

## ADT121K RTD Trip Amplifier with single Trip set point

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508) safety instrumented system (SIS) loop applications
- Non-Smart / Non-uProcessor, Type 'A' instrument
- Supply voltages:
  - 115Vac  $\pm 20\%$
  - 240Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

From 2 or 3 wire RTD (PT100) with a span greater than 25°C.  
Third wire compensation std to overcome lead resistance variation (PT130, PT500, PT1000 & 4-wire input options are available on request)

#### Relay Output

A set of double pole changeover contacts (DPCO), rated at 250VAC, 2A, 100VA (resistive) as std.  
Latching relay 'L' option available with local or Remote Reset.  
Red LED indication of Relay status: ON Energised/ healthy, Extinguished in Trip/ De-energised state as std.  
(Red/Green BI-colour LED indicator optional)

#### Performance

Trip settability:  $\pm 1\%$   
Trip repeatability:  $\pm 0.1\%$   
Response time:  $< 400\text{ms}$   
Input O/C response: Upscale drive as std  
(O/C Downscale drive Option 'X' available)  
Trip Hysteresis: nom 1% span std, wider or variable options available  
Fail Safe relay: De-energise on Trip & Loss of Power as std

#### Protection

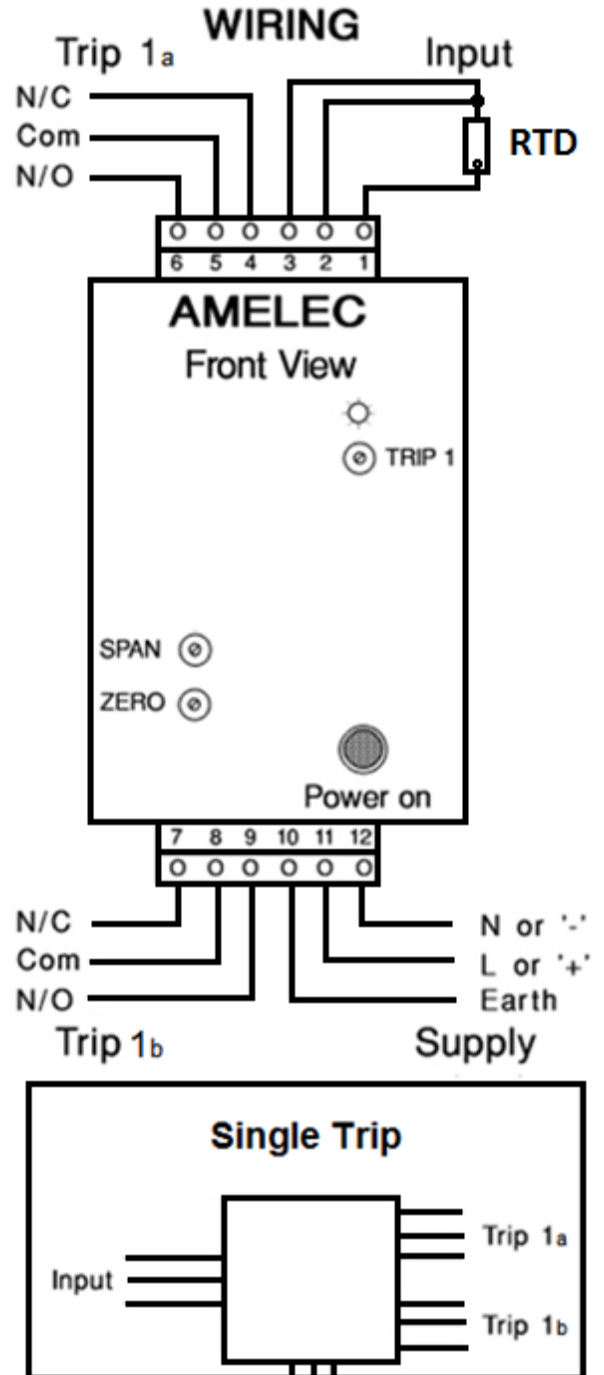
Isolation: 500Vdc Input/Contacts/Supply/Earth  
Internal Fuse.  
Input over range: up to typically 300%.  
RF Immunity: 20MHz-3GHz/5.25GHz  $\leq 10\text{V/m}$ ,  
80MHz-1GHz/5.6GHz  $\leq 30\text{V/m}$ ,  
889MHz/1.75GHz  $\leq 40\text{V/m}$ .

#### 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 (Generic Industrial levels)

#### Mounting/Dimensions

DIN Rail (TS35) or Surface by Seismic Keyhole plate option available  
Enclosure Dims: 50w x 75h x 182d mm  
(Optional rear Surface mounting Plate Dims: 50w x 130h mm)



#### Customer Termination

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