

## AGS1095 Current/Voltage to Frequency Converter / Isolator

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor based, Type A instrument
- 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 Specifications

#### Input

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

Current up to 100mA max input (passive port)

Voltage ranges up to 200Vdc max as std (impedance  $\geq 1M\Omega$ )

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

#### Output

Pulse rate (up to 24Vdc pls) or Sine, Square or Sawtooth waveform (max peak to peak value of 8V @3mA) may be specified as std.

An additional 15-turn blindset Gain potentiometer option is also available if required, allowing Amplitude adjustment through unit front fascia if required.

Typical Output: 500Hz-1KHz Sine wave @8Vpk-pk, into 3K $\Omega$

#### Performance

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

Response Time: typically <400mS (0-100% input step change)

Supply consumption: <3VA

#### 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%

Input Open Circuit response: Downscale drive as std

#### 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)

#### Options

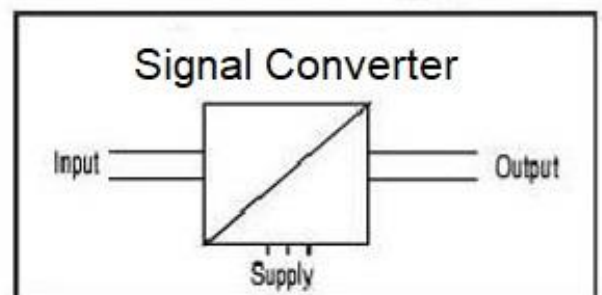
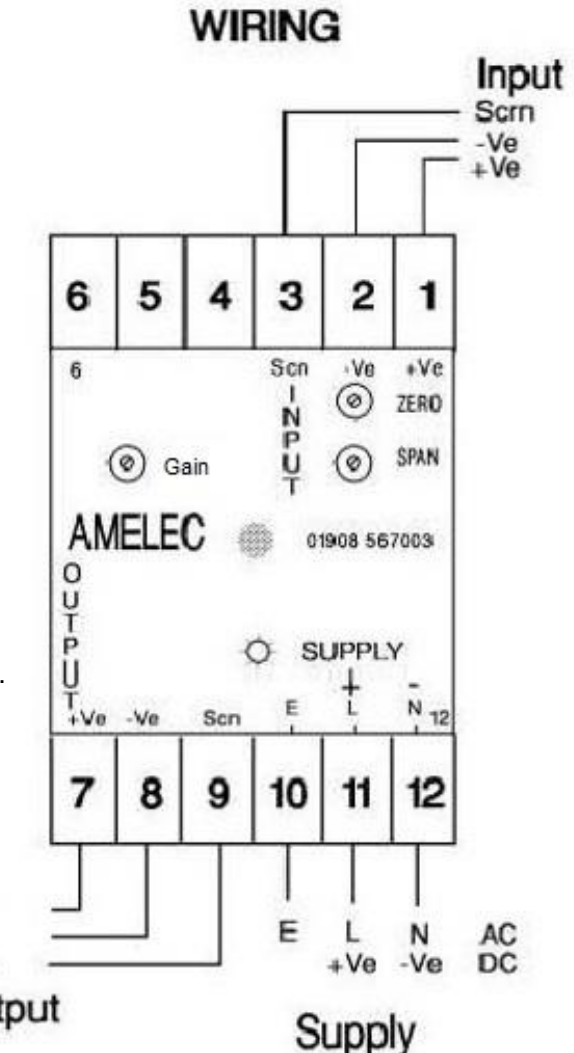
**J** = Input jack for injecting an external signal into the input for proof testing, without disturbing the original process loop.

**DI** = 3½ digit Display: input or output in % or Engineering units to suit

**K** = RF Immunity: 20MHz-3GHz/5.25GHz  $\leq 10V/m$ ,  
80MHz-1GHz/5.6GHz  $\leq 30V/m$ , 889MHz/1.75GHz  $\leq 40V/m$ .

**HV** = High Voltage input ranges, up to 1000Vdc max

**X** = Input Open Circuit response Upscale drive, or 'other' special option



**Mounting:** Either Din Rail (TS35) **or** Surface by corner fixing holes as standard

**Dimensions:** 50w x 75h x 110d mm

(DI option=145d mm, K option= 182d mm)

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