

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 ±20%
 - 240Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
 - 110Vdc ±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 Ω) or 0-10Vdc (impedance 1M Ω)

Output

Option of Sine, Square or Sawtooth wave form
 Max peak to peak value of 8V @3mA as std, adjustable via 15-turn blindset Gain potentiometer through unit front fascia

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

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

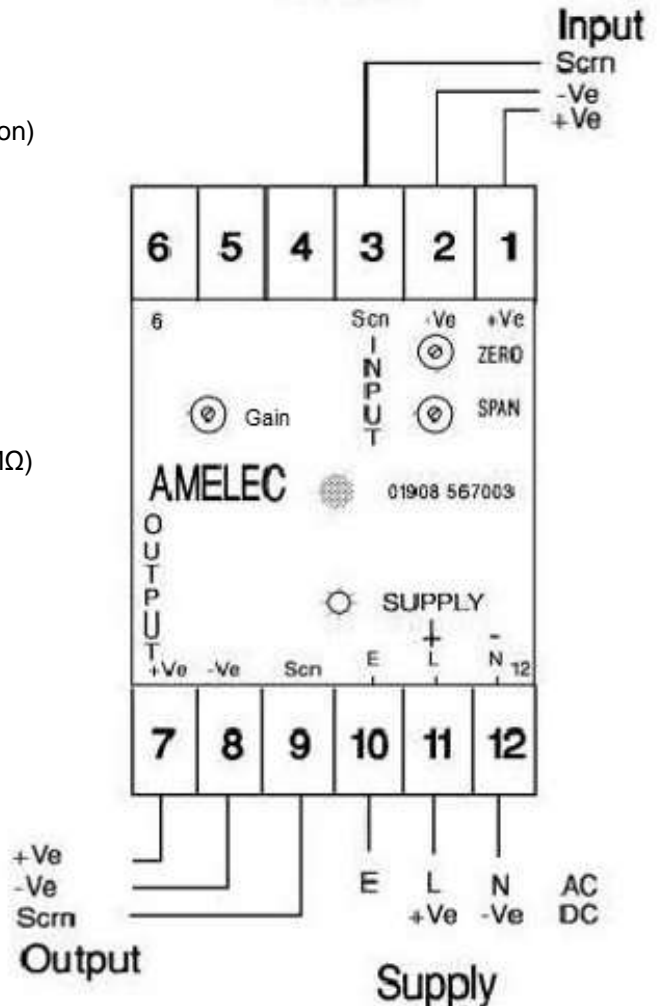
Environmental Conditions

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

WIRING



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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