BINDER
Best conditions for your success

Incubators







Avantgarde.Line
BD | BF series

Classic.Line
B| BD| BF series

EN

Incubators Avantgarde.Line

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The completely redesigned Avantgarde.Line incubators with natural convection or forced convection are now the perfect solution when it comes to meeting growth and incubation requirements. With their exceptional efficiency and perfect temperature accuracy thanks to the very latest APT.line™ technology, this new generation of incubators has real appeal.

PRODUCT SELECTION INCUBATORS AVANTGARDE.LINE

Features	**BD** › Page 6	**BF** › Page 8
Model		
Model 56	•	•
Model 115	•	•
Model 260	•	•
General data		
Temperature range 5 °C above ambient temperature to [°C]	100	–
Temperature range 7-8 °C above ambient temperature to [°C]	–	100
USB interface	•	•
Natural convection	•	–
Forced convection	–	•
Controller and timer functions		
Controller display	LCD	
Ramp function	•	•
Time delayed OFF	•	•
Time delayed ON	–	•
Temperature dependent delayed OFF	–	•
Adjustable fan speed	–	•
Class 3.1 independent temperature safety device	•	•
Temperature alarm, visual	•	•

•Standard equipment

ADVANTAGES AT A GLANCE



EASY DATA LOGGING

Series BD, BF

A USB connector comes standard.



EASY, INTUITIVE HANDLING

Series BD, BF

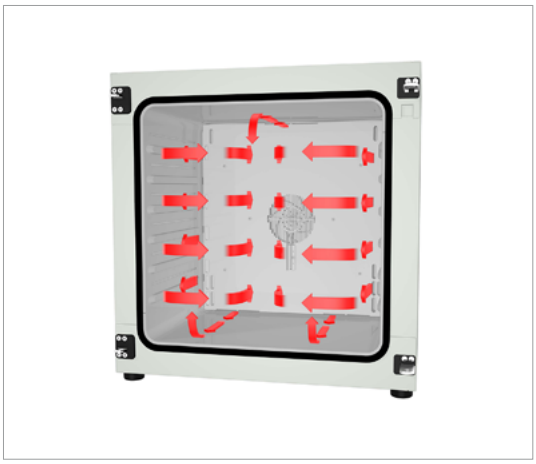
The state-of-the-art controller is equipped with an easy-to-read alphanumeric display with various functions facilitating dialog with the unit and the readability of data.



EXCELLENT ENERGY EFFICIENCY AND LOW INSTALLATION REQUIREMENTS

Series BD, BF

Low heat dissipation and an optimized heating system make the unit energy efficient.



COMPLETELY HOMOGENEOUS TEMPERATURE DISTRIBUTION

Series BF

This feature provides excellent spatial and temporal temperature accuracy with the all-new generation of APT.line™ technology.

Series BD | with natural convection

The BD Avantgarde.Line series is specially designed for gentle incubation of organisms, as well as conditioning of heat-sensitive media. The new design of the units and the homogeneous temperature distribution ensure the very best results.





BD 56 model

MAIN FEATURES

- Temperature range: ambient temperature plus 5 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Natural convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm
- Ergonomic handle design

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
BD 56	57	› go2binder.com/en-BD56
BD 115	112	› go2binder.com/en-BD115
BD 260	253	› go2binder.com/en-BD260

▸ Other Classic.Line models › page 13

TIPS & TRICKS

Benefit from our many years of experience, as demonstrated in our technical papers:

Tips & Tricks: › go2binder.com/en-tips-tricks
Case Studies: › go2binder.com/en-case-studies

Find all details online
go2binder.com/en-BD-a

TECHNICAL DATA

Description	BD 56	BD 115	BD 260
Measures - Outer dimensions			
Width net [mm]	560	710	810
Height net [mm]	625	735	965
Depth net [mm]	565	605	760
Measures - Internal Dimensions			
Width [mm]	360	510	610
Height [mm]	420	530	760
Depth [mm]	380	420	545
Measures			
Interior volume [L]	57	112	253
Net weight of the unit (empty) [kg]	39	54	85
permitted load [kg]	70	150	270
Load per rack [kg]	30	30	40
Performance Data Temperature			
Temperature range 5 °C above ambient temperature to [°C]	100	100	100
Temperature variation at 37 °C [± K]	0.4	0.4	0.4
Temperature fluctuation at 37 °C [± K]	0.2	0.1	0.2
Heating-up time to 37 °C [min]	45	55	65
Recovery time after 30 seconds door open at 37 °C [min]	16	16	19
Electrical data			
Nominal power (Version 120 V) [kW]	0.3	0.35	0.95
Nominal power (Version 230 V) [kW]	0.3	0.35	0.85
Fixtures			
Number of shelves (std./max.)	2/4	2/5	2/8

ORDERING INFORMATION [Art. No.]

