# Model KB PRO 130 | Refrigerated 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



Model 130

## 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
- 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)
- Access port Ø 30 mm with silicone plug (up to model 130)
- Access port 80 mm x 45 mm with silicone plug (from model 260)
- 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)

## ORDERING INFORMATION

| Interior volume | | Power supply - unit fuse | Plug* | Version | Model version | Art.-No. |
|---|---|---|---|---|---|---|
| [cu.ft.] | [L] | | | | | |
| **Model KB PRO 130** | | | | | | |
| 4 | 127 | 208...240 V 1~ 50/60 Hz -16,0 A | CEE 7/7 | Standard | KBPRO130-230V | 9020-0433 |

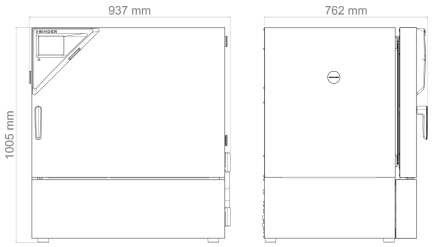
## TECHNICAL DATA

| | |
|---|---|
| **Data** | |
| Article Number | 9020-0433 |
| Designation | KBPRO130-230V |
| 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 | 4 cu.ft. |
| Net weight of the unit (empty) | 298 lbs |
| Load per rack | 66 lbs |
| Permitted load | 331 lbs |
| Wall clearance back | 3,94 in |
| Wall clearance sidewise | 3,94 in |
| **Housing dimensions not incl. fittings and connections** | |
| Width net | 35.43 in |
| Height net | 39.57 in |
| Depth net | 27.95 in |
| **Internal Dimensions** | |
| Interior width | 25.83 in |
| Interior height | 19.69 in |

| | |
|---|---|
| Interior depth | 15.2 in |
| Inner doors | 1 |
| Unit doors | 1 |
| **Environment-specific data** | |
| Sound-pressure level at 25°C | 46 dB(A) |
| Energy consumption at 25°C | 155 Wh/h |
| Energy consumption at 37°C | 160 Wh/h |
| **Fixtures** | |
| 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 | accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A) | - | 8012-2502 |

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| 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 |
| 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 |
| 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 | IQ/OQ documents digital in PDF format – supporting documents for validation consisting of: IQ/OQ checklists, comprehensive unit documentation covering: | | |
| | temperature and light. Excluded: Document execution is separate | - | 7057-0022 |
| | IQ/OQ documents digital in PDF format – supporting documents for validation consisting of: IQ/OQ checklists, comprehensive unit documentation covering: temperature. Excluded: Document execution is separate | | |
| | temperature. Excluded: Document execution is separate | - | 7057-0010 |
| Qualification documents IQ/OQ/PQ | IQ/OQ/PQ documents digital in PDF format – supporting documents for validation customizied to customer requirements, PQ section added to the qualification folder IQ/OQ; supporting documents for validation consisting of: IQ/OQ checklists, comprehensive unit documentation covering: temperature values. Excluded: Document execution is separate | | |
| | temperature values. Excluded: Document execution is separate | - | 7057-0016 |
| 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. |
|---|---|---|---|
| **Calibration services** | | | |
| Temperature calibration | Calibration of one (1) test temperature specified by the user in center of chamber, including certificate Travel to be quoted separate. | 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 Travel to be quoted separate. | 05 | 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. | 05 | 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. | 05 | 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. | 05 | DL30-0127 |
| **Installation services** | | | |

| Designation | Description | * | Art.-No. |
|---|---|---|---|
| Installation services | Installation of BINDER $CO_2$ gassing module (0-1% or 0-20%), assembly of supply box, insertion of $CO_2$ sensor and gas hose in interior, sealing of access port, connection of box to an existing $CO_2$ gas supply, update of controller data set, function check | 05 | DL10-0130 |
| 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. | 05 | DL10-0170 |
| 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. | 05 | DL10-0550 |
| **Maintenance services** | | | |
| 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 |
| 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. | 05 | 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 | 05 | DL20-0845 |
| **Validation services** | | | |
| Execution of IQ/OQ | Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate. | 05 | DL41-0200 |
| Execution of IQ/OQ/PQ | Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate. | 05 | DL44-0500 |
| **Warranty service** | | | |
| 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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