AMELEC
SIGNAL CONDITIONING

ADT121DI (BI)(V)(L)(X)(K) RTD Trip Amplifier with Display

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508) safety instrumented system (SIS) loop applications
- Non-Smart/Non-uProcessor, Type 'A' instrument
- Supply voltage options: 115Vac ±20%
                            240Vac ±20%
                            24Vdc ±10%
                            48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 ('K' option) available
- AMELEC Standard 10 year warranty

Technical Specifications

Input
Any 2 or 3 Wire PT100 resistance temperature sensor.
Third wire compensation is standard to overcome any lead resistance variation.
(PT130 / PT500 / PT1000 & 4 wire input options also available)

Relay Output
A set of double pole changeover contacts (DPCO), rated at 250VAC, 3A, 100VA (resistive) as std.
Latching relay 'L' option available with local or Remote Reset.
Red LED indication of Relay status: ON Energised/ healthy, Extinguished in Trip/ De-energised state as std.
(Red/Green BI-colour LED indicator optional)
Display of the input Temperature on a 3½ digit LCD as std
(Up to 4 digit Red LED Display option available if preferred)
Front fascia Read button or Toggle switch shows the trip set point within the calibrated scale range.

Isolation
1000V RMS*Input/Contact(s)/Supply/Earth
*(500vdc when RFI protection 'K' option is specified)
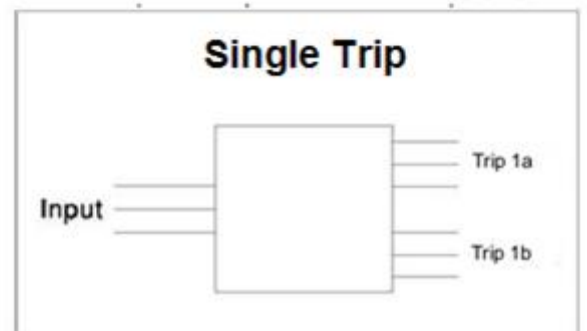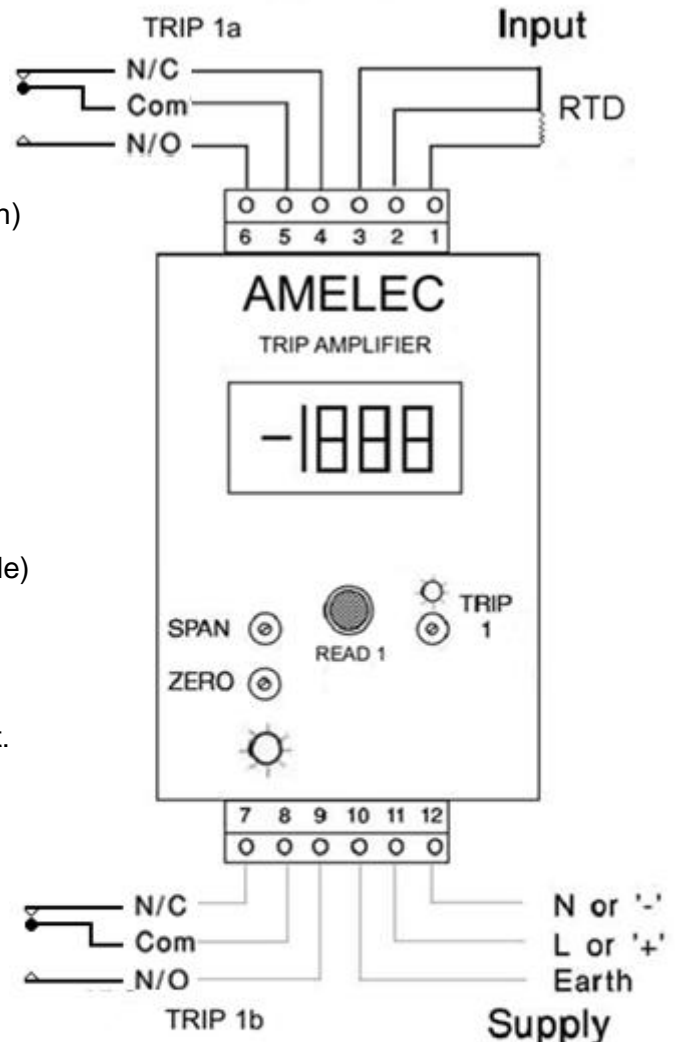
Performance
Hysteresis: nom 1% span std ('V' option = Variable 1-20% span)
Trip settability: ±0.1%
Trip repeatability: ±0.1%
Response time: <400mS
Input O/C response: Upscale drive as standard
(O/C response Downscale drive option 'X' also available)
Fail Safe Relay: De-energise on Trip & Loss of Power 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 Generic Industrial levels)

WIRING

Mounting / Customer Termination
DIN Rail (TS35) or Surface by Seismic Keyhole Plate and Front of Panel options all available.
Fixed screw terminals as std
(Plug-in terminal blocks optional)

Dimensions
50w x 75h x 145d mm ('K' option = 182d mm)

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