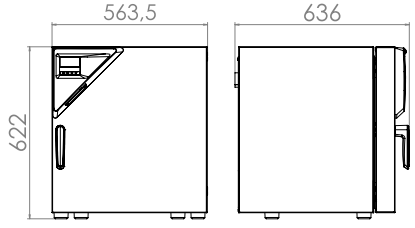
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	BD 56	BD 115	BD 260
230 V 1~ 50/60 Hz	Standard	9010-0323	9010-0325	9010-0329
120 V 1~ 50/60 Hz	Standard	9010-0324	9010-0326	9010-0330

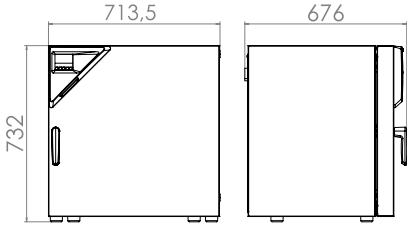
▸ You will find a selction of options, accessories and services suitable for each product on page 10

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

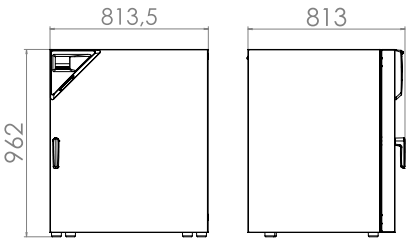
BD 56



BD 115



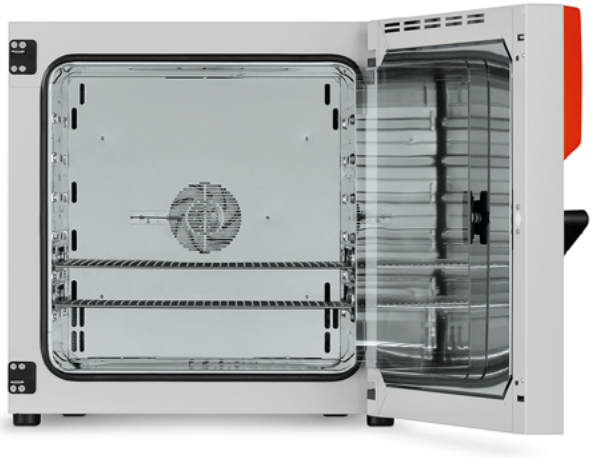
BD 260



Series BF | with forced convection

The BINDER incubator of the BF Avantgarde.Line series with forced 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.





BF 115 model

MAIN FEATURES

- Temperature range (model 56 | 260): ambient temperature plus 7 °C to 100 °C
- Temperature range (model 115): ambient temperature plus 8 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Forced convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
BF 56	59	› go2binder.com/en-BF56
BF 115	114	› go2binder.com/en-BF115
BF 260	257	› go2binder.com/en-BF260

▸ Other Classic.Line models › page 13

TIPS & TRICKS

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Case Studies: › go2binder.com/en-case-studies

Find all details online
go2binder.com/en-BF-a

TECHNICAL DATA

Description	BF 56	BF 115	BF 260
Measures - Outer dimensions			
Width net [mm]	560	710	810
Height net [mm]	625	735	965
Depth net [mm]	565	605	760
Measures - Internal Dimensions			
Width [mm]	400	550	650
Height [mm]	440	550	780
Depth [mm]	340	380	510
Measures			
Interior volume [L]	59	114	257
Net weight of the unit (empty) [kg]	39	54	85
permitted load [kg]	70	150	270
Load per rack [kg]	30	30	40
Performance Data Temperature			
Temperature range 7-8 °C above ambient temperature to [°C]	100	100	100
Temperature variation at 37 °C [± K]	0.3	0.3	0.3
Temperature fluctuation at 37 °C [± K]	0.1	0.1	0.1
Heating-up time to 37 °C [min]	8	8	8
Recovery time after 30 seconds door open at 37 °C [min]	3	4	4
Electrical data			
Nominal power (Version 120 V) [kW]	0.4	0.4	1
Nominal power (Version 230 V) [kW]	0.4	0.4	0.9
Fixtures			
Number of shelves (std./max.)	2/4	2/5	2/8

ORDERING INFORMATION [Art. No.]

