TWINSET STAND-ALONE DUAL GAS MONITOR

Bull TW-ECH
September 2011

CO-CO (Carbon Monoxide), CO-CO2 (Carbon Dioxide), CO-NO_2 (Nitrogen Dioxide), CO-CH_4 (Methane), CO-C_3H_8 (Propane), CO-H_2 (Hydrogen)

Features

- High-accuracy Electrochemical Cell sensor for toxic gases and Catalytic (Pellistor) for flammables
- 3 or 4-stage SPDT relay outputs with LED status indicators
- NEMA 3 Robust Enclosure
- Microprocessor-based control
- 10-Step Bar-Graph Display of gas levels
- Programmable time delays to avoid nuisance alarms
- Optional 4-20mA, 0-1V DC, 0-5 V DC or 0-10V DC analog output
- Optional remote sensor

Applications

- Versatile and cost-effective way of detecting two gases simultaneously by a single Controller
- Energy savings through the intermittent operation of ventilation equipment in enclosed areas
- Commercial or industrial locations where a sudden build-up of toxic and/or flammable gases may occur
- Car Parking and Bus Maintenance Garages, Tunnels, Warehouses, Factories, Food Processing and Bottling Plants, Wastewater Treatment Plants, Steel Mills, Cryogenic laboratories and Incineration Rooms
- Stand-alone with relay outputs or analog outputs for direct connection to the existing Building Management System (BMS) or DDCS

The Acme TwinSet and its microprocessor-based system features a high quality stand-alone controller providing all the necessary hardware for the continuous monitoring of two gases in the following combinations: CO/CO, CO/CO2, CO/NO2, CO/COMB. This unit is primarily geared towards providing alarm activated relays for simple applications such as small parking garages.

The TwinSet employs the best sensing technologies available: electrochem and pellistor (catalytic combustion) cells . These quality components provide virtually instantaneous detection of targeted gasses and deliver long-term trouble-free operation. The main body of the TwinSet detects carbon monoxide build up, while the remote sensor monitors either CO, NO2 or a combustible.

Installed within the monitored space, the TwinSet monitors targeted gas concentration rates and automatically operates the mechanical ventilation system of a facility. Upon detection of low levels of hazardous and flammable gases the ventilation system is energized thereby protecting occupants, personnel and gas-sensitive goods and products.

The TwinSet contains all the well-known standard features of ACME's gas detection line; a robust enclosure, the latest sensing technologies and state-of-the-art electronics.

Standard unit specifications

GASES DETECTED: CO, CO_2, NO_2, H_2, CH_4 (Methane), C_3H_8 (Propane)

SENSOR TECHNOLOGY:
TOXIC: 3-Electrode Electrochemical Cell
FLAMMABLE: Catalytic Pellistor

SENSING METHOD: Diffusion

POWER REQUIREMENTS: 24V or 120V or 240V 50/60HZ

OPTIONAL: 4-20 mA, or one of the following
0-1V DC
0-5V DC
0-10V DC

OPERATING TEMPERATURE: -4ºF to 120ºF (-20ºC to +50ºC)*

HUMIDITY RANGE: 15-90% RH

ACCURACY: +3% /- 5% of Calibrated value (electrochemical sensors)
+/- 1 L.E.L (pellistor)

REPEATABILITY: 2% of Signal

RESPONSE TIME (T90%): 40 seconds

EXPECTED SENSOR LIFETIME: Electrochemical

7 years for CO only
2 years for other gases

Pellistor

3 years

MAIN ENCLOSURE: NEMA 3
Polystyrene
Grey
Surface Mounting

MAIN ENCLOSURE DIM.: 6" x 6"x 4"
(152mm x 152mm x 102mm)

APPROVALS: CAN/CSA C22.2 No. 61010-1:2004

ANSI/UL 61010-1:2004

Ordering Information

MODEL NUMBER	GASES DETECTED
CC-TWR**-X**-Y**	CO-CO
CN-TWR**-X**-Y**	CO-NO2
CH-TWR**-X**-Y**	CO-H2
CM-TWR**-X**-Y**	CO-CH4
CP-TWR**-X**-Y**	CO-C3H8

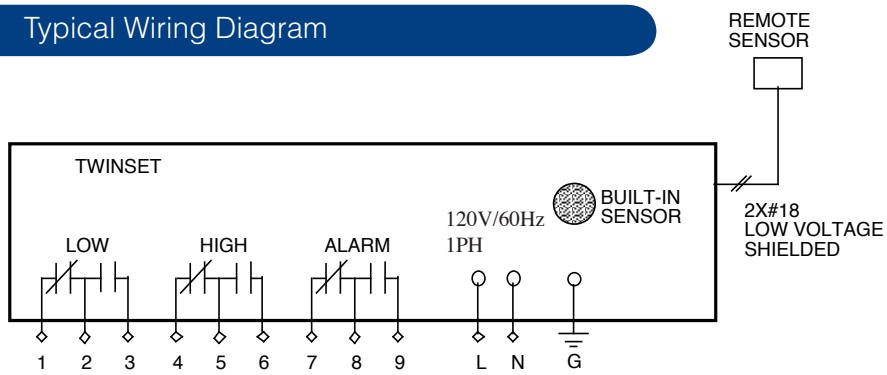
Power Supply Options

**X	LINE VOLTAGE
24	24 V 50/60 HZ
120	120V 50/60 HZ
240	240V 50/60 HZ

**Y= 1 Bar Graph
**Y= 0 or Leave empty for no Bar Graph

**R= 3 For 3 relays
**R= 4 For 4 relays

Typical Wiring Diagram



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