

## ADT116 Process mV input Dual Trip Amplifier

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508) Safety Instrumented System (SIS) loop applications
- Supply voltage options:
  - 20Vac ±20%
  - 115Vac ±20%
  - 240Vac ±20%
  - 24Vdc ±10%
  - 48Vdc ±10%
  - 110Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 option 'K' available (20-3000MHz ≤10V/m, 80-1000MHz ≤30V/m, 889MHz/1.75GHz ≤40V/m)
- 24Vdc @22mA two-wire Input loop Excitation option 'M' available
- Fixed or Variable Time Delay into Trip 'T' option available
- Latching Relay(s) option 'L' with local Reset facility available
- Front fascia Digital Display 'DI' option available
- Non-smart / Non-uProcessor based, Type A instrument
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Any mV (DC) up to 300mV span.  
Typically, 0 - 100mVdc (impedance ≥200KΩ)

#### Outputs

Each trip output is a set of changeover contacts, rated at 250VAC, 2A, 100VA resistive.  
Relays De-energise on Trip & Fail Safe on loss of power as std  
Red LED indication of each relay status  
(ON Energised/healthy, Extinguish in Trip/De-energised state)

#### Isolation

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

#### Performance

Trip settability: ±1%  
Trip repeatability: ±0.1%  
Response time: <100mS (0-100% input step change)  
Deadband: 1% Span as std.  
(Variable hysteresis 0.5%-20% span available – 'V' option)  
Input Open Circuit response: Downscale drive as std  
(O/C Upscale drive available on request – 'X' option)  
Consumption: <3VA

#### 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 by corner fixing holes as std

### WIRING

