



VBW Engineering sp. z o.o.

# BO VESTA H

Compact device  
with counterflow heat exchanger



## BO VESTA H



Size

5

The BO VESTA H ventilation unit is a compact device with a high-performance counter-flow heat exchanger. The product line includes 5 sizes with capacities from 300 to 6000 m<sup>3</sup>/h.

The device is designed for indoor installation in a standing system. The compact dimensions of the device allow for installation in small spaces. Additionally, the unit has connections for flexible ventilation ducts from the top. In addition, it is possible to make the device in a swimming pool version and with a heat pump.

The unit is delivered to the customer as a standard ready-to-use unit. With an innovative self-supporting design, we put all the necessary components in a small, compact case. There is a built-in power and control switchgear, full internal wiring (operating in Plug & Play system) and intuitive automation.



Air flow [m<sup>3</sup>/h]

300 – 6 000



Compact device



Counterflow heat exchanger



Internal execution



Self-supporting construction

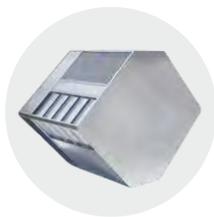


Standing device

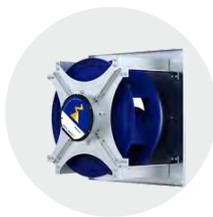


Plug&Play system

# Device components



Highly efficient counterflow heat exchanger



Energy-saving fans with EC motors (IE4)



Panel filters



PTC electric or water heater



Heat pump (option)

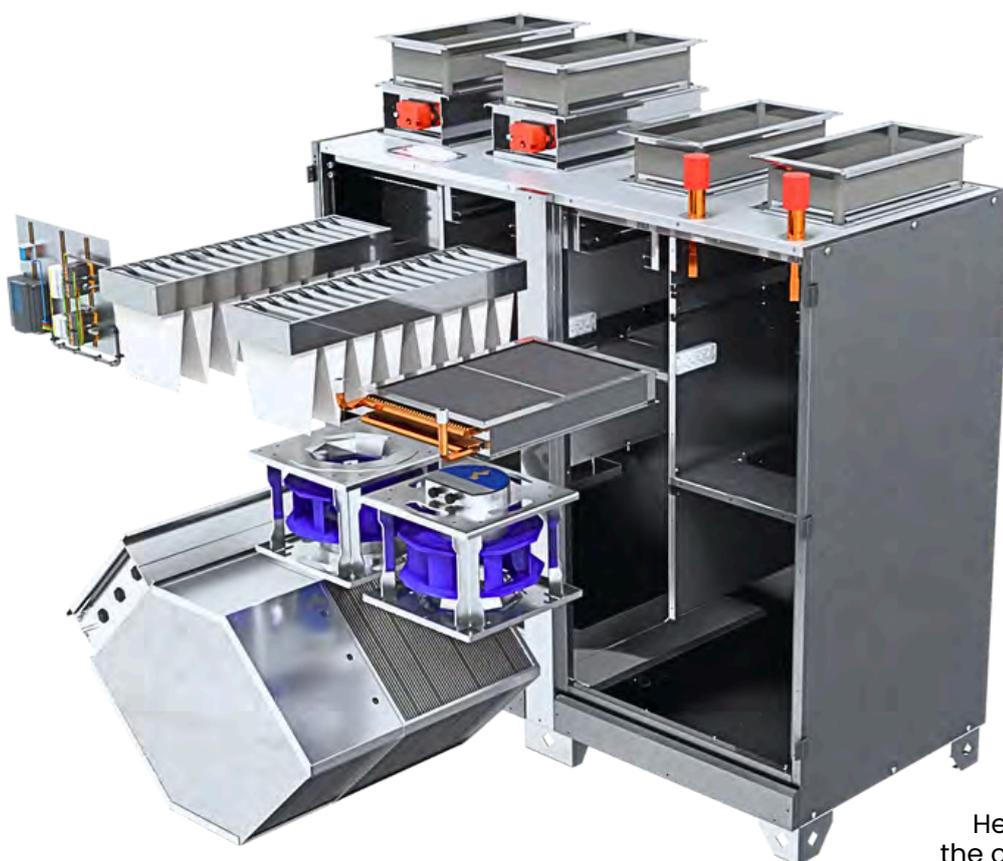


Flexible ventilation channels (from the top of the device)



**Plug&Play**

Fully internally wired, Plug & Play



# 87%

Heat recovery efficiency due to the counter-flow heat exchanger.

