

CO₂ incubators



C | CB series



CO₂ incubators

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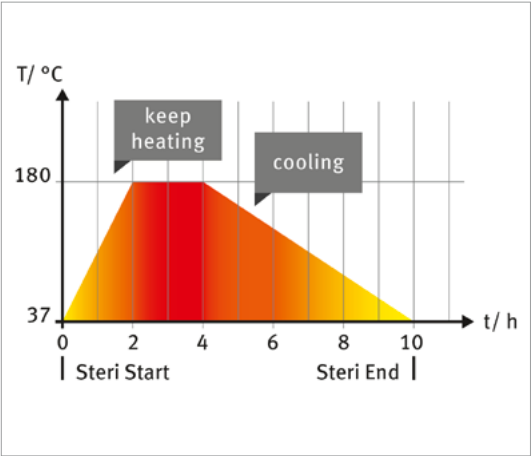
Every CO₂ incubator from BINDER guarantees optimum, reproducible growth conditions for cell cultures. The proven APT.line™ air jacket system and Permady technology eliminate the risk of condensation. Thanks to 180 °C hot-air sterilization, bacteria and spores are eliminated. The unique, seamless deep-drawn inner chamber without built-in obstructions makes cleaning very simple. These are important advantages for uniformly good cell and tissue cultivation, which BINDER Series C and CB CO₂ incubators offer as standard.

PRODUCT SELECTION CO₂ INCUBATORS

Features	C › Page 6	CB › Page 9
Model		
Model 60	–	•
Model 160	–	•
Model 170	•	–
Model 220	–	•
General data		
Temperature range 7 °C above ambient temperature to [°C]	50	60
Humidity range [% RH]	90...95	
Ethernet interface	–	•
USB interface	–	•
Plug-in system	Wire frame	Flanges
Humidification system	Water pan	Double shell
CO ₂ sensor	IR, plug in	IR, can be sterilized
Controller and timer functions		
Controller display	LED	LCD color display
Class 3.1 independent temperature safety device	•	•
Temperature alarm, acoustic	•	•
Temperature alarm, visual	•	•

•Standard equipment

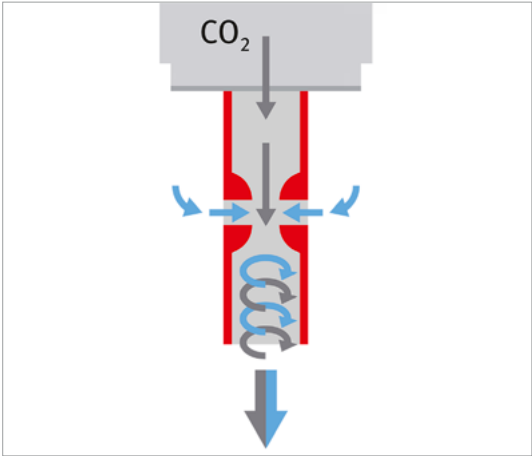
ADVANTAGES AT A GLANCE



MINIMAL RISK OF CONTAMINATION

Series C, CB

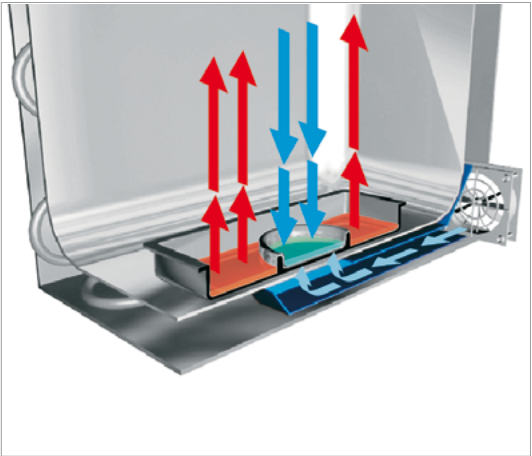
With 180 °C hot-air sterilization, complete sterilization of the entire interior is available at the push of a button. In the CB series, the CO₂ sensor is also sterilized.



OPTIMUM CELL GROWTH

Series C, CB

Stable pH values thanks to drift-free CO₂ sensor technology and homogeneous CO₂ distribution using the BINDER gas mixing head according to the Venturi principle.



PATENTED HUMIDITY MANAGEMENT

Series CB

Active humidity management provide high humidity values of 90% to 95% RH with minimal evaporation. The PERMADRY™ double wall humidity system ensures dry interior walls.



THE "LESS IS MORE" INTERIOR CONCEPT

Series CB

Our interior ensure quick and easy cleaning due to the deep-drawn inner chamber created from a single piece of stainless steel without built-in obstructions. No consumables are required.

