

Troubleshooting Guide

Merlin CT1200S Gas Interlock System



Table of contents

1	General information	3
2	Fault LED	3
2.1	No Power LED Illuminated.....	3
2.2	Emergency Stop Fault	3
2.3	Fan Fault.....	3
2.4	Additional common faults.....	3
3	Operation Instructions	4
3.1	How to turn the system on and off	4
	CT1200S Wiring Diagram	4

1 General information

The Merlin CT1200S is a ventilation interlock panel.

The Merlin CT1200S can receive connections from remote air pressure differential switches or current monitors and remote emergency shut-off buttons. It can also be integrated with a BMS and fire alarm.

2 Fault LED

2.1 No Power LED Illuminated

- 1 If the system is connected to the mains supply, the Power LED will illuminate. Please ensure there is in fact 230/240V going to the 'Power IN' terminal.
- 2 If the system is connected to the mains supply and the power LED is not illuminated please check to see if the 3A fuse is still intact.
- 3 If none of the above have rectified the fault please contact S&S Northern for further assistance.

2.2 Emergency Stop Fault

- 1 If the front fascia emergency stop has been pressed, please re-press the button to release then reset the panel using the key switch.
- 2 If you have a remote emergency stop connected to the Merlin CT1200S please ensure this has not been activated. If this has please reset the emergency stop then reset the CT1200S with the key.
- 3 If you have multiple remote emergency stops connected to the same control panel, please ensure these have been wired in a loop series to our panel and connected to the 'EM REM' terminal in the Merlin CT1200S.
- 4 If you are not using an additional emergency stop, please ensure the 'EM REM' terminal is linked out. Check that the link is securely connected by ensuring you have continuity.
- 5 If none of the above have rectified the fault please contact S&S Northern for further assistance.

2.3 Fan Fault

- 1 Ensure the fan(s) are operational.
- 2 If you are using an air pressure differential switch please ensure this is correctly wired using the normally open contact on the air pressure differential switch so that a closed signal is sent back to the Merlin CT1200S when air flow is seen. For further information on the location and installation please contact S&S Northern for further assistance.
- 3 If you are using an external switch, please ensure that the red 'on' LED light is illuminated. If it's not illuminated firstly confirm that the fan is in fact on, if it is, to increase the sensitivity of the switch you may need to increase the number of loops the live wire is taken through the coil.
- 4 If none of the above have resolved the issue or you would like any technical assistance please contact S&S Northern.

2.4 Additional common faults

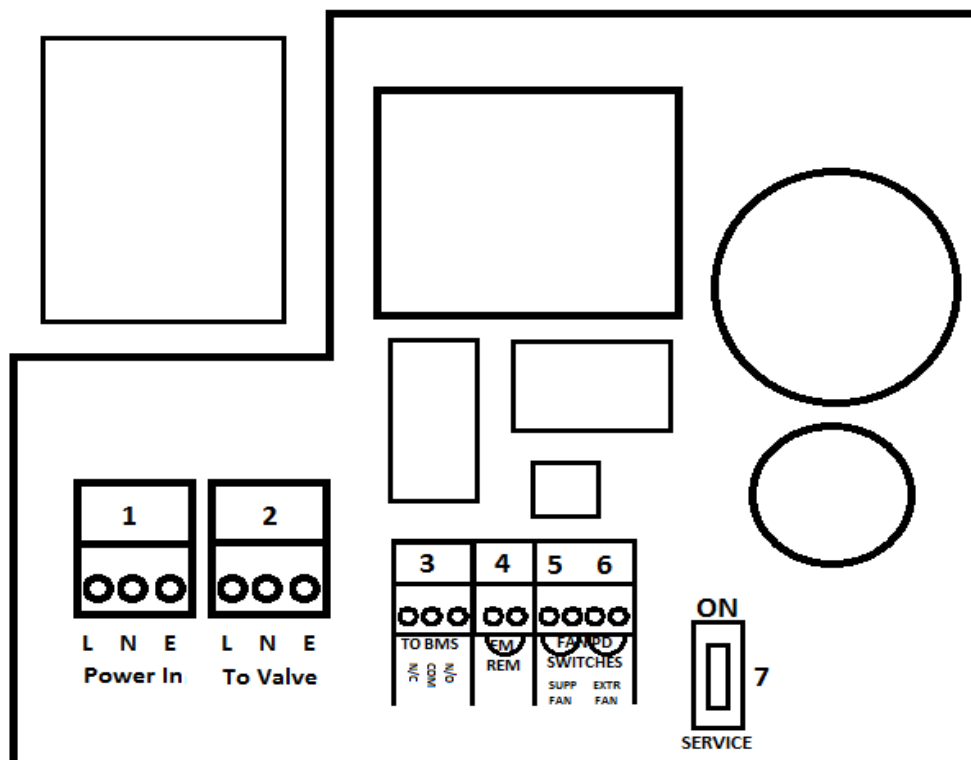
- 1 Gas is on without the fans running - The fan PD terminal links have been left in?
- 2 Incorrect air pressure differential switch wiring.
- 3 The air pressure differential switch is not picking up airflow. The probe may have to be located to a more sensitive area in the duct.
- 4 **Service LED is illuminated** – The service dipswitch will be set to the 'ON' position. This may have been done to bypass one of the 2.3 faults for maintenance purposes.

3 Operation Instructions

3.1 How to turn the system on and off

1. Turn the Fans On.
2. Turn the key switch to on position.
3. To turn the system off, turn the key switch to off position.

CT1200S Wiring Diagram



1. Mains Input 230VAC Single Phase.
2. Gas Solenoid Valve Power Output, 230VAC.
3. BMS output contacts. Normally Closed, Common and Normally Open.
4. Input for remote EM Stop buttons & / or Fire Alarm input wired in series (purchased separately). **VOLT FREE INPUT**
5. Supply Fan pressure differential switch or current switch. **VOLT FREE INPUT**
6. Extract Fan pressure differential switch or current switch. **VOLT FREE INPUT**
7. Service Switch

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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