

Model BF 115 | Standard-Incubators with forced convection

The BINDER incubator of the BF Avantgarde.Line series with forced convection is suitable for all gentle incubation applications, particularly under a full load and large batch throughputs. This incubator is extremely homogeneous and has quick recovery times.

BENEFITS

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



Model 115



Model 115

MAIN FEATURES

- Temperature range (model 56 | 260): ambient temperature plus 7 °C to 100 °C
- Temperature range (model 115): ambient temperature plus 8 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Forced 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
- 4 stable castors, two with brakes, from 720 liters
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm
- Ergonomic handle design
- USB port for recording data

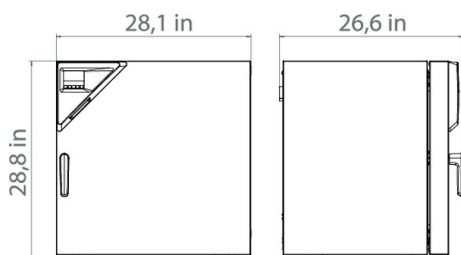
ORDERING INFORMATION

Interior volume [cu.ft.]	Voltage	Option model	Version	Art.-No.
4	230 V 1~ 50/60 Hz	Standard	BF115-230V	9010-0315
	120 V 1~ 60 Hz	Standard	BF115UL-120V	9010-0316

TECHNICAL DATA

Description	BF115-230V ¹	BF115UL-120V ¹
Article Number	9010-0315	9010-0316
Performance Data Temperature		
Temperature range +8 °C above ambient temperature to [°C]	100	100
Temperature variation at 37 °C [± K]	0.3	0.3
Temperature fluctuation at 37 °C [± K]	0.1	0.1
Heating-up time to 37 °C [min]	8	8
Recovery time after 30 seconds door open at 37 °C [min]	3	3
Electrical data		
Rated Voltage [V]	230	120
Power frequency [Hz]	50/60	60
Nominal power [kW]	0.4	0.4
Unit fuse [A]	6.3	12.5
Phase (Nominal voltage)	1~	1~
Measures		
Interior volume [cu.ft.]	4	4
Net weight of the unit (empty) [lbs]	123	123
Permitted load [lbs]	331	331
Load per rack [lbs]	66	66
Wall clearance back [in]	6.3	6.3
Wall clearance sidewise [in]	3.94	3.94
Internal Dimensions		
Width [in]	21.67	21.67
Height [in]	21.67	21.67
Depth [in]	14.97	14.97
Doors		
Unit doors	1	1
Housing dimensions not incl. fittings and connections		
Width net [in]	27.97	27.97
Height net [in]	28.57	28.57
Depth net [in]	23.84	23.84
Environment-specific data		
Energy consumption at 37 °C [Wh/h]	60	60
Sound-pressure level [dB(A)]	43	43
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.

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

OPTIONS

Designation	Description	*	Art.-No.	
Options/Accessories	Calibration certificate, temperature	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-1590
		additional flexible Pt 100, interior, for displaying the temperature on the unit display	-	8012-1618
		battery-backed	-	8012-1639
		for Multi Management Software APT-COM™	-	8012-0990
		for temperature values (output not adjustable)	02	8012-1622
		for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-1111
		Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	09	8012-1045
		left		
		10 mm	01	8012-1274
		30 mm	01	8012-1156
		50 mm	01	8012-1164
		lockable door handle	-	8012-1663
		Measurement in center of chamber at specified temperature	-	8012-1130
		right		
		10 mm	01	8012-1267
		30 mm	01	8012-1153
		50 mm	01	8012-1162
		Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device	-	8012-1634
		temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-1569
		temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-1548
		top		
		10 mm	01	8012-1261
		30 mm	01	8012-1150
		50 mm	01	8012-1159
		100 mm	01, 10	8012-1166
		Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67)	07	8012-1638
		with 15 W light bulb		
	120 V option model	-	8012-0971	
	230 V option model	-	8012-1626	
	With gas inlet and outlet, Ø 10 mm, incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	-	8012-1048	

* Notes › See last page

ACCESSORIES

Designation	Description	*	Art.-No.
Multi Management Software	Multi Management Software APT-COM™		
	version 4, BASIC edition	19	9053-0039
	version 4, GLP edition	19	9053-0042
	version 4, PROFESSIONAL edition	19	9053-0040

* Notes › See last page

Designation	Description	*	Art.-No.
	chrome plated	-	6004-0167
	Stainless steel	-	6004-0183
	stainless steel	-	6004-0151
	concentrated, for gentle remove of residual contaminants; 1 kg	-	1002-0016
	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
Options/Accessories	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
	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	19	8012-0821
	set of 4 anti-slip feet, for safe stacking of units	-	8012-1887
	stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm	-	9051-0018
	Stainless steel, max. load per rack 70 kg	-	6004-0199
	T 220: For continuous temperature logging from -90 °C to 220 °C. The kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit	19	8012-0715

* Notes › See last page

SERVICES

Designation	Description	*	Art.-No.
Installation services			
Services	Unit function instructions for operation and programming of the controller	18	DL10-0500
	Unpacking and setting up of unit, connecting to existing connections, and checking function	13, 18	DL10-0100
Preventive maintenance			
Services	Executive of equipment inspection according to maintenance plan	14, 18	DL20-0200
Calibration services			
Services	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 with 18 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0118
	Temperature measurement with 27 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0127
	Temperature measurement with 9 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0109
Validation services			
Services	Execution of IQ/OQ in accordance with qualification folder	15, 18	DL40-0100
	Execution of IQ/OQ/PQ in accordance with qualification folder	15, 18	DL44-0500
Warranty service			
Services	The warranty is extended from 2 to 3 years from the delivery date, wear parts are excluded	-	DL01-7041
	The warranty is extended from 2 to 5 years from the delivery date, wear parts are excluded	-	DL01-7042

* 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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