Series C | with hot air sterilization

Series C incubators are suitable for routine cell cultivation applications: They are free from contamination due to 180 °C hot-air sterilization and reliable pH stability thanks to the drift-free infrared CO₂ measurement system.



C 170 model

MAIN FEATURES

- Temperature range: room temperature plus 7 °C to 50 °C
 - Humidity range: up to 95 % RH
 - Auto-sterilization with hot air at 180 °C
 - Humidification system with condensation protection
 - CO₂ gas-mixing jet with Venturi effect
- CO₂ sensor with infrared technology
 - Display with 3-digit, 7-segment LEDs
 - Door hinged right or left
 - Tightly-sealed inner door made of tempered safety glass
 - Seamless, deep-drawn inner stainless steel chamber

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
C 170	168	› go2binder.com/en-C170

TECHNICAL DATA

Description	C 170
Outer dimensions	
Width net [mm]	740
Height net [mm]	870
Depth net [mm]	715
Internal Dimensions	
Width [mm]	560
Height [mm]	600
Depth [mm]	500
Measures	
Interior volume [L]	168
Net weight of the unit (empty) [kg]	110
Load per rack [kg]	10
Performance Data Temperature	
Temperature range 7 °C above ambient temperature to [°C]	50
Temperature variation at 37 °C [± K]	0.3
Temperature fluctuation [± K]	0.1
Recovery time after 30 seconds door open at 37 °C [min]	6
Performance Data Climate	
Humidity range [% RH]	90...95
CO ₂ -Data	
CO ₂ range [Vol.-% CO ₂]	0...20
CO ₂ measurement	IR
Electrical data	
Nominal power (version 120 V) [kW]	1.1
Nominal power (version 230 V) [kW]	1.1
Fixtures	
Number of shelves (std./max.)	3/8

ORDERING INFORMATION [Art. No.]

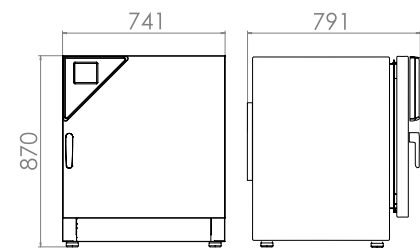
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	C 170
230 V 1 50/60 Hz	Door hinged right	9040-0112
	Door hinged left	9040-0115
120 V 1 60 Hz	Door hinged right	9040-0113
	Door hinged left	9040-0116

► You will find a selction of options, accessories and services suitable for each product on page 12

DIMENSIONS incl. fittings and connections [mm]

C 170



Series CB | with hot air sterilization and heat sterilizable CO₂ sensor

The BINDER CB series CO₂ incubator is the premium class among the CO₂ incubators. It is suitable for all sensitive incubation applications and ensures optimal cell growth. A BINDER CB series CO₂ incubator can perform complex cultivation experiments as well as specific enviromental conditions.



CB 160 model

MAIN FEATURES

- Temperature range: room temperature plus 7 °C to 60 °C
- Humidity range: up to 95% RH
- Alternative O₂ control ranges:
0.2-20 vol. % O₂ or 10-95 vol. % O₂ (O, GO versions)
- Auto-sterilization with hot air at 180 °C
- Double-pan humidification system with condensation protection
- CO₂ gas-mixing jet with Venturi effect
- Hot-air sterilizable CO₂ sensor with infrared technology
- Display via color LCD monitor
- Lockable door handle
- Tightly-sealed inner door made of tempered safety glass

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
CB 60	53	› go2binder.com/en-CB60
CB 160	150	› go2binder.com/en-CB160
CB 220	210	› go2binder.com/en-CB220

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TIPS & TRICKS

Benefit from our many years of experience,

Tips & Tricks:

› go2binder.com/en-tips-tricks

Case Studies:

› go2binder.com/en-case-studies



Find all details online
go2binder.com/en-CB

TECHNICAL DATA

Description	CB 60	CB 160	CB 220
Outer dimensions			
Width net [mm]	580	680	740
Height net [mm]	720	920	1070
Depth net [mm]	545	715	715
Internal Dimensions			
Width [mm]	400	500	560
Height [mm]	400	600	750
Depth [mm]	330	500	500
Measures			
Interior volume [L]	53	150	210
Net weight of the unit (empty) [kg]	68	110	132
permitted load [kg]	30	30	30
Load per rack [kg]	10	10	10
Performance Data Temperature			
Temperature range 7 °C above ambient temperature to [°C]	60	60	60
Temperature variation at 37 °C [± K]	0.3	0.3	0.4
Temperature fluctuation at 37 °C [± K]	0.1	0.1	0.1
Recovery time after 30 seconds door open at 37 °C [min]	4	5	5
Performance Data Climate			
Humidity range [% RH]	90...95	90...95	90...95
CO ₂ -Data			
CO ₂ range [Vol.-% CO ₂]	0...20	0...20	0...20
CO ₂ measurement	IR	IR	IR
Electrical data			
Nominal power (version 120 V) [kW]	1	1.3	1.5
Nominal power (version 230 V) [kW]	1	1.3	1.5
Fixtures			
Number of shelves (std./max.)	2/3	3/6	3/8

