

ADT371K Rate of Change Trip Amplifier

 Suitable for SIL 1, SIL 2 or SIL 3 rated (IEC61508) safety system loop applications

 Supply voltage options: 115Vac ±20% 240Vac ±20%

> 24Vdc ±10% 48Vdc ±10%

- RFI Protection to IEC61000-4-3:2006/A2:2010
- Front fascia LCD or LED digital Display available (DI option)
- 24Vdc @ 22mA two wire Input loop Excitation available (M option)
- 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.

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 to suit the application.

Relay output

D.P.C.O contacts, rated 250Vac 2A 100VA resistive The unit is monitoring for rapid change of the input signal

Front fascia Red LED to indicate relay status, ON when relay is energised healthy, OFF when De-energised in over acceleration Alarm status

(Latching Relay with local or remote reset available – L option)

Deadband

Standard 1% Span

(Adjustable hysteresis 0.5-20% span available - V option)

Protection

Isolation: 500V dc Input/Contacts/Supply/Earth RF Immunity: 20MHz-3GHz/5.25GHz ≤10V/m,

(80MHz-1GHz/5.6GHz <30V/m, 889MHz-1.75GHz <40V/m)

Performance

Trip settability: ±1%
Trip repeatability: ±0.1%
Response time: <100mS

Input open circuit response: Downscale drive as standard (O/C Upscale drive response available – X option)

Environmental Conditions

Storage Temperature: -40 to 70°C
Operating Ambient: -15 to 55°C
Relative Humidity: 5 – 95% RH

Trip 1a Input Screen N/C Input (-) Com N/O Input (+) 00000 6 5 4 3 2 1 AMELEC Front View (Ø) TRIP 1 SPAN (0) ZERO (0) Power on 8 9 10 11 12 000000 N/C N or '-' - Com L or '+' - N/O Earth Trip 1b Supply Single Trip

WIRING

Dimensions & Mounting Options

Input

Enclosure: 50w x 75h x 182d (mm) Mounting: Din Rail (TS35) as standard

Trip 1a

Trip 1b

Surface by Seismic keyhole plate & Front of Panel mounting options available on request. (Surface mounting plate Dims: 50w x 130h mm)

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