

## **Multi-Sensor Control Panel**

**The Multi-Sensor Control Panels shall be as manufactured by Brasch Manufacturing Company, Inc. with specifications and input / output ratings as scheduled.**

### **General:**

1. The multi-sensor control panel shall be an ETL listed unit containing a main control board with the capability to add input/output boards and shall conform completely to the UL 3111-1 standard.
2. The multi-sensor control panel shall have a NEMA 1 enclosure constructed of heavy gauge galvanealed steel with a baked-on polyester finish, which conforms completely to the UL 3111-1 standard. The cover shall close with the sides of the box and be secured with a keyed lock.
3. The multi-sensor control panel's enclosure shall be provided with five, ½" and four, ¾" knockouts pre-punched for connection of field conduit.
4. The multi-sensor control panel shall be protected against static discharge, excessive electrical noise, and tested for safety in accordance with the UL 3111-1 standard.
5. The multi-sensor control panel shall have a four line, 20 character per line, liquid crystal display (LCD) that will continually display the current date and time and any abnormal events that may be occurring.
6. Programming of the multi-sensor control panel and current status all sensors shall be controlled from a front panel 16 key keypad.

### **Overcurrent Protection:**

7. The multi-sensor control panel shall contain a power supply fuse rated for 1.0 amp at 250 VAC. Each output relay shall have a fuse rated for 5 amp at 250 VAC. Fuses shall be of the time-lag type.

### **Switches and Controls:**

8. Each multi-sensor control panel shall receive inputs from sensors or detectors with a 4–20 ma DC signal in direct relationship to the concentration of the type of gas being monitored.
9. The multi-sensor control panel shall have the capability of assigning each sensor to a specific output control zone. Sensors may control zones individually or in combination with other sensors.
10. A key on the multi-sensor control panel's keypad shall be provided to silence the 106 dB internal alarm. The alarm circuit shall become active again, once there is no longer an alarm condition.
11. Output relays providing a normally closed set of contacts for the low-alert and for the alarm shall be provided. These relays shall provide a fail-safe that will automatically activate ventilation equipment upon power loss to the sensor. The low-alert and high-alert relays shall be capable of being configured in the field for a two speed fan or for 50%/100% fan control operations. These relays shall be suitable for the connection of 24 VAC, 24 VA inductive circuits.
12. Field adjustment of the low-alert detection level shall be available for each sensor. The range of detection level shall depend on the gas being monitored. Selectable time delays shall range from 0 to 7 minutes, in 1 minute increments.
13. The multi-sensor control panel shall come standard with the capability to accept up to 8 inputs from sensors and control up to 4 output zones. Optional boards shall be available to extend the control panel's capability to accept up to 20 inputs from sensors and control up to 10 output zones.
14. The multi-sensor control panel shall have a battery backup feature capable of retaining the programmed parameters in case of a power loss for up to 8 hours.

**Bulletin S-700**