AMELEC
SIGNAL CONDITIONING

AHM 716 Thermocouple Temperature Dual Trip Transmitter

- Suitable for any BS4937 Thermocouple input
- Supply voltage 21 to 30Vdc
- Powered by rack common supply BUSS
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)

TECHNICAL SPECIFICATION

FUNCTION

Temperature input signal Converter / Isolator

INPUT

Can be configured to accept mV signal from thermocouple Type S, R, B, J, K, T, E, N and other special types also available on request.

Automatic Cold Junction compensation fitted as standard.

Typical input: 0 – 500 Deg℃ / TC type "K"

OUTPUT

DC current or voltage specified in the range of:
Current up to 100mA max in Sink configuration (externally powered)
Current up 22mA max Source configuration (Internally powered)
Voltage any from 0.4 to 20V max @ up to 20mA.
Typical output range: 4 - 20mA (Source)

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

CONTROLS

Zero / Span: 15 turn potentiometers to calibrate Output.
Set point: 15 turn potentiometers to set Trip points within set Input range.

INDICATOR

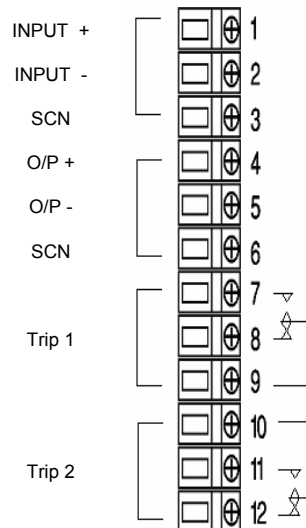Amber Led: power ON indicator
Red Led: Relay status indicators

PERFORMANCE

Response time: Typically < 400mS
Linearity : ±0.1%
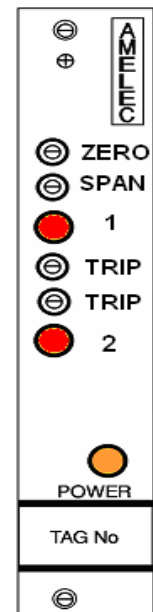Trip repeatability: < ±0.1%
Trip settability: < ±0.1%

PROTECTION

Isolation 1000V RMS*. Input/Output/Supply
 *500VDC if RFI option (K) is specified.
Internal Fuse.
Fail safe on loss of power
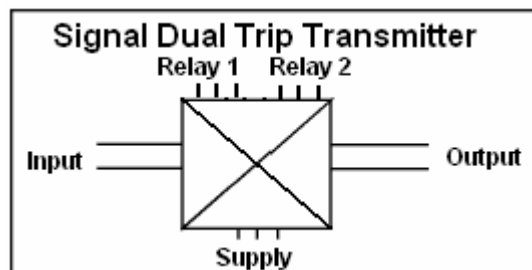Input over range typically at 300%.
Output Saturation 125%

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
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: RFI protection to IEC801-3
Non standard Power supply ranges available