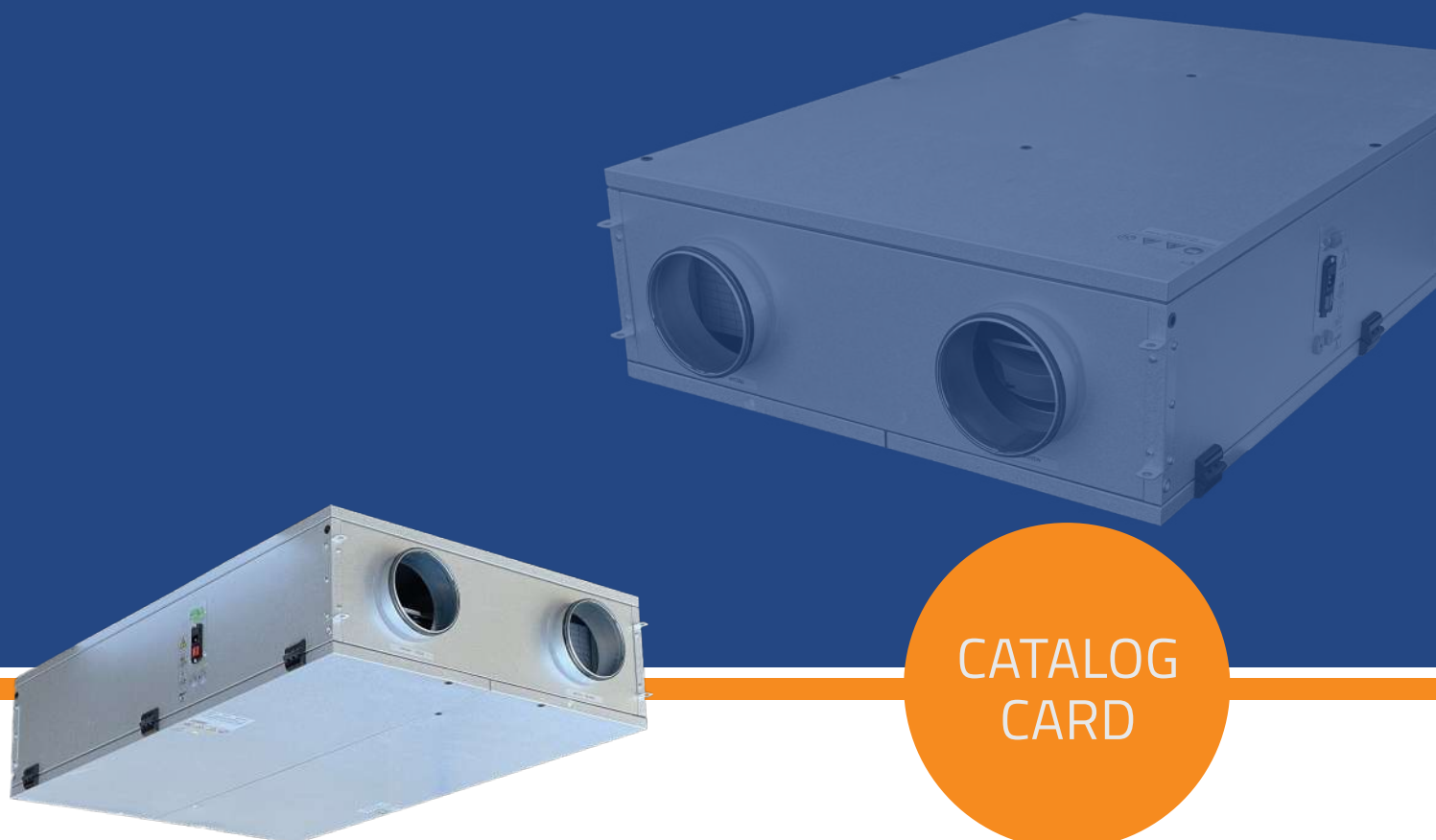


# Energy-saving heat recovery ventilation unit



## FLAT+



[www.aerovent.pl](http://www.aerovent.pl)

