

## ADM242 Resistance Signal Trip-Transmitter/ Isolator

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

### Technical Specifications

#### Input

Resistance/ Slidewire/ Potentiometer/ NTC/PTC Thermistor, with Input ranges up to 60K $\Omega$  available, 2 or 3 wire input connections. Any wire wound Potentiometer can be specified from 100 $\Omega$  up to 20K $\Omega$ . Version also available for plastic film pots (Input Excitation 1V dc @ 2mA max as std, other options available).

#### Analogue Output

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

Reverse Acting ('RA' option) &/or additional Linearisation ('G' option) available if required, E.g; for NTC sensor monitoring applications.

#### Trip Output

A set of S.P.C.O contacts, rated 250VAC, 2A, 100VA (resistive) Latching relay option 'L' available with Local or Remote Reset. Red LED indication of Relay status, **ON** Energised/healthy, Extinguished in Trip/De-energised state as standard. (Red/Green BI-colour LED optional)

#### Performance

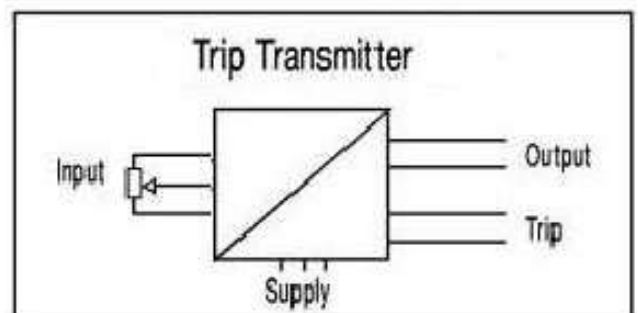
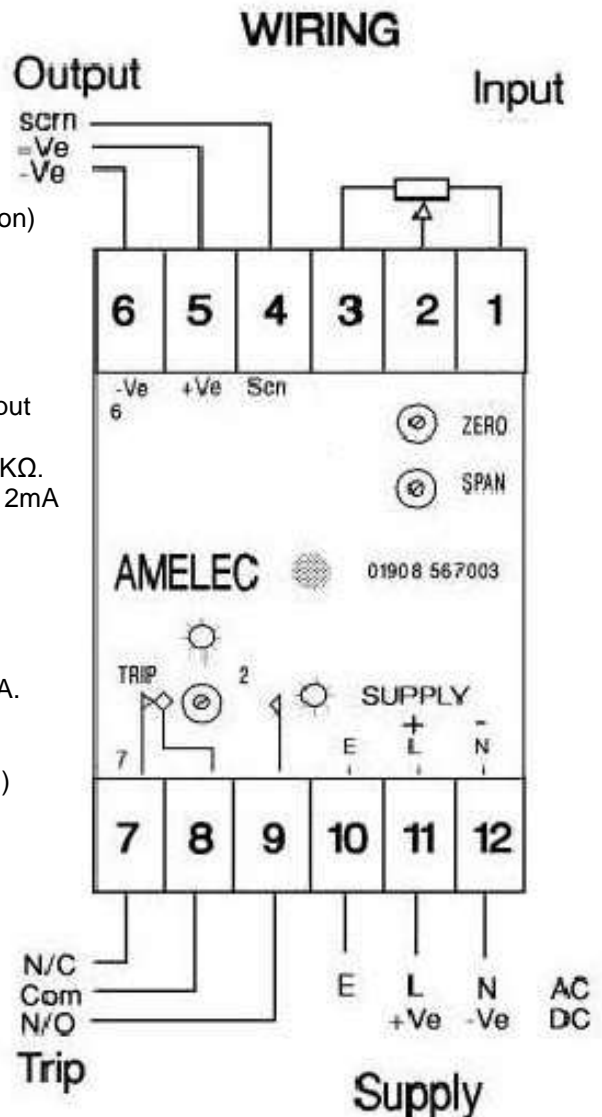
Isolation: 1000V RMS\* Input/Output/Contacts/Supply/Earth  
\*(500Vdc when RFI protection option 'K' is specified)  
Accuracy/Linearity:  $\pm 0.1\%$  resistance span as std  
Trip settability:  $\pm 1\%$   
Trip repeatability:  $\pm 0.1\%$   
Deadband: 1% span as std (adjustable 1-20% span optional 'V')  
Response time: <200mS as std (0-100% input step change)  
Supply consumption: <4VA  
Input O/C response: Upscale drive as standard  
(O/C Downscale drive option 'X' available if required)  
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: EMC/EMI/RFI protection to the highest Generic Industrial Standards)

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#### Mounting / Demensions

Either Din Rail (TS35) **or** Surface by corner fixing holes in standard 50w x 75h x 110d mm enclosure.

(‘DI’ option = 145d mm, ‘K’ option = 182d mm)