

ADC313X-(R)-Auto Process Signal Selector / Isolator

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

FUNCTION

Output repeat signal represents input 1, but will automatically switch to represent input 2 upon loss of input 1. Once input 1 signal recovers the output will switch back to represent input 1. A Relay output contact can indicate a fault upon loss of input 1.

TECHNICAL SPECIFICATION

INPUT 1 & 2

DC current / voltage can be specified in the range of:
 Currents up to 100mA max (Passive)
 Voltages up to 150V dc max
 Typical input: 2 x 4 - 20mA (Passive ports, impedance 20 Ω)
Note: Inputs will have a Common internal 0V.

OPTION R - VOLT FREE CONTACT

Volt free contacts. (Wetted by 24Vdc @ 10mA Max)
 Open contact = Loss of Input 1 (Typically ≤ 3.5 mA)
 Closed contact = Input 1 Healthy

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 up to 20V max @ up to 20mA.
 Typical output range: 4-20mA (Source, max 1000 Ω load)

CONTROLS

Zero / Span ($\pm 20\%$): 15-turn output calibration potentiometers

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: $< \pm 0.1\%$
 Response time: Typically < 100 ms
 Accuracy: $< \pm 0.1\%$

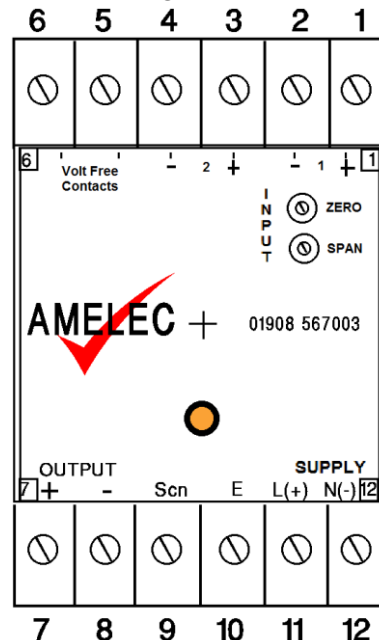
PROTECTION

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

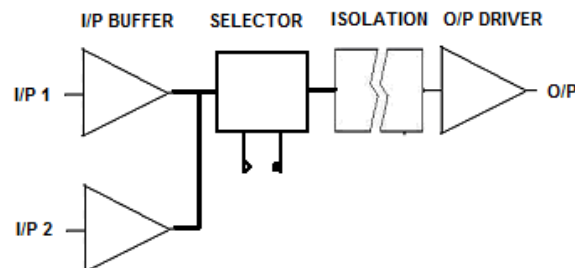
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONS

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

MOUNTING / DIMENSIONS

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

ADD ON / OPTIONS

DI: LCD display for local monitoring of the output signal
 P: Test point for local measurement of the output signal
 R: Output relay contact to indicate which input is represented
 K: Higher EMC/EMI/RFI Protection to Generic industrial levels
 X: Non-standard Power supply ranges available