

# Thermo Scientific Thermolyne Benchtop Muffle Furnaces

**Ideal for general laboratory use, including gravimetric analysis, sintering, quantitative analysis and heat treating**



**Includes:** Power cord

**Warranty<sup>Y</sup>:** 1 year (parts and labor)

**Certifications:** CSA approved, CE marked as indicated

- Reaches a 1200°C maximum temperature
- Available in two capacities for added flexibility
- Built-in vent port removes contaminants and moisture to extend the life of the heating element and furnace
- For added protection, the door safety switch stops power to heating elements when door opens
- Thermocouple break protection cuts power to heating elements, preventing a thermocouple failure runaway condition
- Two open coil heating elements on chamber sides assure fast heat-up with minimum temperature gradient
- Thermal-efficient ceramic insulation surrounds chamber for maximum energy efficiency
- 0.95cm (0.38in.) dia. port for monitoring chamber temperatures with independent measuring device at rear of chamber

## F47900, F48000 Models

- F47900 models provide 2L of heating area, F48000 models provide 5L of heating area
- Includes one hearth tray, F48000 models also include a ceramic shelf (SH480X1) that doubles furnace load capacity

## Choice of Temperature Controllers

- Furnaces that use B, C or D control also use a mechanical over-temperature protection relay
- **A1:** Digital single setpoint control; single display shows actual temperature or setpoint
- **B1:** Digital single setpoint control with a single ramp to setpoint and a dwell; single display shows actual temperature or setpoint; mechanical over-temperature protection relay is included
- **C1:** Digital programmable control with one stored program of 8 segments; mechanical over-temperature protection relay is included
- **D1:** Digital programmable control with 4 stored programs, 16 segments per program, and RS-232 communications interface; mechanical over-temperature protection relay is included

## Accessories

Cat. No.	Description	For Use With
<b>PH479X1</b>	Hearth Tray, 15.2 x 14.3 x 0.95cm	F47900 Muffle Furnace
<b>SH480X1</b>	Ceramic Shelf, 17.4 x 17.3 x 1.2cm	F48000 Muffle Furnace
<b>PH480X1</b>	Hearth Tray, 25.4 x 19.3 x 0.95cm	F48000 Muffle Furnace
<b>AY408X1A</b>	Exhaust Tubing Kit	Atmosphere Controlled Ashing and Muffle Furnaces

Cat. No.	Capacity	Temp. Range	Interior D x W x H	Exterior L x W x H	Control	Electrical	Shipping Weight
F47910‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	A1	240V 50/60Hz 1000w 4.2 A	18.5kg (41 lb.)
F47910-33†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	A1	240V 50/60Hz 1000w 4.2 A	18.5kg (41 lb.)
F47914	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	A1	100V 50/60Hz 750W 7.5A	18.5kg (41 lb.)
F47915‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	A1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48010‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	A1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48010-33†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	A1	240V 50/60Hz 1560w 6.5A	27.2kg (60 lb.)
F48015-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	A1	120V 50/60Hz 1800w 15A	27.2kg (60 lb.)
F48018‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	A1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)
F47920‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	B1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47920-33†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	B1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47924	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	B1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47925	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	B1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48020 -DB‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	B1	240V 50/60Hz 1800w 7.5A	18.5kg (41 lb.)
F48020-33†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	B1	240V 50/60Hz 1560w 6.5A	27.2kg (60 lb.)
F48028‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	B1	208V 50/60Hz 1560W 7.5A	27.2kg (60 lb.)
F48025-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	B1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F47920-80	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	C1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47920-33-80†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	C1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47924-80	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	C1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47925-80	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	C1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48020-80	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	C1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48020-33-80†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	C1	240V 50/60Hz 1800w 6.5A	27.2kg (60 lb.)
F48025-60-80‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	C1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F48028-80	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	C1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)
F47950‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	D1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47950-33†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	D1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47954	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	D1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47955	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 × 13.7 × 10cm (6 × 5 × 4in.)	39 × 28.5 × 47cm (15.5 × 11.3 × 18.5in.)	D1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48050-33†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	D1	240V 50/60Hz 1800w 6.5A	27.2kg (60 lb.)
F48050‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	D1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48055-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	D1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F48058‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 × 18 × 13cm (10 × 7 × 5in.)	50 × 34 × 19cm (19.5 × 13.3 × 19in.)	D1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)

† CE marked; ‡ CSA listed; -60 models include 20-amp cord.

-33 units available with plug for China: please add "CN" at the end of the Cat. No.

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