

## ADT139XL Process Deviation / Differential Trip Amplifier

- 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 available ('K' option)
- Front fascia Digital Display available ('DI' Option)
- Non-Smart / Non-uProcessor, Type A instrument
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Modulus Input(s)

Any current or voltage drives that can be terminated in a PI network to produce 400mV spans. Inputs share a common internal 0V reference, so should be isolated from each other at source as std.

#### Latching Output Trip Relay Contacts

Modulus Trip Relay output is a set of D.P.C.O contacts, rated at 250VAC, 2A, 100VA resistive.

TRIP = either input A>B or B>A, with a 0.5-50% span Deviation set point adjustable via the front fascia 15-turn blindset potentiometer, Red LED indication of relay status: **ON** Energised / healthy, **Extinguished** in Trip / De-energised state as std.  
(Other special Customising options are available on request)

#### Trip Relay RESET

Via front fascia Pushbutton, once process conditions are healthy

#### Isolation

1000V RMS\* Input(s)/Contacts/Supply/Earth

\*(500Vdc when RFI protection option 'K' is specified)

#### Performance

Trip settability:  $\pm 0.5\%$   
 Trip repeatability:  $\pm 0.1\%$   
 Response time: <100mS (0-100% input step change)  
 (Higher Speed <50mS response 'HS' option available)  
 Deadband: 1% span hysteresis as std  
 Input O/C Response: Downscale drive

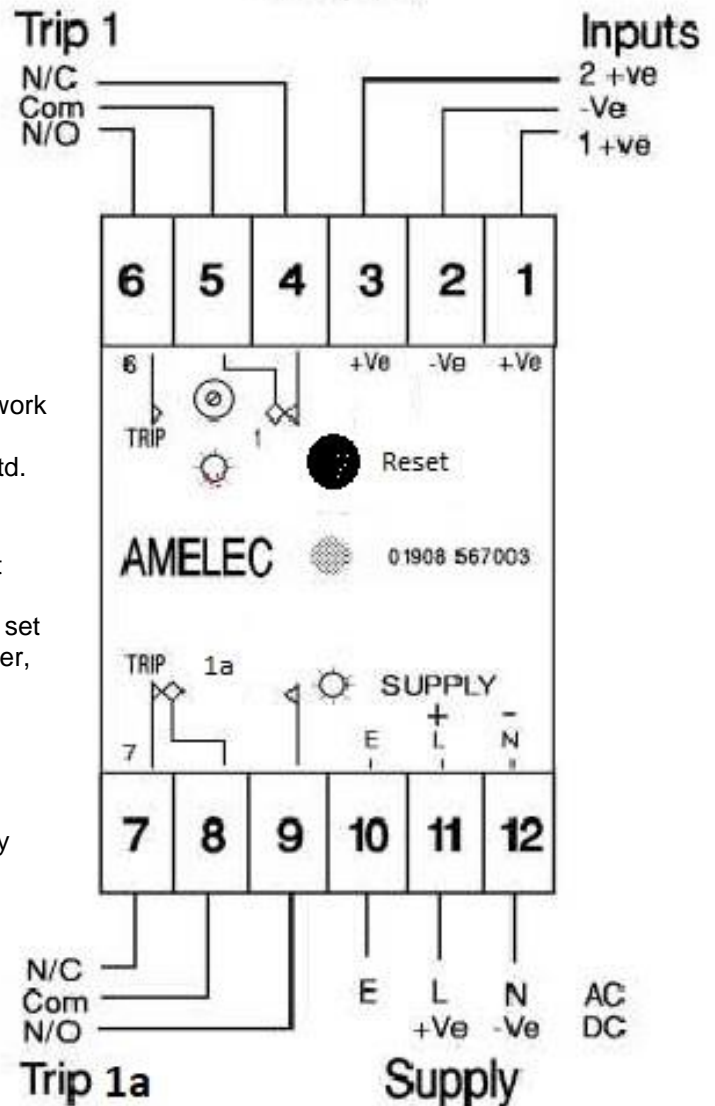
#### Environmental Conditions

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)  
 ('K' option to the highest EMC/EMI/RFI Generic Industrial levels)

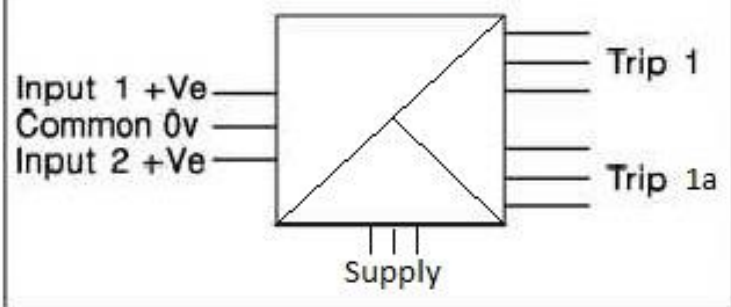
#### Mounting / Dimensions

Din Rail (TS35) **or** Surface by corner fixing holes as std  
 50w x 75h x 110d mm enclosure  
 ('DI' option enclosure =145d mm, 'K' option = 182d mm)

### WIRING



### Single Trip (DPCO)



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