

## ADT112KX-P-RIS-ET7205 Thermocouple/ mV 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 std (other fixed Hysteresis bands available on request)

#### Controls/Test Points

Zero / Span: 15 turn potentiometers, used to set internal reference 0.1 – 2.1Vdc for 0 to 100% input range.

Trip Set Points: 15 turn potentiometers, used to set trip points anywhere over the 0 to 100% input range

Test Points: Input signal & trip set points can be monitored using the front fascia Test Points, 0.1 – 2.1Vdc over 0 to 100% input range (Test plug with 1metre flying lead supplied FOC on request)

#### 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:  $\pm 0.1\%$

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

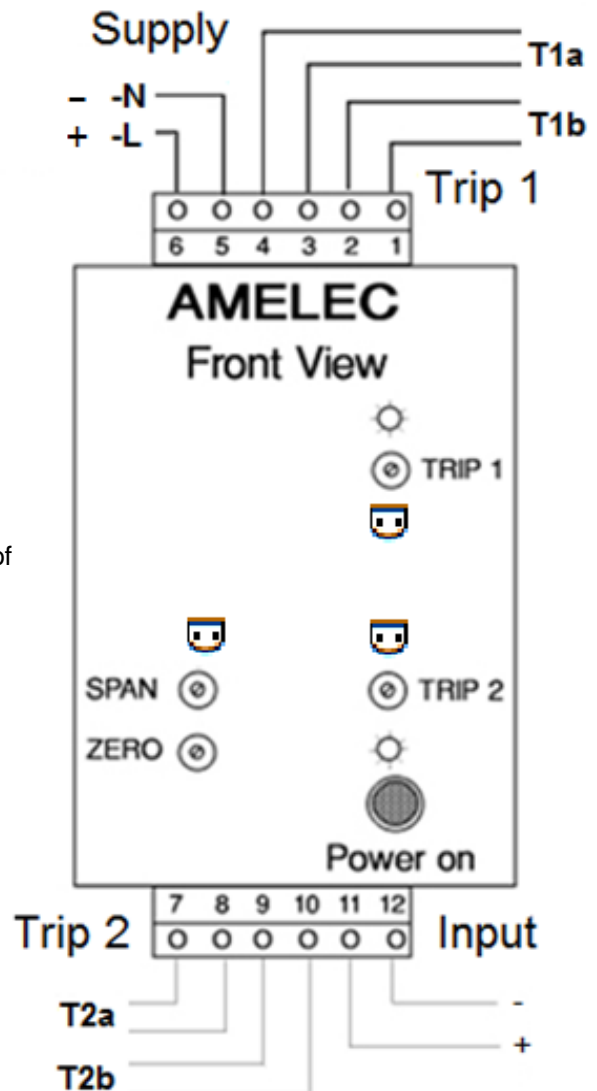
Storage Temperature:  $-40$  to  $70^\circ\text{C}$

Operating Ambient:  $-15$  to  $55^\circ\text{C}$

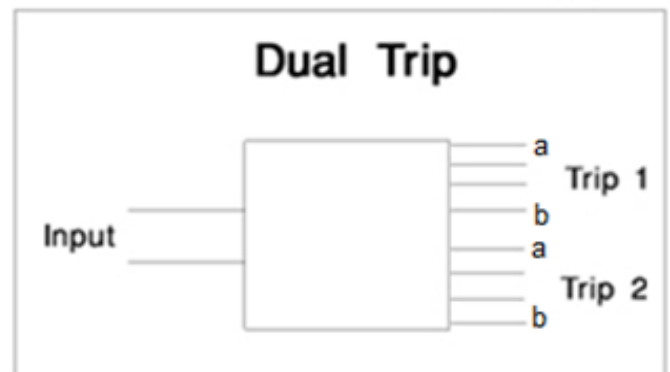
Relative Humidity: 5 – 95% RH

EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial levels)

### WIRING



### Dual Trip



### 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)

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