# Model ED 260 | Drying and heating chambers with natural convection

The strengths of a BINDER ED series drying chamber include routine drying and sterilization tasks up to 300 °C. Thanks to the natural convection, all thermal processes which use this drying chamber are highly efficient. The ED series ensures fast, uniform drying.

## BENEFITS

- Best energy efficiency on the market
- Excellent temporal and spatial temperature accuracy
- USB connection for recording data
- Temperature range up to 300 °C



Model 260



Model 260

## MAIN FEATURES

- Temperature range: ambient temperature plus 5 °C to 300 °C
- Up to 30% lower energy consumption compared to conventional units on the market
- High temperature accuracy thanks to APT.line™ technology
- Natural convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- 2 chrome-plated racks
- Class 2 integrated independent adjustable temperature safety device (DIN 12880) with visual alarm
- Ergonomic handle design
- USB port for recording data

## ORDERING INFORMATION

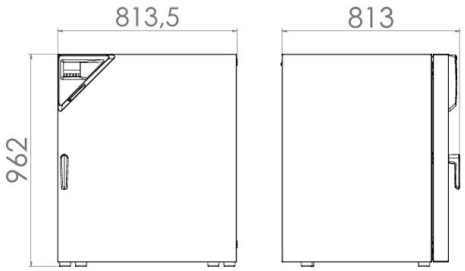
| Interior volume [L] | Voltage | Option model | Version | Art.-No. |
|---|---|---|---|---|
| 255 | 230 V 1~ ph 50/60 Hz | Standard | ED260-230V | 9010-0339 |
| | 240 V 1~ ph 60 Hz | Standard | ED260UL-240V | 9010-0340 |

## TECHNICAL DATA

| Description | ED260-230V[1] | ED260UL-240V[1] |
|---|---|---|
| Article Number | 9010-0339 | 9010-0340 |
| **Performance Data Temperature** | | |
| Temperature range 5 °C above ambient temperature to [°C] | 300 | 300 |
| Temperature variation at 150 °C [± K] | 1.8 | 1.8 |
| Temperature fluctuation at 150 °C [± K] | 0.8 | 0.8 |
| Heating-up time to 150 °C [min] | 50 | 50 |
| Recovery time after 30 seconds door open at 150 °C [min] | 20 | 20 |
| **Electrical data** | | |
| Rated Voltage [V] | 230 | 240 |
| Power frequency [Hz] | 50/60 | 60 |
| Nominal power [kW] | 2.25 | 2.45 |
| Unit fuse [A] | 12.5 | 16 |
| Phase (Nominal voltage) | 1~ | 1~ |
| **Measures** | | |
| Interior volume [L] | 255 | 255 |
| Net weight of the unit (empty) [kg] | 84 | 84 |
| Permitted load [kg] | 270 | 270 |
| Load per rack [kg] | 40 | 40 |
| Wall clearance back [mm] | 160 | 160 |
| Wall clearance sidewise [mm] | 100 | 100 |
| **Internal Dimensions** | | |
| Width [mm] | 610 | 610 |
| Height [mm] | 760 | 760 |
| Depth [mm] | 550 | 550 |
| **Doors** | | |
| Unit doors | 1 | 1 |
| **Housing dimensions not incl. fittings and connections** | | |
| Width net [mm] | 810 | 810 |
| Height net [mm] | 850 | 850 |
| Depth net [mm] | 760 | 760 |
| **Environment-specific data** | | |
| Energy consumption at 150 °C [Wh/h] | 355 | 355 |
| **Fixtures** | | |
| Number of shelves (std./max.) | 2/8 | 2/8 |

1 All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10%. The temperature data is determined to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