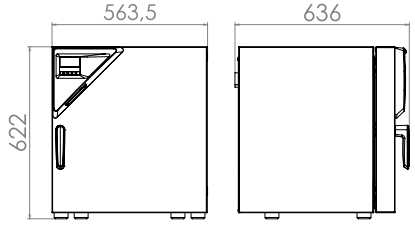
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	BF 56	BF 115	BF 260
230 V 1~ 50/60 Hz	Standard	9010-0313	9010-0315	9010-0319
120 V 1~ 60 Hz	Standard	9010-0314	9010-0316	9010-0320

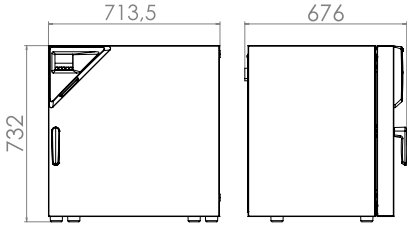
▸ You will find a selction of options, accessories and services suitable for each product on page 10

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

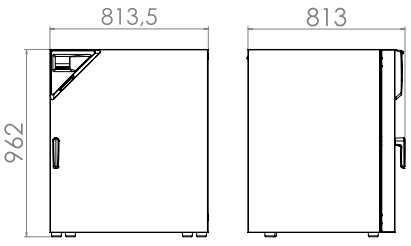
BF 56



BF 115



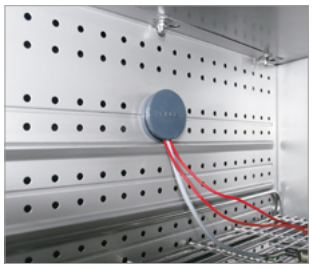
BF 260



EXCERPT FROM OPTIONS AND ACCESSORIES

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top) Series BD, BF
Interior socket	Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, coverable, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67) Series BD, BF
Door lock	Lockable door handle prevents unauthorized access. Series BD, BF
Shelf racks	Perforated shelves or shelf racks, chrome-plated or made from stainless steel. Series BD, BF
Data Logger Kit T	Independent temperature data logging. The tailored product solution contains helpful accessories: From the magnetic mounting of the data logger to the BINDER unit and securing sensor cable for accurate readings. Series BD, BF
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter. Series BD, BF
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter. Series BD, BF

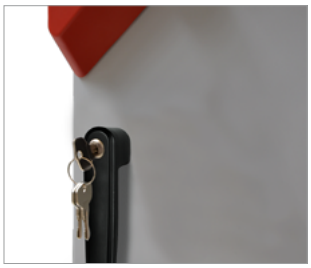
▸ All extras online go2binder.com/en-options



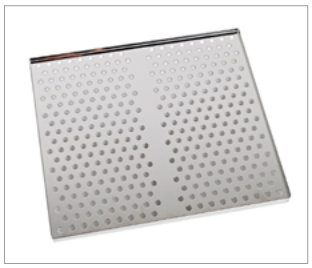
Access port with silicone plug



Shaker operation in the chamber



Door lock



Shelf

Incubators Classic.Line

Series B	Page 16
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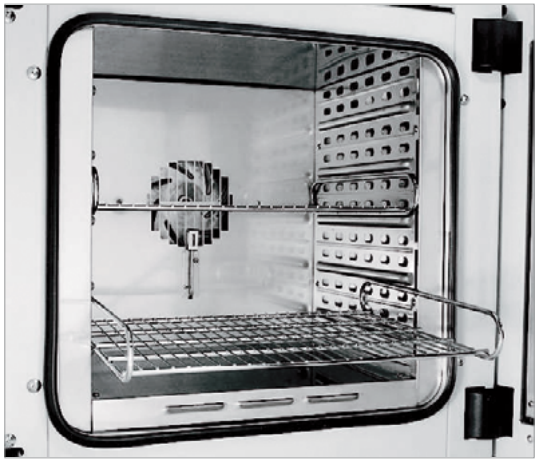
An incubator from BINDER is the perfect solution for stable incubation processes. With their excellent technical profiles, a BINDER incubator produces reliable incubation of microbiological cultures and guarantee reproducible results in every routine test in the laboratory – even under high batch throughputs in long-term operation.
A BD Series incubator functions with natural convection; in a BF Series incubator, convection ensures rapid temperature equalization and quick recovery times.

