Model BD 115 | Incubators Avantgarde.Line with natural convection

BENEFITS

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



Model 115

MAIN FEATURES

- Temperature range: ambient temperature plus 5 °C to 100 °C
- High temperature accuracy thanks to APT.line[™] technology
- · Natural convection
- Controller with LCD display
- · Electromechanical control of the exhaust air flap
- · Inner door made of tempered safety glass



Model 115

- · 2 chrome-plated racks
- 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 [cu.ft.] | Voltage | Option model | Version | ArtNo. |
|---|---------------------|--------------|------------|-----------|
| Model BD 115 | | | | |
| 4 230 V 1 ph 50/60 Hz 120 V 1 ph 60 Hz | 230 V 1 ph 50/60 Hz | Standard | BD115-230V | 9010-0325 |
| | Standard | BD115UL-120V | 9010-0326 | |

TECHNICAL DATA

| Description | BD115-230V ¹ | BD115UL-120V ¹ | |
|--|-------------------------|---------------------------|--|
| Article Number | 9010-0325 | 9010-0326 | |
| Performance Data Temperature | | | |
| Temperature range 5 °C above ambient temperature to [°C] | 100 | 100 | |
| Temperature variation at 37 °C [± K] | 0.4 | 0.4 | |
| Temperature fluctuation at 37 °C [± K] | 0.1 | 0.1 | |
| Heating-up time to 37 °C [min] | 55 | 55 | |
| Recovery time after 30 seconds door open at 37 °C [min] | 16 | 16 | |
| | | | |

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.

| Description | BD115-230V ¹ | BD115UL-120V ¹ |
|--------------------------------------|-------------------------|---------------------------|
| Article Number | 9010-0325 | 9010-0326 |
| Electrical data | | |
| Rated Voltage [V] | 230 | 120 |
| Power frequency [Hz] | 50/60 | 60 |
| Nominal power [kW] | 0.35 | 0.35 |
| Unit fuse [A] | 6.3 | 12.5 |
| Phase (Nominal voltage) [ph] | 1 | 1 |
| Measures - Outer dimensions | | |
| Width net [in] | 27.97 | 27.97 |
| Height net [in] | 28.96 | 28.96 |
| Depth net [in] | 23.84 | 23.84 |
| Wall clearance back [in] | 6.3 | 6.3 |
| Wall clearance sidewise [in] | 3.94 | 3.94 |
| Measures - Doors | | |
| Unit doors | 1 | 1 |
| Measures - Internal Dimensions | | |
| Width [in] | 20.09 | 20.09 |
| Height [in] | 20.88 | 20.88 |
| Depth [in] | 16.55 | 16.55 |
| Measures | | |
| Interior volume [cu.ft.] | 4 | 4 |
| Net weight of the unit (empty) [lbs] | 119 | 119 |
| permitted load [lbs] | 331 | 331 |
| Load per rack [lbs] | 66 | 66 |
| Environment-specific data | | |
| Energy consumption at 37 °C | 25 Wh/h | 25 Wh/h |
| Fixtures | | |
| Number of shelves (std./max.) | 2/5 | 2/5 |

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.

