

# Oil Fired Suspended Unit 'OFSU' heater modification for SmartCom burner lockout reset issues.



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## Warnings

All external wiring MUST comply with the current IEE wiring regulations.

## General information.

When Oil Fired suspended unit heaters are being controlled via SmartCom controllers and the burner is in a lockout state, the controller will currently not reset.

This condition is caused by the removal of power to the Ecoflam oil burner and in-turn, the Satronic controller when the lockout reset button is depressed. To rectify this an additional relay is added in circuit to retain power to the ignition board whilst in a lockout

state to enable the lockout reset to re-activate the system.

This technical bulletin describes in detail the procedure required to complete this task.

The information contained in this technical bulletin is designed to aid a qualified or competent service technician in the instruction it is intended for.

## Tools required.

The following tools and equipment will be required to complete this task:

1. 230v 2 pole relay pt no. 2104
2. Base for above pt no. 2108
3. M3 x 30 machine screw pt no. 5293-1
4. Flat head screwdriver
5. Electrical screwdriver
6. Small pozi screwdriver
7. Wire strippers
8. Crimpers
9. Multi-meter.

## Step by step instructions.



**ISOLATE ALL ELECTRICAL SUPPLY TO THE HEATER AND SMARTCOM CONTROL PANEL BEFORE PROCEEDING.**

1. Remove the 7 way mains plug from the panel mounted socket located on the front of the control panel.



fig.1 – Heater control cover & fixed socket

2. Remove the 4 plastic retaining screws. Carefully, allow the cover to hang down.



fig.2 – Opened control panel.

3. The contractors terminal rail and internal wiring harness is mounted on a plate on the inside of the control panel and is numbered 1 to 9\*.



fig.3 – Terminal strip. \*OFSU 100 has an additional plastic terminal (not shown)

4. Locate relay base (pt no. 2108).
5. Locate the **ORANGE** wire, position stripped end into terminal **A1** of the relay base and secure using an electrical screwdriver.
6. Locate the **BLUE** wire, position stripped end into terminal **A2** of the relay base and secure using an electrical screwdriver.
7. Locate the **BROWN** wire, position stripped end into terminal **11** of the relay base and secure using an electrical screwdriver.
8. Locate the **BLACK** wire, position stripped end into terminal **14** of the relay base and secure using an electrical screwdriver.
9. Check wire tightness and continuity.
10. Remove the metal base plate fixing screw on the bottom edge of the control box. Place the relay base inside the control box and using the M30 x 35 machine screw, fasten to base.

11. Locate the 230V 2 pole relay (pt no. 2104) and being careful not to bend the pins, position correctly onto the base.



fig.4 – Relay position

12. Locate the **ORANGE** wire, position stripped end into **terminal 6** of the control box terminal strip and secure using an electrical screwdriver.
13. Locate the **BLUE** wire, position stripped end into **terminal 1** of the control box terminal strip and secure using an electrical screwdriver.
14. Locate the **BROWN** wire, position stripped end into **terminal 2** of the control box terminal strip and secure using an electrical screwdriver.


15. Locate the **BLACK** wire, position stripped end into **terminal 9** of the control box terminal strip and secure using an electrical screwdriver.
16. Check wire tightness and continuity.
17. Close the control panel cover and secure using the four plastic screws.
18. Turn the mains isolator back on.
19. Call for heat.
20. If the heater was already in a state of lockout prior to modification, both the heater will indicate lockout and the SmartCom controller will state 'Lockout'.
21. Press the  button once.
22. After a 8 second delay there will be an audible click from a relay within the SmartCom, the lockout indication lamp on the heater will go out and the SmartCom display will return to normal mode.



fig.5 – Satronic ignition unit.

