

AHT638M(V)(X) - Single Channel Quad Trip Amplifier

- Suitable for 2-wire process instrument loops
- Supply voltage 21 to 30Vdc as standard
- Amelec standard 10 year Warranty
- Suitable for SIL 1, SIL 2 & SIL 3 rated (IEC 61508-2) Safety System loop applications.

TECHNICAL SPECIFICATION

FUNCTION

High Trip: Relay to De-energise on rising input.
Low Trip: Relay to 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 (Active port, 24Vdc input loop Excitation for the two-wire field sensor/transmitter)

OUTPUT

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

CONTROLS

Zero / Span: 15 turn potentiometers, not fitted unless specified for use with a common display module within the 19" rack.

Set points: 15 turn potentiometer to set each Trip point within the calibrated input range.

DB1/2/3/4: 15 turn potentiometers to set Trip hysteresis within 1 -20% of Span, only fitted when 'V' option is specified.

INDICATOR

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

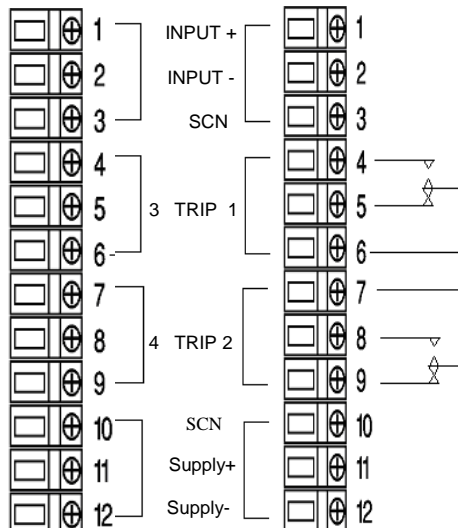
PERFORMANCE

Trip repeatability: < $\pm 0.1\%$
Response time: Typically <100mS
Trip settability: < $\pm 0.1\%$

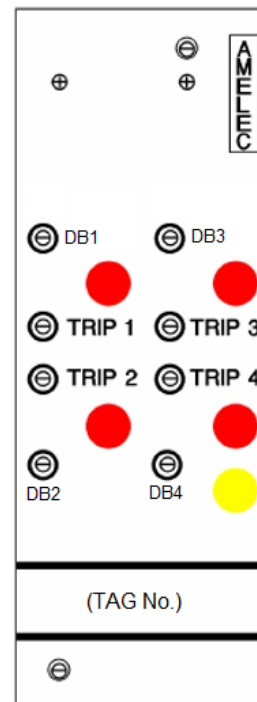
PROTECTION

Isolation 1000V RMS* Input/Contacts-Contacts/Supply/Earth (*500Vdc when RFI Protection option 'K' is specified).
Internal Fuse.
Fail safe Relays De-energise on Trip & loss of power
Input over range typically at 300%.
Input O/C response Downscale drive as standard (O/C response Upscale drive option 'X' available)

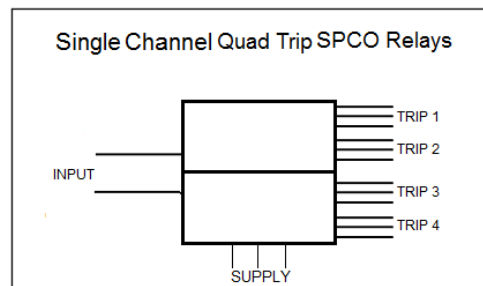
REAR TERMINATION



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

MOUNTING / DIMENSION

Card 3U high 8E wide
Mounting 19" rack / 84E wide (See rack GA for details)
Card weight < 300g

ADD ON / OPTIONS

DI: Common LCD display for local monitoring
J : Input injection jack socket
P: Test point (Trip set point monitoring)
K: RFI protection to IEC801-3
Non standard Power supply ranges available