

## ADT122DI (BI)(V)(X)(K) RTD Trip Amplifier 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 instrument (Type A)
- Supply voltage options:
  - 115Vac  $\pm 20\%$
  - 240Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
- 'K' option: RFI Protection to EN 61000-4-3:2006/A2:2010
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Any 2 or 3 wire PT100 resistance temperature sensor as std.  
Third wire compensation to overcome lead resistance variation.  
(PT130 / PT500 / PT1000 & 4 wire input options available)

#### Trip Relays

Each output is a set of S.P.C.O relay contacts, rated 250VAC, 2A, 100VA (resistive).  
Fail Safe Relays: De-energises on Trip & Loss of Power as std.  
Red LED indication of each Relay status: **ON** Energised/ healthy, **Extinguished** in Trip/De-energised state as std.  
(Red/Green **B**-colour LED indicators optional)

Display of the Input on a 3½ digit front LCD, Calibration range: -1999 to +1999, scaled **0.0-100.0** (%) or in Engineering units to suit the application on request.

(Up to 4½ digit Red LED front Display option also available)  
Front fascia Read buttons or Toggle switch available to show view the Trip Set points within the calibrated scale.

#### Isolation

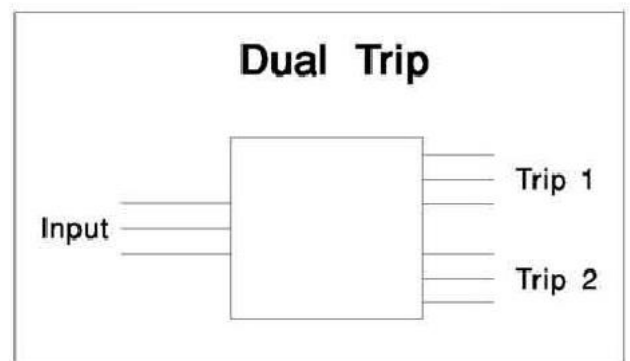
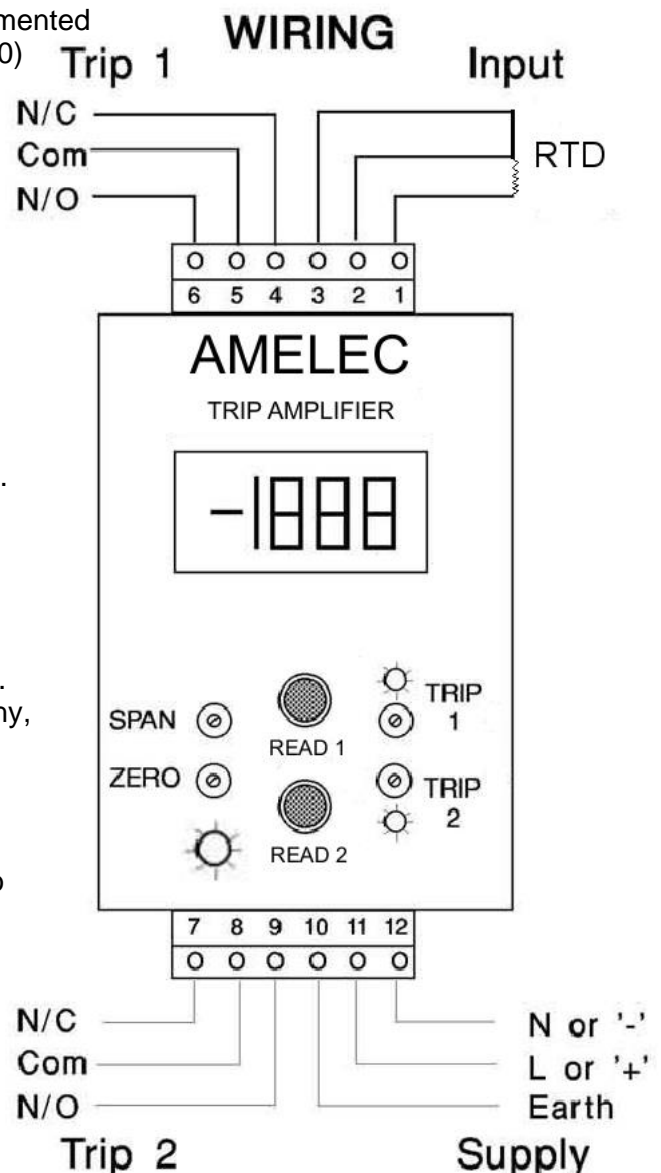
1000V RMS\* Input/Contacts/Contacts/Supply/Earth  
\*(500Vdc any line to Earth when RFI option 'K' is specified)

#### Performance

Deadband: nom 1% std (variable 1-20% optional: 'V')  
Trip settability:  $\pm 0.1\%$   
Trip repeatability:  $\pm 0.1\%$   
Response time: <400mS  
Input O/C response: Upscale drive as standard  
(O/C Downscale drive option available on request)  
'K' option RF Immunity: 20MHz-3GHz  $\leq 10V/m$   
(80MHz-1GHz/5.6GHz  $\leq 30V/m$ , 889MHz/1.75GHz  $\leq 40V/m$ )

#### Mounting/Dimensions

Din Rail (TS35) standard, Surface by seismic Keyhole plate or Front of Panel mounting options also available on request.  
Fixed screw terminals as standard, Plug-in terminals optional  
Enclosure: 50w x 75h x 145d mm  
(RFI 'K' option enclosure = 182d mm)



#### 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  
(‘K’ option to highest Generic Industrial levels)

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