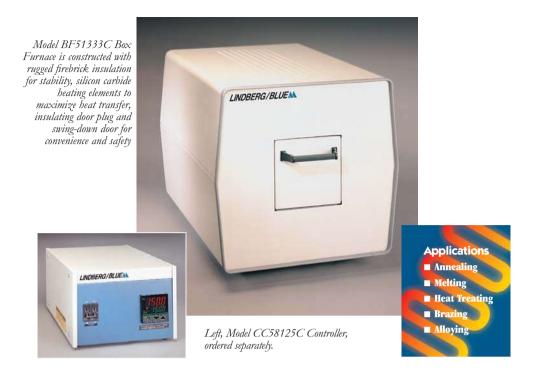
### **Box Furnaces**



# 1500°C Box Furnace, Independent Control

#### 1500°C Box Furnace, Brick Sidewall Composition, Temperature Range 500°C to 1500°C

Furnace	Independent	Electrical	Watts	Interior Dimensions	Exterior Dimensions	Ship Weight
Model No.	Controller	Volts, Hz, 1Ø		H x F-B x W in" (mm)	H x F-B x W in" (mm)	lbs (kg)
BF51333C	CC58125C	208/240V, 50/60 Hz	5900	5" (127) x 12" (304.8) x 6" (152.4)	26" (660.4) x 29" (736.6) x 25" (635)	440 (200)

**Note:** Required power cord, hardwiring and interconnecting wiring are not included. Silicon-carbide heating elements. Fitted hearthplate protects interior from spills. Type "R" thermocouple integrated into chamber backwall, top. Includes 10' compensated thermocouple lead wire and polarized plug.

### 1500°C Digital, Single Setpoint Controller

Control console is fully wired and includes advanced microprocessor-based digital control, a solid-state power module, on/off circuit breaker and thermocouple input jack. Includes microprocessor-based PID control (proportional, integral, derivative), single segment, single setpoint, 1 ramp to setpoint. Built-in adjustable high limit overtemperature protection. Simultaneous LED display of actual temperature vs. setpoint. May be configured to display temperature in either °C or °F.

#### Option P 1500°C Digital Single Program, Multiple Segment Programmable Controller

Control console includes advanced micro-processor-based digital control, a solid-state

power module, on/off circuit breaker and thermocouple input jack. Includes microprocessor-based PID control (proportional, integral, derivative), single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control. See Page 35 for more information. Built-in adjustable high limit overtemperature protection. Simultaneous LED display of actual temperature vs. setpoint. May be configured to display temperature in either °C or °F.

## Option B Overtemperature Control (OTC)

Adjustable digital overtemperature control, factory installed on selected control consoles with "B" suffix designation; see chart. Protects furnace and load in the event of primary control circuit failure. Overrides main controller,

assumes temperature control and shuts off power to furnace if high limit is reached. Manual re-set required for safety. Operates via magnetic contacts through signal from independent thermocouple.

## **Optional RS485 Digital Communications Port**

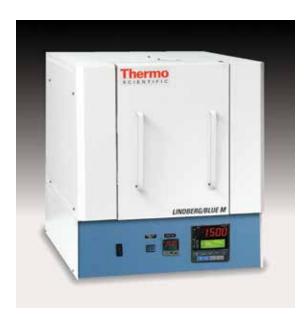
RS485 Digital communications port available as an option. Allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Please see page 35 for ordering information and additional options.

Controller Model No.	Digital	With Programmer	With Overtemp Control	Electrical Volts, Hz	Maximum Amps	Exterior Dimensions H x F-B x W in" (mm)	Ship Weight lbs (kg)
CC58125C				208/240V, 50/60Hz	60	10" (254) x 19" (482.6) x 14" (355.6)	35 (16)
CC58125BC				208/240V, 50/60Hz	60	10" (254) x 19" (482.6) x 14" (355.6)	35 (16)
CC58125PC				208/240V, 50/60Hz	60	10" (254) x 19" (482.6) x 14" (355.6)	35 (16)
CC58125PBC				208/240V, 50/60Hz	60	10" (254) x 19" (482.6) x 14" (355.6)	35 (16)



### Thermo Scientific Lindberg/Blue M Multipurpose 1500°C Box Furnaces

#### Multipurpose furnaces feature integral control to 1500°C



**Ordering information:** Factory-installed Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units

Required power cord and hardwiring are not included. **Warranty**<sup>V</sup>: 1 year (parts and labor)

- Double-wall construction with Moldatherm insulation for rapid heatup and cooldown, energy efficiency and cooler exterior surface temperatures
- Adjustable high-limit over-temperature protection
- Microprocessor-based PID control
- Choice of two controllers: single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control or multiple program with up to 300 segments
- Optional adjustable digital over-temperature control (OTC) protects furnace and load in the event of primary control circuit failure
- Simultaneous LED display of actual and setpoint temperatures in either °C or °F
- Silicon carbide heating elements for long-life, safety and reliable service with maximum energy savings
- Safety door switch interrupts power to heating elements when door is opened; protects elements and minimizes exposure to operator
- Moldatherm hearthplate supports load and protects interior from spillage and mishandling
- Type "R" thermocouple is integrated into chamber backwall
- 6L models with vertical lift door, 25L models with side swing door

#### **NOT AVAILABLE IN EUROPE**

Cat. No.	Capacity	Maximum Temp.	Controller	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Electrical
BF51433C-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433BC-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog/OTC	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PBC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog/OTC	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF5143C0MC-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog/ RS485 port	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PBCOMC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog/OTC/ RS485 port	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51643C-1	25L (0.88 cu. ft.)	1500°C	300 Seg/30 Prog	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 14800w
BF51643BC-1	25L (0.88 cu. ft.)	1500°C	300 Seg/30 Prog/0TC	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	1 208/240V 50/60Hz 4800w