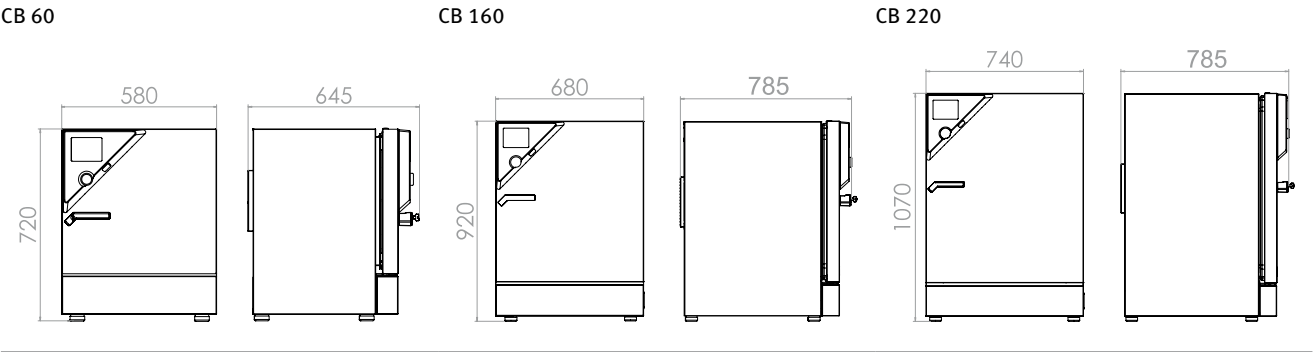
ORDERING INFORMATION [Art. No.]

Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	CB 60	CB 160	CB 220
200...240 V 1 50/60 Hz	Standard	9040-0088	9040-0092	9040-0096
	with 4x divided inner door	9040-0104	9040-0100	–
	with O ₂ control	9040-0090	9040-0094	9040-0098
	with O ₂ control and with 4x divided inner door	9040-0106	9040-0102	–
	with 6x divided inner door	–	–	9040-0108
	with O ₂ control and with 6x divided inner door	–	–	9040-0110

Voltage	Option model	CB 60	CB 160	CB 220
100...120 V 1 50/60 Hz	Standard	9040-0089	9040-0093	9040-0097
	with 4x divided inner door	9040-0105	9040-0101	–
	with O ₂ control	9040-0091	9040-0095	9040-0099
	with O ₂ control and with 4x divided inner door	9040-0107	9040-0103	–
	with 6x divided inner door	–	–	9040-0109
	with O ₂ control and with 6x divided inner door	–	–	9040-0111
► You will find a selction of options, accessories and services suitable for each product on page 12				

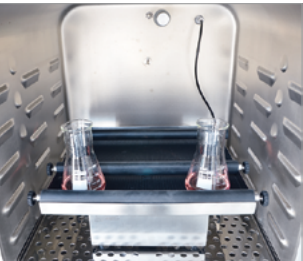
DIMENSIONS incl. fittings and connections [mm]



EXCERPT FROM OPTIONS AND ACCESSORIES

CO₂ - shaker	<p>High-quality solution for the incubation of suspension cell cultures in CO₂ incubators. The exclusive use of corrosion-resistant components in the stainless steel housing makes the CO₂ incubator suitable for gassed incubators with increased CO₂ concentrations and nearly saturated air humidity.</p> <p>Series C, CB</p>
Stacking adapter	<p>Stacking adapters support the safe positioning and stacking of BINDER CO₂ incubators.</p> <p>Series C, CB</p>
CO₂ gas tank changer	<p>External, Binder Gas Supply Service, for connecting 2 gas tanks, with audible and visual alarms, as well as zero-voltage alarm output.</p> <p>Series C, CB</p>
Multiple-split inner door	<p>Split glass doors and special corresponding shelf racks make it possible to divide the space for different experiments. The interior chamber atmosphere remains stable.</p> <p>Series CB</p>
Services	<p>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.</p> <p>Series C, CB</p>
BINDER INDIVIDUAL	<p>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.</p> <p>Series C, CB</p>

► All extras online go2binder.com/en-options



BINDER CO₂ - shakers



Stacking adapter



CO₂ gas tank changer



Multiple-split inner door

BINDER products

CO₂ incubators

Incubators

Cooling incubators

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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