

# COMBUSTIBLE GAS TRANSMITTER / SENSOR

Gas Detection for Life

R61-0203-02RKTR



## Features

- Long life – 3 to 5 years
- Increased stability
- Retro fits all existing installations
- New duct mount feature
- Built by Riken factory
- Compatible with Beacon Controllers
- SAA Approved
- 3-Wire

## Applications

- Petrochemical plants
- Power stations
- Telephone exchanges
- Boiler rooms
- Refineries
- Aerosol manufacturers
- Paint manufacturers
- Mining equipment

The R61-0203-02RKTR Sensor configuration consist of a 3-wire sensor, amplifier and enclosure with terminal strips. The Combustible Gas Sensor type R61-0203-02RK, for diffusion sensing, is a highly reliable catalytic style sensor which is designed to give extended service even under extreme conditions. The combination palladium/platinum catalyst resists destruction by combustible gas levels above 100% LEL, lead and sulphur compounds.

The sensor is enclosed in a 316 stainless steel shell and 316 sintered stainless steel flame arrestor, which is teflon coated. The stainless steel ensures high corrosion resistance, and the teflon covering on the flame arrestor resists the accumulation of dirt and dust .However, it should be realised that the sensor elements themselves are susceptible to breakage by shock and therefore the sensor should not be roughly handled prior to its installation. The enclosure is SAA approved and is rated Class I, IP 66, Zones 1 and 2. This combination makes the R61-0203-02RKTR a robust product which can be used in various applications.

The amplifier board has a 24 VDC input and a 4-20mA output, which enables easy connection to any PLC, Scada or BMS system. It can be directly mounted onto the Beacon 200 or Beacon 800 Controller. The Beacon can be directly wired to a variety of devices like alarm horns, buzzers, or lights. With 10 amp rated relays, it eliminates the need for costly external relays from the controller to devices.

## Specifications:

<b>Detection method</b>	Catalytic Combustion	<b>Humidity range</b>	10% to 95% RH
<b>Measuring range</b>	0 – 100% LEL	<b>Cable Entry</b>	20 mm Metric
<b>Sampling method</b>	Continuous Diffusion	<b>Connections</b>	3 wire shielded 1.5 mm
<b>Max distance to</b>	30 meters	<b>Junction box</b>	IP 66, AUS Ex 319
<b>Repeatability</b>	± 2% of full scale	<b>Input</b>	24 VDC
<b>Linearity</b>	± 5% - over 80% LEL	<b>Output</b>	4 – 20 mA
<b>Response time</b>	Less than 15 sec to 90% of gas applied	<b>Operating Current</b>	385 mA for Methane, 345 mA for other gases
<b>Temperature range</b>	-45°C to 80°C	<b>Sensor Certification</b>	ANZEx 09.3003U

## AUSTGAS Instrument Services Pty Ltd

13 Greer St  
Bonnyrigg Heights NSW 2177  
AUSTRALIA

Phone: +61 2 9823 2551  
Fax: +61 2 9822 9284  
Mobile: +61 451 304 884  
Email: [austgas@hotmail.com](mailto:austgas@hotmail.com)



**RIKEN KEIKI**