

ADC314 Three Process Input Adder/Averager Unit

- Suitable for SIL 1, 2 & 3 applications
 - Suitable for any process input
 - Supply voltages:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 2.5\%$
 - 12Vdc $\pm 1.2\%$ (Option)
 - RFI Protection to IEC61000-4-3 available
 - AMELEC Standard 10 year warranty

Technical Specifications

Input

Any current that can be terminated in a PI network to produce a 400mV span. The inputs share a common 0v, however an isolated version is available.

Output

Any standard process current or voltage
Current source up to 20mA. Drive voltage 24Vdc.
Voltage source up to 10V. Max current 20mA.

Typical equations

$$\text{Adder} = A+B+C / \text{Averager} = (A+B+C)/3$$

Isolation

1000 RMS*. Input/Output/Supply/Earth
*(500Vdc if RFI option (K) is specified)
Linearity <±0.1%

Environmental Conditions

Storage Temperature: -40 to 70°C
Operating Ambient: -15 to 55°C
Relative Humidity: 5 – 95 RH

Input Load / Output Drive

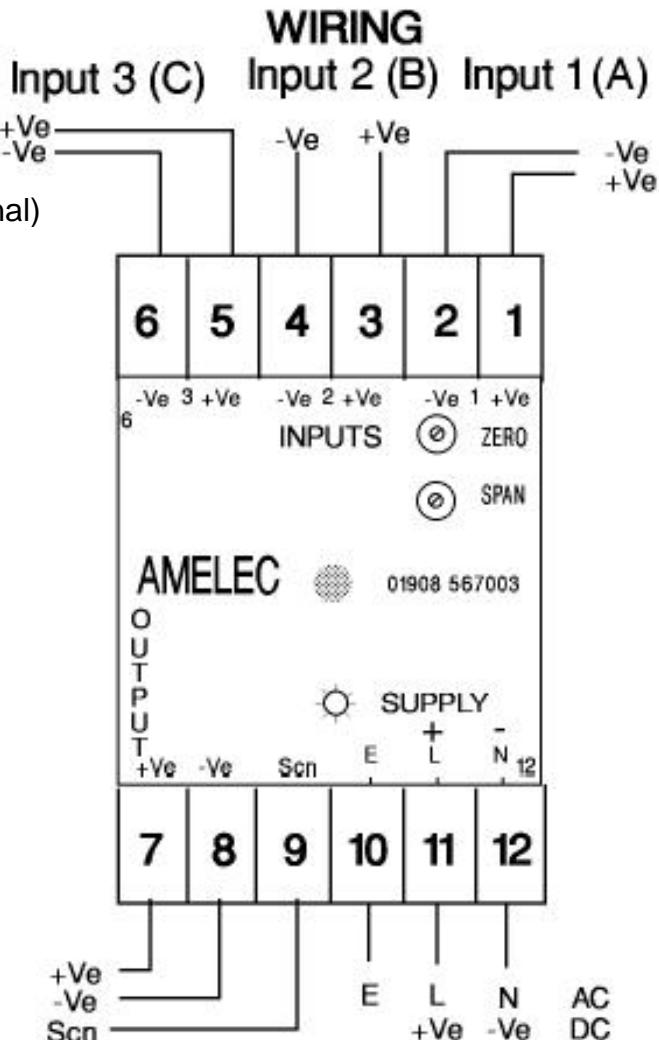
Typical Inputs

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Current: 4 -20mA
Voltage: 0 – 10Vdc

Typical Output

Output
Current: 4 – 20mA max load 1200Ω
Voltage 1 – 5 Vdc min load 250Ω



Output

Supply

Arithmetic Isolating Transmitter

