



# BD

Sectional Air Handling Units  
in outdoor execution



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CAPACITY [m<sup>3</sup>/h]

**700 – 100 000**

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AVAILABLE DEVICE  
SIZES

**22**

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HEAT RECOVERY

even  
**93%**

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# A switchboard tailored to you



External execution



Frame or self-supporting structure



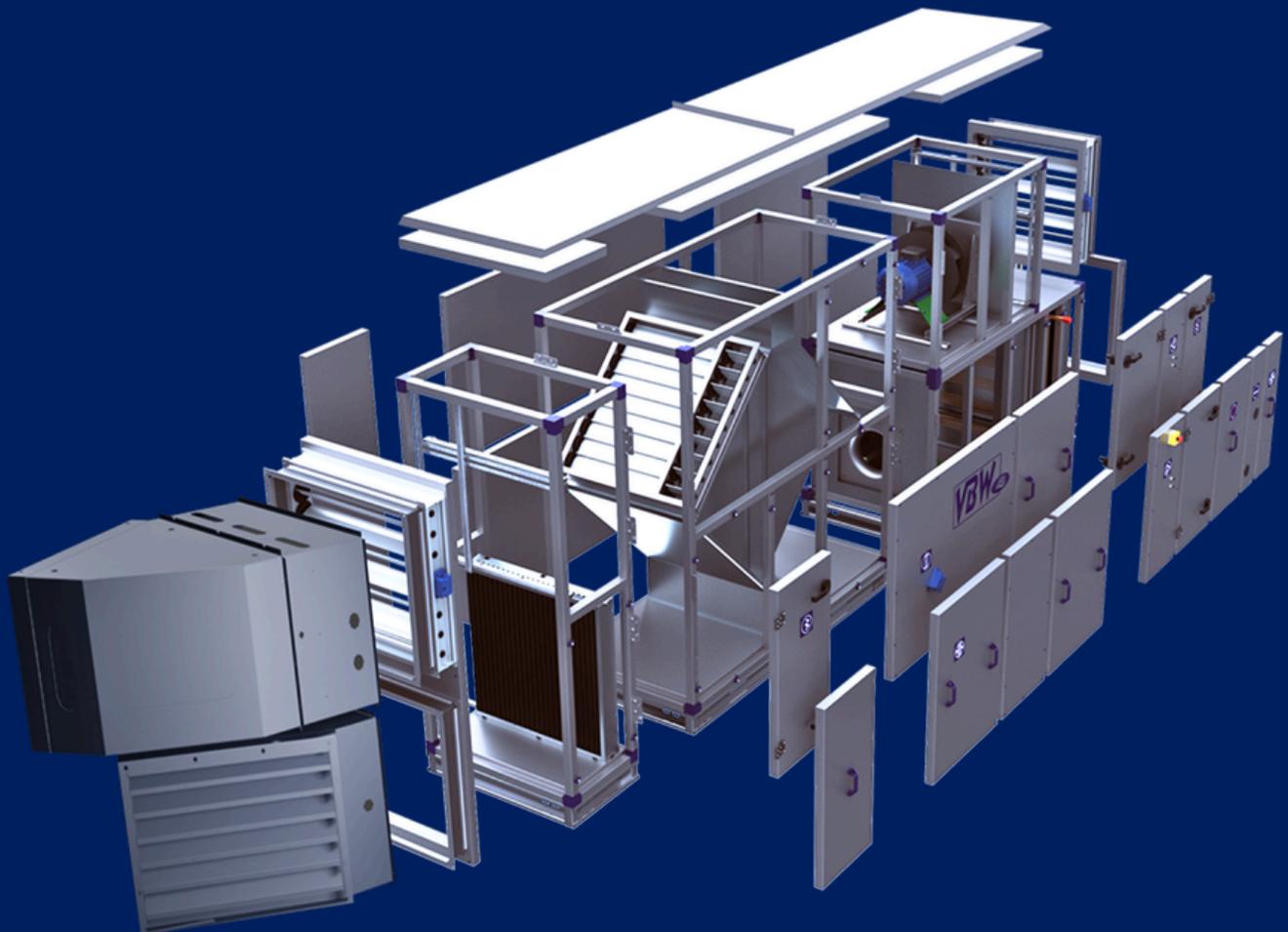
High performance



Intelligent automation system



Individual device configuration



# BD

## General information

The BD air conditioning and ventilation unit is the base unit in our range, designed for outdoor installation. This unit is distinguished by its flexibility of selection and adaptability to individual customer needs.

