

AHT681 AC Frequency Trip Amplifier

- Suitable for combinations of Pulse/AC Frequency inputs
- Supply voltage 21 to 30Vdc
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)

TECHNICAL SPECIFICATION

FUNCTION

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

INPUT

Option of sine, square or sawtooth waveform
Minimum 0 to 100%: 25Hz, Maximum 10KHz

OUTPUT

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

CONTROLS

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

Set point: 15 turn potentiometer to set Trip point within set input range.

INDICATOR

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

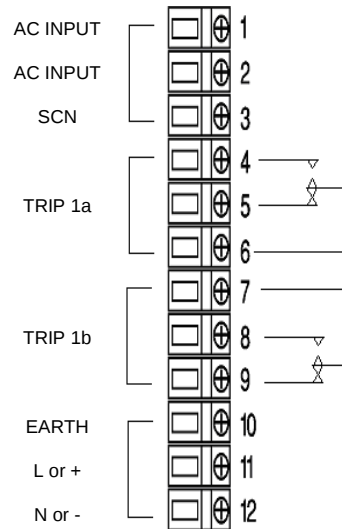
PERFORMANCE

Trip repeatability: $< \pm 0.1\%$
Response time: Typically $< 400\text{ms}$
Trip settability: $< \pm 0.1\%$

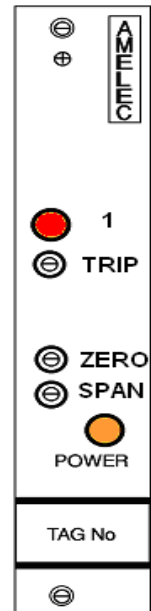
PROTECTION

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

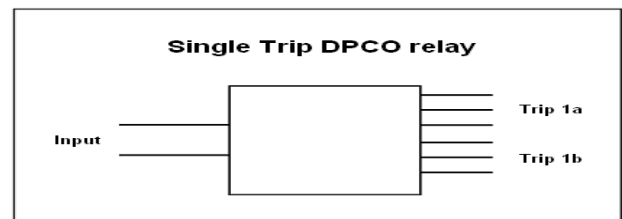
TERMINATION



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

MOUNTING / DIMENSION

Card 3U high 4E wide
Mounting 19" rack / 84E wide (See rack GA for details)
Card weight $< 200\text{g}$

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