

## ADM239X Deviation Control

- Suitable for most process inputs
- Supply voltage: 24Vdc (Other ranges available)
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2 & 3 (IEC 61508-2)

### APPLICATION

- Adjustable Speed regulator / controller

### TECHNICAL SPECIFICATION

#### INPUT 1

Set by 15 turn blindest potentiometer in the range of 60 to 90% of input 2 span, potentiometer located on the Front facia of the unit.

#### INPUT 2

**DC current / voltage can be specified in the range of:**

Current up to 100mA max (Passive)

Voltage 0.4 to 100V max

Typical input: 4 - 20mA (Passive)

### FUNCTION

Subtraction: Input 1- Input 2

Combination of above & other specials arithmetic function available on request.

### OUTPUT

DC current or voltage specified in the range of:

Current up to 100mA max in Sink configuration

(externally powered)

Current up 22mA max Source configuration (Internally powered)

Voltage any from 0.4 to 20V max @ up to 5mA per output.

Typical output range: 4 - 20mA (Source)

### CONTROLS

15 turn potentiometer.

Zero  $\pm 25\%$

Span  $\pm 25\%$

### INDICATOR

Power ON: LED, Amber.

### PERFORMANCE

Linearity:  $< \pm 0.1\%$

Response time: Typically  $< 400\text{ms}$

Accuracy:  $< \pm 0.1\%$

Supply regulation:  $\pm 20\%$

Supply consumption:  $< 2\text{VA}$

### PROTECTION

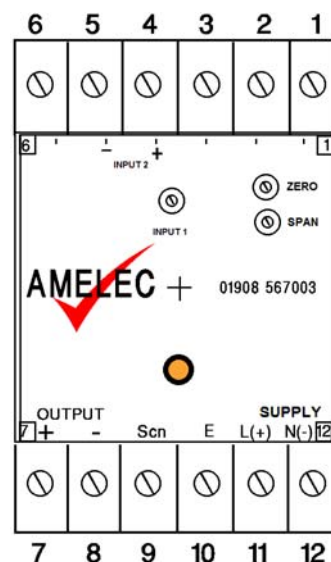
Isolation 1000V RMS: IP/OP/Supply/Earth  
Internal Fuse.

Input over range up to typically 300%.

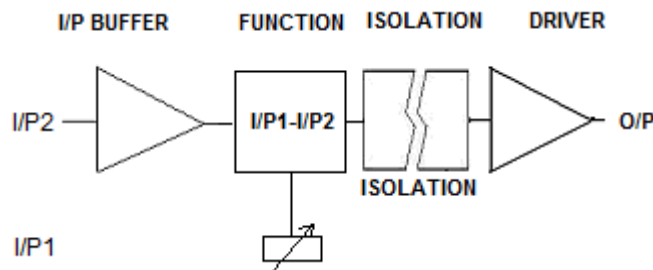
### TERMINATION

NC	1
NC	2
	3
Input 2+	4
Input 2-	5
	6
OUTPUT +	7
OUTPUT -	8
	9
Earth	10
Live / +	11
Neutral / -	12

### FRONT VIEW



### FUNCTION BLOCK DIAGRAM



### ENVIRONMENTAL CONDITION

Storage temperature:  $-40$  to  $+70^\circ\text{C}$

Operating Ambient:  $-15$  to  $+55^\circ\text{C}$

Relative Humidity: 5 to 95% RH

### MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d

Mounting: Din / Surface

Weight  $< 300\text{g}$

### CALIBRATION CHECK

1. Set input 2 to 75% and adjust Input1 potentiometer until output reads 75%.
2. Increase input 2 in steps of 1mA and check output reduces in steps of 1mA.
3. Decrease input 2 in steps of 1mA and check output increases in steps of 1mA.