## DIMENSIONS incl. fittings and connections [mm]



## OPTIONS

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| Access port with silicone plug | back | | |
| | 10 mm | 01 | 8012-1282 |
| | 30 mm | 01 | 8012-0540 |
| | 50 mm | 01 | 8012-0546 |
| | left | | |
| | 10 mm | 01 | 8012-1275 |
| | 30 mm | 01 | 8012-1018 |
| | 50 mm | 01 | 8012-1022 |
| | 100 mm | 01 | 8012-1030 |
| | right | | |
| | 10 mm | 01 | 8012-1268 |
| | 30 mm | 01 | 8012-1017 |
| | 50 mm | 01 | 8012-1021 |
| | 100 mm | 01 | 8012-1031 |
| | top | | |
| | 10 mm | 01 | 8012-1262 |
| | 30 mm | 01 | 8012-0539 |
| | 50 mm | 01 | 8012-0545 |
| | 100 mm | 01, 10 | 8012-1029 |
| Alarm function for overheating | Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device | – | 8012-1635 |
| Analog output 4-20 mA | for temperature values (output not adjustable) | 02 | 8012-1623 |
| Calibration certificate, expanded | for temperature; for extending the measurement in center of chamber to include another test temperature | – | 8012-1115 |
| Calibration certificate, temperature | for temperature, measurement in center of chamber at specified temperature | – | 8012-1134 |
| | temperature measurement incl. certificate and 27 measuring points at specified temperature | – | 8012-1593 |
| | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | – | 8012-1572 |
| | temperature measurement incl. certificate, 9 measuring points at specified temperature | – | 8012-1551 |
| Class 3.1 independent temperature safety device | with visual alarm (DIN 12880) | 04, 12 | 8012-0985 |
| Clock | battery-backed | – | 8012-1640 |
| Door gasket | made of FKM, silicone-free | 03 | 8012-1011 |
| Door lock | lockable door handle | – | 8012-1664 |
| Ethernet interface | for Multi Management Software APT-COM™ | – | 8012-1645 |
| Interior lighting | with 15 W light bulb | | |
| | 230/240 V option model | – | 8012-1627 |
| Load management | to comply with EMC requirements in accordance with EN 61326-1:2013-07 (IEC 61326-1:2012) | – | 8012-0992 |
| Measurement of air exchange rate | in accordance with ASTM D5374, definition and protocol according to ambient temperature | – | 8012-0195 |
| Pt 100 temperature sensor | additional flexible Pt 100, interior, for displaying the temperature on the unit display | – | 8012-1619 |
| Viewing window and interior lighting | viewing window (triple insulating glass) in door, 370 x 370 mm, and 15 W interior | | |
| | 230 V option model | – | 8012-1064 |
| | 240 V option model | – | 8012-1065 |

* Notes › See last page

## ACCESSORIES

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| APT-COM™ 4 BASIC-Edition | for simple logging and documentation requirements with up to 5 networked units. | | |
| | version 4, BASIC edition | 19 | 9053-0039 |
| APT-COM™ 4 GLP-Edition | for working under GLP-compliant conditions. Measured values are documented in a tamper-proof way in line with the requirements of FDA Regulation 21 CFR 11. | | |
| | version 4, GLP edition | 19 | 9053-0042 |
| APT-COM™ 4 PROFESSIONAL-Edition | convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units. | | |
| | version 4, PROFESSIONAL edition | 19 | 9053-0040 |
| Data Logger Kit | T 350: For continuous temperature logging from 0 °C to 350 °C; kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit | 19 | 8012-0714 |
| Data Logger Software | LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable) | 19 | 8012-0821 |
| Ethernet interface | for Multi Management Software APT-COM™ | – | 8012-1645 |
| Instrument tray | with lid made from 18/8 stainless steel, stackable, dimensions: 230 x 133 x 45 mm | – | 4022-0123 |
| | with lid made from 18/8 stainless steel, stackable, dimensions: 315 x 215 x 60 mm | – | 4022-0124 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | – | 1002-0016 |
| Qualification documents | IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, $CO_2$, $O_2$, pressure, depending on unit | | |
| | Digital in PDF format | – | 7057-0001 |
| | Hard copy inside folder | – | 7007-0001 |
| | IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature, $CO_2$, $O_2$ – or pressure, depending on unit | | |
| | Digital in PDF format | – | 7057-0005 |
| | Hard copy inside folder | – | 7007-0005 |
| Rack | chrome plated | – | 6004-0177 |
| | stainless steel | – | 6004-0161 |
| Rack, heavy load | Stainless steel, max. load per rack 70 kg | – | 6004-0203 |
| Rubber pads | set anti-slip feet | – | 8012-1887 |
| Shelf, perforated | Stainless steel | – | 6004-0193 |
| Table on castors | stable cart, casters with locking brakes, dimensions: W 1,300 x D 800 x H 780 mm | – | 9051-0019 |

