

ADT139 Process Deviation / Differential Trip Amplifier

- Suitable for SIL 1, SIL 2 & 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 available ('K' option)
- Front fascia Digital Display available ('DI' Option)
- Non-Smart / Non-uProcessor, Type A instrument
- AMELEC Standard 10 year warranty

Technical Specifications

Inputs

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

Outputs

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

TRIP 1 = A>B, TRIP 2 = B>A, with 1-50% span Deviation set points adjustable via 15-turn blindset potentiometers, Red LED indication of each relay status: ON Energised / healthy, Extinguished in Trip / De-energised state as std.

('X' options: Single Trip Relay output for input A or B deviation & Other special Customising options are available on request)

Isolation

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

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

Performance

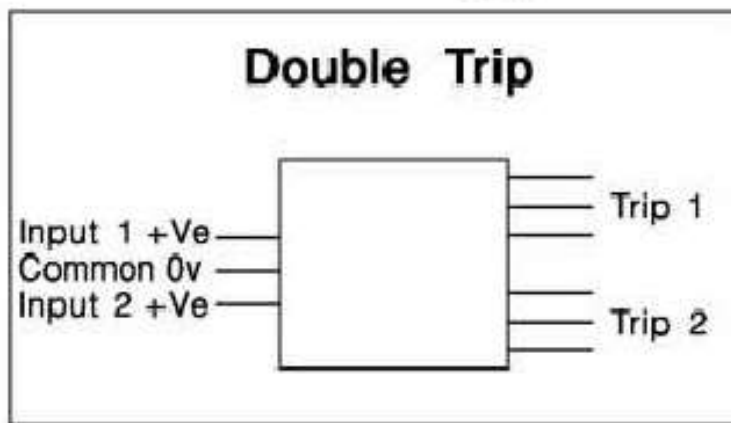
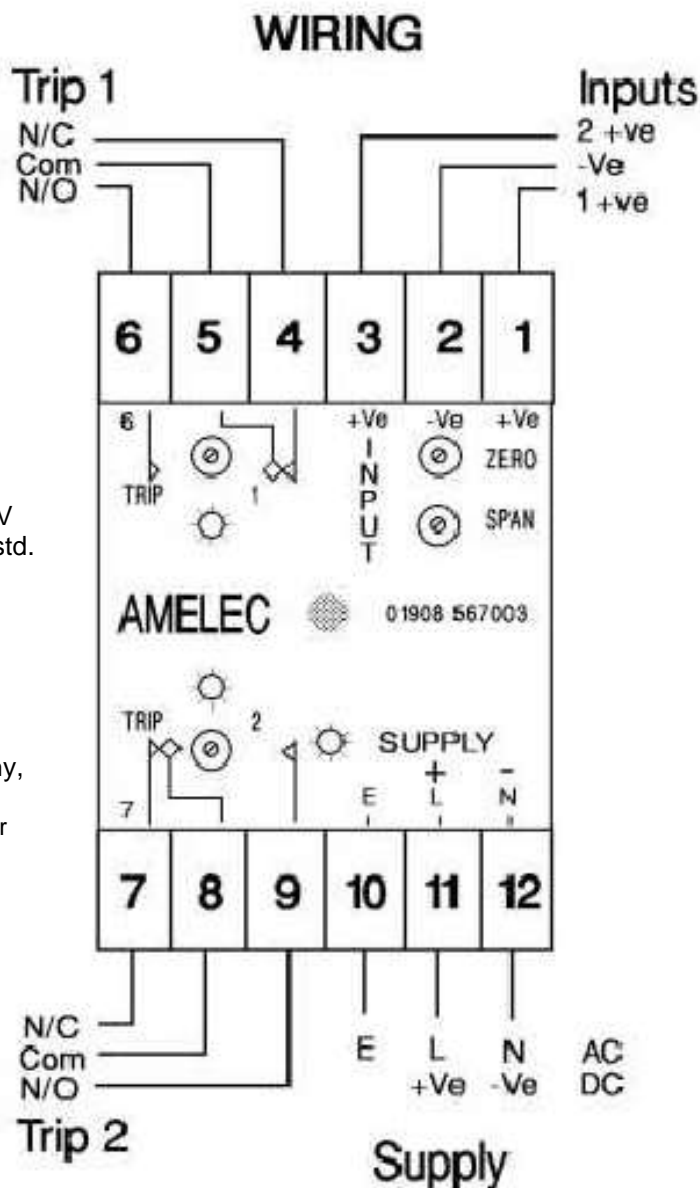
- Trip settability: $\pm 1\%$
- Trip repeatability: $\pm 0.1\%$
- Response time: <100mS (0-100% input step change)
(Fixed or Adjustable time Delay into Trip 'T' option available)
- Deadband: 1% span hysteresis as std
(Adjustable 1-20% span hysteresis 'V' option available)
- Input O/C Response: Downscale 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)



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