

# ADM231X Process I/V to RTD / Thermocouple Signal Splitter / Isolator

Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety

instrumented system (SIS) loop applications

• Supply voltage options: 115Vac ±20% 240Vac ±20%

240 vac ±20% 24 Vdc ±10% 48 Vdc ±10%

Non-Smart/Non-uProcessor based, Type A instrument

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 drive that can be terminated in a PI network to produce a 400mV span.

Current: up to 100mA max (Passive port)

Voltage: up to 200Vdc max as std

### Output 1 & Output 2

(may be specified as either the same or different from each other)

#### Either;

Current: up to 22mA max in std Source configuration (100mA max in optional Sink port configuration)

Voltage: up to 10Vdc max as std.

Typically:4-20mA (max load  $550\Omega$ ) or 0-10Vdc (min load  $500\Omega$ ) **Or**:

Isolated repeat of the RTD input signal. (Bulb Excitation current derived from existing controller or plc to be confirmed by way of a simple survey if not known)

RTD Extension wire to be used between the output terminals & original control system or device input port.

#### Or:

Isolated repeat of the input as a Thermocouple signal, with automatic cold junction compensation.

Type J, K, N, R, S or T type T/C's may be specified & the correct type Extension wire is to be used between the output terminals & original control system or device input port.

#### **PERFORMANCE**

Accuracy/Linearity: < ±0.1% span

Response time: <100mS (0-100% input step change) Isolation: 1000V\* RMS Input/Output/Output/Supply/Earth \*(500vdc when RFI protection option 'K' is specified)

Supply consumption: <3VA

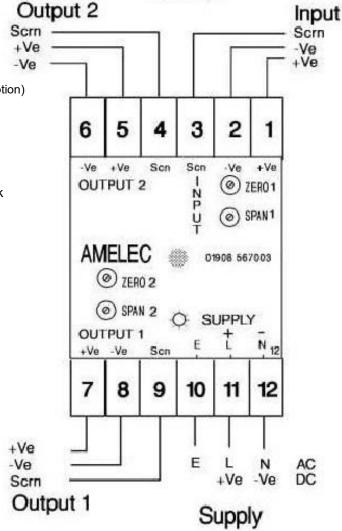
Input O/C response: Downscale drive as std (Input O/C Upscale drive 'X' option available)

## **Environmental Conditions**

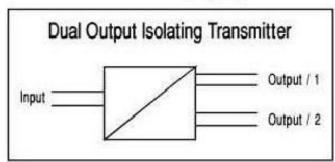
Storage Temperature: -40 to 70°C
Operating Ambient: -15 to 55°C

Relative Humidity: 5 – 95% RH (Non-Condensing) EMC: 2014/30/EU , EN 61326-1:2013 (Controlled EM)

('K' option to highest Generic Industrial levels)



WIRING



#### **MOUNTING / DIMENSIONS**

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

50w x 75h x 110d mm

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

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