* Notes › See last page

## SERVICES

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| Installation services | | | |
| Unit installation | Unpacking and setting up of unit, connecting to existing connections, and checking function | 13, 18 | DL10-0100 |
| Unit instructions | Unit function instructions for operation and programming of the controller | 18 | DL10-0500 |
| Preventive maintenance | | | |
| Maintenance | Functional testing of all electrical and mechanical components, short calibration, documentation in the maintenance schedule | 14, 18 | DL20-0200 |
| Calibration services | | | |
| Measurement of air exchange rate | including certificate (in accordance with ASTM D5374) | 14, 16, 17, 18 | DL33-0000 |
| Temperature calibration | Expansion – including certificate, each additional measuring point in center of chamber at specified test temperature | 14, 16, 17, 18 | DL30-0102 |
| | Temperature calibration with 1 measuring point in center of chamber at a specified test temperature, including certificate | 14, 16, 17, 18 | DL30-0101 |
| Temperature measurement, 18 measuring points | Temperature measurement with 18 measuring points at a specified test temperature, including certificate | 14, 16, 17, 18 | DL30-0118 |
| Temperature measurement, 27 measuring points | Temperature measurement with 27 measuring points at a specified test temperature, including certificate | 14, 16, 17, 18 | DL30-0127 |

* Notes › See last page

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| Temperature measurement, 9 measuring points | Temperature measurement with 9 measuring points at a specified test temperature, including certificate | 14, 16, 17, 18 | DL30-0109 |
| Validation services | | | |
| Execution of IQ/OQ | Execution of IQ/OQ in accordance with qualification folder | 15, 18 | DL40-0100 |
| Execution of IQ/OQ/PQ | Execution of IQ/OQ/PQ in accordance with qualification folder | 15, 18 | DL44-0500 |
| Warranty service | | | |
| Warranty extension from 2 to 3 years | The warranty is extended from 2 to 3 years from the delivery date, wear parts are excluded | – | DL00-2041 |
| Warranty extension from 2 to 5 years | The warranty is extended from 2 to 5 years from the delivery date, wear parts are excluded | – | DL00-2042 |

* Notes › See last page

## NOTES

01 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
02 UL mark is not granted when this option is used.
03 Heat resistant only to max. 200 °C.
04 Only available on units rated for 230 V.
07 The additional heat input may affect the temperature behavior.
09 Not in conjunction with the optional access port, door with window and interior lighting.
10 Not available on 23-liter units.
11 Not available on 23- or 53-liter units.
12 Only available on units rated for 230 V or 400 V.
13 Installation and connections take place at unit location; transport within the company only upon consultation.
14 We recommend a BINDER service contract to cover unit inspections, calibrations and validations.
15 OQ according to Yellow Paper = completed factory validation documentation of all OQ checklists.
16 Sensor calibration is performed in an accredited calibration laboratory.
17 Calibration is performed according to the BINDER factory standard.
18 Quoted prices do not include travel costs. Please refer to the chapter on BINDER Service for travel costs for your region. Quoted prices for services performed in Switzerland do not include a country-specific added fee (available on request).
19 For additional accessories, refer to the Process documentation chapter.

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