

# **ADT111LKT Thermocouple Trip Amplifier with Single Set Point**

• Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1001 architecture (HFT:0)

Supply voltage options: 115Vac ±20%

240Vac ±20%

(with Amber power ON indicator) 24Vdc ±10%

48Vdc ±10%

- Non-Smart/Non-uProcessor based, Type A instrument
- RFI Protection to EN 61000-4-3:2006/A2:2010
- Front fascia LCD or LED Digital Display options available ('DI' option)
- Fixed Time Delay into Trip (Variable delay available if required)
- AMELEC Standard 10 year warranty

# **Technical Specifications**

#### **Input**

mV signal developed from any thermocouple type; B, J, K, N, R, S, T, with a minimum 4mV span (Automatic cold junction compensation as standard)

# Time Delay (T) & Latch (L)

Up to 2 second delay before latching into Trip, with Manual Reset via front fascia pushbutton once input temperature returns to a healthy level. (Remote Reset option is available on request if preferred)

#### **Relay Outputs**

Trip output is a set of DPCO contacts, rated at 250VAC, 2A, 100VA resistive as standard. Other ratings are available on request if required. (Trip output becomes CO+SPCO contacts for Remote Reset option) Red LED relay status indicator: *Extinguished* in Trip/De-energised state.

#### **Protection**

Fuse: 250mA as standard

Isolation: 500Vdc Input/Contacts/Supply/Earth RF Immunity: 20MHz-3GHz/5.25GHz ≤10V/m,

 $(80MHz-1GHz/5.6GHz \le 30V/m, 889MHz/1.75GHz \le 40V/m)$ 

#### Performance

Trip settability: ±1%
Trip repeatability: ±0.1%
Response time: <200ms
Consumption: <3VA

Input Open Circuit response: Upscale drive as standard (O/C Downscale drive may be specified if preferred)

#### **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 (Generic Industrial levels)

#### **Dimensions**

Standard enclosure: 50w x 75h x 182d mm

with Fixed Screw Terminals towards rear of enclosure

(Plug-in screw Terminal Blocks available if preferred – 'X' option)

N/C N or 'Com L or '+
Earth
Trip 1b Supply

7 8 9 10 11 12

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WIRING

0 0 0 0 0

6 5 4 3 2 1

AMELEC

Front View

RESET (

SPAN (0)

ZERO (0)

Input

Ø) TRIP 1

Power on

Screen

Input (-)

Input (+)

Trip 1a

- Com

- N/O

# Single Trip Input Trip 1a Trip 1b

### **Mounting Options**

Heavy duty Din Rail (TS35) as standard

Surface by Seismic keyhole plate & Front of Panel mounting options also available on request.

(Surface mounting plate Dims: 50w x 130h mm)

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