

FCS
CGAS-D-IR Multi
Channel Control System



FCS CGAS-D-IR Multi Channel Control System Installation Guide

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FCS CGAS-D-IR Multi-Channel Control System



OVERVIEW

FCS-CGAS-D-IR-Multi-Channel-Control-System-fig-1

REFRIGERANT DETECTION SYSTEM – EQUIPMENT

- FCS: MULTI CHANNEL CONTROL SYSTEM (UP TO 128 CHANNELS) WITH...
- FOUR RELAYS RATED 5A @ 240VAC, LCD DISPLAY, INTERNAL BUZZER WITH SILENCE
- MANUAL SHUTOFF SWITCH (-SW)
- TOP MOUNTED STROBE (-L)
- CGAS-D-IR: SINGLE CHANNEL REFRIGERANT DETECTOR/TRANSMITTER WITH ONE RELAY RATED 5A @ 240VAC, INTERNAL BUZZER
- CET-RDM: REMOTE DISPLAY MODULE
- RLY-8: REMOTE RELAY MODULE (8 RELAY OUTPUTS PER MODULE)
- LNK-AO: REMOTE ANALOG OUTPUT MODULE (4 ANALOG OUTPUTS PER MODULE)
- RSH-24V: REMOTE HORN/STROBE
- RPS-24VDC: REMOTE POWER SUPPLY (1 FOR EVERY 16 TRANSMITTERS)

SEQUENCE OF OPERATIONS

- **LOW ALARM:** DETECTION OF 50PPM R123 OR 250PPM FREON REFRIGERANT SHALL ACTIVATE VENTILATION SYSTEM
- **HIGH ALARM:** DETECTION OF 150PPM R123 OR 1000PPM FREON REFRIGERANT SHALL ACTIVATE HORN/STROBE AND SHUTDOWN CHILLERS

SYSTEM NOTES

1. REFRIGERANT SENSOR LOCATION AT 6-8 INCHES ABOVE FINISHED FLOOR
2. REFRIGERANT SENSOR TO HAVE DETECTION RADIUS OF 31 FEET
3. ALL TRANSMITTERS AND REMOTE MODULES TO BE 4-WIRE DAISY CHAINED FROM CONTROLLER
4. SYSTEM TO COMMUNICATE VIA MODBUS RS485 FOR DATA COMMUNICATION
5. RECOMMENDED WIRE: 4 CONDUCTOR, 4 COLOR, 16 AWG STRANDED, SHIELDED. DO NOT USE SOLID CORE
6. CONTROLLER POWERED BY 90-240VAC

Specifications

- BACNET MS/TP to BAS
- Additional Analog Outputs
- Additional Relays
- Eight Optional Analog Outputs
- Four Relays
- Refrigerant Detection System – Equipment FCS: Multi-Channel Control System (up to 128 channels)
- Four Relays rated 5A @ 240VAC
- LCD Display
- Internal Buzzer with Silence Manual Shutoff Switch (-SW)
- Top Mounted Strobe (-L)
- **CGAS-D-IR**: Single Channel Refrigerant Detector/Transmitter with one relay rated 5A @ 240VAC
- Internal Buzzer
- **CET-RDM**: Remote Display Module
- **RLY-8**: Remote Relay Module (8 relay outputs per module)
- **LNK-AO**: Remote Analog Output Module (4 analog outputs per module)
- **RSH-24V**: Remote Horn/Strobe
- **RPS-24VDC**: Remote Power Supply (1 for every 16 transmitters)

Product Usage Instructions

Sequence of Operations

- **Low Alarm**: Detection of 50PPM R123 or 250PPM Freon refrigerant shall activate the ventilation system.
- **High Alarm**: Detection of 150PPM R123 or 1000PPM Freon refrigerant shall activate the horn/strobe and shutdown chillers.

System Notes

1. Refrigerant sensor location at 6-8 inches above the finished floor.
2. Refrigerant sensor to have a detection radius of 31 feet.
3. All transmitters and remote modules to be 4-wire daisy-chained from the controller.
4. System to communicate via Modbus RS485 for data communication.
5. Recommended wire: 4 conductors, 4 colors, 16 AWG stranded, shielded. Do not use solid core.
6. Controller powered by 90-240VAC.

FAQs

Q: How do I reset the system after an alarm?

A: To reset the system after an alarm, locate the control panel and press the reset button. Ensure that the cause of the alarm has been addressed before resetting.

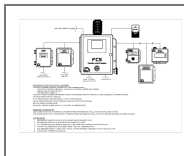
Q: Can I extend the detection range of the refrigerant sensor?

A: No, the detection range of the refrigerant sensor is fixed and cannot be extended beyond its specified radius of 31 feet.

Q: What is the recommended maintenance schedule for the system?

A: It is recommended to perform regular maintenance checks on the system every six months to ensure proper functioning and calibration of the sensors and modules.

Documents / Resources



[FCS CGAS-D-IR Multi Channel Control System](#) [pdf] Installation Guide
CGAS-D-IR, CET-RDM, RLY-8, CGAS-D-IR Multi Channel Control System, CGAS-D-IR, Multi Channel Control System, Channel Control System, Control System

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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