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PILOT MINI GAS ALARM MICROPROCESSER CONTROLLED Part number: 2011149/12v

This item is of the type recommended in the guidelines set out in Annex 3, Paragraph 6 of
“The Safety of Small Commercial Sailing Vessels – A Code of Practice”

And

“The Safety of Small Commercial Motor Vessels – A Code of Practice”

Installation and Operating Instructions **READ THESE INSTRUCTIONS COMPLETELY BEFORE INSTALLING OR USING THE ALARM**

GENERAL DESCRIPTION.

A PILOT SINGLE CHANNEL GAS ALARM is an important and cost effective item of safety equipment wherever leaking gas or other dangerous vapours may be present in the environment.

However good a gas or engine installation may be there can be occasions when either due to mechanical failure, or human error, a potentially lethal leak may occur. Many of the vapours present on boats and in caravans such as butane, propane and petrol vapour are heavier than air. Even a small leak can soon build up to dangerous proportions in the bilge's of a boat or in an inadequately ventilated caravan, to detect the presence of a gas

Pilot Gas Alarms are not fitted with an ON/OFF switch as they are designed to be permanently on whenever the Master Switch is activated. It requires a 12 volt dc power supply and consumes 90 milliamps on standby and 105 milliamps in the presence of gas. An internal 2.5amp fuse protects the circuit fault detection circuitry warns of detector failure, disconnection or short circuit.

The Pilot Gas Alarm operates on a 12volt supply but versions are available if operation from a 24 volt supply is required.

INSTALLATION

Disconnect the supply before proceeding further.

Carefully separate the two halves of the control unit by removing the two screws and gently pulling the two halves of the case apart. Two 5mm holes in the back half of the case are for routing the supply and detector cables. If you prefer to route the cables from the back of the unit, you can do so through the 19mm hole in the back mounting plate. The third hole is for connection to the optional gas valve controller.

The control unit may be mounted in any suitable position, sheltered from the elements, where the warning lights and audible alarm may be easily noticed. Do not mount so that the ventilated slots are obstructed.

The detector heads should be mounted in the lowest possible positions where they will remain dry. Detector heads may be irreparably damaged by immersion in water. The most suitable location is near any gas appliance and at floor level or just under the floorboards. Detector heads are supplied with 3.5 meters of cable and it is recommended that this is not extended to more than a maximum of 6 meters.

Mount the back half of the case to any suitable vertical surface using the two screw holes provided. Ensure that air may freely circulate through the ventilation slots. Pass the detector head cable and a suitable 2-core power supply cable through the holes. Draw sufficient cable through the holes to enable connections to the main part of the alarm to be made.

The sensor head connections may now be made to the 5-way terminal block as follows:

Red wire = terminal 3

Blue & Black wires = terminal 4

Yellow wire = terminal 5

The Power Supply Cable should be connected like this:

The POSITIVE wire to terminal 1

The NEGATIVE wire to terminal 2

The power supply must be 12 volts dc and should come direct from the vessels Master Switch in order that the gas alarm is activated each time power is switched on.

Check the wiring and fit the two halves of the case together, drawing any excess cable carefully out through the holes at the same time. Small plastic cable ties may be used on the inside of the case to prevent the cables being accidentally pulled from the terminal

block. Fix the two halves of the case together with the screws and switch on the power at the Master Switch. The green active light should flash whenever power is supplied to the unit.

OPERATION

A FAULT is indicated by an intermittent audible alarm.

An Alarm is indicated by a red light and a continuous audible alarm.

When power is applied to the unit both the red and green lights will flash as the sensor warms up and stabilizes. As the lights flash there will be short intermittent ‘beeps’. When the sensor head has stabilized there will be one further slightly longer sound to reflect that the unit is now functioning. Following this the green active light will flash continuously to show the unit is operating correctly and monitoring the surrounding environment.

If the audible alarm continues to sound after the initial stabilization period (and the red light remains illuminated) immediate action must be taken as follows:

1. Ensure that nothing is used which could ignite the gas e.g. matches or sparks from batteries or engine ignition.
2. Ventilate the area by opening doors and hatches and creating a flow of fresh air.
3. Investigate and remove the source of dangerous vapour.

The PILOT GAS ALARM will give positive information that the vapour has been safely removed when the alarm ceases to sound and the red light stops being on continuously. The alarm may be tested at any time by pressing the “test” button. This stimulates the presence of gas and should immediately sound the alarm.

FAULT DETECTION

If the wires to the sensor head become disconnected a FAULT alarm (intermittent audible alarm) will occur.

Should the unit alarm yet the cause is found no to be the presence of gas there are other substances that can cause the sensor to become contaminated. These include diesel fumes, petrol vapour, hydrogen (gassing batteries), salt, varnish, cleaning substances and dust. **Should the boat undergo any maintenance work it is recommended that the sensors are removed. Sensors can be replaced and in this version you can replace the sensor only, provided the housing has not been damaged or come into direct contact with any substance that will poison the new sensor.**

SPARES

Spare sensors are available for this product. The 2011 range of Pilot Gas Alarms now have a Socket arrangement for the sensor which is located inside the Black sensor housing.

Part Number: 201115 Sensor only

Part Number: 201115-3.5 Sensor complete with cable 3.5mtrs

Part Number: 201115-C Sensor complete with cable 150mm plus connector block