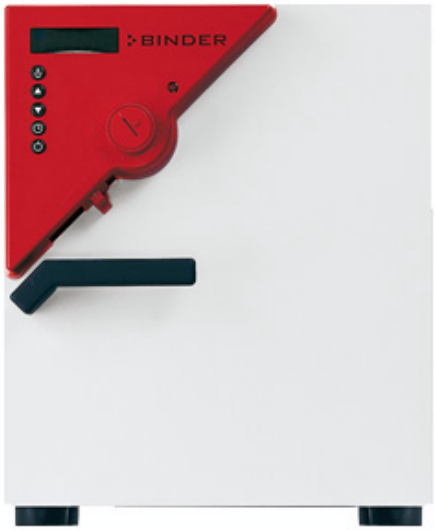
FD 23 - Drying oven with forced convection

FD series units are primarily used in applications needing rapid drying and sterilization. Totally homogenous temperature distribution, rapid dynamic response, and a special air turbine which was developed by us and has 20 % higher output, have made the FD series a genuine time-saving device.



Performance features and equipment :

- Electronically controlled APT.line™ preheating chamber assuring temperature accuracy and reproducible results
- Temperature range 5 °C (32 ºF) above ambient temperature up to 300 °C (572 °F)
- DS controller with integrated timer 0 to 99 h
- Digital temperature setting with an accuracy of one degree
- Independent adjustable temperature safety device class 2 (DIN 12880), with visual temperature alarm
- Adjustable front ventilation flap slide and rear exhaust ø 50 mm (1.97 inch)
- Units up to 115 liters are stackable
- 2 chrome-plated racks included
- BINDER test certificate

Technical specification FD 23

BINDER
Best conditions for your success

	FD 23
Exterior dimensions	
Width (mm/inch)	433 / 17.1
Height (inclusive feet/castors) (mm/inch)	492 / 19.4
Depth (mm/inch)	516 / 20.3
Plus door handle, I-panel and exhaust duct (mm/inch)	85 / 3.4
Wall clearance rear (mm/inch)	100 / 3.9
Wall clearance side (mm/inch)	100 / 3.9
Exhaust duct outer- Ø (mm/inch)	52 / 2.1
Steam space volume (l/cu.ft.)	36 / 1.3
Number of doors	1
Interior dimensions	
Width (mm/inch)	222 / 8.7
Height (mm/inch)	330 / 13.0
Depth (mm/inch)	277 / 10.9
Interior volume (l/cu.ft.)	20 / 0.7
Racks, chrome-plated (number standard/max.)	2 / 3
Load per rack (kg/lbs.)	12 / 26
Permitted total load (kg/lbs.)	25 / 55
Weight of the unit (empty) (kg/lbs.)	33 / 73
Temperature data	
Temperature range, 5 °C (41 °F) above ambient up to (°C / °F)	300 / 572
Temperature variation 1)	
at 70 °C (± °C)	0.8
at 150 °C (± °C)	2.2
at 300 °C (± °C)	4.3
Temperature fluctuation (± °C)	0.3
Heating up time 1), 2)	
to 70 °C (Min.)	7
to 150 °C (Min.)	22
auf 300 °C (Min.)	45
Recov. time after door was opened for 30 sec.	
at 70 °C (Min.)	2
at 150 °C (Min.)	4
at 300 °C (Min.)	9
Air change data	
Air change	
at 70 °C (x/h)	59
at 150 °C (x/h)	64
at 300 °C (x/h)	53
Electrical data	
Housing protection acc. to EN 60529	IP 20
Nominal voltage (±10 %) 50 / 60 Hz (V)	230 / 115
Nominal power (kW)	0.8
Energy consumption	
at 70 °C (W)	145
at 150 °C (W)	300
at 300 °C (W)	720

1) value without window
2) 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.

BINDER Inc. 3500 Sunrise Highway,Suite D214 Great River, NY 11739 Address: 3500 Sunrise Highway,Suite D214 Great River, NY 11739, USA
Contact: Phone: +1 (631) 224 4340 | Toll free: +1 (866) 885 9794 | Fax: +1 (631) 224 4354 | us-sales@binder-world.com | www.binder-world.us

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.

Door with window and interior lighting

For optimum process control in the interior, available for all equipment sizes.

Lockable door

Prevents unauthorized access and interference with processes in the chamber.

Calibration certificates and validation

BINDER can significantly reduce the time and effort needed for equipment qualification. We draw on unparalleled knowledge of our equipment applications and years of experience in certification.

BINDER Inc. 3500 Sunrise Highway,Suite D214 Great River, NY 11739 Address: 3500 Sunrise Highway,Suite D214 Great River, NY 11739, USA
Contact: Phone: +1 (631) 224 4340 | Toll free: +1 (866) 885 9794 | Fax: +1 (631) 224 4354 | us-sales@binder-world.com | www.binder-world.us

	FD 23
Access port with silicone plugs, 10 mm (0.39 inch), 30 mm (1.18 inch), 50 mm (1.97 inch)	O
Independent adjustable temperature safety device, Class 3.1 (DIN 12880)	O
Analog temperature output, 4 - 20 mA, with 6 - pin DIN socket (output not adjustable)	O
Over temperature alarm, acoustic, can be switched off. Temperature limit can be set at the independent, adjustable temperature safety device class 2	O
Temperature measurement acc. to DIN 12880 (27 measuring points) at 150 °C (302 °F) or at specified temperature with measuring protocol and certificate	O
Factory calibration certificate. Measurement in center of chamber at 150 °C (302 °F) or at specified testing temperature	O
Extension to factory calibration certificate. Each additional measurement at an additional measuring point or temperature	O
Rack, chrome - plated or stainless steel	O
Shelf, perforated, stainless steel	O
Lockable door	O
FKM door gasket	O
Door with window and interior lighting, 15 W (180 x 180 mm / 7.09 x 7.09 inch)	O

BINDER Inc. 3500 Sunrise Highway,Suite D214 Great River, NY 11739 Address: 3500 Sunrise Highway,Suite D214 Great River, NY 11739, USA
Contact: Phone: +1 (631) 224 4340 | Toll free: +1 (866) 885 9794 | Fax: +1 (631) 224 4354 | us-sales@binder-world.com | www.binder-world.us