

ADT111K Thermocouple Trip Amplifier with Single Set Point

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
- 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 or Variable Time Delay into Trip available ('T' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

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

Deadband

Nom. 1% of Span hysteresis as standard
(Adjustable hysteresis 0.5-20% span available – 'V' option)

Relay Outputs

Trip output is a set of DPCO contacts, rated at 250VAC, 2A, 100VA resistive as std. (Other ratings available – 'X' option)

Latching Relay with local or remote Reset available – 'L' option

Protection

Fuse: 250mA as standard
Isolation: 500Vdc Input/Contacts/Supply/Earth
RF Immunity: 20MHz-3GHz/5.25GHz ≤ 10 V/m, (80MHz-1GHz/5.6GHz ≤ 30 V/m, 889MHz/1.75GHz ≤ 40 V/m)

Performance

Trip settability: $\pm 1\%$
Trip repeatability: $\pm 0.1\%$
Response time: ≤ 200 mS (0-100% step change)
Consumption: ≤ 3 VA
Input Open Circuit response: Upscale drive as standard
(O/C Downscale drive may be specified if preferred)

Environmental Conditions

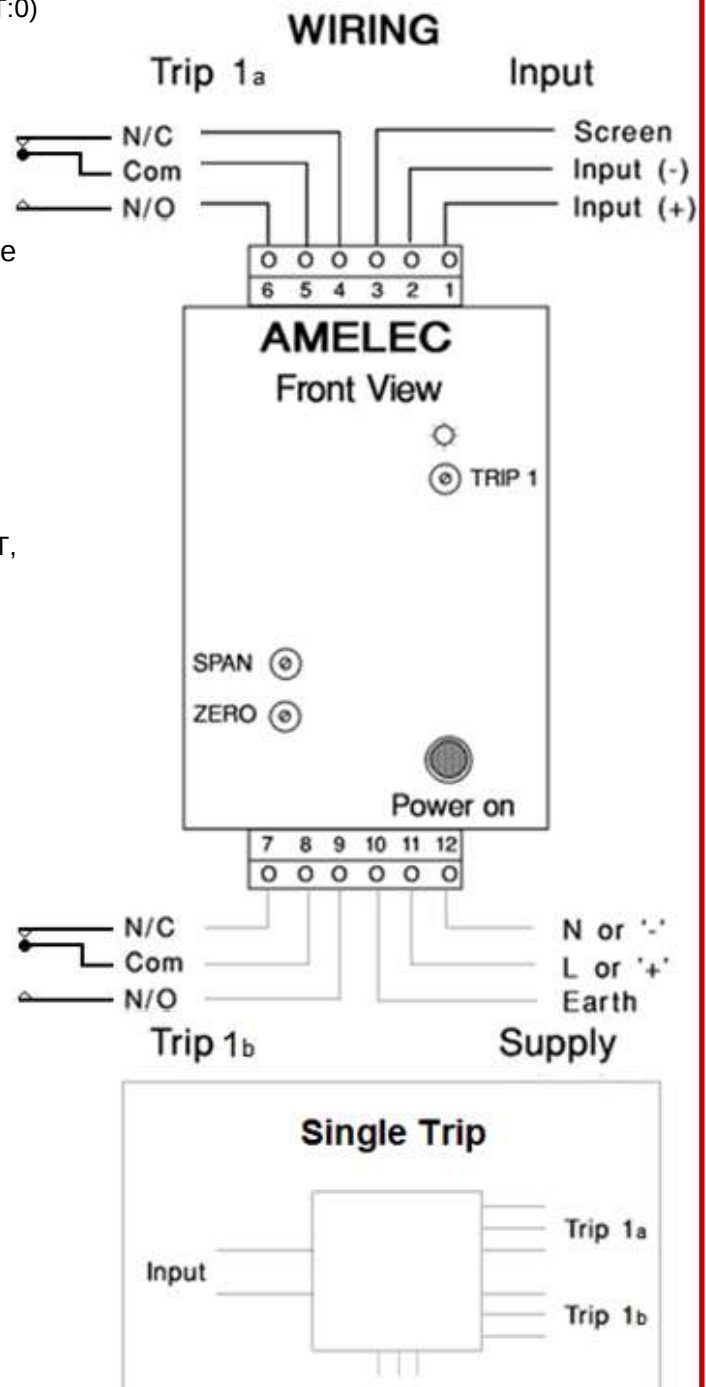
Storage Temperature: -40 to $+70^{\circ}\text{C}$
Operating Ambient: -15 to $+55^{\circ}\text{C}$
Relative Humidity: 5 – 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial levels)

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)

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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)