

ADC311X-BI Signal Converter / Repeater

- Supply voltage options: 12Vdc / 24Vdc / 115Vac / 230Vac
- RFI protection to EN 61000-4-3:2006/A2:2010 available
- Amelec standard 10 year warranty
- Suitable for SIL 1, 2, & 3 (EN 61508-2) loop applications
- Non-Smart / Non-uProcessor based, Type A instrument

APPLICATION

- In case of line fault or maintenance requirements, the output can be switched remotely from one input to the other, to continue operations/ reduce downtime.

TECHNICAL SPECIFICATION

INPUT 1

DC current / voltage can be specified in the range of:
Current up to 100mA max (Passive)
Voltage 0.4 to 150V dc max
Typical input: 0 – 10Vdc (Passive, impedance 1M Ω)

VOLT FREE CONTACTS

Volt free contacts. (Wetted by 10Vdc @ 3mA Max)
contacts 1 Closed = Output repeat as 0 to +10V
contacts 2 Closed = Output repeat as 0 to -10V

OUTPUT

DC current or voltage specified in the range of:
Current up to 100mA max in Sink configuration (externally powered)
Current up to ± 22 mA max Source configuration (Internally powered)
Voltage any from 0.4 to 20V max @ up to 20mA.
Typical output range 0 to ± 10 Vdc (max 1K Ω min)

CONTROLS

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

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

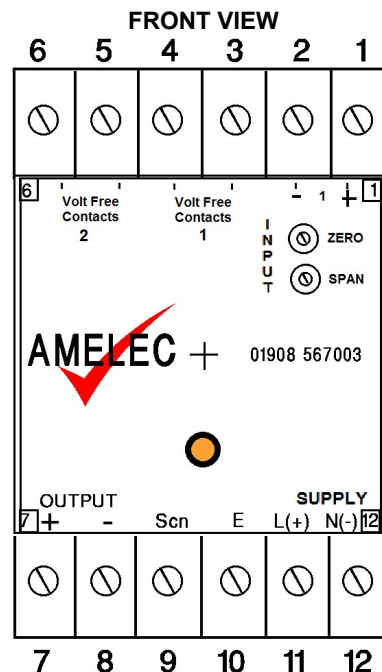
Accuracy/Linearity: < $\pm 0.1\%$ span
Response time: Typically <400mS (0-100% input step change)

PROTECTION

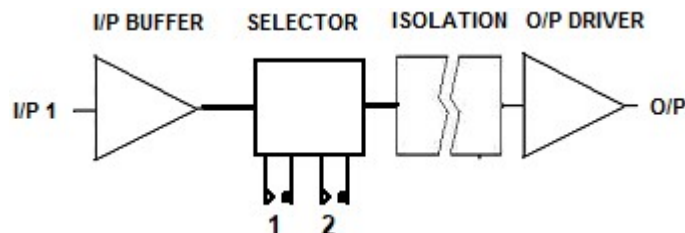
Input O/C response: Downscale drive
Isolation 1000V RMS* Input(s)/Output/Supply/Earth
*(500Vdc if 'K' option specified)
Internal Fuse.
Input over range up to typically 300%.

TERMINATION

I/P 1 +	1
I/P 1 -	2
Contacts 1	3
Contacts 1	4
Contacts 2	5
Contacts 2	6
OUTPUT +	7
OUTPUT -	8
Scn	9
Earth	10
Live / +	11
Neutral / -	12



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU , EN 61326-1:2013 (Controlled EM)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm
Mounting: Din rail (TS35) or Surface by corner fixing holes
Weight < 200g
(* 'K' option enclosure Dims = 50w x 75h x 182d mm)

ADD ON / OPTIONS

DI: LCD display for local monitoring
J : Input injection Jack socket
P: Output Test Point
K: Full RFI Protection to EN61000-4-3:2006/A2:2010