

BOCK

Air dehumidifier



sizes

7



airflow

1400 · 8 000 m³/h



Air dehumidifier

BO – CK

General information

The BO-CK desiccant air dehumidifier is an innovative device used in ventilation systems wherever maintaining low process air humidity is of key importance. Reduced air humidity in many cases affects product quality as well as the reliability and efficiency of production and packaging processes.

The dehumidifier operates by absorbing moisture through a specially prepared desiccant rotor. The rotor is characterized by high sorption capacity, which means that even a high level of moisture saturation does not reduce the unit's performance.

The unit operates with two air streams of different volumes. The larger stream, referred to as process air, is dehumidified while passing through the desiccant rotor. The smaller stream, referred to as regeneration air, is used to remove the accumulated moisture from the dehumidifier.

7

STANDARD
SIZES



AIRFLOW [m³/h]

1400 – 8000



Silica gel
rotor



Desiccant
dehumidification



Self-supporting
construction



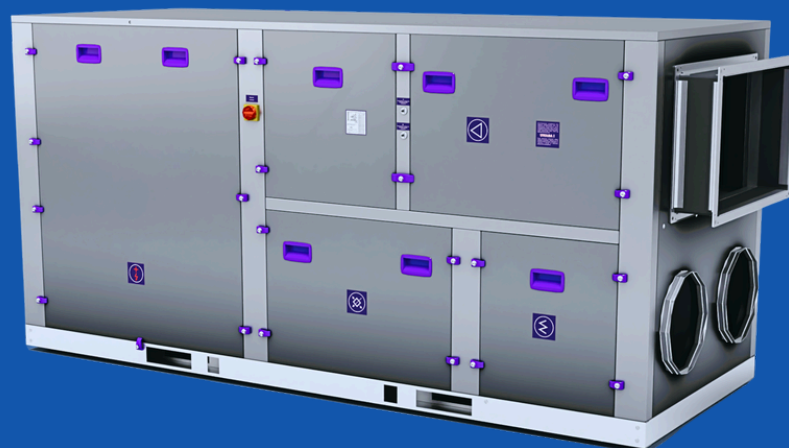
Indoor
installation



Energy-efficient
unit



Plug&Play
automation



7

CONDENSING
DEHUMIDIFICATION

< = [g/kg] = >

absolute humidity

DESICCANT
DEHUMIDIFICATION

Basic information



Casing

- Self-supporting unit construction without aluminum profiles
- Outer casing panels made of white coated sheet steel / Magnelis ZM310
- Inner casing panels made of galvanized sheet steel
- Indoor version
- Unit available in suspended, floor-mounted on feet, or free-standing on feet configuration
- Casing fitted with hinges and quick-release latches
- Unit insulation thickness: 30 mm



Heater

- Water heater
- Compact dimensions in relation to heating capacity
- Electric PTC heater (option)



Filters

- ISO Coarse >65% (G4)
- ISO ePM10 50% (M5)
- ISO ePM1 70% (F7)



Heat recovery

- Counterflow heat exchanger
- Heat recovery efficiency up to 83%



Fans

- High-efficiency EC motors
- Motor operation within the optimum speed range
- Reduced heat emission



Automation

- Built-in power and control cabinet
- Option to detach the power and control cabinet from the unit and install it in the location most suitable for the customer
- Integration with peripheral devices
- Plug&Play control system



