

ADT122DI (BI)(V)(X)(K) 4-Wire RTD Trip Amplifier with Display

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN61508-2) safety system loop applications
- Non-Smart/Non-uProcessor instrument (Type A)
- Supply voltages: 115Vac $\pm 20\%$
240Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to IEC61000-4-3:2006/A2:2010 option 'K'
- AMELEC Standard 10 year warranty

Technical Specifications

Input

4-Wire PT100 RTD, any temperature range with a $\geq 30^\circ\text{C}$ span.
Typical ranges: -15 to $+25^\circ\text{C}$, 10 to 40°C , 0 to 50°C , 0 to 100°C , 0 to 250°C
(PT500 & PT1000 input options also available)

Outputs

Trip1 relay has a N.O contact & Trip2 relay has a set of S.P.C.O contacts as standard, each rated at 250VAC, 3A, 100VA (resistive)
Red LED indication of each Relay Status as standard
(Red/Green BI-colour LED indicators optional)

Display of the Input on a $3\frac{1}{2}$ digit LCD, Calibration range:
 -1999 to $+1999$, scaled 0 to 100.0 (%) or in Engineering units to suit the application.
(Up to $4\frac{1}{2}$ digit Red LED Display also available).
Front fascia Read buttons or Toggle switch show the Trip Set points within the calibrated scale.

Isolation

1000V RMS*Input/Contact/Contacts/Supply/Earth
*(500Vdc if RFI protection option 'K' is specified)

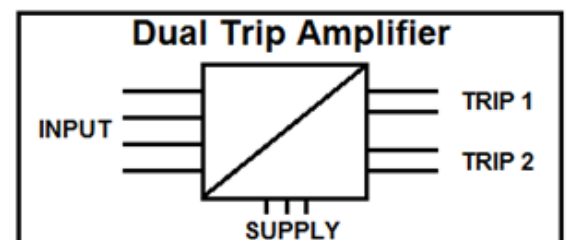
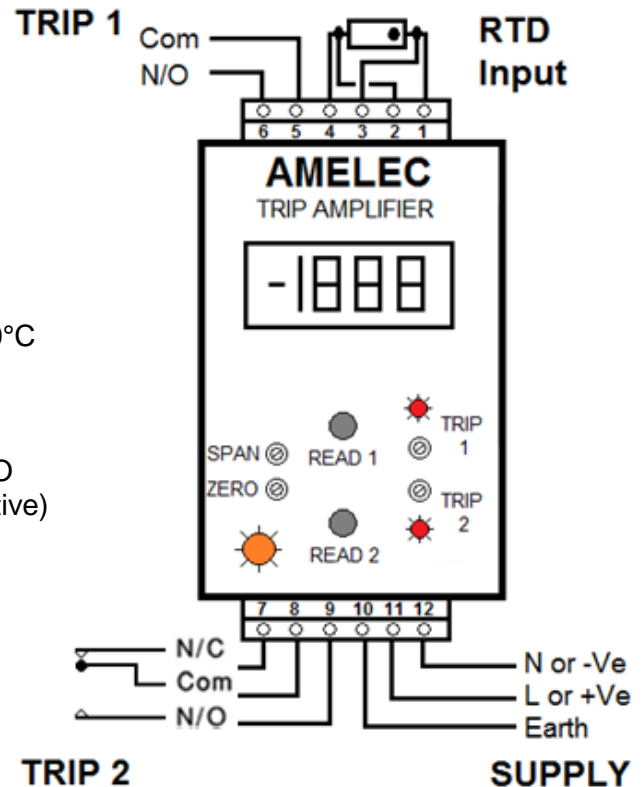
Performance

Deadband: 1% standard (variable 1-20% available, 'V' Option)
Trip settability: $\pm 0.1\%$
Trip repeatability: $\pm 0.1\%$
Response time: $< 400\text{ms}$
Input O/C response: Upscale drive as standard
(O/C Downscale drive option 'X' available)
Relays Fail Safe: 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
'K' option RF Immunity: 20MHz – 3GHz $\leq 10\text{V/m}$
(80MHz – 1GHz / 5.6GHz $\leq 30\text{V/m}$, 889MHz – 1.75GHz $\leq 40\text{V/m}$)

WIRING



Customer Termination

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

Mounting/Dimensions

Enclosure: $50\text{w} \times 75\text{h} \times 145\text{d}$ mm
(RFI 'K' option enclosure = 182d mm)
Standard DIN Rail (TS35) mounting,
or Surface by seismic Keyhole plate
and Front of Panel options available

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