

Model KB 720 | Cooling incubators with a large temperature range

The powerful virtuoso in cooling incubators for microorganisms: KB units are able to incubate with exceptional precision even when fully loaded, feature a hot-air disinfection routine, and can be programmed for weekend operation with ease. The new KB unit consumes as much as 40% less energy than the previous model.



Model 720



Model 720

IMPORTANT FEATURES

- Temperature range: 0°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel
- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- Simple programming of a second set temperature value
- Internal data logger, measured values can be read out in open format via USB
- Class 3.3 independent temperature safety device (DIN 12880) with visual and acoustic alarms
- Unit self-test for comprehensive status analysis
- Data interfaces: Ethernet, USB

ORDERING INFORMATION

Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
Model KB 720					
727	220...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB720-230V	9020-0475
	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB720UL-120V	9020-0503

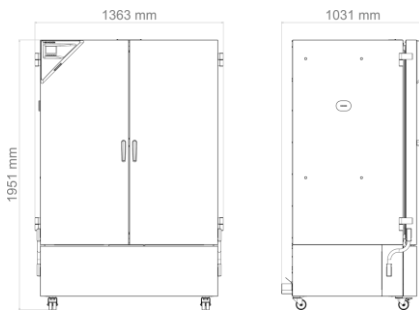
TECHNICAL DATA

Data		
Designation	KB720-230V	KB720UL-120V
Article Number	9020-0475	9020-0503
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	0...70 °C	0...70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	640 W	640 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220...240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,5 kW	1,5 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	727 L	727 L
Net weight of the unit (empty)	285 kg	285 kg
Load per rack	40 kg	40 kg
Permitted load	100 kg	100 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	180 mm	180 mm
Housing dimensions not incl. fittings and connections		
Width net	1,285 mm	1,285 mm
Height net	1,951 mm	1,951 mm
Depth net	900 mm	900 mm
Internal Dimensions		
Interior width	1,011 mm	1,011 mm
Interior height	1,250 mm	1,250 mm

Interior depth	575 mm	575 mm
Inner doors	2	2
Unit doors	2	2
Environment-specific data		
Energy consumption at 37°C	255 Wh/h	280 Wh/h
Fixtures		
Number of shelves (std./max.)	2/16	2/16

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. Technical data refers to 100 % fan speed. 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	KB 720	*	Art.-No.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
	30 mm	•	01	8012-2468
Access port with silicone plug	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472

Designation	Description	KB 720	*	Art.-No.
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	•	-	8012-2370
Analog output 4-20 mA	for temperature values (output not adjustable)	•	-	8012-2371
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	•	-	8012-2372
	for temperature, measurement in center of chamber at specified temperature	•	-	8012-2571
Calibration certificate, temperature	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2424
Door lock	lockable door handle	•	-	8012-2530
Door lock, electromechanical	can be opened with PIN code via controller	•	-	8012-2587
Inner chamber, reinforced	max. total load 200 kg	•	-	8012-2509
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2563
Shipping pallet	with unloading ramp for installing unit without forklift	•	-	8012-2545
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549
Swivel casters, height-adjustable	For horizontal alignment of the unit on uneven floors	•	-	8012-2541

ACCESSORIES

Designation	Description	KB 720	*	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
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
LED light bars	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
	Basic set 500, length 50 cm	•	-	8012-1108
	Basic set 900, length 90 cm	•	-	8012-1109

Designation	Description	KB 720	*	Art.-No.
	Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars			
	Expansion set 500, length 50 cm	•	-	8012-1717
	Expansion set 900, length 90 cm	•	-	8012-1718
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
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Reinforced rack	Load-bearing capacity 80 kg	•	-	8012-2414
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Shelf rack, perforated	Load-bearing capacity 40 kg	•	-	8012-2408
	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2385
Standard rack	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2391

SERVICES

Designation	Description	*	Art.-No.
Calibration services			
	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	–	DL30-0135
Calibration certificate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	–	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	–	DL30-0109

Designation	Description	*	Art.-No.
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	–	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	–	DL30-0127
Installation services			
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)	–	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	–	DL10-0500
Maintenance contracts			
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	–	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	–	DL20-0945
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	–	DL20-0845
Maintenance services			
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	–	DL20-0604
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	–	DL41-0200
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	–	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.

BINDER GmbH
Tuttlingen, Germany
TEL +49 7462 2005 0
info@binder-world.com
www.binder-world.com

BINDER Inc.
Bohemia, NY, USA
TEL +1 631 224 4340
usa@binder-world.com
www.binder-world.us

**BINDER Environmental Testing
Equipment (Shanghai) Co., Ltd.**
Shanghai, P.R. China
TEL +86 21 685 808 25
china@binder-world.com
www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.
Kowloon, Hong Kong, P.R. China
TEL +852 39070500
asia@binder-world.com
www.binder-world.com