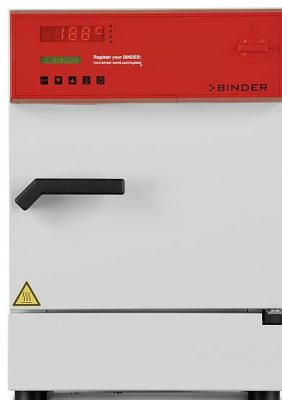


Model KB 23 | Cooling incubators with compressor technology

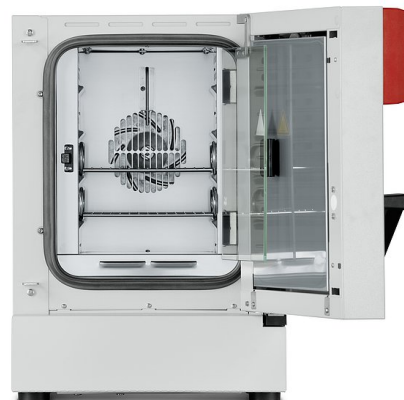
The most versatile among the cooled incubators for microorganisms: The BINDER KB series cooled incubator controls temperature ranges of -5 °C to 100 °C. With its comprehensive program functions, this cooled incubator offers a wide range of capabilities and delivers reproducible test results.

BENEFITS

- Safe, reproducible incubation, even at high ambient temperatures
- Disinfection routine at 100 °C
- Up to 30% lower energy consumption compared to the previous model



Model 23



Model 23

MAIN FEATURES

- Temperature range: 0 °C to 100 °C
- APT.line™ preheating chamber technology
- Cooling with compressor cooling unit
- Adjustable fan speed
- Controller with time-segment and real-time programming
- Elapsed time indicator
- Inner door made of tempered safety glass
- 2 stainless steel racks
- Stackable
- Class 3.1 independent temperature safety device (DIN 12880) with visual and audible temperature alarm

ORDERING INFORMATION

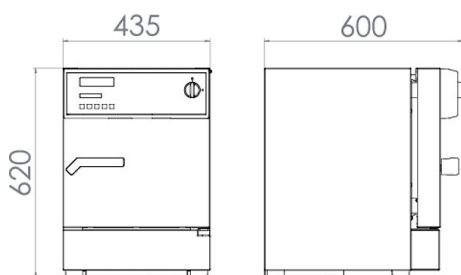
| Interior volume [L] | Voltage | Option model | Version | Art.-No. |
|---------------------|----------------------|--------------|--------------|-----------|
| Model KB 23 | | | | |
| 20 | 230 V 1~ ph 50/60 Hz | Standard | KB023-230V | 9020-0112 |
| | 120 V 1~ ph 60 Hz | Standard | KB023UL-120V | 9020-0113 |

TECHNICAL DATA

| | | |
|---|-------------------------|---------------------------|
| Description | KB023-230V ¹ | KB023UL-120V ¹ |
| Article Number | 9020-0112 | 9020-0113 |
| Performance Data Temperature | | |
| Temperature range [°C] | 0...100 | 0...100 |
| Temperature variation at 37 °C [± K] | 0.3 | 0.3 |
| Temperature fluctuation at 37 °C [± K] | 0.1 | 0.1 |
| Heating-up time to 37 °C [min] | 11 | 11 |
| Recovery time after 30 seconds door open at 37 °C [min] | 2 | 2 |
| Electrical data | | |
| Rated Voltage [V] | 230 | 120 |
| Power frequency [Hz] | 50/60 | 60 |
| Nominal power [kW] | 0.3 | 0 |
| Unit fuse [A] | 10 | 12.5 |
| Phase (Nominal voltage) | 1~ | 1~ |
| Internal Dimensions | | |
| Depth [mm] | 277 | 277 |
| Height [mm] | 330 | 330 |
| Width [mm] | 222 | 222 |
| Housing dimensions not incl. fittings and connections | | |
| Width net [mm] | 435 | 435 |
| Height net [mm] | 620 | 620 |
| Depth net [mm] | 520 | 520 |
| Measures | | |
| Wall clearance back [mm] | 100 | 100 |
| Wall clearance sidewise [mm] | 100 | 100 |
| Interior volume [L] | 20 | 20 |
| Net weight of the unit (empty) [kg] | 44 | 44 |
| permitted load [kg] | 25 | 25 |
| Load per rack [kg] | 10 | 10 |
| Doors | | |
| Inner doors | 1 | 1 |
| Unit doors | 1 | 1 |
| Environment-specific data | | |
| Energy consumption at 40 °C [Wh/h] | 60 | 60 |
| Sound-pressure level [dB(A)] | 47 | 47 |
| Fixtures | | |
| Number of shelves (std./max.) | 2/3 | 2/3 |

