

ADT131DI (BI)(M)(V)(L)(T)(X)(K) Process Trip Amplifier with Display

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications
- Non-smart / Non-uProcessor based, Type A instrument
- Supply voltage options: 115Vac $\pm 20\%$
230Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available (option 'K': 20MHz-3GHz/5.25GHz $\leq 10V/m$, 80MHz-1GHz/5.6GHz $\leq 30V/m$)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Any current or voltage (DC) drive that can be terminated in a PI network to produce a 400mV span.

Current up to 100mA max input (passive port)

Voltage up to 150Vdc max (impedance $\geq 1M\Omega$)

Typical Input: 4-20mA (impedance 20 Ω) or 0-10Vdc (impedance 1M Ω)

Outputs

A set of double pole changeover (D.P.C.O) contacts, rated at 250VAC, 3A, 100VA (resistive)

Latching relay 'L' option available with Local or Remote reset

Red LED indication of Relay status as standard

(Red/Green BI-colour LED status indicator optional)

Display of the Process Input on a 3½ digit LCD as standard

(up to 4½ Digit Red LED Display option also available). Front fascia

Read button or Toggle switch shows the trip set point on Display within the calibrated scale. (Scaling anywhere in -1999 to +1999 range)

Isolation

1000V RMS* Input/Output/Supply/Earth

* (500Vdc if RFI option 'K' is specified)

Performance

Trip settability: $\pm 0.1\%$ span

Trip repeatability: $\pm 0.1\%$ span

Response time: <100mS (0-100% input step change)

Input O/C response: Downscale drive as standard

(Input O/C response Upscale drive 'X' option available)

Deadband: 1% span as std (Variable 0.5-20% 'V' option available)

Fail safe Relay: De-energise on Trip & on 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)

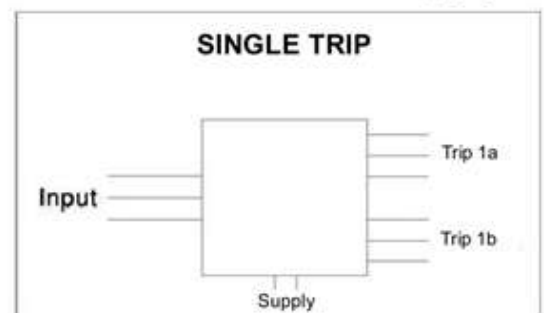
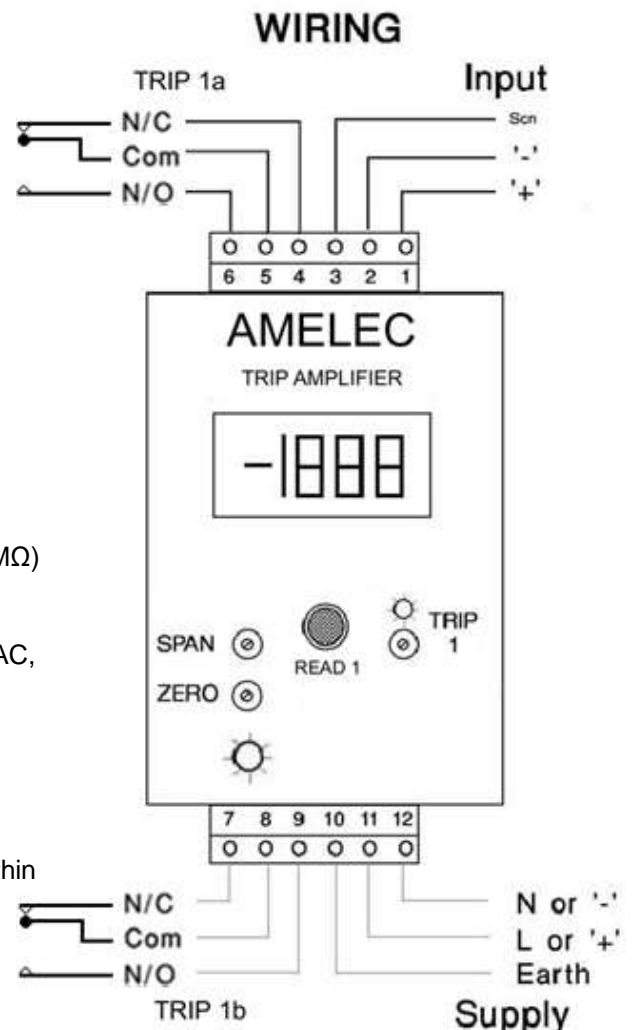
Mounting/Dimensions

Enclosure: 50w x 75h x 145d mm ('K' option enclosure = 182d mm)

Standard DIN Rail (TS35), Front of Panel mounting option available with

Bezel Dims: 57w x 96h mm (Cut out Dims: 51w x 76h mm), or Seismic /

Surface Keyhole plate option (Rear mounting plate Dims = 50w x 130h mm)



Customer Termination

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

Other Options

'T': Time Delay into Trip

'M': 24Vdc @22mA I/P loop Excitation

Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