

ADC314X-4-AC Four Input Adder/Averager Unit

- Suitable for 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 $\pm 10\%$ (Option 'X')
- RFI Protection to EN 61000-4-3:2006/A2:2010 available (Option 'K')
- AMELEC Standard 10 year warranty

Technical Specifications

Input

4 x AC Voltages up to 1V via Amelec ACT range of current transformers.
Input to be equally weighted and terminated with correct phase as per termination drawing. Typical input: 4 x 0-333mV via 4 x ACT-10 CT.

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)

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* $(I/P1+I/P2+I/P3+I/P4)/\text{Output}/\text{Supply}/\text{Earth}$.
*(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

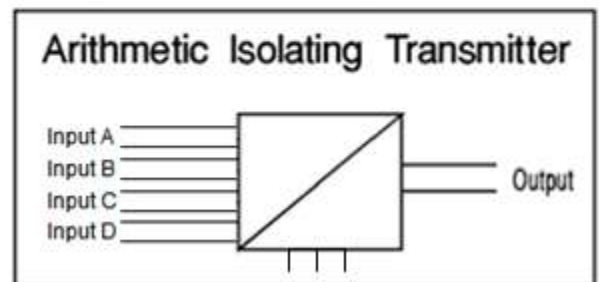
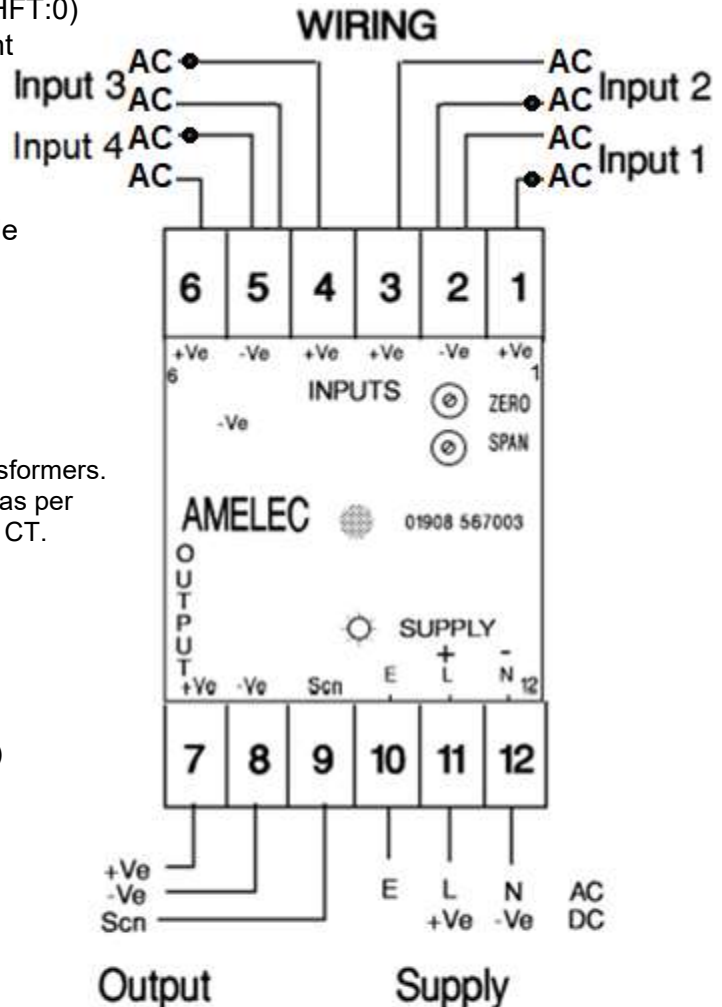
Storage Temperature: -40 to $+70^\circ\text{C}$

Operating Ambient: -15 to $+55^\circ\text{C}$

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)



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

Add On / Options

'K' Option RFI Protection to IEC61000-4-3
(20 - 3000MHz $\leq 10\text{V}/\text{metre}$)

'K' Option Dimensions: 50w x 75h x 182d mm

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