GENESIS INTERNATIONAL, INC.
SHERLOCK 802 WITH OPTIONAL STROBE
REFRIGERANT GAS LEAK MONITORING AND ALARMING SYSTEM

The **SHERLOCK 802 (SHER802-S) Monitoring System** with the optional factory mounted strobe light was designed to monitor up to eight SHERLOCK Refrigerant Gas Sensors, activating up to two alarms based upon user defined alarm level setpoints. The SHERLOCK 402 is compliant with ASHRAE 15-2013 and Mechanical Code requirements for refrigerant gas monitoring.

NEMA 1 Compliant Enclosure - This enclosure is intended for indoor use only primarily to provide a degree of protection against contact with the enclosed equipment. The enclosure is not designed to provide protection from water or to be placed in a hazardous environment. Mount only in Pollution Level 2 environments, ie. environmentally controlled offices, control rooms, or environmentally controlled machine rooms.

Model #	Nema/IP Rating	Size Inches (mm)	Electrical Category	Pollution Protection
SHER802-S	1	12x9.5x5 (305x241x127)	II	2

Power Input	120/208/240vac, 50/60 Hz, 2.5 Amp
Inputs	Up to 8 *Sherlock* Sensors: *Cmos, Ir* or Up to Seven *Sherlock* Sensors and One *Oxygen Deprivation* Sensor
Outputs	Six (6) SPDT, 250VAC / 30V DC, 5.0 amp relays, Two (2) relays each, Level 1, 2 & System. Auxiliary 12V DC Output

Optional: Auxilliary (Zone cutoff) relays (SHER802-S-R)
Optional: Modbus RS485 RTU Communications

Setback	24 Hour Time Clock Two Dry Contact Digital Inputs
Alarms	Two Alarm Levels, One Fault Level, Two SPDT Relay per Level, Fuse On Common Terminal. One relay on each alarm level can be silenceable when in alarm. Zone isolation alarm relays can activate at either level.

Operating Environment

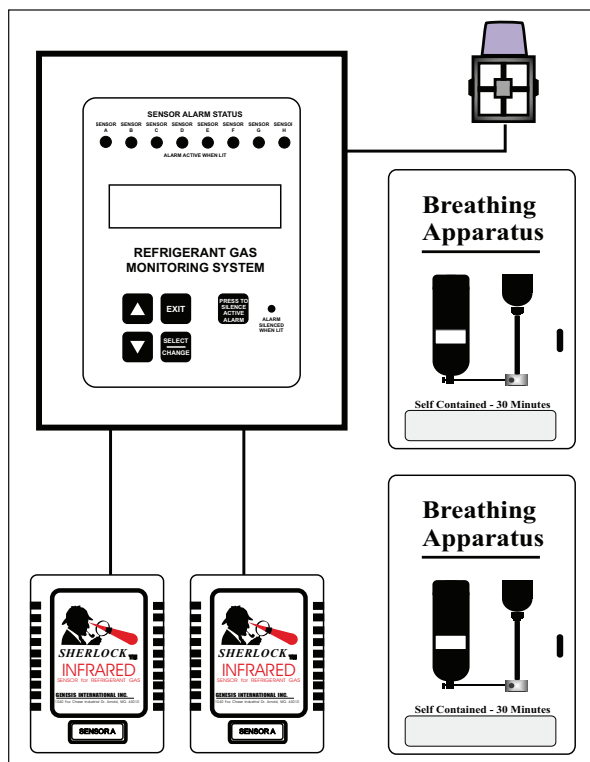|	
Temperature	35°F To 120°F (2°C To 50°C)
Humidity	0 To 95% RH Non-condensing
Display	2 Line By 20 Characters Alphanumeric Backlighted LCD display
Keypad	5 Tactile Pushbuttons *Scroll Up, Scroll Down, Alarm Silent/ Clear, Select/Edit/Change, Exit Function-Menu*

Alarm Indicators

Display	Name And Current Reading Of Alarming Sensor
Buzzer	Built-in Piezo-electric, 90db @10ft, Silenceable
Strobe	90-110 Flashes/Min, Blue, Red, Amber
Listings	ETL, Conforms to UL Std. 3111-1 CAN/CSA C22.2 Std. No. 1010.1
Warranty	15 Month Limited

TYPICAL MACHINE ROOM INSTALLATION

Alarm Level Settings - The **SHERLOCK** 8**02-S** allows you to set a unique Level 1 and Level 2 Alarm Setpoint for up to 8 sensors. When an Alarm Setpoint is exceeded, alarm relays activate. Each alarm setpoint has a programmable Delay of 0 to 120 minutes. Sensor readings are required to exceed an Alarm Setpoint for the programmed amount of time before the control activates the corresponding alarm relay contacts.

Alarm Indication - Alarms are logged to indicate which sensor went in and out of alarm and when. The alarm log stores the last 32 alarms. When a sensor is in alarm, an LED for this sensor on the front panel will light, the on-board beeper will sound and the display will show the activated alarm level.

