

ADM212DI (BI)(M)(V)(L)(X)(K) Thermocouple Trip Transmitter with Display

- 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')
- AMELEC Standard 10 year warranty

Technical Specifications

Input

mV signal developed from any Thermocouple, Temp \geq 4mV 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.

Isolated 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 30Vdc. Voltage source up to 10V, max current 20mA.
 (Non-isolated Thermocouple Repeat output with automatic cold junction compensation option 'X' available. T/C extension wire should then be used between the output & existing temp monitoring device input port terminals)

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')
 Display of the Process Input on front fascia 3½ digit LCD as std, with up to 4 or 4½ digit Red LED Display options available on request.
 Read button or Toggle switch shows the trip Set Point on the display.

Isolation

1000V RMS*. Input/Output/Contacts/Supply/Earth
 *(500Vdc when RFI protection option K is specified)

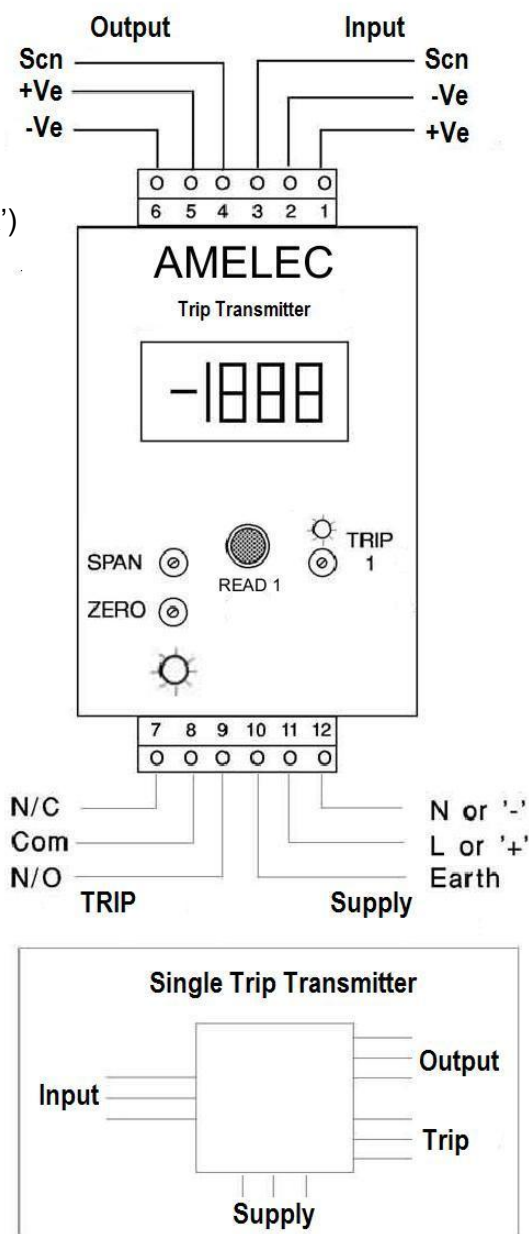
Performance

Accuracy/Linearity: $\pm 0.1\%$
 Trip settability: $\pm 0.1\%$
 Trip repeatability: $\pm 0.1\%$
 Deadband: 1% span as std (adjustable 1-20% span optional 'V')
 Response time: <400mS as std (0-100% input step change)
 Supply consumption: <3VA
 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)

WIRING



Mounting/Dimensions

DIN Rail (TS35) as standard
 Enclosure Dimensions: 50w x 75h x 146d mm.
 ('K' option enclosure = 182d mm)

Surface by seismic keyhole plate (50w x 130h mm)
 & front of panel mounting options also available

Customer connections via screw terminal blocks
 towards rear of enclosure (Fixed or plug-in optional)

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