

ADT131M Process Trip Amplifier

- Suitable for any process input
- Supply voltage: 24Vdc / 115Vac / 230Vac
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)

APPLICATION

Any application where process input is required to be monitored and raise alarm if the input rises or falls more than the set point.

TECHNICAL SPECIFICATION

FUNCTION

Trip = Input < Set point (Low trip)
 Trip = Input > Set point (High Trip)
 Any combination of High/Low can be specified.

INPUT

TB1(+)/2, Active Input: Two wire 4 – 20mA @ 24Vdc
 TB2 (+)/3, Passive input: 4 – 20mA
 (Selected by Terminals)

OUTPUT

1 x DPCO contacts, rated at 250VAC, 2A, 100VA
 resistive.
 (Relay Normally Energise, De-energised on trip)

CONTROLS

Zero / Span: 15 turn potentiometer to set internal input reference (Factory set).
 Trip 1: 15 turn potentiometer to set trip point in the range of 0 to 110%.

INDICATOR

Power ON: LED, Amber.
 Relay status: LED, Red.

PERFORMANCE

Trip settability: better than $\pm 1\%$
 Trip repeatability: better than $\pm 0.1\%$
 Response time: Typically < 400mS
 Dead band: Typically < 1%
 Power consumption: < 3VA

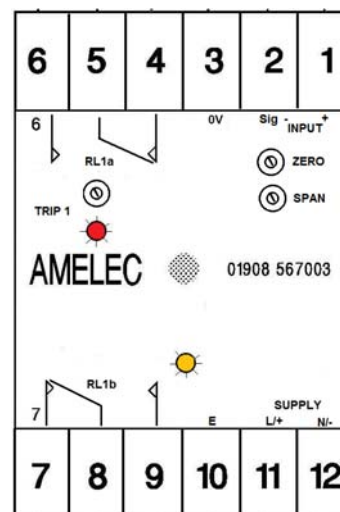
PROTECTION

Isolation 1000V RMS. Inputs/Contacts/Supply/Earth
 Internal Fuse.
 Failsafe Relay loss of power
 Input over range up to typically 300%.

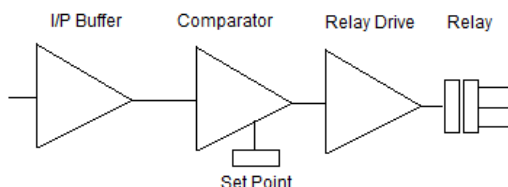
TERMINATION

24V +	1
Sig -	2
0V	3
RL1a-NC	4
RL1a-COM	5
RL1a-NO	6
RL1b-NC	7
RL1b-COM	8
RL1b-NO	9
Earth	10
Live / +	11
Neutral / -	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

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

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d
 Mounting: Din rail / Surface (optional Panel Mount)
 Weight < 300g

ADD ON / OPTIONS

DI: LCD display for local monitoring
 J : Input injection jack socket
 P: Test point (Trip set point monitoring)
 K: RFI protection to IEC61000-4-3
 Non standard Power supply ranges available