

AHT621-P-RIS-ET8274 RTD Trip Amplifier with single set point

- Non-Smart/Non-uProcessor based Type A instrument
- Nom 24Vdc Supply voltage (21-30Vdc)
- AMELEC Standard 10 year Warranty
- Suitable for SIL 2 rated (EN 61508-2) safety system loop applications, as 1oo1 architecture (HFT:0)
- RIS ET8274/8274A Series Replacement Card.

TECHNICAL SPECIFICATION

FUNCTION

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

INPUT

Any 2 or 3 wire PT100 Resistance Temperature sensor.
Lead resistance compensation as standard.
Typical input: 0 – 120 °C / PT100, 3-wire connection
(PT500 or PT1000 & 4 wire input options also all available)

OUTPUT

Trip output is a set of double pole changeover contacts (DPCO), 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 Temp range.

TEST POINT

Trip set point can be monitored using the supplied test plug on any standard DVM. 0 – 2Vdc represents 0 – 100% temperature range.

INDICATOR

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

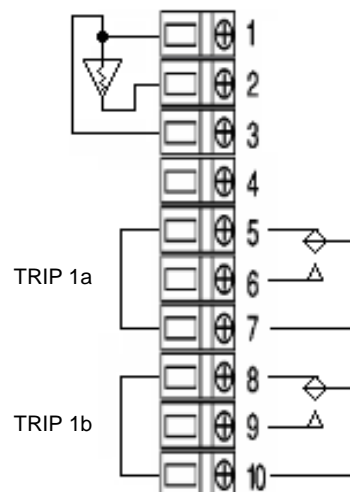
PERFORMANCE

Trip repeatability: < ±0.1%
Response time: Typically <400mS
Trip settability: < ±0.1%
Hysteresis: Fixed nom1% span Deadband as std
Input O/C response: Upscale drive as std
(Downscale drive option 'X' available if application requires)

PROTECTION

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

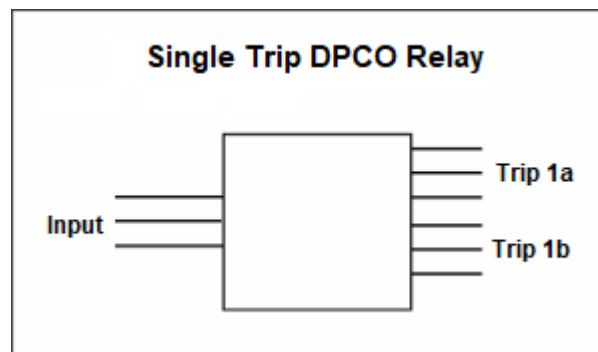
TERMINATION



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 (Non-Condensing)
EMC: 2014/30/EU , EN 51326-1: 2013 (Controlled EM)

MOUNTING / DIMENSION

Loose instrument Card with 3U high 4E wide Front plate
Mounting 19" rack / 84E wide (3U high RIS rack)
Card weight < 200g

ADD ON / OPTIONS

X: Input O/C response - Downscale drive
V: Variable 1-20% Span Trip Hysteresis, either Trip 1 or 2
2V: Variable 1-20% Span Trip Hysteresis, both Trips 1 & 2