# Basic information



## Case

- The air handling unit is made in self-supporting technology without aluminum profiles
- The external covers of the air handling unit are made of coated sheet Magnelis ZM310, the internal ones are made of galvanized sheet
- Internal or external execution
- 50mm thick device insulation
- Connecting the ventilation ducts and electricity from the top of the device



## Heat recovery

- Counterflow heat exchanger
- Heat recovery efficiency up to 87%



## Fans

- Highly efficient EC motors
- Engine operation in the optimal speed range
- Reduced heat generation



## Heater

- Water heater
- Connections flush with the inner surface of the unit cover ensuring compactness and safety during transport
- Small dimensions in relation to heating power
- PTC electric heater (option)



## Filters

- ISO ePM10 50% (M5)
- ISO ePM1 70% (F7)



## Automation

- Power and control switchboard integrated with the device
- Cooperation of the device with external elements
- Plug&Play automation with internal wiring



## Additional sections

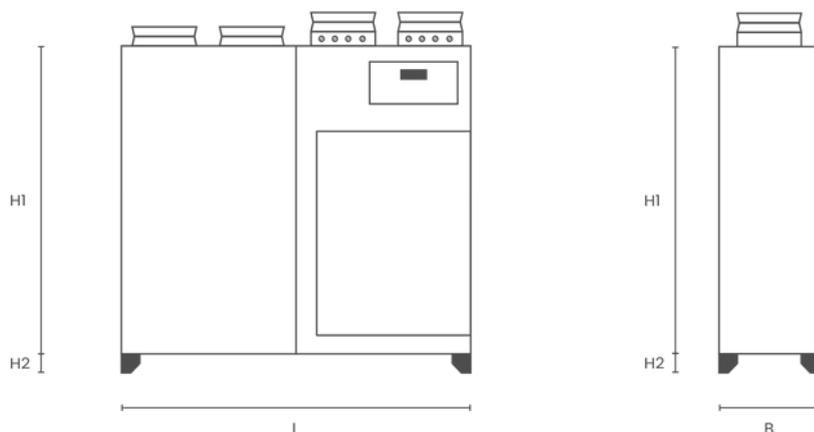
*(the device can be expanded with additional cooperating sections)*

- Heat pump system section (in sizes 2-4)
- Reversible heat pump system section (in sizes 2-4)
- Recirculation section
- Channel section of water cooler
- Pool design (sizes 1-4)



**Plug&Play**

# Technical data



Size		MINI	H-1	H-2	H-3	H-4	
<b>Air flow</b>	min.	300	500	1300	2800	4500	
	max.	500	1600	2800	4500	6000	
<b>External static pressure</b>	[Pa]	300	300	300	300	300	
<b>Max. heat recovery efficiency</b>	[%]	83,7	86,5	82,9	81	80,7	
<b>Weight</b>	[kg]	85	237	470	630	843	
<b>Dimensions</b>	L	1100	1600	2050	2200	2300	
	B	550	750	950	1150	1300	
	H1	600	1350	1600	1650	1850	
	H2	100	100	100	100	100	
<b>Insulation thickness</b>	[mm]			50			
<b>Connections size</b>	[mm]	be 200	450x200	600x300	800x400	1000x400	
<b>Energy consumption</b>	engine power	[kW]	0,17	0,5/0,78	0,78/1,35	1,35/2,5	2,5/2,5
	max. power of electric heater	[kW]	3	12	18	24	27
	max. power of water heater	[kW]	-	3,8	8,7	16,6	25
<b>Motor power (max.)</b>	[A]	2x1,7	2x2,5/2x4	2x3,9/2x6,7	2x6,8/2x4	2x4/2x4	
<b>Voltage</b>	[V,Hz]			3~400, 50			
<b>Filters</b>		ISO Coarse>65% (G4)	ISO Coarse>65% (G4)	ISO ePM10>50% (M5)	ISO ePM1>70% (F7)		

