

ADM230X-4W 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	±20%
240Vac	±20%
24Vdc	±10%
48Vdc	±10%
110Vdc	±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 $\geq 1\text{M}\Omega$)
 Typical Input: 4-20mA (impedance 20Ω) or 0-10Vdc (impedance $1\text{M}\Omega$)

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 $<100\text{ms}$
 Supply consumption: $<3\text{VA}$

Protection

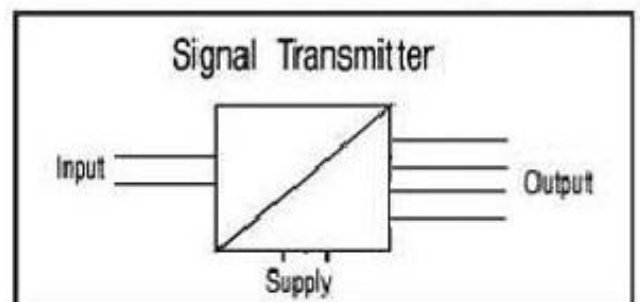
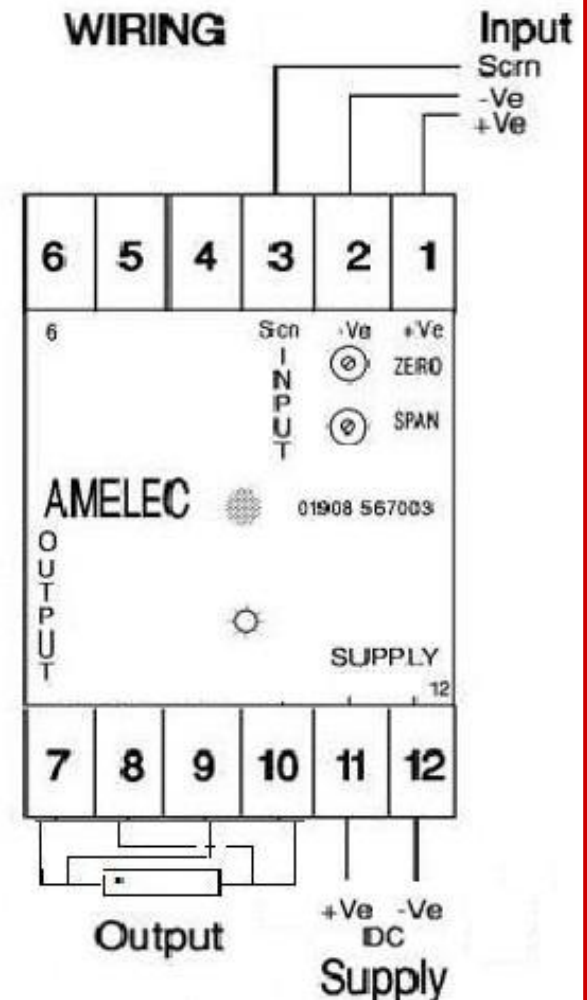
Isolation: 1000V RMS* Input/Output/Supply
 *(500Vdc when 'K' option RFI protection is specified)
 Internal Fuse
 Input over range: up to typically 300%
 Input Open Circuit response: Downscale drive as std

Environmental Conditions

Storage Temperature: -40 to 70°C
 Operating Ambient: -15 to 55°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: $20\text{MHz}-3\text{GHz}/5.25\text{GHz} \leq 10\text{V/m}$,
 $80\text{MHz}-1\text{GHz}/5.6\text{GHz} \leq 30\text{V/m}$, $889\text{MHz}/1.75\text{GHz} \leq 40\text{V/m}$.



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)

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