



# GENESIS INTERNATIONAL, INC.

## SHERLOCK

### HIGH PRESSURE VENTLINE SENSOR FOR EMS APPLICATIONS

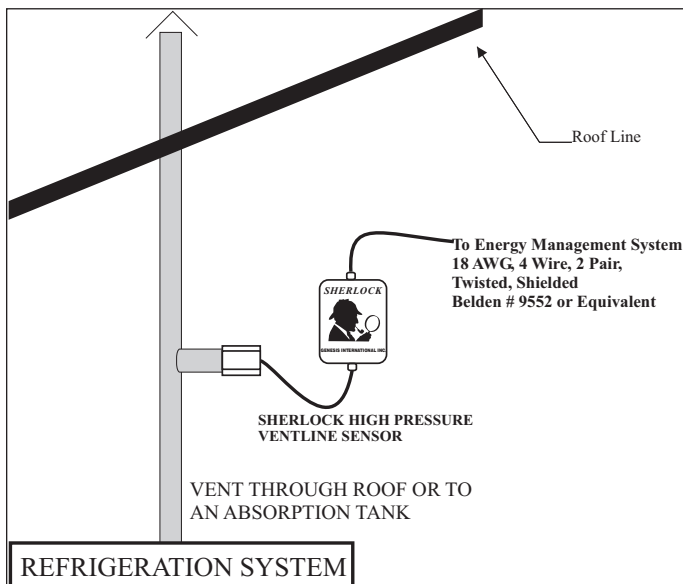


**STAND-ALONE HIGH PRESSURE VENTLINE**

#### OVERVIEW

**SHERLOCK HIGH PRESSURE VENTLINE REFRIGERANT GAS SENSOR** was designed to detect the presence of high concentrations of refrigerant gas in the vent lines of refrigeration systems. The sensor warns the user to investigate for possible leaks in relief valve or to check the systems for over-pressure. The sensor is designed to be installed in refrigeration vent lines and is supplied in a NEMA 3R rated housing with a 1 1/4" NPT female connection. The Ventline Sensor can be utilized as a signal source for A 4-20 mA EMS application.

#### TYPICAL INSTALLATION



#### DIMENSIONS Inches (mm)

<b>ENCLOSURE</b>	NEMA 3R 6.5 x 4.5 x 5.0 (165 x 114 x 127)
<b>SENSOR HEAD</b>	Nickel Plate 4.0 x 2.0 x 2.25 (102 x 51 x 57) Sensor Opening: 1.25 (31.75) NPT Female Connection
<b>CABLE</b>	20Ft (6M) Belden #8443 3-22 AWG Twisted
<b>ENVIRONMENT</b>	-25 to 120 °F (-30 to 50 °C), 0 to 95 % RH non condensing
<b>POWER INPUT</b>	24V AC/DC, 250 mAmps
<b>OUTPUT SIGNAL</b>	4-20mA Standalone Optional Voltage Output
<b>DETECTION RANGE</b>	30 to 300 ppm(gas dependent)
<b>SENSITIVITY</b>	10 % of full scale reading.
<b>MAX. PRESSURE</b>	300 psi
<b>CALIBRATION</b>	Every 6 Months
<b>WARM-UP TIME</b>	Readings will stabilize after 3 hours.

#### VENT-LINE SENSOR SELECTION CHART\*

##### Model 60-0510 -- CFC/HCFC/HFC gases

R-22	R-405A(G2015)	R-503
R-123	R-406A(CHG)	R-507A(AZ50)
R-125	R-407A(Klea60)	R-508A(Klea5R3)
R-134A	R-407B(Klea61)	R-508B(SUVA95)
R-143A	R-407C(Klea66)	R-509A(TP5R2)
R-152A	R-407D	R-411A(G2108A)
R-400	R-408A(FX10)	R-411B(G2108B)
R-401A(MP39)	R-409A(FX56)	R-412A(TP5R)
R-401B(MP66)	R-410A(AZ20)	R-413A
R-401C(MP62)	R-410B	R-438A(MO99)
R-402A(HP80)	R-411A(G2018A)	R-503
R-402B(HP81)	R-411B(G2018B)	R-507(AZ50)
R-403A	R-412A(TP5R)	R-508A(Klea5R3)
R-403B	R-413A	R-508B(SUVA95)
R-404A(HP62)	R-438A(MO99)	R-509A(TP5R2)

