# HVAC Applications for the

## **MSA TRIGARD Monitoring System**





### Application

The HVAC industry possesses a wide variety of gas detection needs. From boiler rooms, battery rooms, engineering and research labs, and transportation maintenance facilities, to a myriad of other industrial building and facility applications, each environment has its own monitoring needs. To enable personnel to work safely in these environments, monitoring of toxic gases, oxygen enrichment and deficiency, and combustible gases is necessary. Due to this wide variety, a flexible, versatile gas monitor is absolutely essential.

#### Solution

With abundant sensor offerings and a variety of configurations, the MSA TRIGARD Monitoring System is an ideal, yet affordable, solution.



#### Additional Features

- · Operates in diffusion mode, with factory-calibrated sensors ready to perform immediately after installation
- · Available for remote sensing applications, where installation requires the sensor to be separated from the electronics
- · Can operate on a completely stand-alone basis with its large LCD display, optional quick-check LEDs and four relay outputs (three alarm and one fault), or can be connected with a 4-20 mA or MODBUS RTU output to a control system (PLC, DCS, etc.)
- Patented sensor change-out feature eliminates the need to declassify a hazardous area
- Pre-calibrated sensor modules are ready for installation out of the box
- Sensors can be replaced in the field without the use of tools. The unit quickly recognizes the new sensor type and reconfigures alarm and relay settings to optimize the new sensor.

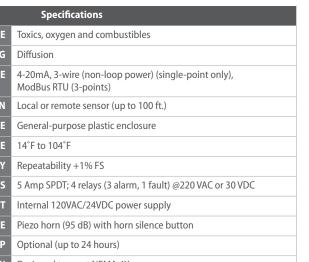
### MSA Sensor Exchange Program

With the MSA Sensor Exchange Program, users receive replacement calibrated sensor modules when they are needed, on demand. Sensors can be scheduled to arrive prior to the calibration due date for easy installation and minimal downtime.

#### Accessories

- Factory-assembled remote sensors are available in 25-, 50- and 100-foot lengths, enabling remote mounting of sensors in either a general purpose or explosion-proof enclosure.
- Strobes (one or two)
- · Back-up battery
- Internal power supply

Specifications	
GAS TYPE	Toxics, oxygen and combustibles
GAS SAMPLING	Diffusion
VOUTPUT TYPE	4-20mA, 3-wire (non-loop power) (single-point only), ModBus RTU (3-points)
SENSOR LOCATION	Local or remote sensor (up to 100 ft.)
ENCLOSURE	General-purpose plastic enclosure
SENSOR TEMPERATURE RANGE	14°F to 104°F
ACCURACY	Repeatability +1% FS
RELAYS	5 Amp SPDT; 4 relays (3 alarm, 1 fault) @220 VAC or 30 VDC
POWER INPUT	Internal 120VAC/24VDC power supply
ALARM TYPE	Piezo horn (95 dB) with horn silence button
BATTERY BACKUP	Optional (up to 24 hours)
ENVIRONMENTAL PROTECTION	Designed to meet NEMA 4X



Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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