The product line includes 22 basic sizes, covering flow rates from 700 to 100,000 m<sup>3</sup>/h. The product is offered in standard, pool, hygienic, chemical-resistant, and explosion-proof versions.

## Technical specification

- Basic sizes: 22
- Capacity: from 700 to 100,000 m<sup>3</sup>/h
- Design: outdoor (unit equipped with a roof, integrated air intake and exhaust vent)
- Foundation: standing
- Construction: sectional
- Special versions: swimming pool / hygienic / chemically resistant / with EX elements)
- Heat recovery: recirculation / cross-flow / rotary / counter-flow / MHR / heat pipe/glycol recovery system
- Heater: water / steam / glycol / electric
- Cooler: water / glycol / freon
- Filter classes: G1-H14 / carbon / electrostatic / UV lamps
- Certificates and approvals: Eurovent, PZH, TÜV, ISO 9001
- Outer sheathing: Weather and corrosion resistant

### Additional options:

- Integration with a gas heater
- Full automation configuration with internal wiring
- System Plug&Play
- Custom Made – device configuration to suit individual customer requirements.

## Application

- Industrial and production halls
- Sports and entertainment halls
- Large-scale commercial and service buildings
- Commercial facilities: office buildings, hotels
- Public institutions and facilities
- Recreation and sports centers



