



indoor air quality and energy saving

TECHNICAL DATA



UNIT	CONTROL	ENERGETIC CLASS
FLAT-V 1	CTR08-PH	B
	EVO(D)-PH	A
	EVO(D)-PH + probe	A
FLAT-V 2	CTR08-PH	B
	EVO(D)-PH	A
	EVO(D)-PH + probe	A

FLAT-V



HEAT RECOVERY VENTILATION UNITS for RESIDENTIAL BUILDINGS



FLAT-V

High efficiency heat recovery ventilation unit with double flow for residential buildings. There are 2 sizes.

EQUIPPED

The FLAT-V 1 unit is equipped with a PVC counter-current heat exchanger while the size 2 with an aluminum exchanger (Eurovent® certified). Backward curved centrifugal fans. The standard partial by-pass allows you to take advantage of favorable climatic conditions outside the building for free cooling (or free heating).

STRUCTURE

The FLAT is realized with a self-supporting casing made by panels, thickness 22 mm, sandwiched on injected polyurethane foam insulation. The casing and the internal parts are realized in Aluzinc®, material with a high resistance to corrosion and an outside attractive appearance. A panel with a hinged opening makes it easy to access the filters ePM10 50% (G4) for fresh air and ePM10 50% (G4) for exhaust air. FLAT-V is designed to be installed inside buildings with an ambient temperature between 0 ° C and 45 ° C and can be installed on the wall.

CONTROLS

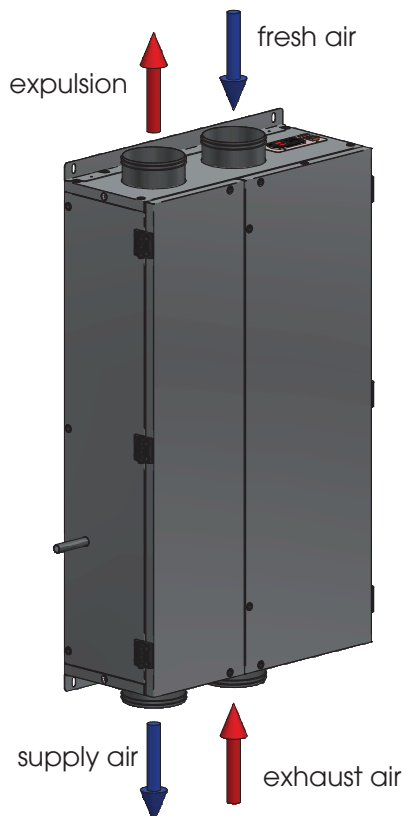
The FLAT is supplied with control system and easy connection to the power supply. It's also available the versions with simplified CTR-S control, the version with EVO-PH control and the version with EVOD-PH-IP control ready for integration in home automation systems (Modbus protocol with Ethernet connection or, upon request, with the addition of the RS485 connection). The new version of our control systems allows the user to shift from one control system to another very quickly and easily by replacing the remote panel even after the installation.

The CTR-S control allows the user to select three levels of fan speed or the possibility to stop them, It automatically manages the bypass and prevents the heat exchanger freezing by programming the fan speed or, if specifically required, the electric pre-heater resistance (optional item to install inside the unit); The control advises the user if filters needs to be replaced (the filter clogging is monitored by a pair of differential pressure series) or any other fault. It is available a version without filters pressure switches (dirty control with hour counter, factory setting), filters G4 renewal / G4 recovery and by-pass made by fans unbalance (recommended a ventilation grid).

The EVO-PH control has a colorful touch screen interface, it gives an intuitive operating status of the unit and it allows programming the fan speed. This control has a weekly time schedule for automatic fans, it can be controlled by an external switch to activate the booster and it can automatically adjust the air flow when connected to an air quality sensor. It supports post-air treatment accessories (in the duct) and it advises the user if filters needs to be replaced (the filter clogging is monitored by a pair of differential pressure series) or if there is any other fault showing where it comes from. If the unit has included the Kit COP Kit and Kit CAV (installed in the duct outside the unit) you can program the heat recovery ventilator either as constant pressure or as constant flow.

The EVOD-PH-IP control has the same characteristics of the EVO-PH version with the addition of the Modbus communication protocol and it allows full control of the unit by the Home Automation software system. If the unit is in a Home Automation network, the webserver lets the user interact with it throughout a device connected to an Internet browser.

