

## ADM212 (BI)(V)(L)(X)(K) Thermocouple Trip Transmitter

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart/Non-uProcessor based instrument (Type A)
- Supply voltage options:
  - 115Vac ±20%
  - 240Vac ±20%
  - 24Vdc ±10%
  - 48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 optional ('K')
- Non-isolated Output repeat of the Thermocouple input optional ('X')
- Front fascia digital Display of the Input & Trip set point optional ('DI')
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

mV signal developed from any Thermocouple, Temperature  $\geq 4\text{mV}$  span  
 E.g: 0-1000°C Type K, 0-250°C Type J, 0-600°C Type N,  
 With automatic cold junction compensation as std.

#### Analogue Output

Any standard process current or voltage signal. Current source up to 20mA with Drive voltage 11Vdc. Current sink up to 20mA, with max External Drive  $\leq 30\text{Vdc}$ . Voltage source up to 10V, max current 20mA.

#### Trip Output

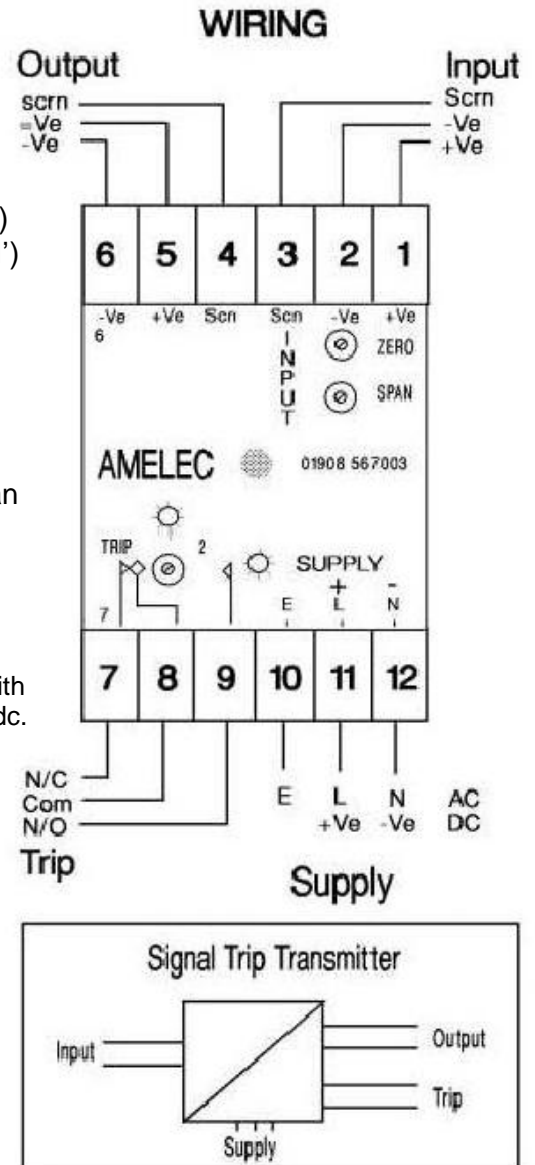
A set of single pole changeover contacts, rated at 250VAC, 3A, 100VA (resistive). Latching relay option ('L') available with Local or Remote Reset. Red LED indication of Relay status, ON Energised / Extinguished in Trip De-energised state as standard. (Red/Green Bi-colour LED optional – 'BI')

#### Performance

Isolation: 1000V RMS\*. Input/Output/Contacts/Supply/Earth  
 \*(500Vdc when RFI protection option 'K' is specified)  
 Accuracy/Linearity:  $\pm 0.1\%$   
 Trip settability:  $\pm 1\%$   
 Trip repeatability:  $\pm 0.1\%$   
 Deadband: 1% span as std (adjustable 1-20% span optional 'V')  
 Response time:  $< 400\text{ms}$  as std (0-100% input step change)  
 Supply consumption:  $< 3\text{VA}$   
 Input O/C response: Up or Downscale drive may be specified  
 Fail Safe Relays: De-energise on Trip & Loss of Power as std

#### 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 the highest EMC/EMI/RFI Generic Industrial levels)



#### Mounting/Dimensions

DIN Rail (TS35) or Surface by corner fixing holes as standard

Enclosure Dimensions: 50w x 75h x 110d mm.  
 ('DI' option enclosure = 146d, 'K' option = 182d mm)

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