**aeroVent**  
REKUPERATORY I WENTYLACJA

## HIGH EFFICIENCY HEAT RECOVERY VENTILATION UNIT WITH DOUBLE FLOW FOR RESIDENTIAL BUILDINGS



### Technical features

- Self-supporting casing made up of sandwich panels with injected polyurethane foam insulation core, thickness 22 mm and density 42 kg/m<sup>3</sup>; external frame and internal parts made of zinc magnesium.
- Configuration and instalation - horizontal: suspended from the ceiling or floor installation.
- High efficiency aluminium counterflow heat exchanger, automatic defrosting.
- Motor fans. High efficiency EC plug fans.
- FILTERS - classified according to ISO 16890 - ePM10 50% (G4) exhaust air/ ePM10 50% (G4) fresh air. Dirty filters alert: hourly alarm.
- Availabe option: water or electric post-treatment (duct); electric pre-heating (internal).
- By-pass 100% automatic as standard.
- Energy class: A

### Specifications of the heat recovery ventilation unit

	FLAT 150+	FLAT 200+	FLAT 350+	FLAT 550+
Catalog number	F150	F200	F350	F550
Catalog number (enthalpic version)	F150E	F200E	F350E	F550E
Material of construction for the counter-flow heat exchanger in standard execution	Aluminium			
Material of construction for the enthalpy counter-flow heat exchanger	Polymeric membrane			
Energy class	[-]	A	A	A
Capacity at a compression of 150 Pa	[m <sup>3</sup> /h]	150	195	370
Discharge pressure	[P]	150		
Maximum discharge pressure	[Pa]	380	450	600
Maximum fan power	[W]	54	100	170
Maximum heat recovery efficiency	[%]	89	89	95
Own weight	[kg]	31	42	62
Electric pre-heater (version R, e.g. FXXXR or FXXXRE)	Optional			
Controller Standard	(cat. no. BW10001)	Required choice between BW/CL (10001)		
Controller Comfort +	(cat. no. CL10001)			
Ground heat exchanger	(cat. no. GWC20024)	Optional		
Internet communication module	(cat. no. GSMEV1000)	Optional		
Set of 4 stands for placing the unit on the floor	(cat. no. OP4G)	Optional		

