

ADT131MX Current Generating/Coil Integrity Trip Amplifier

- Suitable for coil integrity monitoring & alarm applications
- Supply options: 24Vdc / 48Vdc / 115Vac / 230Vac
- Amelec standard 10 year warranty
- Suitable for SIL 1 & SIL 2 rated safety applications, as 1001 architecture HFT:0 (IEC 61508-2:2010)

APPLICATION

Monitor integrity of a coil and raise alarm if the sensing current falls below set point level / coil goes open circuit.

TECHNICAL SPECIFICATION

OUTPUT

TB1(+)/2, Active Output: adjustable 4 – 20mA

TRIP / RELAY

Trip = Output < Trip Set point (Low trip)
1 x SPCO contacts, rated at 250VAC, 2A, 100VA resistive.
(Relay De-energised in Low Tripped state, LED Off)

CONTROLS

Zero / Span calibration: Internal pots/ factory set
Output: 15-turn blindset potentiometer to set sensing Current level anywhere over the 4-20mA range.
Trip 1: factory set at 3.8mA, but with 15-turn blindset potentiometer to set Low trip point over the range of -10% to +110% span.

INDICATOR

Power ON: LED, Amber (ON Healthy / OFF Lost Supply)
Relay status: LED, Red (ON Healthy / OFF Low Trip)

PERFORMANCE

Trip settability: better than $\pm 1\%$
Trip repeatability: better than $\pm 0.1\%$
Response time: Typically < 200mS
Dead band: Typically < 1%
Power consumption: < 3VA

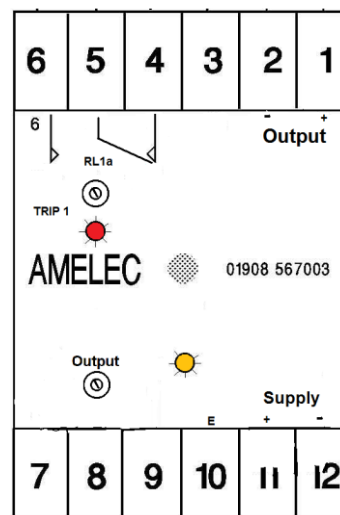
PROTECTION

Isolation 1000V RMS. Output/Contacts/Supply/Earth
Internal Fuse.
Failsafe Relay loss of power

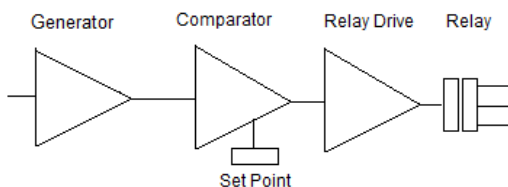
TERMINATION

Output +	1
Output -	2
Scn	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 by corner fixing holes
Weight < 300g

ADD ON / OPTIONS

DI: LCD display for local monitoring
P: Test point (Output or Trip set point monitoring)
K: RFI protection to IEC61000-4-3 (20-1000MHz, $\leq 10V/m$)
Non standard Power supply ranges available