

## ADM212K Thermocouple Trip Transmitter / Isolator

- Suitable for SIL 1 & SIL 2 (EN 61508) safety instrumented system (SIS) safety loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options:
  - 115Vac  $\pm 20\%$
  - 240Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- Digital Display available ('DI' option)
- Non-Smart / Non-uProcessor based, Type A instrument
- 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)

#### Analogue Output

Any standard process current or voltage range may be specified  
Current source up to 20mA. Drive voltage 11Vdc  
Voltage source up to 10V. Max current 20mA

#### Trip Output

Changeover relay contacts, rated at 250VAC, 2A, 100VA (resistive)  
High Temp Trip option, relay De-energises above set point  
Low Temp Trip option, relay De-energises below set point.  
Relay status indicator: Red LED, ON Energised/healthy/  
Extinguished in De-energised/Trip state as std

#### Performance

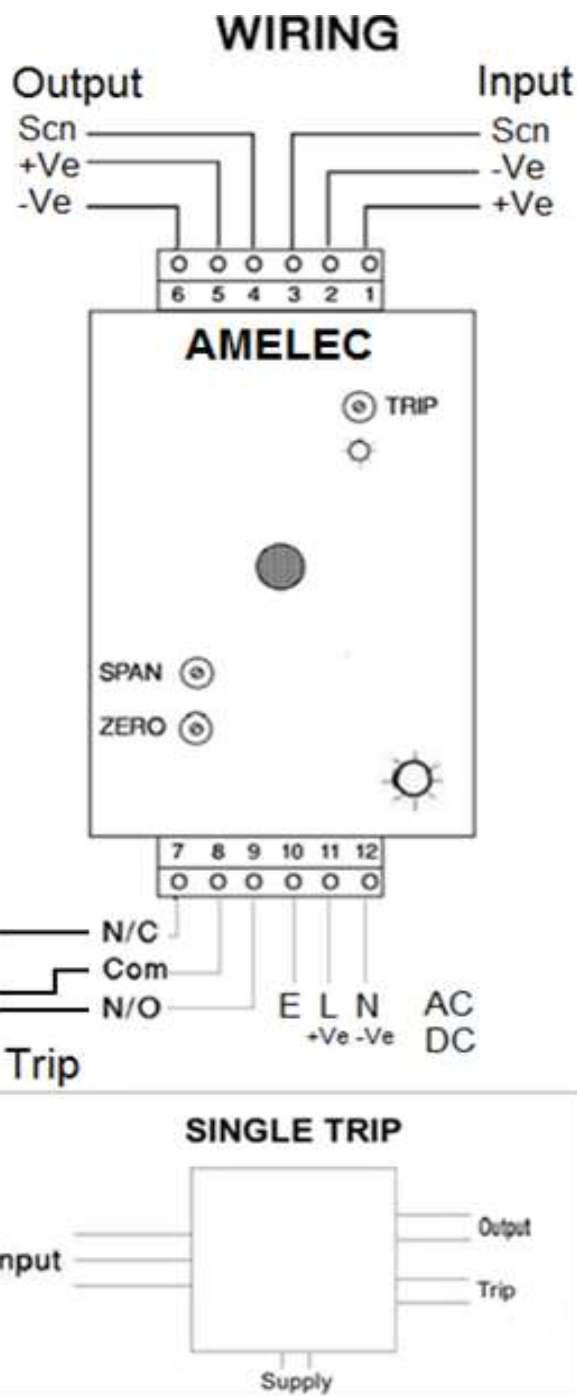
Isolation: 500Vdc Input/Output/Contacts/Supply/Earth  
Accuracy/Linearity:  $< \pm 0.1\%$  mV span as std  
(Linearisation to temperature option 'G' available)  
Input O/C response: Up or Downscale drive may be specified  
(O/C response to be advised at time of orders)  
Relay: De-energise on Trip, Fail Safe on loss of power as standard  
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:  $< 3\text{VA}$   
Fail Safe Relays: De-energise on Trip & Loss of Power as std

#### 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)  
RF Immunity: 20MHz-3GHz/5.25GHz  $\leq 10\text{V/m}$ ,  
(80MHz-1GHz/5.6GHz  $\leq 30\text{V/m}$ , 889MHz/1.75GHz  $\leq 40\text{V/m}$ )

#### Dimensions

50w x 75h x 182d (mm)



#### Mounting

DIN Rail (TS35) as std, Surface by Seismic Keyhole plate & Front of Panel mounting options also available.  
(Surface mounting plate Dims: 50w x 130h mm)

#### Customer Termination

Fixed screw terminals as standard  
(Plug-in terminals optional)

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