

Model BD 115 | Standard-Incubators with gravity convection

The BD Avantgarde.Line series is specially designed for gentle incubation of organisms, as well as conditioning of heat-sensitive media. The new design of the units and the homogeneous temperature distribution ensure the very best results.

BENEFITS

- Excellent temporal and spatial temperature accuracy
- High process reliability
- 100°C disinfection routine



Model 115



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IMPORTANT FEATURES

- Temperature range: ambient temperature plus 5 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Gravity convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm
- Ergonomic handle design
- USB port for recording data

ORDERING INFORMATION

| Interior volume | | Power supply - unit fuse | Plug* | Version | Model version | Art.-No. |
|---------------------|-----|--------------------------|-----------|----------|---------------|-----------|
| [L] | [L] | | | | | |
| Model BD 115 | | | | | | |
| | | 230 V 1~ 50/60 Hz -6,3 A | CEE 7/7 | Standard | BD115-230V | 9010-0325 |
| 112 | 112 | 120 V 1~ 60 Hz -12,5 A | NEMA 5-15 | Standard | BD115UL-120V | 9010-0326 |

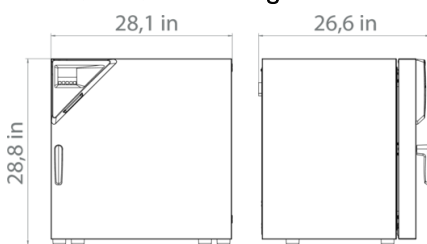
TECHNICAL DATA

| Data | | |
|---|---|---|
| Designation | BD115-230V | BD115UL-120V |
| Article Number | 9010-0325 | 9010-0326 |
| Option model | Standard | Standard |
| Performance Data Temperature | | |
| Temperature range | +5 °C above ambient temperature to 100 °C | +5 °C above ambient temperature to 100 °C |
| Temperature uniformity at 37°C | 0.3 ± K | 0.3 ± K |
| Temperature uniformity at 100°C | 1.0 ± K | 1.0 ± K |
| Temperature fluctuation at 37°C | 0.1 ± K | 0.1 ± K |
| Temperature fluctuation at 100°C | 0.3 ± K | 0.3 ± K |
| Heating up time to 100°C | 90 min | 90 min |
| Heating up time to 37°C | 55 min | 55 min |
| Recovery time after door was opened for 30 s at 37°C | 15 min | 15 min |
| Electrical data | | |
| Rated Voltage | 230 V | 120 V |
| Power frequency | 50/60 Hz | 60 Hz |
| Nominal power | 0,35 kW | 0,35 kW |
| Unit fuse | 6,3 A | 12,5 A |
| Phase (Nominal voltage) | 1~ | 1~ |
| Dimensions and weights | | |
| Interior volume | 112 L | 112 L |
| Net weight of the unit (empty) | 54 kg | 54 kg |
| Load per rack | 30 kg | 30 kg |
| Permitted load | 150 kg | 150 kg |
| Wall clearance back | 160 mm | 160 mm |
| Wall clearance sidewise | 100 mm | 100 mm |
| Housing dimensions not incl. fittings and connections | | |
| Width net | 710 mm | 710 mm |
| Height net | 705 mm | 705 mm |

| | | |
|----------------------------------|----------|----------|
| Depth net | 605 mm | 605 mm |
| Internal Dimensions | | |
| Interior width | 510 mm | 510 mm |
| Interior height | 530 mm | 530 mm |
| Interior depth | 420 mm | 420 mm |
| Inner doors | 1 | 1 |
| Unit doors | 1 | 1 |
| Environment-specific data | | |
| Energy consumption at 100°C | 150 Wh/h | 150 Wh/h |
| Energy consumption at 37°C | 25 Wh/h | 25 Wh/h |
| Fixtures | | |
| Number of shelves (std./max.) | 2/5 | 2/5 |

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 | BD 115 | * | Art.-No. |
|--------------------------------|-------------|--------|----|-----------|
| | back | | | |
| | 10 mm | • | 01 | 8012-0390 |
| | 30 mm | • | 01 | 8012-0397 |
| | 50 mm | • | 01 | 8012-0399 |
| Access port with silicone plug | left | | | |
| | 10 mm | • | 01 | 8012-0388 |
| | 30 mm | • | 01 | 8012-0047 |
| | 50 mm | • | 01 | 8012-0051 |