For a more complete view of the characteristics of the control panels, please read the specific manuals



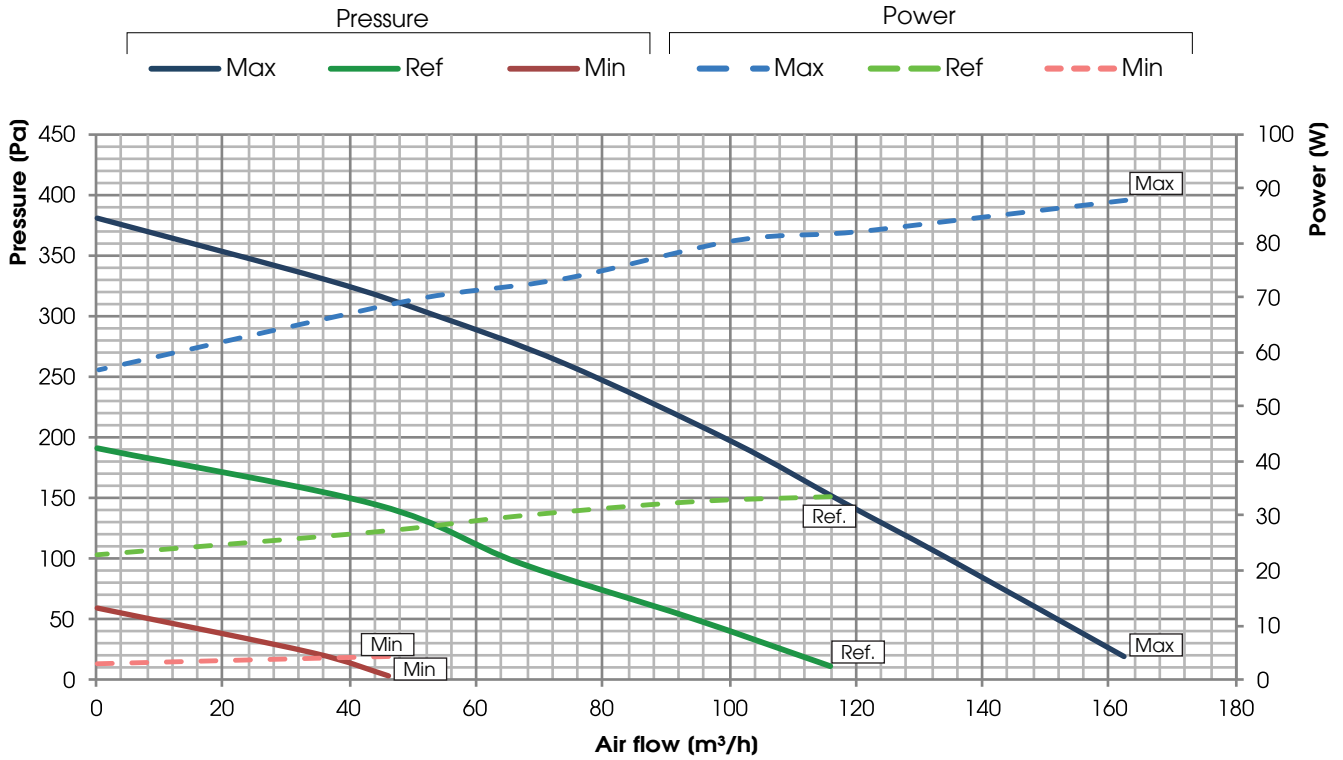
Counterflow heat exchanger made of aluminum manufactured by RECUTECH. RECUTECH participates in the Eurovent Certification Program



