

## ADM239X-RSP Process Signal Deviation Controller / Isolator

- Suitable for SIL 1 & SIL 2 rated (EN61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options:
  - 115Vac ±20%
  - 240Vac ±20%
  - 24Vdc ±10%
  - 48Vdc ±10%
- RFI Protection to EN 61000-4-3 available ('K' option)
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Input 1; Remote 0-5K Ohms (or 0-10K) potentiometer, to set the desired temperature or other process level

Input 2\*; 4-20mA as std, representing actual temperature or process level (Passive/Sink port, Impedance 20ohms).

#### Output\*

4-20mA as std, with a Low signal Limiter adjustable over 0-8mA range by a blindset potentiometer (Active/Source port, max load 1200ohms)

#### Functions

As the Temperature or other process Input Signal deviates from the Set Point by +(xx)%, the Output will decrease by -(xx)%

As the Temperature Input Signal deviates from the Set Point by -(yy)%, the Output will increase by +(yy)%

When the actual temperature or other process Input signal equals the desired Set Point level, the Output = 12mA.

\*(Other mA/Voltage & Bi-polar I/O signal ranges available on request)

#### Performance

Accuracy/Linearity: <math>\pm 0.1\%</math> Span  
 Response Time: <math>\leq 400\text{ms}</math> as std (10-90% input step change)  
 (Higher speed responses available on request – 'HS' option)  
 Supply consumption: <math>< 3\text{VA}</math>

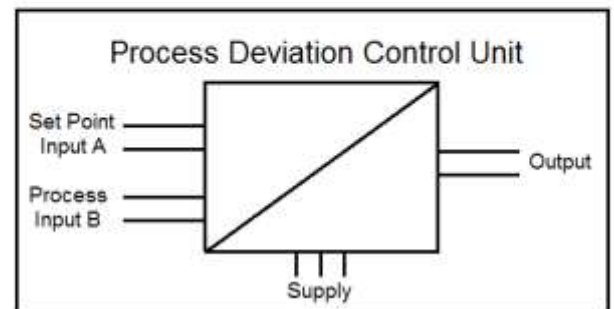
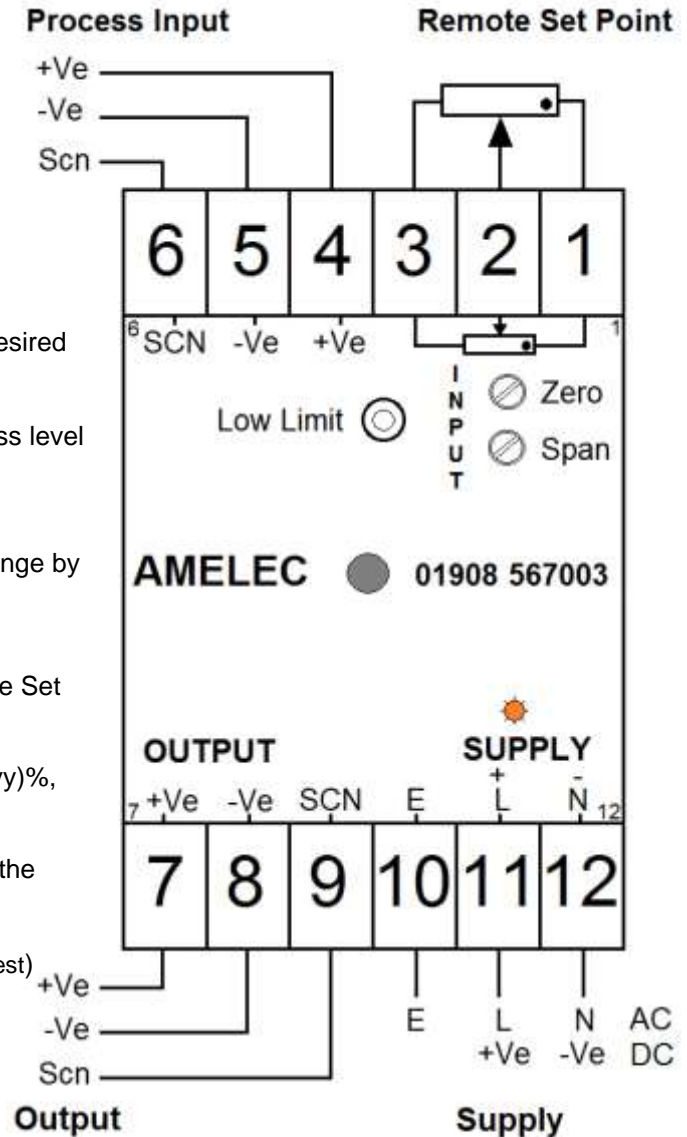
#### Protection

Isolation: 1000V RMS\* Inputs/Output/Supply/Earth.  
 \*(500Vdc when 'K' option RFI protection is specified)  
 Internal Fuse (<math>< 250\text{mA}</math>)  
 Input 2 Open Circuit Response: Downscale Drive/0mA input

#### 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: EMC/EMI/RFI protection to the highest Generic Industrial Standards Test levels)  
 RoHS: 2011/65/EU

### WIRING



#### Mounting / Dimensions

Enclosure: 50w x 75h x 110d mm as std, suitable for either Din Rail (TS35) **or** Surface (by corner fixing)

('K' option enclosure = 182d mm, for TS35 Din Rail)