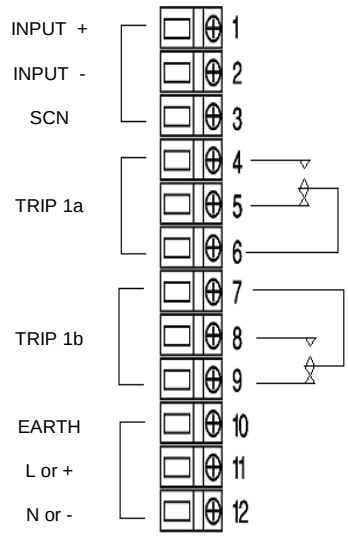
AMELEC SIGNAL CONDITIONING

AHT631(K) Process Trip Amplifier

- Suitable for SIL 1, SIL 2 & SIL 3 rated (IEC61508) safety system loop applications
- Suitable for any process I/V dc input signals
- Supply voltage 21 to 30Vdc
- Amelec standard 10 year warranty
- RFI Protection to IEC61000-4-3:2006/A2:2010 available with option 'K' rack housing

TERMINATION



FRONT VIEW

TECHNICAL SPECIFICATION

FUNCTION

High Trip: Relay De-energise on rising input.
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 to 100V max
Typical input: 4 - 20mA (Passive, impedance 20Ω)

OUTPUT

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

CONTROLS

Zero / Span: 15 turn potentiometer to calibrate input range.
Set point: 15 turn potentiometer to set Trip point within the calibrated range.

INDICATOR

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

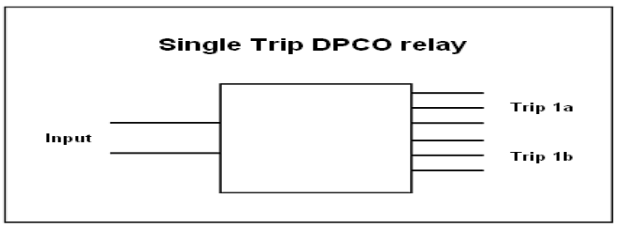
PERFORMANCE

Trip repeatability: < ±0.1%
Response time: Typically <100mS
Trip settability: < ±0.1%
Hysteresis: 1% span as std

PROTECTION

Isolation 1000V RMS*. Input/Contacts/Supply/Earth
*500Vdc if RFI option (K) housing is specified.
Internal Fuse.
Input O/C fail: Downscale std or Upscale on request.
Input over range typically at 300%.
Relay: Fail safe on loss of power

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 < 200g

ADD ON / OPTIONS

DI: Common LCD display for local monitoring
J : Input injection jack socket
P: Test point (Trip set point monitoring)
K: RF Immunity to IEC61000-4-3:2006/A2:2010
20MHz-3GHz/5.25GHz 10V/m, 80MHz-1GHz/5.6GHz 30V/m, (889MHz-1.75GHz 40V/m)
AC: 115Vac or 230Vac (±20%) supply options available