Systems Sensor Open Monitoring - The SHERLOCK 802-S constantly monitors the wiring to the sensors. If any sensor loses communication for any reason, "OPEN" will appear on the display, the alams will activate and the condition logged.
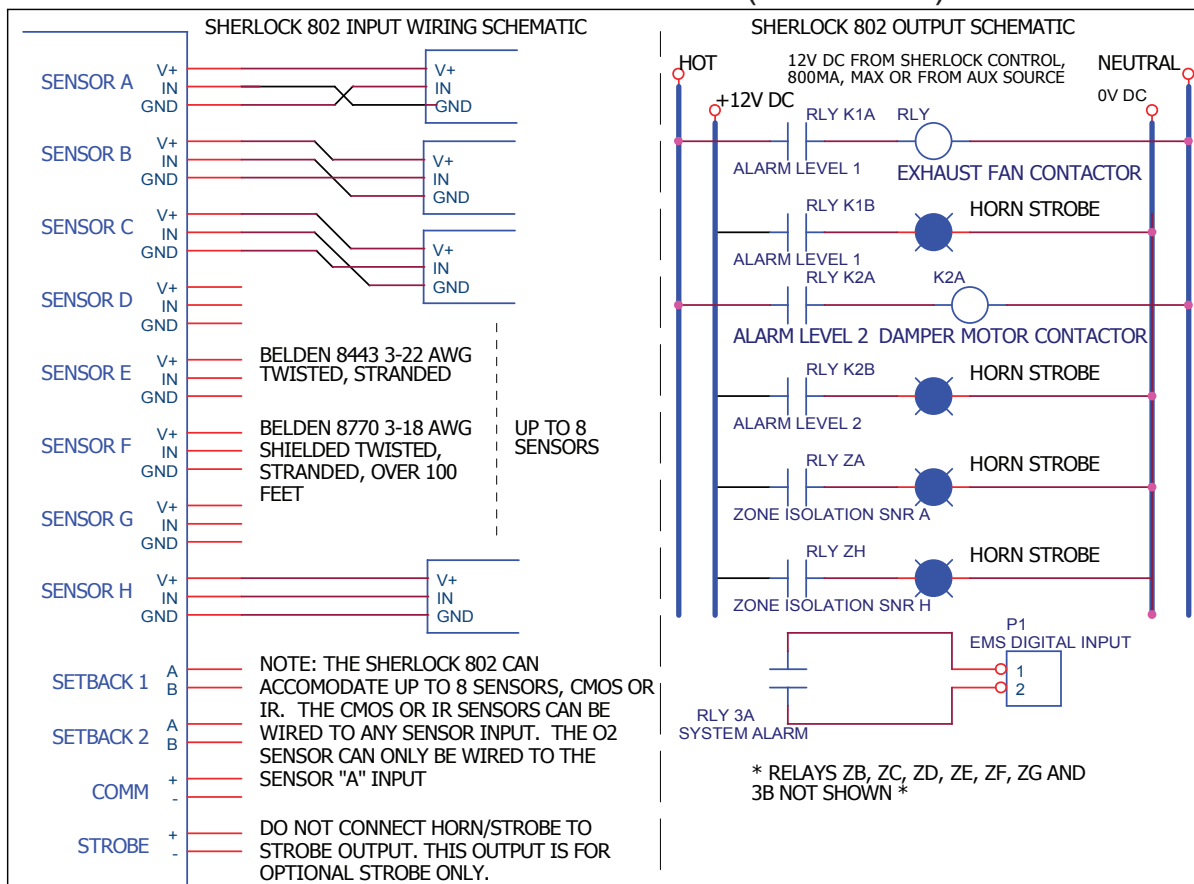
Setback Alarm Settings - In some instances the control may be expected to function in two different environments. The SHERLOCK 802-S provides a feature called SETBACK to accommodate alternate alarm conditions. SETBACK provides a secondary Alarm Setpoint and Delay. The control changes to the setback parameters when a dry contact closes (i.e. air flow switch, sail switch or timer switch) or on a daily schedule.

Alarm Relay Contacts - The SHERLOCK 802-S provides two fused SPDT (Single Pole Double Throw) relay outputs for each for two alarm levels and a system alarm that switch positions in the event of an alarm condition. Level 1 alarm activates the K1A and K1B relays. Level 2 alarm activates the K2A and K2B relays. System alarm activates the 3A and 3B relays. Level 2 for each individual sensor can be disabled. Relays K1B, K2B and 3B can be silenced (returned to non-alarm state) when the SILENT button on the front panel is pushed. The other alarm relays will remain active until the alarm condition is cleared. The control can be programmed so the alarm is cleared automatically when the sensor goes below the alarm setpoint (UNLATCHED) or stay on until the alarm is manually reset (LATCHED). The K1/K2 alarm level can be configured so the relays are "Energized to Alarm" or "De-Energized to Alarm", Common-Normally Open (C-NO) or Common-Normally Closed (C-NC).

Optional Auxiliary Relays (SHER402-S-R) - Optional zone isolation alarm relays (ZA - Sensor A Zone, ZB - Sensor B Zone, ZC - Sensor C Zone, ZD - Sensor D Zone). Each relay can be programmed to activate by level 1 or level 1 & 2 alarm.

Optional: Modbus RTU - This option adds an RS485 output that can communicate with a BAS.

TYPICAL WIRING DIAGRAM (EXAMPLE)

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