

# Model CB 260 | CO<sub>2</sub> incubators with hot air sterilization and heat sterilizable CO<sub>2</sub> sensor

The powerful and versatile CB CO<sub>2</sub> incubator is suitable for cell-based assays in drug and medical research. This BINDER incubator is even suitable for complex cultivation experiments or individual environments with hypoxic conditions thanks to its comprehensive assortment of options and accessories.

## BENEFITS

- Safe – cell cultures receive maximum protection against contamination
- Reliable – constant well-being conditions for the cells
- Smart – simple routine cleaning and convenient operation
- Economical – efficient operation without consumables



Model 260



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## MAIN FEATURES

- Optimized double-pan humidification system with condensation protection
- Tried-and-tested anti-contamination concept with 180 °C hot air sterilization
- Hot-air sterilizable CO<sub>2</sub> sensor with single-beam infrared technology
- Seamless inner chamber made of stainless steel with flanges as shelf support system
- Fanless interior with Venturi CO<sub>2</sub> gas mixing nozzle
- Intuitive touchscreen controller
- Internal data recording, can be read out in open format via USB interface
- Fault diagnosis system with visual and acoustic alarm
- Interfaces: Ethernet, USB, zero-voltage alarm contact
- Fail-safe CO<sub>2</sub> system for protecting the pH of cell cultures

## OPTIONAL EQUIPMENT

- O<sub>2</sub> control with O<sub>2</sub> control ranges: 0.2 to 20 vol.% O<sub>2</sub> or 10 to 95 vol.% O<sub>2</sub>
- Multi-sectional glass doors with special shelves for dividing up the space to accommodate different experiments
- Stacking adapter for secure, space-saving installation
- Gas tank changer for connecting two gas tanks to one or two incubators

## ORDERING INFORMATION

Interior volume [cu.ft.]	Voltage	Option model	Version	Art.-No.
9.4	200...230 V 1~ 50/60 Hz	Standard	CB260-230V	9640-0013
		with O <sub>2</sub> control 0.2–20%	CB260-230V-0	9640-0014
	100...120 V 1~ 50/60 Hz	Standard	CB260UL-120V	9640-0015
		with O <sub>2</sub> control 0.2–20%	CB260UL-120V-0	9640-0016

**TECHNICAL DATA**

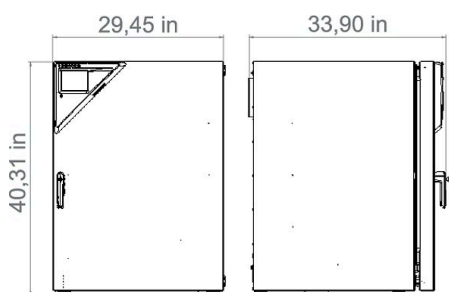
Description	CB260-230V <sup>1</sup>	CB260-230V-0 <sup>1</sup>	CB260UL-120V <sup>1</sup>	CB260UL-120V-0 <sup>1</sup>
Article Number	9640-0013	9640-0014	9640-0015	9640-0016
<b>Performance Data Temperature</b>				
Temperature range +5 °C above ambient temperature to [°C]	60		60	
Temperature range +6 °C above ambient temperature to [°C]		60		60
Temperature variation at 37 °C [± K]	0.4	0.4	0.4	0.4
Temperature fluctuation at 37 °C [± K]	0.1	0.1	0.1	0.1
Recovery time after 30 seconds door open at 37 °C [min]	6	6	6	6
<b>Tabellen</b>				
Humidity range	90...95	90...95	90...95	90...95
CO <sub>2</sub> Recovery time after 30 seconds door open at 5 Vol.-% CO <sub>2</sub> [min]	5	5	5	5
O <sub>2</sub> Recovery time after 30 seconds door open at 5 Vol.-% O <sub>2</sub> [min]		15		15
Energy consumption at 37 °C [Wh/h]	65	65	65	65
<b>CO<sub>2</sub>-Data</b>				
CO <sub>2</sub> range [Vol.-% CO <sub>2</sub> ]	0...20	0...20	0...20	0...20
CO <sub>2</sub> measurement	IR	IR	IR	IR
<b>O<sub>2</sub>-Data</b>				
Standard O <sub>2</sub> control ranges: O <sub>2</sub> range [Vol.-% O <sub>2</sub> ]		0.2...20		0.2...20
O <sub>2</sub> control ranges with option: O <sub>2</sub> range [Vol.-% O <sub>2</sub> ]		10...95		10...95
<b>Electrical data</b>				
Rated Voltage [V]	200...230	200...230	100...120	100...120
Power frequency [Hz]	50/60	50/60	50/60	50/60
Nominal power [kW]	1.5	1.5	1.5	1.5
Unit fuse [A]	10	10	16	16
Phase (Nominal voltage)	1~	1~	1~	1~
<b>Measures</b>				
Interior volume [cu.ft.]	9.4	9.4	9.4	9.4
Net weight of the unit (empty) [lbs]	276	276	276	276
Permitted load [lbs]	88	88	88	88
Load per rack [lbs]	22	22	22	22
Wall clearance back [in]	3.94	3.94	3.94	3.94
Wall clearance sidewise [in]	1.97	1.97	1.97	1.97
<b>Internal Dimensions</b>				
Width [in]	24.43	24.43	24.43	24.43
Height [in]	29.55	29.55	29.55	29.55
Depth [in]	22.65	22.65	22.65	22.65
<b>Doors</b>				
Inner doors	1	1	1	1
Unit doors	1	1	1	1

