

## ADT112DI (BI)(V)(X)(K) Dual Trip Amplifier with Display

- Suitable for SIL 1, SIL 2 & SIL 3 rated (EN61508) safety instrumented system (SIS) loop applications
- Supply voltage options:
  - 115Vac  $\pm 20\%$
  - 230Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
- Non-Smart/Non-uProcessor based, Type A instrument
- RFI Protection to EN 61000-4-3:2006/A2:2010 available (K option)
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

mV signal developed from any thermocouple type; J, K, N, R, S, T, with minimum 4mV span

#### Outputs

Each Trip output has a set of changeover contacts, rated at 250VAC, 3A, 100VA resistive. (Latching relay options also available, 'L' option)

Red LED indication of each Relay status

(Red/Green 'BI'-colour LED status indicators optional)

Display of the Input range on a 3½ digit Front LCD as standard

(up to 4½ Digit Red LED Display option available on request)

Front fascia Toggle switch or Read buttons show the trip set points within the scale on the display, Calibration Range: -1999 to +1999

#### Performance

Trip settability:  $\pm 0.1\%$  span

Trip repeatability:  $\pm 0.1\%$  span

Deadband: nom 1% span standard (Variable 1-20% available)

Response time: <400ms

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

Input O/C response: Up or Downscale drive may be specified

Fail Safe Relays: De-energise on Trip & Loss of Power supply 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 environment)

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

#### Mounting/Dimensions

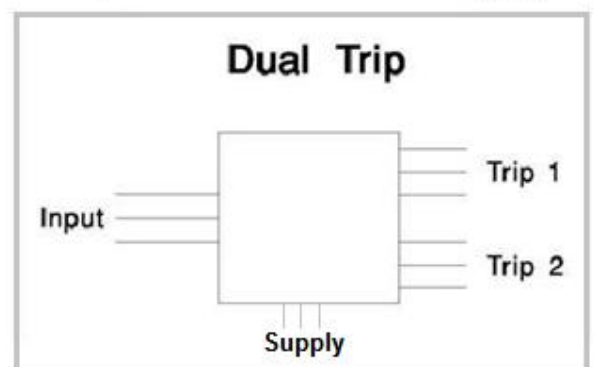
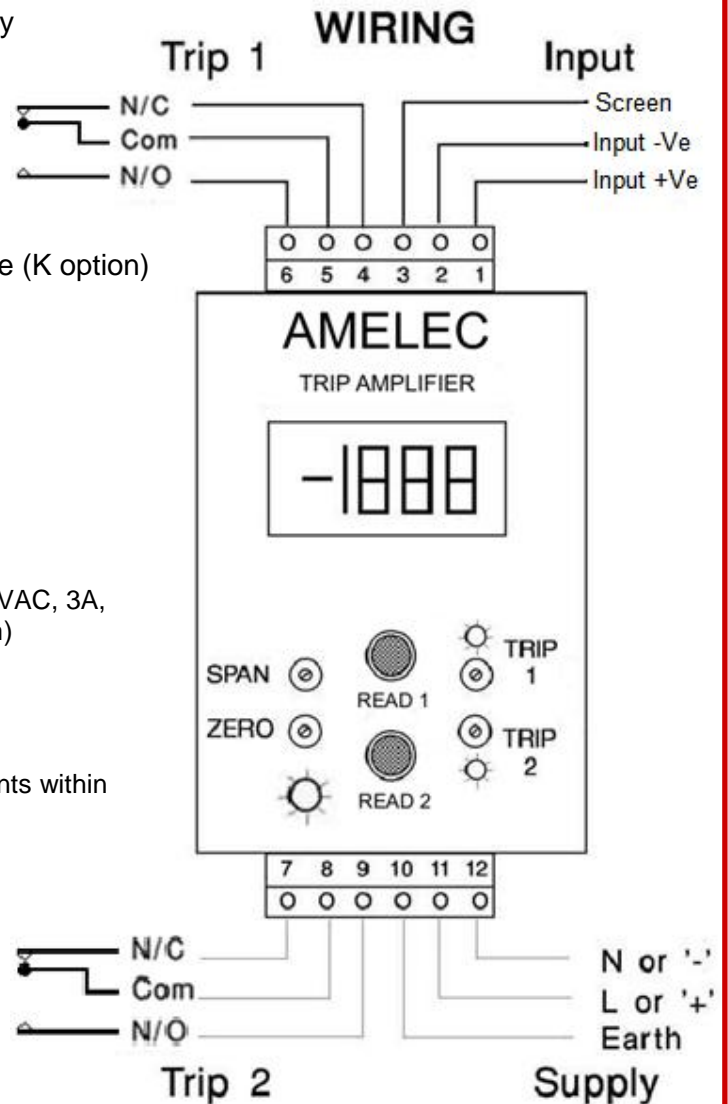
50w x 75h x 145d mm

('K' option enclosure = 182d mm)

DIN Rail (TS35) or Surface by seismic Keyhole plate and

Front of Panel mounting options all available as standard.

(Front of Panel Bezel Dims: 57w x 96h, Cut out Dims: 51w x 76h mm)



#### Customer Termination

Fixed screw terminals as standard

(Plug-in terminals optional)