



# **For laboratories > Muffle**

# **LABORATORY MUFFLE FURNACE TYPE FCF12SH**



Type **FCF12SH** 

Max. temp. [°C] **1300** 

Chamber dimensions [mm] width x height x depth 240 x 200 x 250

Volume [dm<sup>3</sup>] 12

Overall dimensions [mm] width x height x depth 585 x 805 x 750

Power [kW] **3,3** 

Weight [kg] 80

Supply voltage [V~] 230

Heating up time (1000°C) [min] **75** 

Muffle furnaces are designed to conduct thermal processes in the laboratory with a particular application in the conditions of the occurrence of aggressive environment in the chamber in the form of gases, dust, chips, etc. The ceramic muffleseparates the heating elements from the inside of the heating chamber, provides longer service life and maintains a stabletemperature. It is possible to equip the furnace with a temperature programmer type M or temperature regulator type P.

### **TEMPERATURE PROGRAMMER TYPE M**

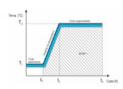




One four-and two single displays allow easy reading of the actual temperature of the object and set parameters. With the ability to program a delayed start time as well as the holding time, ie. to maintain oven temperature for a certain time, it is possible to automatically carry out a series of burnings unattended. This gives you the opportunity to work eg. during the night tariff for electricity or to heat-up the furnace to the required temperature ahead of time, avoiding unnecessary downtime. Has the ability to program the time (ie. speed) to reach the desired temperature. Characterized by a programmable 10 stages in each program of work, where the stage corresponds to the set temperature, the time to come to the temperature and time of annealing temperature setpoint. This enables the formation of burning curve for any given furnace with varying lengths of growth or fall of temperature over time.

### **TEMPERATURE REGULATOR TYPE P**





Two four character displays allow easy reading of the actual temperature of the object and set parameters. With the ability to program a delayed start time as well as the holding time, ie. to maintain oven temperature for a certain time, it is possible to automatically carry out a series of burnings unattended. This gives you the opportunity to work eg. during the night tariff for electricity or to heat-up the furnace to the required temperature ahead of time avoiding unnecessary downtime.

# List of additional equipment:



Additional portable temperature measurement system



Basket for four crucibles and the basket handle. Baffle dimensions 30x30 mm, 25 mm depth; overall dimensions 90x80 mm, height 80 mm.



Catalyst excerpt



Ceramic shelf for the furnace chamber. Parts furnace chamber at half height. Available for FCF 12 and FCF 22.



Chamber calibration. PCA accredited laboratory.



Computer program for visualization's recording and archiving time-temperature parameters of furnace operation.



Computer set with a software



Connection of the protective gas supply. Installed on the door of the furnace, outer diameter 6mm.



Cuvette with a holder. Holder's internal dimensions 150 x 100 x 200 mm (WxHxD); vol 3 l, max temp. 1100° C.



Excerpt with a fan



Furnace stand with shelf



Heat resistant gloves



Heat-resistant steel cuvette. The maximum use temperature up to 1100° C.



Laboratory tongs



Measurement calibration. PCA accredited laboratory.



Pre-heating gas system



Retort inset for muffle furnaces. Available for FCF 12S and FCF 22S. The maximum use temperature up to 1100° C.



Screen Recorder KD8. Touch screen 5.7", archiving data on the card up to 4 GB, 6 measurement inputs, visualization



Sight glass installed in the door of the furnace. Diameter 20 mm.



Sound signaling completion of the program



Stand for six crucibles. 30mm hole diameter, 28mm depth, stand equipped with a handle base. The maximum use temperature up to 1100° C.



Stand with canopy fitted to the outer dimensions of the furnace equipped with an exhaust fan and a lower shelf.



Steel tray adapted to the dimensions of the furnace with a handle. The maximum use temperature up to 1100° C.



Steel tray with holes, stand and tray holder. Adapted to the dimensions of the furnace. The maximum use temperature up to  $1100^{\circ}$  C.



Temperature sensor calibration. PCA accredited laboratory.



Thermocouple connector (installed in the door of the furnace, acid-proof frame, max diameter 11mm).



Viewfinder provided with input from quartz glass. Diameter 25 mm.

If you have any questions please contact us:

tel. 32 47 07 495 tel./fax 32 47 07 502

e-mail: czylok@czylok.com.pl