

## ADM239X2C Process Signal Deviation Transmitter/Isolator

- Suitable for SIL 1, 2 & 3 applications
- Suitable for any process input & output
- Supply voltage: 24Vdc  $\pm 2.5V$  only
- AMELEC Standard 10 year warranty

### Technical Specifications

#### Input

Input 1: 4-20mA representing Vacuum (impedance 20ohms)  
 Input 2: 4-20mA representing Actual Temperature (impedance 20ohms)  
 Input open circuit response; Downscale drive.  
 Input 3: Calibrated Dial on unit front fascia (or 0-5Kohms Remote pot) to set desired constant temperature ref.

#### Output

4-12-20mA to Valve positioner (max load 1200ohms)

#### Function

As the vacuum ref. input deviates from actual temperature input by  $+(xx)\%$ , internal 1st stage Output will increase by  $+(xx)\%$  until it equals desired constant temp. set point.

As the vacuum ref input deviates from actual temperature input  $-(yy)\%$ , internal 1st stage Output will decrease by  $-(yy)\%$  until it equals desired constant temp. set point.

As the internal 1st stage Output deviates from desired set point by  $+(xx)\%$ , Output will increase by  $+(xx)\%$  from 12-20mA top operate valve until it equals desired constant temperature.

As the internal 1st stage Output deviates from desired set point by  $+(yy)\%$ , Output will decrease by  $-(yy)\%$  from 12-4mA top operate valve until it equals desired constant temperature.

#### Equation

$(A-B) - C$ , (Vacuum = Temp = Output 1st stage internal = 12mA)  $= (\text{Output 1st stage} - \text{Desired} = \text{Output} = 12\text{mA})$

#### Dimension

152w x 81h x 137h (mm)

#### Environmental Conditions

Storage Temperature: -40 to 70°C

Operating Ambient: -15 to 55°C

Relative Humidity: 5 – 95% RH

#### Input Load / Output Drive

#### Typical Input

Current 4-20mA 20 $\Omega$

Voltage 1-5Vdc 1M $\Omega$

#### Typical Output

Current 4-20mA max load 1200 $\Omega$

Voltage 1-5Vdc min load 250 $\Omega$

#### Isolation

1000V RMS. Input/Output(s)/Supply

Accuracy  $\leq \pm 0.2\%$

Linearity  $\leq \pm 0.1\%$

