



SEC 3100 LIM Logic Input Module

Operation

The SEC 3100 LIM is used in conjunction with the SEC 3100 explosion proof transmitter or SEC 3100 DIN transmitter. A non-SEC device with normally open contacts is wired to the SEC 3100 LIM. The SEC 3100 LIM receives a Low and High contact closure from the device, converts the input signal into a digital signal compatible with the SEC 3100 transmitter. The SEC 3100 LIM 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 LIM can be installed in the SEC 3100 explosion proof transmitter housing using a taller window dome.

The SEC 3100 LIM accepts one device input for Low Alarm and High Alarm. Examples of switch contact devices that can be used with the SEC 3100 LIM are:

- Open Path Gas Detectors
- Fire Detectors
- Temperature Switch
- Pressure Switch
- Air Flow Switch

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

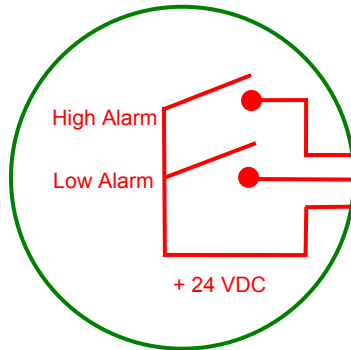
Humidity
0-99% RH (non-condensing)

Input
Low Alarm
High Alarm

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

SEC 3100 EXPLOSION PROOF WIRING DIAGRAM

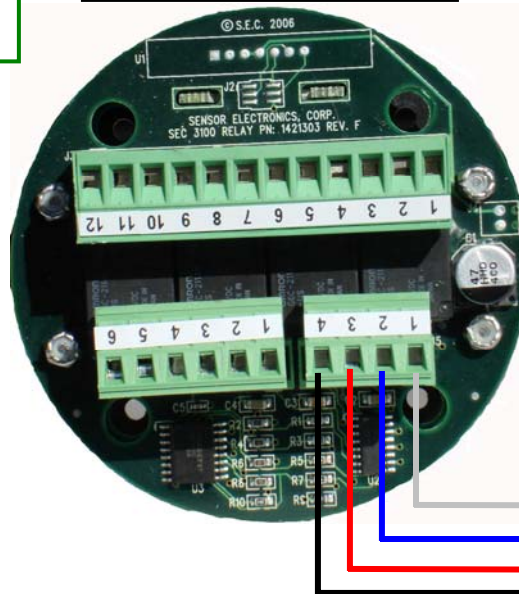
SEC 3100 LIM



Switch Device

- Pressure Switch
- Open Path Gas Detector
- Air Flow Switch
- Temperature Switch
- Fire Detector

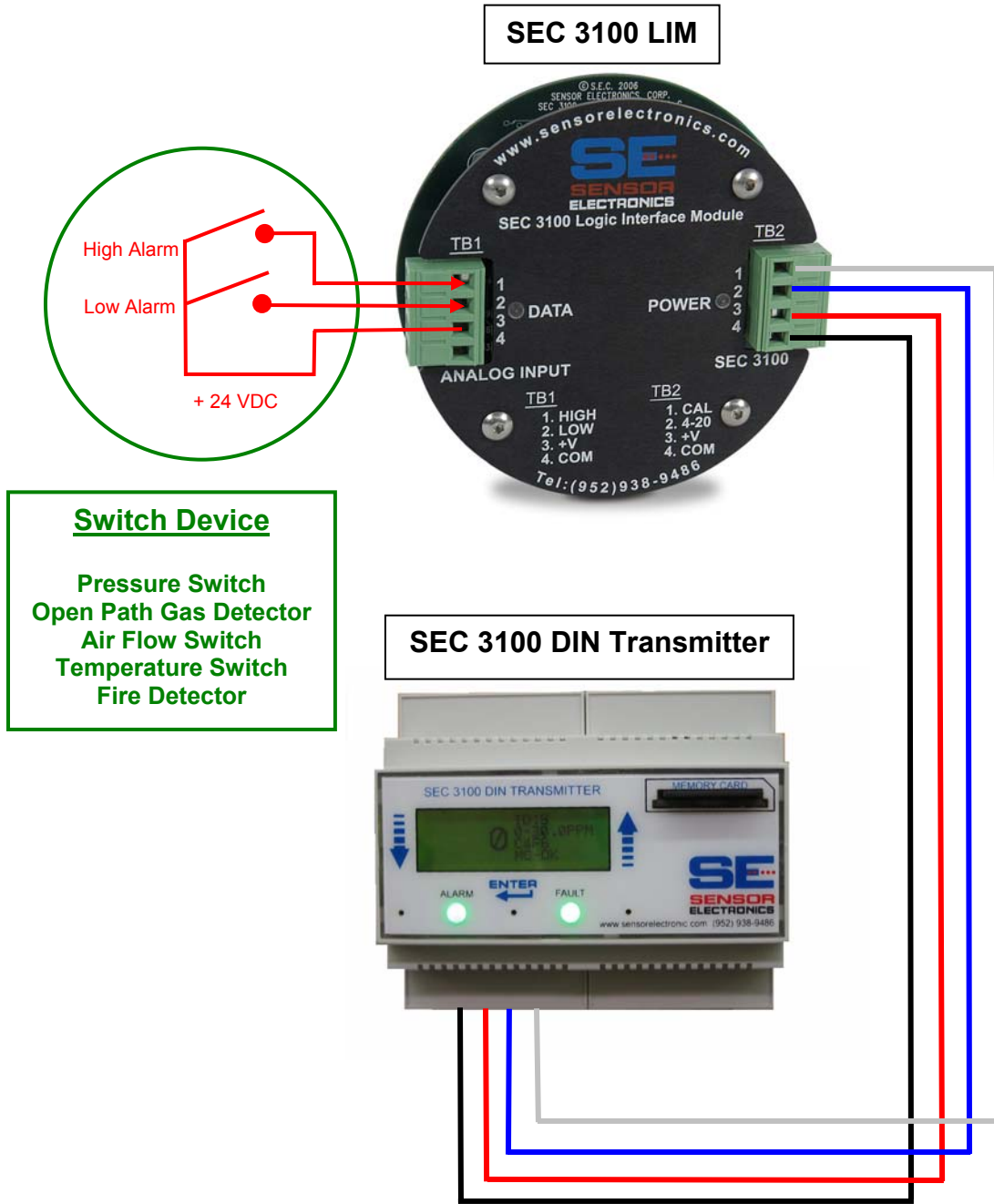
**SEC 3100 Transmitter
(back side)**



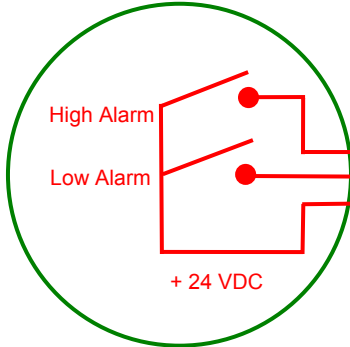
**SEC 3100 Explosion Proof
Transmitter**

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

SEC 3100 DIN WIRING DIAGRAM



SEC 3100 LIM



Switch Device

Pressure Switch
Open Path Gas Detector
Air Flow Switch
Temperature Switch
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.