Gas Safety Products

Merlin PM2 Double Current Monitor

AMERICAN GAS SAFETY

Installation, operating and maintenance

CE RoHS Compliant

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1 General information

The Merlin PM2 Current Monitor is a dual fan current monitor and is to be used in conjunction with the Merlin 1500S and 2000S System; it can be used as an alternative to an air pressure differential switch.

The PM2 Current Monitor checks for a current running between the fan speed controller and the fan and sends a signal to the Merlin gas interlock system dependant on whether or not the fan is in operation.

It is recommended that the user reads this guide before using the system. Please do NOT attempt to operate the unit until the contents of this document have been read and are thoroughly understood.

2 Installation

2.1 Panel Mounting The control panel is designed for surface mounting using 4 mounting screws. Removing the cover on the panel gives access to the circuit board.

2.2 Power Supply A 12vdc electrical supply should be supplied to the PM2 using the '12VDC' terminal inside the Merlin gas interlock system and connected to the terminal marked '+ - POWER'.

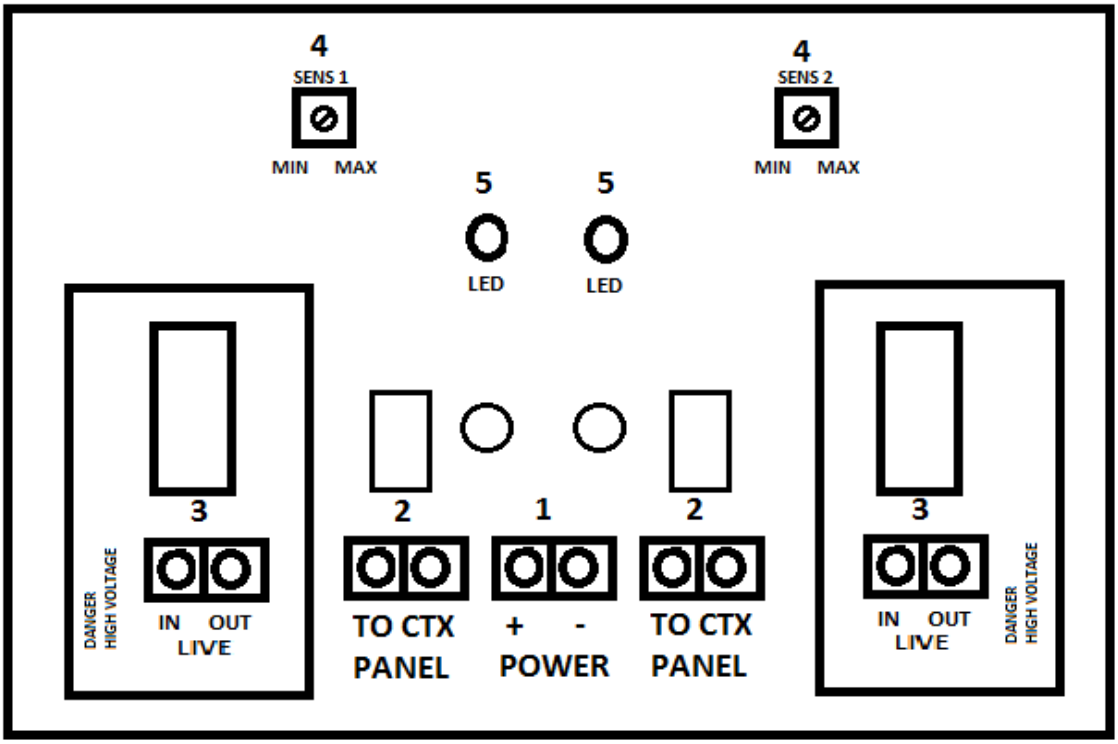
2.3 Current Monitor On the base of the circuit board there are two sets of terminal marked "IN LIVE". The live feed from the fan controller should be taken to the Merlin PM2 and connected of the terminals. On the top of the circuit board there is a potentiometer marked "SENS 1" on the left side and marked "SENS 2" on the right side of the panel. The fan should be run at minimum speed and the potentiometer turned clockwise until the green LED on the PCB, located in the middle of the panel, lights up. This indicates the panel has seen the electrical current going to the fan. If a second fan is connected this procedure should then be repeated on the other potentiometer. The panels are sent from the factory with links in the terminal connections marked "Fan PD Switches supp fan & Extr fan" on the Merlin gas interlock system. These terminals are low voltage, mains supply must NOT be introduced to these terminals. If both supply fans and extract fans are being monitored both theses links should be removed and a low voltage connection should be supplied to the terminals marked 'TO CTX PANEL' on the Merlin PM2 panel. If only one fan is being monitored the relevant link should be taken out of the terminal connection. .

Note: all low voltage connections should be made using a screened cable to avoid electrical interference.

3 Operation Instructions

3.1 The PM2 current monitor requires a 12vdc power supply. (This is normally provided from the main Merlin system which it is used in conjunction with).

PM2 Wiring Diagram



1. Power Input from Merlin Panel, 12VDC.
2. Connection to Merlin 1500S or 2000S Air PD terminals. **LOW VOLTAGE**
3. Supply Fan current monitor, **MAX 20AMPS**
4. Potentiometers.
5. LED Lights.

Please note, Mains wires and low voltage wires should not be run in the same conduit as per the **LOW VOLTAGE DIRECTIVE**

INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT

When this product has reached the end of its life it must be treated as Waste Electrical & Electronics Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Please contact your supplier or local authority for details of recycling schemes in your area.

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