

# Cooling incubators



KB| KT series



# Cooling incubators

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BINDER cooling incubators are gentle on samples and provide high-quality performance. Every KB Series cooling incubator thus makes safe, reproducible incubation possible, even at high ambient temperatures. Together with the efficient weekly program function, a cooling incubator from BINDER is truly versatile in laboratory work with microorganisms. The KT Series combines exceptional performance with low energy consumption. Additionally, every BINDER cooling incubator offers true added value with its exemplary environmental sustainability.

## PRODUCT SELECTION COOLING INCUBATORS

Features	KT › Page 6	KB › Page 8
<b>Model</b>		
Model 23	–	•
Model 53	•	•
Model 115	•	•
Model 170	•	–
Model 240	–	•
Model 400	–	•
Model 720	–	•
<b>General data</b>		
Temperature range [°C]	4...100	-5...100
Ethernet interface	•	•
USB interface	•	•
Cooling technology	Thermoelectric cooling	Compressor
<b>Controller and timer functions</b>		
Controller display	LCD	
Programming option	•	•
Weekly program function	•	•
Adjustable fan speed	•	•
Real-time clock	•	•
Class 1 temperature safety device	•	•
Class 3.1 independent temperature safety device	•	•
Temperature alarm, acoustic	•	•
Temperature alarm, visual	•	•
•Standard equipment		

## ADVANTAGES AT A GLANCE



### HOMOGENEOUS TEMPERATURE DISTRIBUTION

Series KT, KB

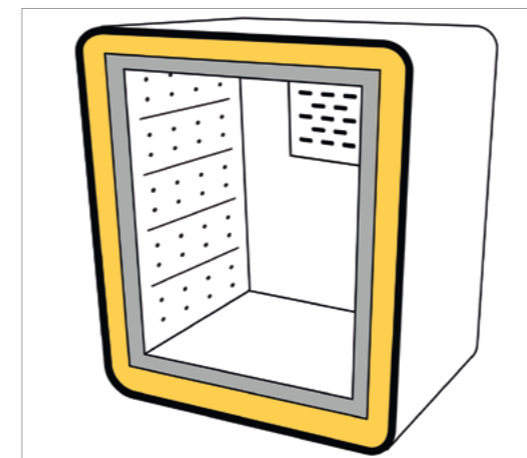
BINDER APT.line™ preheating chamber technology ensures long-term operational stability even under full load.



### EASY DECONTAMINATION

Series KT, KB

The disinfection routine at 100 °C and high quality stainless-steel inner chamber makes it easy to clean.



### EXTREMELY ROBUST AND LONG-LASTING QUALITY

Series KT

HIT insulation provides a layer of foam between the boiler and the housing. This guarantees maximum stability and particle-free thermal insulation with no thermal bridges.



### FLEXIBLE, MIXED STACKING OPTIONS

Series KT

Both units have identical footprints in sizes KT 115 and KT 170.

## Series KT | 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.



KT 115 model

### 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
- Units up to 115 liters are stackable

### AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
KT 53	53	<a href="https://go2binder.com/en-KT53">go2binder.com/en-KT53</a>
KT 115	102	<a href="https://go2binder.com/en-KT115">go2binder.com/en-KT115</a>
KT 170	163	<a href="https://go2binder.com/en-KT170">go2binder.com/en-KT170</a>

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### TECHNICAL DATA

Description	KT 53	KT 115	KT 170
<b>Outer dimensions</b>			
Width net [mm]	660	860	860
Height net [mm]	635	715	1025
Depth net [mm]	630	655	655
<b>Internal Dimensions</b>			
Width [mm]	400	600	600
Height [mm]	400	455	765
Depth [mm]	334	355	355
<b>Measures</b>			
Interior volume [L]	53	102	163
Net weight of the unit (empty) [kg]	63	83	102
permitted load [kg]	40	100	120
Load per rack [kg]	15	30	30
<b>Performance Data Temperature</b>			
Temperature range [°C]	4...100	4...100	4...100
Temperature variation at 37 °C [± K]	0.3	0.3	0.4
Temperature fluctuation [± K]	0.1	0.1	0.1
Recovery time after 30 seconds door open at 37 °C [min]	2	3	3
<b>Electrical data</b>			
Nominal power (version 120 V) [kW]	0.4	0.7	0.8
Nominal power (version 230 V) [kW]	0.4	0.7	0.8
<b>Fixtures</b>			
Number of shelves (std./max.)	2/5	2/6	2/10

