CO2METER REMOTE SAFETY ALARMS RAD-0002-ZR TO THE E-STOP PANEL



RAD-0002-ZR SAFETY MONITOR

The RAD-0002-ZR Oxygen Deficiency Safety Monitor is designed to detect extremely low concentrations of oxygen in enclosed spaces and to warn occupants of low oxygen levels. This device can also monitor either O₂ depletion or O₂ enrichment, as hazardous concentrations of oxygen (O₂) in confined spaces are dangerous, and may lead to health problems ranging from headaches and fatigue to asphyxiation and even fatality. This monitor has both audible and visual alarms, which will alert individuals should hazardous concentrations be present. Detection of low levels of O₂ will also activate relays that can be used for a fan or air-handling system to ventilate the confined space and improve O₂ concentration in the area.

RAD-0002-ZR PRODUCT ADVANTAGES

- Large digital LCD display
- Separate SEU (Main Sensor) and RDU (Remote Display)
- 3 Relay outputs to control ventilation devices
- 4-20mA Outputs O₂: 0~25%, Temp: -50°C
- · Audible and visual indications at 3 alarm levels
- Ability to add strobes for additional indication
- Automatic barometric pressure compensation

APPLICATIONS

ACCESSORIES

- CryogenicsCommercial Freezers
- CM-1027| Dual Strobe Add On Kit
- CM-0126-5,6 | Strobe Tower Add On Kit
- LaboratoriesProcess Cooling
- Food Production



Cooler By Design.

RAD-0002-ZR SPECIFICATIONS

Range	0 - 25% display
Display Resolution	0.1%
Accuracy	Better than 2%FS
Response Time	0 ₂ : <2min by 90%
O ₂ Depletion AL1	15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20. The default AL1 is 19.5%.
O ₂ Depletion AL2	12.5, 13, 13.5, 14, 14.5, 15, 15.5, 16, 16.5%. The default AL2 is 16.5%.
O ₂ Depletion AL3	15.5%, 15.0%, 14.5%, 14.0%, 13.5%, 13.0%, 12.5%, 12%. The default AL3 is 12.0%.
O ₂ Enrichment AL1	22.0%, 22.5%, 23.0%, 23.5%. The default AL1 is 22.0%
O ₂ Enrichment AL2	24.0%, 24.5%, 25.0%. The default AL2 is 24.0%
O ₂ Enrichment AL3	32°F to 122°F (0°C to 50°C)

ELECTRICAL & MECHANICAL SPECIFICATIONS

Power Supply	Output: 12VDC, 2000mA.
Power Input	100~240 VAC,50/60Hz, 0.6A
Power Consumption	6VDC (5.4V~7.0V), recom- mended capacity is 12AH
Relays	Peak current for each relay < 2A @ 30VDC or 250VAC & Relay configuration: SPDT
4-20mA Outputs	CL01:420mA O ₂ : 0~25% CL02:420mA Temp: 32 to 122° F (0-50°C)
Mounting Height	60-72 inches from floor height

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CONNECTING THE RAD-0002-ZR OXYGEN DEFICIENCY MONITOR TO THE CHART E-STOP PANEL

Connect wires from the oxygen safety monitor alarm to the E-Stop panel as follows:

- Connect a **BLUE** wire from terminal #103 in the E-Stop panel to the NC terminal of the RAD-0002 ZR Oxygen Deficiency Monitor.
- Connect a wire **WHITE** from terminal #104 in the E-Stop panel to the COM terminal of the RAD-0002 ZR Oxygen Deficiency Monitor.

A Note: The RAD-0002-ZR monitor has 3 alarms available labeled "AL1", "AL2" and "AL3"

AL1 triggers relay 1 of the RAD-0002-ZR

AL2 triggers relay 2 of the RAD-0002-ZR

Relay 3 is a fault indicator triggered by power loss of the RAD-0002-ZR

The alarms are negative acting, meaning the alarm will trip as the oxygen level drops below the set-point.

Each of these alarms has its own set-point. which can be adjusted by the user.

- Connect a **RED** wire from terminal #104 in the E-Stop panel to the COM terminal of the "FAULT" relay in the of the RAD-0002 ZR Oxygen Deficiency Monitor. The "FAULT" relay is Relay 3.
- Connect a **WHITE** wire from terminal #105 in the E-Stop panel to the NO terminal of the "FAULT relay in the RAD-0002 ZR Oxygen Deficiency Monitor.





