

ADT112KX-RIS-ET7205 Thermocouple Trip Amplifier

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Supply voltage options:
 - 115Vac $\pm 20\%$
 - 230Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- LCD/LED Digital Display options available ('DI' option)
- Non-Smart/Non-uProcessor based, Type 'A' instrument
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Any mV signal range up to 400mV, or mV signal developed from any thermocouple type; J, K, N, R, S, T, with a minimum 4mV span.

Automatic cold junction compensation fitted as standard.

Outputs

Each trip output is a pair of either N.O or N.C contacts, (TBA at time of orders), rated at 250VAC, 3A, 100VA resistive as standard

Relay Status Indicators

Red LED indicator for each Trip point; Extinguished in Energised/healthy state, ON in De-energised/Tripped state

Deadband

1% Span as standard, with other Fixed Hysteresis band or Variable 1-20% span hysteresis options available on request)

Controls

Zero / Span: 15-turn blindset pots, used to set internal 0.1 – 2.1Vdc reference for 0 -100% input range. Trip Set Points: 15-turn blindset pots, used to set the Trip points anywhere over the 0 to 100% input range. (Front fascia Test Point options are available if required)

Protection

Isolation: 500Vdc Input/Contacts/Contacts/Supply/Earth
RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$,
(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$)
Internal Fuse

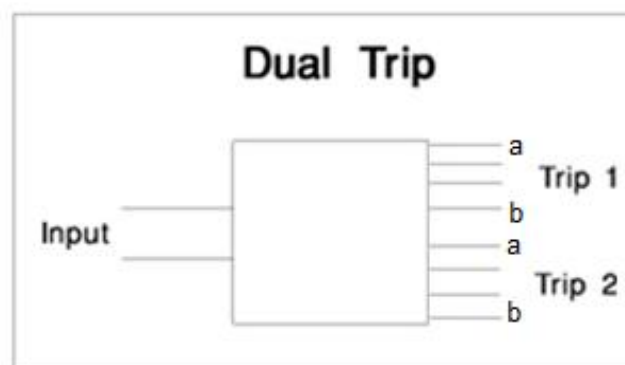
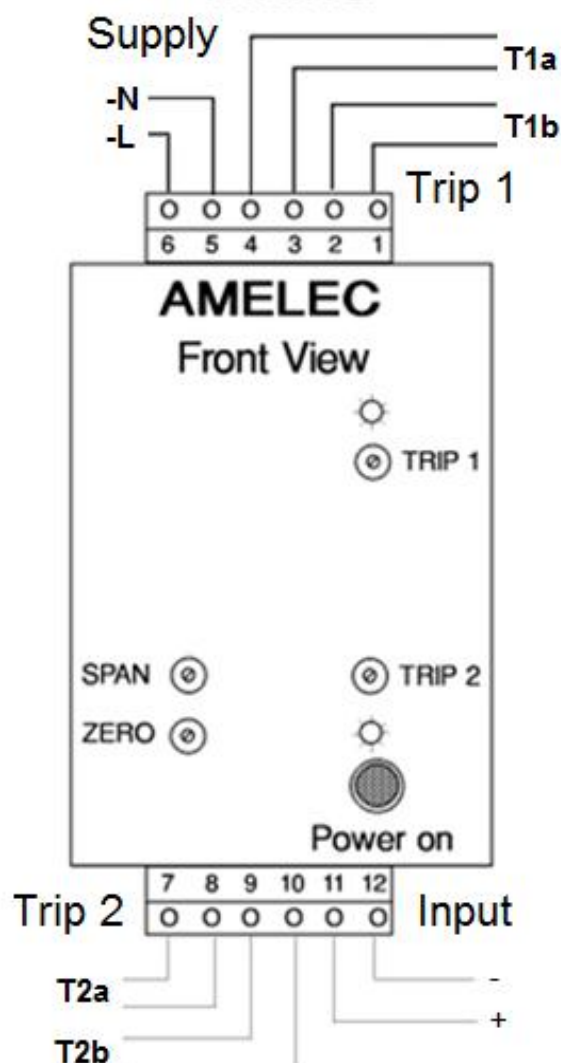
Performance

Trip settability: $\pm 1\%$
Trip repeatability: $\pm 0.1\%$
Response time: $< 200\text{ms}$
Input Open Circuit response: Upscale drive as standard
(O/C Downscale drive available on request)

Environmental Conditions

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

WIRING



Dimensions/Mounting Options

Dimensions: 50w x 75h x 182d mm
Mounting: Din Rail (TS35) as standard.
Surface by Seismic Keyhole plate option available on request (mounting plate Dims: 50w x 130h mm)

Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