QHRC-15

Hot Runner Temperature Controller

The QHRC-15 Hot Runner Temperature Control System offers advanced features and control capabilities in a small package. Systems are available from 8 to 60 zones and stand at a maximum height of 32 inches.

ADVANCED FUZZY LOGIC with PID algorithms provide precise and reliable control with accuracy of ±0.5°F (1°C).

The QHRC-15 features GLOBAL functions, set one, and then set all. Main features include error detection, standby, boost, fuse protected TRIAC, fuse blown indicator, current and voltage display, even temperature rise, and thermocouple slaving.

Single Zone Integrity

The QHRC-15 module can easily be replaced should a problem arise, thus down time is minimal.

Easy to Operate

The QHRC-15 front panel is simple and informative. Dual digital LED displays show process and setpoint values simultaneously and provide error indication. Individual LEDs indicate the mode the controller is in. The simple keypad with audible response provides easy access to Current and Voltage displays, Mode Selection, Parameters, Setpoint adjustment, and Power ON/OFF.

Expanded Feature Set

The QHRC-15 offers an advanced feature set, unlike other hot runner temperature controls. Global and group settings allow users to make adjustments to individual or multiple modules. Up to four groups are available (user selectable). Siren alarm, relay output, and standby input are integrated into the system. Expanding the features even further, the system has Even Temperature Rise, Thermocouple Slaving, and Hot Swappable Control Modules.

Typical 48 Zone System: Height: 26"

User Interface:
- Dual Digital LED 7 Segment Displays
  - Simultaneously show Process and Setpoint Values
  - Error Indication
  - Amperage and Voltage
- Individual Mode LEDs
  - Soft-Start
  - Manual
  - Auto
  - Boost
  - Standby
- Blown AC Input Fuse Indication
- Individual Audible Piezo Indicator
- Rugged Keypad Membrane
  - Up and Down Adjustment
  - Mode Select
  - Halt
  - Start/Enter
  - Amperage/Voltage
  - Parameter Access
  - Global

Advanced Features:
- Auto Power On (Selectable)
- Even Temperature Rise (Even Rise)
- Automatic Bumpless Control for Thermocouple Break (When At Setpoint Temperature)
- Thermocouple Slaving at Start Up
- External Alarm Output
- Remote Standby Input
- Live-swap Zone Retrievable Settings
- Global/Group/Individual Zone Manipulation
- Integrated Fault Siren

Adjustable Global Settings Within Local Frame:
- Global Set-point
- Global Parameters
- Global Power On
- Global Start
- Global Halt
- Global Standby
- Global Boost
- Global Mode
  - Auto Soft-start
  - Manual (Open Loop)
  - Automatic (Closed Loop)
  - Auto/Manual Standby
  - Auto/Manual Boost

Protection Features:
- Over Current Protection
- Fused AC Inputs
- Fused TRIAC Output (GBB Fuse Type)
- High Voltage T/C Circuit Protection

Real-Time Fault Detection:
- High Temperature
- Low Temperature
- Open Thermocouple
- Pinched Thermocouple
- Reverse Thermocouple
- Shorted Thermocouple
- Shorted Heater/TRIAC
- Open Heater/TRIAC/Fuse
- Over Current

Input Specifications

Input Specifications	
Thermocouple Type:	Type J (Standard) Type K (User Selectable)
Grounding:	Grounded or Ungrounded
Protection:	Fused Diode Clamp RC Filter
Operating Range:	32 - 999°F (5 - 650°C)

Electrical

Electrical	
Input Voltage:	208-240VAC
Frequency:	47-63Hz (Auto-detected)
Module Ratings:	15 Amps/zone 3600 Watts/zone

Physical Dimensions	Width x Depth x Height
Module:	1.5" width x 5.7" height
12 Zone Mainframe:	22.125" x 12" x 6.75"
12 Zone Multiple:	Add 6.25" to height