

# Gas Safety Products

## Merlin FAB-1 System



## Installation, operating and maintenance



Read these instructions carefully before operating or servicing

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## 1 General information

The Merlin FAB-1 is a fire alarm bypass panel.

The Merlin FAB-1 is designed to allow gas to remain on- for a pre-determined time during a fire alarm test. The FAB-1 should be activated before a fire alarm test to allow the gas supply to remain on. This is done by turning the key switch on the fascia of the panel as far clockwise as possible. Once released the key will return to its original position and a countdown timer is activated. The countdown timer can be adjusted inside the panel to allow the gas supply to remain on for between 10 and 45 minutes.

When the FAB-1 is in operation the panel will beep every 20 seconds until there is 5 minutes before the end of the timeout, the FAB-1 will then beep every 10 seconds and the bypass LED will start to flash. During the bypass time gas can still be shut off, pressing the emergency shut off button will close the gas solenoid valve.

## 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 Mains Supply:** A 230volt electrical supply should be supplied to the panel. This should be externally fused at 3 Amps using a fused spur and should be connected to the terminals marked **[LNE POWER]**.
- 2.3 Fire Alarm Panel Connection:** The terminal for the connection to a fire alarm panel is detailed on the circuit board as **[TO FIRE PANEL]** - *Low Voltage Connection ONLY*.
- 2.4 Merlin Control Panel Connection:** The terminal for the connection to a Merlin control panel is detailed on the circuit board as **[TO MERLIN PANEL]** - *Low Voltage Connection ONLY*.
- 2.5 BMS Connections:** Terminals are available for connections to Building Management Systems etc, detailed on the circuit board as **BMS [N/C COM N/O]** - *Low Voltage Connection ONLY*.
- 2.6 Timeout Facility:** The bypass time can be adjusted using the RED switches [S1] inside the panel. Please see below the timeout variation you can select.

**NOTE: ALL LOW VOLTAGE CONNECTIONS SHOULD BE MADE USING A SCREENED CABLE TO AVOID ELECTRICAL INTERFERENCE.**

I = ON   O = OFF				
S1	S2	S3	Time (minutes)	
O	O	O	10	
O	O	I	15	
O	I	O	20	
O	I	I	25	
I	O	O	30	
I	O	I	35	
I	I	O	40	
I	I	I	45	

### 3 Operation Instructions

#### 3.1 How to turn the system on and off

1. Turn the key switch to **[ON]** position.
2. To turn the system off, turn the key switch to **[OFF]** position.

#### 3.2 LED status

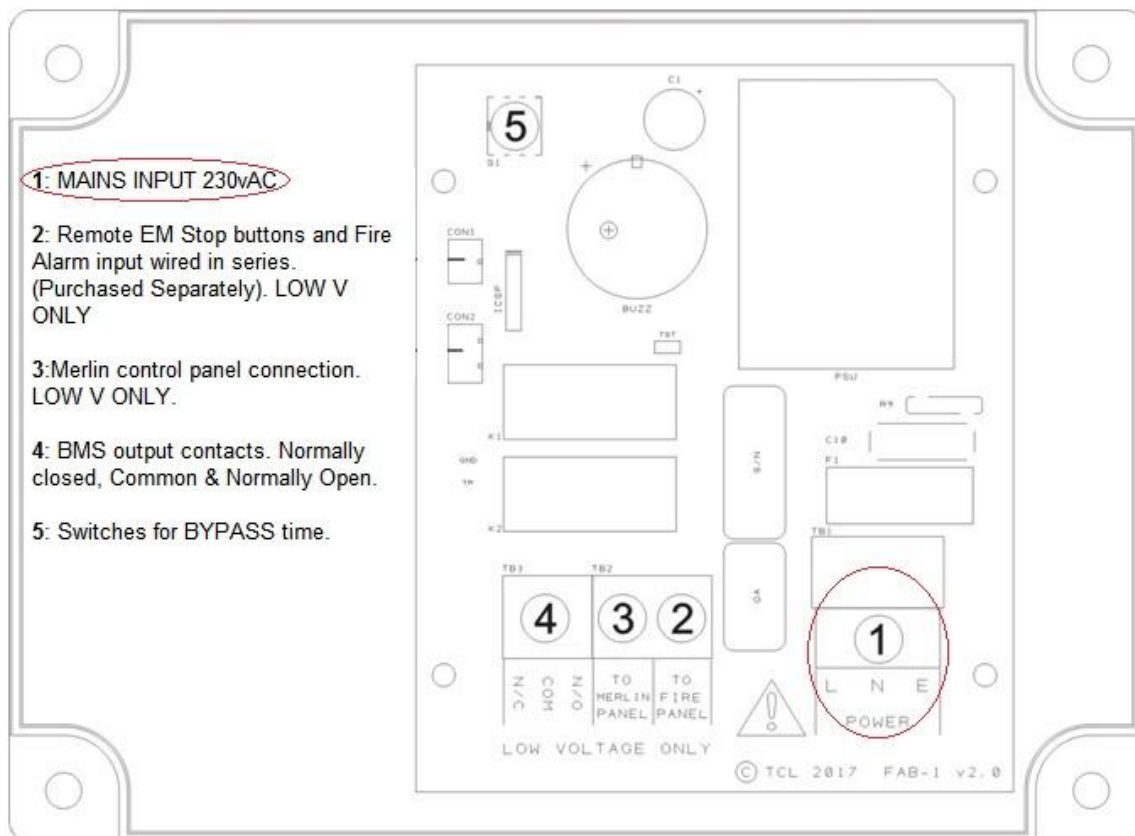
##### [Bypass On]

This LED will illuminate *GREEN* when the key switch on the fascia of the panel has been turned to [ON]. Five minutes before the timeout facility is about to end, the [Bypass On] LED will start to flash. When the bypass time has finished the LED will turn off.

##### [Power]

When the system is connected to the Mains Supply, the LED of the S&S Northern logo located at the bottom right hand corner of the panel will illuminate *RED*. *If there is no power to FAB-1 – the LED will not be lit – check fuse to ensure it is intact.*

### Merlin FAB-1 Circuit Board Diagram



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.

**CONTACT US:****S&S Northern Head Office**

Tel: +44(0) 1257 470 983

Fax: +44(0) 1257 471 937

[www.snsnorthern.com](http://www.snsnorthern.com)[info@snsnorthern.com](mailto:info@snsnorthern.com)**South East Division**

Tel: +44(0) 1702 291 725

Fax: +44(0) 1702 299 148

[south@snsnorthern.com](mailto:south@snsnorthern.com)

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