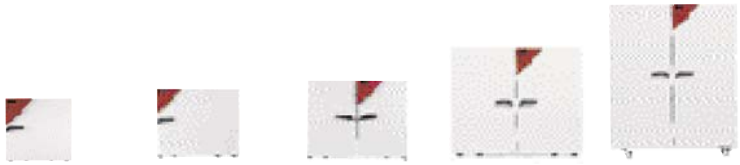
BF series:
Microbiological incubators with forced convection

Premium equipment for all gentle incubation applications, including processing large numbers of samples at high throughput. Outstanding dynamics keep the required temperature virtually stable with homogenous distribution, irrespective of how many times the door is opened.

► **Performance features and equipment:**

- Electronically controlled APT.line™ preheating chamber technology
- Temperature range of 5 °C (9 °F) above ambient temperature up to 100 °C (212 °F)
- MS controller with several timer functions
- Digital temperature setting with an accuracy of a tenth of a degree
- Time functions: delayed ON, delayed OFF, and temperature-dependent delayed OFF
- One ramp function
- Adjustable fan speed (0 – 100 %)
- Adjustable ventilation by means of rear exhaust duct, 50 mm (2 inch) diameter with ventilation flap and front ventilation slide
- Inner glass door
- Independent adjustable temperature safety device, Class 3.1 (DIN 12880), with visual alarm
- RS 422 interface for communication software APT-COM™ DataControlSystem, or switch over to printer output with RS 232 / RS 422 interface converter
- Adjustable intervals for printer
- Units up to 115 liters (4.1 cu.ft) are stackable
- 2 chrome-plated racks
- BINDER test certificate



	BF 53	BF 115	BF 240	BF 400	BF 720
Exterior dimensions					
Width (mm/inch)	634 / 25.0	834 / 32.8	1034 / 40.7	1234 / 48.6	1234 / 48.6
Height (inclusive feet/castors) (mm/inch)	617 / 24.3	702 / 27.6	822 / 32.4	1022 / 40.2	1528 / 60.2
Depth (mm/inch)	575 / 22.6	645 / 25.4	745 / 29.3	765 / 30.1	865 / 34.1
Plus door handle and exhaust duct (mm/inch)	85 / 3.4	85 / 3.4	85 / 3.4	85 / 3.4	85 / 3.4
Wall clearance rear (mm/inch)	100 / 3.9	100 / 3.9	100 / 3.9	100 / 3.9	100 / 3.9
Wall clearance side (mm/inch)	160 / 6.3	160 / 6.3	160 / 6.3	160 / 6.3	160 / 6.3
Exhaust duct outer-Ø (mm/inch)	52 / 2.1	52 / 2.1	52 / 2.1	52 / 2.1	52 / 2.1
Steam space volume (l/cu.ft.)	70 / 2.5	142 / 5.0	283 / 10.0	457 / 16.2	808 / 28.6
Number of doors	1	1	2	2	2
Number of inner glass doors	1	1	2	2	2
Interior dimensions					
Width (mm/inch)	400 / 15.8	600 / 23.6	800 / 31.5	1000 / 39.4	1000 / 39.4
Height (mm/inch)	400 / 15.8	480 / 18.9	600 / 23.6	800 / 31.5	1200 / 47.2
Depth (mm/inch)	330 / 13.0	400 / 15.8	500 / 19.7	500 / 19.7	600 / 23.6
Interior volume (l/cu.ft.)	53 / 1.9	115 / 4.1	240 / 8.6	400 / 14.3	720 / 25.7
Racks, chrome-plated (number standard/max.)	2 / 5	2 / 5	2 / 7	2 / 10	2 / 16
Load per rack (kg/lbs.)	15 / 33	20 / 44	30 / 66	35 / 77	45 / 99
Permitted total load (kg/lbs.)	40 / 88	50 / 110	70 / 155	90 / 199	120 / 265
Weight of the unit (empty) (kg/lbs.)	43 / 95	64 / 141	104 / 230	145 / 320	180 / 397
Temperature data					
Temperature range, 5 °C (9 °F) above ambient up to (°C/°F)	100 / 212	100 / 212	100 / 212	100 / 212	100 / 212
Temperature variation [1]					
at 37°C (98.6 °F) (± °C)	0.4	0.3	0.3	0.4	0.4
at 50°C (122 °F) (± °C)	0.7	0.6	0.8	0.9	0.6
Temperature fluctuation					
at 37 °C (98.6 °F) (± °C)	0.2	0.2	0.2	0.2	0.1
at 50 °C (122 °F) (± °C)	0.2	0.2	0.2	0.2	0.2
Heating up time [2]					
to 37 °C (98.6 °F) (Min.) 98 %	12	22	12	18	21
to 50 °C (122 °F) (Min.) 98 %	20	23	24	26	24
Recov. time after door was opened for 30 sec. [2]					
at 37 °C (98.6 °F) (Min.)	1	1	1	2	1
at 50 °C (122 °F) (Min.)	1,5	2	2	4	4
Air change at 70 °C (158 °F) (x/h) [3]	59	29	19	17	11
Electrical data					
Housing protection acc. to EN 60529	IP 20	IP 20	IP 20	IP 20	IP 20
Nominal voltage (±10 %) 50/60 Hz (V)	230 / 115	230 / 115	230 / 115	230 / 115	230 / 115
Nominal power (W)	400	400	680	850	1250
Energy consumption at 37 °C (98.6 °F) (W)	11	20	33	56	80

[1] value without window [2] up to 98 % of the set value [3] The air change depends on the inner chamber- and ambient temperature and is subject to significant individual variance. The indicated air change rate represents average values for standard equipment. Individual measurement of air change rate in acc. to ASTM D 5374 are optionally available.

All technical specification are specified for units with standard equipment at an ambient temperature of 25 °C (77 °F) and a voltage fluctuation of ±10 %.
The temperature data are determinated in accordance to factory standard following DIN 12880, part 2 respecting 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 alter technical specifications at all times.

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