1 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 AND ACCESSORIES

| Designation | Description | * | Art.-No. |
|--------------------------------------|--|--------|-----------|
| Access port with silicone plug | back | | |
| | 10 mm | 01 | 8012-0395 |
| | 30 mm | 01 | 8012-1292 |
| | 50 mm | 01 | 8012-1294 |
| | left | | |
| | 10 mm | 01 | 8012-0393 |
| | 30 mm | 01 | 8012-1157 |
| | right | | |
| | 10 mm | 01 | 8012-0392 |
| | 30 mm | 01 | 8012-1154 |
| | top | | |
| | 10 mm | 01 | 8012-0391 |
| | 30 mm | 01 | 8012-1151 |
| | 50 mm | 01 | 8012-1160 |
| | 100 mm | 01, 10 | 8012-1167 |
| Calibration certificate, expanded | for temperature; for extending the measurement in center of chamber to include another test temperature | – | 8012-1120 |
| Calibration certificate, temperature | for temperature, measurement in center of chamber at specified temperature | – | 8012-1139 |
| | temperature measurement incl. certificate and 27 measuring points at specified temperature | – | 8012-1598 |
| | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | – | 8012-1577 |
| | temperature measurement incl. certificate, 9 measuring points at specified temperature | – | 8012-1556 |
| Data Logger Kit | T 220: For continuous temperature logging from -90 °C to 220 °C. The kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit | 19 | 8012-0715 |
| Data Logger Software | LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable) | 19 | 8012-0821 |
| Door lock | lockable door handle | – | 8012-1250 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | – | 1002-0016 |
| Rack | stainless steel | – | 6004-0051 |
| Rack accessories | fasteners (1 set of 4) for additional security of racks | – | 8012-0531 |
| Shelf, perforated | Stainless steel | – | 6004-0052 |

* Notes › See last page

SERVICES

| Designation | Description | * | Art.-No. |
|---|--|----------------|-----------|
| Installation services | | | |
| Installation | and set up of unit at operating location, connect to existing connections | 13, 18 | DL10-0100 |
| Instruction | unit function instructions for operation and programming of the controller | 18 | DL10-0500 |
| Calibration services | | | |
| Calibration temperature incl. certificate | including certificate, one measuring point in center of chamber at specified temperature | 14, 16, 17, 18 | DL30-0101 |
| Temperature measurement 18 measuring points | including certificate, 18 measuring points at specified temperature | 14, 16, 17, 18 | DL30-0118 |
| Temperature measurement 27 measuring points | including certificate, 27 measuring points at specified temperature | 14, 16, 17, 18 | DL30-0127 |
| Temperature measurement 9 measuring points | including certificate, 9 measuring points at specified temperature | 14, 16, 17, 18 | DL30-0109 |
| Validation services | | | |
| Execution of IQ/OQ | in accordance with qualification folder | 15, 18, 20 | DL41-0200 |
| Execution of IQ/OQ/PQ | in accordance with customer's requirement, price: on request | 15, 18 | DL44-0500 |

* Notes › See last page

| Designation | Description | * | Art.-No. |
|---|---|------------|-----------|
| Qualification folder IQ/OQ | supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001 | 15, 18, 20 | 8012-0873 |
| Qualification folder IQ/OQ/PQ | supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ | 15, 18 | 8012-0960 |
| Warranty service | | | |
| Extension of the warranty from 2 to 3 years | beginning with the date of delivery, wearing parts are not included | – | DL01-8041 |
| Extension of the warranty from 2 to 5 years | beginning with the date of delivery, wearing parts are not included | – | DL01-8042 |

* Notes › See last page



WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.