

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

Model 65

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- · Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- · Two racks made of stainless steel

- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 65					
<i>(</i> -	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB065-230V	9020-0471
63	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB065UL-120V	9020-0491



TECHNICAL DATA

Data		
Data		
Designation	KB065-230V	KB065UL-120V
Article Number	9020-0471	9020-0491
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o70 °C	o70 °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	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	o,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	25 kg	25 kg
Permitted load	50 kg	50 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
Environment-specific data		
Environment-specific data Energy consumption at 37°C	90 Wh/h	100 Wh/h
	90 Wh/h	100 Wh/h

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	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
Associa more with ciliagna mluc	30 mm	•	01	8012-2468
Access port with silicone plug	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	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), with acoustic signal that can be switched off	•	-	8012-2370



Designation	Description	KB 65	*	ArtNo.
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
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	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	*	ArtNo.
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4 BASIC-Edition	T-COM™ 4 BASIC-Edition 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-	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.			
Edition	version 4, PROFESSIONAL edition	•	-	9053-0040
Base	With swivel casters, for mobile installation or leveling of the unit or stack of units	•	-	9051-0055
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED II LAL	Basic set 300, length 30 cm	•	-	8012-1107
LED light bars	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	*	ArtNo.
	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_2 , O_2 – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Qualification documents	Hard copy inside folder	•	-	7007-0005
Qualification documents	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 ₂ , O ₂ , pressure, depending on unit			
	Digital in PDF format	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
Shalf rack perferated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Shelf rack, perforated	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			
Stanualu lack	Load-bearing capacity 25 kg	•	-	8012-2388

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
Calibration cortificate temporature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	-	DL30-0135
Calibration certificate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	-	DL30-0102
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
Installation services			
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
Maintenance contracts			
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



Designation	Description	*	ArtNo.
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
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
Maintenance services			
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
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



NOTES

- O1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
- 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).

BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com



Model KB 130 | 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 130

Model 130

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- · Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- · Two racks made of stainless steel

- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 130					
	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB130-230V	9020-0472
127	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB130UL-120V	9020-0500



TECHNICAL DATA

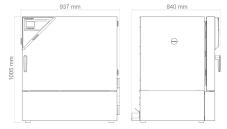
TECHNICAL DATA		
Data		
Designation	KB130-230V	KB130UL-120V
Article Number	9020-0472	9020-0500
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o70 °C	o70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	270 W	270 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,2 kW	1,2 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	127 L	127 L
Net weight of the unit (empty)	124 kg	124 kg
Load per rack	25 kg	25 kg
Permitted load	50 kg	50 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	100 mm	100 mm
Housing dimensions not incl. fittings and connections		
Width net	900 mm	900 mm
Height net	1,005 mm	1,005 mm
Depth net	710 mm	710 mm
Internal Dimensions		
Interior width	656 mm	656 mm
Interior height	500 mm	500 mm



Interior depth	386 mm	386 mm
Inner doors	1	1
Unit doors	1	1
Environment-specific data		
Energy consumption at 37°C	125 Wh/h	155 Wh/h
Fixtures		

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 130	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
A	30 mm	•	01	8012-2468
Access port with silicone plug	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472



Designation	Description	KB 130	*	ArtNo.
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. $24\mathrm{V}$ - $2.5\mathrm{A}$), with acoustic signal that can be switched off	•	-	8012-2370
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
Calibration certificate, temperature	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
	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	•	-	8012-2506
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2559
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549

ACCESSORIES

Designation	Description	KB 130	*	ArtNo.
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4 BASIC-Edition	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	•	-	9051-0045
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED light bars	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			



Designation	Description	KB 130	*	ArtNo.
	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
	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_2 , O_2 – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Qualification documents	Hard copy inside folder	•	-	7007-0005
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, ${\rm CO_2}$, ${\rm O_2}$, 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			
Reilliorced rack	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			
Shelf rack, perforated	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			
Statiudfu fack	Load-bearing capacity 25 kg	•	-	8012-2389

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
Calibration partificate temporature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	-	DL30-0135
Calibration certificate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	-	DL30-0102
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
Installation services			



Designation	Description	*	ArtNo.
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
Maintenance contracts			
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
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
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
Maintenance services			
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
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



NOTES

- O1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
- 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).

BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com



Model KB 260 | 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 260



Model 260

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- · Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steelInner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel

- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 260					
262	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB260-230V	9020-0473
	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB260UL-120V	9020-0501



TECHNICAL DATA

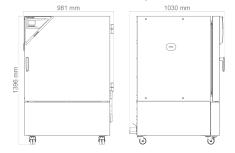
Deta		
Data		
Designation	KB260-230V	KB260UL-120V
Article Number	9020-0473	9020-0501
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o70 °C	o70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	410 W	410 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,3 kW	1,3 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	262 L	262 L
Net weight of the unit (empty)	174 kg	174 kg
Load per rack	30 kg	30 kg
Permitted load	90 kg	90 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	180 mm	180 mm
Housing dimensions not incl. fittings and connections		
Width net	930 mm	930 mm
Height net	1,396 mm	1,396 mm
Depth net	900 mm	900 mm
Internal Dimensions		
Interior width	656 mm	656 mm
Interior height	695 mm	695 mm



Interior depth	575 mm	575 mm
Inner doors	1	1
Unit doors	1	1
Environment-specific data		
Energy consumption at 37°C	140 Wh/h	165 Wh/h
Fixtures		

All technical data is specified for unloaded units with standard equipment at an ambient temperature of $\pm 20^{\circ}$ C $\pm 3^{\circ}$ C and a power supply voltage fluctuation of $\pm 10^{\circ}$ %. 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 260	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
Access port with silicone plug	30 mm	•	01	8012-2468
Access port with stitcone plug	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472



Designation	Description	KB 260	*	ArtNo.
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	•	-	8012-2370
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
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	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 180 kg	•	-	8012-2507
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2559
Shipping pallet	with unloading ramp for installing unit without forklift	•	-	8012-2545
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549
Swivel casters, height- adjustable	For horizontal alignment of the unit on uneven floors	•	-	8012-2541

ACCESSORIES

Designation	Description	KB 260	*	ArtNo.
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4 BASIC-Edition	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-	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.			
Edition	version 4, PROFESSIONAL edition	•	-	9053-0040
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED light bars	Basic set 300, length 30 cm	•	-	8012-1107
	Basic set 500, length 50 cm	•	-	8012-1108



Designation	Description	KB 260	*	ArtNo.
	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
	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, ${\rm CO_2}$, ${\rm O_2}$ – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Qualification decuments	Hard copy inside folder	•	-	7007-0005
Qualification documents	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 ₂ , O ₂ , 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			
Remorced rack	Load-bearing capacity 80 kg	•	-	8012-2413
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Shell facil, periorated	Load-bearing capacity 40 kg	•	-	8012-2407
	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel			
Standard rack	Load-bearing capacity 40 kg	•	-	8012-2384
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2390

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
Calibration certificate, temperature	Calibration of one (i) 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
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	-	DL30-0109



Designation	Description	*	ArtNo.
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
Installation services			
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
Maintenance contracts			
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
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
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
Maintenance services			
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
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



NOTES

- O1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
- 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).

BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd. Shanghai, P.R. China

TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com



Model KB 470 | 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 470



Model 470

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel

- · Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 470					
	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB470-230V	9020-0474
472	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB470UL-120V	9020-0502



TECHNICAL DATA

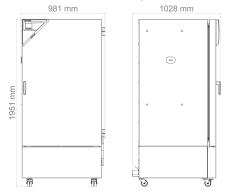
Data		
Data		
Designation	KB470-230V	KB470UL-120V
Article Number	9020-0474	9020-0502
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o7o °C	o70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	530 W	530 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,3 kW	1,3 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	472 L	472 L
Net weight of the unit (empty)	212 kg	212 kg
Load per rack	40 kg	40 kg
Permitted load	90 kg	90 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	180 mm	180 mm
Housing dimensions not incl. fittings and connections		
Width net	930 mm	930 mm
Height net	1,951 mm	1,951 mm
Depth net	900 mm	900 mm
Internal Dimensions		
Interior width	656 mm	656 mm
Interior height	1,250 mm	1,250 mm



