AERECO

VBP+

Assistance fan for hybrid ventilation

Hybrid ventilation, more energy efficient than ever

The VBP+ hybrid ventilation fan range is the ideal solution for the renovation of buildings equipped with natural or passive stack ventilation ducts, improving the performance of the ventilation through a very low electrical consumption.

Its hybrid working, at very low pressure, (natural or mechanical mode) enables to automatically adapt to weather conditions to keep the pressure in the ductwork, all year long. The VBP+ is specially designed for demand controlled ventilation (humidity sensitive, presence detection or other activation modes) thanks to its pressure management. Located on a terrace or on a slope roof, the VBP+ is easily installed on the top of chimney through adaptation parts. Its large free area (equivalent to 8 ducts of ø125 mm) allows to gather several collective or individual ducts without reducing the cross section. Not critical in case of supply default with its patented blades design (no pressure losses when stopped), the VBP+ requires a very light maintenance in comparison with standard mechanical systems, making of it a privileged solution for social housing. Equipped with an EC motor, the VBP+ has a very low energy consumption.The VBP+ exists in two versions, both fire resistant, which enable the VBP+ «C4» and the VBP+ «R» to withstand to hot smoke up to 400°C for 30 minutes.

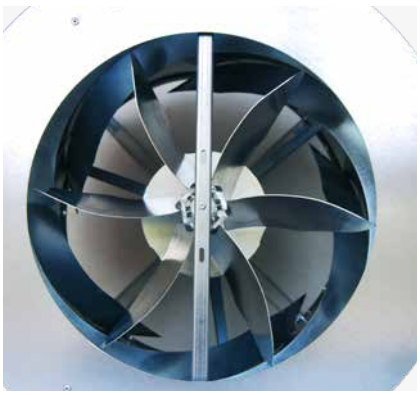
- **Hybrid working: allows natural ventilation when stopped / at very low speed.**
- **Low energy consumption: only 35 W at 800 m³/h.**
- **Constant pressure: adapted to demand controlled ventilation**
- **Fire safety: can withstand hot smoke up to 400°c for 30 mn**
- **Adapts to weather conditions: management system (ms version) with temperature sensor.**
- **Renovation or new building, on natural ventilation ductwork.**
- **Alarm output (ms version).**
- **Low maintenance: low air speed = lower dusting.**
- **Not critical: ensures natural ventilation if the fan stops.**

Patented smart blades design

The unique smart propeller design of VBP+ prevents from creating pressure loss when stopped: the central blades are parallel to the airflow, the airflow being generated through static peripheral paddles.Thus, the system is not critical in case of supply failure (natural ventilation working mode). The C4 version offers a galvanised steel propeller; the R version is equipped with a plastic one.

Fire safety

The VBP+ fan range offers a very high level of fire satefy: thanks to body and structure in galvanized steel and their patented design, the R version and the C4 version enable to extract smoke up to 400 °C, at their nominal airflow, during 30 minutes. Thanks to the non-combustible matrix made of calcium silicate protecting the motor, the C4 version can still operate to fire smoke up to 400°C, at least during 30 minutes.



VBP+ Fan for hybrid ventilation

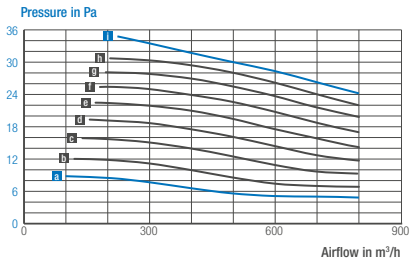
		VBP+ R	VBP+ C4
Standard code		VB21828 (ST) / VB21826 (MS)	VB21829 (ST) / VB21827 (MS)
Airflow characteristics			
Max. airflow	m^3/h	800	800
Max. pressure @ Max. airflow	Pa	27	23
Max. pressure @ 200 m^3/h	Pa	39 (ST) / 35 (MS)	35
Acoustics			
Max. sound power level Lw	dB(A)	59	61
Max. sound pressure level Lp @ 4m	dB(A)	36	38
Electrics			
Motor type		EC (Electronic commutation)	EC (Electronic commutation)
Power supply		230 VAC, 50-60 Hz	230 VAC, 50-60 Hz
Max. power	W	42	46
IP degrees of protection		IP54	IP54
Control		by built-in potentiometer (ST) or by management system (MS)	by built-in potentiometer (ST) or by management system (MS)
Degree of pollution		1	1
Characteristics			
Weight	kg	17	20
Colours		metal grey / black	metal grey / black
Material (main)		galvanised steel / PE	galvanised steel / PE
External dimensions	mm	888 / ø590	888 / ø590
Fire safety			
Guarantee of extracted nominal airflow*		■	■
Preservation of the motor running*		-	■
Installation			
Number of available draft connections		1	1
Outlet		ø354	ø354
Installation	mm	installation on terrace, head of the air duct / 3 x screws ø8	installation on terrace, head of the air duct / 3 x screws ø8
Operation			
Direct-drive impeller		by motor coupler	by shaft / motor coupler
Max. speed	RPM	650	650

Remark: the indicated pressure is the **static** pressure.

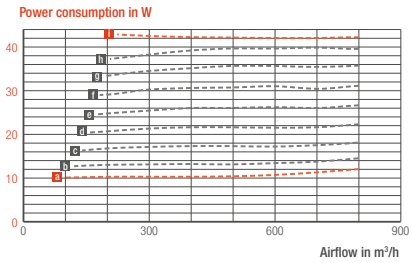
*Test conditions = 400°C ; 30 minutes

■ standard

Airflow characteristics



— VBP+ C4 – Minimum and maximum speeds
— VBP+ C4 – Intermediate curves (examples)



-- VBP+ C4 – Minimum and maximum speeds
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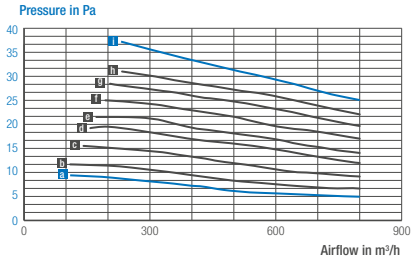
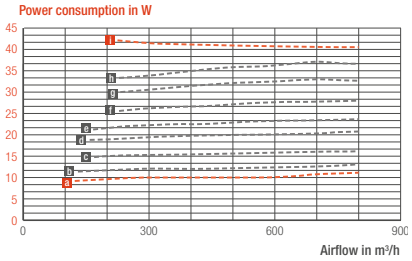
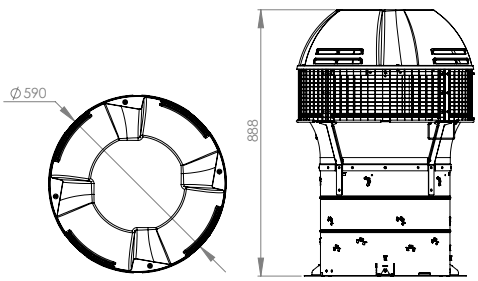


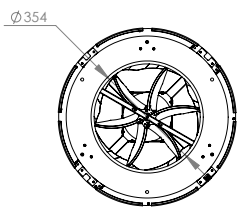
— VBP+ R – Minimum and maximum speeds
— VBP+ R – Intermediate curves (examples)



-- VBP+ R – Minimum and maximum speeds
-- VBP+ R – Intermediate curves (examples)

Dimensions in mm





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