

**Refrigerant - Solid State Sensor
Gas Sensor / Transmitter**

The Refrigerant gas sensor/transmitter shall be as manufactured by Brasch Manufacturing Company, Inc. with specifications and input / output ratings as scheduled.

General:

1. The sensor / transmitter shall be an ETL listed unit and conform completely to the UL 3111-1 standard.
2. The NEMA 1 enclosure consists of two pieces, a cover and chassis that shall be constructed of heavy gauge galvanealed steel with a baked-on polyester finish. The cover shall close flush with the sides of the box and shall require a special tool to open it. The sensor module shall be protected from damage inside the enclosure and the cover shall contain louver openings to allow proper sensing. The openings shall conform to the UL 3111-1 standard.
3. The sensor / transmitter shall contain a semiconductor sensor with temperature compensation circuits. The sensor can be calibrated to respond to any one of the following refrigerants:
R-11, R-12, R-22, R-23, R-113, R-123, R-134a, R-141b, R-142b, R-152a, R-500 or R-502.
4. The enclosure shall be provided with four, ½" pre-punched opening for connection of field conduit.
5. The sensor / transmitter shall be protected against static discharge, excessive electrical noise, and tested for safety in accordance with the UL 3111-1 standard.
6. The sensor / transmitter shall have a green "power" LED and yellow "sensor-failure" LED.

Overcurrent Protection:

7. The sensor / transmitter shall contain a power supply fuse rated for 1.25 amp at 250 VAC. Fuse shall be of the time-lag type.

Switches and Controls:

8. The sensor / transmitter shall provide a 4–20 ma DC, 0–1 VDC, 0–5 VDC or 0–10 VDC signal in direct relationship to the refrigerant gas concentration. The signal type can be selected at time of order or changed in the field. This signal shall be compatible with building and energy management systems and/or Brasch Manufacturing, Multi-Sensor Control Panels.