<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. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

Description	CB260-230V <sup>1</sup>	CB260-230V-0 <sup>1</sup>	CB260UL-120V <sup>1</sup>	CB260UL-120V-0 <sup>1</sup>
Article Number	9640-0013	9640-0014	9640-0015	9640-0016
Housing dimensions not incl. fittings and connections				
Width net [in]	29.16	29.16	29.16	29.16
Height net [in]	40.2	40.2	40.2	40.2
Depth net [in]	30.93	30.93	30.93	30.93
Environment-specific data				
Sound-pressure level [dB(A)]	41	41	41	41
Fixtures				
Number of shelves (std./max.)	3/8	3/8	3/8	3/8

<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. 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	*	Art.-No.
Access port with silicone plug	back 30 mm	01	8612-0025
	left 30 mm	01	8612-0026
	right 30 mm	01	8612-0027
Analog output 4-20 mA	for temperature and CO <sub>2</sub> values (outputs not adjustable)	02	8612-0022
Calibration certificate O <sub>2</sub>	for versions with O <sub>2</sub> control; a measuring point in center of chamber at a specified O <sub>2</sub> percentage value	-	8012-0229
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	-	8012-1132
	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-1592
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-1571
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-1550
Calibration certificate, temperature and CO <sub>2</sub>	for temperature and CO <sub>2</sub> , temperature measurement in center of chamber, CO <sub>2</sub> measurement performed using test gas at 37 °C and 5 % CO <sub>2</sub>	-	8012-1235
CELLROLL Set	modular, expandable roller bottle system for cell cultivation, 6 roller bottles	-	8612-0024
Door hinged on the left	Unit door and standard glass inner door with door hinged on the left	-	8612-0034
Electric access port	8-pin, for low voltage with LEMO socket (coverable) and LEMO plug (max. 24 V – 2 A)	-	8612-0033
Inner door, divided	Cell therapy compartmentalization, consisting of 8 inner doors and two shelf levels with four partition wall each	-	8612-0031
O <sub>2</sub> control range	alternative to the standard range, for controlling O <sub>2</sub> concentrations between 10 and 95 vol. %, only in conjunction with option models with O <sub>2</sub> control	-	8612-0028
Quick sample access	viewing window (13 x 25 cm) in the inner door for quick access	-	8612-0032

