

# Model KT 170 | Cooling incubators with Peltier technology

The KT series combines outstanding performance with impressive energy efficiency and environmental friendliness. The cooled incubators of the KT series are state-of-the-art in application and protect the samples.

### **BENEFITS**

- Safe and reproducible incubation conditions even at high environmental conditions
- Hot air disinfection at 100 °C
- Energy efficient, environmentally friendly and secure



Model 170



Model 170

#### **MAIN FEATURES**

- Temperature range: +4 °C to +100 °C
- APT.line™ preheating chamber technology
- · Adjustable fan speed
- Electric cooling with Peltier module
- Controller with time-segment and real-time programming
- Display via LCD monitor
- Input via pushbutton/rotary knob

- Inner door made of tempered safety glass
- 2 stainless steel racks
- Stackable with KT 115
- Class 3.1 independent temperature safety device (DIN 12880) with visual and audible temperature alarm
- Computer interface: Ethernet
- Data recording and USB interface

## **ORDERING INFORMATION**

Interior volume [L]	Voltage	Option model	Version	ArtNo.
163	200240 V 1~ ph 50/60 Hz	Standard	KT170-230V	9020-0289
	100120 V 1~ ph 50/60 Hz	Standard	KT170UL-120V	9020-0310

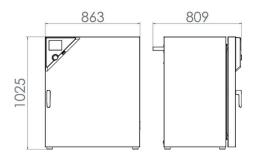


### **TECHNICAL DATA**

Description	KT170-230V1	KT170UL-120V <sup>1</sup>
Article Number	9020-0289	9020-0310
Performance Data Temperature		
Temperature range [°C]	4100	4100
Temperature variation at 37 °C [± K]	0.4	0.4
Temperature fluctuation [± K]	0.1	0.1
Max. heat compensation at 40 °C [W]	100	100
Recovery time after 30 seconds door open at 37 °C [min]	3	3
Electrical data		
Rated Voltage [V]	200240	100120
Power frequency [Hz]	50/60	50/60
Nominal power [kW]	0.8	0.8
Unit fuse [A]	10	10
Phase (Nominal voltage)	1~	1~
Measures		
Interior volume [L]	163	163
Net weight of the unit (empty) [kg]	102	102
Permitted load [kg]	120	120
Load per rack [kg]	30	30
Wall clearance back [mm]	100	100
Wall clearance sidewise [mm]	240	240
Internal Dimensions		
Width [mm]	600	600
Height [mm]	765	765
Depth [mm]	355	355
Doors		
Inner doors	1	1
Unit doors	1	1
Housing dimensions not incl. fittings and connections		
Width net [mm]	860	860
Height net [mm]	1025	1025
Depth net [mm]	655	655
Environment-specific data		
Sound-pressure level [dB(A)]	48	48
Fixtures		
Number of shelves (std./max.)	2/10	2/10

<sup>1</sup> 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 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	*	ArtNo.
	left		
	10 mm	01	8012-1290
	30 mm	01	8012-1158
	50 mm	01	8012-1165
	right		
	10 mm	01	8012-1289
Access port with silicone olug	30 mm	01	8012-1155
pius	50 mm	01	8012-1163
	top		
	10 mm	01	8012-1288
	30 mm	01	8012-1152
	50 mm	01	8012-1161
	100 mm	01	8012-1168
Alarm output, zero- voltage	for temperature (±2 °C), accessible via 6-pin DIN socket (max. 24 V - 2.5 A), with audible signal that can be switched off	-	8012-1002
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-1122
	for temperature, measurement in center of chamber at specified temperature	-	8012-1141
Calibration certificate,	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-1600
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-1579
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-1558
Door lock	lockable door handle	-	8012-166
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	-	8012-099
Shelf, reinforced	positioned at bottom level, max. load 45 kg, with additional attachment for operation of shaking device, stirring device or roller bottle system	-	8012-081
Notes > See last page			

<sup>\*</sup> Notes > See last page

## **ACCESSORIES**

Designation	Description	*	ArtNo.
APT-COM™ 4 BASIC-	for simple logging and documentation requirements with up to 5 networked units.		
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
	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	-	1002-0016

<sup>\*</sup> Notes > See last page



Designation	Description	*	ArtNo.
	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
Qualification documents	Hard copy inside folder	-	7007-0001
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, $CO_2$ , $O_2$ – or pressure, depending on unit		
	Digital in PDF format	-	7057-0005
	Hard copy inside folder	-	7007-0005
Rack	stainless steel	-	8012-2049
Rack accessories	fasteners (1 set of 4) for additional security of racks	-	8012-0620
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	-	8012-0828
Rubber pads	set anti-slip feet	-	8012-2030
Shelf, perforated	Stainless steel	-	6004-0115
Table on castors	stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm	-	9051-0018

<sup>\*</sup> Notes > See last page

### **SERVICES**

Designation	Description	*	ArtNo.
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)	05	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
Maintenance contracts			
Maintenance services			
BRONZE 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts	05	DL20-0710
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	DL20-0910
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	DL20-0200
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	DL20-0810
Calibration services			
Calibration cartificate temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	03, 04, 05	DL30-0101
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	03, 04, 05	DL30-0102
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0127
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0109
Validation services			
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
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010
* Notes > See last page			

<sup>\*</sup> Notes > See last page



#### **NOTES**

- o1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
- 02 UL mark is not granted when this option is used.
- o3 Sensor calibration is performed in an accredited calibration laboratory.
- O4 Calibration is performed according to the BINDER factory standard.
- OS 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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