

ADT111DI (BI)(V)(L)(T)(X)(K) Thermocouple Trip Amplifier

- Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Non-Smart/Non-uProcessor instrument (Type A)
- Supply voltage options:
 - 115Vac ±20%
 - 240Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 'K' option available (RF Immunity: 20MHz-3GHz ≤10V/m)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

mV signal developed from any thermocouple type; B, J, K, N, R, S or T, with a minimum 4mV span. (Automatic CJ compensation)

Trip Relay Output

A set of D.P.C.O contacts, rated 250VAC, 3A,100VA (resistive).
 Fail Safe Relay: De-energises on Trip & Loss of Power.
 Red LED indication of Relay status: On Energised/healthy,
 Extinguished in Trip/De-energised state as standard
 (Red/Green BI-colour indicator LED optional)

Display of the Input on a 3½ digit LCD, Calibration range: -1999 to +1999, scaled 0-100.0 (%) or in Engineering units to suit.
 (Up to 4½ digit Red LED Display option also available)

Front fascia Read button or Toggle switch shows the Trip Set point within the calibrated scale.

Isolation

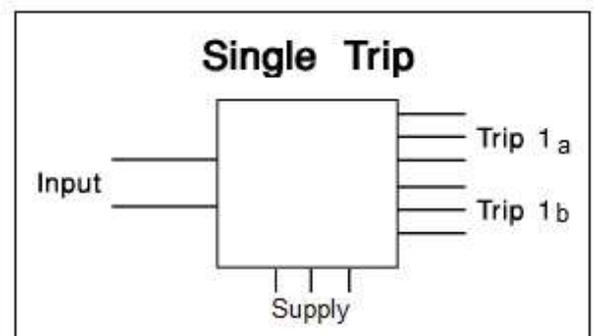
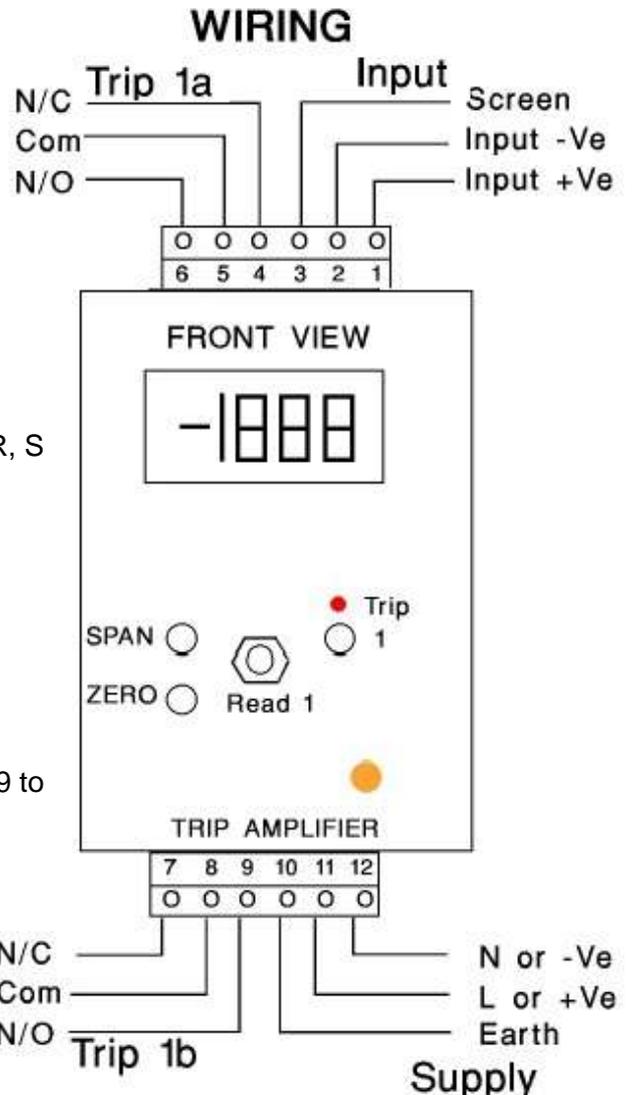
1000V RMS* Input/Contact(s)/Supply/Earth
 *(500Vdc when RFI protection option 'K' is specified)

Performance

Deadband: 1% standard (variable 1-20% optional 'V')
 (Latching Relay optional 'L', with local or Remote Reset)
 Trip settability: ±0.1%
 Trip repeatability: ±0.1%
 (Timer relay option 'T': 10 secs up to 10 mins delay available)
 Response time: <400mS (0-100% span step change)
 Input O/C response: Upscale drive as standard
 (O/C Downscale drive response available on request)

Mounting/Dimensions

Din Rail (TS35) standard, Surface by seismic Keyhole plate or Front of Panel mounting options also available on request.
 (Fixed screw terminals as standard, Plug-in terminals optional)
 Enclosure: 50w x 75h x 145d mm
 (RFI 'K' option enclosure = 182d mm)



Environmental Conditions

Storage Temperature: -40 to +70°C
 Operating Ambient: -15 to +55°C
 Relative Humidity: 5 – 95% RH (Non-condensing)
 EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

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