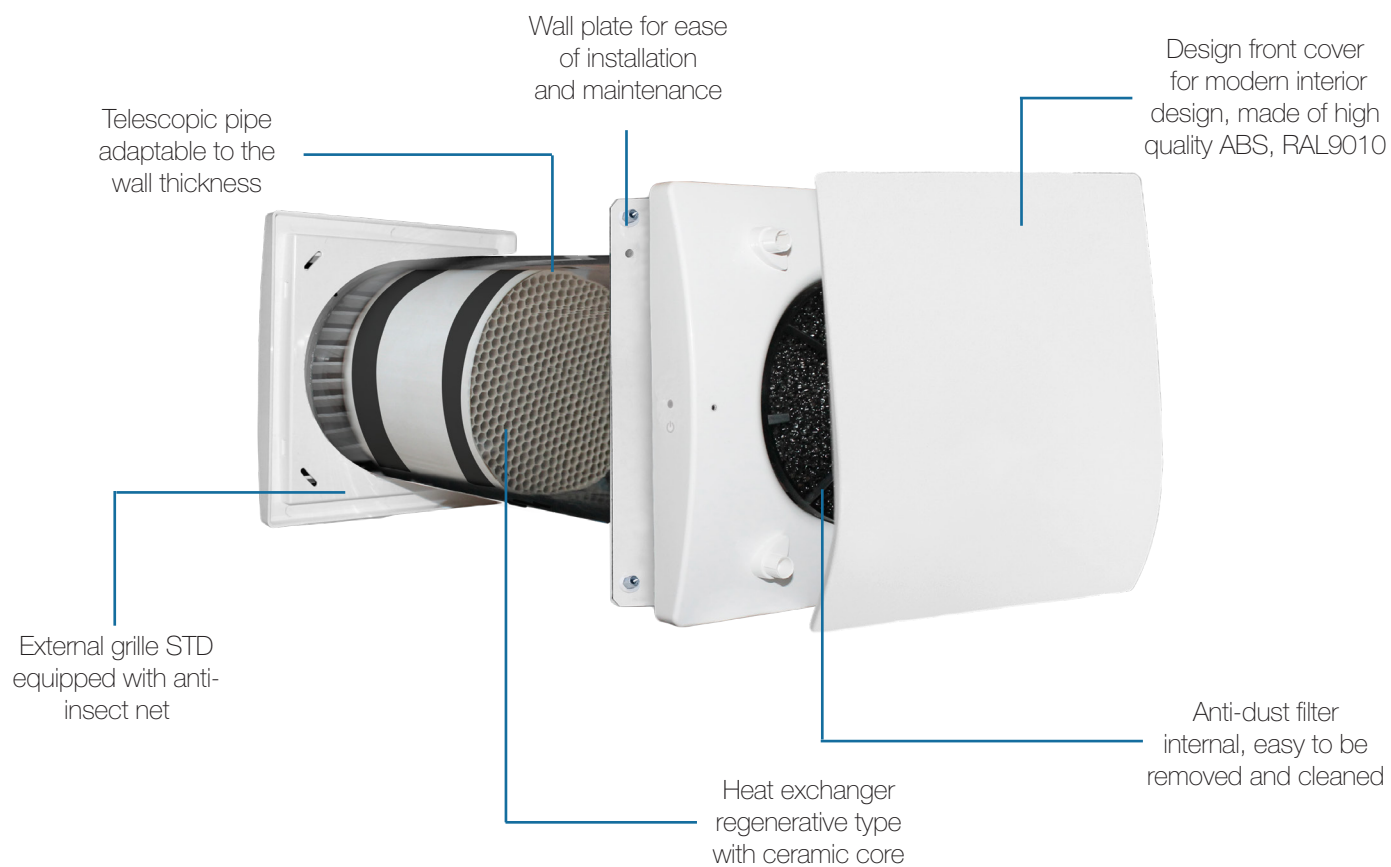
- 220-240V ~ 50Hz - Air performance measured according to ISO 5801 a 230V 50Hz, air density 1,2 Kg/m³.

- data measured in the TÜV Rheinland recognised laboratory in Aerauliqa.

(1) sound pressure level @ 3m in free field, for comparative purposes only.

PULSAR

Details



Functionality selectable via remote control (supplied):

- 4 speeds (including 'night' speed).
- Free-cooling mode to activate 'extract only' or 'intake only' mode.
- ON/OFF.