PRODUCT SELECTION INCUBATORS CLASSIC.LINE

Features	**B** › Page 16	**BD** › Page 18	**BF** › Page 20
Model			
Model 23	–	•	–
Model 28	•	–	–
Model 400	–	•	•
Model 720	–	•	•
General data			
Temperature range [°C]	30…70	–	–
Temperature range 5 °C above ambient temperature to [°C]	–	100	100
RS 422 interface	–	•	•
Natural convection	•	•	–
Forced convection	–	–	•
Controller and timer functions			
Controller display	Analog	LED	LED
Ramp function	–	•	•
Time delayed OFF	–	•	•
Time delayed ON	–	–	•
Temperature dependent delayed OFF	–	–	•
Adjustable fan speed	–	–	•
Class 3.1 independent temperature safety device	–	•	•
Temperature alarm, visual	–	•	•

•Standard equipment

ADVANTAGES AT A GLANCE



CONVENIENT WORK ENVIRONMENT

Series B, BD, BF

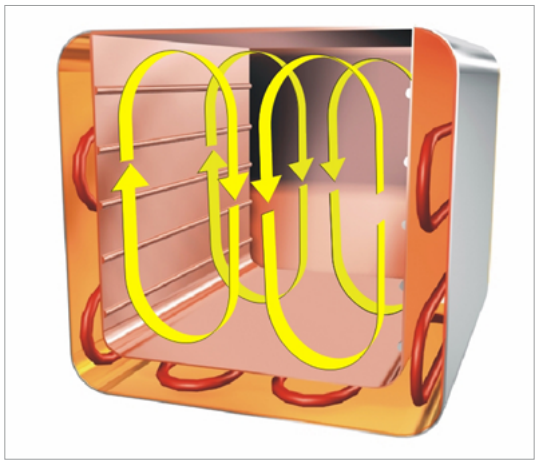
The BINDER interior concept of less is more, highlights rack with tilt protection, no permanent fixtures and stainless-steel inner chamber.



RELIABLE DECONTAMINATION

Series BD, BF

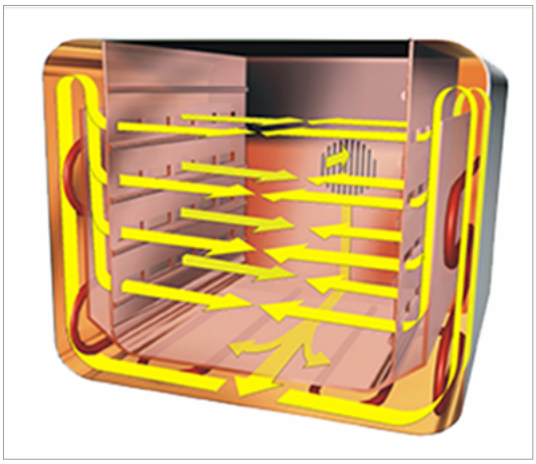
Decontamination is provided by our disinfection routine at 100° C.



HOMOGENEOUS TEMPERATURE CONDITIONS WITH NATURAL CONVECTION

Series BD

Gentle temperature distribution provided by the APT.line™ preheating chamber technology.



HOMOGENEOUS TEMPERATURE CONDITIONS WITH FORCED CONVECTION

Series BF

Long-term operational stability even under full load from the APT.line™ preheating chamber technology.

Series B | with mechanical adjustment

With the B series incubator, you get a reliable and powerful unit in a solid configuration at a very attractive price.



