

ADM231X-3-AMCO Three way signal Converter/Isolator/Splitter

- Suitable for SIL 1, SIL 2, & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Supply voltage options: 12Vdc / 24Vdc / 48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 option 'K' available
- Amelec standard 10 year warranty

APPLICATION

- Signal Isolator / Splitter
- Signal Isolator / Booster
- Signal converter to resolve incompatibility.

TECHNICAL SPECIFICATION

INPUT

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)

OUTPUTS

Different mA / Voltage range for each output can be specified.

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 10V max per output.
Typical output range: 4 - 20mA (Source)

CONTROLS

Single Zero/Span:15-turn calibration potentiometers (+/-20%)

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

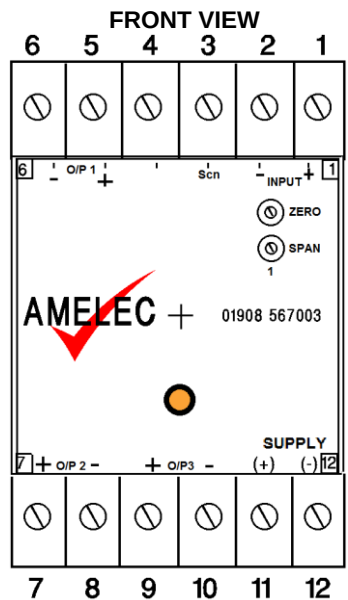
Linearity: $< \pm 0.1\%$
Response time: Typically $< 200\text{ms}$
Accuracy: $< \pm 0.1\%$
Supply regulation: AC $\pm 20\%$ / DC $\pm 10\%$
Supply consumption: $< 3\text{VA}$

PROTECTION

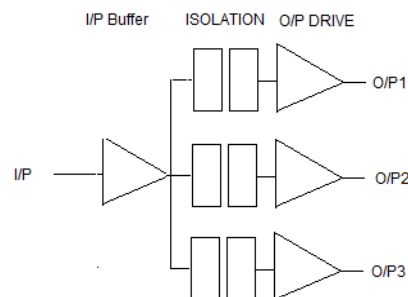
Isolation 1000V RMS*
Input /Output1/Output 2/Output3/Supply/Earth
(*500Vdc with 'K' option RFI Protection)
Internal Fuse.
Input over range up to typically 500%.
Output limited at 120%

TERMINATION

Input +	1
Input -	2
Scn	3
	4
OUTPUT 1 +	5
OUTPUT 1 -	6
OUTPUT 2 +	7
OUTPUT 2 -	8
OUTPUT 3 +	9
OUTPUT 3 -	10
Supply / +	11
Supply / -	12



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm
Mounting: Din rail / Surface
Weight $< 200\text{g}$

ADD ON / OPTIONS

HS: High Speed Response time ($< 20\text{ms}$)
DI: LCD Digital Display for local monitoring
J : Input injection Jack socket
P: Test Point
K: Higher level of RFI protection (20-1000MHz, up to 10V/mtr)
Non standard Power supply ranges available