

ADT139MX 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

Inputs

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.

Outputs

Trip 1 Relay output is a set of S.P.C.O contacts, Trip 2 Relay output is a set of C.O contacts (N/O or N/C may be specified), all contacts rated at 250VAC, 2A, 100VA resistive.

TRIP 1 = A>B, TRIP 2 = B>A, with 1% up to 50% span Deviation set points (*To be specified*), 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 either input A or B deviation & Other special Customising options are available on request)

Isolation

1000V RMS* Input(s)/Excitation/Contacts/Contact/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 as std

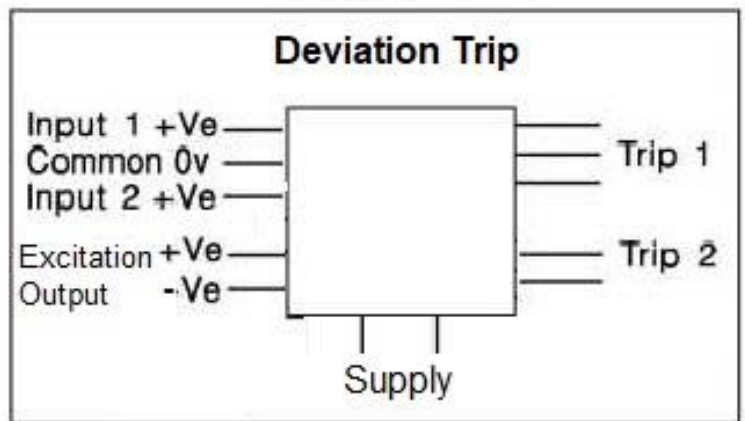
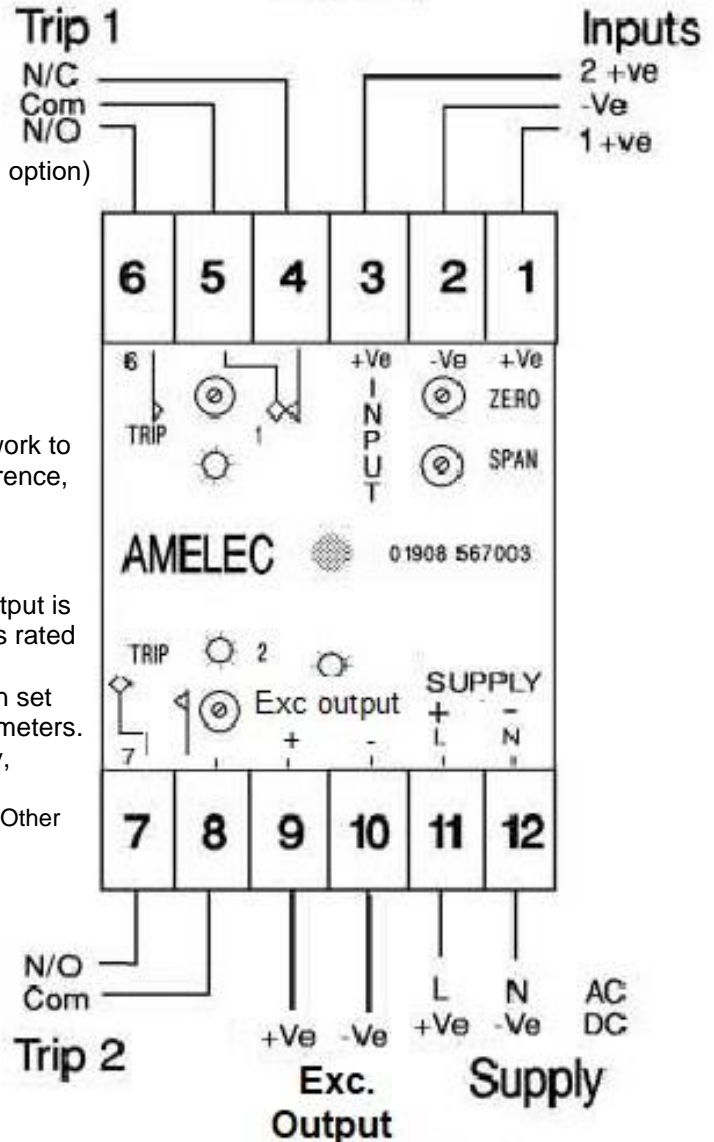
Environmental Conditions

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



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