BD 400 - Microbiological incubator with natural 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 (41 °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 door
- RS 422 interface for use with optional GMP/GLP and FDA guideline 21 CFR Part 11 compliant APT-COM™ DataControlSystem software
- Units up to 115 liters (4.1 cu.ft.) are stackable
- 2 chrome-plated racks included
- BINDER test certificate

	BD 400
Exterior dimensions	
Width (mm/inch)	1234 / 48.6
Height (inclusive feet) (mm/inch)	1022 / 40.2
Depth (mm/inch)	765 / 30.1
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 (l/cu.ft.)	457 / 16.2
Number of doors	2
Interior dimensions	
Width (mm/inch)	1000 / 39.4
Height (mm/inch)	800 / 31.5
Depth (mm/inch)	500 / 19.7
Interior volume (l/cu.ft.)	400 / 14.3
Racks (number standard/max.)	2 / 10
Load per rack (kg/lbs.)	35 / 77
Permitted total load (kg/lbs.)	90 / 199
Weight of the unit (empty) (kg/lbs.)	135 / 298
Temperature data	
Temperature range, 5 °C (41 °F) above ambient up to (°C / °F)	100 / 212
Temperature variation	
at 37 °C (± °C)	0.5
at 50 °C (± °C)	0.9
Temperature fluctuation (± °C)	
at 37 °C (Min.)	0.1
at 50 °C (Min.)	0.1
Heating up time 1)	
to 37 °C (Min.)	105
to 50 °C (Min.)	132
Recovery time after door was opened 30 sec. 1)	
at 37 °C (Min.)	6
at 50 °C (Min.)	29
Electrical data	
Housing protection acc. to EN 60529	IP 20
Nominal voltage (±10 %) 50 / 60 Hz (V)	230
Nominal power (kW)	0,85
Energy consumption at 37 °C (98.6 °F) (W)	56

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.

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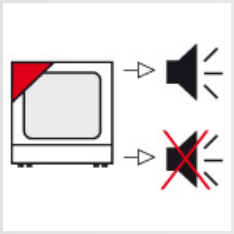
Waterproof interior power socket in the inner chamber

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.



Acoustic alarm

Activates in the event of excess temperature, with adjustable setpoint at the temperature controller. Acoustic alarm can be switched off.

Lockable door

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 mm (0.4, 1.2, 2 inch) diameter.

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	BD 400
Access port with silicone plugs, 10 mm (0.39 inch), 30 mm (1.18 inch), 50 mm (1.97 inch)	O
Switchable waterproof interior socket 230 V AC (max. 500 W), IP65 protected, with corresponding plug (IP 66 protected)	O
Over temperature alarm, acoustic, can be switched off. Temperature limit can be set at the independent, adjustable temperature safety device class 2	O
Additional PT 100 temperature sensor, flexibly installed, with external connection, including LEMO connector (3 - pin)	O
Factory calibration certificate. Measurement in center of chamber at 37 °C (98.6 °F) or at specified testing temperature.	O
Extension to factory calibration certificate. Each additional measurement at an additional measuring point or temperature.	O
Anti-slip rubber pads for safe stacking (4 pieces)	O
Access port with silicone plugs, 100 mm (3.94 inch), top	O
Temperature measurement acc. to DIN 12880 (27 measuring points) at 37 °C (98.6 °F) or at specified temperature with measuring protocol and certificate	O
Rack, chrome - plated or stainless steel	O
Shelf, perforated, stainless steel	O
Lockable door	O

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