##### THE BELOW SENSORS WILL HAVE LIMITED DETECTABILITY USING THE 60-0508 CMOS

R-11	R-32	R-500(AZ50)
R-12	R-113	R-502
R-13	R-124	
R-23	R-142B	

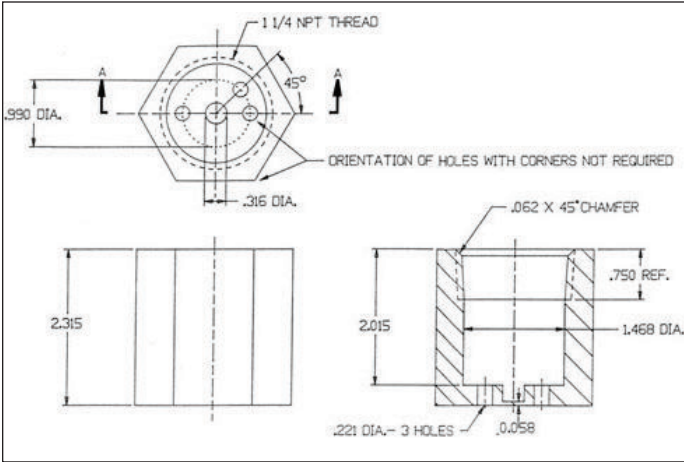
##### Model 60-0149 -- Ammonia

R-717

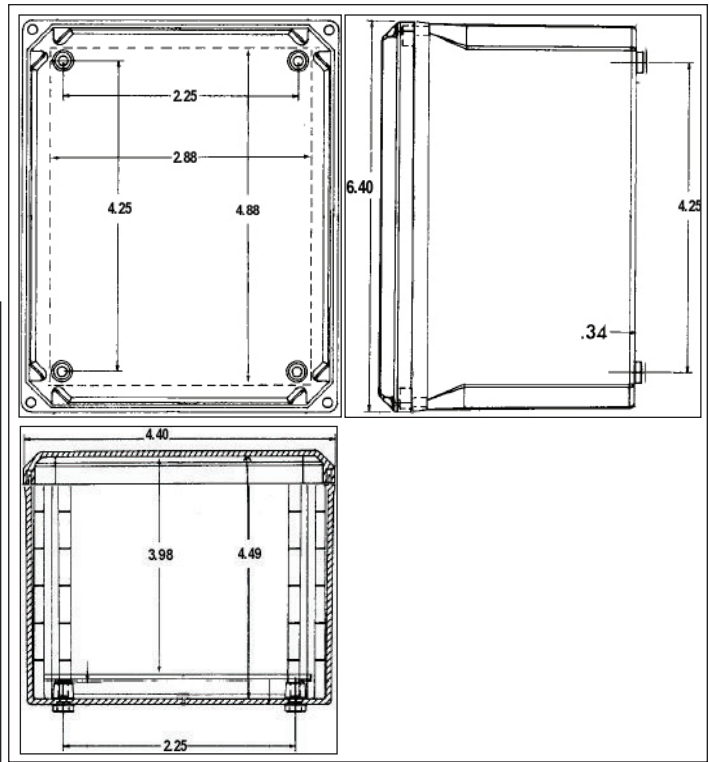
\* Please Note: Sensor Part Numbers Have Changed for Several Refrigerants

## VENT-LINE SENSOR INDIVIDUAL COMPONENT DIMENSIONS

**NOTE:** Sensor element located in sensor head is replaceable. Remove old element with needlenose and line up prongs of new sensor and insert. minimize touching of element screen.

