

◆ RAD/RFD1-42 Benchtop Ovens

Proven reliability in demanding applications, such as curing, drying and aging



Despatch RA cabinet ovens feature horizontal recirculating airflow to ensure exceptional temperature uniformity throughout the oven. A high-volume fan circulates air through perforated, steel walls to create a constant horizontal airflow across all sections of the oven. The result is proven reliability in demanding production and laboratory applications, such as curing, drying, stress relieving, aging, and other process-critical applications.

This oven is equipped with the Protocol 3™ microprocessor-based temperature and hi-limit controller with large LCD display and real time clock for auto start capability. The LCD display shows temperature readings along with clear, detailed information on oven status. The data-logging functionality enables reporting and analyzing and data files can be exported via the controller's USB port. Modbus RS485 communications are included for easy data access.



FEATURES AT A GLANCE

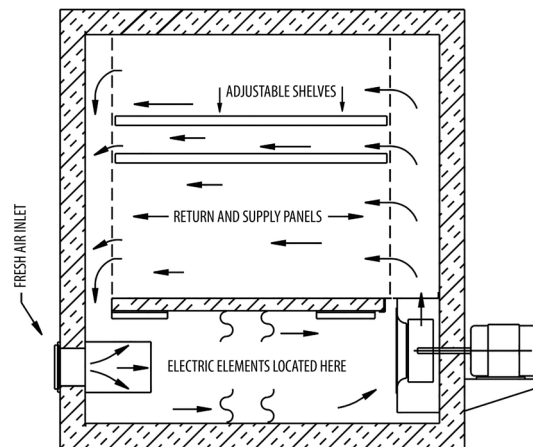
- ◆ Temperatures up to 343°C (650°F)
(Models available with temperatures up to 538°C (1000°F))
- ◆ Horizontal recirculating airflow
- ◆ Protocol 3™ control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export.
- ◆ Aluminized steel interior
- ◆ 5-year heater warranty
- ◆ End of cycle and high-limit indicators
- ◆ Audible and visual high-limit alarm
- ◆ RS485 Modbus communication PC interface
- ◆ 1" process port for test wires and disconnect switch
- ◆ UL and C-UL listed open industrial control panel

OPTIONS

- ◆ Door switch
- ◆ Stainless steel interior
- ◆ CE compliance

		RAD1-42	RFD1-42
PHYSICAL SPECIFICATIONS			
Chamber size (width x depth x height)		20 x 18 x 20 in. 51 x 46 x 51 cm	20 x 18 x 20 in. 51 x 46 x 51 cm
Capacity in cubic feet (liters)		4.2 (119)	4.2 (119)
Overall size (width x depth x height)		46 x 31.5 x 37.5 in. 119 x 80 x 95 cm	46 x 36.5 x 37.5 in. 117 x 92.7 x 95 cm
Electrical: 50/60 hertz - single phase	208 volts	33.7 amps/6 kW	34.5 amps/6 kW
	240 volts	30 amps/6 kW	30.8 amps/6 kW
Number of shelves provided		2	2
Maximum number of shelves		9 on 2 in. centers	9 on 2 in. centers
Shelf dimensions (width x depth)		19.6 x 17.75 in. 50 x 45 cm	19.6 x 17.75 in. 50 x 45 cm
Exhaust outlet diameter		2.5 in. (6.4 cm)	2.5 in. (6.4 cm)
Doors		1	1
Approximate net weight		380 lbs (172 kg)	380 lbs (172 kg)
Approximate domestic shipping weight (export adds weight)		480 lbs (218 kg)	510 lbs (231 kg)
Insulation thickness		4 in. (10.2 cm)	4 in. (10.2 cm)
FUNCTIONAL SPECIFICATIONS			
Time to temp with no load (40°C to 177°C)		10 minutes	12 minutes
Time to temp with no load (40°C to 260°C)		20 minutes	26 minutes
Time to temp with no load (40°C to 343°C)		38 minutes	36 minutes
Temperature uniformity		+/- 2.3°C at 177°C +/- 3.4°C at 260°C +/- 4.2°C at 343°C	+/- 2.3°C at 177°C +/- 3.4°C at 260°C +/- 4.2°C at 343°C
Minimum operating temp		40°C (104°F)	30°C (86°F)
Maximum operating temp		343°C (650°F)	343°C (650°F)
Control stability		+/- 0.5°C on all models	
Repeatability		+/- 0.5°C	+/- 0.5°C
Maximum load capacity		91 kg (200 lbs.)	200 lbs (91 kg)
Maximum shelf capacity		13.6 kg (30 lbs.)	30 lbs (13.6 kg)
Exhaust capacity (minimum/maximum)		Adj. to 12 CFM (5.6 l/s)	23/93 CFM (10.9/43.9 l/s)
Solvent handling capacity at 177°C (350°F) MEK		NA	.025 GPH (.095 l/h)
Forced exhaust HP		NA	1/5 HP
Recirculating fan		1/2 HP 425 CFM (200 l/s)	1/2 HP 425 CFM (200 l/s)

Notes: Uniformity figures are based on a nine-point test conducted in an empty oven after stabilization period. Uniformity can vary slightly depending on unit and operating conditions. Minimum operating temperature and cooling times are based on 20°C ambient temperature measured at the fresh air inlet with the fresh air and exhaust dampers fully open. Specifications are subject to change without notice. If the existing specifications differ from yours, ask about our customizing capabilities.



RAD front view cross section showing airflow pattern.



RFD1-42 Class A oven

Specially designed to meet NFPA 86 requirements for applications that include flammable solvents or large amounts of moisture removal. Includes a pressure relief panel, purge timer and exhaust fan.

RAD models are not to be used with flammable solvents, materials or containers. If your process involves flammable solvents please inquire about our RFD models.

SERVICE AND TECHNICAL SUPPORT

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