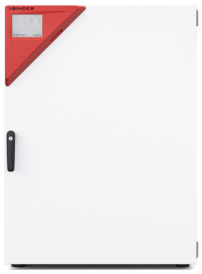
Model CBF 260 | CO2 incubators with hot air sterilization and humidity regulation

The BINDER CBF is the high-end CO_2 incubator with humidity control that is suitable for all sensitive incubation applications in GMP environments. It ensures consistent results including in cell-based assays with multiwell plates. 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



Model

IMPORTANT FEATURES

- Contamination-safe humidification system without water pan
- Tried-and-tested anti-contamination concept with 180 °C hot air sterilization
- Hot-air sterilizable CO_2 sensor with single-beam infrared technology
- Seamless inner chamber made of stainless steel with flanges as shelf support system
- Fanless interior with Venturi CO_2 gas mixing nozzle
- Intuitive touchscreen controller
- Internal data logger, measured values can be read out in open format via USB
- Troubleshooting system with visual and acoustic alarms
- Interfaces: Ethernet, USB, zero-voltage alarm contact
- Fail-safe CO_2 system for protecting the pH of cell cultures

OPTIONAL EQUIPMENT

- O_2 control with O_2 control ranges: 0.2 to 20 vol.% O_2 or 10 to 90 vol.% O_2
- 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 [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
Model CBF 260					
267	200...230 V 1~ 50/60 Hz -10,0 A	CEE 7/7	Standard	CBF260-230V	9040-0215
			with O_2 control 0.2–20%	CBF260-230V-O	9040-0216
	100...120 V 1~ 50/60 Hz -16,0 A	NEMA 5-20	Standard	CBF260UL-120V	9040-0217

Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
			with O_2 control 0.2–20%	CBF260UL-120V-O	9040-0218

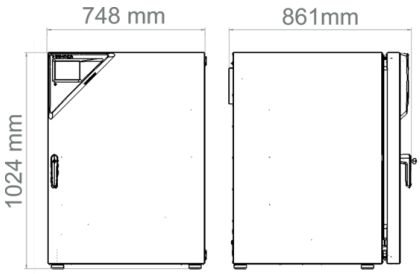
TECHNICAL DATA

Data				
Article Number	9040-0215	9040-0216	9040-0217	9040-0218
Designation	CBF260-230V	CBF260-230V-O	CBF260UL-120V	CBF260UL-120V-O
Option model	Standard	with O_2 control 0.2–20%	Standard	with O_2 control 0.2–20%
Performance Data Temperature				
Temperature range	+6 °C above ambient temperature to 50 °C	+6 °C above ambient temperature to 50 °C	+6 °C above ambient temperature to 50 °C	+6 °C above ambient temperature to 50 °C
Temperature uniformity at 37°C	0.4 ± K	0.4 ± K	0.4 ± K	0.4 ± K
Temperature fluctuation at 37°C	0.1 ± K	0.1 ± K	0.1 ± K	0.1 ± K
Recovery time after door was opened for 30 s at 37°C	6 min	6 min	6 min	6 min
Performance Data Climate				
Humidity range	50...95 % RH	50...95 % RH	50...95 % RH	50...95 % RH
Gas Data				
CO_2 range	0...20 Vol.-% CO_2	0...20 Vol.-% CO_2	0...20 Vol.-% CO_2	0...20 Vol.-% CO_2
CO_2 measuring technology	IR	IR	IR	IR
CO_2 recovery time after door was opened for 30 s at 5 vol. % CO_2	5 min	5 min	5 min	5 min
Standard O_2 control range		0.2...20 Vol.-% O_2		0.2...20 Vol.-% O_2
O_2 control ranges with option: O_2 range		10...90 Vol.-% O_2		10...90 Vol.-% O_2
O_2 recovery time after door was opened for 30 s at 5 vol. % O_2		15 min		15 min
Electrical data				
Rated Voltage	200...230 V	200...230 V	100...120 V	100...120 V
Power frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Nominal power	1,5 kW	1,5 kW	1,5 kW	1,5 kW
Unit fuse	10,0 A	10,0 A	16,0 A	16,0 A
Phase (Nominal voltage)	1~	1~	1~	1~
Dimensions and weights				
Interior volume	267 L	267 L	267 L	267 L
Net weight of the unit (empty)	126 kg	126 kg	126 kg	126 kg
Load per rack	10 kg	10 kg	10 kg	10 kg

Permitted load	40 kg	40 kg	40 kg	40 kg
Wall clearance back	100 mm	100 mm	100 mm	100 mm
Wall clearance sidewise	50 mm	50 mm	50 mm	50 mm
Housing dimensions not incl. fittings and connections				
Width net	740 mm	740 mm	740 mm	740 mm
Height net	1,020 mm	1,020 mm	1,020 mm	1,020 mm
Depth net	785 mm	785 mm	785 mm	785 mm
Internal Dimensions				
Interior width	620 mm	620 mm	620 mm	620 mm
Interior height	750 mm	750 mm	750 mm	750 mm
Interior depth	575 mm	575 mm	575 mm	575 mm
Inner doors	1	1	1	1
Unit doors	1	1	1	1
Environment-specific data				
Sound-pressure level	41 dB(A)	41 dB(A)	41 dB(A)	41 dB(A)
Energy consumption at 37°C	65 Wh/h	65 Wh/h	65 Wh/h	65 Wh/h
Fixtures				
Number of shelves (std./max.)	3/8	3/8	3/8	3/8