(E) enthalpic version



Quiet operation



Ground exchanger operation



High actual efficiency



Internet control



Protection against smog



Weekly programming



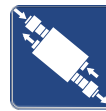
Aluminum heat exchanger



Enthalpy heat exchanger



Freeze resistance



Compatibility with water heater or water chiller

## HIGH EFFICIENCY HEAT RECOVERY VENTILATION UNIT WITH DOUBLE FLOW FOR RESIDENTIAL BUILDINGS

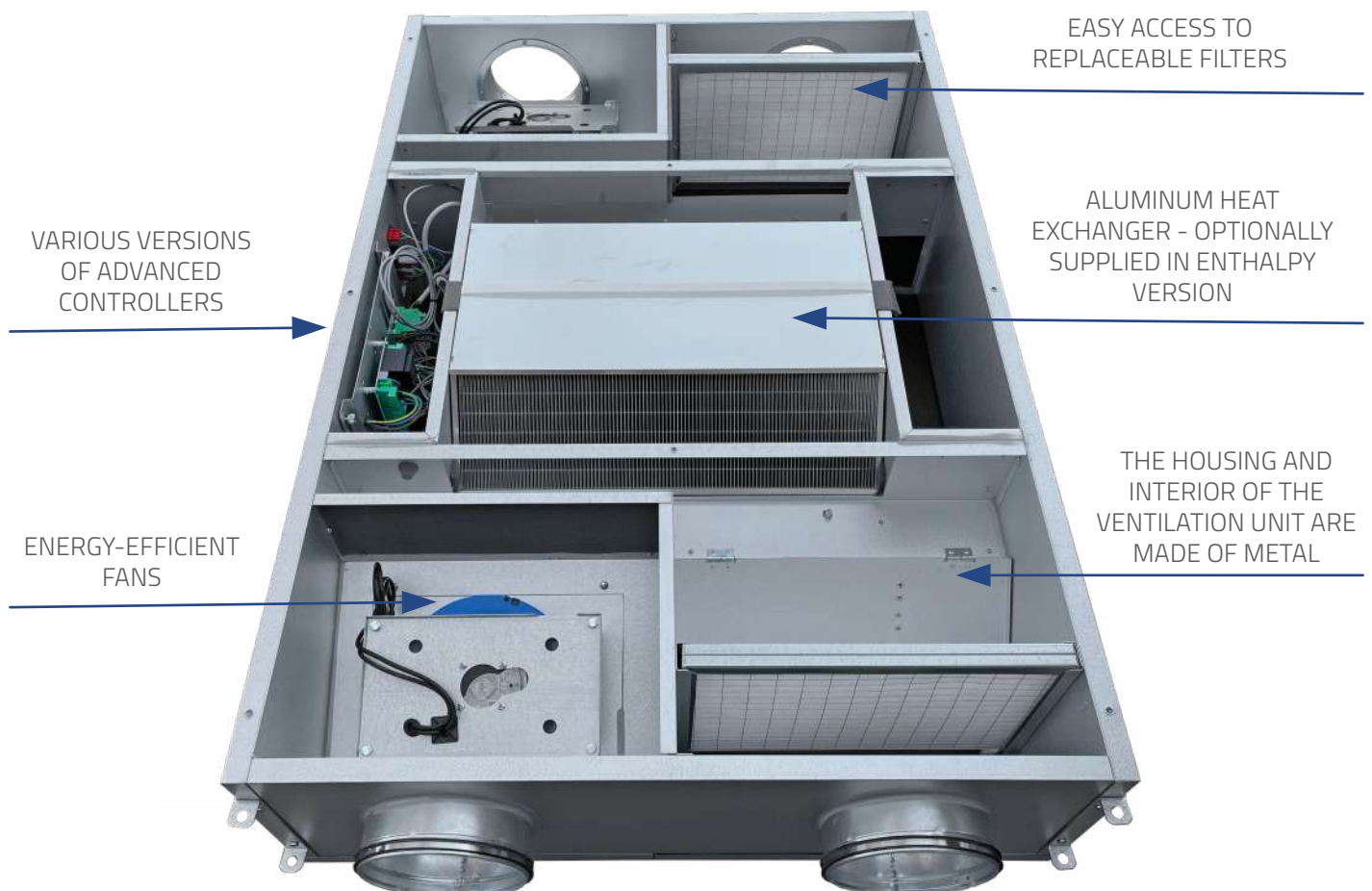
THERE ARE 4 SIZES

### Equipped

It is equipped with an aluminum counterflow heat exchanger (Eurovent certified). EC backward curved centrifugal fans allow the FLAT to reach a maximum capacity of about: 130 m<sup>3</sup>/h at 100 Pa with 62 Watt power consumption (Flat 150), 200 m<sup>3</sup>/h at 100 Pa with 97 Watt power consumption (Flat 200), 370 m<sup>3</sup>/h at 100 Pa with 161 Watt power consumption (Flat 350) and 560 m<sup>3</sup>/h at 100 Pa with 339 Watt power consumption (Flat 550). The unit includes the total by-pass, which permits to take advantage of favorable climatic conditions outside the building for automatic free cooling (or free heating).

### Structure

The FLAT is realized with a self-supporting casing made by panels, thickness 25 mm, sandwiched on injected polyurethane foam insulation. The casing and the internal parts are realized in zinc magnesium, material with a high resistance to corrosion and an outside attractive appearance. A hinge-opening panel makes easy the filters replacement (ePM10 50% (G4) for fresh air and ePM10 50% (G4) for exhaust air). The FLAT can be installed in ambient with temperature between 0° C and 45° C. The device is supplied with a set of suspensions allowing for ceiling installation.