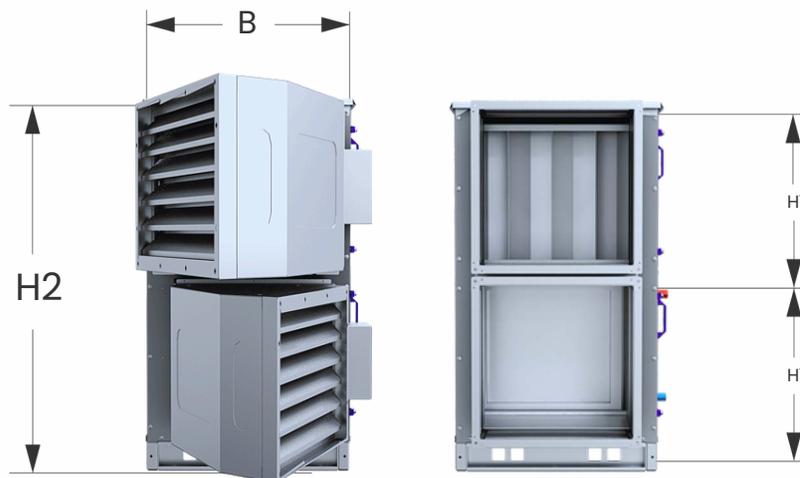
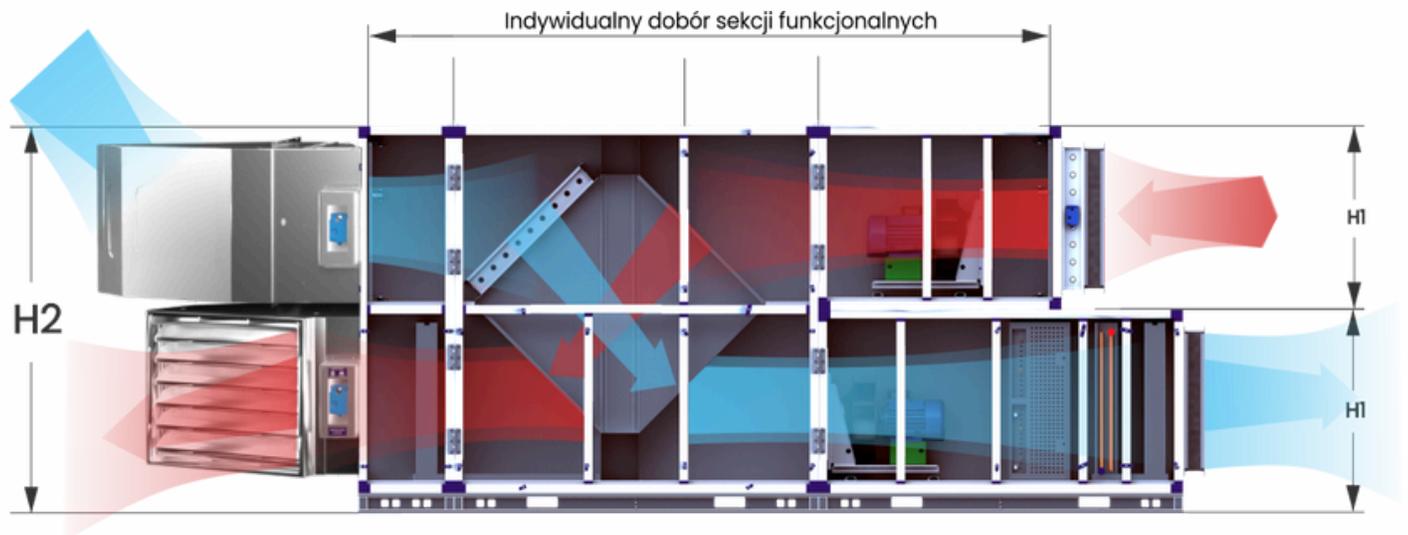
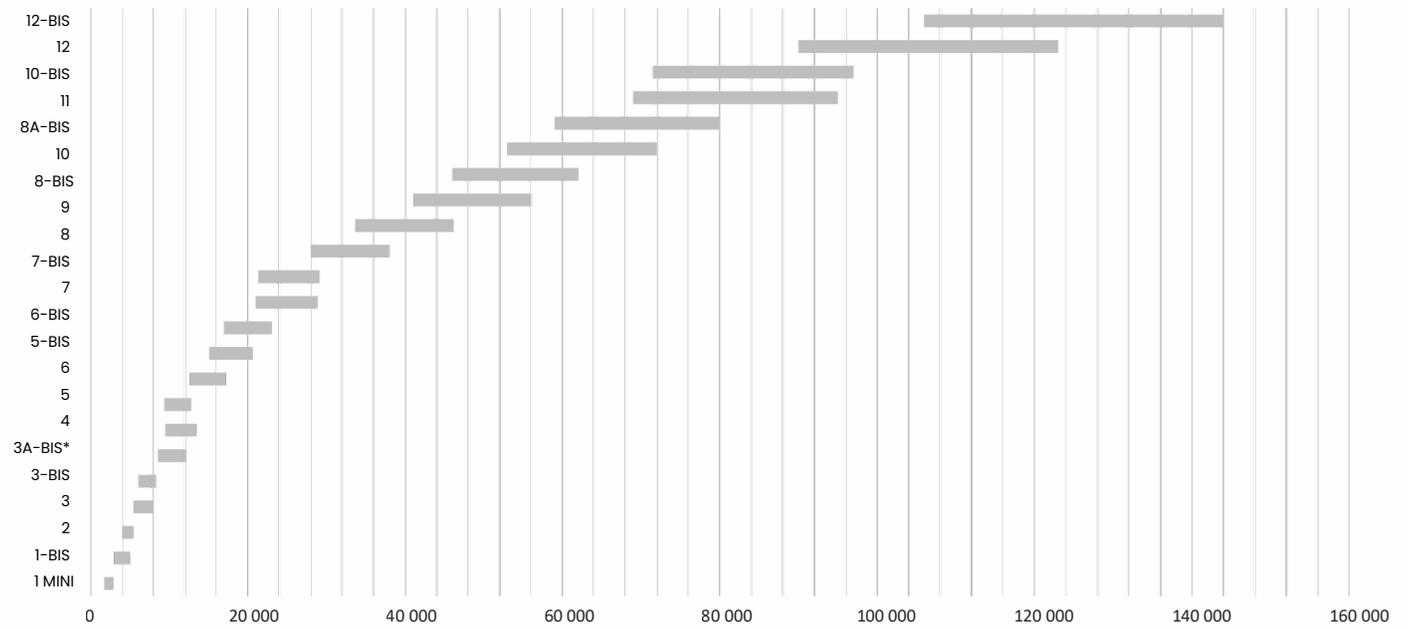
**Technical data**

