

FED series: Drying ovens with forced convection and multifunctional control

Universal performance for high-precision thermal processing via expanded time functions, including standard APT-COM® DataControlSystem interface.



► Performance features and equipment:

- Electronically-controlled APT.line® preheating chamber technology with forced convection
- Temperature range of 5 °C above ambient temperature up to 300 °C
- MS-controller with several timer functions
- Controller timer functions: delayed ON, delayed OFF, temperature dependent delayed OFF
- Digital temperature setting with degree accuracy
- One ramp function
- Adjustable fan speed (0 to 100 %)
- 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
- 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 are stackable
- 2 chrome-plated shelves





	FED 53	FED 115	FED 240	FED 400	FED 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, I-panel and exhaust duct (mm/inch)	105 / 4.1	105 / 4.1	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	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.)	77 / 2.7	158 / 5.6	308 / 10.9	498 / 17.6	869 / 30.7
Number of 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
Shelves, chrome-plated (number standard/max.)	2/5	2/6	2/7	2/10	2/16
Load per shelf (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.)	44 / 97	62 / 137	96 / 212	145 / 320	195 / 430
▶ Temperature data					
Temperature range, 5 °C/41°F above ambient up to (°C/°F)	300 / 572	300 / 572	300 / 572	300 / 572	300 / 572
Temperature variation ¹⁾					
at 70 °C (± °C)	0.8	0.7	0.8	1	1
at 150 °C (± °C)	2	1.8	2	2.5	2
at 300 °C (± °C)	3.7	3.9	4.3	4.8	5.5
Temperature fluctuation (± °C)	0.3	0.3	0.3	0.3	0.3
Heating-up time ²⁾					
to 70 °C (Min.)	6	7	12	18	25
to 150 °C (Min.)	24	30	27	35	39
to 250 °C (Min.)	45	49	50	60	65
Recov. time after door was opened for 30 sec. ²⁾					
at 70 °C (Min.)	2	2	2	2	2
at 150 °C (Min.)	5	8	10	17	20
at 300 °C (Min.)	10	15	16	21	24
Air change					
at 70 °C (x/h)	59	29	19	17	11
at 150 °C (x/h)	64	32	20	18	12
at 300 °C (x/h)	53	26	18	16	10
▶ Temperature data					
Housing protection acc. to EN 60529	IP 20	IP 20	IP 200	IP 20	IP 20
Nominal voltage (± 10 %) 50/60 Hz (V)	230	230	230	400 3/N	400 3/N
Nominal power (W)	1200	1600	2700	3400	5000
Energy consumption					
at 70 °C (W)	145	230	370	520	570
at 150 °C (W)	300	544	850	1200	1320
at 300 °C (W)	720	1100	1400	2340	2600

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.