

# MACURCO

## GAS DETECTION



# 12-Series

## Gas Detection Powered by 100-240VAC



### Gas Detection and Control

The Macurco 12-Series are line voltage powered (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 240 VAC 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: 100-240 VAC (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
- Current Loop, 4-20 mA
- 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
- 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 Relay Minimum Runtime settings are 0 (default), 3, 5, 10 or 15 minutes
- Operating Environment: 0°F to 125° F (-18°C to 52°C)\*. 10 to 90% RH non-condensing



12-Series Rear View

### Options

\* CD-12H - Refer to product manual for temperature range

CM-12 Carbon Monoxide (CO) Range: 0-200ppm, Default Relay Settings: Fan - 35ppm, Alarm - 200ppm

GD-12 Combustibles (CH<sub>4</sub>, C<sub>3</sub>H<sub>8</sub>, H<sub>2</sub>) Range: 0-50% LEL, Default Relay Settings: Fan - 10% LEL, Alarm - 20% LEL

TX-12-ND Nitrogen Dioxide (NO<sub>2</sub>) Range: 0-20ppm, Default Relay Settings: Fan - 2.5ppm, Alarm - 5.0ppm

TX-12-AM Ammonia (NH<sub>3</sub>) Range: 0-100ppm, Default Relay Settings: Fan - 25ppm, Alarm - 75ppm

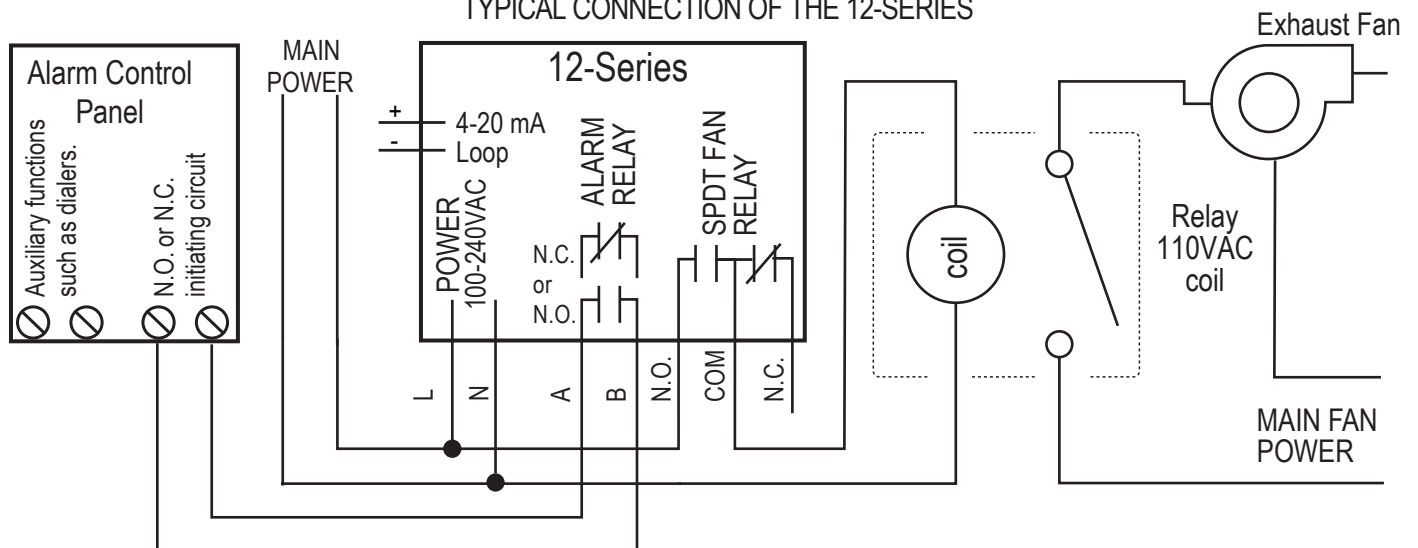
TX-12-HS Hydrogen Sulfide (H<sub>2</sub>S) Range: 0-50ppm, Default Relay Settings: Fan - 8ppm, Alarm - 20ppm

RD-12 Refrigerants (REF) Range: 0-1,000ppm, Default Relay Settings: Fan - 100ppm, Alarm - 300ppm

CD-12H Carbon Dioxide (CO<sub>2</sub>) Range: 0-5,000ppm, Default Relay Settings: Fan - 1,000ppm, Alarm - 4,000ppm

OX-12 Oxygen (O<sub>2</sub>) Range: 0-25% by volume, Default Relay Settings: Fan - 20.2%, Alarm - 19.5%

### TYPICAL CONNECTION OF THE 12-SERIES



Made in the U.S.A. with US and imported materials

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