

Model C 170 | CO₂ incubators with hot air sterilization

BENEFITS

- Minimum risk of contamination thanks to 180 °C hot-air sterilization
- Stable pH values thanks to drift-free CO₂ IR sensor technology
- High humidity up to 95% RH
- Simple and fast cleaning thanks to a seamlessly deep-drawn inner chamber



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
- 3 perforated stainless steel shelves
- Units are stackable with stacking adapter
- Troubleshooting system with visual and audible alarms
- Zero-voltage alarm contact

ORDERING INFORMATION

| Interior volume [L] | Voltage | Option model | Version | Art.-No. |
|---------------------|-------------------|-------------------|---------------|-----------|
| Model C 170 | | | | |
| 168 | 230 V 1~ 50/60 Hz | Door hinged right | C170-230V-R | 9040-0112 |
| | | Door hinged left | C170-230V-L | 9040-0115 |
| | 120 V 1~ 60 Hz | Door hinged right | C170UL-120V-R | 9040-0113 |
| | | Door hinged left | C170UL-120V-L | 9040-0116 |

TECHNICAL DATA

| Description | C170-230V-R | C170-230V-L | C170UL-120V-R | C170UL-120V-L |
|--|-------------|-------------|---------------|---------------|
| Article Number | 9040-0112 | 9040-0115 | 9040-0113 | 9040-0116 |
| Performance Data Temperature | | | | |
| Temperature range 7 °C above ambient temperature to [°C] | 50 | 50 | 50 | 50 |
| Temperature variation at 37 °C [± K] | 0.3 | 0.3 | 0.3 | 0.3 |
| Temperature fluctuation [± K] | 0.1 | 0.1 | 0.1 | 0.1 |

| Description | C170-230V-R | C170-230V-L | C170UL-120V-R | C170UL-120V-L |
|--|-------------|-------------|---------------|---------------|
| Article Number | 9040-0112 | 9040-0115 | 9040-0113 | 9040-0116 |
| Recovery time after 30 seconds door open at 5 Vol.-% CO ₂ [min] | 5 | 5 | 5 | 5 |
| Recovery time after 30 seconds door open at 37 °C [min] | 6 | 6 | 6 | 6 |
| Performance Data Climate | | | | |
| Humidity range [% RH] | 90...95 | 90...95 | 90...95 | 90...95 |
| Gas Data - CO₂-Data | | | | |
| CO ₂ range [Vol.-% CO ₂] | 0...20 | 0...20 | 0...20 | 0...20 |
| CO ₂ measurement | IR | IR | IR | IR |
| Electrical data | | | | |
| Rated Voltage [V] | 230 | 230 | 120 | 120 |
| Power frequency [Hz] | 50/60 | 50/60 | 60 | 60 |
| Nominal power [kW] | 1.1 | 1.1 | 1.1 | 1.1 |
| Unit fuse [A] | 10 | 10 | 10 | 10 |
| Phase (Nominal voltage) | 1~ | 1~ | 1~ | 1~ |
| Measures - Outer dimensions | | | | |
| Width net [mm] | 740 | 740 | 740 | 740 |
| Height net [mm] | 870 | 870 | 870 | 870 |
| Wall clearance back [mm] | 100 | 100 | 100 | 100 |
| Wall clearance sidewise [mm] | 50 | 50 | 50 | 50 |
| Measures - Doors | | | | |
| Inner doors | 1 | 1 | 1 | 1 |
| Unit doors | 1 | 1 | 1 | 1 |
| Measures - Internal Dimensions | | | | |
| Width [mm] | 560 | 560 | 560 | 560 |
| Height [mm] | 600 | 600 | 600 | 600 |
| Depth [mm] | 500 | 500 | 500 | 500 |
| Measures | | | | |
| Interior volume [L] | 168 | 168 | 168 | 168 |
| Net weight of the unit (empty) [kg] | 110 | 110 | 110 | 110 |
| Load per rack [kg] | 10 | 10 | 10 | 10 |
| Environment-specific data | | | | |
| Energy consumption at 37 °C | 90 Wh/h | 90 Wh/h | 90 Wh/h | 90 Wh/h |
| Fixtures | | | | |
| Number of shelves (standard/ maximum) | 3/8 | 3/8 | 3/8 | 3/8 |

OPTIONS AND ACCESSORIES

| Designation | Description | * | Art.-No. |
|-----------------------------------|---|----|-----------|
| Access port with silicone plug | 30 mm, back | 01 | 8012-0558 |
| | 30 mm, left | 01 | 8012-0559 |
| | 30 mm, right | 01 | 8012-0560 |
| Analog output, 4 – 20 mA | for temperature and CO ₂ values (outputs not adjustable) | 02 | 8012-0742 |
| Base | with casters | – | 9051-0029 |
| Calibration certificate, expanded | for temperature; for extending the measurement in center of chamber to include another test temperature | – | 8012-0022 |