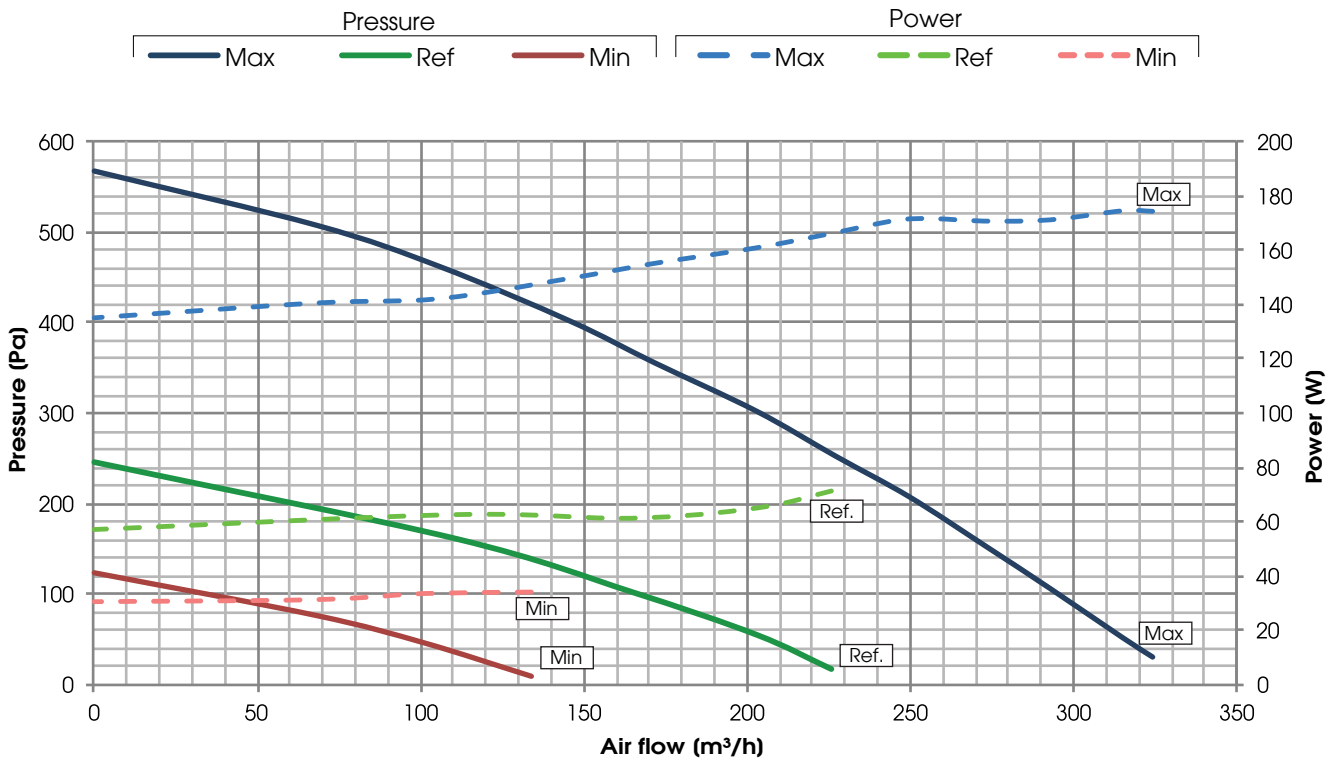
PERFORMANCES (UNI EN 13141-7)

The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue
 The declared performances are with CLEAN filters, and guaranteed ONLY with the original filters UTEK low pressure drop.

