

ADW131-3W 3 Wire Loop Powered Trip Amplifier

- Suitable for 4-20mA Loops
- Loop Voltage supply: 21 to 30Vdc
- Amelec standard 10 year warranty
- Suitable for SIL1 & SIL2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0).

APPLICATION

Any application where 4-20mA is required to be monitored and auxiliary supply is not available.

TECHNICAL SPECIFICATION

FUNCTION (either / or)

Trip1 High = Input > Set point 1
Relay De-Energises (Fail safe), LED Extinguished

Trip1 Low = Input < Set point 1
Relay De-Energises (Fail safe), LED Extinguished

INPUT

Minimum loop currents: 15mA
Maximum loop currents: 35mA
Minimum loop voltage: 21V
Maximum loop voltage: 30V

OUTPUT RELAYS

SPCO contacts, rated at 250VAC, 2A, 30VA resistive.

CONTROLS

Trip 1: 15-turn blindset Set Point potentiometer

INDICATORS

Power **ON**: LED, Amber.
Relay status: LED, Red. (**ON** Energised)

PERFORMANCE

Trip settability: $\pm 1\%$
Trip repeatability: $\pm 0.1\%$
Response time: Typically $\le 100\text{ms}$ (0-100% step)
Dead band: Typically 1% span hysteresis as std
Input loop O/C response: Downscale drive as std

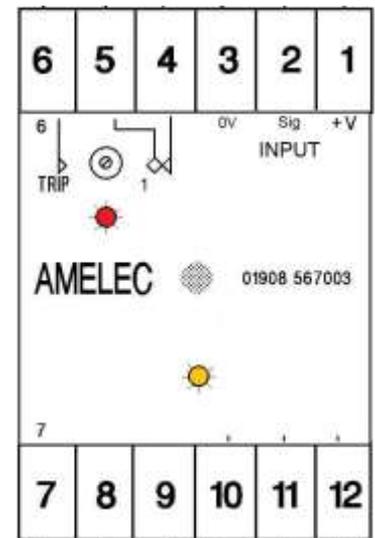
PROTECTION

Isolation 1000V RMS. Input/Contacts
Internal Fuse.
Failsafe Relay De-energises on loss of Input loop supply
Input over range up to typically 120%.

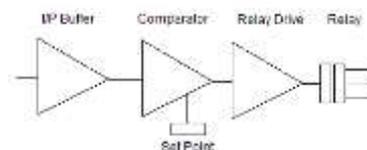
TERMINATION

24Vdc +	1
Sig (4 - 20mA)	2
COMM 0V	3
RL1-NC	4
RL1-COM	5
RL1-NO	6
	7
	8
	9
	10
	11
	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 (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm
(145d with 'DI' Option, 182d with 'K' option)
Mounting: Din rail / Surface (optional Front of Panel mounting)
Weight < 300g

ADD ON / OPTIONS

DI: 3.5 Digit LCD display (Input only).
P: Test point (Trip set point monitoring)
K: RFI protection to EN 61000-4-3:2006/A2:2010
X: Input loop O/C response Upscale drive