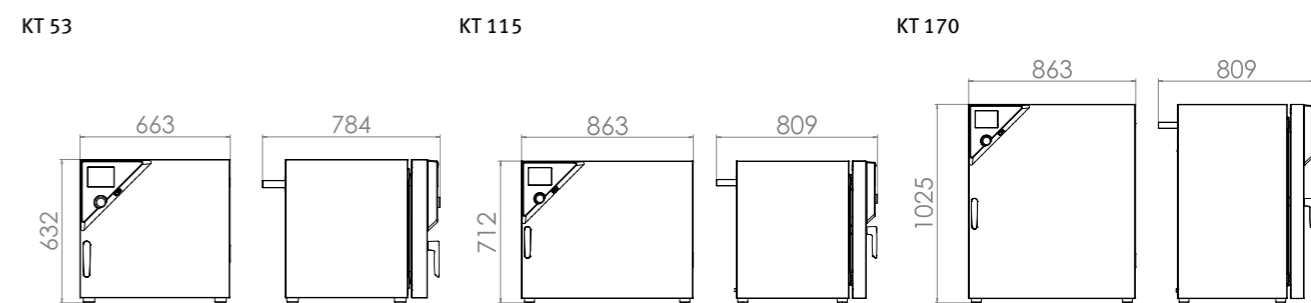
### ORDERING INFORMATION [Art. No.]

Further details: Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

Voltage	Option model	KT 53	KT 115	KT 170
200...240 V 1 50/60 Hz	Standard	9020-0311	9020-0313	9020-0289
100...120 V 1 50/60 Hz	Standard	9020-0312	9020-0314	9020-0310

► You will find a selection of options, accessories and services suitable for each product on page 11

### DIMENSIONS incl. fittings and connections [mm]



## Series KB | with compressor technology

The powerful virtuoso in cooling incubators for microorganisms: the KB masters temperature ranges from -5 °C to 100 °C. The new KB series consumes up to 30% less energy compared to its predecessor. With its extensive programming options and homogenous incubation conditions even when fully loaded, this cooling incubator covers a wide range of applications.



KB 53 model



### MAIN FEATURES

- Temperature range: -5 °C to 100 °C
- APT.line™ preheating chamber technology
- Up to 30% lower energy consumption compared to the previous model
- Cooling with compressor cooling unit
- Door heating system from 240 liters
- Adjustable fan speed
- Controller with time-segment and real-time programming
- Inner door made of tempered safety glass
- 2 stainless steel racks
- Units up to 115 liters are stackable

### AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
KB 23	20	<a href="https://go2binder.com/en-KB23">go2binder.com/en-KB23</a>
KB 53	53	<a href="https://go2binder.com/en-KB53">go2binder.com/en-KB53</a>
KB 115	115	<a href="https://go2binder.com/en-KB115">go2binder.com/en-KB115</a>
KB 240	247	<a href="https://go2binder.com/en-KB240">go2binder.com/en-KB240</a>
KB 400	400	<a href="https://go2binder.com/en-KB400">go2binder.com/en-KB400</a>
KB 720	698	<a href="https://go2binder.com/en-KB720">go2binder.com/en-KB720</a>

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### TECHNICAL DATA

Description	KB 23	KB 53	KB 115	KB 240	KB 400	KB 720
<b>Outer dimensions</b>						
Width net [mm]	435	635	835	925	925	1250
Height net [mm]	620	835	1025	1465	1950	1925
Depth net [mm]	520	580	650	800	805	885
<b>Internal Dimensions</b>						
Width [mm]	222	400	600	650	650	970
Height [mm]	330	400	480	785	1270	1250
Depth [mm]	277	330	400	485	485	576
<b>Measures</b>						
Interior volume [L]	20	53	115	247	400	698
Net weight of the unit (empty) [kg]	44	78	106	171	221	304
permitted load [kg]	25	40	50	100	120	150
Load per rack [kg]	10	15	20	30	30	45
<b>Performance Data Temperature</b>						
Temperature range [°C]	0...100	-5...100	-5...100	-5...100	-5...100	-5...100
Temperature variation at 37 °C [± K]	0.3	0.2	0.2	0.2	0.2	0.2
Temperature fluctuation at 37 °C [± K]	0.1	0.1	0.1	0.1	0.1	0.1
Recovery time after 30 seconds door open at 37 °C [min]	2	2	2	2	4	3
<b>Electrical data</b>						
Nominal power (version 120 V) [kW]	0.3	0.6	0.7	1.2	1.4	–
Nominal power (version 230 V) [kW]	0.3	0.6	0.7	1.2	1.4	2.3
Nominal power (version 240 V) [kW]	–	–	–	–	–	2.3
<b>Fixtures</b>						
Number of shelves (std./max.)	2/3	2/4	2/5	2/9	2/15	2/15