| Designation | Description | BD 115 | * | Art.-No. |
|--------------------------------------|---|--------|----|-----------|
| | right | | | |
| | 10 mm | • | 01 | 8012-0387 |
| | 30 mm | • | 01 | 8012-0046 |
| | 50 mm | • | 01 | 8012-0050 |
| | top | | | |
| | 10 mm | • | 01 | 8012-0386 |
| | 30 mm | • | 01 | 8012-0045 |
| | 50 mm | • | 01 | 8012-0049 |
| | 100 mm | • | 01 | 8012-0053 |
| Alarm function for overheating | Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device | • | - | 8012-0979 |
| Analog output 4-20 mA | for temperature values (output not adjustable) | • | 02 | 8012-0941 |
| Calibration certificate, expanded | for temperature; for extending the measurement in center of chamber to include another test temperature | • | - | 8012-1110 |
| | for temperature, measurement in center of chamber at specified temperature | • | - | 8012-1129 |
| Calibration certificate, temperature | temperature measurement incl. certificate, 9 measuring points at specified temperature | • | - | 8012-0915 |
| | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | • | - | 8012-0918 |
| | temperature measurement incl. certificate and 27 measuring points at specified temperature | • | - | 8012-0921 |
| Clock | battery-backed | • | - | 8012-0981 |
| Door lock | lockable door handle | • | - | 8012-1025 |
| Ethernet interface | for Multi Management Software APT-COM™ | • | - | 8012-0986 |
| Pt 100 temperature sensor | additional flexible Pt 100, interior, for displaying the temperature on the unit display | • | - | 8012-0940 |

ACCESSORIES

| Designation | Description | BD 115 | * | Art.-No. |
|-------------|--|--------|---|-----------|
| | convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units. | | | |
| APT-COM™ 4 | version 4, PROFESSIONAL edition | • | - | 9053-0040 |
| | for simple logging and documentation requirements with up to 5 networked units. | | | |
| | version 4, BASIC edition | • | - | 9053-0039 |

| Designation | Description | BD 115 | * | Art.-No. |
|-------------------------|---|--------|---|-----------|
| | 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 | • | – | 9053-0042 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | • | - | 8012-2250 |
| | 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 |
| 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 |
| | max. load per rack 30 kg | | | |
| Rack | chrome plated | • | - | 8012-2041 |
| | stainless steel | • | - | 8012-2172 |
| Rubber pads | set anti-slip feet | • | - | 8012-2030 |
| | max. load per rack 30 kg | | | |
| Shelf, perforated | Stainless steel | • | - | 8012-2180 |
| Table on castors | stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm | • | - | 9051-0018 |

SERVICES

| Designation | Description | * | Art.-No. |
|--|--|---|-----------|
| Calibration services | | | |
| Temperature calibration | Calibration of one (1) test temperature specified by the user in center of chamber, including certificate Travel to be quoted separate. | – | DL30-0110 |
| | Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate Travel to be quoted separate. | – | DL30-0102 |
| Temperature measurement, 9 measuring points | Temperature measurement with 9 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | – | DL30-0109 |
| Temperature measurement, 18 measuring points | Temperature measurement with 18 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 2 shelves are required. | – | DL30-0118 |

| Designation | Description | * | Art.-No. |
|--|---|---|-----------|
| Temperature measurement, 27 measuring points | Temperature measurement with 27 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | – | DL30-0127 |
| Installation services | | | |
| Unit installation | Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions check, brief operating instructions. (excl.: unpacking, setup, controller instructions, programming, installation work) Travel to be quoted as separate. | – | DL10-0100 |
| Unit instructions | Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate Limited to 3 hours. | – | DL10-0500 |
| Maintenance services | | | |
| BRONZE 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate. 10% Discount on Spare Parts and Labor for any additional Services needed Wear + tear parts to be purchased or billed to customer. Travel to be quoted as separate. | – | DL20-0720 |
| GOLD 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate of Temperature. 25% Discount on Spare Parts and Labor for any additional Services needed. One additional courtesy visit per year can be used for service visit or operator. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | – | DL20-0915 |
| Preventive maintenance | One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Checking a test temperature specified by the user in center of usable space without certificate. Wear + tear parts need to be purchased or billed to customer. Travel to be quoted as separate. | – | DL20-0601 |
| SILVER 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate 15% Discount on Spare Parts and Labor for any additional Services needed One additional courtesy visit per year can be used for service visit or operator training. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | – | DL20-0815 |
| Validation services | | | |
| Execution of IQ/OQ | Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate. | – | DL40-0100 |
| Execution of IQ/OQ/PQ | Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate. | – | DL44-0500 |
| Warranty service | | | |
| 1-year warranty extension | The warranty is extended by 1 year from the delivery date, wear parts are excluded | – | DL50-0010 |

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.

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