

## **Oxygen - Electro-Chemical & Nitrogen Dioxide - Electro-Chemical Gas Sensor / Transmitter**

The combination Oxygen & Nitrogen Dioxide 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 shall be constructed of heavy polycarbonate plastic, which consists of two pieces, cover and chassis. 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. The gas sensor shall be exposed to the ambient air to allow for proper sensing. The case shall conform to the UL 3111-1 standard.
3. The sensor / transmitter shall contain an electro-chemical oxygen (O<sub>2</sub>) sensor with temperature compensation circuits and an electro-chemical nitrogen dioxide (NO<sub>2</sub>) sensor.
4. The enclosure shall be provided with one, 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.

### **Overcurrent Protection:**

7. The sensor / transmitter shall contain two power supply fuses rated for 0.200 amp at 250 VAC. Fuses 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 oxygen (O<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>) gas concentrations. The signal types 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.