B 28 model

MAIN FEATURES

- Temperature range: 30 °C to 70 °C
- Hydro-mechanical thermostat
- Inner door made of tempered safety glass
- 2 chrome-plated racks

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
B 28	28	› go2binder.com/en-B28

Find all details online
go2binder.com/en-B-c

TECHNICAL DATA

Description	B 28
Measures - Outer dimensions	
Width net [mm]	580
Height net [mm]	405
Depth net [mm]	425
Measures - Internal Dimensions	
Width [mm]	400
Height [mm]	280
Depth [mm]	250
Measures	
Interior volume [L]	28
Net weight of the unit (empty) [kg]	23
permitted load [kg]	25
Load per rack [kg]	10
Performance Data Temperature	
Temperature range [°C]	30...70
Temperature variation at 37 °C [± K]	1.5
Temperature fluctuation at 37 °C [± K]	1
Heating-up time to 37 °C [min]	95
Electrical data	
Nominal power (Version 120 V) [kW]	0.25
Nominal power (Version 230 V) [kW]	0.25
Fixtures	
Number of shelves (std./max.)	2/4

ORDERING INFORMATION [Art. No.]

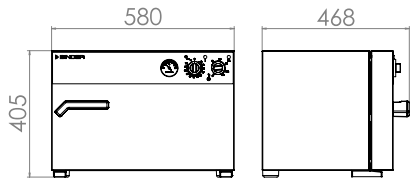
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	B 28
230 V 1~ 50/60 Hz	Standard	9010-0002
	with TB class 1	9010-0004
120 V 1~ 60 Hz	Standard	9010-0067

▸ You will find a selction of options, accessories and services suitable for each product on page 22

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

B 28



Series BD | with natural convection

The BINDER incubator of the BD series with natural convection is the specialist in long-term and stable continuous operation. This incubator is specially designed for gentle incubation of organisms, as well as conditioning of heat-sensitive media or microbiological heating.





BD 400 model

MAIN FEATURES

- Temperature range: room temperature plus 5 °C to 100 °C
- APT.line™ preheating chamber technology
- natural convection
- Adjustable exhaust air flap
- Controller with timer functions
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 liters are stackable
- Class 3.1 independent temperature safety device (DIN 12880) with visual temperature alarm
- Computer interface: RS 422

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
BD 23	20	› go2binder.com/en-BD23
BD 400	400	› go2binder.com/en-BD400
BD 720	720	› go2binder.com/en-BD720

▸ Other Avantgarde.Line models › page 3

Find all details online
go2binder.com/en-BD-c

TECHNICAL DATA

Description	BD 23	BD 400	BD 720
Measures - Outer dimensions			
Width net [mm]	435	1235	1235
Height net [mm]	495	1025	1530
Depth net [mm]	520	765	865
Measures - Internal Dimensions			
Width [mm]	222	1000	1000
Height [mm]	330	800	1200
Depth [mm]	277	500	600
Measures			
Interior volume [L]	20	400	720
Net weight of the unit (empty) [kg]	27	135	191
permitted load [kg]	25	90	120
Load per rack [kg]	12	35	45
Performance Data Temperature			
Temperature range 5 °C above ambient temperature to [°C]	100	100	100
Temperature variation at 37 °C [± K]	0.5	0.5	0.5
Temperature fluctuation at 37 °C [± K]	0.2	0.1	0.1
Heating-up time to 37 °C [min]	59	120	110
Recovery time after 30 seconds door open at 37 °C [min]	20	10	15
Electrical data			
Nominal power (Version 120 V) [kW]	0.2	1.25	0.2
Nominal power (Version 230 V) [kW]	0.2	1.25	0.2
Fixtures			
Number of shelves (std./max.)	2/4	2/9	2/15

ORDERING INFORMATION [Art. No.]

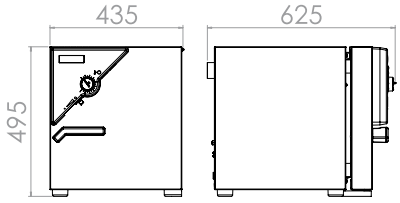
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	BD 23	BD 400	BD 720
230 V 1~ 50/60 Hz	Standard	9010-0187	9010-0073	9010-0074
120 V 1~ 60 Hz	Standard	9010-0189	9010-0176	9010-0177

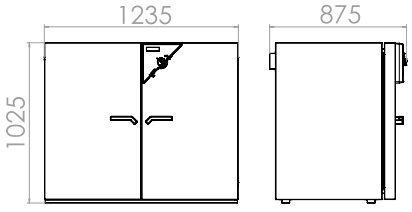
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DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

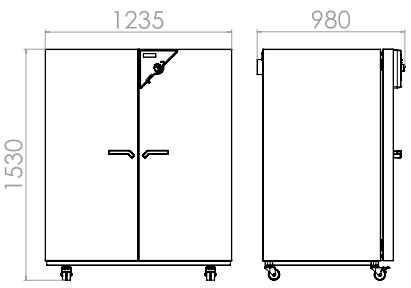
BD 23



BD 400



BD 720



Series BF | 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.