FLAT-V 1



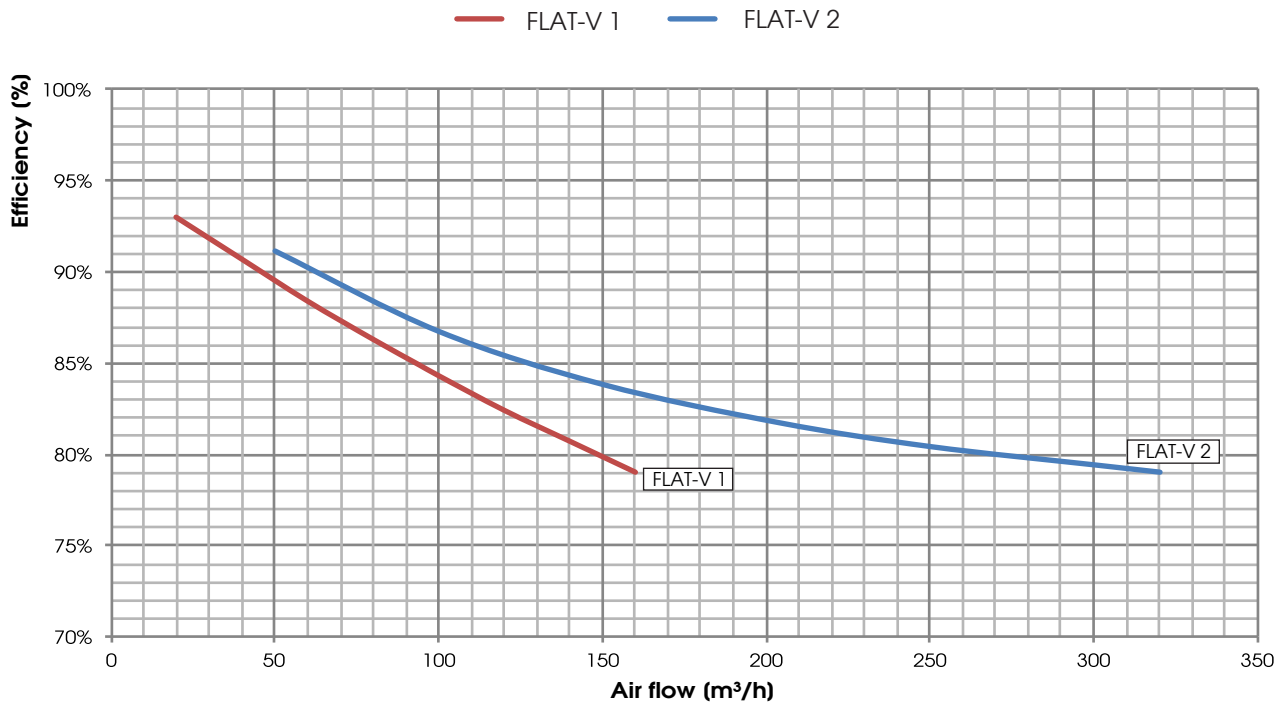
FLAT-V 2





HEAT RECOVERY PERFORMANCE (sensible efficiency)

Values referred to the following conditions (UNI EN 13141-7): T_{bs} external air 7°C; U.R. external 72%; T_{bs} environment 20°C; U.R. environment 28%



TEST LEAKAGE FLAT-VER according UNI EN 13141-7

LEAKAGE	TEST CONDITIONS	FLAT-V 1 CLASS	FLAT-V 2 CLASS
ESTERNO	Positive pression 250 Pa	A3	A2
ESTERNO	Negative pression 250 Pa	A3	A2
INTERNO	Pressure difference 100 Pa	A3	A2

NOISE LEVEL

L_w Sound power level taken in accordance to UNI EN ISO 3747 CLASS 3

Unit FLAT-V 1	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L _w dB(A)
100%	58,5	69,8	61,2	49,0	42,6	34,5	40,3	63,2
REF	52,7	62,8	50,7	43,6	32,3	27,7	37,6	55,5

Unit FLAT-V 1	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L _w dB(A)
100%	59,8	71,1	67,4	59,4	53,6	50,6	52,5	67,7
REF	53,9	64,0	59,2	48,7	43,9	41,0	42,7	59,5

Unit FLAT-V 2	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L _w dB(A)
100%	59,9	66,0	64,1	49,0	44,7	39,1	40,9	62,9
REF	52,6	63,5	51,0	42,2	36,4	30,9	38,9	56,1

Unit FLAT-V 2	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L _w dB(A)
100%	58,4	72,2	66,2	57,7	55,0	53,0	62,0	68,3
REF	51,4	70,3	53,7	49,5	47,3	43,4	49,2	62,6

ELECTRICAL DATA

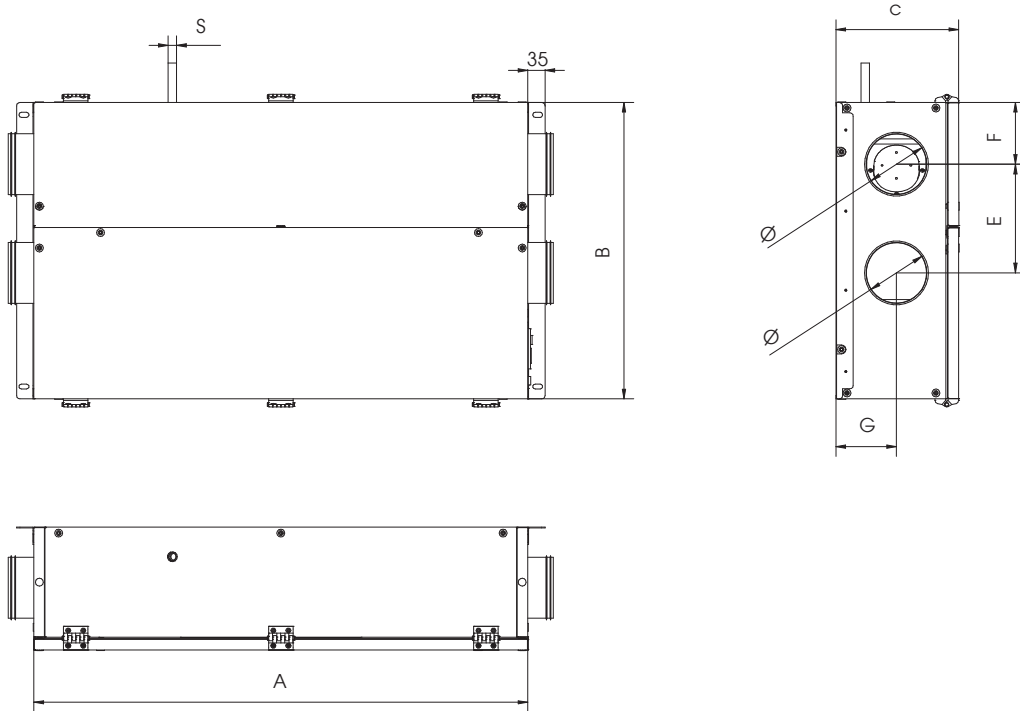
UNIT	FAN				UNIT FLAT-V	
	Power *(W)	Supply	Current max. (A)	Insulation class	Supply	Current max. (A)
FLAT-V 1	2 X 50	230 V, 50/60 Hz 1F	2 X 0,46	IP 54 classe B	230 V, 50 Hz 1F	1,0
FLAT-V 2	2 X 85	230 V, 50/60 Hz 1F	2 X 0,75	IP 54 classe B	230 V, 50 Hz 1F	1,6

