

## Model KB PRO 130 | 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.

### 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



Model 130



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### 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
- Sturdy 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
- Ø 30 mm access port with silicone plug
- Stackable
- Intuitive touchscreen controller with time-segment and real-time programming
- 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 CO<sub>2</sub> gassing modules for plant growth (0-1%) and cell culture (0-20%)

### 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

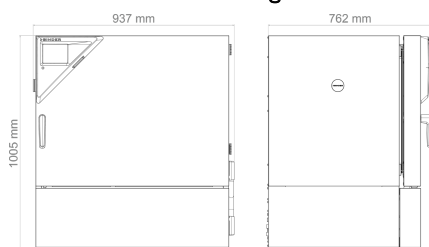
## TECHNICAL DATA

Data	
Designation	KBPRO130-230V
Article Number	9020-0433
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	450 W
Recovery time after door was opened for 30 s at 37°C	2 min
Electrical data	
Rated Voltage	208...240 V
Power frequency	50/60 Hz
Nominal power	1 kW
Unit fuse	16,0 A
Phase (Nominal voltage)	1~
Dimensions and weights	
Interior volume	127 L
Net weight of the unit (empty)	135 kg
Load per rack	25 kg
Permitted load	50 kg
Wall clearance back	100 mm
Wall clearance sidewise	100 mm
Housing dimensions not incl. fittings and connections	
Width net	900 mm
Height net	1,005 mm
Depth net	710 mm
Internal Dimensions	
Interior width	656 mm
Interior height	500 mm

Interior depth	386 mm
Inner doors	1
Unit doors	1
<b>Environment-specific data</b>	
Sound-pressure level at 25°C	46 dB(A)
Energy consumption at 37°C	160 Wh/h
<b>Fixtures</b>	
Number of shelves (std./max.)	2/6

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.
Access port with silicone plug	left		
	30 mm	01	8012-2473
	50 mm	01	8012-2474
	right		
	30 mm	01	8012-2476
	50 mm	01	8012-2477
	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

Designation	Description	*	Art.-No.
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
Door lock	lockable door handle	-	8012-2532
Door lock, electromechanical	can be opened with PIN code via controller	-	8012-2534
Inner chamber, reinforced	max. total load 100 kg	-	8012-2512
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	-	8012-2560
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	-	8012-2553

## 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
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
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
	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
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	8012-2250

Designation	Description	*	Art.-No.
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 checklists 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
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
Stacking adapter	For safe stacking of two identical units	-	9051-0048
Standard rack	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel		
	Load-bearing capacity 25 kg	-	8012-2389

## SERVICES

Designation	Description	*	Art.-No.
<b>Calibration services</b>			
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	05	DL30-0135
	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	05	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	05	DL30-0109
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	05	DL30-0127
<b>Installation services</b>			
Installation of CO <sub>2</sub> gassing module	Installation of BINDER CO <sub>2</sub> gassing module (0-1% or 0-20%), assembly of supply box, insertion of CO <sub>2</sub> sensor and gas hose in interior, sealing of access port, connection of box to an existing CO <sub>2</sub> gas supply, update of controller data set, function check	05	

Designation	Description	*	Art.-No.
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)	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
<b>Maintenance contracts</b>			
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	05	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	05	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	05	DL20-0845
<b>Maintenance services</b>			
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	05	DL20-0604
<b>Validation services</b>			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	05	DL41-0200
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	05	DL44-0500
<b>Warranty service</b>			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	05	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.
- 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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