

## AHM 725 RTD Differential Dual Trip Transmitter

- Suitable for BS1904 2 Wire RTD's
- 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

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

#### INPUT

From 2 x 2 wire resistance temperature sensors.

Third Wire compensation as standard

Typical input: Differential range 0 - 30 Deg °C over a working range of 0 – 200 Deg °C / PT100 2 wire RTD

#### 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 DPCO, rated at 250VAC, 2A, 100VA (resistive).

#### CONTROLS

Zero / Span: 15 turn potentiometers to calibrate Output.

Set points: 15 turn potentiometers to set Trip points within set Input range.

#### INDICATOR

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

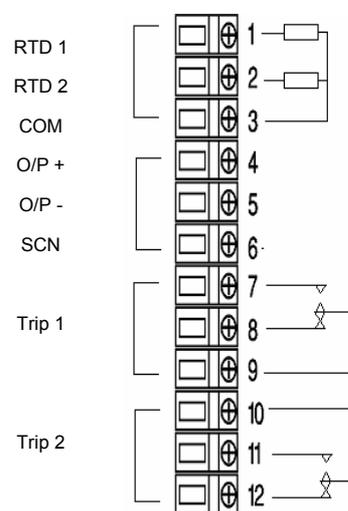
#### PERFORMANCE

Response time: Typically < 400mS  
Linearity :  $\pm 0.1\%$   
Trip repeatability: <  $\pm 0.1\%$   
Trip settability: <  $\pm 0.1\%$

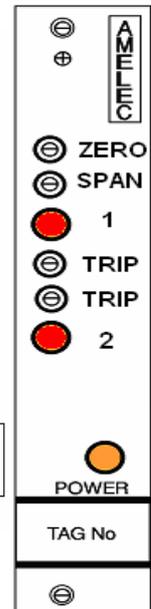
#### PROTECTION

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%

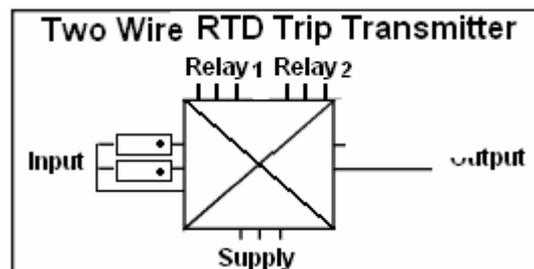
#### TERMINATION



#### FRONT VIEW



#### FUNCTION BLOCK DIAGRAM



#### 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 < 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