

## ADT371 Rate of Change Trip Amplifier

- Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Supply Voltages: 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)
- Front fascia Digital Display available ('DI' option)
- Non-Smart / Non-uProcessor based, Type A instrument
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Any current or voltage (DC) drive that can be terminated in a PI network to produce a 400mV span. Current up to 100mA max input (passive port), Voltage up to 150Vdc max (impedance  $\geq 1M\Omega$ )  
Typical examples: 0-1mA, 0-10mA, 4-20mA, 0-5V, 0-10V, 0-100Vdc.

#### Rate of Change Trip Function

In a typical high trip application, the relay will change state for a rapid rising input signal. The Set point is adjustable over a rate of change range customised to suit the specific application.

#### Relay output

D.P.C.O contacts, rated 250Vac 2A 100VA resistive  
The unit is monitoring for rapid change of the input signal, either High Trip rising signal or Low Trip for falling signal may be specified.

Front fascia Red LED to indicate relay status, **ON** when relay is Energised/healthy, **OFF** when De-energised in over acceleration Trip/Alarm state.

#### Isolation

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

#### Performance

Trip settability:  $\pm 1\%$   
Trip repeatability:  $\pm 0.1\%$   
Response time:  $< 100\text{mS}$  (0-100% step change)  
Deadband: 1% Span hysteresis as std.

#### Environmental Conditions

Storage Temperature:  $-40$  to  $+70^\circ\text{C}$   
Operating Ambient:  $-15$  to  $+55^\circ\text{C}$   
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

50w x 75h x 110d mm

#### Mounting

Din Rail (TS35) **or** Surface (by corner fixing holes)

Tel: 01908-567003 Email: [sales@amelec-uk.com](mailto:sales@amelec-uk.com) Visit: [www.amelec-uk.com](http://www.amelec-uk.com) Fax: 01908-566735

**AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ**

### WIRING