\* Notes › See last page

## ACCESSORIES

Designation	Description	*	Art.-No.
<b>Base</b>	the base equipped with casters is used for the secure positioning and leveling of a BINDER CO <sub>2</sub> incubator	-	9051-0044
<b>Gas cylinder connection set</b>	for CO <sub>2</sub> , consisting of a gas tank pressure regulator with connection parts and 5-meter hose	-	8012-0014
	for N <sub>2</sub> , consisting of a gas tank pressure regulator with connection parts and 5-meter hose	-	8012-0016
	for O <sub>2</sub> , consisting of a gas tank pressure regulator with connection parts and 5-meter hose	-	8012-0015
<b>Gas tank changer</b>	external, BINDER Gas Supply Service, for connecting 2 gas tanks (CO <sub>2</sub> , N <sub>2</sub> or O <sub>2</sub> ), with audible and visual alarms, as well as zero-voltage alarm output	-	8012-0408
<b>Multi Management Software</b>	Multi Management Software APT-COM™		
	version 4, BASIC edition	-	9053-0039
	version 4, GLP edition	-	9053-0042
	version 4, PROFESSIONAL edition	-	9053-0040
<b>pH-neutral detergent</b>	concentrated, for gentle remove of residual contaminants; 1 kg	-	1002-0016
<b>Qualification documents</b>	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 <sub>2</sub> , O <sub>2</sub> , pressure, depending on unit		
	Digital in PDF format	-	7057-0001
	Hard copy inside folder	-	7007-0001
	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 <sub>2</sub> , O <sub>2</sub> – or pressure, depending on unit		
	Digital in PDF format	-	7057-0005
	Hard copy inside folder	-	7007-0005
<b>Rubber pads</b>	set anti-slip feet	-	8012-0702
<b>Shaker „Professional“</b>	Shaker and controller equipped with LEMO connectors, exclusively for CB with electric access port, 100 – 240 V, 50/60 Hz	-	8012-1772
<b>Shaker „Universal“</b>	Shaker and controller connected via ribbon cable, universally applicable, 100 – 240 V, 50/60 Hz	-	8012-1771
<b>Shelf, perforated</b>	Stainless steel	-	6004-0197
	for divided inner door Stainless steel, divided	-	8012-1996
<b>Stacking adapter</b>	for the thermally isolated stacking of two BINDER CO <sub>2</sub> incubators	-	9051-0039
<b>Stacking frame</b>	stable, vibration-free stacking frame on casters with stop brake for safe stacking of two CB series units	-	9051-0041
<b>WLAN kit</b>	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	-	8500-0164

\* Notes › See last page

## SERVICES

Designation	Description	*	Art.-No.
<b>Installation services</b>			
Unit installation	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
<b>Maintenance services</b>			
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 temperature and CO <sub>2</sub> value, including certificate	05	DL20-0940
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	DL20-0400

\* Notes › See last page

Designation	Description	*	Art.-No.
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	DL20-0820
<b>Calibration services</b>			
CO <sub>2</sub> calibration	CO <sub>2</sub> calibration at a specified value, measurements are taken with analyzed test gas at 5%, including certificate	03, 04, 05	DL30-0401
O <sub>2</sub> calibration	O <sub>2</sub> calibration with 1 measuring point in center of chamber at a specified O <sub>2</sub> percentage value, including certificate	03, 04, 05	DL30-0402
Temperature calibration	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
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
<b>Validation services</b>			
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
<b>Warranty service</b>			
Warranty extension from 2 to 3 years	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0020

\* Notes › See last page

**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 Sensor calibration is performed in an accredited calibration laboratory.
- 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).

**BINDER GmbH**

Tuttlingen, Germany  
TEL +49 7462 2005 0  
FAX +49 7462 2005 100  
info@binder-world.com  
www.binder-world.com

**BINDER Asia Pacific (Hong Kong) Ltd.**

Kowloon, Hong Kong, P.R. China  
TEL +852 39070500  
FAX +852 39070507  
asia@binder-world.com  
www.binder-world.com

**Representative Office for CIS**

Moscow, Russia  
TEL +7 495 988 15 16  
FAX +7 495 988 15 17  
russia@binder-world.com  
www.binder-world.com

**BINDER Environmental Testing  
Equipment (Shanghai) Co., Ltd.**

Shanghai, P.R. China  
TEL +86 21 685 808 25  
FAX +86 21 685 808 29  
china@binder-world.com  
www.binder-world.com

**BINDER Inc.**

Bohemia, NY, USA  
TEL +1 631 224 4340  
FAX +1 631 224 4354  
usa@binder-world.com  
www.binder-world.us