

ADT131X-BI Process Trip Amplifier with Single set

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications
Supply voltage options: 20Vac $\pm 20\%$
115Vac $\pm 20\%$
230Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 option 'K' available (20-3000MHz $\leq 10\text{V/m}$, 20-1000MHz $\leq 30\text{V/m}$)
- 24Vdc @22mA two-wire Input loop Excitation option 'M' available (Other two/three-wire loop Excitation spec. options 'MX' available)
- Fixed or Variable Time Delay into Trip 'T' option available
- Front fascia Digital Display 'DI' option available
- Non-smart / Non-uProcessor based, Type A instrument
- 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 $\geq 1\text{M}\Omega$)
Typical Input: 4-20mA (impedance 20Ω) or 0-10Vdc (impedance $1\text{M}\Omega$)
(*'Other' special input signal ranges available on request – 'X' option*)

Outputs

Trip output is a set of changeover contacts (D.P.C.O) rated at 250VAC, 2A, 100VA resistive.
Relays De-energise on Trip & Fail Safe on loss of power as std
LED Green indication of relay status; Energised / healthy,
RED indication of relay status in Trip / De-energised state.
Latching relay with local/remote Reset facility 'L' option available

Isolation

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

Performance

Trip settability: $\pm 1\%$
Trip repeatability: $\pm 0.1\%$
Response time: $< 100\text{ms}$ (0-100% input step change)
Deadband: 1% Span as std.
(Variable hysteresis 0.5%-20% available – 'V' option)
Input Open Circuit response: Downscale drive as std
(O/C Upscale drive available on request – 'X' option)

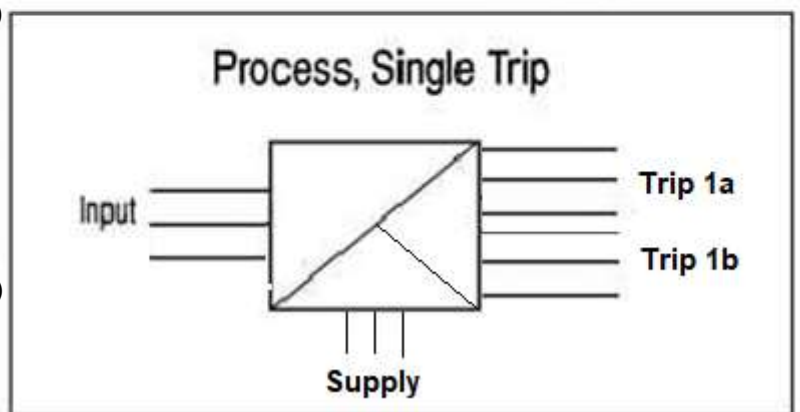
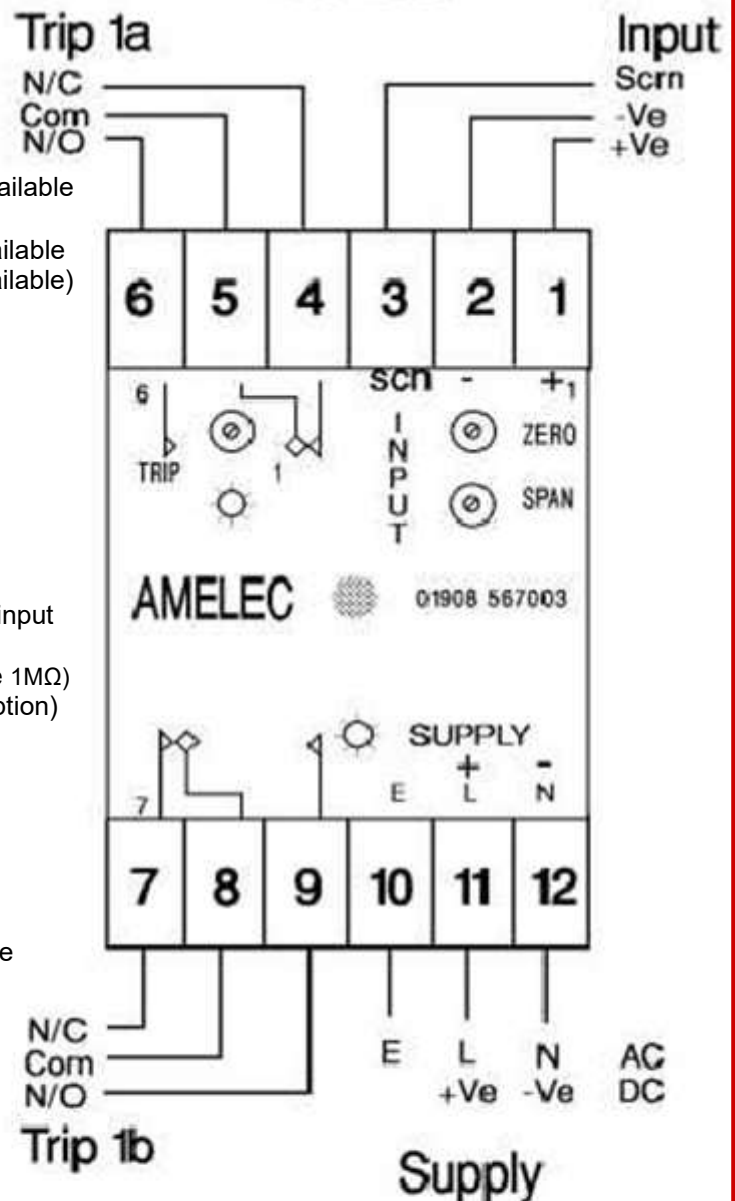
Environmental Conditions

Storage Temperature: -40°C to $+70^\circ\text{C}$
Operating Ambient: -15°C to $+55^\circ\text{C}$
Relative Humidity: 5 – 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)
(*'K' option to the highest Generic Industrial levels*)

Dimensions/Mounting

50w x 75h x 110d mm, Din Rail (TS35) **or** Surface
(*'K' option enclosure = 182d mm*)

WIRING



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