## Advanced control system for FLAT+ HRVU

FLAT+ heat recovery units are supplied with an advanced control system. The built-in automation of the recuperator ensures:

- control of the fans,
- protection against freezing,
- the ability to integrate with a kitchen hood and a home alarm system,
- cooperation with air quality sensors embedded in the control panel,
- cooperation with external\* sensors: humidity, CO<sub>2</sub> concentration,
- control of the bypass damper and ground heat exchanger (GHE),
- control of additional accessories, e.g., heaters, coolers,
- integration with smart home management systems – Smart Home,
- MOD-BUS communication.

FLAT+ units come with a Standard Wi-Fi control panel included in the purchase price. Additionally, they can be equipped with a Comfort Wi-Fi control panel featuring a touchscreen, which visualizes the device's operation.

Bluetooth and Wi-Fi communication allow the use of an iOS or Android phone to control the unit's operation. The phone then takes over the functions of the control panel, enabling remote operation of the recuperator – locally within Bluetooth range or globally via the internet\*\*.

The basic control panel, Standard Wi-Fi, enables measurement of temperature, CO<sub>2</sub> concentration, and relative humidity in the room. This allows for fully automatic operation of the recuperator, depending on the air quality in the controlled room.

Standard Wi-Fi controller panel



Comfort Wi-Fi controller panel



Description	Standard Wi-Fi	Standard BT	Comfort Wi-Fi
Control from an Android/iOS phone from any location	+	–	+
Control via a computer browser from any location	+	–	+
Control from an Android/iOS phone locally within Bluetooth range	+	+	+
Control of fan operation (on/off, 3-level adjustment)	+	+	+
Smooth fan speed adjustment ***	–	–	+
Programming weekly operating schedules ***	–	–	+
Switching operating modes: party, fireplace, ventilation, schedules ***	–	–	+
Reminder about the need to replace filters	+	+	+
Integrated room temperature sensor	+	+	+
Integrated CO <sub>2</sub> concentration sensor	+	+	–
Integrated relative humidity sensor rH%	+	+	–

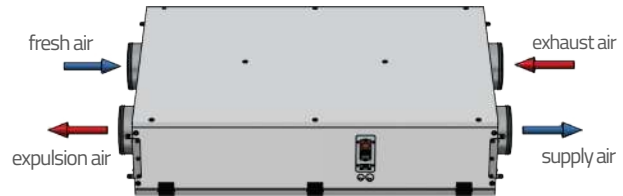
\* External sensors replace the role of built-in sensors.  
 \*\* The recuperator must be within Wi-Fi network range.  
 \*\*\* Always available from a connected BT or Wi-Fi phone.

