

ADM239-AA Two Input Auto Averager Arithmetic Unit

- Suitable for use in SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Non-Smart / Non-uProcessor based, Type A instrument
- Supply voltage options:
 - 115Vac ±20%
 - 230Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Inputs

Typical 4-20mA signals from field Flow, Temperature, Pressure Transmitters
 Current may be specified up to 100mA max inputs (passive ports)
 Voltage may be specified up to 150Vdc max inputs (impedance $\geq 1M\Omega$)
 Typical Inputs: 4-20mA (impedance 20 Ω) or 0-10Vdc (impedance 1M Ω)
 The inputs share a common internal 0V, however an isolated version is available on request if required ('X' option).

Output

Any standard process current or voltage signal in the range of;
 Current source up to 22mA max, with drive voltage 24Vdc
 (Current Sink option available on request, 30Vdc max external drive)
 Voltage source up to 20V max output
 Typical Output: 4-20mA (max load 1200 Ω) or 0-10Vdc (min load 500 Ω)

Typical 4-20mA Application / Function

The Output signal will represent the Average of the two input signals,
 Unless either one of the inputs is lost, shut off or goes open circuit,
 @ $\leq 3.8mA$ unit will automatically switch to just repeat the remaining
 active input signal.

Performance

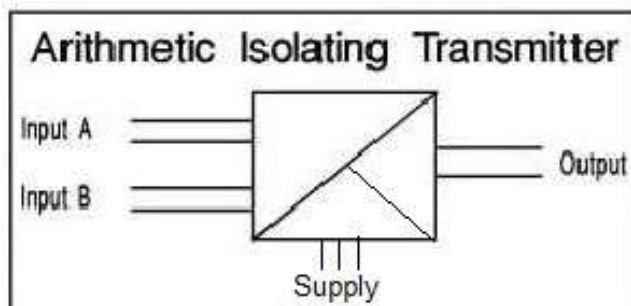
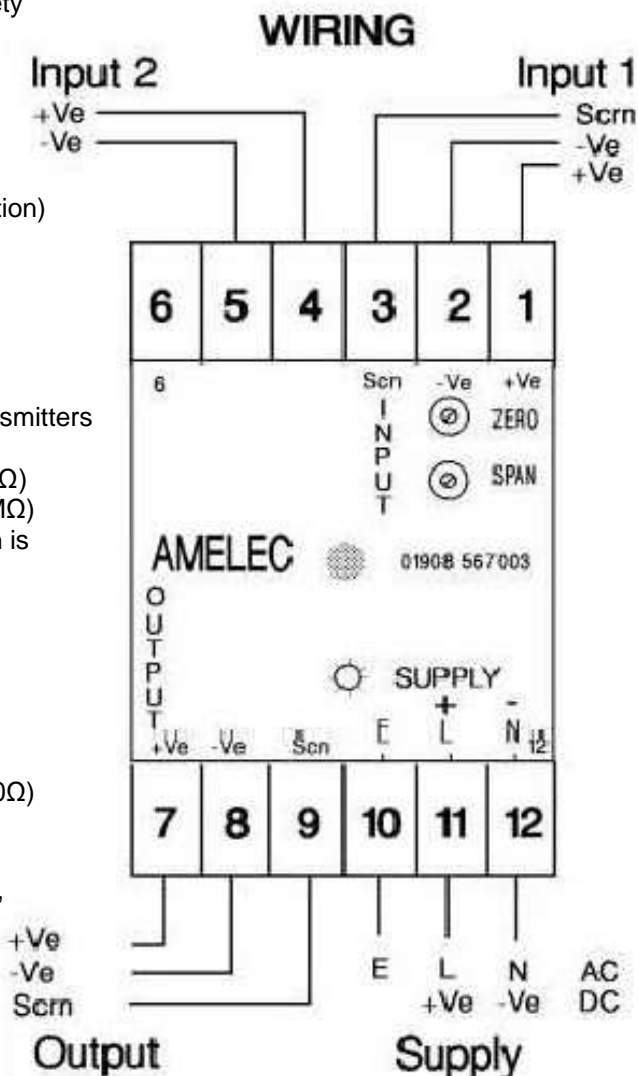
Accuracy/Linearity: $< \pm 0.1\%$ Span
 Response Time: typically $< 100mS$ (0-100% input step change)
 Supply consumption: $< 3VA$

Protection

Isolation: 1000V RMS* Inputs/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 standard

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)
 RoHS: 2011/65/EU



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)

Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