Interior depth	575 mm	575 mm
Inner doors	1	1
Unit doors	1	1
Environment-specific data		
Environment-specific data Energy consumption at 37°C	140 Wh/h	165 Wh/h
	140 Wh/h	165 Wh/h

All technical data is specified for unloaded units with standard equipment at an ambient temperature of $\pm 20^{\circ}$ C $\pm 3^{\circ}$ C and a power supply voltage fluctuation of $\pm 10^{\circ}$ %. 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

ArtNo.
8012-2465
8012-2466
8012-2467
8012-2468
8012-2469
8012-2470
8012-2497
8012-2471



Designation	Description	KB 470	*	ArtNo.
	100 mm	•	01	8012-2472
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	•	-	8012-2370
Analog output 4-20 mA	for temperature values (output not adjustable)	•	-	8012-2371
Calibration certificate,	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
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
emperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	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
nner chamber, reinforced	max. total load 180 kg	•	-	8012-2508
nterior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2559
Shipping pallet	with unloading ramp for installing unit without forklift	•	-	8012-2545
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549
Swivel casters, height- adjustable	For horizontal alignment of the unit on uneven floors	•	-	8012-2541

ACCESSORIES

Designation	Description	KB 470	*	ArtNo.
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4 BASIC-Edition	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
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



Designation	Description	KB 470	*	ArtNo.
	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
	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_2 , O_2 – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Qualification documents	Hard copy inside folder	•	-	7007-0005
Qualification documents	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 ₂ , O ₂ , pressure, depending on unit			
	Digital in PDF format	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
Dainforced rack	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Reinforced rack	Load-bearing capacity 80 kg	•	-	8012-2413
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Shell rack, penorated	Load-bearing capacity 40 kg	•	-	8012-2407
	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel			
Standard rack	Load-bearing capacity 40 kg	•	-	8012-2384
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2390

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
Calibration certificate, temperature	Calibration of one $\ (i)$ 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
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	-	DL30-0109



Designation	Description	*	ArtNo.
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
Installation services			
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
Maintenance contracts			
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
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
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
Maintenance services			
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
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



NOTES

- O1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
- 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).

BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com



Model KB 720 | 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 720



Model 720

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel

- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 720					
	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB720-230V	9020-0475
727	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB720UL-120V	9020-0503



TECHNICAL DATA

Data		
Data		
Designation	KB720-230V	KB720UL-120V
Article Number	9020-0475	9020-0503
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o70 °C	o70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	640 W	640 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,5 kW	1,5 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	727 L	727 L
Net weight of the unit (empty)	285 kg	285 kg
Load per rack	40 kg	40 kg
Permitted load	100 kg	100 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	180 mm	180 mm
Housing dimensions not incl. fittings and connections		
Width net	1,285 mm	1,285 mm
Height net	1,951 mm	1,951 mm
Depth net	900 mm	900 mm
Internal Dimensions		
Interior width	1,011 mm	1,011 mm
Interior height	1,250 mm	1,250 mm



Interior depth	575 mm	575 mm
Inner doors	2	2
Unit doors	2	2
Environment-specific data		
Environment-specific data Energy consumption at 37°C	255 Wh/h	280 Wh/h
	255 Wh/h	280 Wh/h

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 720	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
	right			
Assess part with ciliagns plus	30 mm	•	01	8012-2468
Access port with silicone plug	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472



Designation	Description	KB 720	*	ArtNo.
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	•	-	8012-2370
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
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2424
Door lock	lockable door handle	•	-	8012-2530
Door lock, electromechanical	can be opened with PIN code via controller	•	-	8012-2587
Inner chamber, reinforced	max. total load 200 kg	•	-	8012-2509
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2563
Shipping pallet	with unloading ramp for installing unit without forklift	•	-	8012-2545
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549
Swivel casters, height- adjustable	For horizontal alignment of the unit on uneven floors	•	-	8012-2541