## Configuration of connection ports

**FLAT 150+ & FLAT 200+**  
Standard version - right



**FLAT 350+ & FLAT 550+**  
Standard version - right



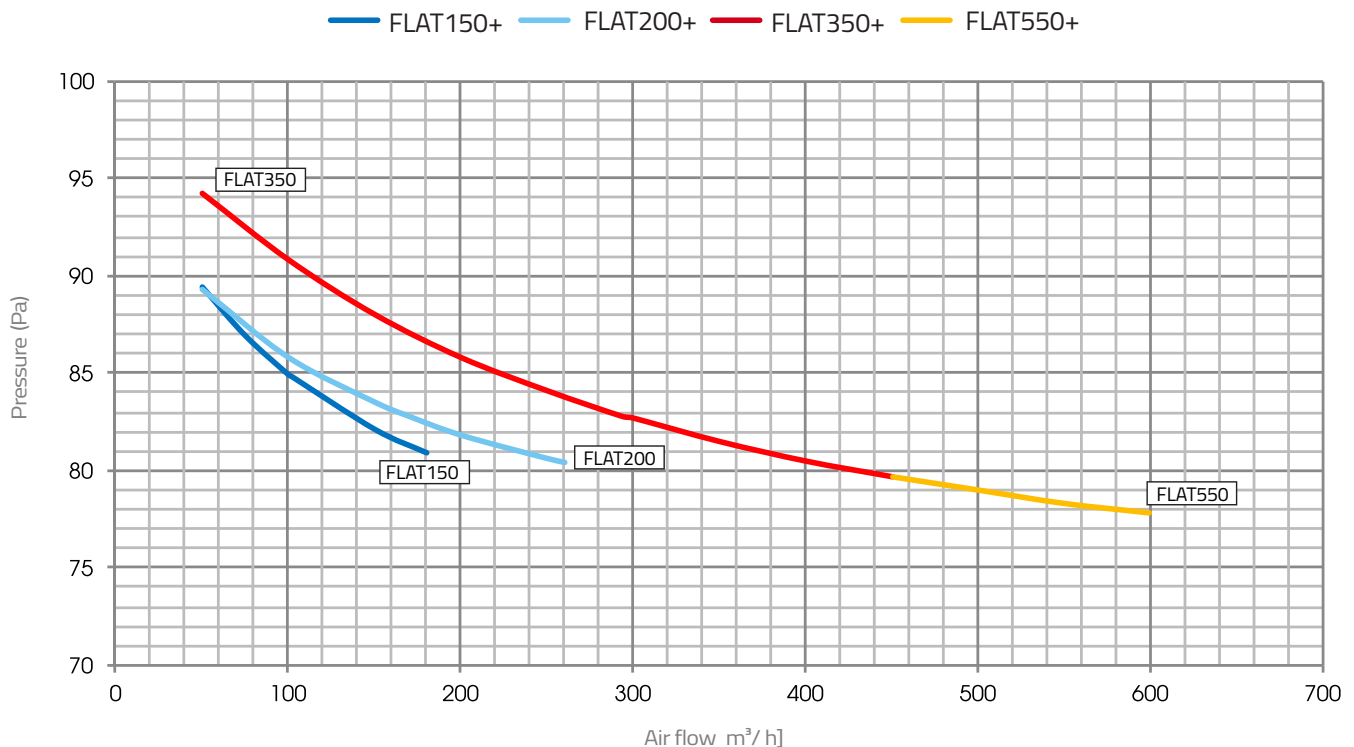
**Flat 150+ & FLAT 200+**  
Mirrored version - left



