

ADT139TX Deviation Trip Amplifier with Time Delay

- 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 two inputs are required to be monitored and raise alarm if the inputs deviate from each other by more than the set point.

TECHNICAL SPECIFICATION

FUNCTION

Deviation Trip = Input 1(A) < Input 2 (B)
Real time trip, 2 second delay on reset.

INPUT

DC current / voltage can be specified in the range of:
Current up to 100mA max (Passive)
Voltage 0.4 to 100V max
Typical input: 4 - 20mA (Passive)
Note: Inputs will have Common 0V.

OUTPUT

DPCO contacts, rated at 250VAC, 2A, 100VA resistive.

CONTROLS

Zero / Span: 15 turn potentiometer to set internal input reference.
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%

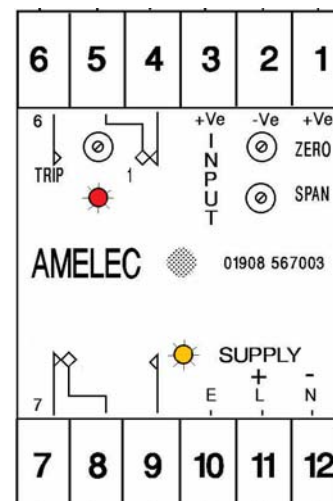
PROTECTION

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

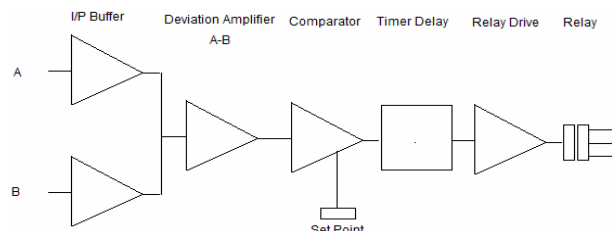
TERMINATION

INPUT 1 +	1
COMM 0V	2
INPUT 2 +	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 IEC801-3
Non standard Power supply ranges available