# Model Series KB | Refrigerated 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

### **IMPORTANT FEATURES**

- Temperature range: o°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



Model 720

- 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 3.1 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 volur	ne	Power supply - unit fuse	Plug*	Version	Model version	ArtNo.
[L]	[L]					
Model KB 72	0					
727 727		220240 V 1~ 50/60 Hz -16,0 A	-	Standard	KB720-230V	9020-0475
	727	120 V 1~ 50/60 Hz -16,0 A	_	Standard	KB720UL-120V	9020-0503

### TECHNICAL DATA

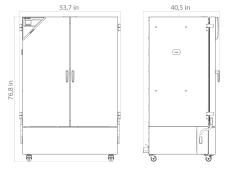
Data		
Designation	KB720-230V	KB720UL-120V
Article Number	9020-0475	9020-0503
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	070 °C	070 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	640 W	640 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 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  $\pm 22 \,^{\circ}C \pm 3 \,^{\circ}C$  and a power supply voltage fluctuation of  $\pm 10 \,^{\circ}$ . 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	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
Access port with silicone plug	30 mm	•	01	8012-2468
	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471

#### BINDER Best conditions for your success

Designation	Description	KB 720	*	ArtNo.
	100 mm	•	01	8012-2472
Alarm	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 measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
temperature	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
Options/Accessories	For horizontal alignment of the unit on uneven floors	•	-	8012-2541
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

# ACCESSORIES

Designation	Description	KB 720	*	ArtNo.
	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.			
	version 4, PROFESSIONAL edition	•	-	9053-0040
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4	version 4, BASIC edition	•	_	9053-0039
	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
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED light bars	Basic set 500, length 50 cm	•	-	8012-1108
	Basic set 900, length 90 cm	•	-	8012-1109

#### BINDER Best conditions for your success

Designation	Description	KB 720	*	ArtNo.
	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
	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			
		•	-	8012-2385
Shelves	Load-bearing capacity 40 kg	•	-	8012-2391
		•	-	8012-2408
	Load-bearing capacity 80 kg	•	-	8012-2414
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250

### SERVICES

Designation	Description	*	ArtNo.
Calibration services			
	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate Travel to be quoted separate.	-	DL30-0135
Temperature calibration	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate Travel to be quoted separate.	_	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required.	_	DL30-0109
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 2 shelves are required.	_	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required.	_	DL30-0127

#### BINDER Best conditions for your success

Designation	Description	*	ArtNo.
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) Travel to be quoted as separate.	_	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate Limited to 3 hours.	_	DL10-0500
Maintenance services			
BRONZE 3-year maintenance contract	Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate. 10% Discount on Spare Parts and Labor for any additional Services needed Wear + tear parts to be purchased or billed to customer. Travel to be quoted as separate.	-	DL20-0720
GOLD 3-year maintenance contract	Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate of Temperature. 25% Discount on Spare Parts and Labor for any additional Services needed. One additional courtesy visit per year can be used for service visit or operator. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate.	_	DL20-0945
Preventive maintenance	One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Checking a test temperature specified by the user in center of usable space without certificate. Wear + tear parts need to be purchased or billed to customer. Travel to be quoted as separate.	_	DL20-0604
SILVER 3-year maintenance contract	Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate 15% Discount on Spare Parts and Labor for any additional Services needed One additional courtesy visit per year can be used for service visit or operator training. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate.	_	DL20-0845
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate.	-	DL41-0200
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate.	_	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.

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