(*) Fan data, it's referred to the global absorbed power graph of the machine in the working point



FLAT-V 1 e 2

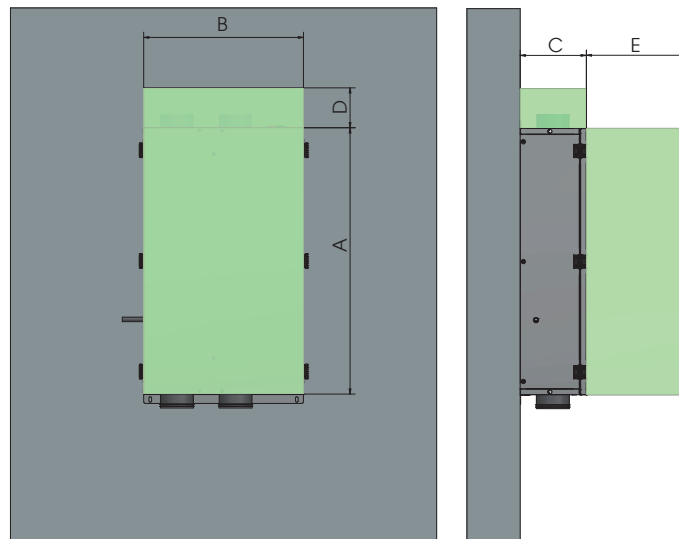
DIMENSIONS (mm) WEIGHT (kg)



UNIT	A	B	C	E	F	G	Ø	S	Weight (kg)
FLAT-V 1	1000	600	248,5	220	125	122,5	125	17	34
FLAT-V 2	1060	650	273	280	185	124	160	17	41

FLAT-V 1 and 2 Wall Installation

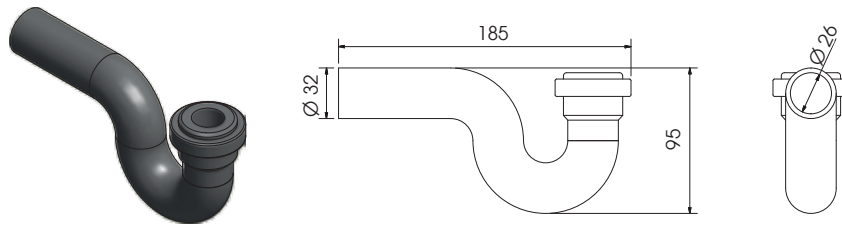
Minimum required space for maintenance (mm)



UNIT	A	B	C	D	E
FLAT-V 1	1000	600	248,5	150	380
FLAT-V 2	1060	650	273	150	350



STANDARD SIPHON (mm)



Electrical resistance

DATI RESISTENZA ELETTRICA DI PRE RISCALDAMENTO				
Model	Supply	Power (kW)	Courrent (A)	No. of stages
FLAT-V 1/2	230V, 50Hz, 1F	0,5	2,2	1

N.B. - for POST treatment batteries see the Tecno-price list ACCESSORIES

CLA & UTEK reserves the right to at any time the necessary changes to improve products without prior notice .

Dear Customer

Thanks for your attention to the product UTEK , designed and manufactured to ensure the real values to the User: Quality, Safety and Savings on working.



Made in Italy

**COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
ISO 9001**



the Dealer
FLAT-V_2020_1_EN



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