# **GAS & SPECIALTY SENSORS**

OXYGEN SENSOR
OS-1



## **DESCRIPTION**

The **Kele Model OS-1** is a dependable, economical **oxygen sensor** designed to monitor oxygen levels in ambient air. It has a jumper-selectable analog output for interfacing with a BAS controller and an SPDT relay output to activate an alarm in the event of oxygen depletion due to a refrigerant leak. The units are powered by 24 VAC/VDC and are housed in a rugged polystyrene enclosure for dust and moisture protection.

The **Model OS-1** is designed to be used as part of a control system that helps to prevent the formation of a hazardous environment when properly installed and maintained.



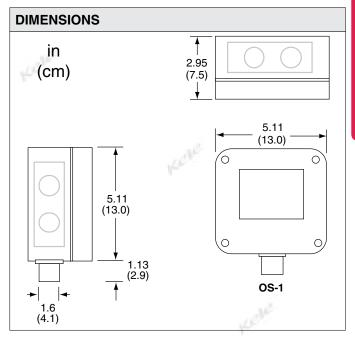
## **FEATURES**

- 4-20 mA, 0-5 VDC, or 0-10 VDC output, jumper-selectable
- SPDT alarm relay

- 24VAC/VDC power
- 0% to 25% range
- · Rugged polystyrene enclosure

#### **SPECIFICATIONS** Supply Voltage 24 VAC @ 6 VA or 24 VDC @ 250 mΑ Accuracy ±1% Signal Output (jumper selectable) $4-20 \text{ mA} (300\Omega \text{ max})$ 0-5 VDC (20 kΩ min) 0-10 VDC (20 $k\Omega$ min) **Measurement Range** 0% to 25% oxygen Sensing Technology Galvanic cell Life Expectancy Approximately five years @ 68°F (20°C) in ambient air **Response Time** Approximately 12 seconds **Relay Type** SPDT 24 VAC/VDC @ 0.5A, factory set @ 19.5% Operating Temperature 40° to 104°F (5° to 40°C) **Operating Humidity** 10% to 95% non-condensing Weight 1.25 lb (0.57 kg)

1 year



Warranty

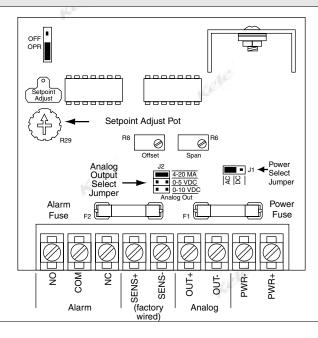


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### WIRING



### Note:

AC power must be floating and may not be grounded. If AC power is grounded a separate transformer is required for each OS-1.

# **INSTALLATION**

The **OS-1** is suitable for indoor use only. Mount the unit as close to the source of potential refrigerant leaks as possible. Some recommended considerations are as follows:

- 1. Mount the unit with the sensor pointing down.
- 2. Mount the unit in a location with low vibration. Strong vibration may cause a change in the condition of the internal membrane.
- 3. The sensor should be mounted 3' to 5' (0.9 to 1.5m) from the floor in equipment rooms or 1' (0.3m) above the floor in refrigeration pits.
- 4. The **OS-1** should cover about 1000-1500 square feet with adequate air movement.
- 5. Mount at least 5' (1.5m) from the exhaust fan.
- 6. Verify operation yearly.

Note: Make all connections in accordance with national and local codes. Not recommended for MRI rooms.

# ORDERING INFORMATION **MODEL DESCRIPTION OS-1** Oxygen sensor, 0% to 25% range **RELATED PRODUCTS GAS-02-18** 18% oxygen (O2) in nitrogen (N2), 17L UCK-1 Universal calibration kit for non-corrosive gases (N2, CO2, CH4, H2, O2, CO, and refrigerants) **ACCESSORIES** 691-K0A Control transformer, 120:24 VAC, 40 VA, Class 2 **DCP-1.5-W** Power supply, 24 VAC IN to 24 VDC OUT DCPA-1.2 Power supply, 120 VAC IN to 24 VAC/24 VDC OUT

FREE CUSTOM CALIBRATIONS, JUST ASK