

## ADC313X Process Signal Selector / Isolator

- Supply voltage options: 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 & 2

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: 2 x 4 - 20mA (Passive, impedance 20Ω)  
Note: Inputs will have a Common internal 0V.

#### VOLT FREE CONTACTS

Volt free contacts. (Wetted by 24Vdc @ 10mA Max)  
 Open contact = Input 1 routed through to the output  
 Closed contact = Input 2 routed through to the output

#### 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 20mA.  
 Typical output range: 4-20mA (Source, max 550Ω load)

#### CONTROLS

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

#### INDICATOR

Power ON: LED, Amber.

#### PERFORMANCE

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

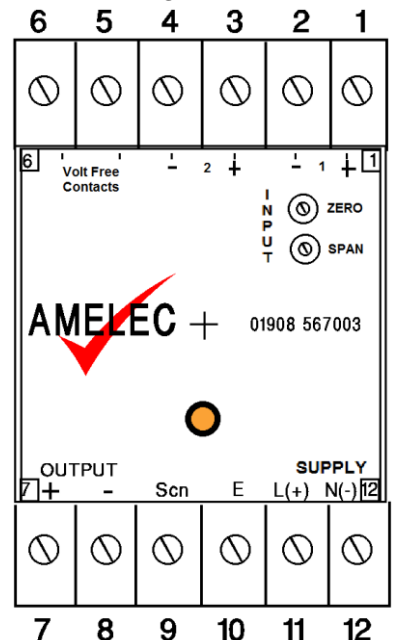
#### PROTECTION

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%.

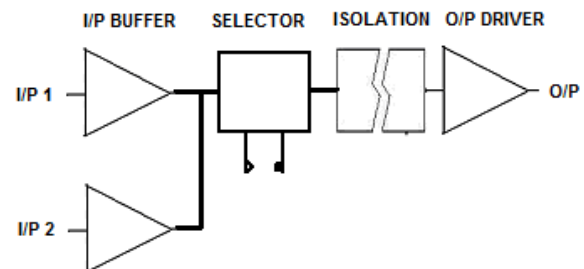
### TERMINATION

I/P 1 +	1
I/P 1 -	2
I/P 2 +	3
I/P 2 -	4
Input Select	5
V Free Contact	6
OUTPUT +	7
OUTPUT -	8
Scn	9
Earth	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 (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