* Notes › See last page

| Designation | Description | * | Art.-No. |
|--|---|---|-----------|
| Calibration certificate, temperature | for temperature, measurement in center of chamber at specified temperature | - | 8012-0030 |
| | temperature measurement incl. certificate and 27 measuring points at specified temperature | - | 8012-0921 |
| | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | - | 8012-0918 |
| | temperature measurement incl. certificate, 9 measuring points at specified temperature | - | 8012-0915 |
| 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 | - | 8012-0228 |
| Door lock | lockable door handle | - | 8012-1014 |
| Ethernet interface | for communication software | - | 8012-0604 |
| Gas cylinder connection set | for CO ₂ , consisting of a gas tank pressure regulator with connection parts and 5-meter hose | - | 8012-0014 |
| 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 | - | 8012-0408 |
| Magnetic Pouch (A4) | insert pouch with magnetic strip | - | 1007-0065 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | - | 1002-0016 |
| Shelf, perforated | stainless steel | - | 6004-0142 |
| Stacking adapter, flat | for thermally decoupled stacking of two identical units | - | 9051-0036 |

* Notes › See last page

SERVICES

| Designation | Description | * | Art.-No. |
|---|---|----------------|-----------|
| Installation services | | | |
| Installation | and set up of unit at operating location, connect to existing connections | 13, 18 | DL100200 |
| Instruction | unit function instructions for operation and programming of the controller | 18 | DL100500 |
| Preventive maintenance | | | |
| Preventive maintenance | Execution of equipment inspection according to maintenance plan | 14, 18 | DL200400 |
| Calibration services | | | |
| Calibration CO ₂ | including certificate, CO ₂ measurement with analyzed test gas at 5 % or at specified value | 14, 16, 17, 18 | DL300401 |
| Calibration temperature | including certificate, one measuring point in center of chamber at specified temperature | 14, 16, 17, 18 | DL300101 |
| Temperature measurement 18 measuring points | including certificate, 18 measuring points at specified temperature | 14, 16, 17, 18 | DL300118 |
| Temperature measurement 27 measuring points | including certificate, 27 measuring points at specified temperature | 14, 16, 17, 18 | DL300127 |
| Temperature measurement 9 measuring points | including certificate, 9 measuring points at specified temperature | 14, 16, 17, 18 | DL300109 |
| Validation services | | | |
| Execution of IQ/OQ | in accordance with qualification folder | 15, 18, 20 | DL410200 |
| Execution of IQ/OQ/PQ | in accordance with customer's requirement, price: on request | 15, 18 | DL440500 |
| Qualification folder IQ/OQ | supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001 | 15, 18, 20 | 8012-0875 |
| Qualification folder IQ/OQ/PQ | supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ | 15, 18 | 8012-0962 |
| Warranty service | | | |
| Extension of the warranty from 2 to 3 years | beginning with the date of delivery, wearing parts are not included | - | DL020041 |
| Extension of the warranty from 2 to 5 years | beginning with the date of delivery, wearing parts are not included | - | DL020042 |

* 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 Heat resistant only to max. 200 °C.
- 04 Only available on units rated for 230 V.
- 06 Heating-up time may increase as a result of the lower heat conductivity.
- 07 The additional heat input may affect the temperature behavior.
- 09 Not in conjunction with the optional access port, door with window and interior lighting.
- 10 Not available on 23-liter units.
- 11 Not available on 23- or 53-liter units.
- 12 Only available on units rated for 230 V or 400 V.
- 13 Installation and connections take place at unit location; transport within the company only upon consultation.
- 14 We recommend a BINDER service contract (see the chapter on BINDER Service) to cover unit inspections, calibrations and validations.
- 15 OQ according to Yellow Paper = completed factory validation documentation of all OQ checklists.
- 16 Sensor calibration is performed in an accredited calibration laboratory.
- 17 Calibration is performed according to the BINDER factory standard.
- 18 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).
- 19 For additional accessories, refer to the Process documentation chapter.
- 20 When ordering IQ/OQ qualification folders and associated IQ/OQ execution on one order, we offer a 15 % discount for both items.
When ordering IQ/OQ/PQ qualification folders and associated IQ/OQ/PQ execution on one order, we offer a 15 % discount for the item of the IQ/OQ/PQ folder.

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