

# **GAS DETECTION** **Macurco**

## Nitrogen Dioxide Detector and Transducer

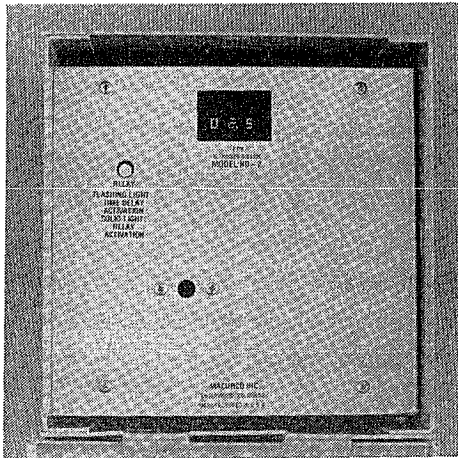
Parking Garage

Warehouse

Maintenance Facility

Ice Skating Arena

Storage Facility



### ND-2

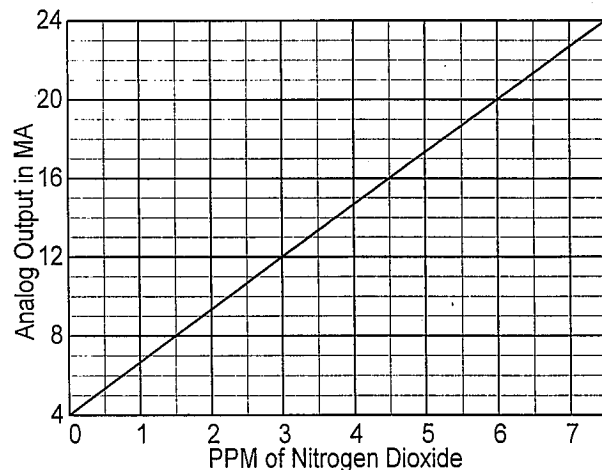
- \* Automatic Ventilation Controller
- \* 4 to 20 mA Output, for 0 to 6 ppm
- \* Microcomputer Controlled
- \* Digital Display: 0 to 9 ppm NO<sub>2</sub>
- \* Highly Linear Electrochemical Sensor
- \* Relay w/Selectable Set Point & Delay
- \* Diesel Exhaust detection and control

- \* Specific to Nitrogen Dioxide.
- \* Provides Nitrogen Dioxide detection, digital display of gas concentration, 4 to 20 mA output, and a relay to automatically control exhaust fans or other devices.
- \* ND-2 works on a wide range of power: 12 to 24 VAC or VDC.
- \* Meets the requirements of OSHA and the state of Wisconsin.
- \* Housed in Nema 1, UL, metal knockout case.
- \* Internally adjustable switch for relay delay from 0.5 to 5 minutes.
- \* Bright LED shows relay status, flashes during delay period, is on steady when the relay closes.
- \* Replacement sensors and field calibration kit available. Normal sensor life is over 2 years.
- \* Isolated 4 to 20 mA output (1000 volts) so common power supplies can be used.

### SPECIFICATIONS

POWER: 1.2 Watts from 12 to 24 VAC or VDC  
SIZE: 6 X 6 X 3 inches  
COLOR: Gray  
SHIPPING WEIGHT: 3 pounds  
RELAY: 5 Amps, 240VAC, pilot duty, SPDT  
RELAY SET POINT: 0.5 to 3.0 ppm  
OPERATING ENVIR.: 0 to 125° F, 10 to 90% RH  
LINEARITY: Within 1%.  
ACCURACY (after calibration): ± 3%  
SENSOR OUTPUT DROOP: Less than 2% a month.

