

BD

Sectional air handling units
for outdoor installation





AIRFLOW [m³/h]

700 – 100 000



AVAILABLE UNIT
SIZES

22



HEAT RECOVERY

even
93%

A unit tailored to your needs



Indoor installation



Framed or self-supporting casing



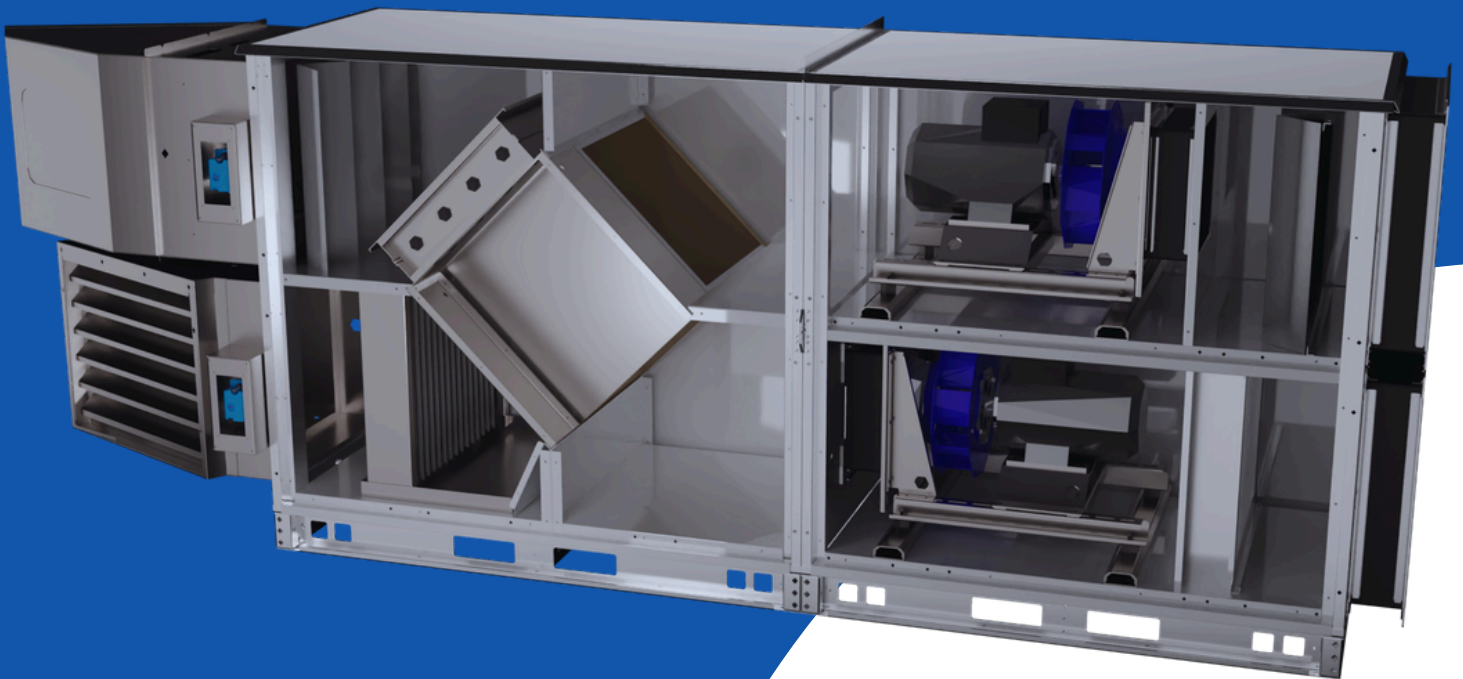
High performance



Smart automation system



Custom unit configuration



BD

General information

The BD air handling unit is the core model in our outdoor range. It stands out for its versatile configuration and its adaptability to specific customer requirements.

The product line includes 22 standard sizes, covering airflow rates from 700 to 100,000 m³/h. The unit is available in standard, swimming pool, hygienic, chemical-resistant, and explosion-proof versions.

Technical specification

- **Basic sizes:** 22
- **Capacity:** from 700 to 100,000 m³/h
- **Installation:** outdoor (features a weather roof, integrated air intake, and exhaust hoods)
- **Mounting:** floor-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 / refrigerant
- **Filter classes:** G1-H14 / carbon / electrostatic / UV lamps
- **Certificates and approvals:** Eurovent, PZH, TÜV, ISO 9001
- **Outer casing:** 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 venues
- Large-scale commercial and service buildings
- Commercial facilities: office buildings, hotels
- Public institutions and facilities
- Recreation and sports centers