ACCESSORIES

Designation	Description	KB 720	*	ArtNo.
	for simple logging and documentation requirements with up to 5 networked units.			
APT-COM™ 4 BASIC-Edition	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.			
Edition	version 4, PROFESSIONAL edition	•	-	9053-0040
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED light bars	Basic set 500, length 50 cm	•	-	8012-1108
	Basic set 900, length 90 cm	•	-	8012-1109



Designation	Description	KB 720	*	ArtNo.
	Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars			
	Expansion set 500, length 50 cm	•	-	8012-1717
	Expansion set 900, length 90 cm	•	-	8012-1718
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
	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, ${\rm CO_2}$, ${\rm O_2}$ – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Our life at land and a second	Hard copy inside folder	•	-	7007-0005
Qualification documents	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 ₂ , O ₂ , 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			
Remidiced fack	Load-bearing capacity 80 kg	•	-	8012-2414
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Since rading periorated	Load-bearing capacity 40 kg	•	-	8012-2408
	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel			
Standard rack	Load-bearing capacity 40 kg	•	-	8012-2385
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2391

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
	Calibration of one (i) test temperature specified by the user in center of chamber, including certificate	-	DL30-0135
Calibration certificate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	-	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	-	DL30-0109



Description	*	ArtNo.
Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	-	DL30-0118
Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	-	DL30-0127
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
Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts	-	DL20-0720
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 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
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
Execution of IQ/OQ in accordance with qualification folder	-	DL41-0200
Execution of IQ/OQ/PQ in accordance with qualification folder	-	DL44-0500
The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010
	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate Temperature measurement with 27 measuring points with a set value specified by the user, including certificate 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) Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming 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 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 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 Execution of IQ/OQ/PQ in accordance with qualification folder Execution of IQ/OQ/PQ in accordance with qualification folder	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate Temperature measurement with 27 measuring points with a set value specified by the user, including certificate 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) Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts 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 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 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 Execution of IQ/OQ in accordance with qualification folder Execution of IQ/OQ/PQ in accordance with qualification folder - Execution of IQ/OQ/PQ in accordance with qualification folder



NOTES

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- 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).

BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com



Model KB 1060 | 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 1060



Model 1060

IMPORTANT FEATURES

- Temperature range: o°C to +70°C
- Proven APT.line™ preheating chamber technology
- Up to 40% lower energy consumption compared to the previous model
- Energy-efficient cooling with modern inverter cooling unit
- Cooling with climate-neutral R-600a refrigerant
- · Door heating to prevent condensation
- Housing design with HIT technology
- Interior made completely of stainless steel
- Inner doors made of metal oxide-coated safety glass
- Two racks made of stainless steel

- Large access port with silicone plug
- Floor-standing units featuring robust twin casters with brakes at the front
- Stackable tabletop units with a volume of up to 130 liters
- 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 1288o) 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	ArtNo.
Model KB 1060					
	220240 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KB1060-230V	9020-0476
1,070	120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	KB1060UL-120V	9020-0504



TECHNICAL DATA

TECHNICAL DATA		
Data		
Designation	KB1060-230V	KB1060UL-120V
Article Number	9020-0476	9020-0504
Option model	Standard	Standard
Performance Data Temperature		
Temperature range	o70 °C	o70 °C
Temperature uniformity at 37°C	0.2 ± K	0.2 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K
Max. heat compensation at 37°C	640 W	640 W
Recovery time after door was opened for 30 s at 37°C	3 min	3 min
Electrical data		
Rated Voltage	220240 V	120 V
Power frequency	50/60 Hz	50/60 Hz
Nominal power	1,5 kW	1,5 kW
Unit fuse	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~
Dimensions and weights		
Interior volume	1,070 L	1,070 L
Net weight of the unit (empty)	315 kg	315 kg
Load per rack	40 kg	40 kg
Permitted load	100 kg	100 kg
Wall clearance back	100 mm	100 mm
Wall clearance sidewise	180 mm	180 mm
Housing dimensions not incl. fittings and connections		
Width net	1,285 mm	1,285 mm
Height net	1,951 mm	1,951 mm
Depth net	1,175 mm	1,175 mm
Internal Dimensions		
Interior width	1,011 mm	1,011 mm
Interior height	1,250 mm	1,250 mm