**FLAT 350+ & FLAT 550+**  
Mirrored version - left



## Heat recovery efficiency (UNI EN 13141-7)

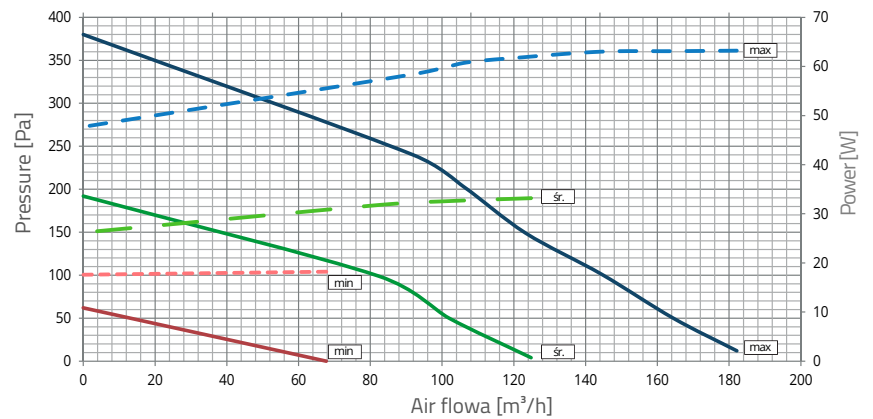


# Performance charts

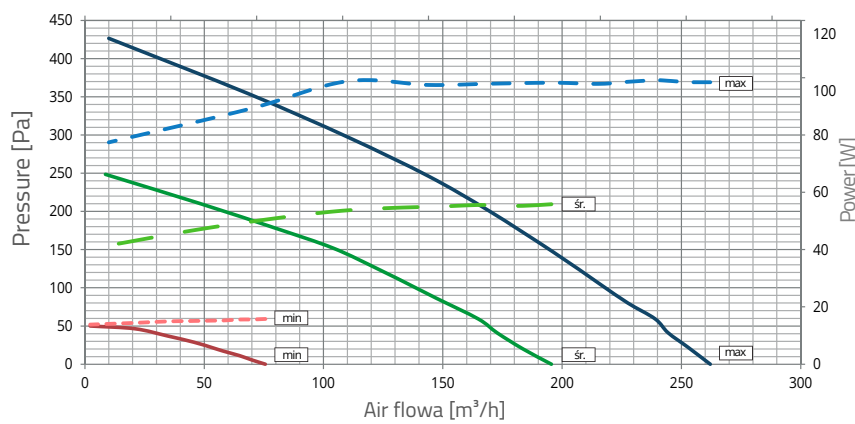
(UNI EN 13141-7)



