

# Model CBF 170 $\mid$ CO $_{_2}$ incubators with hot air sterilization and humidity regulation

The BINDER CB series  $CO_2$  incubator is the premium class among the  $CO_2$  incubators. It is suitable for all sensitive incubation applications and ensures optimal cell growth. A BINDER  $CO_2$  incubator of the CB series is up to even complex cultivation experiments or individual environments.

#### **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 170



- $\bullet \ \ Contamination\text{-safe humidification system without water pan}$
- 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 CO<sub>2</sub> 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<sub>2</sub> system for protecting the pH of cell cultures



Model 170

#### **OPTIONAL EQUIPMENT**

- $O_2$  control with  $O_2$  control ranges: 0.2 to 20 vol.%  $O_2$  or 10 to 95 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]	Voltage	Option model	Version	ArtNo.
	200230 V 1~ ph 50/60 Hz	Standard	CBF170-230V	9640-0017
450	200230 V 1~ pii 50/60 H2	with O <sub>2</sub> control 0.2–20%	CBF170-230V-0	9640-0018
170	400 400 V4. ph 50/60 Hz	Standard	CBF170UL-120V	9640-0019
	100120 V 1~ ph 50/60 Hz	with O <sub>2</sub> control 0.2–20%	CBF170UL-120V-0	9640-0020



## **TECHNICAL DATA**

Article Number	CBF170-230V1	CBF170-230V-O1	CBF170UL-120V1	CBF170UL-120V-O1
	9640-0017	9640-0018	9640-0019	9640-0020
Performance Data Temperature				
emperature range +6 °C above mbient temperature to [°C]	60	60	60	60
emperature variation at 37 °C [± K]	0.4	0.4	0.4	0.4
emperature 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
Performance Data Climate				
lumidity range	5095	5095	5095	5095
CO <sub>2</sub> -Data				
CO <sub>2</sub> range [Vol% CO <sub>2</sub> ]	020	020	020	020
O <sub>2</sub> measurement	IR	IR	IR	IR
)₂-Data				
Standard O2 control ranges: O2 range Vol% O2]		0.220		0.220
O <sub>2</sub> -Regelbereich durch Option: O <sub>2</sub> - Bereich [Vol% O <sub>2</sub> ]		1095		1095
abellen				
CO <sub>2</sub> Recovery time after 30 seconds loor 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]		12		12
lectrical data				
ated Voltage [V]	200230	200230	100120	100120
Power frequency [Hz]	50/60	50/60	50/60	50/60
lominal power [kW]	1.4	1.4	1.4	1.4
Init fuse [A]	10	10	16	16
Phase (Nominal voltage)	1~	1~	1~	1~
Measures				
nterior volume [L]	170	170	170	170
let weight of the unit (empty) [kg]	95	95	95	95
Permitted load [kg]	30	30	30	30
oad per rack [kg]	10	10	10	10
Vall clearance back [mm]	100	100	100	100
Vall clearance sidewise [mm]	50	50	50	50
nternal Dimensions				
Vidth [mm]	560	560	560	560
leight [mm]	600	600	600	600
Pepth [mm]	505	505	505	505
Doors				
nner doors	1	1	1	1
	1	1	1	1
Init doors				
Unit doors Housing dimensions not incl. fittings an	d connections			
	d connections 680	680	680	680
lousing dimensions not incl. fittings an		680 870	680 870	680 870

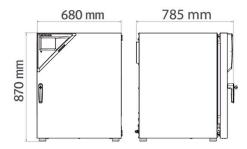
<sup>1</sup> All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10%. The temperature data is determined to BINDER factory standard following DIN 12880, observing the recommended wall clearances 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	CBF170-230V1	CBF170-230V-01	CBF170UL-120V1	CBF170UL-120V-O1
Article Number	9640-0017	9640-0018	9640-0019	9640-0020
Environment-specific data				
Sound-pressure level [dB(A)]	41	41	41	41
Fixtures				
Number of shelves (std./max.)	3/6	3/6	3/6	3/6

