



### **Gas Detection and Control**

The Macurco 12-Series are line voltage (100-240VAC), dual relay gas detector, controller and transducers. The 12-Series utilizes an internal switching power supply that is capable of using line voltage between 100 and 240VAC and 50-60Hz. The 12-Series have selectable 4-20mA output, buzzer and digital display options. It is an electronic detection system used to measure the concentration of various gases and provide feedback and automatic control to help reduce gas concentrations in parking garages, maintenance facilities or other commercial applications.

#### Selectable options include:

- Selectable relay actuation levels
- Output: Fan relay, Alarm relay and 4-20mA current loop
- Controls: Buzzer, digital display, latching relay, relay delay, relay minimum runtime

### **Features**

- Mounts on a standard 4" x 4" electrical box
- 5 A SPDT relay controls valves, louvers or exhaust fans
- 0.5 A N.O. or N.C alarm relay connects to warning devices or control panels
- 4-20mA current loop compatible with the Macurco DVP-120 Control Panel
- Supervised system design: detector problem will cause relay activation
- ETL Listed to UL 61010-1, CAN/CSA C22.2 No 61010-1



# 12-Series Specifications

Power: 100-240VAC (50 TO 60 HZ)

Current: 1.0 A MAX

• Shipping Weight: 1 pound (0.45 kg)

• Size: 4 1/2 x 4 x 2 1/8 in. (11.4 X 10.2 X 5.4 cm)

Color: Dark gray

Connections: plugs/terminals

• Mounting box: (not included) 4x4 electric

• Fan relay: 5 A, 240 VAC, pilot duty, SPDT, latching or non-latching

• Fan relay actuation: Selectable within sensor range

• Fan Delay Settings of 0, 1, 3 (default), 5 and 10 minutes

• Fan Minimum Runtime settings are OFF (default), 3, 5, 10 or 15 minutes

Alarm relay: 0.5A 120 V, 60 VA

• Alarm relay actuation: selectable N.O. default or N.C.

Alarm relay settings: Selectable within sensor range

Current Loop, 4-20 mA

• Operating Environment: 0°F to 125° F (-18°C to 52°C).10 to 90% RH



12-Series Rear View

## **Options**

CM-12 Carbon Monoxide (CO) Range: 0-200ppm, Default Relay Settings: Fan - 35ppm, Alarm - 200ppm GD-12 Combustibles (EX) Range: 0-50% LEL, Default Relay Settings: Fan - 10% LEL, Alarm - 20% LEL TX-12-ND Nitrogen Dioxide (NO2) Range: 0-20ppm, Default Relay Settings: Fan - 2.5ppm, Alarm - 5.0ppm TX-12-AM Ammonia (NH3) Range: 0-100ppm, Default Relay Settings: Fan - 25ppm, Alarm - 75ppm TX-12-HS Hydrogen Sulfide (H2S) Range: 0-50ppm, Default Relay Settings: Fan - 8ppm, Alarm - 20ppm RD-12 Refrigerants (REF) Range: 0-1,000ppm, Default Relay Settings: Fan - 100ppm, Alarm - 300ppm CD-12 Carbon Dioxide (CO2) Range: 0-5,000ppm, Default Relay Settings: Fan - 1,000ppm, Alarm - 3,000ppm OX-12 Oxygen (O2) Range: 0-25% by volume, Default Relay Settings: Fan - 20.2%, Alarm -19.5%





