

AHT612-P-RIS Thermocouple Trip Amplifier

- Suitable for any BS4937 T/C type input
- Supply voltage 21 to 30Vdc
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)
- RIS ET8205W Series Replacement Card.

TECHNICAL SPECIFICATION

FUNCTION

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

INPUT

Can be configured to accept mV signal from any thermocouple.
Type S, R, B, J, 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

Each Trip output is a pair of changeover contacts SPCO, rated at 250VAC, 3A, 100VA (resistive).

CONTROLS

Zero / Span: 15 turn potentiometers, used to set internal reference 0 – 2Vdc for 0 to 100% input.

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

TEST POINT

Trip set points can be monitored using the supplied test plug on any standard DVM. 0 – 2Vdc for 0 – 100%.

INDICATOR

Amber Led: power ON indicator
Red Led: Trip status indicator
LED Off / Relay Energised = Healthy Condition
LED ON / Relay De-energised = Trip Condition

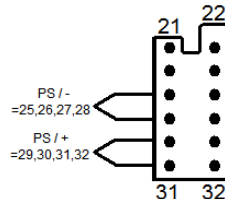
PERFORMANCE

Trip repeatability: $< \pm 0.1\%$
Response time: Typically $< 400\text{ms}$
Trip settability: $< \pm 0.1\%$
Hysteresis: 1%

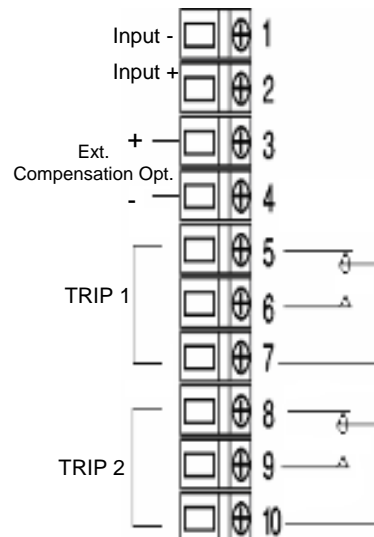
PROTECTION

Isolation 1000V RMS*. Input/Contacts/Supply/
Internal Fuse.
Fail safe on loss of power (Relay de-energised)
Input over range typically at 300%.

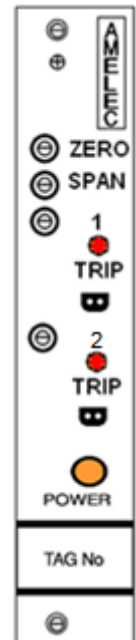
Internal 24Vdc
SUPPLY BUSS



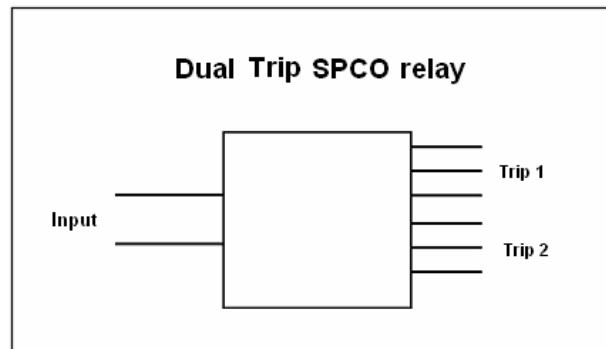
TERMINATION



FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIROMENTAL 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 $< 200\text{g}$

ADD ON / OPTIONS

DI: Common LCD display for local monitoring
J: Input injection jack socket
P: Test point (Trip set point monitoring)
Non standard Power supply ranges available