



# --- COOLING INCUBATORS

## Series KB PRO | 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.



Model 470

### BENEFITS

- Reliable and powerful thanks to innovative temperature control technology
- Reliable: failsafe operation over the long term thanks to proven compressor technology and inner chamber made of stainless steel
- Smart: signal triangle with light-up status display, ergonomic control terminal with touchscreen program controller, rack with telescopic rails
- Efficient: low energy consumption thanks to modern inverter cooling technology

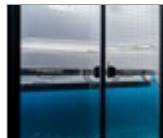




### IMPORTANT CHARACTERISTICS

- 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
- Robust housing design with HIT sandwich technology
- Stainless-steel inner chamber
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel (for models from 260 with telescopic rails)
- Large access port with silicone plug
- Tabletop units (up to model 130) are stackable with stacking adapter
- Floor-standing units (from model 260) featuring robust twin casters, with brakes at the front
- Intuitive touchscreen controller with time-segment and real-time programming
- Ergonomically adjustable control terminal (from model 470)
- Signal triangle with light-up status display (from model 470)
- 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)

## AVAILABLE SIZES

Designation	Interior volume	Kurz-URL
KB PRO 130	127	› <a href="https://go2binder.com/en-KBPRO130">go2binder.com/en-KBPRO130</a>
KB PRO 260	262	› <a href="https://go2binder.com/en-KBPRO260">go2binder.com/en-KBPRO260</a>
KB PRO 470	472	› <a href="https://go2binder.com/en-KBPRO470">go2binder.com/en-KBPRO470</a>
KB PRO 720	727	› <a href="https://go2binder.com/en-KBPRO720">go2binder.com/en-KBPRO720</a>
KB PRO 1060	1,070	› <a href="https://go2binder.com/en-KBPRO1060">go2binder.com/en-KBPRO1060</a>
KB PRO 1600	1,610	› <a href="https://go2binder.com/en-KBPRO1600">go2binder.com/en-KBPRO1600</a>

## OPTIONAL EQUIPMENT

<b>ICH-Lighting module</b>	<p>Light cassettes and supply module for upgrading a cooling incubator to a photostability test chamber. Can be retrofitted in two versions with or without light sensors for light dose control (LQC). Complies with ICH guideline Q1B.</p> <p><b>KB PRO 260, 470, 720</b></p>	
<b>Plant Lighting module</b>	<p>LED light strips with supply module and control unit for the three light channels warm white, cool white and dark red. The light strips can be positioned flexibly and are attached to standard slide-in grids.</p> <p><b>KB PRO 260, 470, 720 1060, 1600</b></p>	
<b>CO2 Gassing module</b>	<p>The free-standing units in the KB PRO series can be retrofitted with a CO2 gassing module. Control ranges 0-1 vol.-% CO2 for plants or 0-20 vol.-% CO2 for cell cultures.</p> <p><b>KB PRO 260, 470, 720</b></p>	
<b>Services</b>	<p>You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us.</p>	
<b>BINDER Customized Solutions</b>	<p>Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty.</p>	
<p>► Alle Extras Online <a href="https://go2binder.com/de-Optionen">go2binder.com/de-Optionen</a></p>		