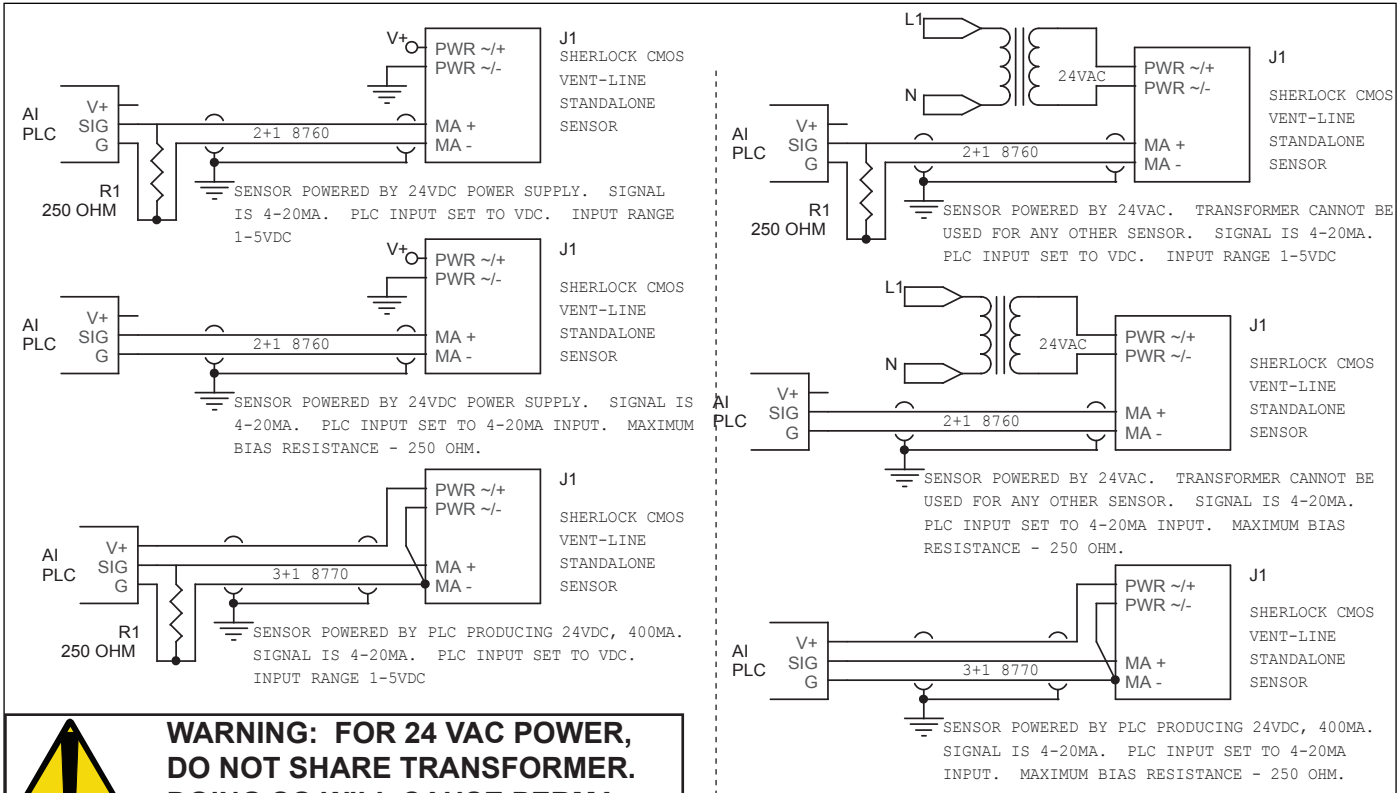


**SENSOR HEAD**



**ENCLOSURE**

## TYPICAL WIRING DIAGRAM



**WARNING: FOR 24 VAC POWER,  
DO NOT SHARE TRANSFORMER.  
DOING SO WILL CAUSE PERMA-  
NENT DAMAGE TO THE UNIT.**



# GENESIS INTERNATIONAL, INC.

1040 FOX CHASE INDUSTRIAL DRIVE  
ARNOLD, MISSOURI 63010

PHONE: (636) 282-0011  
FAX: (636) 282-2722

WEBSITE:  
[WWW.GENESIS-INTERNATIONAL.COM](http://WWW.GENESIS-INTERNATIONAL.COM)

EMAIL:  
[MAIL@GENESIS-INTERNATIONAL.COM](mailto:MAIL@GENESIS-INTERNATIONAL.COM)