

ADM210X Thermocouple to RTD Converter

- 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:
 - 115Vac ±20%
 - 240Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/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
 EMC: 2014/30/EU , EN 61326-1:2013 (controlled EM)
 ('K' option to the highest Generic Industrial levels)

Protection

Isolation: 1000V RMS*. Input/Output/Supply/Earth
 *(500Vdc if RFI option 'K' is specified)
 Internal Fuse
 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

