

AHT631-P-RIS-ET8214(A)(E) Process I/V Trip Amplifier

- Suitable for any DC Voltage or Current input
- Supply voltage 21-30Vdc
- AMELEC Standard 10 year warranty
- Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- RIS ET8214/ 8214A Series Replacement Card.

TECHNICAL SPECIFICATION

FUNCTION

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

INPUT

DC current / voltage can be specified in the range of:
Current up to 100mA max (Passive)
Voltage 0.4 up to 150Vdc max
Typical input: 4 – 20mA (Passive port, impedance 20Ω)

OUTPUT

The Trip relay output is a pair of 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 set input range.

TEST POINT

The original individual card 3-digit bubble Displays are no longer available, so the Trip set point can now be monitored via a Test Point (& Test Plug/Lead supplied) on a DVM; 0 – 2Vdc for 0 – 100% range. Entire Replacement Rack/Trip amp's with a Common Display facility & individual card READ buttons is available if preferred.

INDICATOR

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

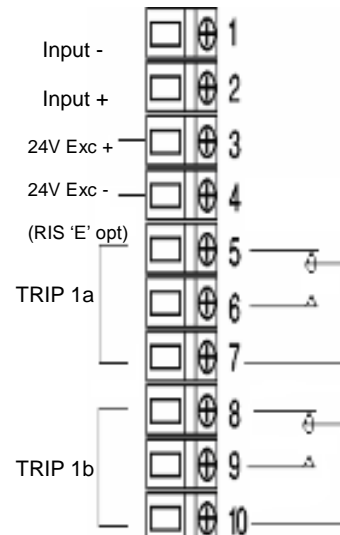
PERFORMANCE

Trip repeatability: < ±0.1%
Response time: Typically <100ms
Trip settability: < ±0.1%
Hysteresis: 1% span as std
(Variable 1-20% span hysteresis 'V' option available on request)
Input O/C response: Downscale drive as std
(Upscale drive 'X' option available on request)

PROTECTION

Isolation 1000V RMS Input/Contacts/Supply
Internal Fuse.
Fail safe: Relay De-energises in Trip & on Loss of Power
Input over range typically at 300%.

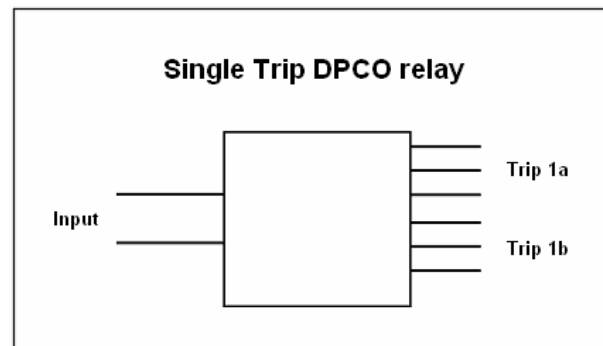
TERMINATION



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 front plate
Mounting: 3U high 19" (84E) wide RIS Rack
Card weight : < 200g

ADD ON / OPTIONS

X: Input O/C response Upscale drive
V: 1-20% span Variable Hysteresis
J : Input injection Jack socket
M: (or 'E'): 24Vdc @21mA Excitation output for field transmitter