

# GAS & SPECIALTY SENSORS

## GAS DETECTION SYSTEM 301EM-K



### DESCRIPTION

The Kele 301EM-K Series gas detection system delivers control functionality for up to 20 remote refrigerant sensors and detects a wide variety of gases. The controller is equipped with a backlit LCD display and keypad that can be placed in a safe area, remote from the sensors.

### FEATURES

- RS-485 Modbus communication
- Contact input for manual break-glass switches
- Three 24VDC outputs to activate strobes and horns
- 4-20mA output for each sensor
- Four relay outputs
- Easy-to-read LCD display
- Explosion proof sensors for combustible and toxic gases



301EM-K



301-EMRP-K



S301-IRF-\*\*\*-K



S301D2CO-K



M-700123-1

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SPECIFICATIONS	
<b>Supply Voltage</b>	22-27 VAC @ 48 VA, 50/60 Hz or 22-38 VDC @ 2 A max.
<b>Accuracy</b>	±40 ppm @ 500 ppm
<b>Signal Output</b>	4-20mA, 1000Ω @ 24 vdc each sensor
<b>Communication</b>	RS-485, Modbus
<b>Measurement Range</b>	
<b>CO</b>	0-250 ppm
<b>NO2</b>	0-10 ppm
<b>Refrigerants</b>	0-1000 ppm
<b>Sensing Technology</b>	
<b>CO</b>	Electrochemical
<b>Refrigerants</b>	Dual Infrared Sensor
<b>Distance To Transmitters</b>	Up to 500 feet (160 m), 200 ft (60.9m) maximum
<b>Calibration Interval</b>	6 months
<b>Visual Indication</b>	Green - Normal Red - Alarms A, B, & C Yellow - Fault/Service Alarm Amber - Tx (network mode)
<b>Display</b>	Backlit LCD
<b>Response Time</b>	60 seconds
<b>Relay Output</b>	4 DPDT relays (20 ppm diff) (4) 5A, 30 VDC or 250 VAC (resistive)
<b>Alarm Auditory Levels [Db]</b>	65 dBA @ 3 ft (1m) internal
<b>Gases Detected</b>	CO, NO2, O2, SO2, refrigerant gases, (see ordering guide)
<b>Operating Temperature</b>	
<b>301EM**</b>	32° to 100°F (0 to 40°C)
<b>5301 Sensors</b>	-40° to 104°F (-40 to 40°C)
<b>Operating Humidity</b>	0% to 95% RH (noncondensing)
<b>Enclosure Rating</b>	NEMA 1
<b>Dimensions</b>	
<b>301-EMRP-K (controller)</b>	7.99"H x 11.02"W x 2.76"D (20.3 x 28 x 7 cm)
<b>301-IRF-***-K (sensor)</b>	4.02"H x 11.02"W x 2.48"D (10.2 x 28 x 6.3 cm)
<b>S301D(sensor)</b>	3"H x 2" Diameter (7.6 x 5.1 cm)
<b>Weight</b>	
<b>301EM-K</b>	3.1 lb (1.4 Kg)
<b>301-IRF</b>	2.3 lb (1.0 Kg)
<b>S301D2</b>	2.0 lb (0.9 Kg)
<b>Approvals</b>	CSA, C 22.2, UL 61010-1
<b>Warranty</b>	1 year

