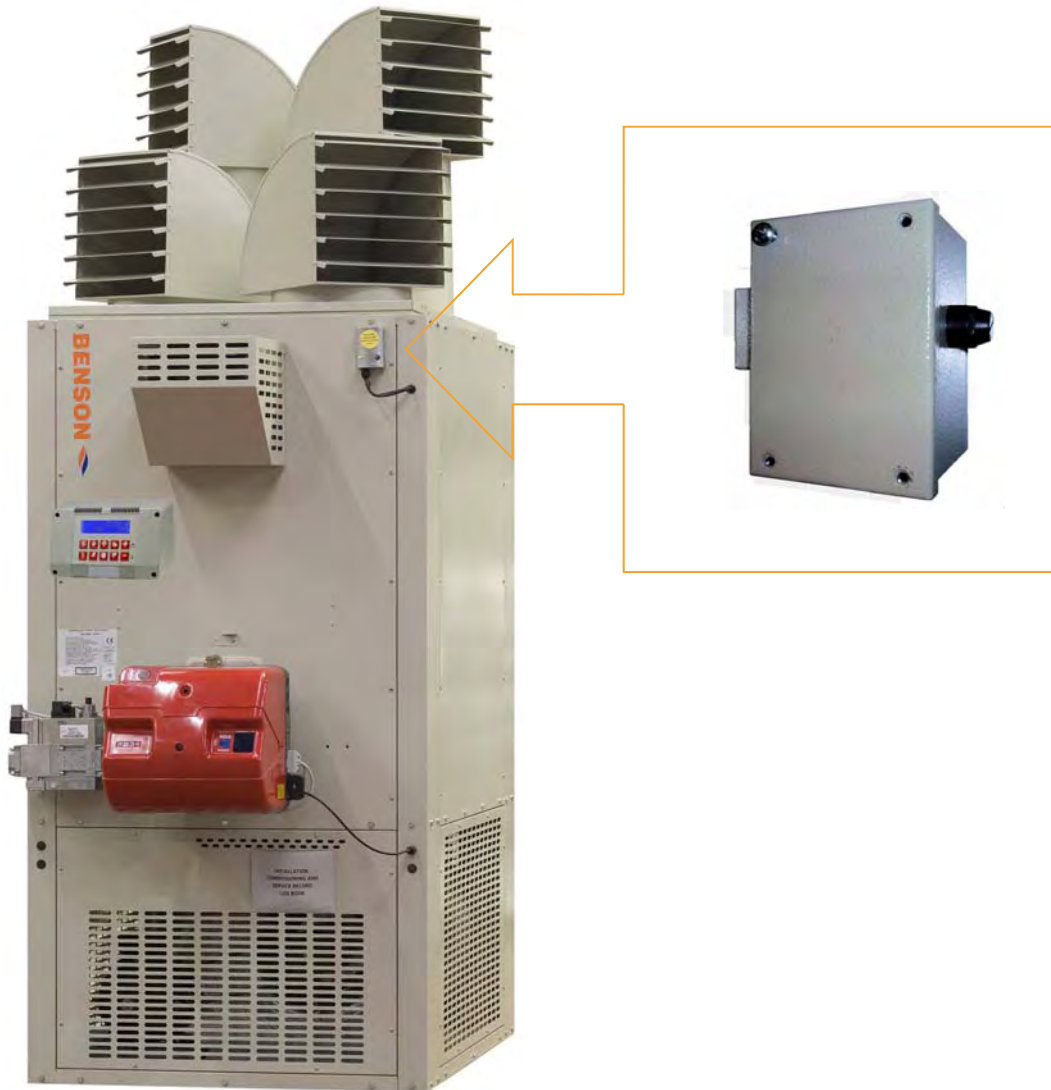


# BENSON CABINET HEATERS

## NEW FAN CONTROL / LIMIT STAT RETROFIT



### WARNINGS

Benson equipment must be installed and maintained in accordance with the current OFTEC Regulations for oil fired products, and the relevant provisions of the Gas Safety (Installations and Use) Regulations 1998 for gas fired products. Due account should also be taken of any obligations arising from the Health and Safety at Works Act 1974 or relevant codes of practice. In addition the installation must be carried out in accordance with the current IEE wiring regulations (BS 7671), BS 6896: Industrial & Commercial) and any other relevant British Standards and Codes of Practice by a qualified installer. All external wiring MUST comply with the current IEE wiring regulations.

The original Honeywell fan control/overheat limit thermostat is no longer available for the Cabinet range of warm air heaters.

This bulletin describes the parts required and method of fitting a replacement fan control and overheat limit thermostat to these heaters.

The functions of the original Honeywell controller will now operate from two separate components, a 110° C limit thermostat and a fan control thermostat. The new components fit into the original Honeywell sensing tube hole.

In addition the kit for the Cabinet models 60, 75 and 85 (single phase) will contain a contactor and din rail.

