

## BD 240 - Incubator with gravity convection

BD series incubators are specially designed for long-term and stable continuous operation. Ideal for gentle incubation of organisms, such as on agar plates, and also for conditioning of heat sensitive media.



- Performance features and equipment :
- Electronically controlled APT.line™ preheating chamber assuring temperature accuracy and reproducible results
- Temperature range 5 °C (9 °F) above ambient up to 100 °C (212 °F)
- Digital temperature setting with an accuracy of a tenth of a degree
- DS controller with integrated timer 0 to 99 h
- Independent adjustable temperature safety device class 3.1, providing full protection against chamber over-temperature, with visual alarm
- Adjustable ventilation by means of rear exhaust duct, Ø 50 mm (1.97 inch) with ventilation flap and front ventilation slide
- Inner glass doors
- RS 422 interface for use with optional GMP/GLP and FDA guideline 21 CFR Part 11 compliant APT-COM™
   DataControlSystem software
- 2 chrome-plated racks included
- BINDER test certificate

## Technical specification BD 240





	BD 240	
Exterior dimensions		
Width (mm/inch)	1034 / 40.7	
Height (inclusive feet) (mm/inch)	822 / 32.4	
Depth (mm/inch)	745 / 29.3	
plus door handle and exhaust duct (mm/inch)	90 / 3.5	
Wall clearance rear (mm/inch)	100 / 3.9	
Wall clearance side (mm/inch)	160 / 6.3	
Steam space volume (I/cu.ft.)	283 / 10.0	
Number of doors	2	
Interior dimensions		
Width (mm/inch)	800 / 31.5	
Height (mm/inch)	600 / 23.6	
Depth (mm/inch)	500 / 19.7	
Interior volume (I/cu.ft.)	240 / 8.6	
Racks (number standard/max.)	2 / 7	
Load per rack (kg/lbs.)	30 / 66	
Permitted total load (kg/lbs.)	70 / 155	
Weight of the unit (empty) (kg/lbs.)	93 / 205	
Temperature data		
Temperature data  Temperature range, 5 °C (9 °F) above ambient up	100 / 212	
to (°C / °F)	100 / 212	
Temperature variation		
at 37 °C (98.6 °F) (± °C)	0.5	
at 50 °C (122 °F) (± °C)	0.9	
Temperature fluctuation (± °C)		
at 37 °C (98.6 °F) (Min.)	0.1	
at 50 °C (122 °F) (Min.)	0.1	
Heating up time 1)		
to 37 °C (98.6 °F) (Min.)	70	
to 50 °C (122 °F) (Min.)	115	
Recovery time after door was opened 30 sec. 1)		
at 37 °C (98.6 °F) (Min.)	5	
at 50 °C (122 °F) (Min.)	6	
Electrical data		
Housing protection acc. to EN 60529	IP 20	
Nominal voltage (±10 %) 50 / 60 Hz (V)	230	
Nominal voltage (±10 %) 60 Hz (V)	115	
3 ' ' '		
Nominal power (kW)	0,68	

1) up to 98 % of the set value
All technical data are specified for units with standard equipment at an ambient temperature of 25 °C and a voltage fluctuation of ±10 %. The temperature data are determinated in accordance to factory standard following DIN 12880 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.

## Options and accessories BD series





Waterproof interior power socket in the inner chamber
 Connected to the main switch. To connect ancillary equipment inside the chamber



Additional PT 100 temperature sensor

In situ or flexible installation for exact temperature measurement within the specimen material; connects to a special plug on the back wall of the inner chamber.



BINDER Data Logger kits

The new BINDER Data Logger kits for temperature can record temperature data of BINDER equipment. This finely tuned product solution also contains useful accessories for mounting the Logger on the BINDER unit, including cable bushings and a sensor mounting bracket.



Door Lock

Prevents unauthorized access and interference with processes in the chamber.



Access ports

With silicon plugs for inserting external measuring devices into the chamber. Access ports with 10, 30, 50, 100 mm (0.4, 1.2, 2, 3.9 inch) diameter.

## Options and accessories BD series





	BD 240
Access port with silicone plugs, 10 mm (0.39 inch), 30 mm (1.18 inch), 50 mm (1.97 inch), 100 mm (3.94 inch)	0
Switchable waterproof interior socket 230 V AC (max. 200 W), IP65 protected, with corresponding plug. Max. allowed operating temperature 50 °C (122 °F)	0
Over temperature alarm, audible, can be switched off. Temperature limit can be set at the independent, adjustable temperature safety device	0
Additional PT 100 temperature sensor, flexibly installed, with external connection, including LEMO connector (3 - pin)	0
Temperature measurement acc. to DIN 12880 (27 measuring points) at 37 °C (98.6 °F) or at specified temperature with measuring protocol and certificate	0
Factory calibration certificate. Measurement in center of chamber at 37 °C (98.6 °F) or at specified testing temperature	0
Extension to factory calibration certificate. Each additional measurement at an additional measuring point or temperature	0
Anti - slip rubber pads for safe stacking (1 set of 4 pieces)	0
Data Logger Kit T 220: For the continuous temperature recording of -90 °C (-130 °F) to 220 °C (428 °F). Kit includes 1 data logger, PT 100 sensor with 2 m Teflon extension cable and 1 fixture for the connection at the BINDER unit	0
Data Logger Software: Configuration und evaluation software for all BINDER Data Logger Kits, incl. data cable	0
Rack, chrome - plated	0
Rack, stainless steel	0
Shelf, perforated, stainless steel	0
Door Lock	0