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	CBF 260	*	Art.-No.
Access port with silicone plug	back 30 mm	•	01	8012-1390

Designation	Description	CBF 260	*	Art.-No.
	left			
	30 mm	•	01	8012-1391
	right			
	30 mm	•	01	8012-1392
Analog output 4-20 mA	for temperature and CO_2 values (outputs not adjustable)	•	02	8012-1840
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	•	-	8012-1132
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-1550
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-1571
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-1592
Calibration certificate, temperature and CO_2	for temperature and CO_2, temperature measurement in center of chamber, CO_2 measurement performed using test gas at 37 °C and 5 % CO_2	•	-	8012-1235
Calibration certificate O2	for versions with O_2 control; a measuring point in center of chamber at 1 Vol.-% O_2	•	-	8012-2603
CELLROLL Set	modular, expandable roller bottle system for cell cultivation, 6 roller bottles	•	-	8012-0572
Electric access port	8-pin, for low voltage with LEMO socket (coverable) and LEMO plug (max. 24 V – 2 A)	•	-	8012-1848
Inner door, divided	Cell therapy compartmentalization, consisting of 8 inner doors and four shelf levels with one partition wall each	•	-	8012-2025
Quick sample access	vewing window (13 x 25 cm) in the inner door for quick access	•	-	8012-2728

ACCESSORIES

Designation	Description	CBF 260	*	Art.-No.
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

Designation	Description	CBF 260	*	Art.-No.
Base	the base equipped with casters is used for the secure positioning and leveling of a BINDER CO_2 incubator	•	-	9051-0044
Cleaning kit	for equipment maintenance and disinfection, consisting of pH-neutral detergent (1000 g, concentrate), spray disinfectant (500 ml, ready-to-use solution), lint-free cleansing tissues, protective gloves, and protective glasses	•	-	8012-0503
Convenient water supply	Set consisting of 10 liter water container with magnetic holder, hose adapter with practical quick coupling and water stop function, flexible positioning, enables water to be supplied to multiple CB units simultaneously via a water container, not pre-filled.			
	for versions with active humidification	•	-	8009-1128
Gas cylinder connection set	for CO_2, consisting of a gas tank pressure regulator with connection parts and 5-meter hose	•	-	8012-0014
	for N_2, consisting of a gas tank pressure regulator with connection parts and 5-meter hose	•	-	8012-0016
	for O_2, consisting of a gas tank pressure regulator with connection parts and 5-meter hose	•	-	8012-0015
Gas tank changer	external, BINDER Gas Supply Service, for connecting 2 gas tanks (CO_2, N_2 or O_2), with audible and visual alarms, as well as zero-voltage alarm output	•	-	8012-2344
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
Qualification documents	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	•	-	7057-0005
	Hard copy inside folder	•	-	7007-0005
	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	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
Rubber pads	set anti-slip feet	•	-	8012-0702
Shaker „Universal“	Shaker and controller connected via ribbon cable, universally applicable, 100 – 240 V, 50/60 Hz	•	-	8012-1771
Shelf, perforated	Stainless steel	•	-	8012-2183
	for divided inner door			
	Stainless steel, divided	•	-	8012-1996
Stacking adapter	for the thermally isolated stacking of two BINDER CO_2 incubators	•	-	9051-0039
Stacking frame	stable, vibration-free stacking frame on casters with stop brake for safe stacking of two CB series units	•	-	9051-0041

Designation	Description	CBF 260	*	Art.-No.
Water supply	Set consisting of 10 bottles, each with 1,000 ml of sterile humidification water, including peristaltic tubing, connectors, and fine gas filters			
	for versions with active humidification	•	-	8009-1104
	Set consisting of 12 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters			
	for versions with active humidification	•	-	8012-2255
	Set consisting of 3 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters			
	for versions with active humidification	•	-	8012-2256

SERVICES

Designation	Description	*	Art.-No.
Calibration services			
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	05	DL30-0150
	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	05	DL30-0102
CO_2 calibration	CO_2 calibration at a specified value, measurements are taken with analyzed test gas at 5%, including certificate	05	DL30-0401
O_2 calibration	O_2 calibration with 1 measuring point in center of chamber at a specified O_2 percentage value, including certificate	05	DL30-0402
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	05	DL30-0109
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	05	DL30-0127
Installation services			
Unit commissioning	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	DL10-0180
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0550
Maintenance contracts			
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 test temperature specified by the user in the center of the usable space, including certificate	05	DL20-0965

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	DL20-0865
Maintenance services			
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	DL20-0609
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	05	DL41-0210
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	05	DL44-0500
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	05	DL50-0020

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.

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
info@binder-world.com
www.binder-world.com

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

BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.
Shanghai, P.R. China
TEL +86 21 685 808 25
china@binder-world.com
www.binder-world.com