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

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



Model 170

- 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

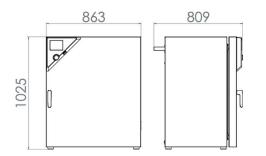
Interior volume [L]	Voltage	Option model	Version	ArtNo.
163	200240 V 1~ ph 50/60 Hz	Standard	KT170-230V	9020-0289
	100120 V 1~ ph 50/60 Hz	Standard	KT170UL-120V	9020-0310

TECHNICAL DATA

Description	KT170-230V ¹	KT170UL-120V ¹
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 at 37 °C [± 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		
Interior width [mm]	600	600
Interior height [mm]	765	765
Interior 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		
Energy consumption at 25 °C [Wh/h]	80	80
Energy consumption at 37 °C [Wh/h]	80	80
Sound-pressure level [dB(A)]	48	48
Fixtures		
Number of shelves (std./max.)	2/10	2/10

1 All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined 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	8012-128
Access port with silicone olug	30 mm	01	8012-1155
	50 mm	01	8012-116
	top		
	10 mm	01	8012-128
	30 mm	01	8012-1152
	50 mm	01	8012-116:
	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	_	8012-100
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	-	8012-160
emperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-1579
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-155
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

ACCESSORIES

Designation	Description	*	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

* Notes > See last page

Designation	Description	*	ArtNo.
	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
ED 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
	Expansion set 500, length 50 cm	-	8012-1717
oH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	8012-225
	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	-	7057-000
Qualification documents	Hard copy inside folder	-	7007-000
	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	-	7057-000
	Hard copy inside folder	-	7007-000
Rack	stainless steel	-	8012-204
Rack accessories	fasteners (1 set of 4) for additional security of racks	-	8012-228
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	-	8012-082
lubber pads	set anti-slip feet	-	8012-203
able on castors	stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm	-	9051-001

* Notes > See last page

SERVICES

Designation	Description	*	ArtNo.
Maintenance contracts			
Validation services			
Calibration services			
Installation services			
Maintenance services			
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010
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
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	03, 04, 05	DL30-0101
	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
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
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
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

* Notes > See last page

Designation	Description	*	ArtNo.
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
Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions Unit commissioning 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

* Notes > See last page

NOTES

- Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge. UL mark is not granted when this option is used. 01
- 02
- Sensor calibration is performed in an accredited calibration laboratory. 03
- 04 Calibration is performed according to the BINDER factory standard.
- 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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