

## ADM216DI (BI)(M)(V)(X)(K) Thermocouple Trip Transmitter with Display

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

### Technical Specifications

#### Input

Any mV signal range up to 400mV, or a 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)

#### Analogue Output

Any standard process current or voltage signal. Current source up to 20mA with Drive voltage 11Vdc, Current sink up to 20mA,  $\leq 30$ Vdc External drive, Voltage source upto 10Vdc, max current 20mA  
Typical Output options: 0-20mA or 4-20mA (max load 550 $\Omega$ ), or 0-5Vdc (min load 250 $\Omega$ ) or 0-10Vdc (min load 500 $\Omega$ )

#### Trip Relay Outputs

2 sets of changeover contacts, rated at 250VAC, 3A, 100VA (resistive). Red LED indication of Relay status standard (Red/Green Bi-colour LED's optional)  
Deadband: 1% span standard (variable 1-20% available – 'V' option)  
Fail Safe Relays De-energise on Trip & on loss of power as std

#### Digital Display

Input displayed on a 3½ digit display (LCD) scaled as 0-100.0 (%) or as Temperature or in other Engineering units to suit the application..  
Read buttons show the trip set points within the same scale  
Display Calibration Range: -1999 to +1999

#### Performance

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

Accuracy/Linearity:  $\pm 0.1\%$  mV span

Trip settability:  $\pm 0.1\%$

Trip repeatability:  $\pm 0.1\%$

Response time: <200mS as std (0-100% input step change)

Supply consumption: <4VA

Input O/C response: Upscale drive as std

(input O/C Downscale drive can be specified on orders if preferred)

'K' option RF Immunity: 20MHz-3GHz/5.25GHz 10V/m,  
80MHz-1GHz/5.6GHz 30V/m, 889MHz/1.75GHz 40V/m

#### Environmental Conditions

Storage Temperature: -40 to 70°C

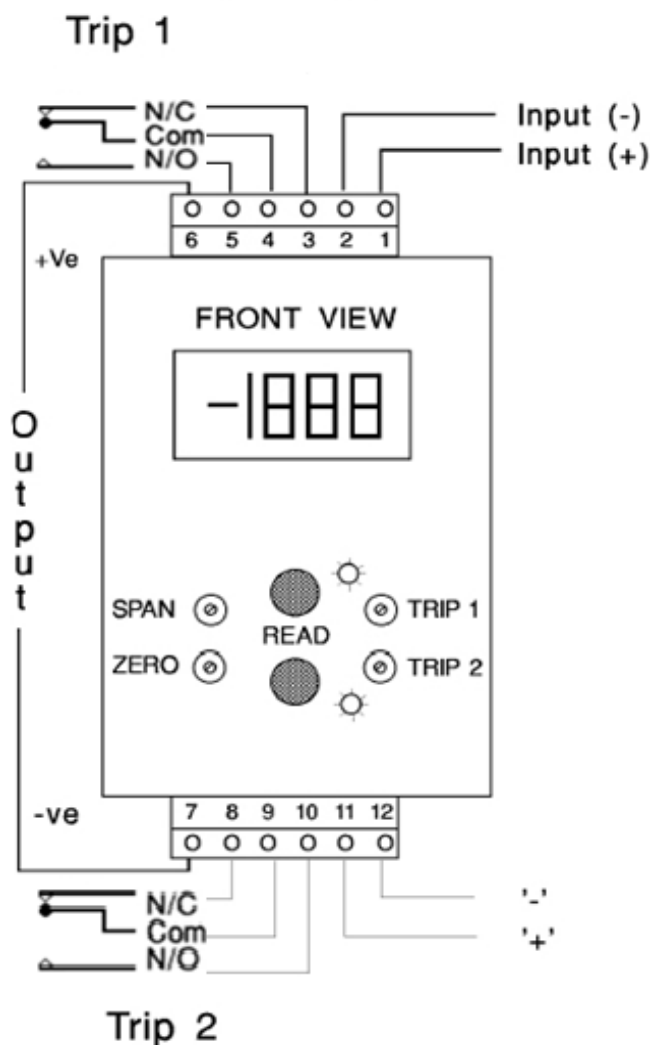
Operating Ambient: -15 to 55°C

Relative Humidity: 5 – 95% RH

EMC: 2014/30/EU, EN 61326-1:2013 (controlled EM)

('K' option to the highest Generic Industrial levels)

### WIRING



**Mounting:** DIN RAIL (TS35) as std.  
Surface/Seismic Keyhole plate & Front of Panel mounting options also available.  
(Rear seismic mounting plate Dims: 50w x 130h mm)

**Dimensions:** 50w x 75h x 145d mm  
( 'K' option enclosure = 182d mm)

#### Customer Termination

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

Tel: 01908-567003 Email: [sales@amelec-uk.com](mailto:sales@amelec-uk.com) Visit: [www.amelec-uk.com](http://www.amelec-uk.com) Fax: 01908-566735

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