

ADM230X-RTD2W / 3W Process I/V Signal 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 $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
 - 110Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Input

Any current or voltage (DC) drive that can be terminated in a PI network to produce a 400mV span.
 Current from 1mA span, up to 100mA max input (passive port)
 Voltage from 0.4V span, up to 150Vdc max (impedance $\geq 1M\Omega$)
 Typical Input: 4-20mA (impedance 20Ω) or 0-10Vdc (impedance $1M\Omega$)

Output

Isolated repeat of input as simulated RTD signal to remote equipment.

(RTD extension wire to be used between output terminals & the original temperature monitoring system / control device input port)

Performance

Accuracy/Linearity: $< \pm 0.1\%$ Span
 Response Time: typically $< 100ms$
 Supply consumption: $< 3VA$

Protection

Isolation: 1000V RMS* Input/Output/Supply
 *(500Vdc when 'K' option RFI protection is specified)
 Internal Fuse
 Input over range: up to typically 300%
 Input Open Circuit response: Downscale drive as std

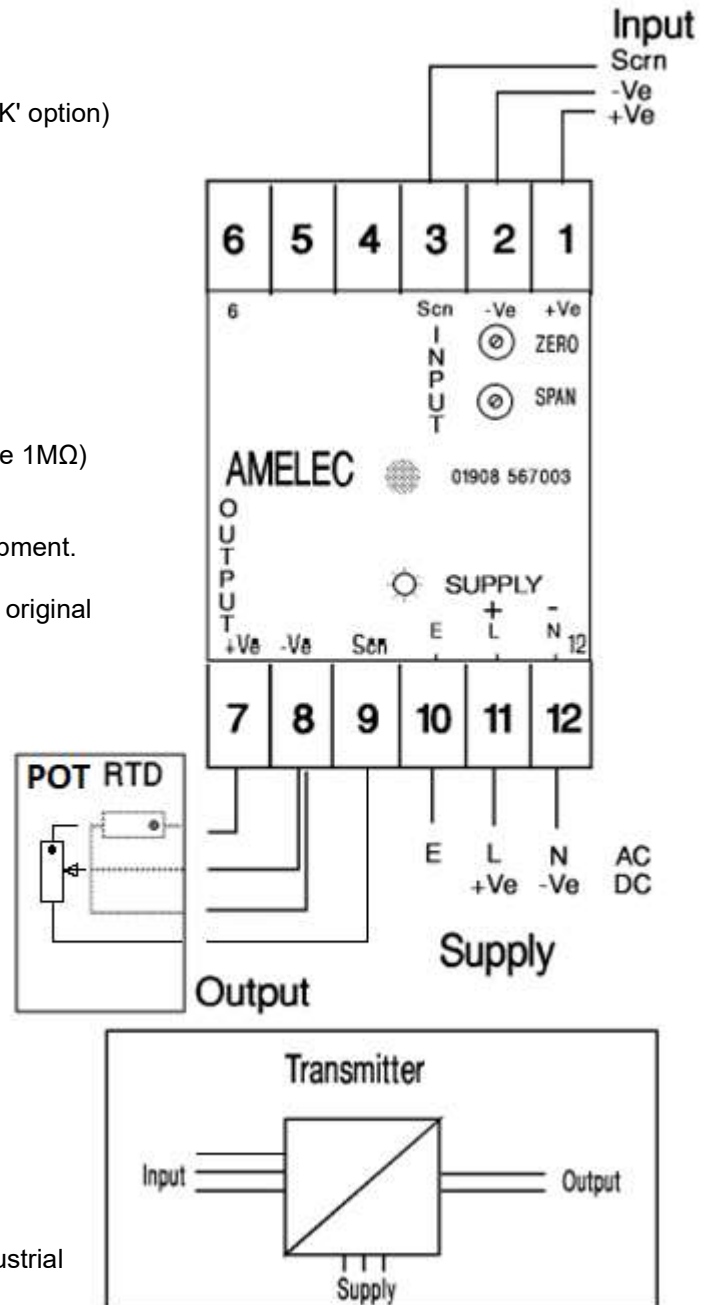
Environmental Conditions

Storage Temperature: -40 to $70^\circ C$
 Operating Ambient: -15 to $55^\circ C$
 Relative Humidity: 5 – 95% RH
 EMC: 2014/30/EU, EN 61326-1:2013 (controlled EM)
 ('K' option: EMC/EMI/RFI protection to the highest Generic Industrial Standards Test levels)

Options

J = Input jack for injecting an external signal into the input for proof testing, without disturbing the original process loop.
DI = $3\frac{1}{2}$ digit Display: input or output in % or Engineering units to suit
K = RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10V/m$,
 80MHz-1GHz/5.6GHz $\leq 30V/m$, 889MHz/1.75GHz $\leq 40V/m$.

WIRING



Mounting: Either Din Rail (TS35) **or** Surface by corner fixing holes as standard

Dimensions: 50w x 75h x 110d mm

(DI option=145d mm, K option= 182d mm)

Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