<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	*	ArtNo.
	back		
	30 mm	01	8612-0025
Access port with silicone plug	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 O2	for versions with $O_2$ control; a measuring point in center of chamber at a specified $O_2$ 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 $CO_2$ , temperature measurement in center of chamber, $CO_2$ measurement performed using test gas at 37 °C and 5 % $CO_2$	-	8012-1235
CELLROLL Set	modular, expandable roller bottle system for cell cultivation, 4 roller bottles	-	8612-0023
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 6 inner doors and three shelf levels with one partition wall each	-	8612-0030
O <sub>2</sub> control range	alternative to the standard range, for controlling $O_2$ concentrations between 10 and 95 vol. %, only in conjunction with option models with $O_2$ control	-	8612-0028
Quick sample access	vewing window (13 x 25 cm) in the inner door for quick access	-	8612-0032

<sup>\*</sup> Notes > See last page

### **ACCESSORIES**

Designation	Description	*	ArtNo.
APT-COM™ 4 BASIC-	for simple logging and documentation requirements with up to 5 networked units.		
Edition	version 4, BASIC edition	-	9053-0039

<sup>\*</sup> Notes > See last page



Designation	Description	*	ArtNo.
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.		
-uition	version 4, GLP edition	-	9053-0042
APT-COM™ 4	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.		
PROFESSIONAL-Edition	version 4, PROFESSIONAL edition	-	9053-0040
Base	the base equipped with casters is used for the secure positioning and leveling of a BINDER $\mathrm{CO}_2$ incubator	-	9051-0028
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
Copper interior fittings	Set consisting of 3 shelves (all-copper) and a water pan (copper-plated), more information.	-	8012-1918
	for CO <sub>2</sub> , consisting of a gas tank pressure regulator with connection parts and 5-meter hose	-	8012-0014
Gas cylinder connection set	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
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
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	1002-0016
	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		
Qualification documents	Digital in PDF format	-	7057-0001
	Hard copy inside folder	-	7007-000
	$IQ/OQ/PQ$ 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	-	7057-000
	Hard copy inside folder	-	7007-000
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	-	6004-013
Shelf, perforated	for divided inner door		
	Stainless steel, divided	-	8012-1888
Stacking adapter	for the thermally isolated stacking of two BINDER CO <sub>2</sub> incubators	-	9051-003
Stacking frame	stable, vibration-free stacking frame on casters with stop brake for safe stacking of two CB series units	-	9051-004
	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	-	8009-110
Water supply	Set consisting of 12 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters		
	for versions with active humidification	_	8009-105
	Set consisting of 3 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters		
	for versions with active humidification	-	8009-108
WLAN kit	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.	-	8500-016

<sup>\*</sup> Notes > See last page



## **SERVICES**

Designation	Description	*	ArtNo.
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	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
Maintenance contracts			
Maintenance services			
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
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
Calibration services			
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	03, 04, 05	DL30-0101
Campanion certificate, temperature	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
CO₂ 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
$O_2$ calibration	$\rm O_2$ calibration with 1 measuring point in center of chamber at a specified $\rm O_2$ percentage value, including certificate	03, 04, 05	DL30-0402
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
Validation services			
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
Warranty service			
ı-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0020

<sup>\*</sup> Notes > See last page



#### **NOTES**

- Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge. UL mark is not granted when this option is used. 01
- 02
- Sensor calibration is performed in an accredited calibration laboratory. 03
- Calibration is performed according to the BINDER factory standard. 04
- 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

**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

**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 Inc.** 

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



# Model CBF 260 $\mid$ CO $_{2}$ incubators with hot air sterilization and humidity regulation

The BINDER CBF is the high-end CO<sub>2</sub> 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 170



- · Contamination-safe humidification system without water pan
- 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 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
- $\bullet~$  Fail-safe  $\rm CO_{\scriptscriptstyle 2}$  system for protecting the pH of cell cultures



