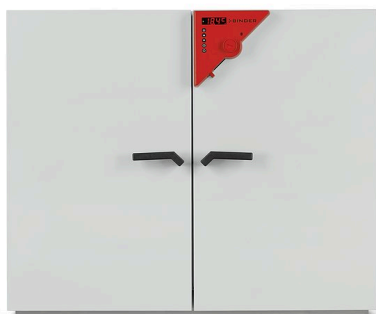


# Model BF 400 | Standard-Incubators with forced convection

The BINDER incubator of the BF series with mechanical convection is suitable for all gentle incubation applications, particularly under a full load and large batch throughputs. This incubator is extremely homogeneous and has quick recovery times.

## BENEFITS

- Safe and reproducible incubation even under high batch throughputs in long-term operation
- Disinfection routine at 100 °C
- Stable atmosphere by inner glass door



Model 400

## MAIN FEATURES

- Temperature range: room temperature plus 5 °C to 100 °C
- APT.line™ preheating chamber technology
- Adjustable fan speed
- Adjustable exhaust air flap
- Controller with timer functions
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Class 3.1 independent temperature safety device (DIN 12880) with visual temperature alarm
- Computer interface: RS 422

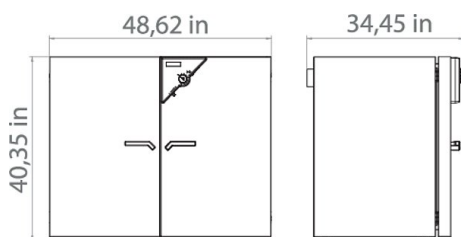
## ORDERING INFORMATION

Interior volume [cu.ft.]	Voltage	Option model	Version	Art.-No.
14.1	230 V 1~ 50/60 Hz	Standard	BF400-230V	9010-0241
	120 V 1~ 60 Hz	Standard	BF400UL-120V	9010-0242

**TECHNICAL DATA**

Description	BF400-230V <sup>1</sup>	BF400UL-120V <sup>1</sup>
<b>Article Number</b>	<b>9010-0241</b>	<b>9010-0242</b>
<b>Performance Data Temperature</b>		
Temperature range +5 °C above ambient temperature to	100 °C	100 °C
Temperature variation at 37 °C [± K]	0.4	0.4
Temperature fluctuation at 37 °C [± K]	0.1	0.1
Heating-up time to 37 °C [min]	12	12
Recovery time after 30 seconds door open at 37 °C [min]	5	5
<b>Electrical data</b>		
Rated Voltage [V]	230	120
Power frequency [Hz]	50/60	60
Nominal power [kW]	0.85	0.85
Unit fuse [A]	12.5	12.5
Phase (Nominal voltage)	1~	1~
<b>Measures</b>		
Interior volume [cu.ft.]	14.1	14.1
Net weight of the unit (empty) [lbs]	320	320
Permitted load [lbs]	198	198
Load per rack [lbs]	77	77
Wall clearance back [in]	6.3	6.3
Wall clearance sidewise [in]	3.94	3.94
<b>Internal Dimensions</b>		
Width [in]	39.4	39.4
Height [in]	31.52	31.52
Depth [in]	19.7	19.7
<b>Doors</b>		
Unit doors	2	2
<b>Housing dimensions not incl. fittings and connections</b>		
Width net [in]	48.7	48.7
Height net [in]	40.4	40.4
Depth net [in]	30.14	30.14
<b>Environment-specific data</b>		
Energy consumption at 37 °C [Wh/h]	56	56
<b>Fixtures</b>		
Number of shelves (std./max.)	2/9	2/9

<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 in accordance 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.
<b>Calibration certificate, temperature</b>	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-1590
	additional flexible Pt 100, interior, with external connection incl. LEMO connector (3-pin)	-	8012-1172
<b>Options/Accessories</b>	back		
	10 mm	01	8012-1281
	30 mm	01	8012-1291
	50 mm	01	8012-1293
	for temperature values (output not adjustable)	-	8012-0482
	for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-1111
	including 2 reinforced racks	-	8012-1732
	left		
	10 mm	01	8012-1274
	30 mm	01	8012-1156
	50 mm	01	8012-1164
	lockable door handle	-	8012-1252
	Measurement in center of chamber at specified temperature	-	8012-1130
	right		
	10 mm	01	8012-1267
	30 mm	01	8012-1153
	50 mm	01	8012-1162
	Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device		
	120 V option model	-	8012-1302
	120/208 V option model	-	8012-1298
temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-1569	
temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-1548	
top			
10 mm	01	8012-1261	
30 mm	01	8012-1150	
50 mm	01	8012-1159	
100 mm	01, 10	8012-1166	
Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67)	07	8012-1170	

\* Notes › See last page

**ACCESSORIES**

Designation	Description	*	Art.-No.
<b>Multi Management Software</b>	Multi Management Software APT-COM™		
	version 4, BASIC edition	19	9053-0039
	version 4, GLP edition	19	9053-0042
	version 4, PROFESSIONAL edition	19	9053-0040

\* Notes › See last page

Designation	Description	*	Art.-No.
	chrome plated	-	6004-0005
	Stainless steel	-	6004-0032
	stainless steel	-	6004-0011
	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 <sub>2</sub> , O <sub>2</sub> , pressure, depending on unit		
	Digital in PDF format	-	7057-0001
	Hard copy inside folder	-	7007-0001
<b>Options/Accessories</b>	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
	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	19	8012-0821
	set of 4 anti-slip feet, for safe stacking of units	-	8012-1887
	stable cart, casters with locking brakes, dimensions: W 1,300 x D 800 x H 780 mm	-	9051-0019
	T 220: For continuous temperature logging from -90 °C to 220 °C. The kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit	19	8012-0715

\* Notes › See last page

## SERVICES

Designation	Description	*	Art.-No.
<b>Installation services</b>			
Services	Unit function instructions for operation and programming of the controller	18	DL10-0500
<b>Preventive maintenance</b>			
Services	Executive of equipment inspection according to maintenance plan	14, 18	DL20-0200
<b>Calibration services</b>			
	Expansion – including certificate, each additional measuring point in center of chamber at specified test temperature	14, 16, 17, 18	DL30-0102
	Temperature calibration with 1 measuring point in center of chamber at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0101
Services	Temperature measurement with 18 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0118
	Temperature measurement with 27 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0127
	Temperature measurement with 9 measuring points at a specified test temperature, including certificate	14, 16, 17, 18	DL30-0109
<b>Validation services</b>			
Services	Execution of IQ/OQ in accordance with qualification folder	15, 18	DL40-0100
	Execution of IQ/OQ/PQ in accordance with qualification folder	15, 18	DL44-0500
<b>Warranty service</b>			
Services	The warranty is extended from 2 to 3 years from the delivery date, wear parts are excluded	-	DL01-7041
	The warranty is extended from 2 to 5 years from the delivery date, wear parts are excluded	-	DL01-7042

\* Notes › See last page

## NOTES

- 01 Hinweise
- 02 Hinweise
- 03 Hinweise
- 04 Hinweise
- 07 Hinweise
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