

# Model BD 115 | Standard-Incubators with natural 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: +5°C above ambient temperature 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
- 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 [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
Model BD 115					
112	120 V 1~ 60 Hz -12,5 A	NEMA 5-15	Standard	BD115UL-120V	9010-0326
	230 V 1~ 50/60 Hz -6,3 A	CEE 7/7	Standard	BD115-230V	9010-0325

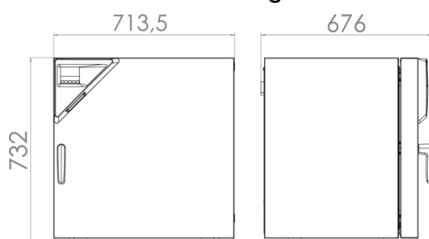
## TECHNICAL DATA

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
<b>Internal Dimensions</b>		
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
<b>Environment-specific data</b>		
Energy consumption at 100°C	150 Wh/h	150 Wh/h
Energy consumption at 37°C	25 Wh/h	25 Wh/h
<b>Fixtures</b>		
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.
Access port with silicone plug	back			
	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

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
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	•	-	8012-1129
	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.
APT-COM™ 4 BASIC-Edition	for simple logging and documentation requirements with up to 5 networked units.			
	version 4, BASIC edition	•	-	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	•	-	9053-0042

Designation	Description	BD 115	*	Art.-No.
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	•	-	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
Qualification documents	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 <sub>2</sub> , O <sub>2</sub> – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
	Hard copy inside folder	•	-	7007-0005
	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 <sub>2</sub> , O <sub>2</sub> , pressure, depending on unit			
	Digital in PDF format	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
Rack	max. load per rack 30 kg			
	chrome plated	•	-	8012-2041
	stainless steel	•	-	8012-2172
Rubber pads	set anti-slip feet	•	-	8012-2030
Shelf, perforated	max. load per rack 30 kg			
	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.
<b>Calibration services</b>			
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	05	DL30-0110
	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	05	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	05	DL30-0109
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	05	DL30-0127
<b>Installation services</b>			

Designation	Description	*	Art.-No.
Unit commissioning	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)	05	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
<b>Maintenance contracts</b>			
BRONZE 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts	05	DL20-0720
GOLD 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts, testing of all key functions, replacement of wear parts, calibration of one test temperature specified by the user in the center of the usable space, including certificate	05	DL20-0915
SILVER 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts, testing of all key functions, calibration of one test temperature specified by the user in the center of the usable space, without certificate	05	DL20-0815
<b>Maintenance services</b>			
Maintenance	One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Calibration of a test temperature specified by the user in center of usable space without certificate	05	DL20-0601
<b>Validation services</b>			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	05	DL40-0100
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	05	DL44-0500
<b>Warranty service</b>			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	05	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.
- 05     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).

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