



Ambient Ozone Alarm

Description

The optional ambient ozone monitor and alarm can be used to detect leaks or dangerous accumulations of ozone gas. It is a cost-effective solution for measuring TLV ozone levels in areas around generators, contactors, gas exhaust systems, and enclosed gas delivery systems in order to monitor worker exposure to ozone. The ozone sensor monitors ozone levels and sets an alarm should the ambient ozone level reach 0.08 ppm. This is below the OSHA permissible level of 0.1 ppm averaged over an 8-hr day. The ozone generator and all components are de-energized and a visual and audible alarm are activated. The sensor can be located adjacent to the ozone generator or in a remote location where personnel exposure is a concern.



Theory of Operation

A solid state sensor consists of two electrodes embedded into a solid state metal oxide material. The presence of ozone gas changes the resistance of the material, with the magnitude of the change directly related to the gas concentration. The resistance change, and hence the gas concentration, is measured through the sensors corresponding electronic circuitry. The sensor is kept at a specific operating temperature by applying a “heater” voltage to it.

Features

- Detect ozone gas from 0 to 3% by weight.
- Long life expectancy, typically ten years or more with a three year warranty.
- Calibration interval: 30 days to six months, depending on application.
- Temperature range: -25 to 50°C. Sensor cabling can be run up to a thousand feet to monitor anywhere in your facility.
- LED digital display on sensor face.
- Optional analog 4-20mA signal can be tied into PLC, portable datalogger, or other control system.

Field Calibration Procedure

- Auto calibration available on LED digital model only.
- Does not require the removal of the sensor housing for calibration, which is especially important in hazardous or explosive environments.
- Simple, one-man automatic calibration. No potentiometers to adjust and no covers to remove; it's as easy as 1,2,3.