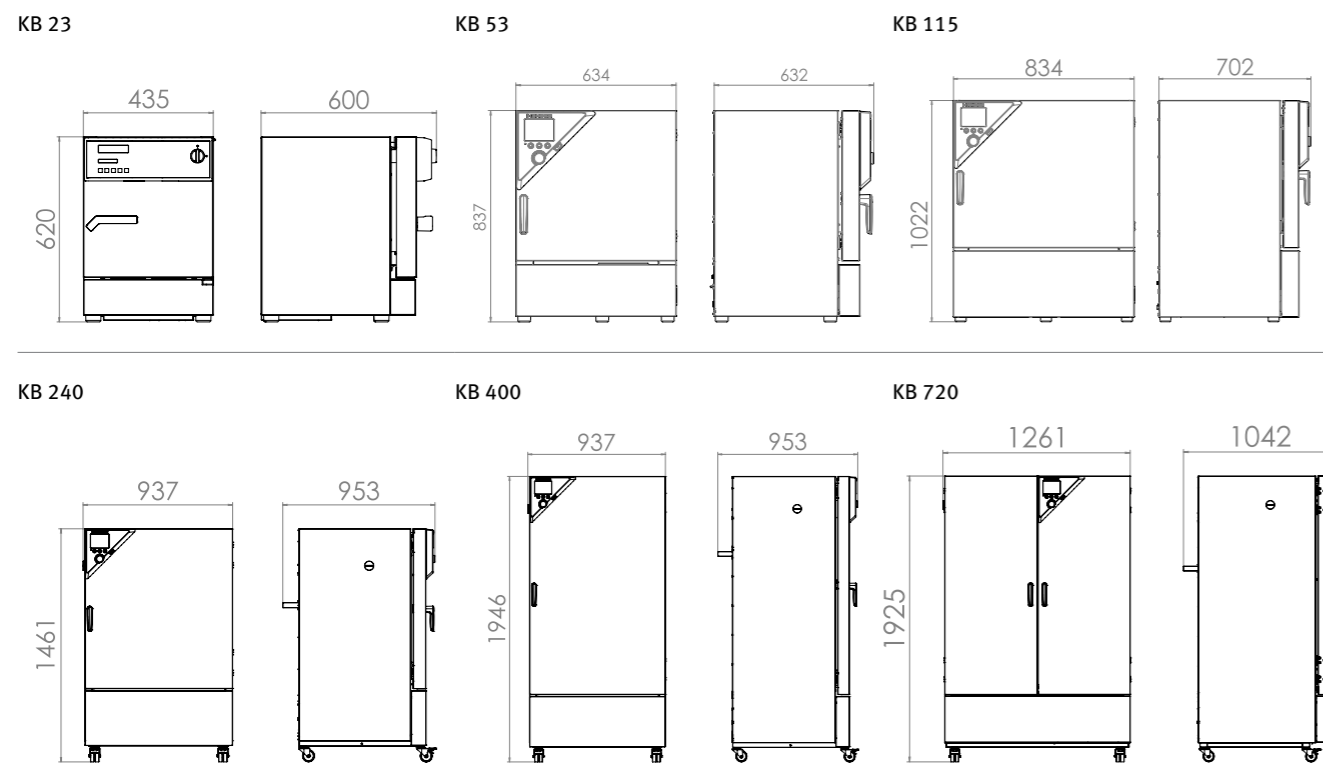
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Voltage	Option model	KB 23	KB 53	KB 115	KB 240	KB 400	KB 720
230 V 1 50/60 Hz	Standard	9020-0112	9020-0199	9020-0397	–	–	–
200...240 V 1 50 Hz	Standard	–	–	–	9020-0202	9020-0203	9020-0204 9020-0306
120 V 1 60 Hz	Standard	9020-0113	9020-0302	9020-0303	–	–	–
100...120 V 1 60 Hz	Standard	–	–	–	9020-0304	9020-0305	–

► You will find a selection of options, accessories and services suitable for each product on page 11

## DIMENSIONS incl. fittings and connections [mm]



## EXCERPT FROM OPTIONS AND ACCESSORIES

**LED light strip sets**

LED light strips in three different lengths (30, 50, 90 cm) can be easily and variably positioned in the BINDER unit, including various attachment options and control unit. Additional light strips can be added as desired.

Series KT, KB

**Access port with silicone plug**

For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)

Series KT, KB

**Interior socket**

Socket with cover, with associated LEMO connector, nominal voltage, max. 500 W, max. 90 °C, and protection class IP67. For installing external units in the interior.

Series KT, KB

**Door lock**

Lockable door handle prevents unauthorized access.

Series KT, KB

**Services**

You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.

Series KT, KB

**BINDER INDIVIDUAL**

Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.

Series KT, KB

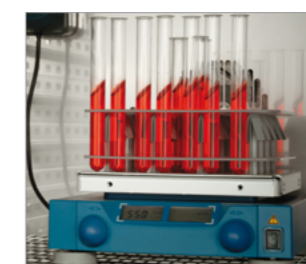
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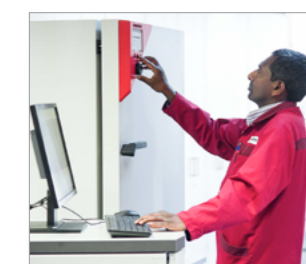
LED light strip sets



Access port with silicone plug



Shaker operation in the chamber



Services

# BINDER products

CO<sub>2</sub> incubators

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Growth chambers

Ultralow temperature freezers

Drying and heating chambers

Safety drying chambers

Vacuum drying chambers

Constant climate chambers

Dynamic climate chambers



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