DELTA-THERM

MASTERTRACE DTMT2-4X

Digital Heat Tracing Monitor And Alarm Panel

MasterTrace shown with solid-state switching

MASTERTRACE SPECIFICATIONS

Enclosure:	NEMA 4 steel, NEMA 4X Stainless Steel, or NEMA 4X F.R.P.
Setpoint Range:	32° to 572°F (0° to 300°C)
Control Voltage:	120 VAC
Input Voltage:	120, 208, 240, or 277 VAC
Electrical Contactor Switch Rating:	Single pole 208 and 277 VAC @ 30 amps Dual pole 208 - 240 VAC @ 30 amps
Note:	Up to 100A rating available with solid-state relay switching device
Sensor:	One or two 100-ohm, platinum, 3-wire RTDs per point

Temperature input is accomplished using 100 ohm, platinum, 3 wire RTDs.

The DTRTD-CA is an optional right angle RTD temperature sensor that can be ordered. Please refer to back page.

DESCRIPTION

Available in a NEMA 4 Steel, NEMA 4X Stainless Steel, or NEMA 4X Fiber Reinforced Plastic (F.R.P.) enclosure. The MasterTrace digital monitor and alarm panel controls up to 10 circuits.

MasterTrace's modular design allows for custom systems to be assembled using 1, 2, 5, and 10 point modules. Factory technicians design and build panels in a CSA approved panel shop.

Multiple panels (up to total 30 modules) can be daisy chained and remotely controlled using the MasterTrace DTMS100 user interface.

EACH CIRCUIT FEATURES THE FOLLOWING STANDARD DIGITAL INDICATORS AND ALARMS:

- Pipe Temperature
- Temperature Set Point Value
- Power Light
- System Fail Light
- Heater Current
- Ground Fault Current
- Heater On Light
- Alarm Light

STANDARD ALARMS INCLUDE:

- High Temperature
- High Current
- High Current Trip
- Ground Fault Current Trip
- Low Temperature
- Low Current
- Ground Fault Current

STANDARD HARDWARE ALSO INCLUDES:

- Self Check Failure
- Switch Shorted
- RTD Open
- RTD Shorted

APPLICATIONS

Freeze Protection Pipe Tracing
Temperature Maintenance Pipe Tracing

APPROVALS

$_{C}CSA_{US}$

With mechanical contactors: Ordinary Area Pipe Tracing
With solid-state switching:

Hazardous Area Pipe Tracing
Class I, Division II, Groups A, B, C, D
Class I, Zone II, Groups IIC

C SP US

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DTMS100 MASTERTRACE SOFTWARE
DTMS100 central monitoring software is designed for plant wide monitoring and programming of MasterTrace heat tracing controllers using a standard PC running Windows 95, 98, NT4, 2000 and Windows XP operating systems.

The software communicates with control modules via an RS485 serial link with facilities for bringing data on any part of the network to the desktop and controlling the operation of heat tracing controllers remotely.

The software has a graphical user interface that allows you to view the data collected from the field and program the controllers as required.

Client/server internet communication capability allows for cross continent control and maintenance of heat tracing systems.

CONTROL/MONITORING FEATURES

- Client/Server Internet Communication Capability
- Utility Tools For Flexible Setup Of Communication Network
- User Defined Password And Security Levels
- User Interface And Utility Tools To Configure MasterTrace Modules And Heaters
- Utility Tools For Controller Commissioning/Addressing
- Backup And Restore System Configurations
- Copy System Configurations From Module To Module And Heater To Heater
- Display Setup Parameters For Any Communication Port, Control Module Or Heater
- View Statistics On Running Time, Energy Usage, And Measured Values On Per Module Or Per Heater Basis
- View Change In Temperature, Current, And Ground Fault Current Using The Real-Time Graphic Screen
- Perform On-Line Operations
- Perform Load Shedding Manually Or Automatically
- Log Any Measured Data, Currently Active Or Historical Alarms
- Display Different Alarms With Descriptive Information
- Monitor The Status Of Serial Communication To Ensure The System Is Running In Good Conditions

SOFTWARE ARCHITECTURE FEATURES

- Uses Industry Standard MODBUS Communication Protocol
- Uses Object-Oriented Design Tools And Open Software Architecture For Easy Enhancement Of System Functionality
- Supports Unlimited System Capability Using Flexible Open-Architecture Design

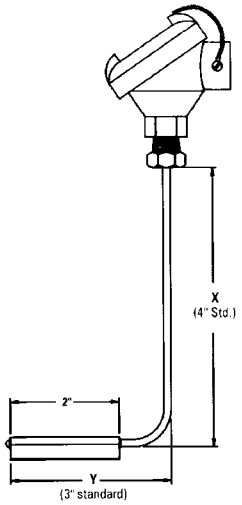
16 AVAILABLE SCREENS

- System
- Port
- Heat Setpoint
- Heater Setup
- Measured
- Statistics
- Bar Graph
- Alarm Status
- Change Password
- Controller Commissioning/Addressing
- Data Log
- Load Shedding
- Copy Heater/Module
- Setpoint List
- Alarm History
- Backup/Restore

SYSTEM REQUIREMENTS

- Intel Pentium Computer
- 1GB Hard Drive
- 32MB SDRAM
- RS232 Serial Ports
- Windows/95/NT Operating System

DTRTD-CA1500 OPTIONAL RIGHT ANGLE RTD TEMPERATURE SENSOR
Used to accurately measure the surface temperature of any pipe.
Head Type: Cast Aluminum NEMA 4
High Temperature: 900°F (482°C)



Detail 1. Optional Right Angle RTD