

### ◆ 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.

Standard digital controls regulate temperatures within tight tolerances and provide high limit protection. For more advanced control choose the optional Protocol 3™ microprocessor-based temperature and hi-limit controller with large LCD display and real time clock for auto start capability. 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.



*Shown with optional Protocol 3 controller*

#### FEATURES AT A GLANCE

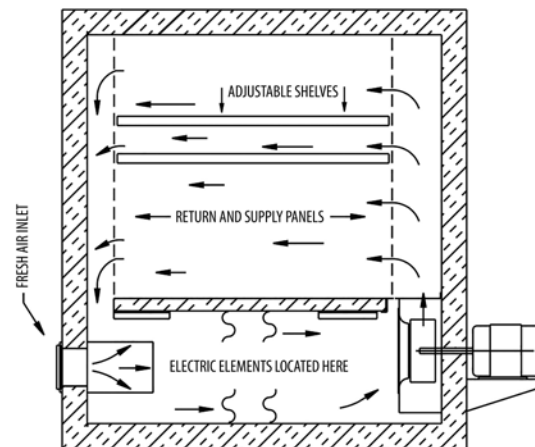
- ◆ Temperatures up to 343°C (650°F) (Models available with temperatures up to 538°C (1000°F))
- ◆ Horizontal recirculating airflow
- ◆ Digital control with 3/4" (1.9cm) LED display
- ◆ Aluminized steel interior
- ◆ 5-year heater warranty
- ◆ End of cycle and high-limit indicators
- ◆ Audible and visual 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

- ◆ Protocol 3™ control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export
- ◆ Door switch
- ◆ Stainless steel interior
- ◆ CE compliance

		RAD1-42	RFD1-42
<b>PHYSICAL SPECIFICATIONS</b>			
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)
<b>FUNCTIONAL SPECIFICATIONS</b>			
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	
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: Design uniformity figures are based on a nine-point test conducted in an empty oven after stabilization period. Minimum operating temperature and cooling times are based on 20°C ambient temperature measured at the fresh air inlet. 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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