

## COMMODITY DESCRIPTION

| H.S. Code    | Item No | Description             | Unit | Quantity |
|--------------|---------|-------------------------|------|----------|
| 8514.20.1000 |         | Electric Muffle Furnace | SET  | 1        |

A. Model Name : JSMF-140T

B. Product Description : Electric Muffle Furnace

C. Manufacturer / Origin : JS Research Inc. / Rep. of KOREA

D. Application :

Ideal for experiments and process needs high temperature up to 1000°C such as chemical analysis, annealing loss determination, materials testing and ashing processes.

E. Photo



JSMF-45T Electric Muffle Furnace

## **F. Feature**

### **Controller**

- ✓ Programmable Digital PID control with  $\pm 1.0$  °C resolution
- ✓ 3 Patterns Memory, 9 Ramps and 9 Dwell Segments, Max. 999 Cycles repeatable for each pattern
- ✓ Program Mode / Constant Temp. Mode
- ✓ Pattern Link Function
- ✓ Segment Skip Function
- ✓ Automatic STOP timer Max. 99 min 59 sec
- ✓ Temperature calibration
- ✓ Auto-tuning function
- ✓ CA-Type sensor

### **Construction**

- ✓ Heavy duty vacuum molding ceramic fiber insulation designed to supports heavy load, high temperature and repeated use
- ✓ Door inner liner is filled with molded ceramic-fiber for long service life
- ✓ Ventilation damper on top

### **Performance**

- ✓ Embedded or exposed Kanthal-A1 heating elements offer maximum heat transfer and thermal uniformity, long service life, protection from harmful materials and mechanical shock
- ✓ Maximum temperature up to 1,000 °C

### **Convenience**

- ✓ Opening size adjustable ventilation
- ✓ Optional Ceramic Shelf

### **Safety**

- ✓ OVER TEMP. CUT-OFF  
Digital system cut-off heater and AUDIO VISUAL ALARM in case +2 °C above set temperature  
Analog system cut-off heater 10% above set temp.
- ✓ MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM when +1 °C above maximum limit
- ✓ SENSOR DISCONNECTION ALARM
- ✓ OVER CURRENT CUT-OFF : Electrical Leakage Breaker

## G. Specifications

|                           |   |
|---------------------------|---|
| Chamber Volume (Capacity) | 14.0 Liters   |
| Inner Dims. (W x D x H)   | 250 x 350 x 160 mm  |
| Outer Dims. (W x D x H)   | 575 x 605 x 650 mm  |
| No. of Ventilation damper | 1 EA  |
| Heating                   | KANTHAL A-1 heating element   |
| Temp. Range               | Maximum +1,000°C<br>General operating +800°C                                  |
| Accuracy                  | ±6.0°C at +500°C  |
| Uniformity                | ±6.0°C at +500°C  |
| Heat up time to +800°C    | 30 min.   |
| Control                   | Programmable PID control<br>3 Pattern Memory<br>9 ramps and 9 dwells segments |
| Sensor                    | CA(K)-Type Sensor   |
| Safety                    | Over-Temperature Cut-Off<br>Over Current Cut-Off                              |
| Material                  | Body : Epoxy Powder Coated Steel, 1.0 mm thickness<br>Chamber : Ceramic Fiber |
| Electrical Requirement    | 220 ± 10% VAC, 50/60Hz, 1-Phase   |
| Heater Capacity           | 4.0 kW  |
| Power Rating              | 18.3 amps   |
| Plug Configuration        | 30 AMP PLUG   |

## H. Standard Accessories

Instruction Manual : 1 EA  
Warranty Card : 1 EA

## I. Options & Accessories

| Art No. | Descriptions  |
|---------|---------------|
| PHS-E04 | Ceramic Shelf |

## J. Warranty

1 Year full coverage warranty