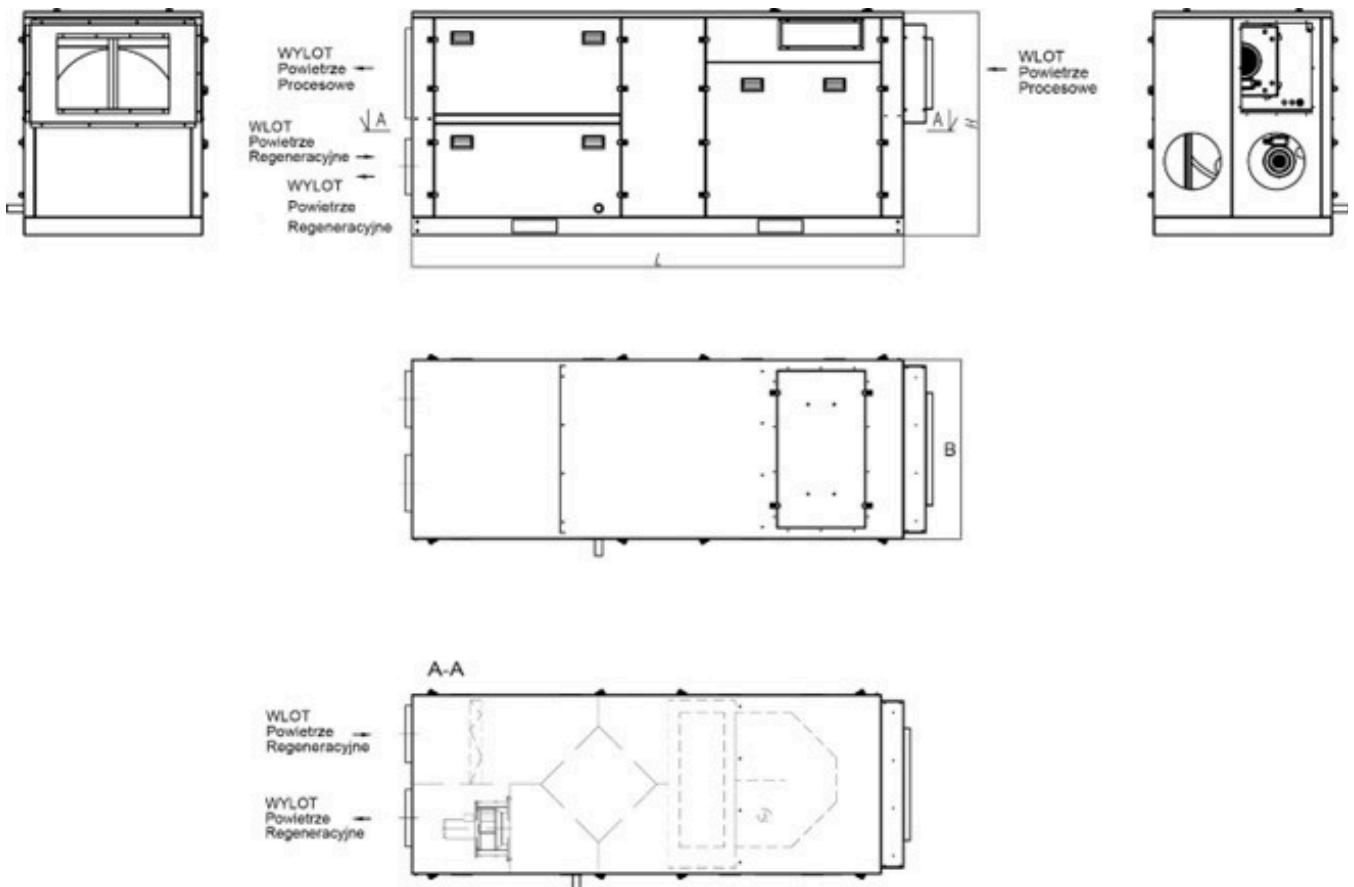
Additional sections

- Water cooling coil / DX cooling coil



Technical data

Model	Dehumidification capacity	Process air	Regeneration air	Power consumption	Weight
	[kg/h]	[m ³ /h]	[m ³ /h]	[kW]	[kg]
BO-CK 1400 SP	10,1	1400	500	10,5	290
BO-CK 2400 SP	16,5	2400	800	19,5	290
BO-CK 3400 SP	20,5	3400	1000	19,5	290
BO-CK 4500 SP	30	4500	1500	29,2	350
BO-CK 5000 SP	31,4	5000	1550	29,5	350
BO-CK 6000 SP	36,7	6000	1700	33	470
BO-CK 8000 SP	50,6	8000	2500	45,8	550



*The manufacturer reserves the right to update technical data and images in the catalog.

