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MUFFLE FURNACE

LMF-G Series

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Muffle Furnace LMF-G series

LMF-G series models of Muffle Furnace are microprocessor controlled furnaces having unique electronic design with user friendly operating menu in 4 line display for easy operation. They use phase angle firing method for slowing down the inevitable aging of SiC heating elements, have their own unique software and are accurate in temperature controlling and measuring using S type thermocouple. Crafted for minimal space requirement in the laboratory, they are equipped with instantaneous energy consumption indicator, total working hour counter, control unit overheating sensor etc. and are ideal for maximum and continuous working temperature of 1500^{0}C.

Features

- PID controller
- LCD display that shows current and target temperature
- Optimum insulation properties
- 4, 8, 16 step heating programs available
- SiC heating elements horizontally aligned next to the side walls
- Accurate temperature measurement and control using S type of thermocouple
- Durable inside lining made of high quality light insulating bricks and ceramic fibre board
- Dual shell housing for low outer surface temperature
- Current limit control for safe operation
- High cold start heating rate
- Uses phase angle firing method for slowing down the aging of SiC heating elements
- Provision of sound warning as the step changes and at the end of the program
- Equipped with step indicator
- Instantaneous energy consumption indicator
- Step indicator
- Total working hour counter
- Descriptive error indicator
- Control unit over heating sensor
- Open door sensor

- Provision of automatic power cutoff to the heating element if the control unit/ control card is over heated.
- User friendly operating menu

Applications

They are used for applications such as: Fusing glass, Creating enamel coatings, Ceramics, Soldering, Brazing, Rubbers & Polymers. They are also used for metallurgical applications, for ash content determination and in research centers and medical laboratories to determine the volatile & non-combustible proportion of the sample.

Specifications

Model No.	LMF-G10	LMF-G11	LMF-G12
Max. Temperature	1500^{0}C		
Capacity	3 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20^{0}C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1^{0}C (can vary at low temperatures)		
Measurement Accuracy	±1^{0}C		

Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	2 x 12 A		
Power	5.100 W		
Inner Chamber Dimension (W x H x D)	140 x 130 x 165 mm		
Product Outer Dimension (W x H x D)	494 x 606 x 634 mm		
Gross Dimension (W x H x D)	554 x 666 x 794 mm		
Net Weight	48 kg		
Gross weight	64 kg		

Model No.	LMF-G20	LMF-G21	LMF-G22
Max. Temperature	1500°C		
Capacity	6 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20°C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1°C (can vary at low temperatures)		
Measurement Accuracy	±1°C		
Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	2 x 14 A		
Power	6.100 W		
Inner Chamber Dimension (W x H x D)	180 x 160 x 260 mm		
Product Outer Dimension (W x H x D)	545 x 636 x 684 mm		
Gross Dimension (W x H x D)	605 x 696 x 844 mm		
Net Weight	56 kg		
Gross weight	75 kg		

Model No.	LMF-G30	LMF-G31	LMF-G32
Max. Temperature	1500°C		
Capacity	9 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20°C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1°C (can vary at low temperatures)		
Measurement Accuracy	±1°C		
Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	2 x 16 A		
Power	7.000 W		
Inner Chamber Dimension (W x H x D)	200 x 180 x 300 mm		
Product Outer Dimension (W x H x D)	570 x 646 x 634 mm		
Gross Dimension (W x H x D)	630 x 706 x 894 mm		
Net Weight	66 kg		
Gross weight	87 kg		

Model No.	LMF-G40	LMF-G41	LMF-G42
Max. Temperature	1500°C		
Capacity	16 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20°C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1°C (can vary at low temperatures)		
Measurement Accuracy	±1°C		
Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	3 x 14 A		
Power	7.200 W		
Inner Chamber Dimension (W x H x D)	250 x 200 x 320 mm		
Product Outer Dimension (W x H x D)	620 x 676 x 789 mm		
Gross Dimension (W x H x D)	680 x 736 x 949 mm		
Net Weight	82 kg		
Gross weight	107 kg		

Model No.	LMF-G50	LMF-G51	LMF-G52
Max. Temperature	1500°C		
Capacity	30 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20°C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1°C (can vary at low temperatures)		
Measurement Accuracy	±1°C		
Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	3 x 21 A		
Power	11.200 W		
Inner Chamber Dimension (W x H x D)	300 x 250 x 395 mm		
Product Outer Dimension (W x H x D)	670 x 726 x 864 mm		
Gross Dimension (W x H x D)	730 x 786 x 1024 mm		
Net Weight	91 kg		
Gross weight	120 kg		

Model No.	LMF-G60	LMF-G61	LMF-G62
Max. Temperature	1500°C		
Capacity	60 L		
Heating Program	4 step	8 step	16 step
Thermal Rate	3-20°C		
Heating element	SiC (Silicon Carbide)		
Program Memories	4	6	5
Thermocouple Type	S Type		
Display	4 x 20" LCD		
Heating Element Placement	Horizontally aligned next to the side walls		
Inner Insulation Material	Ceramic Fibre Board		
Front Face Insulation Material	Insulating Fire Brick		
Door Insulation Material	Ceramic Fibre Board		
Housing Material	Steel Sheet		
Housing Coating	Epoxy powder coating		
Chimney	Standard without fan		
Lockable Door Handle	Sidewards		
Temperature Control Accuracy	±1°C (can vary at low temperatures)		
Measurement Accuracy	±1°C		
Inner Volume Temperature Homogenity	±10°C		
Auto Start at Certain Date	Yes	Yes	Yes
Show Remaining Waiting Time	Yes	Yes	Yes
Skip the Waiting Step	Yes	Yes	Yes
Burst Heating Mode	Yes	Yes	Yes
Max. Current	3 x 26 A		
Power	14 x 200 W		
Inner Chamber Dimension (W x H x D)	400 x 300 x 495 mm		
Product Outer Dimension (W x H x D)	770 x 776 x 964 mm		
Gross Dimension (W x H x D)	830 x 836 x 1124 mm		
Net Weight	100 kg		
Gross weight	136 kg		

Optional Features

- Over Temperature Limiter
- Lift-up Door
- Stainless Steel body
- Gas Supply Connection
- Open Door Sensor
- Second Thermocouple
- Observation Hole
- PC Connection
- 110 V Power Supply

Spare Parts

- Inner Module: Changing inner module renews your furnace close to a brand new furnace
- Door Insulation: With sheet metal holder vessel
- Control Card: Easy-to-replace, pre-programmed
- Power Card: Easy-to-replace
- Display: 4 x 20 LCD display
- Cooling Fan: 80 x 80 x 20/ 220 V fan
- Chimney Fan: 40 x 40 x 10/ 5V fan

Sr. No.	Accessory
1	High Temperature Gloves
2	Tongs
3	Alumina Crucibles
4	Metal Crucibles
5	Alumina Combustion Boats
6	Ceramic pipes
7	Extra Thermocouples