## TECHNICAL DATA

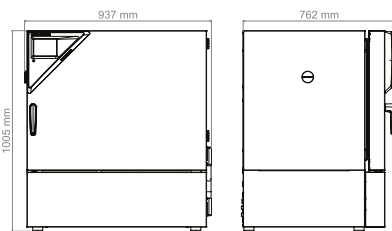
Data						
Designation	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600
Option model	Standard	Standard	Standard	Standard	Standard	Standard
Performance Data Temperature						
Temperature range	-20...100 °C	-20...100 °C	-20...100 °C	-20...100 °C	-20...100 °C	-20...100 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K	0.2 ± K	0.2 ± K	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K	0.1 ± K	0.1 ± K	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	450 W	800 W	800 W	1,000 W	1,000 W	1,000 W
Recovery time after door was opened for 30 s at 37°C	2 min	3 min	4 min	4 min	4 min	6 min
Electrical data						
Rated Voltage	208...240 V	208...240 V	208...240 V	208...240 V	208...240 V	208...240 V
Power frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Nominal power	1 kW	1,5 kW	1,5 kW	1,7 kW	1,8 kW	1,8 kW
Unit fuse	16,0 A	16,0 A	16,0 A	16,0 A	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~	1~	1~	1~	1~
Dimensions and weights						
Interior volume	127 L	262 L	472 L	727 L	1,070 L	1,610 L
Net weight of the unit (empty)	135 kg	190 kg	233 kg	296 kg	353 kg	443 kg
Load per rack	25 kg	30 kg	40 kg	40 kg	40 kg	40 kg
Permitted load	50 kg	90 kg	90 kg	100 kg	100 kg	100 kg
Wall clearance back	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Wall clearance sidewise	100 mm	180 mm	180 mm	180 mm	180 mm	180 mm
Housing dimensions not incl. fittings and connections						
Width net	900 mm	930 mm	930 mm	1,285 mm	1,285 mm	1,795 mm
Height net	1,005 mm	1,396 mm	1,951 mm	1,951 mm	1,951 mm	1,951 mm
Depth net	710 mm	900 mm	900 mm	900 mm	1,175 mm	1,175 mm
Internal Dimensions						
Interior width	656 mm	656 mm	656 mm	1,011 mm	1,011 mm	1,521 mm
Interior height	500 mm	695 mm	1,250 mm	1,250 mm	1,250 mm	1,250 mm
Interior depth	386 mm	575 mm	575 mm	575 mm	847 mm	847 mm
Inner doors	1	1	1	2	2	2
Unit doors	1	1	1	2	2	2
Environment-specific data						
Sound-pressure level at 25°C	46 dB(A)	48 dB(A)	50 dB(A)	50 dB(A)	50 dB(A)	52 dB(A)
Fixtures						
Number of shelves (std./max.)	2/6	2/9	2/16	2/16	2/16	2/16

## ORDERING INFORMATION

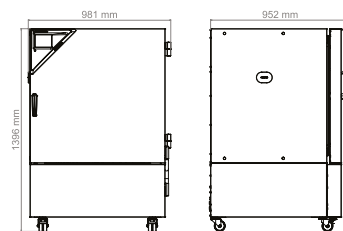
Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
<b>Model KB PRO 130</b>					
127	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO130-230V	9020-0433
<b>Model KB PRO 260</b>					
262	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO260-230V	9020-0434
<b>Model KB PRO 470</b>					
472	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO470-230V	9020-0435
<b>Model KB PRO 720</b>					
727	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO720-230V	9020-0436
<b>Model KB PRO 1060</b>					
1,070	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO1060-230V	9020-0437
<b>Model KB PRO 1600</b>					
1,610	208...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBPRO1600-230V	9020-0438

