Model KB PRO 720 | Cooling incubators with an extended temperature range

A temperature control cabinet that can do it all, the KB PRO is our most powerful cooling incubator. With a temperature range of -20°C to +100°C and comprehensive programming options, it covers a wide range of applications that extend well beyond incubation. Optional light modules are also available to turn the KB PRO into a chamber for ICH photostability testing or plant growth.

Model 720

Model 720

IMPORTANT FEATURES

- Temperature range: -20°C to +100°C
- Proven APT.line™ preheating chamber technology
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-290 refrigerant
- Door heating to prevent condensation
- Adjustable fan speed
- Housing design with HIT technology
- Stainless-steel inner chamber
- Inner doors made of metal oxide-coated safety glass
- Two racks with stainless-steel telescopic rails
- 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
- Intuitive touchscreen controller with time-segment and real-time programming

- Ergonomically adjustable control terminal (for units with a volume of 470 liters and above)
- Signal triangle with light-up status display (for units with a volume of 470 liters and above)
- 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
- BINDER Multi Management Software APT-COM™ basic edition
- Optional light modules for ICH photostability testing (for models 260, 470, 720)
- Optional LED light modules for plant growth (for models from 260)

ORDERING INFORMATION

Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
Model KB PRO 720					
727	208...240 V 1~ 50/60 Hz -16,0 A	–	Standard	KBPRO720-230V	9020-0436

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TECHNICAL DATA

Data	
Designation	KBPRO720-230V
Article Number	9020-0436
Option model	Standard

Performance Data Temperature	
Temperature range	-20...100 °C
Temperature uniformity at 37°C	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K
Max. heat compensation at 37°C	1,000 W
Recovery time after door was opened for 30 s at 37°C	4 min

Electrical data	
Rated Voltage	208...240 V
Power frequency	50/60 Hz
Nominal power	1,7 kW
Unit fuse	16,0 A
Phase (Nominal voltage)	1~

Dimensions and weights	
Interior volume	727 L
Net weight of the unit (empty)	296 kg
Load per rack	40 kg
Permitted load	100 kg
Wall clearance back	100 mm
Wall clearance sidewise	180 mm

Housing dimensions not incl. fittings and connections	
Width net	1,285 mm
Height net	1,951 mm
Depth net	900 mm

Internal Dimensions	
Interior width	1,011 mm
Interior height	1,250 mm

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Interior depth	575 mm
Inner doors	2
Unit doors	2
Environment-specific data	
Energy consumption at 37°C	330 Wh/h
Fixtures	
Number of shelves (std./max.)	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]
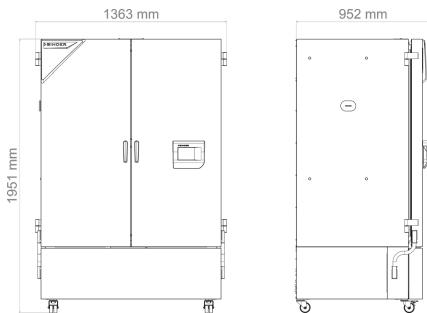
OPTIONS

Designation	Description		*	Art.-No.
	left			
	30 mm		01	8012-2473
	50 mm		01	8012-2474
	100 mm		01	8012-2475
	right			
Access port with silicone plug	30 mm		01	8012-2476
	50 mm		01	8012-2477
	100 mm		01	8012-2478
	top			
	30 mm		01	8012-2498
	50 mm		01	8012-2479

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Designation	Description	*	Art.-No.
	100 mm	01	8012-2480
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	-	8012-2502
Analog output 4-20 mA	for temperature values (output not adjustable)	-	8012-2573
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-2373
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	-	8012-2572
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-2377
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-2381
	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-2425
Coated heat exchanger	For preventing damage to the aluminum heat exchanger caused by corrosive sample material	-	8012-2464
Door lock	lockable door handle	-	8012-2533
Door lock, electromechanical	can be opened with PIN code via controller	-	8012-2588
Inner chamber, reinforced	max. total load 200 kg	-	8012-2515
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	-	8012-2564
Shipping pallet	with unloading ramp for installing unit without forklift	-	8012-2546
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	-	8012-2553
Swivel casters, height-adjustable	For horizontal alignment of the unit on uneven floors	-	8012-2542

ACCESSORIES

Designation	Description	*	Art.-No.
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
CO$_2$ gassing module	BINDER CO$_2$ gassing module 0-1%, with NDIR CO$_2$ sensor and analog output 4-20 mA	-	8012-2140
	BINDER CO$_2$ gassing module 0-20%, with NDIR CO$_2$ sensor and analog output 4-20 mA	-	8012-2138
ICH light module	BINDER ICH-Q1B light module consisting of a VIS cassette and a UVA cassette as well as an independent power supply	-	8012-2442

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Designation	Description	*	Art.-No.
ICH light module with LQC	BINDER ICH-Q1B light module with light-dose control consisting of a VIS cassette, a UVA cassette, a spherical VIA sensor, a spherical UVA sensor as well as an independent power supply	-	8012-2444
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 300, length 30 cm	-	8012-1107
	Basic set 500, length 50 cm	-	8012-1108
	Basic set 900, length 90 cm	-	8012-1109
	Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars		
	Expansion set 300, length 30 cm	-	8012-1716
	Expansion set 500, length 50 cm	-	8012-1717
	Expansion set 900, length 90 cm	-	8012-1718
Light module for plants	BINDER LED plant light module consisting of 16 LED strip lights, 3-channel controller and fresh air pump as well as independent power supply	-	8012-2439
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_2, O_2 – 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_2, O_2, pressure, depending on unit		
	Digital in PDF format	-	7057-0001
	Hard copy inside folder	-	7007-0001
Reinforced rack	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel		
	Load-bearing capacity 80 kg	-	8012-2414
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel		
	Load-bearing capacity 40 kg	-	8012-2408
Standard rack	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
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel		
	Load-bearing capacity 40 kg	-	8012-2391

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SERVICES

Designation	Description	*	Art.-No.
Calibration services			
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	–	DL30-0135
	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
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

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NOTES

01   Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.

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