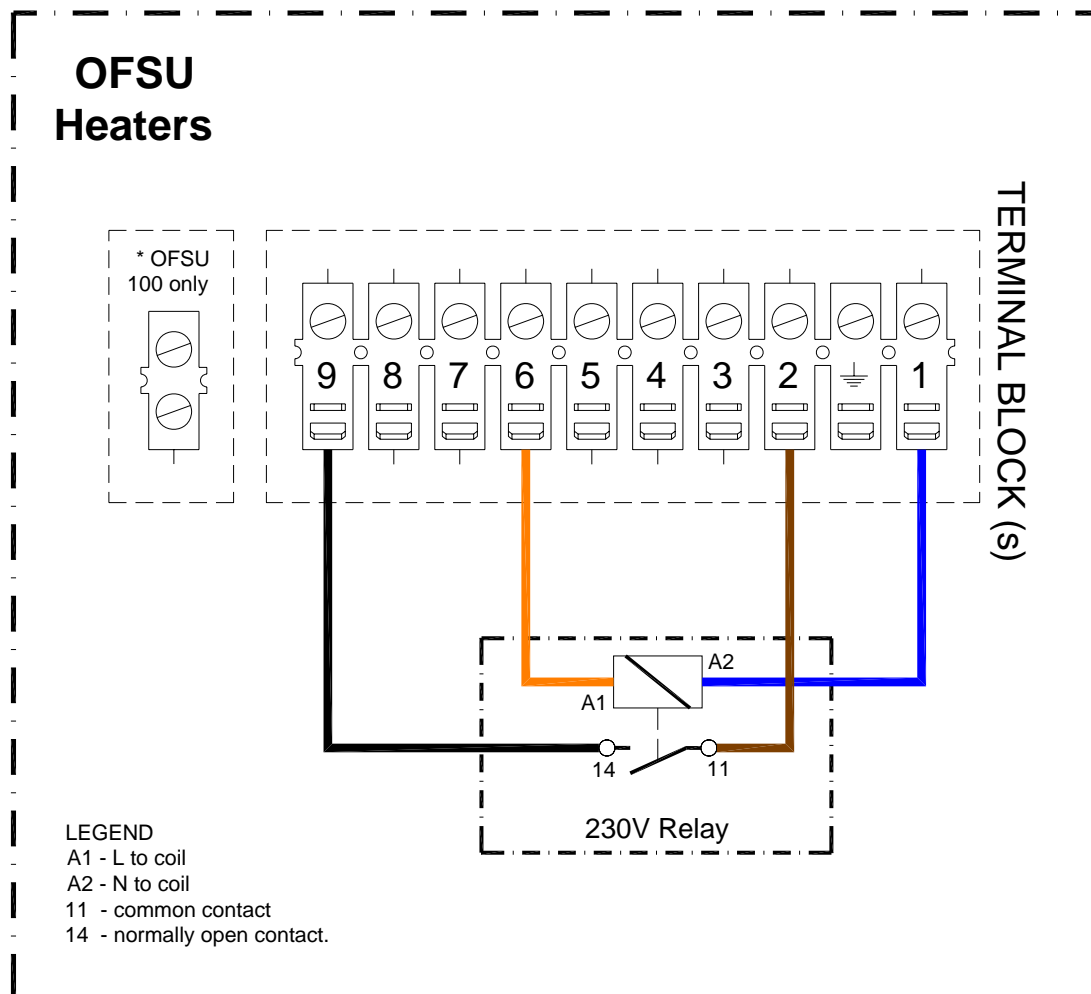


fig.6 – Wiring modification schematic.

# Interconnection wiring diagram & heater modifications.

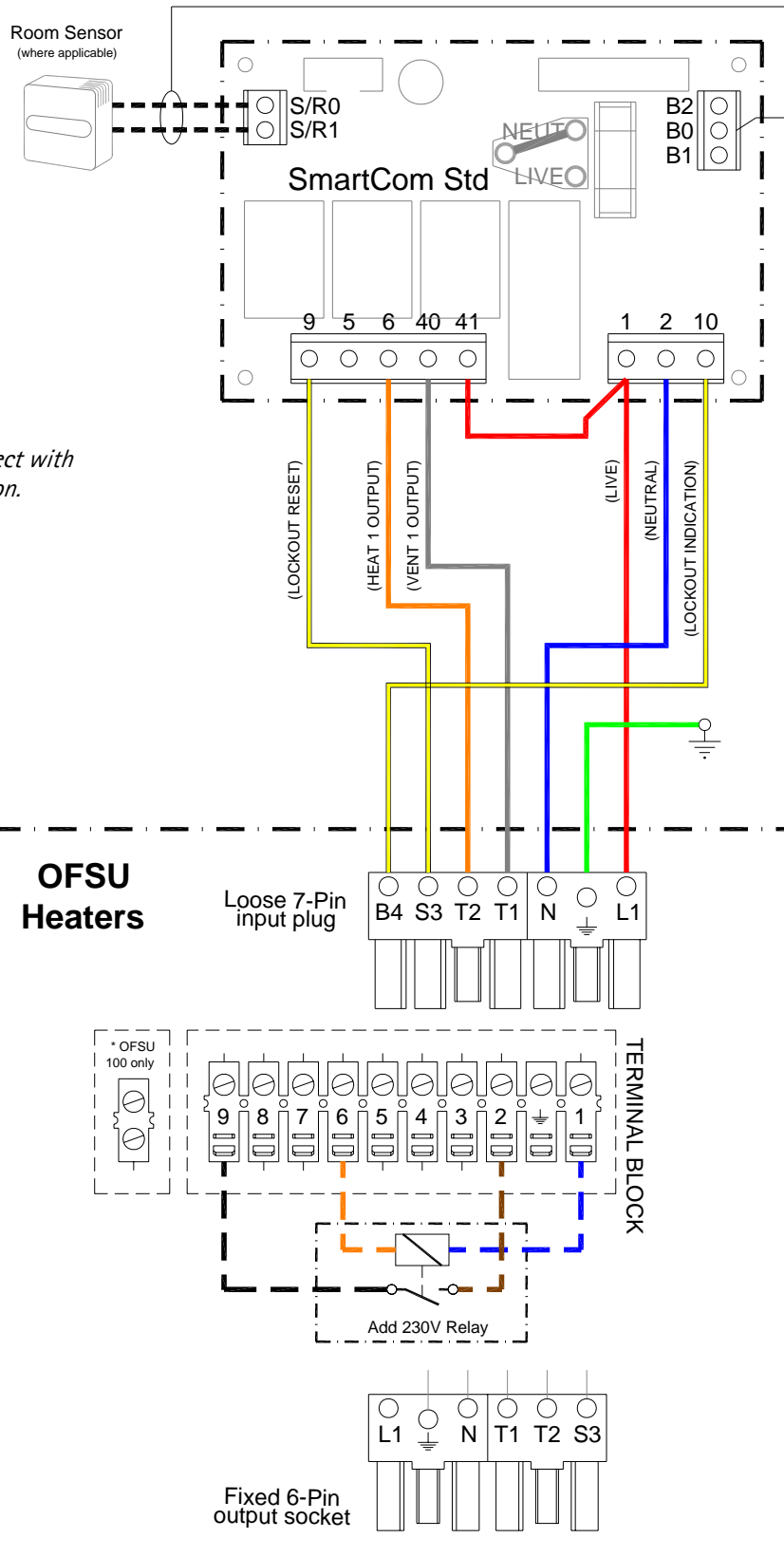


fig.7 – Interconnect with wiring modification.



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