

ADT141 Resistance Input Trip Amplifier

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-smart / Non-uProcessor based, Type A instrument
- Supply Voltage options: 20Vac $\pm 20\%$
115Vac $\pm 20\%$
240Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option: (20-3000MHz $\leq 10V/m$, 20-1000MHz $\leq 30V/m$)
- Fixed or Variable Time Delay into Trip available ('T' option)
- Latching Relay with Local or remote Reset available ('L' option)
- Front fascia Digital Display available ('DI' Option)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Resistance/ Slidewire/ Thermistor/ Potentiometer input variation ranges up to 12K ohms with a min Span of 10 ohms as std. If the Input is from a slidewire device the end to end resistance should be greater than 100 Ω . Version available for conductive plastic potentiometers & higher input resistance ranges for 3-wire pots or other Special applications ('X' option) (Four-wire input option is also available on request – '4W' option).

Output

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, Extinguish in Trip/De-energised state)

Isolation

1000V RMS* Input/Contacts/Supply/Earth
*(500Vdc if RFI option 'K' is specified)

Performance

Trip settability: $\pm 1\%$
Trip repeatability: $\pm 0.1\%$
Response time: <400mS
Deadband: nom 1% of Span Hysteresis as std.
(Variable hysteresis 0.5%-20% available - 'V' option)
Input Open Circuit response: Upscale drive as std
(O/C Downscale drive available as special request ('X' option))

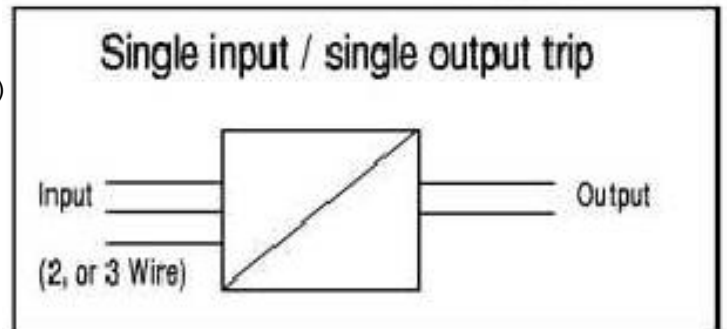
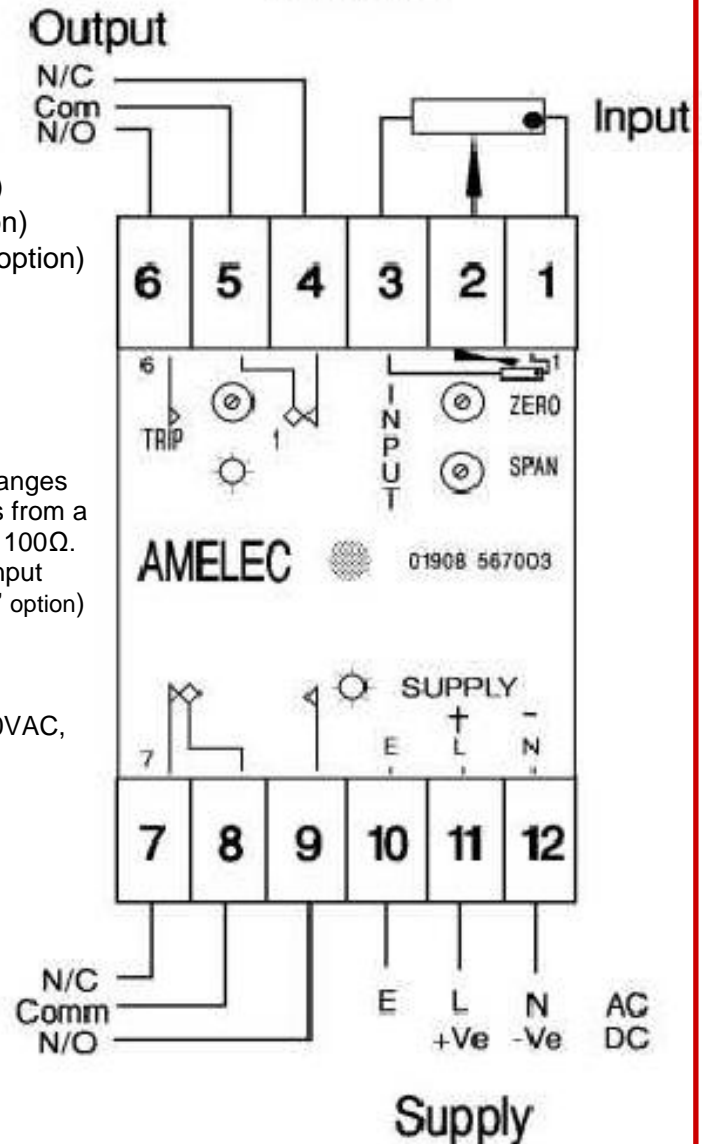
Environmental Conditions

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 Generic Industrial levels)

Dimensions/Mounting

50w x 75h x 110d mm, Din Rail (TS35) **or** Surface.
(*DI' option enclosure= 145d mm, 'K' option enclosure = 182d mm)

WIRING



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