

FD series: Drying ovens with forced convection

Drying and sterilization tasks with reduced processing times.



► **Performance features and equipment:**

- Temperature range of 5 °C above ambient temperature up to 300 °C
- Electronically-controlled APT.line® preheating chamber technology with forced convection
- DS-controller with integrated timer 0 to 99 hours
- Digital temperature setting with degree accuracy
- One ramp function
- Adjustable safety device, Class 2 (DIN 12880), with visual temperature alarm
- Adjustable ventilation by means of rear exhaust duct Ø 50 mm with ventilation flap and front ventilation slide
- 2 chrome-plated shelves
- Units up to 115 liters are stackable
- Optional RS 422 interface for communication software APT-COM® DataControlSystem

► **Only at BINDER: Precision regardless of size – the 20-liter bench-top units.**





	FD 23	FD 53	FD 115	FD 240
▶ Exterior dimensions				
Width (mm/inch)	433 / 17.1	634 / 25.0	834 / 32.8	1034 / 40.7
Height (inclusive feet/castors) (mm/inch)	492 / 19.4	617 / 24.3	702 / 27.6	822 / 32.4
Depth (mm/inch)	516 / 20.3	575 / 22.6	645 / 25.4	745 / 29.3
Plus door handle, I-panel and exhaust duct (mm/inch)	85 / 3.4	105 / 4.1	105 / 4.1	105 / 4.1
Wall clearance rear (mm/inch)	100 / 3.9	100 / 3.9	100 / 3.9	100 / 3.9
Wall clearance side (mm/inch)	100 / 3.9	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
Steam space volume (l/cu.ft.)	36 / 1.3	77 / 2.7	158 / 5.6	308 / 10.9
Number of doors	1	1	1	2
▶ Interior dimensions				
Width (mm/inch)	222 / 8.7	400 / 15.8	600 / 23.6	800 / 31.5
Height (mm/inch)	330 / 13.0	400 / 15.8	480 / 18.9	600 / 23.6
Depth (mm/inch)	277 / 10.9	330 / 13.0	400 / 15.8	500 / 19.7
Interior volume (l/cu.ft.)	20 / 0.7	53 / 1.9	115 / 4.1	240 / 8.6
Shelves, chrome-plated (number standard/max.)	2/3	2/5	2/6	2/7
Load per shelf (kg/lbs.)	12 / 26	15 / 33	20 / 44	30 / 66
Permitted total load (kg/lbs.)	25 / 55	40 / 88	50 / 110	70 / 155
Weight of the unit (empty) (kg/lbs.)	33 / 73	44 / 97	62 / 137	96 / 212
▶ Temperature data				
Temperature range, 5°C/41°F above ambient up to (°C/°F)	300 / 572	300 / 572	300 / 572	300 / 572
Temperature variation ¹⁾				
at 70 °C (± °C)	0.8	0.8	0.7	0.8
at 150 °C (± °C)	2.2	2	1.8	2
at 300 °C (± °C)	4.3	3.7	3.9	4.3
Temperature fluctuation (± °C)	0.3	0.3	0.3	0.3
Heating-up time ^{1), 2)}				
to 70 °C (Min.)	7	7	7	11
to 150 °C (Min.)	22	22	28	24
to 300 °C (Min.)	45	45	49	50
Recov. time after door was opened for 30 sec. ^{1), 2)}				
at 70 °C (Min.)	2	2	2	2
at 150 °C (Min.)	4	4	5	6
at 300 °C (Min.)	9	9	12	13
Air change				
at 70 °C (x/h)	59	59	29	19
at 150 °C (x/h)	64	64	32	20
at 300 °C (x/h)	53	53	26	18
▶ Electrical data				
Housing protection acc. to EN 50529	IP 20	IP 20	IP 20	IP 20
Nominal voltage (± 10 %) 50/60 Hz (V)	230	230	230	230
Nominal power (W)	800	1200	1600	2700
Energy consumption				
at 70 °C (W)	145	145	230	370
at 150 °C (W)	300	300	544	850
at 300 °C (W)	720	720	1100	1400

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 determined in accordance to 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.