



SEC 3100 AIM Analog Input Module

Operation

The SEC 3100 AIM is used in conjunction with the SEC 3100 explosion proof transmitter or SEC 3100 DIN transmitter. A non-SEC device with a conventional analog 4 - 20 mA output is wired to the SEC 3100 AIM. The SEC 3100 AIM receives a sourced 4 - 20 mA signal from the device, converts the analog signal into a digital signal compatible with the SEC 3100 transmitter. The SEC 3100 AIM is factory programmed with the following customer supplied variables:

Device Name
Range
Unit of Measure
Calibration Value

The SEC 3100 visually displays the variables on the LCD the same as if the SEC 3100 had an SEC gas detector connected. The SEC 3100 transmitter reports the foreign device status bidirectional to the SEC 3500 HMI Operator Interface via the MODBUS RS485 communication network. The SEC 3100 AIM can be installed in the SEC 3100 explosion proof transmitter housing using a taller window dome.

The SEC 3100 AIM accepts one device input. Examples of 4 - 20 mA devices that can be used with the SEC 3100 AIM are:

- Open Path Gas Detectors
- Fire Detectors
- Temperature Transmitter
- Pressure Transmitter
- Pyrolyzers

SPECIFICATIONS

Operating Voltage
18-32 VDC

Operating Current (No Sensor)
50mA @ 24VDC

Output (digital)
SEC SSP (Smart Sensor Protocol)

Temperature Rating
-40° to + 70°C

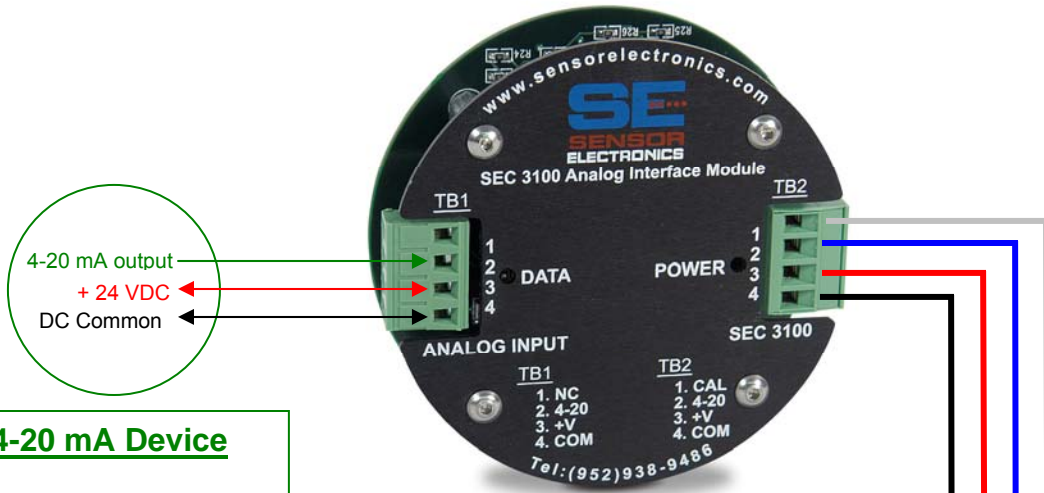
Humidity
0-99% RH (non-condensing)

Input (analog)
Impedance: 200 Ω
Max applied voltage: 32 VDC

Device Variable Characters
Device Name: 8
Range: 4
Unit of Measure: 4
Calibration Value: 4
(Standard ASCII Characters)

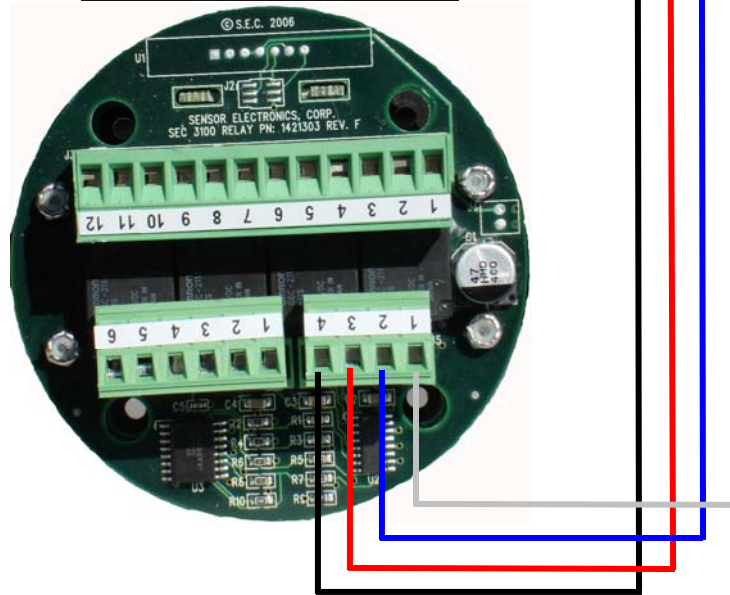
SEC 3100 EXPLOSION PROOF WIRING DIAGRAM

SEC 3100 AIM



4-20 mA Device
Pressure Transmitter
Open Path Gas Detector
Pyrolyzer
Temperature Transmitter
Fire Detector

SEC 3100 Transmitter (back side)

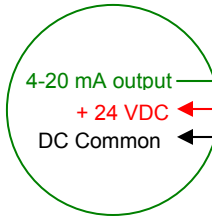


SEC 3100 Explosion Proof Transmitter

NOTE: Refer to the SEC 3100 Transmitter Instruction Manual for additional wiring connections.

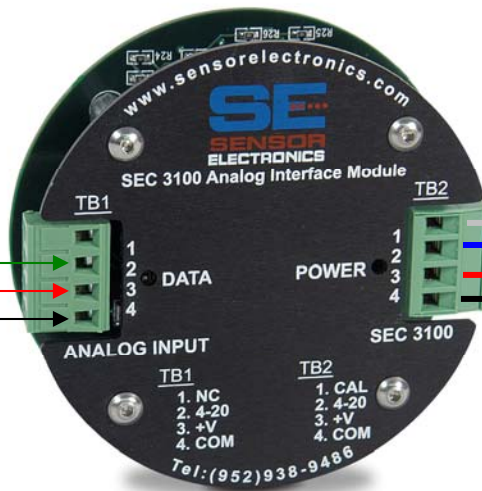
SEC 3100 DIN WIRING DIAGRAM

SEC 3100 AIM



4-20 mA Device

Pressure Transmitter
Open Path Gas Detector
Pyrolyzer
Temperature Transmitter
Fire Detector



SEC 3100 DIN Transmitter



TB 5

- 1 DC COMMON
- 2 +24 VDC
- 3 4 – 20 mA
- 4 Communication

NOTE: Refer to the SEC 3100 DIN Transmitter Instruction Manual for additional wiring connections.