

## AST111 Thermocouple Trip Amplifier with single set point

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) Safety Instrumented System (SIS) Loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor based, Type A instrument
- Supply voltage options: 24Vdc  $\pm 10\%$   
48Vdc  $\pm 10\%$
- AMELEC Standard 10 year warranty



### Technical Specifications

#### Input

mV signal developed from any thermocouple type; J, K, N, R, S, T, with minimum 4mV span  
(Automatic cold junction compensation)

#### Relay Outputs

Trip output is two sets of changeover contacts (D.P.C.O), rated at 250VAC, 2A, 100VA resistive.  
Fail Safe Relays, De-energise on Trip & on Loss of Power as standard.  
High (rising) or Low (falling) Trip action may be specified.  
Red LED indication of relay status; LED ON when Energised/ healthy, Extinguished in Trip/ De-energised state as standard.

#### Isolation

1000V RMS Input/Contacts-Contacts/Supply

#### Performance

Trip settability:  $\pm 1\%$   
Trip repeatability:  $\pm 0.1\%$   
Response time:  $< 400\text{mS}$  (0-100% input step change)  
Deadband: Fixed 1% Span as std (other Fixed Hysteresis ranges available)  
Input Open Circuit response: Upscale drive as standard (O/C Downscale drive may be specified if preferred)  
Consumption:  $< 3\text{VA}$

#### Environmental Conditions

Storage Temperature:  $-40$  to  $+70^\circ\text{C}$   
Operating Ambient:  $-15$  to  $+55^\circ\text{C}$   
Relative Humidity: 5 – 95% RH (Non-Condensing)  
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

#### Dimensions

22.5w x 75h x 110d mm

#### Mounting

Din Rail (TS35)

#### Customer Termination

Fixed screw terminals

