

### ◆ RBC Stackable Burn-In Chambers

Dual chambers equate to maximum flexibility



Despatch's stackable burn-in chambers offer maximum flexibility for small lot qualification testing, burn-in, reliability testing, and research and development.

**Flexibility** - The stackable burn-in chambers allow users to run concurrent tests utilizing different temperatures or different cycle times. They are ideal for qualification testing with small lots, because a new test may be started on the second chamber while the first test is still in progress. This chamber configuration is designed to maximize throughput and equipment utilization.

**Small Footprint** - The chamber may be placed on a benchtop, or stacked to conserve valuable floorspace. The small footprint makes these chambers ideal for test labs or production areas where space is at a premium.

**Easy to use Controls** - The Protocol 3TM is a microprocessor based temperature and hi-limit controller that is easy to use for both simple and complex applications. The large, bright LCD displays temperature and detailed information on oven status with clear real-text messages and simplifies programming of temperature and time parameters with user-friendly menus. Datalogging function allows for logging important process data for reporting and analyzing. Data files can be exported via the USB port on the front of the controller or through the communications. Modbus communication (RS485) is standard or you can select the optional ethernet connection.

**Thermal Dissipation** - High volume recirculation fans maintain consistent, uniform temperatures required by MIL STD 883 while removing heat generated by the load. Despatch's stackable burn-in chambers are ideal for high dissipation applications.

#### FEATURES AT A GLANCE

- ◆ Stackable configuration
- ◆ High dissipation capacity
- ◆ Maximum temperature: 260°C
- ◆ High volume horizontal recirculating airflow
- ◆ Automatic modulation damper for energy efficiency



## STACKABLE BURN-IN OVENS RBC1-50

### PHYSICAL SPECIFICATIONS

| Model   | Air   | Nitrogen                            |
|---|---|-------------------------------------|
| Nominal Chamber Dimensions (width x depth x height) | 18 x 25 x 18 in<br>46 x 64 x 46 cm  | 18 x 25 x 18 in<br>46 x 64 x 46 cm  |
| Capacity in cubic feet (liters)                     | 4.7 (133)   | 4.7 (133)                           |
| Overall Size (width x depth x height)               | 46 x 36 x 32 in<br>117 x 91 x 81 cm   | 46 x 36 x 32 in<br>117 x 91 x 81 cm |
| Electrical (Heater)                                 | 208V-1PH-60HZ, 22 AMPs (3 kW)<br>220V-1PH-50HZ, 23 AMPs (3.3 kW)<br>240V-1PH-60HZ, 24 AMPs (4 kW) |                                     |
| 1 HP Recirculating fan                              | 600 CFM (283 LPS)   | 600 CFM (283 LPS)                   |
| Approximate Net weight                              | 470 lbs / 213 kg  | 470 lbs / 213 kg                    |
| Approximate Shipping weight                         | 600 lbs / 272 kg  | 600 lbs / 272 kg                    |

### FUNCTIONAL SPECIFICATIONS

|   |   |  |  |
|---|---|--|--|
| Operating range <sup>1</sup>  |   | 50°C - 260°C                             | 50°C - 260°C                             |
| Maximum dissipation <sup>2</sup>                                      | @ 80°C<br>@ 125°C<br>@ 150°C                | 800 watts<br>1300 watts<br>1400 watts    | 800 watts<br>1300 watts<br>1400 watts    |
| Maximum mean temperature gradient (with evenly distributed live load) |   | 4°C @ 80°C<br>6°C @ 125°C<br>6°C @ 150°C | 4°C @ 80°C<br>6°C @ 125°C<br>6°C @ 150°C |
| Temperature uniformity (empty oven)                                   | @ 125°C<br>@ 260°C                          | < ±1°C<br>±1°C                           | < ±1°C<br>±1°C                           |
| Control stability   |   | ± 0.10C/0C rise in ambient temperature   |  |
| Time to temperature (240V) <sup>3</sup>                               | 25-80°C<br>25-125°C<br>25-150°C<br>25-260°C | 4 min.<br>10 min.<br>14 min.<br>34 min.  | 4 min.<br>10 min.<br>14 min.<br>30 min.  |
| Cool down 125°C to 60°C   |   | 40 min.                                  | 11 min.                                  |
| Recovery time to 125°C (door open 1 min.)                             |   | > 1 min.                                 | > 1 min.                                 |

#### Notes:

<sup>1</sup> Assumes ambient of 25°C

<sup>2</sup> Dissipation is reduced by 17% on 50 Hz

<sup>3</sup> Time to temperature slightly longer for voltages lower than 240V

### STANDARD FEATURES

- ◆ Removable rear-wall for fixturing
- ◆ Protocol 3™ control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export
- ◆ Modbus communications connection (RS485) for remote monitoring and recording
- ◆ High limit over temperature protection
- ◆ Airflow switch protects against fan failure
- ◆ Stainless steel interior
- ◆ Baked enamel exterior
- ◆ Easy to service
- ◆ Scratch resistant

### OPTIONS

- ◆ Nitrogen injection capability for minimizing oxidation at high temperatures includes LN2 for rapid cooling
- ◆ Ethernet communication connection
- ◆ Casters with brake
- ◆ Redundant hi-limit
- ◆ Chart recorder
- ◆ CE compliant
- ◆ Stacking hardware

### SERVICE AND TECHNICAL SUPPORT

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# Despatch

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