

ADM220 RTD Transmitter / Isolator

- 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 $\pm 20\%$
240Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Any 2 or 3 wire PT100 resistance temperature sensor.
Third wire compensation to overcome lead resistance variation (PT130 / PT500 / PT1000 & 4 wire input options available)

Typical Input ranges

-15 to +25°C, 0-50°C, 0-100°C, 0-150°C PT100, 3-wire connection

Output

Any standard process current or voltage in the range of;
Current source up to 22mA max, with drive voltage 24Vdc (Current Sink option available, 30Vdc max external drive)
Voltage source up to 20V max output
Typical: 4-20mA (max load 1200Ω) or 0-10Vdc (min load 500Ω)

Performance

Accuracy: $< \pm 0.1\%$ Span
Linearity: $< \pm 0.1\%$ resistance Span
(Linearisation to temperature 'G' option available)
Isolation: 1000V RMS*. Input/Output/Supply/Earth
*(500Vdc when 'K' option is specified)
Response Time: $< 200\text{ms}$
Input over range: up to 300%
Input Open Circuit response: Upscale drive as standard (Input O/C Downscale drive 'X' option available)
Supply consumption: $< 3\text{VA}$
'K' option RF Immunity available: 20MHz-3GHz $\leq 10\text{V/m}$
(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$)

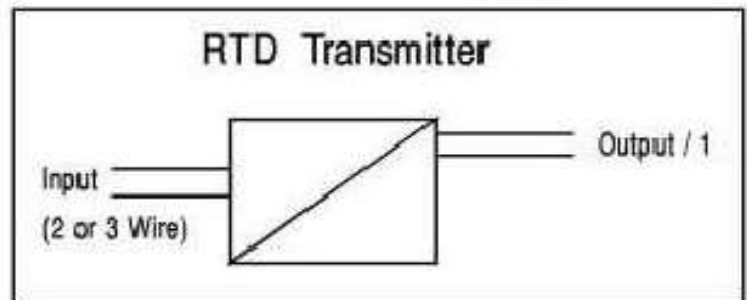
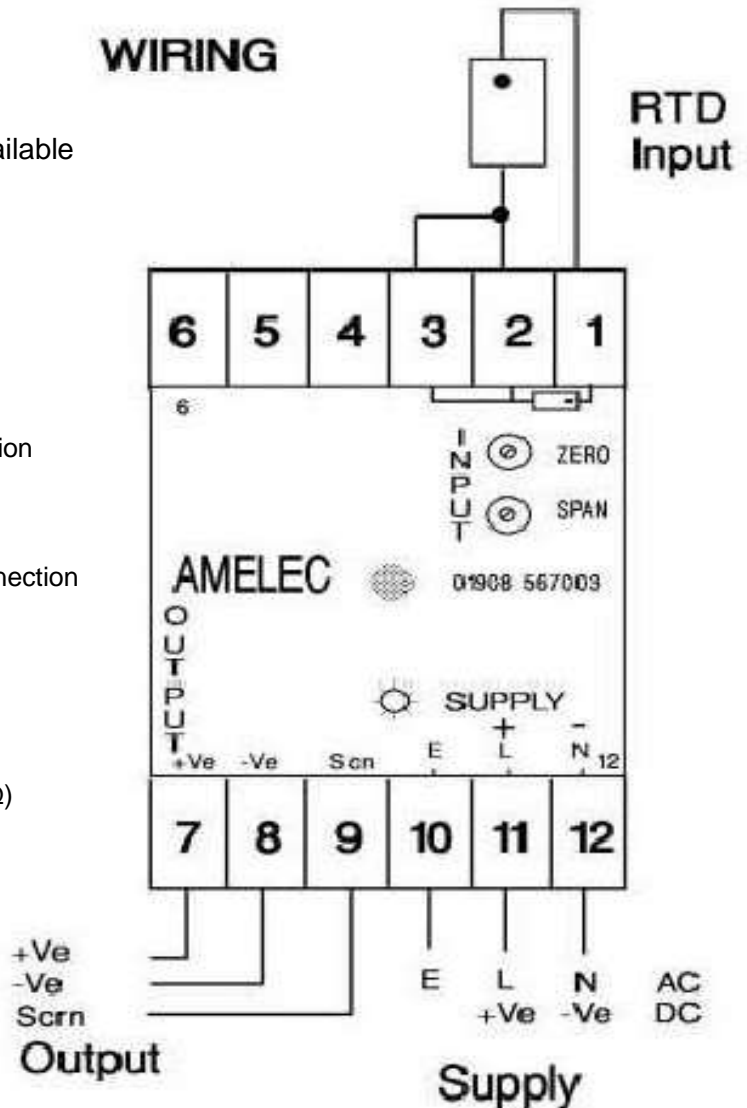
Environmental Conditions

Storage Temperature: -40 to +70°C
Operating Ambient: -15 to +55°C
Relative Humidity: 5 – 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)
('K' option to highest Generic Industrial levels)

Mounting

Either Din Rail (TS35) **or** Surface by corner fixing holes

WIRING



Dimensions

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