

Model CB 260 | CO₂ incubators with hot air sterilization and heat sterilizable CO₂ sensor

The powerful and versatile CB CO₂ 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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IMPORTANT FEATURES

- Optimized double-pan humidification system with condensation protection
- Tried-and-tested anti-contamination concept with 180°C hot air sterilization
- Hot-air sterilizable CO₂ sensor with single-beam infrared technology
- Seamless inner chamber made of stainless steel with flanges as shelf support system
- Fanless interior with Venturi CO₂ 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 CO₂ system for protecting the pH of cell cultures

OPTIONAL EQUIPMENT

- O₂ control with O₂ control ranges: 0.2 to 20 vol.% O₂ or 10 to 90 vol.% O₂
- 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 | Power supply - unit fuse | Plug* | Version | Model version | Art.-No. | |
|---------------------|--------------------------|---------------------------------|-----------|-------------------------------------|--------------|-----------|
| [L] | [L] | | | | | |
| Model CB 260 | | | | | | |
| 267 | 267 | 200...230 V 1~ 50/60 Hz -10,0 A | CEE 7/7 | Standard | CB260-230V | 9640-0013 |
| | | | | with O ₂ control 0.2–20% | CB260-230V-0 | 9640-0014 |
| | | 100...120 V 1~ 50/60 Hz -16,0 A | NEMA 5-20 | Standard | CB260UL-120V | 9640-0015 |

| Interior volume | Power supply - unit fuse | Plug* | Version | Model version | Art.-No. |
|-----------------|--------------------------|-------|-------------------------------------|----------------|-----------|
| [L] | [L] | | with O ₂ control 0.2–20% | CB260UL-120V-0 | 9640-0016 |

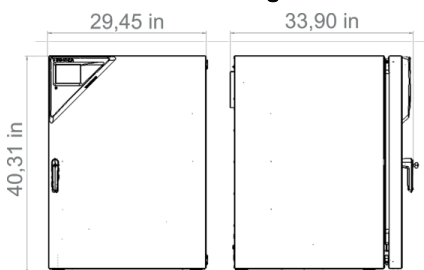
TECHNICAL DATA

| Data | | | | |
|--|--|--|--|--|
| Designation | CB260-230V | CB260-230V-0 | CB260UL-120V | CB260UL-120V-0 |
| Article Number | 9640-0013 | 9640-0014 | 9640-0015 | 9640-0016 |
| Option model | Standard | with O ₂ control 0.2–20% | Standard | with O ₂ control 0.2–20% |
| Performance Data Temperature | | | | |
| Temperature range | +5 °C above ambient temperature to 60 °C | +6 °C above ambient temperature to 60 °C | +5 °C above ambient temperature to 60 °C | +6 °C above ambient temperature to 60 °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 | 90 ...95 % r.F. | 90 ...95 % r.F. | 90 ...95 % r.F. | 90 ...95 % r.F. |
| 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) | 125 kg | 125 kg | 125 kg | 125 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 | CB 260 | * | 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 ₂ values (outputs not adjustable) | • | 02 | 8612-0022 |
| 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 O ₂ | for versions with O ₂ control; a measuring point in center of chamber at a specified O ₂ percentage value | • | - | 8012-2603 |
| | | • | - | 8012-2604 |
| 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 ₂ control range | alternative to the standard range, for controlling O ₂ concentrations between 10 and 90 vol. %, only in conjunction with option models with O ₂ control | • | - | 8612-0028 |
| Quick sample access | viewing window (13 x 25 cm) in the inner door for quick access | • | - | 8612-0032 |

ACCESSORIES

| Designation | Description | CB 260 | * | Art.-No. |
|-------------|--|--------|---|-----------|
| APT-COM™ 4 | 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 | CB 260 | * | Art.-No. |
|-----------------------------|---|--------|---|-----------|
| | for simple logging and documentation requirements with up to 5 networked units. | | | |
| | version 4, BASIC edition | • | - | 9053-0039 |
| | 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 |
| Base | the base equipped with casters is used for the secure positioning and leveling of a BINDER CO ₂ incubator | • | - | 9051-0044 |
| | for CO ₂ , consisting of a gas tank pressure regulator with connection parts and 5-meter hose | • | - | 8012-0014 |
| Gas cylinder connection set | 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 |
| | 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 |
| Qualification documents | 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 „Professional“ | Shaker and controller equipped with LEMO connectors, exclusively for CB with electric access port, 100 – 240 V, 50/60 Hz | • | - | 8012-1772 |
| Shaker „Universal“ | Shaker and controller connected via ribbon cable, universally applicable, 100 – 240 V, 50/60 Hz | • | - | 8012-1771 |
| | Stainless steel | • | - | 8012-2183 |
| Shelf, perforated | for divided inner door | | | |
| | Stainless steel, divided | • | - | 8012-1996 |
| Stacking adapter | for the thermally isolated stacking of two BINDER CO ₂ incubators | • | - | 9051-0039 |

| Designation | Description | CB 260 | * | Art.-No. |
|----------------|---|--------|---|-----------|
| Stacking frame | stable, vibration-free stacking frame on casters with stop brake for safe stacking of two CB series units | • | - | 9051-0041 |

SERVICES

| Designation | Description | * | Art.-No. |
|--|---|---|-----------|
| Calibration services | | | |
| CO ₂ calibration | CO ₂ calibration at a specified value, measurements are taken with analyzed test gas at 5%, including certificate. Travel to be quoted separate. | - | 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. Travel to be quoted separate. | - | DL30-0402 |
| Temperature calibration | Calibration of one (1) test temperature specified by the user in center of chamber, including certificate Travel to be quoted separate. | - | DL30-0140 |
| | Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate Travel to be quoted separate. | - | DL30-0102 |
| Temperature measurement, 9 measuring points | Temperature measurement with 9 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | - | DL30-0109 |
| Temperature measurement, 18 measuring points | Temperature measurement with 18 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 2 shelves are required. | - | DL30-0118 |
| Temperature measurement, 27 measuring points | Temperature measurement with 27 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | - | DL30-0127 |
| Installation services | | | |
| 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) Travel to be quoted as separate. | - | DL10-0110 |
| Unit instructions | Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate Limited to 3 hours. | - | DL10-0510 |
| Maintenance services | | | |
| BRONZE 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate. 10% Discount on Spare Parts and Labor for any additional Services needed Wear + tear parts to be purchased or billed to customer. Travel to be quoted as separate. | - | DL20-0710 |
| GOLD 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate of Temperature. 25% Discount on Spare Parts and Labor for any additional Services needed. One additional courtesy visit per year can be used for service visit or operator. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | - | DL20-0975 |
| Preventive maintenance | One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Checking a test temperature specified by the user in center of usable space without certificate. Wear + tear parts need to be purchased or billed to customer. Travel to be quoted as separate. | - | DL20-0608 |

| Designation | Description | * | Art-No. |
|------------------------------------|--|---|-----------|
| SILVER 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate 15% Discount on Spare Parts and Labor for any additional Services needed One additional courtesy visit per year can be used for service visit or operator training. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | – | DL20-0875 |
| Validation services | | | |
| Execution of IQ/OQ | Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate. | – | DL41-0200 |
| Execution of IQ/OQ/PQ | Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate. | – | DL44-0500 |
| Warranty service | | | |
| 1-year warranty extension | The warranty is extended by 1 year from the delivery date, wear parts are excluded | – | 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.

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