



BURN-IN OVENS

Ideal for electronic components, electronic devices, electronic assemblies

Blue M ovens have earned a long-standing reputation for exceptional performance, long service life and ease of operation over a broad range of applications.

Blue M Burn-In Ovens are no exception. With Blue M's trademark tough industrial construction, uniform, reliable temperature control and numerous standard features, these ovens are ideal for burn-in applications for electronic component, devices and assemblies.

Oven Features

- **Heavy gauge steel exterior**
 - All exterior panels are at least 16 gauge
- **Heavy gauge type 304 stainless steel interior**
- **Welded construction**
 - Contributes to Blue M's legendary strength and reliability
- **Fiberglass insulation**
 - 4 full inches minimizes heat loss
- **Baked-on powder-coated blue enamel finish**
 - For long-lasting corrosion protection
- **Blue M silicone door seal design**
 - For positive sealing of door
- **"Clean" side walls**
 - For unobstructed side-by-side installation

Uniform, Accurate and Reliable Temperature Control

- **Available with profiling or single setpoint temperature controls**
- **Horizontal or vertical air flow**
 - Allows maximum flexibility of product fixturing
- **Double plenum design**
 - Tuned for optimum uniformity
 - Removable for cleaning
- **Exclusive Blue M Eterna™ heating elements**
 - The most reliable available
 - Heavy-gauge high temperature nickel chromium wire
 - Low-watt density of longer service life
 - Standard air flow switch for extra protection against burnout
 - Premium alumina ceramic element insulators
 - Manual override allows elements to be shut off without shutting unit down
- **Watt Watcher™ air flow system**
 - Automatically compensates for load variations caused by wattage dissipation
 - Motorized damper for automatic operation and rapid cool down
- **Standard door interlock**
 - Shuts down oven if door is opened during operation
- **Customer power supply interlock**
 - Shuts off power if door is opened or on chamber fault
 - Protects the product and operator
- **Oversized direct drive blower**
 - Multi-blade centrifugal blower with matched helical scroll
 - High-volume air delivery
 - Dynamically balanced for minimum noise and maximum reliability
 - Lifetime lubricated motor



BI/BI-32

-Model BI-32F-

Unit shown with optional circular chart recorder

Burn-In Oven Options

- 10" Circular chart recorder
- Floorstand for BI-9 and BI-9V models
- Lead-in ports

Controllers

- Pro-550 Controller
YOKO Controllers/pro550

Engineered Oven Options

- Rear access door(s)
- Redundant over-temperature protection
- Welded and sealed interior
- N₂ purge

General Specifications

Temperature range: 15°C above ambient to 300°C (572°F)

Uniformity: ± 1% of setpoint (empty chamber at 125°C)

Control accuracy: ±1.0°C

Resolution: ±0.1°C

Wattage dissipation: at 125°C, 60 Hz; 6,600 Watts
at 125°C, 50 Hz; 5,500 Watts

Performance data (typical): See chart on right

- Empty chamber performance with intake and exhaust closed at rated voltage -



BI/BI-09

-Model BI-09-

Unit shown with optional floorstand and lead-in port

Blue M, a part of:



Thermal Product Solutions

P.O. Box 150 White Deer, PA 17887-0150 USA

Pho: 570.538.7200

Fax: 570.538.7380

2821 Old Route 15 New Columbia, PA 17856-9396

TPSinfo@tps.spx.com

www.bluem.com

Performance Data (typical)

| Live Load | Run-up time to 125°C | Cool Down Time |
|-------------|----------------------|---------------------|
| 1,500 Watts | 8 minutes | To 40°C: 30 minutes |
| 3,000 Watts | 6 minutes | To 50°C: 40 minutes |
| 5,000 Watts | 5.5 minutes | To 70°C: 30 minutes |

-Data based on 25°C ambient at rated voltage-
Meets Mil. 833C, Method 1015.4

Condensed Specifications

| Model | 9F (horizontal airflow) | 9F (vertical airflow) | 16F (horizontal airflow) | 16F (vertical airflow) | 32F (horizontal airflow) | 32F (vertical airflow) |
|---|-------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| Interior Volume ft ³ (l) | 9.0 (255) | 9.0 (255) | 16.6 (470) | 16.6 (470) | 33.3 (943) | 33.3 (943) |
| Interior Dimensions WxDxH in. (mm) | 25 x 25 x 25 (635 x 635 x 635) | 25 x 25 x 25 (635 x 635 x 635) | 24 x 25 x 48 (610 x 635 x 1219) | 48 x 25 x 24 (1219 x 635 x 610) | 48 x 25 x 48 (1219 x 635 x 1219) | 48 x 25 x 48 (1219 x 635 x 1219) |
| 4 Exterior Dimensions WxDxH in. (mm) | 41 x 38 x 58 (1041 x 965 x 1473) | 58 x 38 x 68 (1473 x 965 x 1727) | 42 x 37 x 84 (1067 x 940 x 2134) | 83 x 37 x 58 (2108 x 94 x 1473) | 66 x 37 x 84 (1676 x 940 x 2134) | 83 x 37 x 82 (2108 x 940 x 2083) |
| Machine Footprint ft ² (m ²) | 10.8 (1.0) | 15.3 (1.42) | 10.7 (1.0) | 21.3 (1.97) | 16.9 (1.57) | 21.3 (1.97) |
| Electrical Service | | | | | | |
| 208 VAC 3 Ph 60 Hz Line current (per ph) | 7.5 kW 26 Amps | 7.5 kW 26 Amps | 11.0 kW 40Amps | 11.0 kW 40Amps | 14.0 kW 48 Amps | 14.0 kW 48 Amps |
| 240 VAC 3 Ph 60 Hz Line current (per ph) | 10.0 kW 29 Amps | 10.0 kW 29 Amps | 14.0 kW 45 Amps | 14.0 kW 45 Amps | 18.5 kW 54 Amps | 18.5 kW 54 Amps |
| 480 VAC 3 Ph 60 Hz Line current (per ph) | 10.0 kW 15 Amps | 10.0 kW 15 Amps | 11.0 kW 18 Amps | 11.0 kW 18 Amps | 14.0 kW 22 Amps | 14.0 kW 22 Amps |

All specifications are subject to change without

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