Interior depth	847 mm	847 mm
Inner doors	2	2
Unit doors	2	2
Environment-specific data		
Energy consumption at 37°C	260 Wh/h	300 Wh/h
	260 Wh/h	300 Wh/h

All technical data is specified for unloaded units with standard equipment at an ambient temperature of $\pm 20^{\circ}$ C $\pm 3^{\circ}$ C and a power supply voltage fluctuation of $\pm 10^{\circ}$ %. 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 1060	*	ArtNo.
	left			
	30 mm	•	01	8012-2465
	50 mm	•	01	8012-2466
	100 mm	•	01	8012-2467
Access port with silicone plug	right			
	30 mm	•	01	8012-2468
	50 mm	•	01	8012-2469
	100 mm	•	01	8012-2470
	top			
	30 mm	•	01	8012-2497
	50 mm	•	01	8012-2471
	100 mm	•	01	8012-2472



Designation	Description	KB 1060	*	ArtNo.
Alarm output, zero-voltage	Accessible via 3-pin clamping sleeve (max. 24 V - 2.5 A), with acoustic signal that can be switched off	•	-	8012-2370
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
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2376
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2380
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2424
Door lock	lockable door handle	•	-	8012-2530
Door lock, electromechanical	can be opened with PIN code via controller	•	-	8012-2587
Inner chamber, reinforced	max. total load 200 kg	•	-	8012-2510
Interior lighting	With climate-resistant LEDs, switches when the unit door is opened	•	-	8012-2563
Shipping pallet	with unloading ramp for installing unit without forklift	•	-	8012-2545
Specimen temperature display	Flexible Pt 100 indoor temperature sensor, for object temperature display or control	•	-	8012-2549
Swivel casters, height- adjustable	For horizontal alignment of the unit on uneven floors	•	-	8012-2541

ACCESSORIES

Designation	Description	KB 1060	*	ArtNo.
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
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
LED light bars	Basic set 500, length 50 cm	•	-	8012-1108
	Basic set 900, length 90 cm	•	-	8012-1109



Designation	Description	KB 1060	*	ArtNo.
	Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars			
	Expansion set 500, length 50 cm	•	-	8012-1717
	Expansion set 900, length 90 cm	•	-	8012-1718
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
	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, ${\rm CO_2}$, ${\rm O_2}$ – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Qualification de suments	Hard copy inside folder	•	-	7007-0005
Qualification documents	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_2 , O_2 , 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			
Reilliorced fack	Load-bearing capacity 80 kg	•	-	8012-2415
Shelf rack, perforated	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
Sheli rack, periorated	Load-bearing capacity 40 kg	•	-	8012-2409
	Shelf rack in set with pair of retaining rails (ball bearing mounted telescopic rails), made entirely of stainless steel			
Standard rack	Load-bearing capacity 40 kg	•	-	8012-2386
	Shelf rack in set with pair of retaining rails (U rails), made entirely of stainless steel			
	Load-bearing capacity 40 kg	•	-	8012-2392

SERVICES

Designation	Description	*	ArtNo.
Calibration services			
6 11	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	-	DL30-0135
Calibration certificate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	-	DL30-0102
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	-	DL30-0109



Designation	Description	*	ArtNo.
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
Installation services			
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
Maintenance contracts			
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
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
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
Maintenance services			
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
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



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BINDER GmbH

Tuttlingen, Germany TEL +49 7462 2005 0 info@binder-world.com www.binder-world.com BINDER Inc.

Bohemia, NY, USA TEL +1 631 224 4340 usa@binder-world.com www.binder-world.us BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 china@binder-world.com www.binder-world.com

BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 asia@binder-world.com www.binder-world.com