

## ADC316XL High Process Signal Limiter / Isolator

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options:
  - 115Vac  $\pm 20\%$
  - 240Vac  $\pm 20\%$
  - 24Vdc  $\pm 10\%$
  - 48Vdc  $\pm 10\%$
  - 110Vdc  $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

### Technical Specification

#### Function

The Output is an isolated repeat of the input, whilst it is below the set high Limit level.

As std the High Limit adjustment range is from 50% up to 100% span, Adjustable via a 15-turn blindset potentiometer through the unit front fascia.

#### Input

Any current or voltage (DC) drive that can be terminated in a PI network to produce a 400mV span.

Current ranges up to 100mA max input (passive port)

Voltage ranges up to 150Vdc max (impedance  $\geq 1M\Omega$ )

Typical Input: 4-20mA (impedance  $20\Omega$ ) or 0-10Vdc (impedance  $1M\Omega$ )

#### Output

Any standard process current in the range of;

Current source up to 22mA max, with drive voltage 24Vdc

(Current Sink option available, 30Vdc max external drive)

Typical Output: 4-20mA (max load  $1200\Omega$ ) / 0-10mA (max load  $2400\Omega$ )

#### Protection

Isolation: 1000V RMS\* Input/Output/Supply/Earth.

\*(500Vdc when 'K' option RFI protection is specified)

Internal Fuse

Input over range: up to typically 300%

High Limiter Fault Detection: Downscale drive/ 0mA, as internal contact Open Circuits the output port (Adjustable set point, to be set just above the nom. High output Limit point)

#### Performance

Accuracy/Linearity:  $< \pm 0.1\%$  Span

Response Time: typically  $< 100mS$  (0-100% input step change)

Input Open Circuit response: Downscale drive as std

Option 'X': O/C response Upscale drive, or other Special customising

Option 'H': HART Loop compatible, in both directions

Supply consumption:  $< 3VA$

#### Environmental Conditions

Storage Temperature:  $-40$  to  $+70^\circ C$

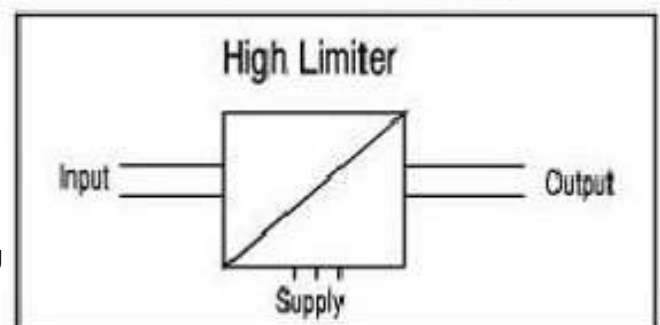
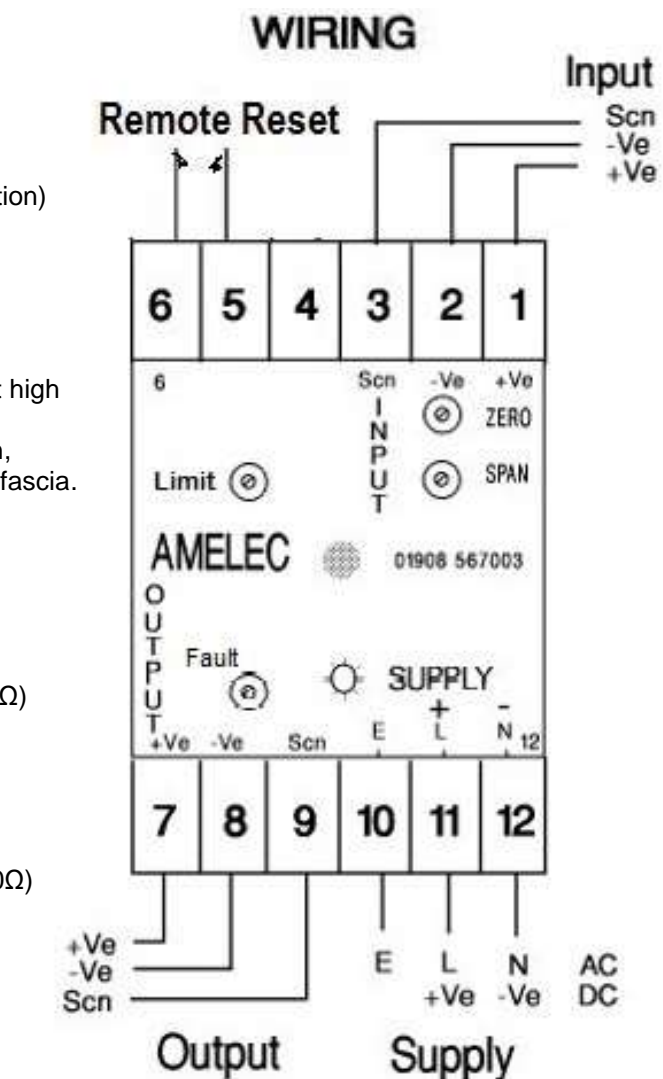
Operating Ambient:  $-15$  to  $+55^\circ C$

Relative Humidity: 5 – 95% RH (Non-Condensing)

EMC: 2014/30/EU, EN 61326-1:2013 (controlled EM)

('K' option: EMC/EMI/RFI protection to the highest Generic

Industrial Standards Test levels)



#### Mounting/ Dimensions

Din Rail (TS35) **or** Surface by corner fixing holes  
Standard enclosure 50w x 75h x 110d mm

(K option enclosure Dims: 50w x 75h x 182d mm)

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