ALL UNITS ARE FACTORY CALIBRATED  
TYPICAL COVERAGE: 5000 square feet per unit



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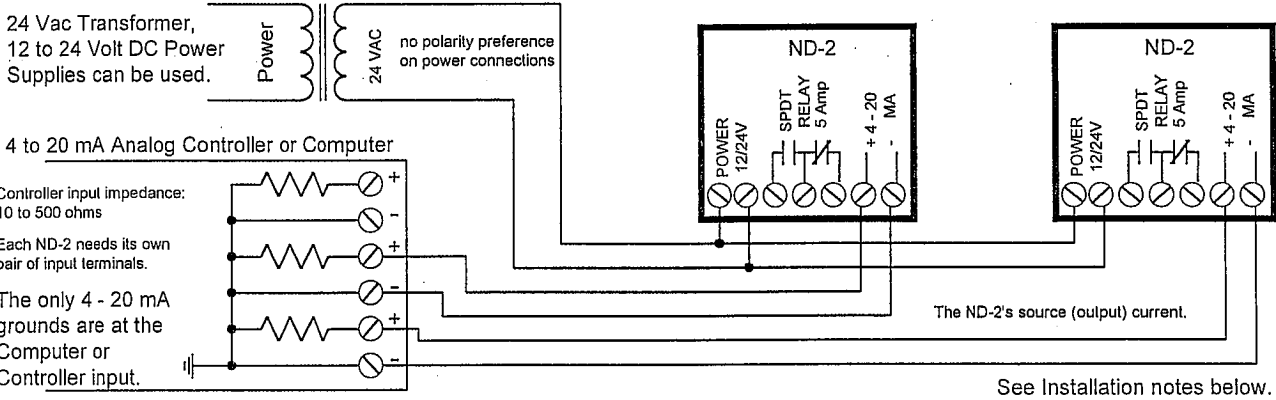
**GAS DETECTION**  
**Macurco**

3946 S. Mariposa Street  
Englewood, Colorado 80110  
303-781-4062 Fax: 303-761-6640  
www.macurco.com

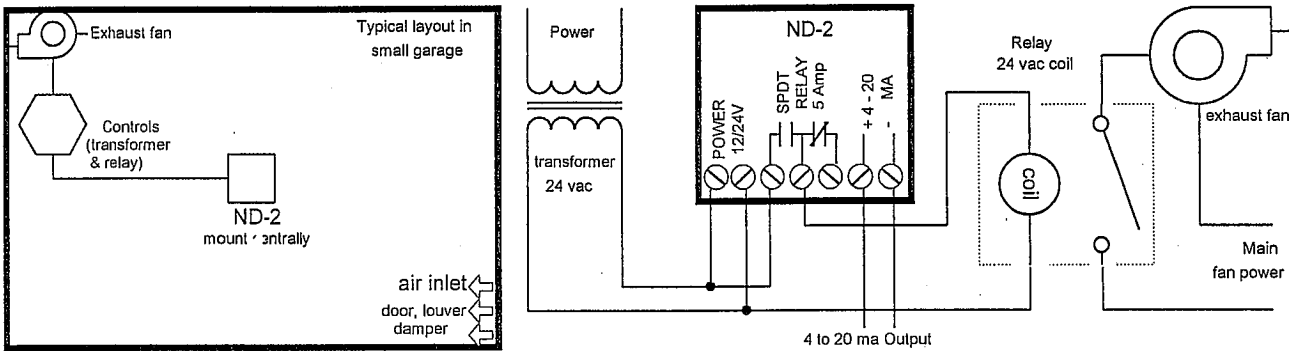
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# ND-2 APPLICATIONS AND SAMPLE HOOK-UPS

## Typical connections to Building Automation Controllers



## Typical Installation in small garage



## Typical multiple ND-2 installation

### INSTALLATION NOTES

1. One sensor per 5000 square feet (approximately).
2. Mount ND-2 four to five feet above the floor (breathing height), as NO<sub>2</sub> is heavier than air.
3. See applicable building code for fan size vs air changes per unit of time.
4. Make sure there are air inlets to provide adequate air flow throughout the building.
5. ND-2 relays are dry contact & can switch up to 5 Amps, up to 240V.

