

ADC316 High (or Low) 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 ±20%
 - 240Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
 - 110Vdc ±10%
- RFI Protection to IEC61000-4-3:2006/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 above or below the set Limit level. The High or Low Limiter function required is to be specified at time of orders.

As std the Low Limit adjustment range is from 50% down to 0% span, A High Limit adjustment range is from 50% up to 100% span.

Adjustment via a 15-turn blindset potentiometer through the unit front fascia

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 Ω) or 0-10Vdc (impedance 1M Ω)

Output

Any standard process current or voltage in the range of;

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

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

Voltage source up to 20V max output

Typical Output: 4-20mA (max load 1200 Ω) / 0-10Vdc (min load 500 Ω)

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%

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°C

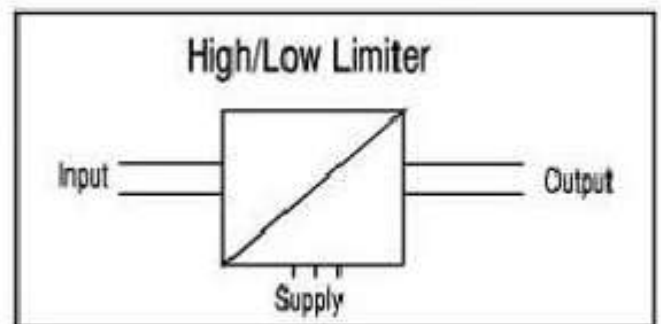
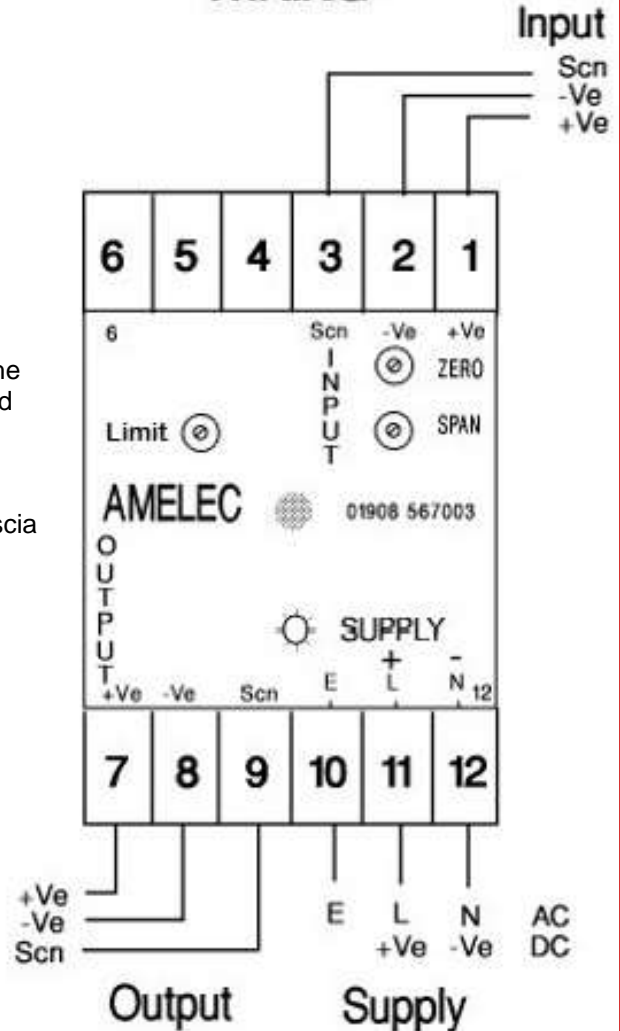
Operating Ambient: -15 to +55°C

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)

WIRING



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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