

ADM231MX-3 Three way signal Converter/Isolator/Splitter

Supply voltages: 12Vdc / 24Vdc / 48Vdc $\pm 10\%$
115VAC/ 230Vac $\pm 20\%$

- Amelec standard 10 year warranty
- Suitable for SIL 1 & SIL 2 rated (IEC 61508-2) safety system loop applications, as 1oo1 architecture (HFT:0)

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:
24Vdc Exc, current up to 21mA max
Typical input: 4 - 20mA Sink or Source

OUTPUTS

Different mA / Voltage range for each output can be specified.
DC current or voltage specified in the range of:
Current up to 22mA max in Sink configuration (externally powered)
Current up to 22mA max Source configuration (Internally powered, max load 550 Ω)
Voltage any from 0.4 to 10V max.
Typical output range: 3 x 4 - 20mA
(Source ports 550 Ω max load, Sink ports max 30V external)

CONTROLS

Master Zero / Span (+/- 20%): 15 turn potentiometers for output calibration.

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: < $\pm 0.1\%$
Response time: Typically < 100ms
Accuracy: < $\pm 0.1\%$
Supply regulation: $\pm 20\%$
Supply consumption: < 3VA

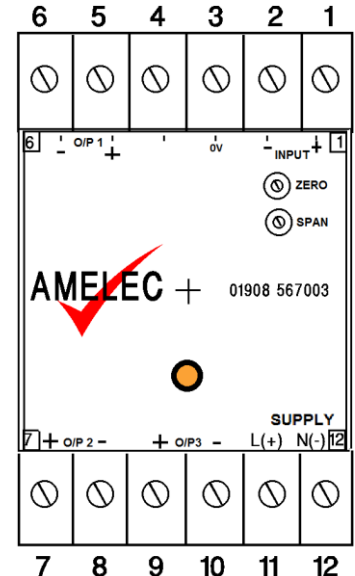
PROTECTION

Isolation: 1000V RMS,
Input /Output1/Output 2/Output3/Supply/Earth
Internal Fuse.
Input over range up to typically 120%.
Output limited at 120%

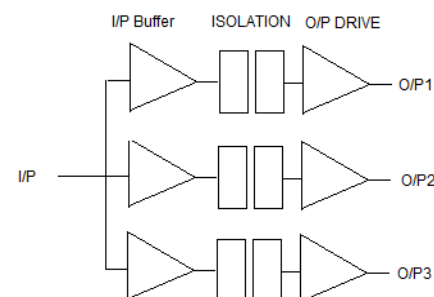
TERMINATION

Source	Input +	1
Sink	Input -	2
	0V	3
		4
OUTPUT 1 +		5
OUTPUT 1 -		6
OUTPUT 2 +		7
OUTPUT 2 -		8
OUTPUT 3 +		9
OUTPUT 3 -		10
Live / +		11
Neutral / -		12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIROMENTAL 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 or Surface by corner fixing holes
Weight < 200g

ADD ON / OPTIONS

DI: LCD display for local monitoring
J : Input injection jack socket
P: Test point
K: RF Immunity: 20MHz-3GHz/5.25GHz 10V/m,
80MHz-1GHz/5.6GHz 30V/m, 889MHz-1.75GHz 40V/m
Non standard Power supply ranges available