

600-GDRV

600 SERIES

FUME DETECTOR

INSTALLATION
AND
OPERATING INSTRUCTIONS

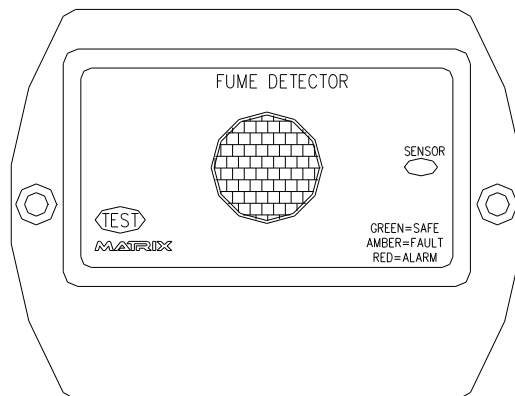


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1 Warranty

The warranty of this BEP MARINE LTD product is for Two Years from date of sale to original purchaser. BEP MARINE LTD will not assume the cost of removal or refitting of the product, or any other incidental cost that may arise, as the result of defective workmanship.

Warranty will only be undertaken on equipment returned to either BEP MARINE LTD or their agent. The equipment will only be repaired at the discretion of either BEP MARINE LTD or their agent. Equipment has neither been (1) Abused (2) Wrongly connected (3) Contaminated due to neglect (4) Improper installation, (5) Used in violation of instructions supplied with the product manufactured by BEP MARINE LTD. On return of equipment for warranty it must be accompanied with proof of purchase and not be tampered with.

2 Important

It is the installer's sole responsibility to install and use this product in a manner that will not cause accidents, personal injury or property damage. Please follow the installation instructions supplied. If installation is not correct, the unit may not perform at its full potential. If in doubt, consult your local BEP MARINE LTD dealer. BEP MARINE LTD disclaims all liability for any use of the product that may cause accidents, damage or be in violation of any laws.

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3 Cautions when using gas sensors

- 1. Exposure to silicone vapours**
If silicone vapours adsorb onto the sensor's surface, the internal sensing element may be coated, irreversibly reducing sensitivity. Avoid exposure where silicone adhesives, hair grooming materials or silicone rubber/putty may be present.
- 2. Highly corrosive environment**
Exposure to corrosive materials such as SO_2 , H_2S , HCl , etc. for extended periods may cause irreversible damage to the sensor.
- 3. Water**
Sensor performance may be adversely affected due to soaking, splashing or water condensing on the sensor surface. Salt water spray will adversely affect sensor performance. Light condensation under conditions of indoor usage should not pose a problem for sensor performance.
- 4. Freezing**
If freezing occurs on the sensor's surface irreversible damage may occur to the internal sensing element.
- 5. Usage in high density of gas**
Sensor performance may be adversely affected if exposed to a high density of gas for a long period of time.
- 6. Explosive Limits**
Different combustible gasses have their own Lower Explosive Limits (LEL). Our gas sensors are calibrated against a mixture of gas in Air.
- 7. False positive alarms**
False positive alarms can be caused by differing concentrations of various aerosols, perfumes, resins, epoxies, petrol, alcohol, hydrogen, gases and fuels.

4 Features

The GDRV fume detector offers the following features: –

- Self testing capability
- Microprocessor control
- Single sensor mounted in front fascia.
- Audible and visual alarms

5 Specification

Voltage: 10V-30V DC
Current: Total 350mA Max
Alarm: 20% LEL (Lower Explosive Limit)