**Product images are for illustrative purposes only.



Hybrid Dehumidification

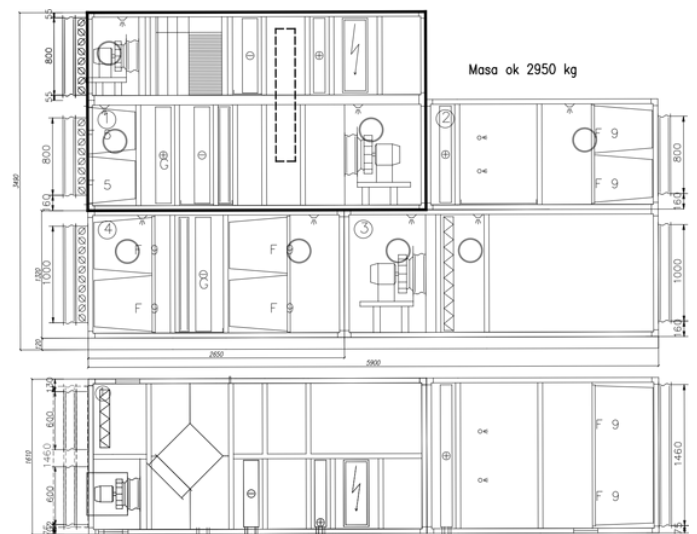
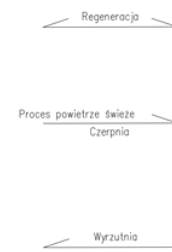
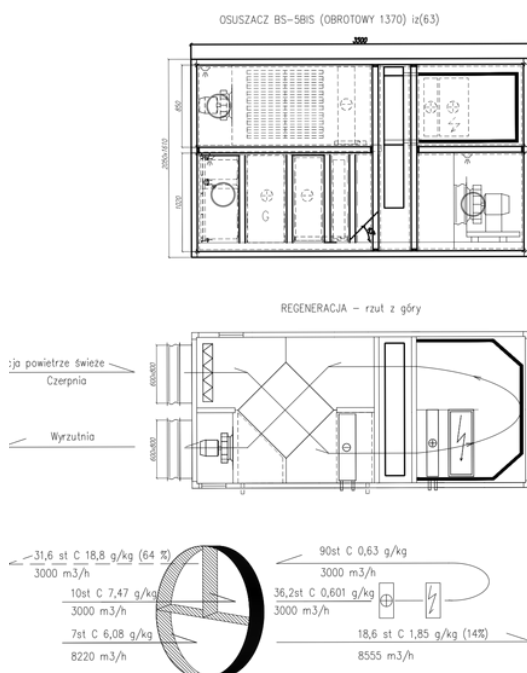
Dehumidification & Ventilation

A state-of-the-art technological solution. You can now integrate a desiccant dehumidifier module within the unit to create a hybrid system with high-efficiency dehumidification and ventilation modes.

An all-in-one integrated unit.

ADVANTAGES OF THE HYBRID DEHUMIDIFIER

- ✓ Integrated AHU with sorption dehumidification module.
- ✓ Eliminates the need for a separate, stand-alone dehumidifier.
- ✓ Utilization of exhaust air as a regeneration stream.
- ✓ Simplified on-site installation (ductwork, power supply, heating/cooling, controls).
- ✓ Possibility of applying additional heat/cold recovery in the process line.
- ✓ Reduced investment costs.



Ready-to-operate unit

The unit is equipped with an intuitive control system, an integrated internal power and control panel, and full internal wiring.



If you expect more...

We offer the option to equip each unit with either factory-standard or fully proprietary control systems – tailored to the most demanding customer needs and specific site requirements. When selecting your unit, ask our consultant about the possibilities of expanding the AHU with **PREMIUM+** automation components.

Discover the full capabilities of your unit

PREMIUM+ Automation



Full unit control



Operation and running cost optimization



Integration of peripheral devices with the control panel



Custom BMS graphics based on floor plans



Intelligent Energy Management Systems (EMS)



Cloud-based remote access



Smart Home systems integration

*Additional options available upon unit selection.

Plug&Play compatible unit



Benefits of the Plug&Play system

- + Reduced installation and commissioning time (cost savings).
- + Factory configuration and complete wiring ensure trouble-free operation of the unit.
- + Electrical connections executed and tested by qualified technicians.
- + Certified cables, electrical terminals, as well as approved junction boxes and cable connections.

The Plug&Play system is available in all compact units.

Air tailored to **your** needs



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