

## ADT131-HV High Voltage Trip Amplifier with Single set point

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications, as 1oo1 architecture (HFT:0)  
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  $\leq 10V/m$ , 20-1000MHz  $\leq 30V/m$ )
- 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 high voltage (DC) range, from 300V up to 1000Vdc may be specified.

Typical Input: 0-750Vdc (impedance  $\geq 2M\Omega$ )

#### Outputs

Trip output is a set of changeover contacts (S.P.C.O) rated at 250VAC, 2A, 100VA resistive.

Fail Safe Relay De-energises on Trip & 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 or remote Reset facility 'L' option available

#### Isolation

1500Vdc Input / (Contacts/Supply/Earth)

1000V RMS\* Contacts/Supply/Earth

\*(500Vdc any line to Earth if option 'K' RFI protection specified)

#### Performance

Trip settability:  $\pm 1\%$

Trip repeatability:  $\pm 0.1\%$

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:  $-40^{\circ}C$  to  $+70^{\circ}C$

Operating Ambient:  $-15^{\circ}C$  to  $+55^{\circ}C$

Relative Humidity: 5 – 95% RH (Non-Condensing)

EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

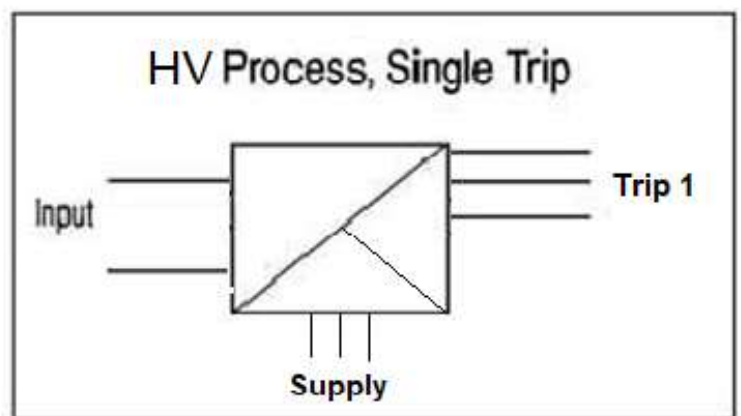
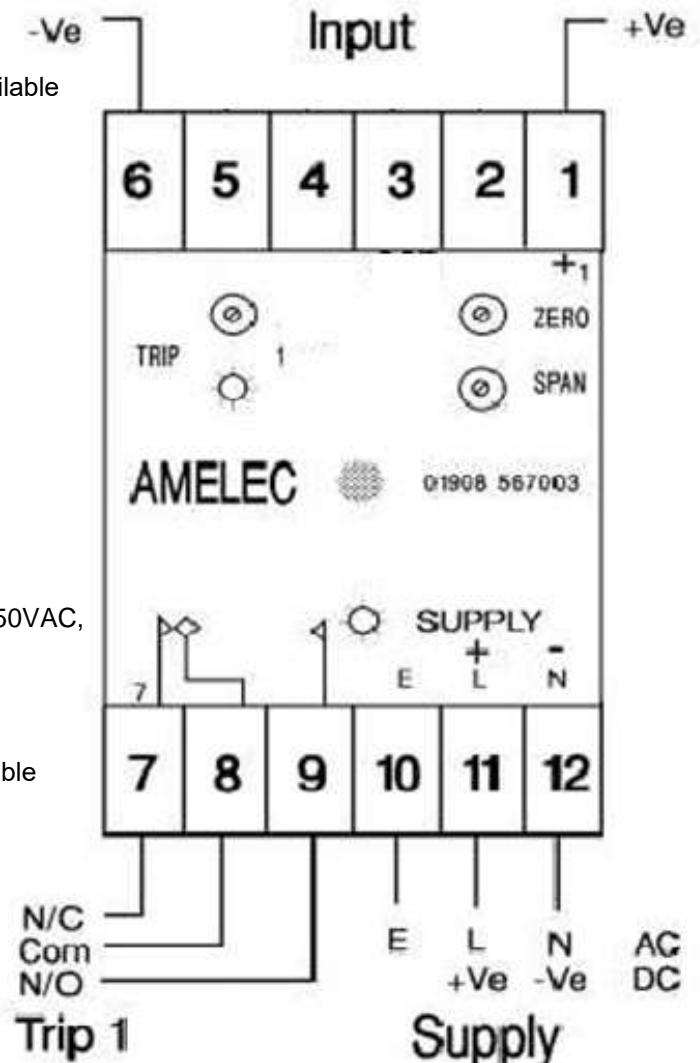
('K' option to the highest Generic Industrial levels)

#### Dimensions/Mounting

50w x 75h x 110d mm, Din Rail (TS35) **or** Surface

('K' option enclosure = 182d mm)

### WIRING



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