BINDER

Model KT 115 | Cooling incubators with thermoelectric cooling

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
- Disinfection routine at 100 °C
- Energy efficient, environmentally friendly and secure

Model 115

Model 115

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
- Class 3.1 independent temperature safety device (DIN 12880) with visual and audible temperature alarm
- Computer interface: Ethernet
- Data recording and USB interface
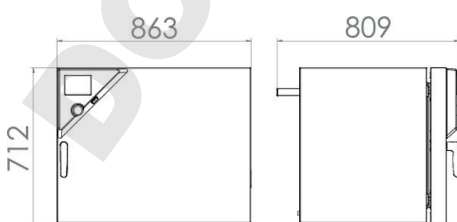
ORDERING INFORMATION

Interior volume [L]	Voltage	Option model	Version	Art.-No.
Model KT 115				
102	200…240 V 1~ ph 50/60 Hz	Standard	KT115-230V	9020-0313
	100…120 V 1~ ph 50/60 Hz	Standard	KT115UL-120V	9020-0314

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TECHNICAL DATA

Description	KT115-230V[1]	KT115UL-120V[1]
Article Number	9020-0313	9020-0314
Performance Data Temperature		
Temperature range [°C]	4…100	4…100
Temperature variation at 37 °C [± K]	0.3	0.3
Temperature fluctuation [± K]	0.1	0.1
Max. heat compensation at 37 °C [W]	100	100
Recovery time after 30 seconds door open at 37 °C [min]	3	3
Electrical data		
Rated Voltage [V]	200…240	100…120
Power frequency [Hz]	50/60	50/60
Nominal power [kW]	0.7	0.7
Unit fuse [A]	10	10
Phase (Nominal voltage)	1~	1~
Outer dimensions		
Width net [mm]	860	860
Height net [mm]	715	715
Depth net [mm]	655	655
Wall clearance back [mm]	100	100
Wall clearance sidewise [mm]	240	240
Doors		
Inner doors	1	1
Unit doors	1	1
Internal Dimensions		
Width [mm]	600	600
Height [mm]	455	455
Depth [mm]	355	355
Measures		
Interior volume [L]	102	102
Net weight of the unit (empty) [kg]	83	83
permitted load [kg]	100	100
Load per rack [kg]	30	30
Environment-specific data		
Energy consumption at 25 °C [Wh/h]	75	75
Energy consumption at 37 °C [Wh/h]	75	75
Sound-pressure level [dB(A)]	48	48
Fixtures		
Number of shelves (std./max.)	2/6	2/6

1 All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

DIMENSIONS incl. fittings and connections [mm]

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OPTIONS AND ACCESSORIES

Designation	Description	*	Art.-No.
	left		
	10 mm	01	8012-1290
	30 mm	01	8012-1158
	50 mm	01	8012-1165
	right		
	10 mm	01	8012-1289
	30 mm	01	8012-1155
Access port with silicone plug	50 mm	01	8012-1163
	top		
	10 mm	01	8012-1288
	30 mm	01	8012-1152
	50 mm	01	8012-1161
	100 mm	01, 10	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	–	8012-1001
Analog output 4-20 mA	for temperature values (output not adjustable)	02	8012-0995
APT-COM™ 4 BASIC-Edition	for simple logging and documentation requirements with up to 5 networked units.		
	version 4, BASIC edition	19	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	19	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	19	9053-0040
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	temperature measurement incl. certificate and 27 measuring points at specified temperature	–	8012-1600
	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
Class 3.3 independent temperature safety device	with visual alarm (DIN 12880)	–	8012-0999
Data Logger Kit	T 220: For continuous temperature logging from -90 °C to 220 °C. The kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit	19	8012-0715
Data Logger Software	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	19	8012-0821
Door heating	120 V option model	–	8012-0928
	230 V option model	–	8012-0929
Door lock	lockable door handle	–	8012-1668
	with 15 W light bulb		
Interior lighting	120 V option model	–	8012-0932
	230 V option model	–	8012-0933
Interior socket	Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67)	07	8012-1005
	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
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
	Expansion set 500, length 50 cm	–	8012-1717
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	–	1002-0016

* Notes › See last page

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Designation	Description	*	Art.-No.
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	–	8012-0993
Rack	stainless steel	–	6004-0112
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	–	8012-1887
Shelf, perforated	Stainless steel	–	6004-0115
Shelf, reinforced	positioned at bottom level, max. load 67 kg, with additional attachment for operation of shaking device, stirring device or roller bottle system	–	8012-0817
Table on castors	stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm	–	9051-0018
Zero voltage relay contacts	for controlling 3 relay contacts via program regulators, accessible via 6-pin DIN socket (max. 24 V - 2.5 A)	–	8012-0997

* Notes › See last page

SERVICES

Designation	Description	*	Art.-No.
Installation services			
Installation	and set up of unit at operating location, connect to existing connections	13, 18	DL10-0100
			DL10-0300
Instruction	unit function instructions for operation and programming of the controller	18	DL10-0500
Preventive maintenance			
Preventive maintenance	Executive of equipment inspection according to maintenance plan	14, 18	DL20-0200
Calibration services			
Calibration temperature incl. certificate	including certificate, one measuring point in center of chamber at specified temperature	14, 16, 17, 18	DL30-0101
Temperature measurement 18 measuring points	including certificate, 18 measuring points at specified temperature	14, 16, 17, 18	DL30-0118
Temperature measurement 27 measuring points	including certificate, 27 measuring points at specified temperature	14, 16, 17, 18	DL30-0127
Temperature measurement 9 measuring points	including certificate, 9 measuring points at specified temperature	14, 16, 17, 18	DL30-0109
Validation services			
Execution of IQ/OQ	in accordance with qualification folder	15, 18, 20	DL41-0200
Execution of IQ/OQ/PQ	in accordance with customer's requirement, price: on request	15, 18	DL44-0500
Qualification folder IQ/OQ	supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001	15, 18, 20	8012-0874
Qualification folder IQ/OQ/PQ	supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ	15, 18	8012-0961
Warranty service			
Extension of the warranty from 2 to 3 years	beginning with the date of delivery, wearing parts are not included	–	DL03-0041
Extension of the warranty from 2 to 5 years	beginning with the date of delivery, wearing parts are not included	–	DL03-0042

* Notes › See last page

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NOTES

01   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.
03   Heat resistant only to max. 200 °C.
04   Only available on units rated for 230 V.
06   Heating-up time may increase as a result of the lower heat conductivity.
07   The additional heat input may affect the temperature behavior.
09   Not in conjunction with the optional access port, door with window and interior lighting.
10   Not available on 23-liter units.
11   Not available on 23- or 53-liter units.
12   Only available on units rated for 230 V or 400 V.
13   Installation and connections take place at unit location; transport within the company only upon consultation.
14   We recommend a BINDER service contract to cover unit inspections, calibrations and validations.
15   OQ according to Yellow Paper = completed factory validation documentation of all OQ checklists.
16   Sensor calibration is performed in an accredited calibration laboratory.
17   Calibration is performed according to the BINDER factory standard.
18   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).
19   For additional accessories, refer to the Process documentation chapter.
20   When ordering IQ/OQ qualification folders and associated IQ/OQ execution on one order, we offer a 15 % discount for the item of the IQ/OQ folder.
        When ordering IQ/OQ/PQ qualification folders and associated IQ/OQ/PQ execution on one order, we offer a 15 % discount for the item of the IQ/OQ/PQ folder.

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