

ADT131K Process I/V Trip Amplifier with Single Set Point

 Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications

Supply voltage options: 115Vac ±20%

240Vac ±20% 24Vdc ±10%

48Vdc ±10%

Non-Smart/Non-uProcessor based, Type A instrument

RFI Protection to EN 61000-4-3:2006/A2:2010

 Front fascia LCD or LED Digital Display options available ('DI' option)

 24Vdc @ 22mA two wire Input loop Excitation available ('M' option)

AMELEC Standard 10 year warranty

Technical Specifications

<u>Input</u>

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

Deadband

Nom. 1% of Span hysteresis as standard (Adjustable hysteresis 0.5-20% span available – 'V' option)

Relay Outputs

Trip output is a set of DPCO contacts, rated at 250VAC, 2A, 100VA resistive as std. (Other ratings available – 'X' option)

Latching Relay with local or remote Reset available – 'L' option Fixed or Variable Time Delay into Trip options available – 'T' option

Protection

Fuse: 250mA as standard

Isolation: 500Vdc 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 (0-100% step change)

Consumption: <3VA

Input Open Circuit response: Downscale drive as standard (O/C Upscale drive response available if required – '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 (Generic Industrial levels)

Dimensions

Standard enclosure: 50w x 75h x 182d (mm)

Single Trip

Trip 1a

Input

Earth
Supply

Trip 1a

Trip 1b

7 8 9 10 11 12 O O O O O O

WIRING

0 0

6 5 4 3 2

AMELEC

Front View

(Ø) TRIP 1

Power on

Input

Screen

Input (-)

Input (+)

Trip 1a

SPAN (0)

ZERO (0)

N/C

Com

N/C

Com

N/O

Mounting Options

Heavy duty Din Rail (TS35) as standard

Surface by Seismic keyhole plate & Front of Panel mounting options also available on request.

(Surface mounting plate Dims: 50w x 130h mm)

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