Model 170

## **OPTIONAL EQUIPMENT**

- $O_2$  control with  $O_2$  control ranges: 0.2 to 20 vol.%  $O_2$  or 10 to 95 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]	Voltage	Option model	Version	ArtNo.
		Standard	CBF260-230V	9640-0021
	200230 V 1~ ph 50/60 Hz	with O <sub>2</sub> control 0.2–20%	CBF260-230V-0	9640-0022
-4-		with O <sub>2</sub> control 0.2–20% and cell therapy compartmentalization	CBF260-230V-OZ	9640-0025
267	<del></del>	Standard	CBF260UL-120V	9640-0023
	100120 V 1~ ph 50/60 Hz	with O <sub>2</sub> control 0.2–20%	CBF260UL-120V-0	9640-0024
		withO2 control 0.2-20% and cell therapy compartmentalization	CBF260UL-120V-0Z	9640-0026



## **TECHNICAL DATA**

Description	CBF260-230V1	CBF260-230V-01	CBF260-230V-0Z1	CBF26oUL-12oV¹	CBF260UL-120V-	CBF260UL-120 OZ¹
Article Number	9640-0021	9640-0022	9640-0025	9640-0023	9640-0024	9640-0026
Performance Data Temperature						
Temperature range +6 °C above ambient temperature to [°C]	60	60	60	60	60	60
Temperature variation at 37 °C [± K]	0.4	0.4	0.4	0.4	0.4	0.4
Temperature fluctuation at 37 °C [± K]	0.1	0.1	0.1	0.1	0.1	0.1
Recovery time after 30 seconds door open at 37 °C [min]	6	6	6	6	6	6
Performance Data Climate						
Humidity range	5095	5095	5095	5095	5095	5095
CO <sub>2</sub> -Data						
CO <sub>2</sub> range [Vol% CO <sub>2</sub> ]	020	020	020	020	020	020
CO <sub>2</sub> measurement	IR	IR	IR	IR	IR	IR
O₂-Data						
Standard O2 control ranges: O2 range Vol% O2]		0.220	0.220		0.220	0.220
O₂-Regelbereich durch Option: O₂- Bereich [Vol% O₂]		1095	1095		1095	1095
<b>Tabellen</b>						
CO2 Recovery time after 30 seconds loor open at 5 Vol% CO2 [min]	5	5	5	5	5	5
D <sub>2</sub> Recovery time after 30 seconds door open at 5 Vol% O <sub>2</sub> [min]		15	15		15	15
Electrical data						
Rated Voltage [V]	200230	200230	200230	100120	100120	100120
Power frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60
lominal power [kW]	1.5	1.5	1.5	1.5	1.5	1.5
Jnit fuse [A]	10	10	10	16	16	16
Phase (Nominal voltage)	1~	1~	1~	1~	1~	1~
Measures						
nterior volume [L]	267	267	267	267	267	267
Net weight of the unit (empty) [kg]	125	125	125	125	125	125
Permitted load [kg]	40	40	40	40	40	40
oad per rack [kg]	10	10	10	10	10	10
Vall clearance back [mm]	100	100	100	100	100	100
Vall clearance sidewise [mm]	50	50	50	50	50	50
nternal Dimensions						
Vidth [mm]	620	620	620	620	620	620
Height [mm]	750	750	750	750	750	750
Pepth [mm]	575	575	575	575	575	575
Doors .						
nner doors	6	6	6	6	6	6
Jnit doors	1	1	1	1	1	1
Housing dimensions not incl. fittings and						
Vidth net [mm]	740	740	740	740	740	740
Height net [mm]	1020	1020	1020	1020	1020	1020
Depth net [mm]	785	785	785	785	785	785

