Model BF 720 | 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 720

MAIN FEATURES

- Temperature range (model 56 | 260): +7 °C above ambient temperature to +100 °C
- Temperature range (model 115): +8 °C above ambient temperature 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

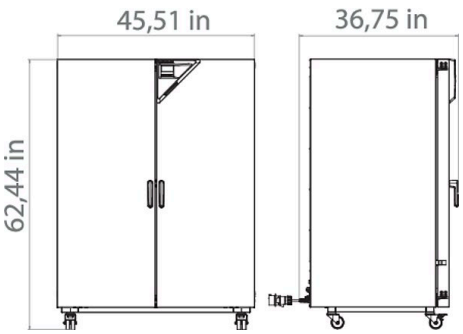
Interior volume [cu.ft.]	Voltage	Option model	Version	Art.-No.
25.9	230 V 1~ 50/60 Hz	Standard	BF720-230V	9010-0321
	240 V 1~ 60 Hz	Standard	BF720UL-240V	9010-0322

TECHNICAL DATA

Description	BF720-230V[1]	BF720UL-240V[1]
Article Number	**9010-0321**	**9010-0322**
Performance Data Temperature		
Temperature range +10 °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]	15	15
Recovery time after 30 seconds door open at 37 °C [min]	4	4
Electrical data		
Rated Voltage [V]	230	240
Power frequency [Hz]	50/60	60
Nominal power [kW]	1.75	1.85
Phase (Nominal voltage)	1~	1~
Measures		
Interior volume [cu.ft.]	25.9	25.9
Net weight of the unit (empty) [lbs]	364	364
Permitted load [lbs]	694	694
Load per rack [lbs]	99	99
Wall clearance back [in]	6.3	6.3
Wall clearance sidewise [in]	3.94	3.94
Internal Dimensions		
Width [in]	39.4	39.4
Height [in]	51.2	51.2
Depth [in]	22.26	22.26
Doors		
Inner doors	2	2
Unit doors	2	2
Housing dimensions not incl. fittings and connections		
Width net [in]	45.9	45.9
Height net [in]	62.6	62.6
Depth net [in]	34.28	34.28
Environment-specific data		
Energy consumption at 37 °C [Wh/h]	130	130
Sound-pressure level [dB(A)]	43	43
Fixtures		
Number of shelves (std./max.)	2/16	2/16

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 in accordance 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	left		
	10 mm	01	8012-1274
	30 mm	01	8012-1156
	50 mm	01	8012-1164
	right		
	10 mm	01	8012-1267
	30 mm	01	8012-1153
	50 mm	01	8012-1162
	top		
	10 mm	01	8012-1261
	30 mm	01	8012-1150
	50 mm	01	8012-1159
	100 mm	01	8012-1166
Alarm function for overheating	Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device	–	8012-1634
Analog output 4-20 mA	for temperature values (output not adjustable)	02	8012-1622
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	–	8012-1111
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	–	8012-1130
	temperature measurement incl. certificate and 27 measuring points at specified temperature	–	8012-1590
	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
Clock	battery-backed	–	8012-1639
Door lock	lockable door handle	–	8012-1816
Ethernet interface	for Multi Management Software APT-COM™	–	8012-0991
Inner chamber, reinforced	max. total load 350 kg	–	8012-1829
Interior lighting	with two 15 W light bulbs		
	230/240 V option model	–	8012-1823
Interior socket	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)	–	8012-1638
Load management	to comply with EMC requirements in accordance with EN 61326-1:2013-07 (IEC 61326-1:2012)	–	8012-1820
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	–	8012-1618

* Notes › See last page

ACCESSORIES

Designation	Description	*	Art.-No.
Data Logger Kit	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	–	8012-0715
Data Logger Software	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	–	8012-0821
Multi Management Software	Multi Management Software APT-COM™		
	version 4, BASIC edition	–	9053-0039
	version 4, GLP edition	–	9053-0042
	version 4, PROFESSIONAL edition	–	9053-0040
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	–	6004-0171
	stainless steel	–	6004-0155
Rack, heavy load	Stainless steel, max. load per rack 70 kg	–	6004-0204
			6004-0247
Shelf, perforated	Stainless steel	–	6004-0187

* Notes › See last page

SERVICES

Designation	Description	*	Art.-No.
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)	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
Maintenance services			
Maintenance	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 chamber without certificate	05	DL20-0200
Calibration services			
Temperature calibration	Calibration of one (1) test temperature specified by the user in center of chamber including certificate	03, 04, 05	DL30-0101
	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	03, 04, 05	DL30-0102
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0127
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0109
Validation services			
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

* 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 Sensor calibration is performed in an accredited calibration laboratory.
04 Calibration is performed according to the BINDER factory standard.
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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