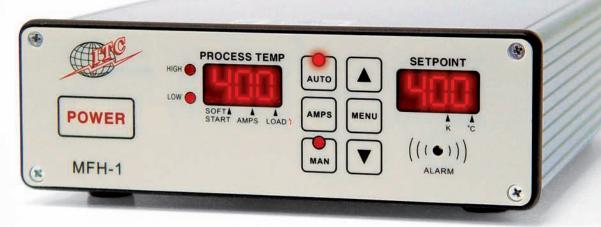


# Single Zone Temperature Control System

Totally Digital & Self Contained for Today's Industry

The MFH-1 is a 15 amp, microprocessor-based, single zone temperature controller designed for today's demanding needs. It's compact foot print, robust design with rugged extruded aluminum case and advanced features are ideally suited for use with hot sprue bushings, machine nozzles or in areas where this condensed size and all inclusive design are requisites.



The latest in microprocessor technology offers many improved and unique operating features not found elsewhere, providing ease of use, the flexibility of menu selectable features and settings, as well as real time fault detection and alarm.

#### **SUPERIOR FEATURES:**

- Compact, durable and full featured design
- Easy to use
- Preferred diagnostic features
- Large Dual Digital Displays Easy to read temperature, setpoint and diagnostic conditions
- Audible Alarm Sounds during error conditions
- Fuses Mounted on rear panel for easy access
- Soft Start LED Indicator Lit when in soft start mode
- Heater Load LED Indicator Lit as power is applied to heater
- Bumpless Transfer APO (average power output) with learned % power for thermocouple failure conditions

### **SELECTABLE FEATURES:**

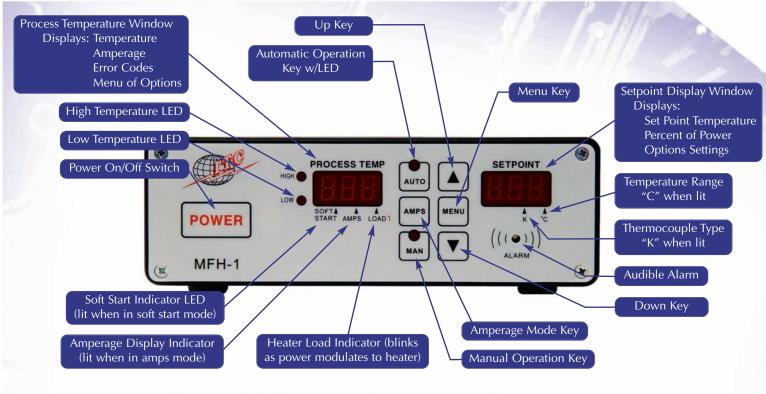
- Auto or Manual Operation LED mode indicator
- Type J or K Thermocouple LED mode indicator
- F° or C° Temperature Range LED mode indicator
- Amperage Monitoring & Display LED indicates AMP mode
- Audible Alarm Selectable on /off
- Front Panel Lockout Selectable on/off

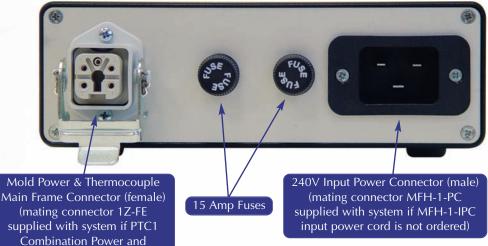
#### **ENHANCED DIAGNOSTICS:**

- High/Low Temperature LED's indicate fault (selectable range)
- tCr Error Display Thermocouple Reverse
- tCO Error Display Thermocouple Open
- tCS Error Display Thermocouple Shorted
- tOh Error Display Triac/Heater Open
- tSh Error Display Triac Shorted
- HiC Error Display High Amperage Alarm (selectable range)

#### **SAFETY FEATURES:**

- High Voltage Thermocouple Protection (fused)
- Module High Current Protection (fused)
- Electrically Isolated Front Panel
- Power Disabled to Heater:
  - o Triac Shorted
  - o Triac Open
  - o Heater Open
  - o Over Temperature
  - o High Amperage





These connectors are supplied when *no cables are ordered* 



**MFH-1-PC**Cable End for Power Cord
Requires 14/3 SJ or SJO

**1Z-FE**Cable End for Main Frame

## **Optional Items**

T/C cable is not ordered)



240Vac Input Input Power Cable 240Vac



PRODUCT SPECIFICATIONS:

- 208 to 240Vac, single phase 120Vac (Optional)
- 50/60 Hz
- 15 Amp Capable
- 3600 Watts
- Size: 6 1/2" Wide, 2" High, 10" Deep
- Control System Power Usage, Less than 5 watts
- Set Point Range 0° to 999° F

- Control Accuracy +/- 1° F (0.5° C)
- Calibration Accuracy Better than 0.2% full range
- Cold Junction Compensation
- Operating Temperature Range -32° to 120° F
- Output Drive Internal solid state triac, zero crossing AC pulse

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