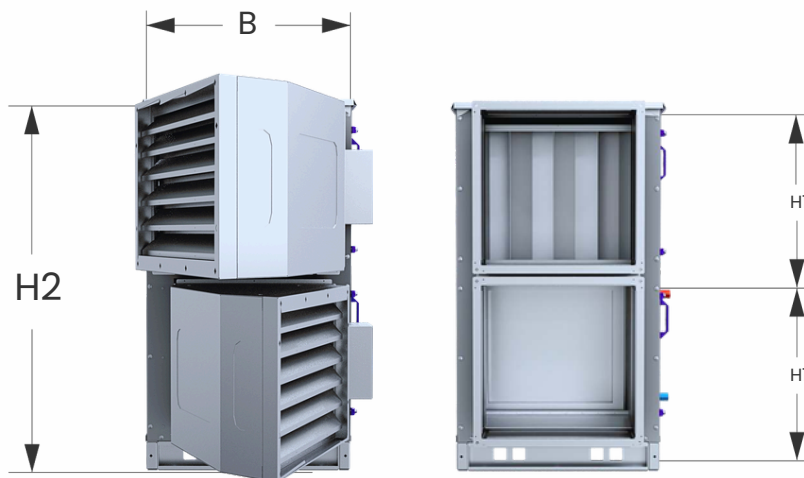
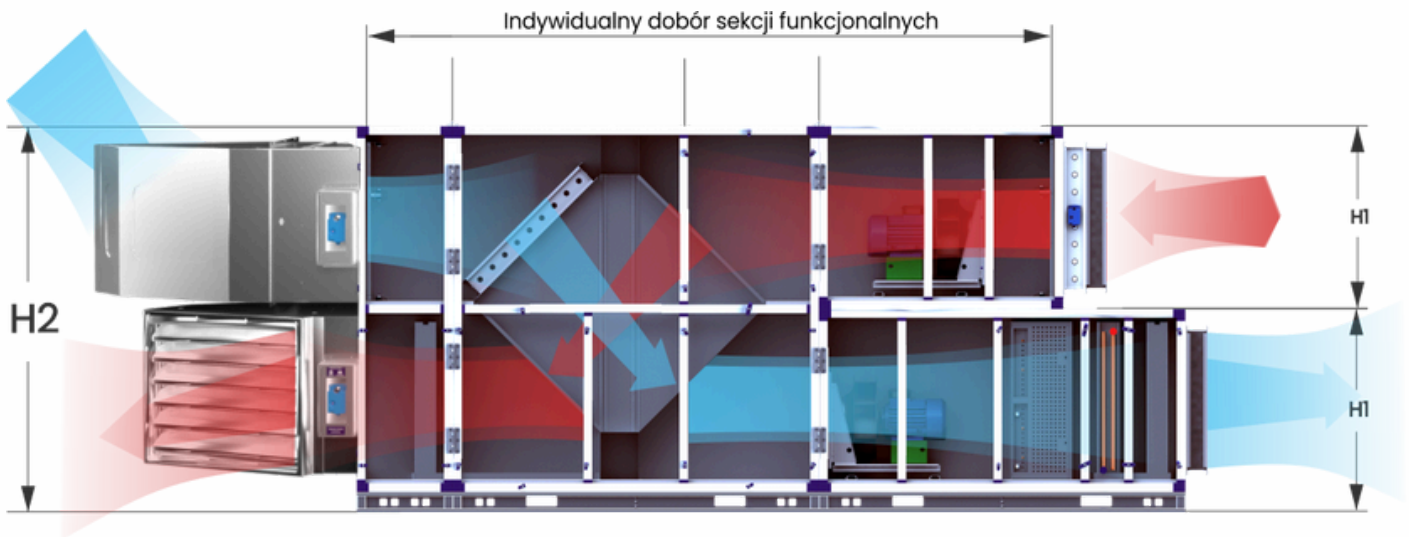
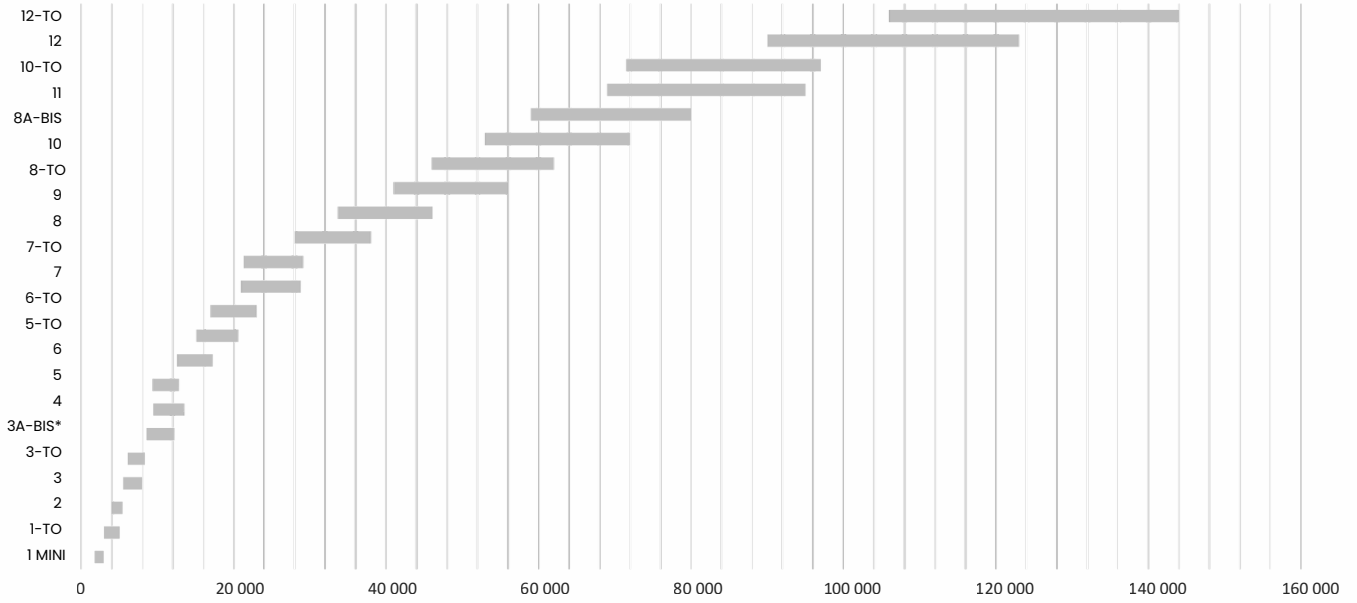
Technical data

