

ADT111C 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 available ('K' option)
- Front fascia LCD or LED Digital Display options available ('DI' option)
- Fixed or Variable Time Delay options into Trip available ('T' option)
- 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 cold junction compensation as std)

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 standard. (Other ratings available – 'X' option)

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

Protection

Internal Fuse: 250mA as standard
 Isolation: 1000V RMS* Input/Contacts/Supply/Earth
 *(500Vdc when 'K' option specified)
 'K' option RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10V/m$,
 (80MHz-1GHz/5.6GHz $\leq 30V/m$, 889MHz/1.75GHz $\leq 40V/m$)

Performance

Trip settability: $\pm 0.1\%$ (Ten-Turn Calibrated Dial on front fascia)
 Trip repeatability: $\pm 0.1\%$
 Response time: $\leq 200mS$ (0-100% step change)
 Consumption: $\leq 3VA$
 Input Open Circuit response: Upscale drive as standard
 (O/C Downscale drive option may be specified if preferred)

Environmental Conditions

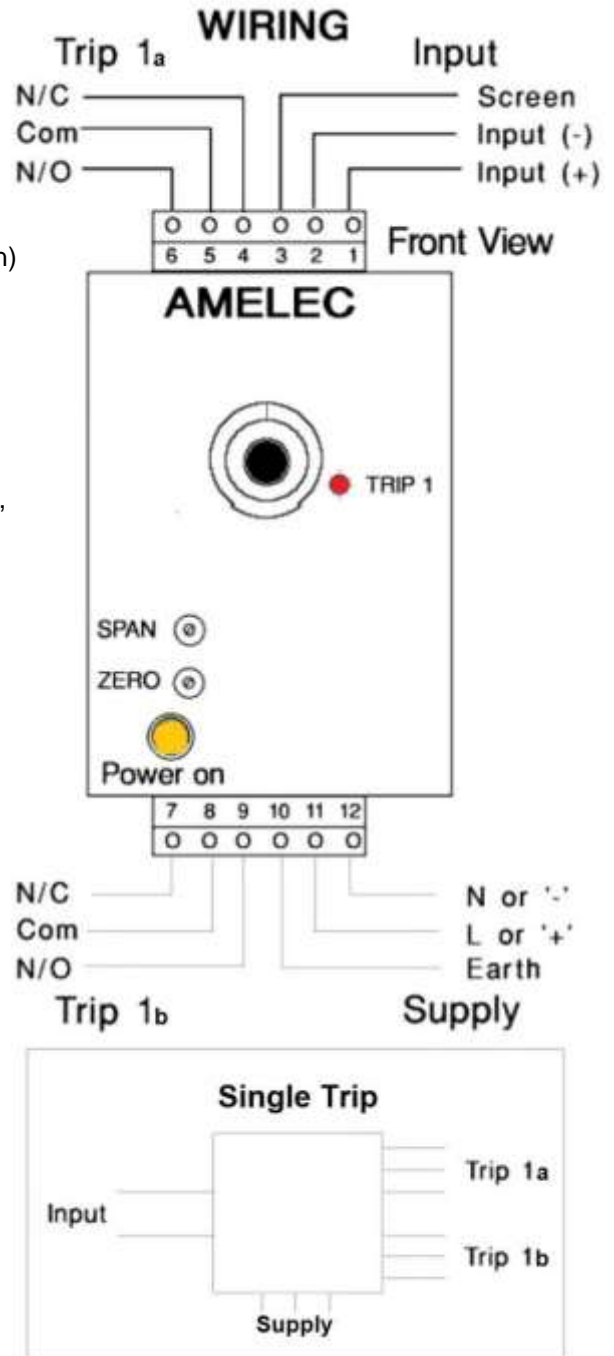
Storage Temperature: -40 to +70°C
 Operating Ambient: -15 to +55°C
 Relative Humidity: 5 – 95% RH (Non-Condensing)
 EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)
 ('K' option to higher Generic Industrial levels)

Dimensions

Standard enclosure: 50w x 75h x 145d mm ('K' option = 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

Din Rail (TS35) as standard

Surface by Seismic keyhole plate & Front of Panel mounting options also available if preferred.

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

(Front of Panel Bezel Dims: 57w x 96h mm, Panel Cut Out Dims: 51w x 76h mm)