

**REFRIGERANT
GAS DETECTION
& VENTILATION
CONTROLS**

30+
YEARS OF
EXPERIENCE

**PROTECT
LIFE &
PROPERTY**

REFRIGERANTS
TOXIC GAS
COMBUSTIBLE GAS



ONE CONTROLLER FITS ALL

- ✓ Off The Shelf Way To Meet ASHRAE Code
- ✓ Four Outputs For Pre-Alarm & Alarm
- ✓ 0-10V Output For BMS or Fan Control
- ✓ Strobe Alarm Outputs
- ✓ Various Gases Detectors Available
- ✓ Control Up To 16 Gas Detectors

DESCRIPTION

The MerlinGuard is a gas detection panel designed to be used with up to sixteen (16) CGS TFT detectors. It is intended for use in spaces that require either refrigerant, toxic or combustible gas detection and provides a pre-programmed control panel including features such as fan control options, alarm damper control, and connectivity to Building Management Systems (BMS).

The panel has four output options for pre-alarm and high-alarm conditions, and contains a 0-10V output that can be utilized by the BMS or for fan control via VFD.



PROVIDING SAFETY & CONTROLS IN

- SCIENCE LABORATORIES
- BOILER ROOMS
- GAS FEATURES
- COMMERCIAL KITCHENS
- PARKING GARAGES
- EMS STATIONS

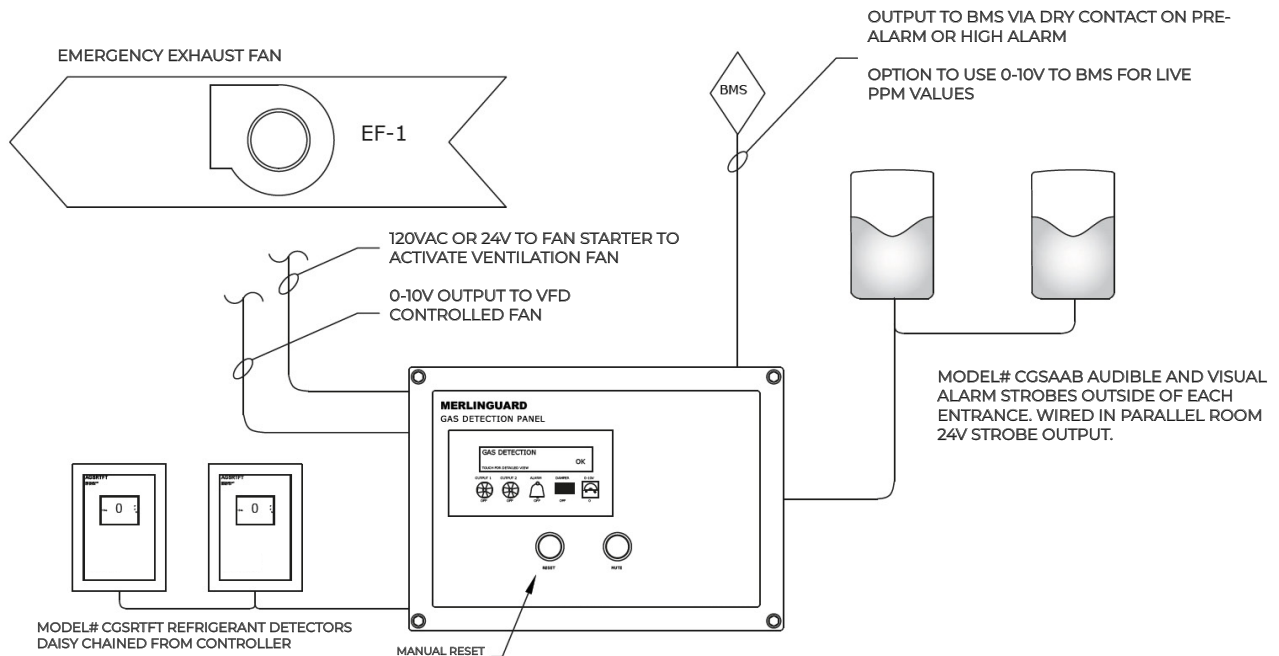
FIND OUT MORE

info@canadiangassafety.com
647-577-1500

Gas Detectors Available

CO	CO₂	H	O₂	NO₂	C₃H₈	CH₄	R
Carbon Monoxide	Carbon Dioxide	Hydrogen	Oxygen Depletion/ Oxygen Enrichment	Nitrogen Dioxide	LPG / Propane	Natural Gas / Methane	Refrigerant
							R-1234yf, R-1234ze, R-134a, R32, R-404a, R-407c, R-410a, R-454a, R-454b, R-454C, R-455a

Example Setups



ASHRAE 15 Code Requirement Summary

Located in an area where refrigerant from a leak will concentrate:

Check for the weight of the refrigerant gas, and if it will rise or fall. Check the installation heights in the CGS detector manual. The detectors can be placed on a wall near the chillers or hung from the ceiling next to a high-risk point on the chiller.

Actuates an alarm and mechanical ventilation:

The system must connect to a ventilation system and ventilate the refrigerant upon a leak at a rate of 100 times the square root of the system refrigerant charge. (8.9.8.1).

Set Point (Alarm Levels). Occupational Exposure Limit (OEL):

The time-weighted-average (TWA) concentration for a normal eight-hour workday and a 40-hour workweek to which nearly all workers can be repeatedly exposed without adverse effect, based on the OSHA PEL, ACGIH TLV-TWA, TERA OARS-WEEL, or consistent value. These values are given in ASHRAE 34.

Annunciate Visual and Audible Alarms:

The visual and audible alarms outside of the room can be accomplished using remote alarm strobes installed outside of each entrance and wired back into the control panel. The alarms inside of the room can be accomplished by the control panel and detectors built in visual and audible alarms, or by adding a redundant alarm strobe inside of the space.

Shall be of the manual reset type:

The CGS MerlinGuard requires a manual reset after high alarm, which is located on the control panel. By mounting the control panel inside of the chiller room, it satisfies this section of code.



FIND OUT MORE

info@canadiangassafety.com

647-577-1500

PROVIDING SAFETY & CONTROLS IN

- SCIENCE LABORATORIES • BOILER ROOMS • GAS FEATURES
- COMMERCIAL KITCHENS • PARKING GARAGES • EMS STATIONS

