

# Advanced Motor RTD + Differential Protection

## Resistance Temperature Dectector (RTD) + Differential Protection

The TE-RTD12 Relay device adds advanced RTD (Resistor Temperature Detector) and differential current monitoring capability to your new or existing motor system. The TE-RTD12 Relay device offers 12 built-in RTD inputs, 3 programmable output relays (5A), 2 isolated analog inputs (4-20mA), 1 isolated analog output (4-20mA), 3 isolated digital inputs, and differential current monitoring.

Additionally, an RS485 (2 wire) communication port is available for use with a master device (PLC / SCADA / Operator Interface) for the purpose of programming and/or monitoring.

Programmable relay outputs are provided that can be configured for a system function or for use as a global Alarm or Trip based on temperature readout, which can be entered in °C or °F.

A built-in event recorder stores fault history of past events with data points including Alarm Code , Trip Code, Current , Temperature value, Analog input value and Date / Time Stamp.



## Specifications

Control Voltage:	Universal input range 120 – 240 VAC 50/60Hz
Inputs:	12 RTD inputs (Pt100, Ni100, Ni120, Cu10), 3 CT inputs for differential CT's 2 isolated 4-20mA analog inputs <sup>1</sup> , 3 isolated Digital Inputs <sup>2</sup>
Outputs:	3 programmable form C Relays with 5A contact rating and 1 isolated 4-20mA analog output
Keypad:	Two 4-digit displays, one for RTD name, one for Temperature, LEDs for OK, ALARM & TRIP, 3 Output Relay LEDs, Easy to use pushbutton keypad for customer interface.
Differential CT's:	Primary 5-2000A, Secondary 1A or 5A, Alarm and Trip Levels OFF, 5% to 90 % of CT value
Resolution/Accuracy:	Analog Inputs better than 1%, Analog Outputs better than 0.5%
Communication Port:	2 Wire RS-485 <sup>2</sup> , MODBUS RTU
I/O Terminals:	Removable terminal blocks
Temperature:	Operating 32°F – 122°F / 0°C to 50°C, Storage -4°F to 176°F / -20°C to 80°C

<sup>1</sup> All analog I/O share a common ground point

<sup>2</sup> RS485 and Digital Inputs share a common ground point



## TE-RTD12 Series

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