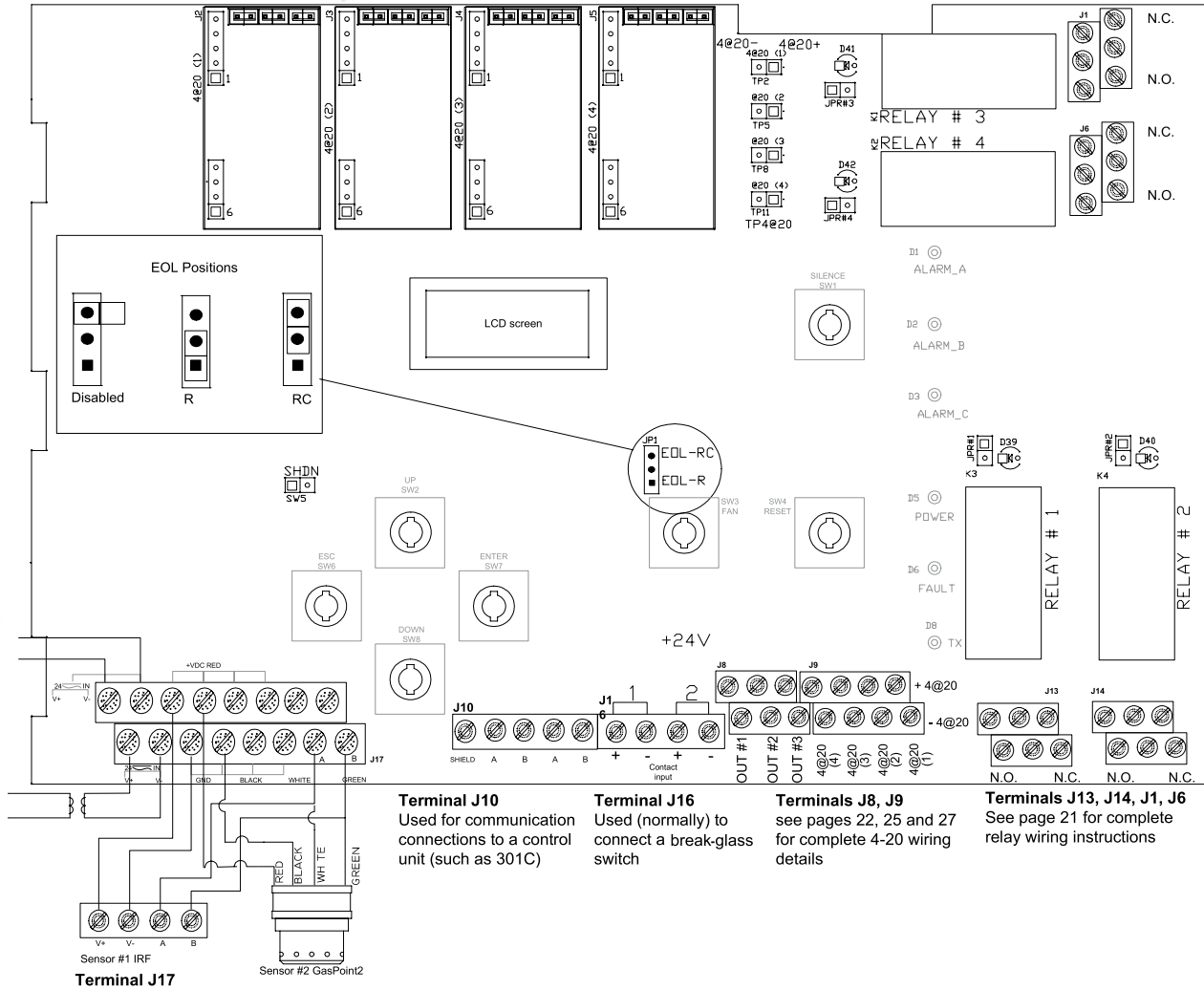


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## GAS DETECTION SYSTEM

301EM-K

### WIRING



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### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>CONTROLLERS</b>	
<b>301-EM-RFSA-US3-K</b>	MECHANICAL ROOM CONTROLLER WITH HORN/STROBE
<b>301-EM-US3-K</b>	MECHANICAL ROOM CONTROLLER
<b>301-EMRP-K</b>	REMOTE PANEL
<b>301-EMRP-RFSA-K</b>	REMOTE PANEL WITH HORN/STROBE
<b>REFRIGERANT SENSORS</b>	
<b>S301-IRF-R11-K</b>	R11 REFRIGERANT GAS SENSOR
<b>S301-IRF-R123-K</b>	R123 REFRIGERANT GAS SENSOR
<b>S301-IRF-R125-K</b>	R125 REFRIGERANT GAS SENSOR
<b>S301-IRF-R134A-K</b>	R134a REFRIGERANT GAS SENSOR
<b>S301-IRF-R22-K</b>	R22 REFRIGERANT GAS SENSOR
<b>S301-IRF-R404A-K</b>	R404a REFRIGERANT GAS SENSOR
<b>S301-IRF-R407C-K</b>	R407c REFRIGERANT GAS SENSOR
<b>S301-IRF-R410A-K</b>	R410a REFRIGERANT GAS SENSOR
<b>S301-IRF-R4310-K</b>	R4310 REFRIGERANT GAS SENSOR
<b>S301-IRF-R507A-K</b>	R507a REFRIGERANT GAS SENSOR
<b>S301-IRF-R514A-K</b>	R514a REFRIGERANT GAS SENSOR
<b>S301-IRF-R1233ZD-K</b>	R1233ZD REFRIGERANT GAS SENSOR
<b>S301-IRF-R1234ZE-K</b>	R1234ZE REFRIGERANT GAS SENSOR
<b>S301-IRF-R448A-K</b>	R448A REFRIGERANT GAS SENSOR
<b>S301-IRF-R449A-K</b>	R449A REFRIGERANT GAS SENSOR
<b>S301-IRF-R513A-K</b>	R513A REFRIGERANT GAS SENSOR
<b>GAS SENSORS</b>	
<b>S301D2CL2</b>	CL2 REMOTE CHLORINE SENSOR
<b>S301D2CO</b>	CO REMOTE SENSOR
<b>S301D2COMB</b>	COMB REMOTE SENSOR
<b>S301D2H2S</b>	H2S REMOTE SENSOR
<b>S301D2NO2</b>	NO2 REMOTE SENSOR
<b>S301D2O2</b>	O2 REMOTE SENSOR
<b>S301D2SO2</b>	SO2 REMOTE SENSOR
<b>ACCESSORIES</b>	
<b>M-700123-1</b>	301EM-K LIGHT STACK ASSEMBLY WITH RED LENS, HORN (85-103dB), VOLTAGE RATING, 24VDC
<b>M-508617</b>	BREAK-GLASS MANUAL SWITCH OPTION FOR 301EM-K