OPTIONS AND ACCESSORIES

| Designation | Description | * | ArtNo. |
|-----------------------------------|---|--------|-----------|
| 3 | 10 mm | 01 | 8012-0390 |
| | 30 mm | 01 | 8012-0397 |
| | 50 mm | 01 | 8012-0399 |
| | left | | |
| | 10 mm | 01 | 8012-0388 |
| | 30 mm | 01 | 8012-0047 |
| | 50 mm | 01 | 8012-0051 |
| Access port with silicone | right | | |
| plug | 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, 10 | 8012-0053 |
| 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 measurement incl. certificate and 27 measuring points at specified temperature | - | 8012-0921 |
| temperature | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | - | 8012-0918 |
| | temperature measurement incl. certificate, 9 measuring points at specified temperature | - | 8012-0915 |
| Cart | Cart – stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm | - | 9051-0018 |
| Door lock | lockable door handle | - | 8012-1025 |
| Ethernet interface | for communication software | - | 8012-0986 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | - | 1002-0016 |
| Pt 100 temperature sensor | additional flexible Pt 100, interior, for displaying the temperature on the unit display | - | 8012-0940 |
| Dl- | chrome plated | - | 6004-0175 |
| Rack | stainless steel | - | 6004-0159 |
| Rack, heavy load | Stainless steel (1.4301/AISI 304), max. load per rack 70 kg, max. total load 150 kg | - | 6004-0202 |
| Shelf, perforated | stainless steel | - | 6004-019 |
| | APT-COM™ communications software | | |
| Software | version 2 to 3, GLP edition | 19 | 9053-0016 |
| | version 3, BASIC edition | 19 | 9053-0014 |
| | version 3, GLP edition | 19 | 9053-0015 |
| | version 3, STANDARD edition | 19 | 9053-0013 |
| | APT-COM™ communications software, price: for free | | |
| | | 40 | 0053 0000 |
| | version 3, GLP DEMO Edition | 19 | 9053-0008 |

Notes > See last page

SERVICES

| Designation | Description | * | ArtNo. |
|--------------------------------------|--|----|----------|
| Installation services | | | |
| Data Logger Kit installation service | unit function instructions for operation and programming of the controller | 18 | DL100400 |

^{*} Notes > See last page

| Designation | Description | * | ArtNo. |
|---|---|-------------------|-----------|
| Installation | and set up of unit at operating location, connect to existing connections | 13, 18 | DL100100 |
| Preventive maintenance | | | |
| Preventive maintenance | Executive of equipment inspection according to maintenance plan | 14, 18 | DL200200 |
| Calibration services | | | |
| Data Logger Kit calibration service | including certificate, one measuring point in center of chamber at specified temperature | 14, 16, 17, 18 | DL300101 |
| Temperature measurement 18 measuring points | including certificate, 18 measuring points at specified temperature | 14, 16, 17, 18 | DL300118 |
| Temperature measurement 27 measuring points | including certificate, 27 measuring points at specified temperature | 14, 16, 17, 18 | DL300127 |
| Temperature measurement 9 measuring points | including certificate, 9 measuring points at specified temperature | 14, 16, 17, 18 | DL300109 |
| Validation services | | | |
| Data Logger Kit validation service | in accordance with qualification folder | 15, 18, 20 | DL400100 |
| Execution of IQ/OQ/PQ | in accordance with customer's requirement, price: on request | 15, 18 | DL440500 |
| Qualification folder IQ/OQ | supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001 | 15, 18, 20 | 8012-0870 |
| Qualification folder IQ/OQ/PQ | supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ | 15, 18 | 8012-0958 |
| Warranty service | | | |
| Extension of the warranty from 2 to 3 years | beginning with the date of delivery, wearing parts are not included | - | DL016041 |
| Extension of the warranty from 2 to 5 years | beginning with the date of delivery, wearing parts are not included | - | DL016042 |

^{*} Notes > See last page

NOTES

- Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge. UL mark is not granted when this option is used. 01 02
- Heat resistant only to max. 200 °C. 03
- Only available on units rated for 230 V.
- Heating-up time may increase as a result of the lower heat conductivity.
- 09 Not in conjunction with the optional access port, door with window and interior lighting.
- 10 Not available on 23-liter units.
- Not available on 23- or 53-liter units.

 Only available on units rated for 230 V or 400 V. 11 12 13
- Installation and connections take place at unit location; transport within the company only upon consultation.
- We recommend a BINDER service contract (see the chapter on BINDER Service) to cover unit inspections, calibrations and validations
- OQ according to Yellow Paper = completed factory validation documentation of all OQ checklists.
- 16 Sensor calibration is performed in an accredited calibration laboratory.
- Calibration is performed according to the BINDER factory standard. 17
- 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). 18
- For additional accessories, refer to the Process documentation chapter. 19
- When ordering IQ/OQ qualification folders and associated IQ/OQ execution on one order, we offer a 15 % discount for both items.
 - When ordering IQ/OQ/PQ qualification folders and associated IQ/OQ/PQ execution on one order, we offer a 15 % discount for the item of the IQ/OQ/PQ folder.