Size of the BS/BD switchboard	Frame construction						Self-supporting construction		Air flow	
	B [mm]		H1 [mm]		H2 [mm]		H1 [mm]	H2 [mm]	Vmin [m³/h]	Vmax [m³/h]
	Insulation thickness [mm]									
	50	70	50	70	50	70	50	50		
MINI	640	680	-	-	-	-	490	980	700	1 800
1	690	730	640	640	1 280	1 280	600	1 200	1 000	3 000
1-BIS	1 150	1 190	640	640	1 280	1 280	600	1 200	3 000	5 500
2	740	780	740	740	1 480	1 480	700	1 400	2 600	4 100
3	980	1 020	740	740	1 480	1 480	700	1 400	3 900	6 100
3-BIS	1 400	1 440	740	740	1 480	1 480	700	1 400	5 000	8 600
3A-BIS*	1 500	-	-	-	1 540	-	-	-	5 500	9 500
4	980	1 020	1 050	1 050	2 100	2 100	1 010	2 100	6 000	9 400
5	1 290	1 330	1 050	1 050	2 100	2 100	1 010	2 100	8 000	12 600
6	1 290	1 620	1 250	1 250	2 500	2 500	-	-	9 600	15 100
5-BIS	1 580	1 620	1 050	1 050	2 100	2 100	-	-	11 000	17 000
6-BIS	1 580	1 620	1 250	1 250	2 500	2 500	-	-	13 200	21 000
7	1 580	1 620	1 370	1 370	2 740	2 740	-	-	13 500	21 300
7-BIS	1 885	1 925	1 370	1 370	2 740	2 740	-	-	18 000	28 000
8	1 885	1 925	1 670	1 670	3 340	3 340	-	-	21 300	33 700
8-BIS	2 400	1 925	1 670	1 670	3 340	3 340	-	-	30 000	46 000
10	2 400	2 440	2 020	2 020	4 040	4 040	-	-	34 000	53 000
8A-BIS	3 000	3 040	1 670	1 670	3 340	3 340	-	-	38 000	59 000
11	2 400	2 440	2 500	2 500	5 000	5 000	-	-	43 000	69 000
10-BIS	3 000	3 040	2 020	2 020	4 040	4 040	-	-	46 000	71 500
12	3 000	3 040	2 500	2 500	5 000	5 000	-	-	57 000	90 000
12-BIS**	3 500	3 540	2 500	2 500	5 000	-	-	-	68 000	106 000

\*The unit size is intended only for devices with a rotary heat exchanger.

\*\*Design based on double cross-section and size 10 components

**Performance Table**



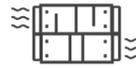
\*photos presenting the product are for illustrative purposes only.

## Adjust the control panels to your needs



### Device performance

Customize your unit's performance to your facility's individual requirements. Capacity reaches 100,000 m<sup>3</sup>/h and more.



### Device size

Adjust the size of the control panel and individual sections to the available space in the facility.



### Device cover

Match the color, upholstery elements and finishes of the unit to the individual needs of the project.



### Automation system

Gain full control over your device and customize your own automation system.

## Flexible selection of functional sections



Rotary heat exchanger section



Cross-flow exchanger section



Double cross-flow heat exchanger section



Counterflow heat exchanger section / MHR (hexagonal)



Mixing section



Fan assembly section



Heating section



Cooling section



Humidification section



Damping section



Heat pump system section



Reversing system section



Filtration section



Glycol recovery system section



Heat pipe section

## Special versions



Swimming pool

for medium and highly corrosive environments



Hygienic

for moderately aggressive environments with frequent condensation



Chemically resistant

for environments with aggressive chemical compounds



With EX elements

for potentially explosive environments

# Discover the full capabilities of the device

Thanks to the proprietary automation of VBW Engineering



Our proprietary automation system supports modern solutions for "Smart Homes." This allows our clients to gain complete and easy control over their devices. Our experts offer comprehensive support, including installation and wiring between automation components and the power and control switchboard. We also handle the commissioning of automation systems and all arrangements and activities related to integration with devices and components of other installations.

## PREMIUM+ Automation

At the customer's request, we deliver devices with the PREMIUM+ automation system tailored to the customer's individual needs.



Full control over the device



Optimization of work and operating costs



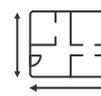
24/7 device availability  
(Remote Service Center)



Inspection reminders



Integration of devices cooperating with control panels



Individual graphics developed based on building designs



Possibility to send E-mail & SMS notifications



Intelligent energy management systems



Smart Homes integrated Smart Home systems



Internet compatibility, access from anywhere in the world

\*additional options available when selecting the device.

# System PLUG&PLAY (option)



The idea behind control panels with a Plug&Play automation system is to produce and deliver a ready-to-use device to the customer immediately after initial configuration, connection of necessary external accessories, and power supply. This solution is possible thanks to the use of internal, complete device cabling and a switchboard with a controller installed directly on the control panel.



## Advantages of the Plug&Play system

- + Reduced installation and commissioning time (cost reduction).
- + Factory configuration and complete cabling guarantee trouble-free operation of the device.
- + Electrical connection made and checked by qualified technicians
- + Certified cables, electrical terminals, approved junction boxes and cable connections

