

Gas Safety Products

Merlin CT500 Gas Isolation Panel



Installation, operating and maintenance

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1 General information

The Merlin CT500S is a gas isolation panel.

The CT500S is designed to provide an effective way of isolating gas by means of a key switch on the panel or by the operation of the emergency shut off button. The CT500S can receive connections from remote emergency shut-off buttons and also features a permanent 12VDC output.

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 **Mains Supply.** A 230-volt 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 IN"
- 2.3 **Gas solenoid valve.** The gas solenoid valve should be powered using the terminals on the Merlin CT500S marked "LNE TO VALVE".
- 2.4 **Remote emergency shut off buttons.** The terminal for remote emergency shut-off buttons is detailed on the circuit board as "REMOTE EM STOP". These connections are linked out as a factory setting. Remote emergency shut-off buttons should be volt free and wired to the Merlin CT500S using two-core cable.
- 2.5 **12v DC.** This is a permanent 12v DC output when there is power at the panel.
- 2.6 **Internal Buzzer.** Operates at 65dB measured 30cm from closed panel.

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

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 Explanation of LED status

3.2.1 Power LED

When the system is connected to the mains supply, the Red LED of the S&S Logo located in the bottom right corner of the panel will illuminate. When no power is present, this LED will not light up.

RED = OK

OFF = No power to CT500S, a loose ribbon connection or the fuse may not be intact.

3.2.2 Gas on LED

When the fans are operational and the key switch is turned on, the Merlin CT500S will check the installation for gas leaks. If gas proving is successful, the gas valve will open and the green 'Gas On' LED will illuminate.

GREEN = Gas On

OFF = Gas Off

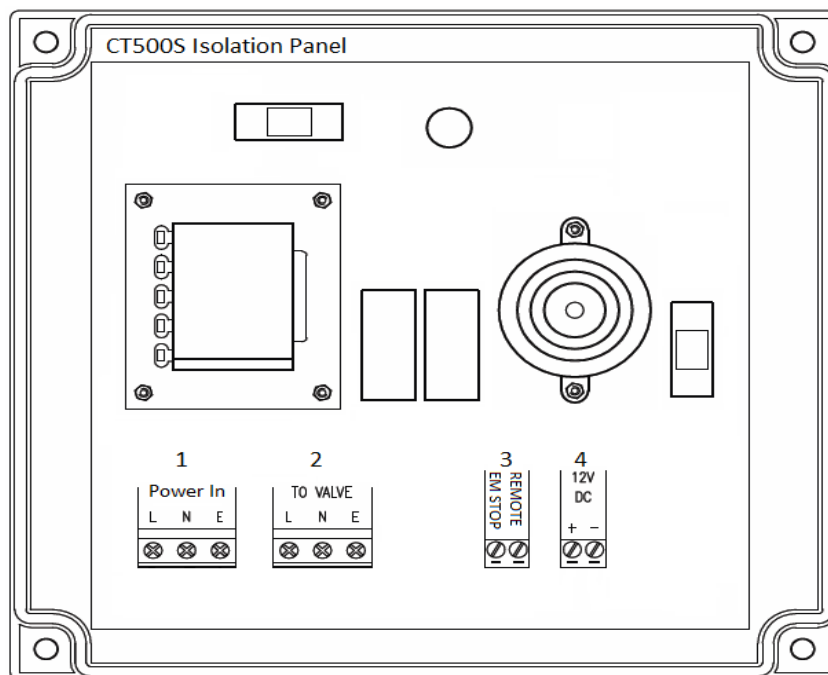
3.2.3 EM Stop LED

If an emergency shut off button (either remote or on the panel) is pressed, the LED will illuminate AMBER and the gas will be turned off. The EM Stop button must be re-set before restarting the system.

OFF = OK

AMBER = EM Stop button pressed

Merlin CT500S Wiring Diagram



1. Mains Input 230V Single Phase.
2. Gas Solenoid Valve Power Output, 230VAC.
3. Remote EM Stop buttons and Fire Alarm input wired in series (purchased separately). **VOLT FREE INPUT**
4. Permanent 12VDC output.

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

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