MASTER*TRACE*

3.3.9 MS-10ADIN2

Temperature Input

Range: Accuracy: Repeatability: Sensor: -50°C to +500°C ±2°C ±1°C Ten 100 ohm, Platinum, 3-wire RTD; one per point 20 ohm maximum lead resistance

Ten dual pole

30A @ 280Vac max 0.1 to 30A 3%±0.2A

10 to 1000mA 5%±2mA

50VA @ 120Vac, 50 or 60Hz

Heater Switching

Number of Switches: Switch Rating: Current Measurement: GF Measurement:

Control Power

Power Requirements:

Communications

Communication Ports:

Serial Communications

Type: Protocol: Transmission Rate: Interconnect: Highway Distance: Modules per Highway: RS485 Modbus® RTU. 600, 1200, 2400, 4800, 9600 baud. 2-wire, shielded, twisted pair. 4,000 feet without repeater. (1) Interface and (30) Control Modules.

Parallel Local Interface connection
Serial network connections

Measured Values

Temperature: Minimum Temperature: Maximum Temperature: Heater Current: Ground Fault Current: Power Consumption: Heater Utilization: Operating Cost: -50 to 500°C (-58 to 932°F) -50 to 500°C (-58 to 932°F) -50 to 500°C (-58 to 932°F) 0.1 to 100A 0.01 to 1.0A 0 to 1,000 MWh 0 to 100% 0 to \$1,000,000.00

24.5 seconds

Ground Fault

Maximum Trip Time:

Environment

Approval: Operating Range: Conformal Coating: CSA NRTL/C for Ordinary areas -40°C to +60°C Boards conformal coated for hostile environments

Alarm

Alarm Output:	Programmable for NO or NC contacts One DC opto-isolated contact One dry mechanical contact
Alarm Output Rating:	DC contact: 30Vdc/0.1A, 500mW max Dry mech contact: 120Vac/1.0A max 30Vdc/0.1A max
Alarm Light Output:	LED Indicator: 12Vdc/30mA
Alarm Messages	
Temperature:	High Temperature Alarm
	Low Temperature Alarm
Current:	High Current Alarm
	Low Current Alarm
	High Current Trip
Ground Fault Current:	Ground Fault Current Alarm
	Ground Fault Current Trip
Hardware:	Self-Check Failure
	Switch Shorted
	RTD Open

RTD Shorted

User-Settable Options

Heater Status: Heater Name or Tag: Temperature Units: Control Strategy: Deadband: StaggerStart: Temperature Setpoint: High Temp Alarm: Low Temp Alarm: High Current Alarm: Low Current Alarm: High Current Trip: Ground Fault Alarm: Ground Fault Trip: TraceCheck Interval: RTD Fail-safe: Master Override Input: Alarm Contacts: Alarm Light: GF Test:

Enable or Disable 16 Character Alphanumeric °C or °F On-Off 0 to 50C° (0-90F°) On or Off 0 to 500°C (32 to 932°F) 0 to 500°C (32 to 932°F) -50 to 500°C (-58 to 932°F) 0.5 to 30A 0.5 to 30A 0.5 to 30A 0.01 to 1.0A 0.01 to 1.0A 1 to 24 hr. Heater On or Heater Off On or Off NO or NC for each contact Alarm on, Alarm off, Flash during alarm then on, Flash during alarm then off 1 to 24hrs, test now

Specifications subject to change without notice.