

ADC314X-4 Four Process Input Adder/Averager Unit

- Suitable for SIL1 & SIL2 (EN 61508-2) rated 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 $\pm 10\%$
12Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 option 'K' available
- AMELEC Standard 10 year warranty

Technical Specifications

Input x 4

Any current range that can be terminated in a PI network to produce a 400mV span. The inputs all share a common internal 0V.

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 20Vdc max output.
Typically: 4-20mA (max load 550 Ω) or 0-10Vdc (min load 500 Ω)

Typical equations

Adder = A+B+C+D (Each input = 1/4)

Adder/Averager = (A+B+C+D)/4

Indicator

Power ON: LED, Amber.

Performance

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

Response time: $< 200\text{ms}$

Supply consumption: $< 3\text{VA}$

Protection

Isolation: 1000V RMS* (I/P1+I/P2+I/P3+I/P4)/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

Environmental Conditions

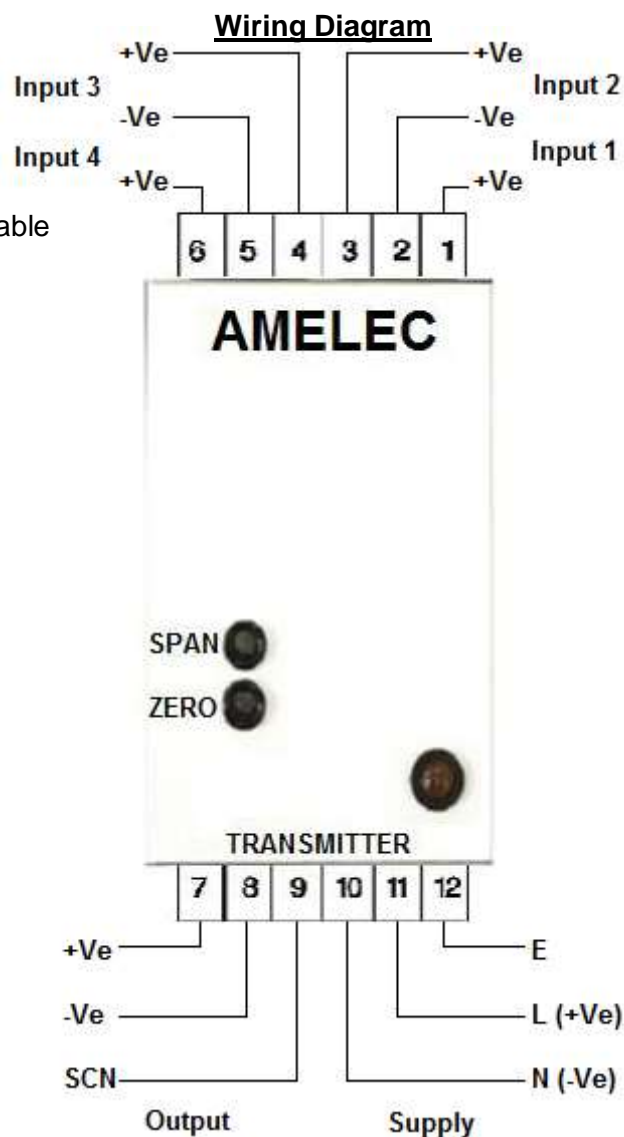
Storage Temperature: -40 to +70°C

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 levels)



Mounting:

Din Rail (TS35) as standard
(Surface, by rear 130h mm Keyhole plate, optional)

Enclosure Dimensions:

50w x 75h x 146d mm
('K' option enclosure = 182d mm)

Customer Connections:

Fixed screw terminals towards rear of enclosure
(Plug-in screw terminal blocks optional)