

AHT632X-P-RIS-ET8215 Process I/V Trip Amplifier

- Suitable for SIL 1 & SIL 2 rated (EN 61508) safety system loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor based, Type 'A' instrument
- Supply voltage 21-30Vdc
- AMELEC Standard 10 year warranty
- RIS ET8215 / 8215A Series Replacement Card.

TECHNICAL SPECIFICATION

TRIP FUNCTIONS

High Trip: Relay De-energise on rising I/V input
Low Trip: Relay De-energise on falling I/V input

INPUT

DC current / voltage can be specified in the range of:
Current up to 100mA max (Passive)
Voltage up to 150Vdc max
Typical input: 4 – 20mA (Passive port, impedance 20ohms)
Optional 24Vdc @ 22mA field loop Excitation (RIS 'E' option)

RELAY OUTPUTS

Each Trip Relay output is a set of single pole changeover contacts (SPCO), rated at 250VAC, 3A, 100VA (resistive) as std

CONTROLS

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

Set points: 15-turn potentiometers to set Trips within input range.

TEST POINTS

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

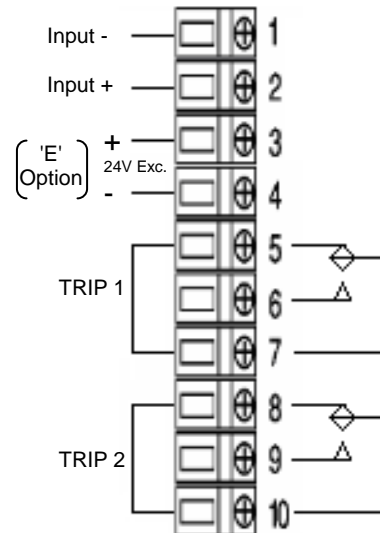
PERFORMANCE

Trip repeatability: < ±0.1%
Response time: <100mS (0-100% input step change)
Trip settability: < ±0.1%
Hysteresis: Fixed nom 1% span Deadband as std
Input O/C response: Upscale drive as std
(Downscale drive option may be specified if application requires)

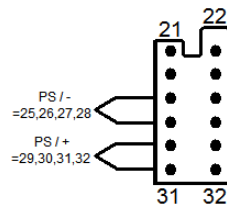
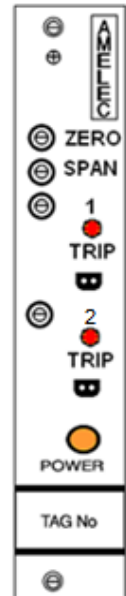
PROTECTION

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

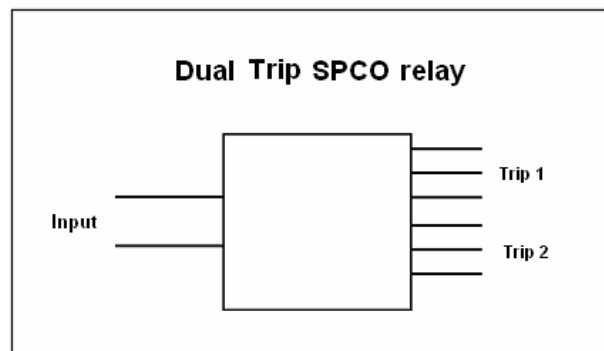
TERMINATION



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

Card 3U high 4E wide
Mounting 19" rack / 84E wide (3U High RIS rack)
Card weight < 200g

ADD ON / OPTIONS

M: 24Vdc @22mA field loop Excitation output (RIS 'E' option)
J: Input injection jack socket
V: Variable 1-20% Span Trip Hysteresis, either Trip 1 or 2
2V: Variable 1-20% Span Trip Hysteresis, both Trips 1 & 2
T: Fixed or Adjustable Time Delay into either Trip 1 or 2
2T: Fixed or Adjustable Time Delays into both Trips 1 & 2