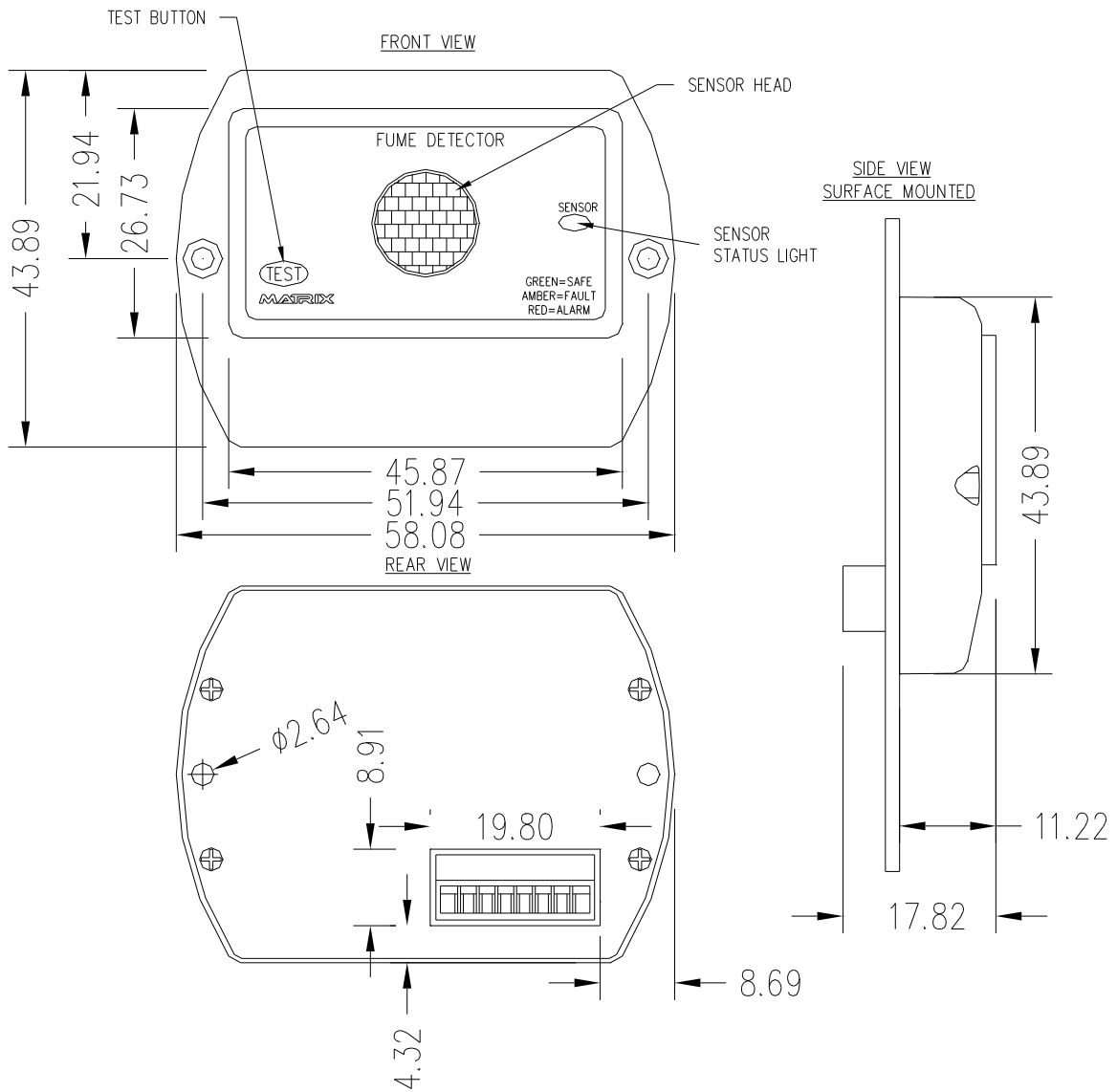
6 Fault Detection

The nominal alarm point of the GDRV is 20% of the LEL (Lower Explosive Limit) of LPG/CNG in Air. In the event of an alarm activating, close the manual valve on your gas bottles and open hatches to ventilate the area. All fans and blow ventilate must be ignition-protected types.

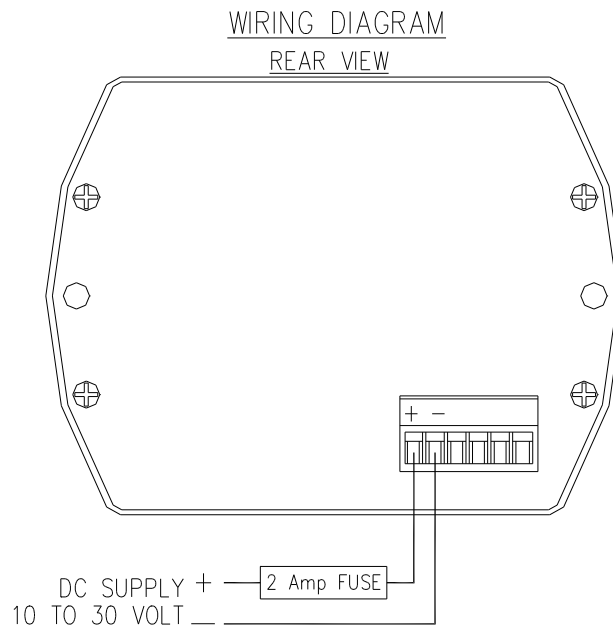
In the event of the sensor being contaminated or damaged the amber light will come on for the sensor. If the sensor the sensor could be damaged and will need to be replaced.

In detecting LPG the sensor can also detect hydrocarbons in other products such as cleaners and strong adhesives, nuisance alarms. See section 3 - 'Cautions when using gas sensors' for more details.

7 Dimensions



8 Wiring Diagram



9 Installation

For ease of operation, the unit should be mounted in a convenient position close to your gas appliances and in a position where the control head can be seen and heard easily. The unit can be either surface mounted or recessed into a 2.5mm panel.

- For LPG and Petrol fumes, which are heavier than air, mount the sensor in a low dry position where the gas is likely to collect. The sensor must be mounted clear of bilge water.

NOTE: If the sensor gets wet then the sensor becomes inoperable and must be replaced.

- For CNG, which is lighter than air, mount the unit just below ceiling height but not above cooking or heating appliances.

10 Operation

On applying power to the unit, the unit goes through a test cycle. This will take approximately 45 seconds. During this time the unit is being cleaned and tested, at this time there will be a slow beep from the audible alarm and all the lights will flash. At the end of this period the pulse of the beeper and light will increase, if the unit senses that the environment is clear then it will go into safe mode. The beeper will turn off and the sensor light will change to green.

11 Test Button

When operated in normal operation it will -

- Sounds the keyboard beeper
- Turns light red

Pressing the switch again cancels the above.

12 Indicator Display

SENSOR #1

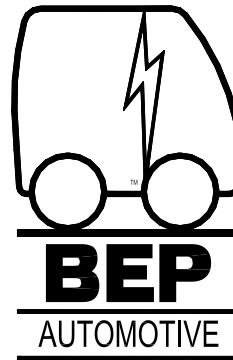
Green:	Sensor on safe, no fumes, no beeping
Amber:	Sensor fault, slow beeping
Red:	Alarm. Gas present, fast beeping

AUDIBLE ALARM SOUNDS

Warming up:	Medium slow, all lights flash amber
Alarm:	Fast, sensor lights red
Fault:	Slow, sensor lights amber



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