The SHERLOCK 202 (SHER202) Monitoring System was designed to monitor up to two SHERLOCK Refrigerant Gas Sensors, activating up to two alarms based upon user defined alarm level setpoints. The SHERLOCK 202 is compliant with ASHRAE 15-2019 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.

**Power**
Universal Input Power Supply 90 to 250VAC, 50/60 Hz, 2 AMPS

**Inputs**
Up to two Sherlock Sensors: Cmos, Ir or One Sherlock Sensor and One Oxygen Deprivation Sensor

**Outputs**
Four (4) SPDT, 250V AC / 30V DC 5.0 Amp Relays. Aux. 12V DC Output Two 12V DC For Audible/Visual Optional Four zone isolation Relays Optional 4-20mA Analog Signal

**Setback**
24 Hour Time Clock, Two Dry Contact Digital Inputs

**Alarms**
Two Alarm Levels, Two SPDT Relays per Level, Fuse On Common Terminal. One relay on each alarm level can be silenceable when in alarm.

**Operating Environment**
- **Temperature**: 32°F To 120°F (0°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
- **Alarm Indicators**: Name And Current Reading Of Alarming Sensor
- **Buzzer**: Built-in Piezo-electric, 90db @10ft, Silenceable
- **Light**: Built-in Flashing red Light on front panel
- **Listings**: ETL, Conforms to UL Std. 61010-1 CAN/CSA C22.2 Std. No. 61010-1
- **Warranty**: 15 Month Limited

**Alarm Level Settings** - The SHERLOCK 202 allows you to set

SHER202 P/N 82-0618-00; SHER202-A P/N 82-0618-AO; SHER202-R P/N 82-0618-ZN; SHER202-A-R P/N 82-0618-AZ 09-10-19
a unique Level 1 and Level 2 Alarm Setpoint and delay for each individual sensor. These relays can be active Normally Open (N.O.) or Normally Closed (N.C.). When an Alarm Setpoint is exceeded for a user set delay, the corresponding alarm relays will activate. Each Alarm Setpoint has a programable Delay of 1 to 120 minutes. The control provides two fused SPDT (Single Pole Double Throw) relay outputs for each alarm level that change state in the event of an alarm condition. Level 1 Alarm activates Relays #1 and #2 (REFR LEAK LEVEL 1, REFレAK LEVEL 1 SILENCEABLE). Level 2 Alarm activates Relays #3 and #4 (REFR LEAK LEVEL 2, REFレAK LEVEL 2 SILENCEABLE). Relays #2 and #4 can be silenced (returned to non-alarm state), “SENSOR CLEAR” button on the front panel is pushed. Relays #1 and #3 remain active until the alarm condition is cleared. The Control can be programmed so the alarm can be cleared automatically (UNLATCHED) or remain on until manually reset (LATCHED).

Systems Sensor Open Monitoring - The SHERLOCK 202 constantly monitors the wiring to the sensors. Should any of the activated sensor wires be cut or disconnected, “SENSOR ALARM” will appear on the SHERLOCK display, the #1 (REFR LEAK LEVEL 1) and #2 (REFR LEAK LEVEL 1 SILENCEABLE) relays will be activated and the condition is logged.

Alarm Logging - Alarms are logged to indicate which sensor went in alarm and when for any of the two alarm levels. The alarm log stores the last 10 alarms. When an alarm occurs, the red alarm light on the panel will flash and an on-board beeper will sound. The display will state the alarm condition.

Setback Alarm Settings - In some locations the sensor may be expected to function in two different environments. The SHERLOCK 202 provides a feature called SETBACK to accommodate alternative conditions. SETBACK provides a secondary ALARM SETPOINT and DELAY. The control switches to the setback parameters when a dry contact (i.e. air flow switch, sail switch or timer switch) closes or on a daily time schedule.

Zone Isolation Relays (SHER202-R, Factory Installed Option) - Optional zone isolation alarm relay (#5 SENSOR A ZONE, #6 SENSOR A ZONE SILENCE-ABLE, #7 SENSOR B ZONE, #8 SENSOR B ZONE SILENCE-ABLE). Each relay can be programmed to activate by level 1 or level 1 & 2 alarm. One relay is silenceable and one is non-silenceable.

Analog Signal Generator (SHER202-A, Factory Installed Option) - The SHERLOCK 202 has an optional 4-20 mA analog output generator for each sensor which can be incorporated to any commercially used monitoring and alarming system or in-house Data Management System.