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-TO	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-TO	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-TO	1 580	1 620	1 050	1 050	2 100	2 100	-	-	11 000	17 000
6-TO	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-TO	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-TO	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-TO	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-TO**	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 meet your facility's specific requirements. Capacity reaches over 100,000 m³/h.



Device size

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



Device cover

Match the color, casing elements, and finishes to the specific requirements of your 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



Silencer section



Heat pump system section



Reversible 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 unit

with VBW Engineering proprietary automation



The proprietary VBW Engineering automation system provides full control over the unit operation and enables integration with building management systems.








We provide support in installation, cabling, selection of automation components and power/control switchgear.

If you expect more...

PREMIUM+ automation extends the capabilities of the standard control system with functions tailored to the requirements of the facility and the operating mode of the installation.

Discover the full potential of your unit

PREMIUM+ Automation

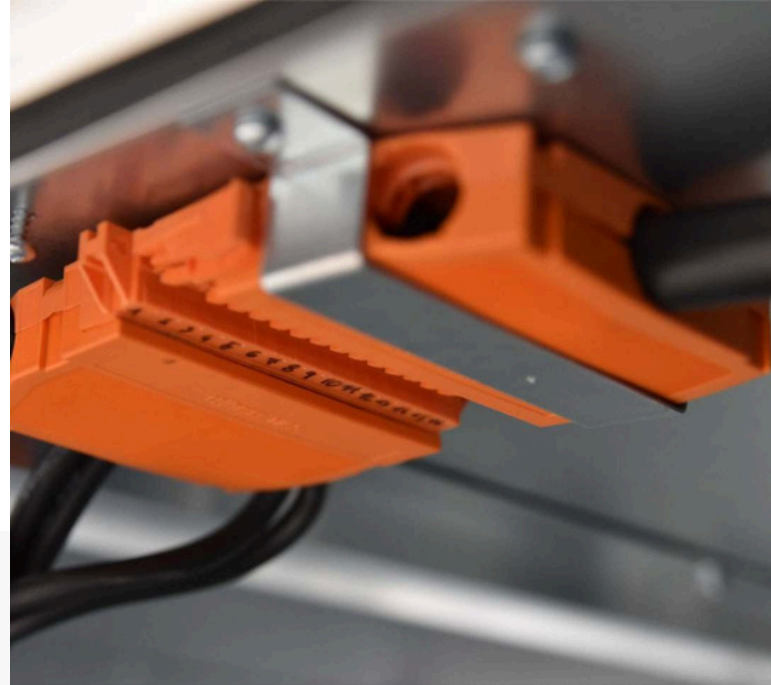
-  Full control over the unit
-  Optimization of operation and operating costs
-  Integration of units cooperating with air handling units
-  Individual graphics based on building design documentation
-  Intelligent energy management systems
-  Internet access from anywhere in the world
-  Integration with Smart Home systems

*additional options available during unit selection.

System **PLUG&PLAY** (option)



Our Plug&Play automation system is designed to deliver a unit that is ready for immediate operation. Once the initial configuration is set and external accessories and power supply are connected, the device is fully functional. This is made possible by complete factory internal wiring and a control cabinet with an integrated controller installed directly on the unit.



Advantages of the **Plug&Play** system

- + Reduced installation and commissioning time, leading to significant cost savings.
- + Factory configuration and integrated wiring ensure trouble-free operation of the unit.
- + All internal electrical connections are performed and verified by certified technicians.
- + High-quality certified components: cables, terminals, and approved junction boxes.



Air tailored to **your** needs



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