GAS & SPECIALTY SENSORS

DESCRIPTION

The **Kele GDN Series Network Compatible Gas Detector** optimizes BAS, fire, ventilation, and other security systems by providing continuous monitoring of toxic and combustible gases. Modbus or BACnet MS/TP protocols are supported by the **GDN Series** and can be quickly integrated into a BAS network. Activate alarms, horns, strobes, and fans through HVAC controls or directly from the on-board relay. The modular design adds functionality and flexibility with pre-calibrated plug-in sensors. The unit features a two-line LCD for local indication, self test diagnostics, and a built-in 85 dBA buzzer.

The **GDN Series Network Compatible Gas Detector** 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.

GDN

FEATURES

- **Modbus or BacNet MS/TP compatible**
- **Pre-calibrated plug-in sensors**
- **Built-in 85 dBA buzzer**
- **Wide variety of gases detected**
- **Two-line LCD display**

- **DPDT relay output**
- **Easy installation, commissioning, and operation**
- **LED status indication**
- **Password protection**
- **Programmable relay differential**

SPECIFICATIONS

Supply Voltage	17-27 VAC @ 8.4 VA, 50/60 Hz or 24-38 VDC @ 350 mA	**Response Time**	50 seconds or less	
Accuracy	±3%	**Display**	8 character, two-line LCD	
Communication	RS485 Modbus, Bacnet MS/TP	**Relay Output**		
Measurement Range			(1) DPDT pilot duty, 150 VA max inductive, 5A @ 30 VDC, 250 VAC	
CO	0-250 ppm	**Alarm Auditory Levels [Db]**		
O2	0% to 25%		85 dBA @ 10 ft (3m)	
H2S	0-50 ppm	**Display Resolution**	0.5%, 1 ppm, 0.2 ppm, 0.2%, 0.5%	
N2O	0-10 ppm	**Operating Temperature**		
CH4, C3H8, H2	0% to 100% LEL	CO	-4° to 122°F (-20° to 50°C)	
Sensing Technology		All Others	-40° to 122°F (-40° to 50°C)	
CO, O2, H2S,NO2	Electrochemical	**Operating Humidity**	15 to 90% non-condensing	
CH4, C3H8, H2	Catalytic combustion	**Dimensions**	8.1"H x 5.9"W x 2.7"D (20.6 x 14.9 x 6.7 cm)	
Calibration Interval	6 months	**Weight**	1.84 lb (0.83 Kg)	
Life Expectancy		**Approvals**	ETL	
CO	6 years	**Warranty**	1 year	
Alll Others	2 years			
Visual Indication	Green LED: power			
Amber LED 1	Alarm/fault			
Amber LED 2	Alarm/fault			

APPLICATIONS

Modbus Configuration
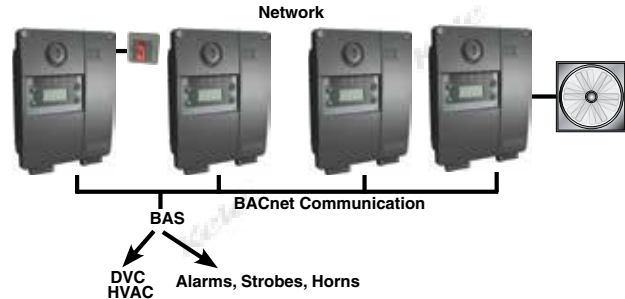

VA301C
Modbus Communication
VA301EM
Modbus Communication   Up to 3 x 32 units
BAS

Supports Modbus protocol to daisy-chain detectors, providing up to 96 points of monitoring on a serial bus. Excellent option for controller-based (VA301C) installations common in larger applications. A relay output is provided as an option for activating ventilation directly (e.g. when fan is located in close proximity to detector).

BACnet (MS-TP) Configuration

Network
BACnet Communication
BAS
DVC HVAC   Alarms, Strobes, Horns

GDN Series outputs directly to BACnet or other BAS (building automation system). Alarms, strobes, and horns are activated through the BAS with links to DCV/HVAC controls. The system design supports new and retrofit installations for large buildings, and can couple with a controller to effectively integrate wired and wireless system components. A relay output is provided as an option for activating ventilation directly (e. g. when fan is located in close proximity to the detector).

ORDERING INFORMATION

MODEL	DESCRIPTION
GDN-BC3H8	BACnet network Propane gas detector, wall mount
GDN-BCH4	BACnet network Methane gas detector, wall mount
GDN-BCO-1	BACnet network Carbon Monoxide gas detector, wall mount
GDN-BH2	BACnet network Hydrogen gas detector, wall mount
GDN-BH2S	BACnet network Hydrogen Sulfide gas detector, wall mount
GDN-BNO2	BACnet network Nitrogen Dioxide gas detector, wall mount
GDN-BO2	BACnet network Oxygen gas detector, wall mount
GDN-MC3H8	Modbus network Propane gas detector, wall mount
GDN-MCH4	Modbus network Methane gas detector, wall mount
GDN-MCO-1	Modbus network Carbon Monoxide gas detector, wall mount
GDN-MH2	Modbus network Hydrogen gas detector, wall mount
GDN-MH2S	Modbus network Hydrogen Sulfide gas detector, wall mount
GDN-MNO2	Modbus network Nitrogen Dioxide gas detector, wall mount
GDN-MO2	Modbus network Oxygen gas detector, wall mount

RELATED PRODUCTS

Calibration Gases	CO, CO2, NO2, O2, CH4, NH3, N2, H2S, H2, and Refrigerants (See calibration page)
E3H2	Replacement H2 (Hydrogen) sensor cartridge
E3H2S	Replacement H2S (Hydrogen Sulfide) sensor cartridge
E3M	Replacement CH4 (Methane) sensor cartridge
E3NO2	Replacement NO2 (Nitrogen Dioxide) sensor cartridge
E3O2	Replacement O2 (Oxygen) sensor cartridge
E3P	Replacement C3H8 (Propane) sensor cartridge
E3SCO	Replacement CO sensor cartridge
ECLAB	Splash Guard for NEMA 4X

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
UCK-1	Universal calibration kit for non-corrosive gases (N2, CO2, CH4, H2, O2, CO, and refrigerants)
UCK-2	Universal calibration kit for corrosive gases (NO2, H2S, SO2, and NH3)

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