

## ADM210X Thermocouple to RTD Converter

- Suitable for SIL 1 & SIL 2 rated (IEC61508) safety system loop applications, as 1oo1 architecture (HFT:0)
- Suitable for BS4937 Thermocouple inputs
- Supply voltage options:
  - 115Vac  $\pm 20\%$
  - 240Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
- RFI Protection to IEC61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Any signal developed from a thermocouple, with  $\geq 4\text{mV}$  span.  
Typical input: 0-150°C type T, 0-250°C type K, 0-200°C type J  
with Automatic cold junction compensation fitted as standard.

#### Output

Equivalent mV to simulate RTD for the same temperature range.  
RTD extension wire to be used between the output terminals & the remote RTD monitoring system/ control device input port.  
Bulb Excitation current from the RTD device connected needs to be determined (*a simple test procedure is available if unknown*).  
Typical output: 0-150°C PT100 RTD, 0-250°C PT1000 RTD

#### Performance

Accuracy/Linearity:  $< \pm 0.1\%$  mV Span  
Response Time: typically  $< 200\text{ms}$   
Supply consumption:  $< 3\text{VA}$

#### Environmental Conditions

Storage Temperature: -40 to 70°C  
Operating Ambient: -15 to 55°C  
Relative Humidity: 5 – 95 RH

#### Protection

Isolation: 1000V RMS\*. Input/Output/Supply/Earth  
\*(500Vdc if RFI option 'K' is specified)  
Internal Fuse  
Input over range: up to typically 300%  
Input O/C response: Upscale or Downscale drive (TBA)

#### Mounting

TS35 Din Rail or Surface by corner fixing holes  
(‘K’ option: TS35 Rail or Surface by seismic keyhole plate)

#### Enclosure Dimensions

50w x 75h x 110d mm  
(‘K’ option enclosure = 50w x 75h x 182d mm)

### WIRING

