

Thermo Scientific Lindberg/Blue M 1700°C Box Furnaces, Large Chamber, Integral Control

Designed for efficient, high-temperature use with minimal maintenance



- Fast heatup to high temperatures, unique door design and control sophistication ranging from solid-state, single setpoint to more versatile microprocessor-based systems with programming and communications options
- Designed for efficient high-temperature use with minimal maintenance
- Choice of single setpoint or programmable control
- Side swing door provides full and easy access to chamber, protects user from heat surge
- Atmosphere port, 0.375in. diameter, for fresh air or inert gas inlet (located at back wall, bottom)
- Solid-state power module with ammeter, circuit breaker, transformer and front panel indicator lights for “Ready Element” and “Main Power Applied”
- Safety power disconnect switch cuts power to heating elements when door is opened
- Moldatherm high-temperature ceramic fiber insulation with advanced graded design for fast heat-up and resistance to thermal shock
- Moldatherm hearthplate supports load and protects chamber from spills or mishandling
- High-volume cooling fans move air between inner and outer chamber to reduce exterior shell temperatures and improve energy efficiency and operator safety
- Long-life type “B” thermocouples with 10ft. compensated lead wire and polarized plug for accurate high-temperature measurement
- Removable panels for easy access to replaceable heating elements and thermocouples

Smart Heating Elements

- Molybdenum disilicide elements with unique right-angle bend and sidewall mounting reduce maintenance usually associated with element termination and mounting
- Designed for easy replacement without matching resistance values
- Fast heat-up and recovery with excellent uniformity and energy efficiency
- Increased resistance to thermal shock, ideal for rapid cycling over extended periods

Over-temperature Protection (OTP)†

- Adjustable digital over-temperature control protects furnace and load in the event of primary control circuit failure
- Overrides main controller and shuts off power to furnace if high limit is reached
- Manual reset required for safety
- Operates via signal from independent thermocouple

Programmable Controller With Communications (COM Models)

- With RS-485 data port (communications card and port) for connection to remote computer
- Enables modification, interrogation and data transfer of instrument control and configuration parameters
- Up to 30 units can be connected to one PC
- Software not included (available as an option)
- Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units

Digital Multiple Program, Multiple Segment Programmable Controller

- Microprocessor-based PID control (proportional, integral, derivative) prevents overshoot
- Up to 30 programs and up to 300 segments for ramp (up and down) and dwell (timed hold) temperature control – up to 99 segments per program
- Simultaneous digital LED display of actual temperature vs. setpoint in either °C or °F

Digital Single Setpoint Controller:

- Microprocessor-based PID control (proportional, integral, derivative) prevents overshoot
- Single segment, single setpoint, one ramp to setpoint
- Adjustable high limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint in either °C or °F

Ordering Information: Required power cord and hardwiring not included
Required Accessories: Power cord, hardwiring
Warranty[†]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Maximum Temp.	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Controller	Electrical	Shipping Weight
BF51634PC-1	17L (0.6 cu. ft.)	1700°C	26.7 x 27.9 x 22.9cm (10.5 x 11 x 9in.)	61 x 71.1 x 78.7cm (24 x 28 x 31in.)	Multisegment/multiprogram	208/240V 50/60Hz 5900w	159kg (350 lb.)
BF51634PCOMC-1	17L (0.6 cu. ft.)	1700°C	26.7 x 27.9 x 22.9cm (10.5 x 11 x 9in.)	61 x 71.1 x 78.7cm (24 x 28 x 31in.)	Multisegment/multiprogram/communications	208/240V 50/60Hz 5900w	159kg (350 lb.)
BF51664C-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Digital/1 setpoint	208/240V 50/60Hz 7100w	168kg (370 lb.)
BF51664PC-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Multisegment/multiprogram	208/240V 50/60Hz 7100w	168kg (370 lb.)
BF51664PCOMC-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Multisegment/multiprogram/communications	208/240V 50/60Hz 7100w	168kg (370 lb.)

† For OTP specify Option B before last letter in cat. no. when ordering, e.g., BF51634PBC-1, or BF51634PBCOMC-1
 COM option requires communication Cable # 7043 for first unit and Communication Cable # 7044 for second and additional units