## Muffle Furnaces



CF series muffle furnaces feature the famous Kanthal (Sweden) spiral wire coils embedded in Mitsubishi (J apan) high quality alumina fiber insulation. A double walled steel internal housing helps minimize heat loss to exterior surface.

Furnace operation is controlled by Shimaden (Japan) 40-segment digital controller with built-in RS485 digital communications port and USB adaptor, allowing the user to connect to a PC for remote control and monitoring of the furnace. You can also save or export test results.

## Features

- Microprocessor based self-tuning PID control provides optimum thermal process with minimal overshoot.
- Built-in ammeter and dual voltmeters for easy monitoring and troubleshooting.
- Built-in computer interface.
- Long life type K thermocouple.
- CE compliant

| Model | CF1100 | CF1200 | CF1400 | GCF 1600 | GCF 1700 | GCF 1800 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electrical Requirements | AC 110 V 60 Hz 700 watts | 208-240V, $50 / 60 \mathrm{~Hz}$, single phase |  |  |  |  |
| Heating Element Type | Resistant coil wire | Kanthal (Sweden) resistant coil wire | Silicon carbide (SiC) | Molybdenum silicon (MoSi2, diameter 7 mm ) |  | Kanthal 1900 grade <br> Molybdenum silicon (MoSiz) |
| Min./Constant Temp. | Ambient |  |  | $300^{\circ} \mathrm{C} / 800^{\circ} \mathrm{C}$ |  |  |
| Max./Constant Temp. | $1050^{\circ} \mathrm{C} / 950^{\circ} \mathrm{C}$ | $1200^{\circ} \mathrm{C} / 1100^{\circ} \mathrm{C}$ | $1400^{\circ} \mathrm{C} / 1300^{\circ} \mathrm{C}$ | $1600^{\circ} \mathrm{C} / 1500^{\circ} \mathrm{C}$ | $1700^{\circ} \mathrm{C} / 1600^{\circ} \mathrm{C}$ | $1800^{\circ} \mathrm{C} / 1700^{\circ} \mathrm{C}$ |
| Refractory Lining | Mitsubishi (Japan) 1500 grade alumina fiber |  | Mitsubishi (Japan) 1600 grade alumina fiber | Mitsubishi (Japan) 1700 grade alumina fiber | Mitsubishi (Japan) 1800 grade alumina fiber | Mitsubishi (Japan) 1900 grade alumina fiber |
| Thermocouple Type | K |  | S | B |  |  |
| Temp. Controller | UDIAN 30-segment, single PID | Shimaden fp93 (Japan) with 4 programs \& 4 segments |  |  |  |  |
| Temp. Accuracy | $+/-1^{\circ} \mathrm{C}$ |  |  |  |  |  |
| Max. Heating Rate | $30^{\circ} \mathrm{C} / \mathrm{min}$ | $15^{\circ} \mathrm{C} / \mathrm{min}$ |  |  |  |  |



