

AHT612 Thermocouple Trip Amplifier

- Suitable for any BS4937 Thermocouple input
- Supply voltage 21 to 30Vdc
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)

TECHNICAL SPECIFICATION

FUNCTION

High Trip: Relay de-energise on rising temperature.
Low Trip: Relay de-energise on falling temperature.

INPUT

Can be configured to accept mV signal from thermocouple Type S, R, B, J, K, T, E, N and other special types also available on request.

Automatic Cold Junction compensation fitted as standard.

Typical input: 0 – 500 Deg °C / TC type “K”

OUTPUT

The Trip output is a pair of changeover contacts SPCO per set point, rated at 250VAC, 2A, 100VA (resistive).

CONTROLS

Zero / Span: 15 turn potentiometers, only fitted when used with common display.

Set point: 15 turn potentiometer to set Trip point within set input range.

INDICATOR

Amber Led: power ON indicator
Red Led: Relay status indicators

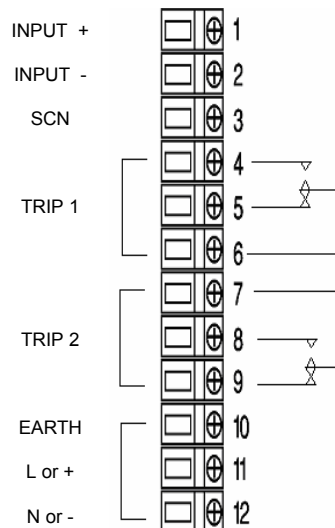
PERFORMANCE

Trip repeatability: < ±0.1%
Response time: Typically < 400mS
Trip settability: < ±0.1%

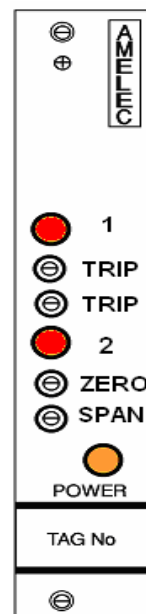
PROTECTION

Isolation 1000V RMS*. Input/Contacts/Supply/Earth
*500VDC if RFI option (K) is specified.
Internal Fuse.
Fail safe on loss of power
Input over range typically at 300%.

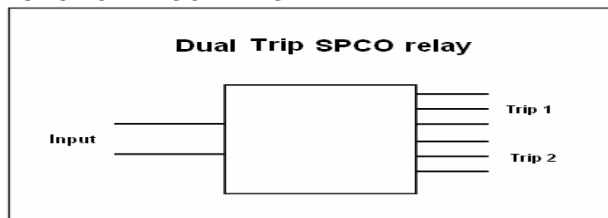
TERMINATION



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

Card 3U high 4E wide
Mounting 19" rack / 84E wide (See rack GA for details)
Card weight < 200g

ADD ON / OPTIONS

DI: Common 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