

COMPLIANCE SOLUTIONS

CHILLSense™ CHILLER ROOM GAS DETECTION

PURPOSE BUILT FOR CSA B52 & ASHRAE 15-2024 COMPLIANCE

CET's ChillSense™ gas detection solution for large chiller room applications complies with regulatory standards for reliable detection of A2L refrigerants, and supports the required ventilation and equipment operation protocols.

Stay compliant, reduce risk, and safeguard chiller rooms. Trust the gas detection experts to keep your critical environment safe and secure.

COMPLIANT, COMPLETE, SAFE

- **FCS-L-SW:** Multi Channel Controller with Modbus® or BACnet® WAN output to BAS
- **CGAS-D-IR:** Digital IR Refrigerant Transmitters
- **RDM-L2:** Remote Display with side mounted strobe
- **RSW-E:** Remote Switch with red push button
- **RSH-24V-R:** Remote Strobe/Horn Combo

Talk to one of our gas detection experts today to learn about compliant gas detection solutions.



ChillSense, the complete solution



**THE
GAS DETECTION
EXPERTS.**

WWW.CETCI.COM
(877) 940 8741
SALES@CETCI.COM



CHILSENSE: MEETING SPEC

- Gas detectors installed where refrigerant leaks may collect
- Activate the ventilation system on OEL or 25% LFL
- Manual shutdown of equipment in an emergency
- Activation of alarms inside and outside the room

FCS Multi Channel System Controller

- Four 5A relays, audible alarm, touch LCD display with menu, zoning, logic control, and data logging
- Factory installed strobe and manual switch
- Modbus® RS-485 or BACnet® MS/TP output for BAS integration
- 90–240V AC power supply

cGas Detector IR Refrigerant Transmitters

- 0-2000 ppm sensor range
- 1 relay, 4-20 mA or voltage output, 3-wire VDC or 4-wire VAC, or Modbus® RS-485 or BACnet® MS/TP output, 4-wire VAC/VDC
- Options: Low Temp Operation, Splash Guard

Remote Display

- View status and gas readings at other room entrances
- Connection loss detection
- Side mounted strobe and internal audible alarm

Remote Switch

- Manual push button control for mechanical/electrical shutdowns and activating horn/strobes

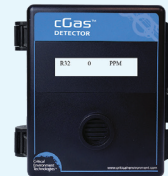
Remote Strobe / Horn Combo

- Multiple alarm features in one device
- Independent settings for horn, strobe or horn and strobe together
- Three lens colours to choose from

CRITICAL ENVIRONMENT TECHNOLOGIES



Flexible Control System (FCS)



cGas Detector (Refrigerant)



Remote Display (RDM-L2)



RSW-E



RSH-24V-R



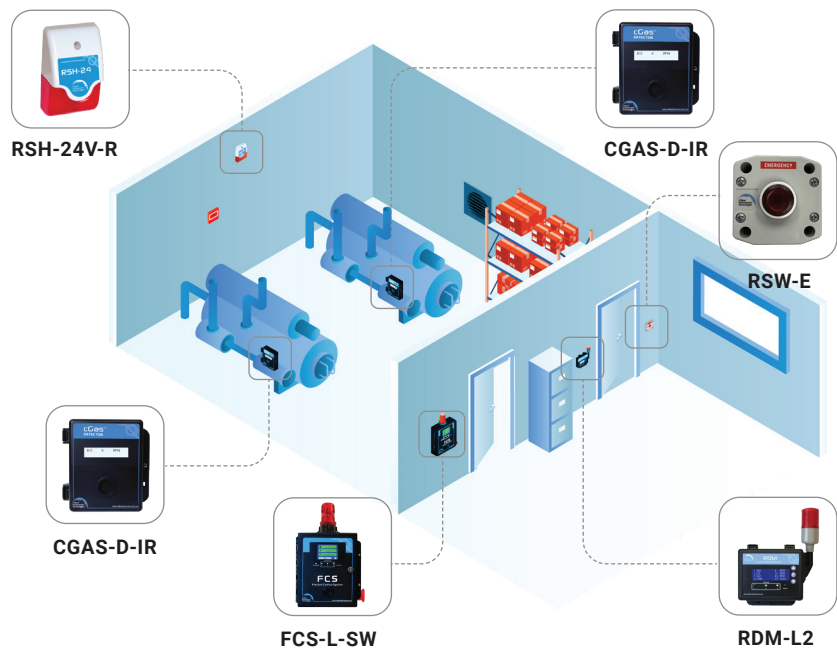
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COMPLETE SYSTEM INTEGRATION BUILT TO MEET SPEC

- **FCS-L-SW** Controller w/strobe & manual shutoff switch
- **CGAS-D-IR** Digital IR Refrigerant Transmitters
- **RDM-L2** Remote Display Module
- **RSW-E** Remote Switch
- **RSH-24V-R** Remote Strobe & Horn



CSA B52:23 CLAUSE 6.3.2 AND ASHRAE 15-2024 SECTIONS 7&8

Each refrigeration machinery room must be equipped with refrigerant detectors placed where leaks are most likely to accumulate. These detectors must be capable of identifying each specific refrigerant present in the room. The detectors must have alarm setpoints no higher than the lowest applicable Occupational Exposure Limit (OEL) and Refrigerant Concentration Limit (RCL). If the gas concentration reaches or exceeds the OEL setpoint, the system must trigger a trouble alarm and initiate Level 1 ventilation within 300 seconds, both of which must reset automatically. If the concentration reaches or exceeds the RCL setpoint, the system must activate an emergency alarm and Level 2 ventilation within 15 seconds, with manual resets required for both. If refrigerant levels exceed 25% of the lower flammable limit (LFL) or the upper detection limit—whichever is lower—alarm signals must trigger the shutdown of refrigerant-related equipment such as compressors and pumps. A digital readout of the current gas reading must be outside the entrance.

All alarms must be both visual and audible,

located inside the machinery room and outside each entrance. Manual alarm reset controls must be located inside the room. Ventilation fans must be on a dedicated electrical circuit with a control switch positioned immediately outside the machinery room door. The mechanical ventilation system must operate continuously or be activated by refrigerant detectors, with building fire and smoke systems permitted to override this function. If refrigerant concentrations exceed a defined threshold, emergency ventilation must engage automatically and continue for at least five minutes after levels drop below the setpoint.

Emergency shutoff controls for mechanical equipment must be located immediately outside the machinery room door and be dedicated solely to emergency shutdown. Refrigerant detectors must support automatic self-testing and be tested upon installation and at least annually, or more frequently if specified by the manufacturer. These tests must confirm alarm setpoints and response times. If a detector fails a self-test, a trouble alarm must be transmitted to an approved monitored location.

It is the user's responsibility to ensure compliance with applicable regulations. CET is not liable for errors, omissions or misinterpretations. 10-25



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