# Data Sheet Model: TMH18(Z3)/50/450

1800 °C Maximum Temperature, Three Zone Horizontal Tube Furnace



#### INTRODUCTION

The TMH18(Z3) furnace is a floor mounted tube furnace ideal for most general laboratory thermal processing applications.

The TMH18(Z3)/50 Three Zone Tube furnace has an internal tube diameter of 50 mm. TMH18(Z3)/50 range offers a choice of two heated zone lengths of 450mm & 610mm.

TMH18(Z3)/50/450 comes with a heated zone length of 450 mm.



## TMH18(Z3)/50/450

**External Dimensions (mm):** H x W x D **Net Wt.** (Nominal) TMH18(Z3)/50/450 1550 x 835 x 650 280 kg

Supply: 230V-Single Phase

Energy rating: 9.0 kW

#### **SPECIFICATIONS**

Maximum Temperature: 1800°C

Maximum Continuous Temperature: 1800 °C

- The TMH(Z3) furnaces are designed to give a longer uniform centre zone temperature than that of the single zone tube furnace models of the same length.
- All TMH(Z3) models are controlled by retransmission of set point from the centre zone controller to the end zone controllers.
- Molybdenum tungsten Disilicide heating elements are mounted in the sides of the chamber radiating heat directly into the furnace.
- Energy efficient, high quality, low thermal mass insulation.
- A work tube is not supplied as an integral part of the furnace and therefore needs to be ordered with the furnace as it is an essential accessory.
- Temperature Sensor: 'B' Type thermocouple.
- Over temperature protection is included in the standard specification.
- High end Microprocessor PID controller.
- Horizontal models are supplied as standard with controls in the base.

#### PHASE CONTROL

Phase angle fired thyristor units operating in conjunction with low voltage secondary isolating transformers providing the correct parameters for the heating elements.

#### OPTIONAL FEATURES

- Work tubes of various materials, lengths and diameters for use in the furnace.
- The work tubes are available for containment of atmosphere or protection against process contaminants.
- A variety of triple flange gas tight end seals for work tubes to allow processing under gas atmospheres.
- Multi segment, multi program storage controller.

Vertical versions are available at extra cost, which will have separate temperature console

### **Elite Thermal Systems Limited**