Muffle Furnace

Code: L.803.xxx.xx

Usage

For ash content determination of paper or pulp samples.

Applicable standards

- ISO 2144:1997

Furnace stainless steel edition

Furnace grey metal sheet,
powder painted

Device description

High accuracy electric muffle furnace is a universal laboratory furnace, firing up to 1100°C and designed for material testing and heat treatment such as hardening, loosening, normalizing ceramic and stoneware samples. To eliminate gases or smoke that are released during thermal processing, an exhaust system may be additionally installed in the product. The furnace is an excellent fit for scientific laboratories, educational institutions, ceramic studios, medicine and paper and pulp industry.

Specifications

- One-piece high thermal efficiency vacuum-formed ceramic fiber chamber
- Outside casing: stainless steel or metal sheet, powder painted grey
- Heating elements are embedded in vacuum-formed fiber on four sides of the chamber
- Door opens upwards
- Door safety interlock switch
- Control panel is placed in the underpart of the furnace
- Non-programmable temperature controller – Omron E5CC
- Ceramic bottom plates
- Fast heating time due to low thermal mass construction
- Low power consumption
- Good stability and uniformity

Control

- temperature measurement by thermo-couple type "K"
- PID electronic regulator, double digital display reference temperature & measured temperature
- products are equipped with high-precision digital microprocessor Omron or Eurotherm temperature controllers fitted with self-tuning and manual PID settings.
- selectable options: basic or programmable temperature controller, which offers up to 32 programming segments (rate of temperature rise or decrease control, maintenance of present temperature, automatic shutdown)
- a wide range of devices allows selecting the most appropriate controller for customized process.
- SSR control unit

Optional additions

- Eurotherm 3216 (non-programmable)
- Eurotherm 3208 (programmable)
- Omron E5CC-T (programmable)
- PC connection and special designed software
- OTP (over temperature protection, non-adjustable)
- OTP (over temperature protection, adjustable Eurotherm 3216i)
- OTP (over temperature protection, adjustable Omron E5GC)
- Buzzer
- Timer (delayed furnace start)
- Ventilation hole ceramic tube (in the back side Ø17mm)
- Chimney
- Gas injection system for Argon or Nitrogen (flowmeter, reducer and connections)
- Gas box to operate with protective gases (up to 1150°C)
- Window Ø35mm temp. up to 1100°C

Connections

- Electricity: 230 V, 50 Hz

Models

Code	Execution	Max. temp.	Vol.	Dimensions chamber	Dimensions outer case	Weight net
L.803.030	grey*	1100°C	3 l	120 x 200 x 105mm	345 x 470 x 430 mm	17 kg
L.803.030.SS	stainless steel		3 l	120 x 200 x 105mm	345 x 470 x 430 mm	17 kg
L.803.082	grey*		8.2 l	195 x 310 x 135 mm	445 x 660 x 495 mm	25 kg
L.803.082.SS	stainless steel		8.2 l	195 x 310 x 135 mm	445 x 660 x 495 mm	25 kg
L.803.130	grey*		13 l	220 x 335 x 170 mm	505 x 685 x 555 mm	36 kg
L.803.130.SS	stainless steel		13 l	220 x 335 x 170 mm	505 x 685 x 555 mm	36 kg
L.803.220	grey*		22 l	280 x 500 x 160 mm	605 x 855 x 620 mm	59 kg
L.803.220.SS	stainless steel		22 l	280 x 500 x 160 mm	605 x 855 x 620 mm	59 kg
L.803.390	grey*		39 l	320 x 495 x 230 mm	655 x 890 x 740 mm	75 kg
L.803.390.SS	stainless steel		39 l	320 x 495 x 230 mm	655 x 890 x 740 mm	75 kg
More models are available on request! For more information ask your personal distributor or contact *PTE Austria* directly.						

*powder coated grey sheet steel outside, stainless steel chamber