AMELEC
SIGNAL CONDITIONING

AHT616 mV Dual Trip Amplifier

- Suitable for SIL 1 & SIL 2 rated (IEC61508) safety system loop applications, as 1oo1 architecture (HFT:0)
- Suitable for Millivolt input signals
- Supply voltage 21 to 30Vdc as standard (AC supply options available)
- RFI Protection to IEC61000-4-3:2006/A2:2010 available ('K' option)
- Amelec standard 10 year warranty

TECHNICAL SPECIFICATION

FUNCTION

High Trip configuration: Relay De-energises on rising mV input.
Low Trip configuration: Relay De-energise on falling mV input

INPUT

Any signal mV signal range up to 400mV max,
with minimum 4mV span.

OUTPUT

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

0-2Vdc signals to the READ buss line when a common Display module exists within the rack(s), to display the input & each trip set point (0-2V representing 0-100% input range)

CONTROLS

Zero / Span: 15 turn potentiometers, only fitted when used with common display.

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

INDICATOR

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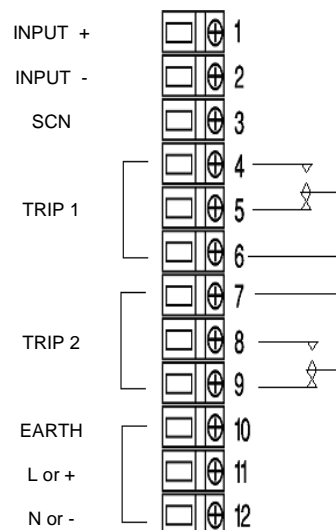Red Led: Relay status indicators

PERFORMANCE

Trip repeatability: < ±0.1%
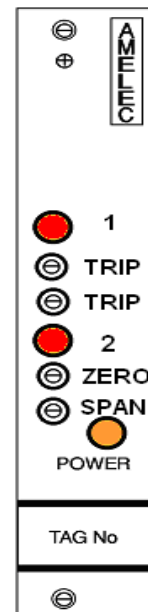Response time: Typically < 200mS
Trip settability: < ±0.1%

PROTECTION

Isolation: 1000V RMS* Input/Contacts/Contacts/Supply/Earth
*500VDC if RFI option (K) is specified.
Fail safe: Relays De-energise on loss of power
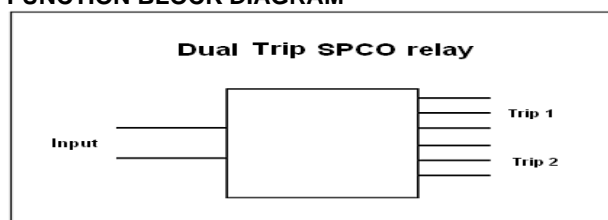Input over range: typically at 300%
Internal Fuse.

TERMINATION   FRONT VIEW

FUNCTION BLOCK DIAGRAM

Dual Trip SPCO relay

Input

Trip 1

Trip 2

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

J : Input injection jack socket
P: Test point (Trip set point monitoring)
K: RFI protection to IEC801-3/IEC61000-4-3:2006/A2:2010
X: READ output facility for monitoring set points on common Display & Non standard Power supply ranges available