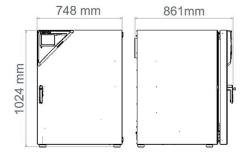
<sup>1</sup> All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10%. The temperature data is determined to BINDER factory standard following DIN 12880, observing the recommended wall clearances 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	CBF260-230V <sup>1</sup>	CBF260-230V-01	CBF260-230V-OZ1	CBF26oUL-12oV¹	CBF260UL-120V-	CBF260UL-120V- OZ <sup>1</sup>
Article Number	9640-0021	9640-0022	9640-0025	9640-0023	9640-0024	9640-0026
Environment-specific data						
Sound-pressure level [dB(A)]	41	41	41	41	41	41
Fixtures						
Number of shelves (std./max.)	3/8	3/8	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	*	ArtNo.
	back		
	30 mm	01	8612-0025
Access port with silicone	left		
plug	30 mm	01	8612-0026
	right		
	30 mm	01	8612-0027
Analog output 4-20 mA	for temperature and CO₂ values (outputs not adjustable)	02	8612-0022
Calibration certificate O <sub>2</sub>	for versions with $O_2$ control; a measuring point in center of chamber at a specified $O_2$ 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 $CO_2$ , temperature measurement in center of chamber, $CO_2$ measurement performed using test gas at 37 °C and 5 % $CO_2$	-	8012-1235
CELLROLL Set	modular, expandable roller bottle system for cell cultivation, 6 roller bottles	-	8612-002
Door hinged on the left	Unit door and standard glass inner door with door hinged on the left	-	8612-003
Electric access port	8-pin, for low voltage with LEMO socket (coverable) and LEMO plug (max. 24 V – 2 A)	-	8612-003
Inner door, divided	Cell therapy compartmentalization, consisting of 8 inner doors and four shelf levels with one partition wall each	-	8612-003
O <sub>2</sub> control range	alternative to the standard range, for controlling $O_2$ concentrations between 10 and 95 vol. %, only in conjunction with option models with $O_2$ control	-	8612-002
Quick sample access	vewing window (13 x 25 cm) in the inner door for quick access	_	8612-0032

<sup>\*</sup> Notes > See last page



## **ACCESSORIES**

Designation	Description	*	ArtNo.
APT-COM™ 4 BASIC-	for simple logging and documentation requirements with up to 5 networked units.		
dition	version 4, BASIC edition	-	9053-003
APT-COM™ 4 GLP-	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.		
Edition	version 4, GLP edition	-	9053-004
APT-COM™ 4	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.		
PROFESSIONAL-Edition	version 4, PROFESSIONAL edition	-	9053-004
Base	the base equipped with casters is used for the secure positioning and leveling of a BINDER CO2 incubator	-	9051-004
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
	for CO <sub>2</sub> , consisting of a gas tank pressure regulator with connection parts and 5-meter hose	-	8012-001
Gas cylinder connection set	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	-	8012-001
Gas tank changer	external, BINDER Gas Supply Service, for connecting 2 gas tanks $(CO_2, N_2 \text{ or } O_2)$ , with audible and visual alarms, as well as zero-voltage alarm output	-	8012-040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	1002-001
	$IQ/OQ$ 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		
Ougliffestion de surrents	Digital in PDF format	-	7057-000
	Hard copy inside folder	-	7007-000
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	-	7057-000
	Hard copy inside folder	-	7007-000
Rubber pads	set anti-slip feet	-	8012-070
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	-	6004-019
Shelf, perforated	for divided inner door		
	Stainless steel, divided	-	8012-199
Stacking adapter	for the thermally isolated stacking of two BINDER CO <sub>2</sub> incubators	-	9051-003
Stacking frame	stable, vibration-free stacking frame on casters with stop brake for safe stacking of two CB series units	-	9051-004
	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	-	8009-110
Nater supply	Set consisting of 12 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters		
	for versions with active humidification	-	8009-105
	Set consisting of 3 empty, refillable tubular bags including peristaltic tubing, connectors, and fine gas filters		
	for versions with active humidification	-	8009-108
WLAN kit	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.	-	8500-016

<sup>\*</sup> Notes > See last page



## **SERVICES**

Designation	Description	*	ArtNo.
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	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
Maintenance contracts			
Maintenance services			
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
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
Calibration services			
Calibration certificate, temperature	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
CO₂ 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	$\rm O_2$ calibration with 1 measuring point in center of chamber at a specified $\rm O_2$ percentage value, including certificate	03, 04, 05	DL30-0402
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
Validation services			
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
Warranty service			
ı-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	_	DL50-0020

<sup>\*</sup> Notes > See last page



## **NOTES**

- Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge. UL mark is not granted when this option is used. 01
- 02
- Sensor calibration is performed in an accredited calibration laboratory. 03
- Calibration is performed according to the BINDER factory standard. 04
- 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

**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

**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 Inc.** 

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