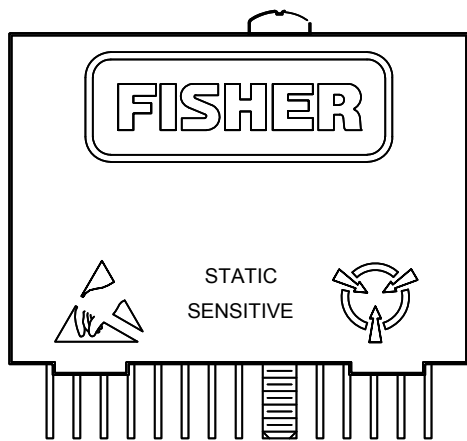
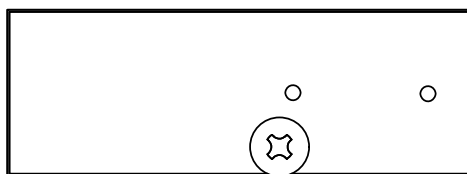


Analog Input Source Module

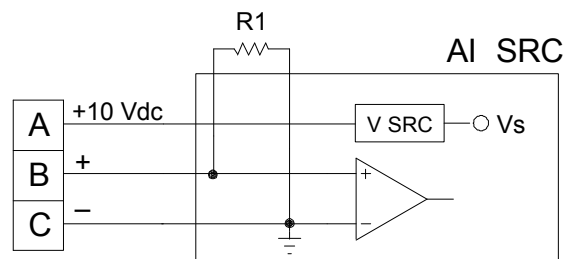
The Analog Input Source Module plugs into a ROC300-Series Remote Operations Controller (ROC) or FloBoss™ 407 Flow Manager and is used to monitor a single voltage output or current loop device. The module provides a 10 Volt dc source voltage for powering the field device. It can accept a scaling resistor for converting loop current to input voltage.

Field wiring connections are made through a separate terminal block which plugs in next to the module. This design facilitates replacement of the module without disconnecting field wiring.



DOC34AIS

Analog Input Source Module



DOC0071C

Note: Scaling resistor R1 is used only for a current loop device, which must be capable of operating on 10 V dc and a maximum of 20 mA.

Simplified Input Schematic

Specifications

<p>FIELD WIRING TERMINALS A: 10 V dc B: Analog Input C: Common</p> <p>INPUT Type: Single-ended, voltage sense; can be current loop if scaling resistor (not supplied) is used. Voltage: 0 to 5 V dc, software configurable. Resolution: 12 bits. Accuracy: 0.1% of full scale (20 to 30 °C); 0.5% of full scale (-40 to 65 °C). Impedance: Greater than 400 kΩ (without scaling resistor). Normal Mode Rejection: 50 db @ 60 Hz.</p> <p>SOURCE POWER 9.99 to 10.01 V dc, 20 mA maximum.</p> <p>POWER REQUIREMENTS 4.9 to 5.1 V dc, 6 mA maximum; -4.5 to -5.5 V dc, 2 mA maximum (all supplied by ROC).</p> <p>INPUT ISOLATION Not isolated. Terminal C is tied to power supply ground.</p> <p>SURGE WITHSTAND Meets IEEE 472 / ANSI C37.90a.</p> <p>FILTER Single pole, low-pass, 40 millisecond time constant.</p>	<p>CONVERSION TIME 30 microseconds typical.</p> <p>VIBRATION 20 Gs peak or 0.06 in. double amplitude, 10 to 2,000 Hz, per MIL-STD-202 method 204 condition F.</p> <p>MECHANICAL SHOCK 1500 Gs 0.5 millisecond half sine per MIL-STD-202, method 213, condition F.</p> <p>CASE Solvent-resistant thermoplastic polyester, meets UL94V-0. Dimensions 0.6 in. D by 1.265 in. H by 1.690 in. W (15 mm by 32 mm by 43 mm), not including pins.</p> <p>ENVIRONMENTAL Meets the environmental specifications of the ROC or FloBoss in which the module is installed, including temperature, humidity, and transient protection.</p> <p>WEIGHT 1.3 ounces (37 grams).</p> <p>APPROVALS Approved by CSA for hazardous locations Class I, Division 2, Groups A, B, C, and D.</p>
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