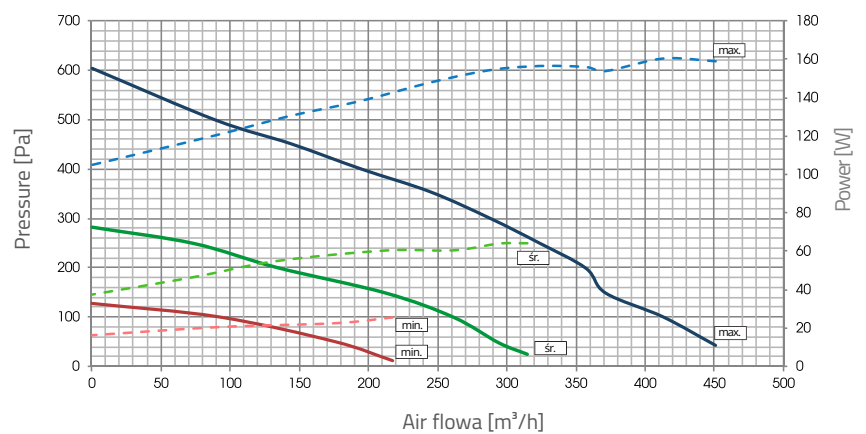
## FLAT 150+



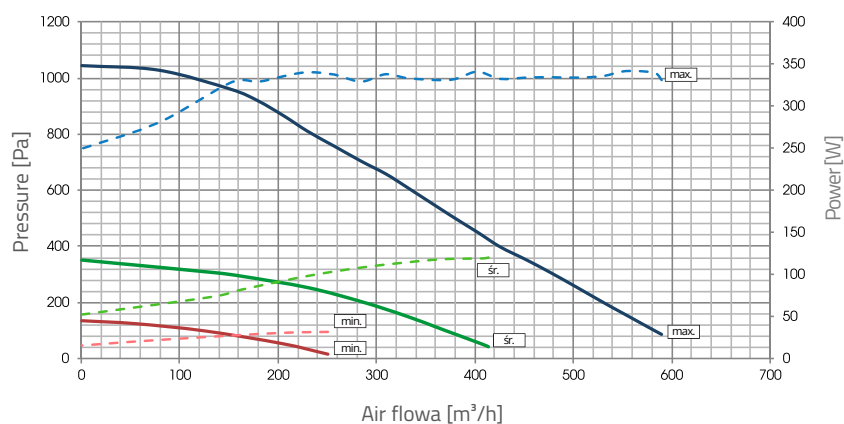
## FLAT 200+



## FLAT 350+

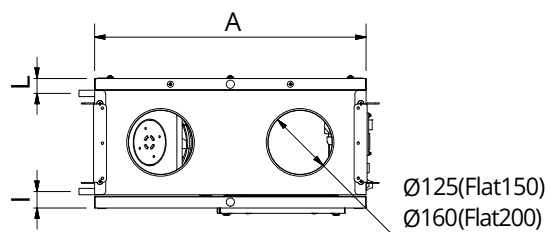
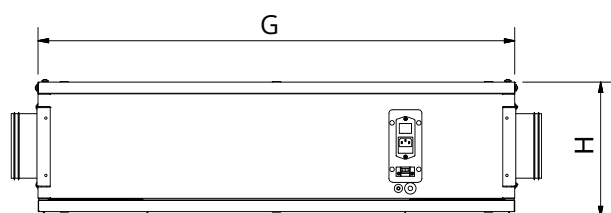
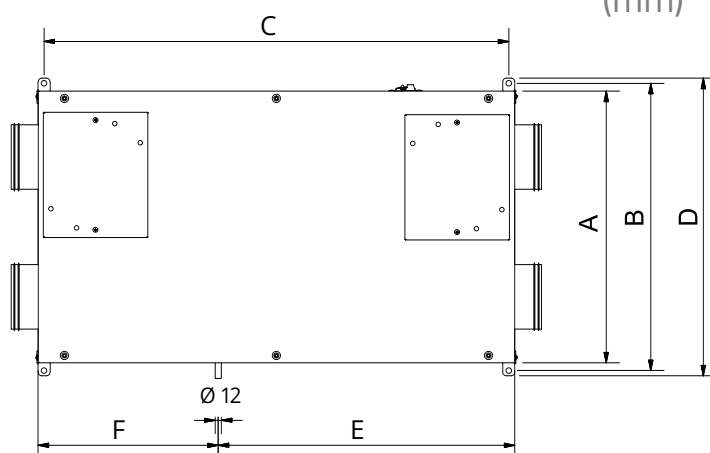


## FLAT 550+



## Dimensions FLAT 150+, FLAT 200+

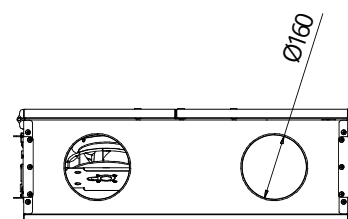
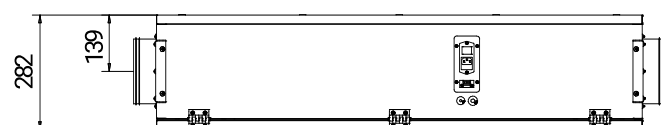
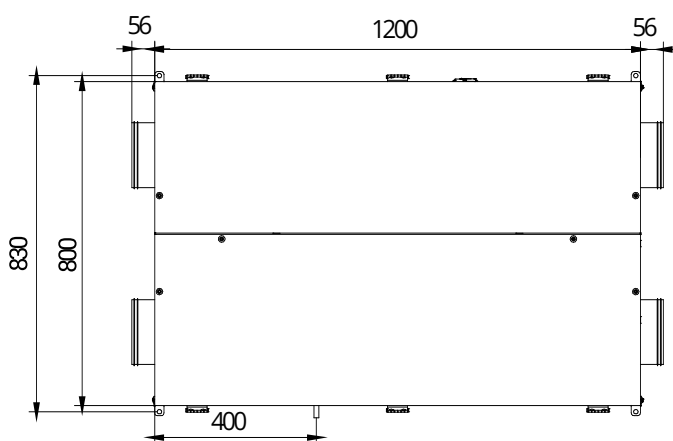
(mm)



Unit	A	B	C	D	E	F	G	H	I	J
FLAT 150+	520	550	890	570	568	345	913	258	32	29
FLAT 200+	580	610	1211	630	858	376	1234	258	32	29

## Dimensions FLAT 350+, FLAT 550+

(mm)



# aeroVent

REKUPERATORY I WENTYLACJA

- Complete ventilation system for single-family houses
- Use of the highest quality components
- Guaranteed energy savings

The information contained in this data sheet contains only general descriptions or features of the product, which may change as a result of further product development.



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The owner of the aeroVent brand is Santech Sp. z o.o.

**santech**

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