## DIMENSIONS AND WEIGHTS

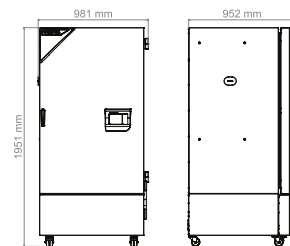
KB PRO 130



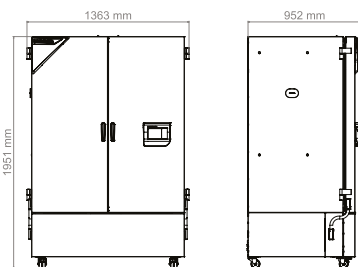
KB PRO 260



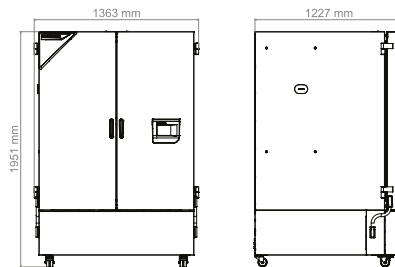
KB PRO 470



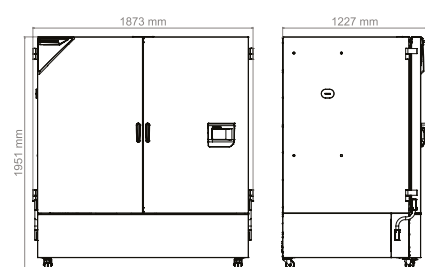
KB PRO 720



KB PRO 1060



KB PRO 1600



## OPTIONS

Designation	Description	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600	*	Art.-No.
Access port with silicone plug	left								
	30 mm	•	•	•	•	•	•	01	8012-2473
	50 mm	•	•	•	•	•	•	01	8012-2474
	100 mm	–	•	•	•	•	•	01	8012-2475
	right								
	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
	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	•	–	–	–	–	–	-	8012-2580
		–	•	–	–	–	–	-	8012-2462
		–	–	•	–	–	–	-	8012-2463
		–	–	–	•	•	–	-	8012-2464
		–	–	–	–	–	•	-	8012-2581
Door lock	lockable door handle	•	•	•	–	–	–	-	8012-2532
		–	–	–	•	•	•	-	8012-2533
Door lock, electromechanical	can be opened with PIN code via controller	•	•	•	–	–	–	-	8012-2534
		–	–	–	•	•	•	-	8012-2588

Designation	Description	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600	*	Art.-No.
Inner chamber, reinforced	max. total load 100 kg	•	–	–	–	–	–	-	8012-2512
	max. total load 180 kg	–	•	–	–	–	–	-	8012-2513
	max. total load 200 kg	–	–	•	–	–	–	-	8012-2514
	max. total load 200 kg	–	–	–	•	–	–	-	8012-2515
	max. total load 200 kg	–	–	–	–	•	–	-	8012-2516
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	•	•	–	–	–	-	8012-2560
		–	–	–	•	•	–	-	8012-2564
		–	–	–	–	–	•	-	8012-2568
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	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600	*	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
Base	With swivel casters, for mobile installation or leveling of the unit or stack of units	•	–	–	–	–	–	-	9051-0045
Converter, voltage	to operate the device at a nominal voltage of 120 V 1 ph 60 Hz								
	240 V option model	•	•	•	•	•	•	-	8009-0821
CO <sub>2</sub> gassing module	BINDER CO <sub>2</sub> gassing module 0-1%, with NDIR CO <sub>2</sub> sensor and analog output 4-20 mA	–	•	•	•	•	•	-	8012-2140
	BINDER CO <sub>2</sub> gassing module 0-20%, with NDIR CO <sub>2</sub> 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	–	•	•	–	–	–	-	8012-2441
	BINDER ICH-Q1B light module consisting of a VIS cassette and a UVA cassette as well as an independent power supply	–	–	–	•	–	–	-	8012-2442
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	–	•	•	–	–	–	-	8012-2443
	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

Designation	Description	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600	*	Art.-No.
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 <sub>2</sub> , O <sub>2</sub> – 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 check-lists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO <sub>2</sub> , O <sub>2</sub> , 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 50 kg	•	-	-	-	-	-	-	8012-2412
		-	•	•	-	-	-	-	8012-2413
	Load-bearing capacity 80 kg	-	-	-	•	-	-	-	8012-2414
		-	-	-	-	•	-	-	8012-2415
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel								
	Load-bearing capacity 25 kg	•	-	-	-	-	-	-	8012-2406
		-	•	•	-	-	-	-	8012-2407
		-	-	-	•	-	-	-	8012-2408
	Load-bearing capacity 40 kg	-	-	-	-	•	-	-	8012-2409
		-	-	-	-	-	•	-	8012-2410
Stacking adapter	For safe stacking of two identical units	•	-	-	-	-	-	-	9051-0048



Designation	Description	KB PRO 130	KB PRO 260	KB PRO 470	KB PRO 720	KB PRO 1060	KB PRO 1600	*	Art.-No.
Standard rack	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel	-	•	•	-	-	-	-	8012-2384
		-	-	-	•	-	-	-	8012-2385
		-	-	-	-	•	-	-	8012-2386
		-	-	-	-	-	•	-	8012-2387
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel	•	-	-	-	-	-	-	8012-2389
		-	•	•	-	-	-	-	8012-2390
		-	-	-	•	-	-	-	8012-2391
		-	-	-	-	•	-	-	8012-2392
	Load-bearing capacity 40 kg	-	-	-	-	-	•	-	8012-2393
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-

## SERVICES

Designation	Description	*	Art.-No.
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010
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
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
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
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
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
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
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
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	05	DL10-0500