BF 400 model

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
- Units up to 115 liters are stackable
- Class 3.1 independent temperature safety device (DIN 12880) with visual temperature alarm
- Computer interface: RS 422

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
BF 400	400	› go2binder.com/en-BF400
BF 720	720	› go2binder.com/en-BF720

▸ Other Avantgarde.Line models › page 3

Find all details online
go2binder.com/en-BF-c

TECHNICAL DATA

Description	BF 400	BF 720
Measures - Outer dimensions		
Width net [mm]	1235	1235
Height net [mm]	1025	1530
Depth net [mm]	765	865
Measures - Internal Dimensions		
Width [mm]	1000	1000
Height [mm]	800	1200
Depth [mm]	500	600
Measures		
Interior volume [L]	400	720
Net weight of the unit (empty) [kg]	145	180
permitted load [kg]	90	120
Load per rack [kg]	35	45
Performance Data Temperature		
Temperature range 5 °C above ambient temperature to [°C]	100	100
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	17
Recovery time after 30 seconds door open at 37 °C [min]	5	4
Electrical data		
Nominal power (Version 120 V) [kW]	0.85	1.25
Nominal power (Version 230 V) [kW]	0.85	1.25
Fixtures		
Number of shelves (std./max.)	2/9	2/15

ORDERING INFORMATION [Art. No.]

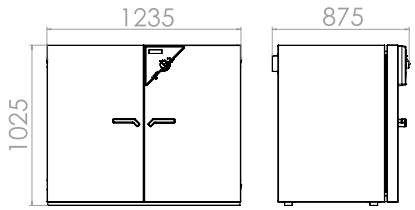
Further details: Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model	BF 400	BF 720
230 V 1~ 50/60 Hz	Standard	9010-0241	9010-0243
120 V 1~ 60 Hz	Standard	9010-0242	9010-0244

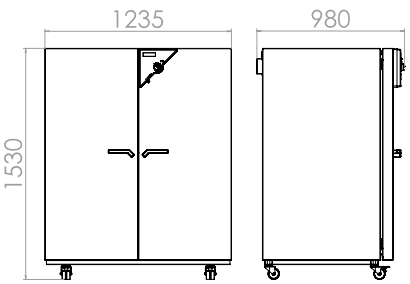
▸ You will find a selction of options, accessories and services suitable for each product on page 22

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

BF 400



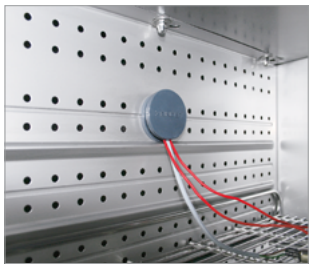
BF 720



EXCERPT FROM OPTIONS AND ACCESSORIES

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top) Series BD, BF
Interior socket	Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, coverable, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67) Series BD, BF
Door lock	Lockable door handle prevents unauthorized access. Series BD, BF
Shelf racks	Perforated shelves or shelf racks, chrome-plated or made from stainless steel. Series B, BD, BF
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter. Series B, BD, BF
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter. Series B, BD, BF

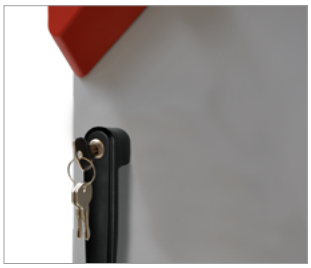
▸ All extras online go2binder.com/en-options



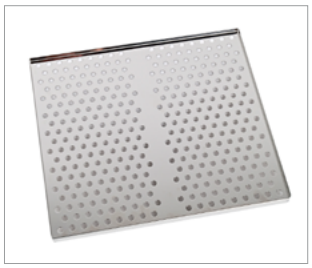
Access port with silicone plug



Shaker operation in the chamber



Door lock



Shelf

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