

## Model KB 65 | Cooling 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.

### BENEFITS

- Assured: highly precise incubation conditions thanks to power reserves
- Reliable: failsafe operation over the long term thanks to proven compressor technology and interior made of stainless steel
- Smart: hot-air disinfection and easy programming of a second set temperature
- Economical: up to 40% lower energy consumption than the previous model thanks to modern inverter cooling technology



Model 65



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### IMPORTANT FEATURES

- Temperature range: 0 °C to +70 °C
- Proven APT.line™ preheating chamber technology
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- Door heating to prevent condensation
- Sturdy housing design with HIT sandwich technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel
- Ø 30 mm access port with silicone plug
- Stackable
- Simple programming of a second set temperature value
- 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

### ORDERING INFORMATION

Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
<b>Model KB 65</b>					
63	220...240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB065-230V	9020-0471
	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB065UL-120V	9020-0491

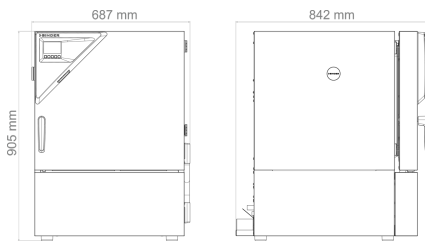
## TECHNICAL DATA

Data		
Article Number	9020-0471	9020-0491
Designation	KBo65-230V	KBo65UL-120V
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	0...70 °C	0...70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.2 ± K	0.2 ± K
Max. heat compensation at 37°C	160 W	160 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220...240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	0,9 kW	0,9 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	63 L	63 L
Net weight of the unit (empty)	95 kg	95 kg
Load per rack	30 kg	30 kg
Permitted load	90 kg	90 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	100 mm	100 mm
Housing dimensions not incl. fittings and connections		
Width net	650 mm	650 mm
Height net	905 mm	905 mm
Depth net	710 mm	710 mm
Internal Dimensions		
Interior width	406 mm	406 mm
Interior height	400 mm	400 mm

Interior depth	386 mm	386 mm
Inner doors	1	1
Unit doors	1	1
<b>Environment-specific data</b>		
Sound-pressure level at 25°C	44 dB(A)	44 dB(A)
Energy consumption at 25°C	80 Wh/h	95 Wh/h
Energy consumption at 37°C	90 Wh/h	100 Wh/h
<b>Fixtures</b>		
Number of shelves (std./max.)	2/4	2/4

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	KB 65	*	Art.-No.
Access port with silicone plug	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	right			
	30 mm	•	01	8012-2468
	50 mm	•	01	8012-2469
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472
Alarm output, zero-voltage	accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A)	•	-	8012-2370

Designation	Description	KB 65	*	Art.-No.
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
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
Calibration certificate, temperature	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2424
Door lock	lockable door handle	•	-	8012-2529
Door lock, electromechanical	can be opened with PIN code via controller	•	-	8012-2531
Inner chamber, reinforced	max. total load 100 kg	•	-	8012-2505
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2555
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549

## ACCESSORIES

Designation	Description	KB 65	*	Art.-No.
APT-COM™ 4 BASIC-Edition	for simple logging and documentation requirements with up to 5 networked units.			
	version 4, BASIC edition	•	-	9053-0039
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	•	-	9051-0055
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
	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
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250

Designation	Description	KB 65	*	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			
Shelf rack, perforated	Digital in PDF format	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 25 kg	•	-	8012-2405
Stacking adapter	For safe stacking of two identical units	•	-	9051-0056
Standard rack	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 25 kg	•	-	8012-2388

## 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>			
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	DL10-0170
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0550
<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

Designation	Description	*	Art.-No.
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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