

## ADT131 Process Trip Amplifier with Single set point

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications  
Supply voltage options: 20Vac ±20%  
115Vac ±20%  
230Vac ±20%  
24Vdc ±10%  
48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 option 'K' available (20-3000MHz ≤10V/m, 20-1000MHz ≤30V/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 ≥1MΩ)  
Typical Input: 4-20mA (impedance 20Ω) or 0-10Vdc (impedance 1MΩ)  
(\*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  
Red LED indication of relay status; **ON** Energised / healthy, Extinguished 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: ±1%  
Trip repeatability: ±0.1%  
Response time: <100mS (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)

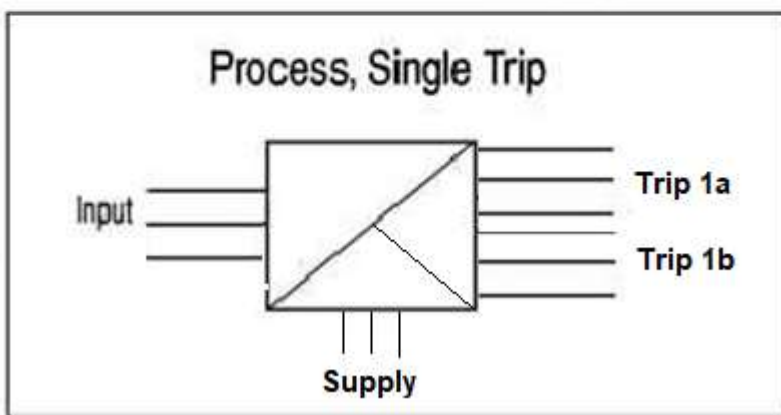
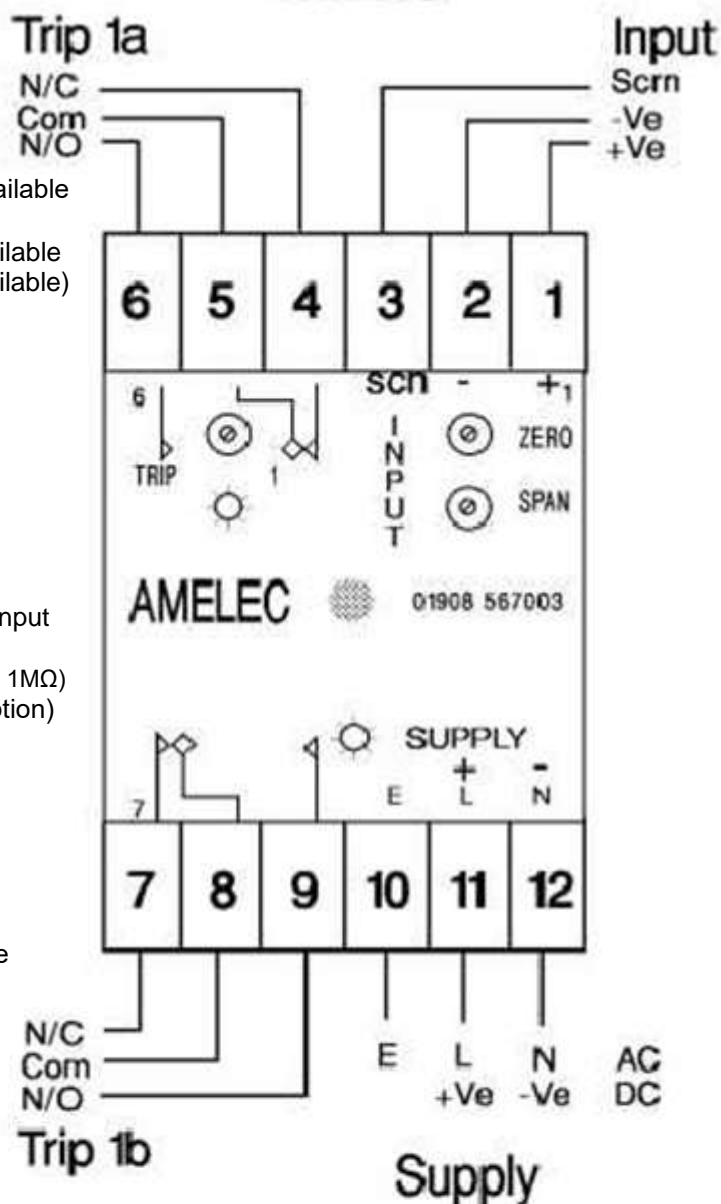
#### Environmental Conditions

Storage Temperature: -40°C to +70°C  
Operating Ambient: -15°C to +55°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



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