**WARNING: Disconnect both electrical and gas supplies before carrying out any work on this heater.**

A replacement fan control/limit thermostat assembly kit part No. **20-45-590 (20-45-598 for Cabinet models 60, 75 and 85 single phase)** will be required comprising of:

- 1 off fan control/limit thermostat housing
- 1 off overheat thermostat
- 1 off fan control thermostat
- 5 off loose female insulated crimp terminals
- 1 off gasket

- 1 off pre-wired contactor (Cabinet models 60, 75 and 85 single phase only)
- 1 off din rail (Cabinet models 60, 75 and 85 single phase only)

**1: Remove original Honeywell fan control/limit stat:**

Remove single retaining screw securing the lid of the original fan/limit stat as shown.



Disconnect the five cables (black, red, grey, blue and earth) by releasing the quick connectors with a screwdriver as shown.

*Note: The earth cable ring crimp will need to be cut off and discarded.*

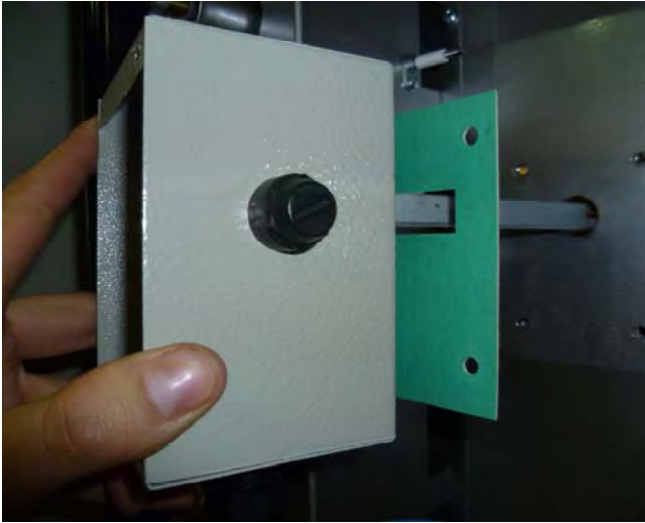


Unscrew and withdraw cable gland (save for later), then remove fixing screws then remove unit from heater.



## 2: Fit new fan control/limit stat assembly:

Slide gasket over sensing tube as shown.  
Fit assembly into original cut-out



Fix in position using the original screws and holes.



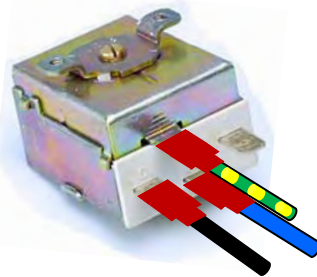
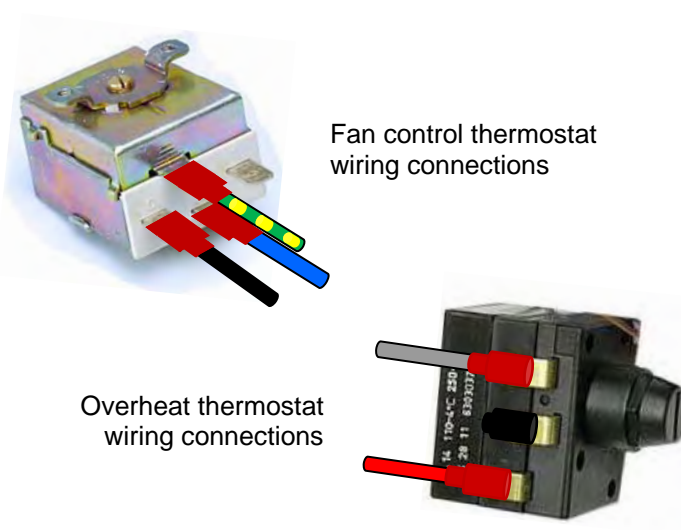
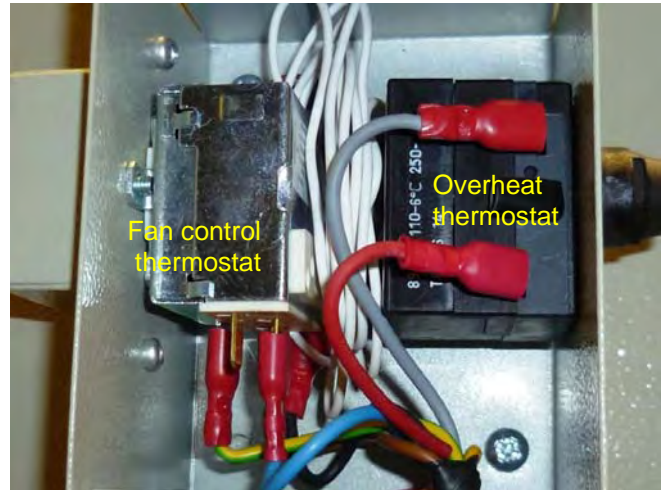
Fit the supplied female spade crimps to the original cables .



Fit cable gland into new assembly and connect new fan control/limit thermostats as follows:

Fan control thermostat: **Black to terminal C**  
**Blue to terminal 2**  
**Green/Yel to Earth terminal**

Overheat thermostat: **Red to terminal 2**  
**Grey to terminal 1**



Fan control thermostat wiring connections

Overheat thermostat wiring connections



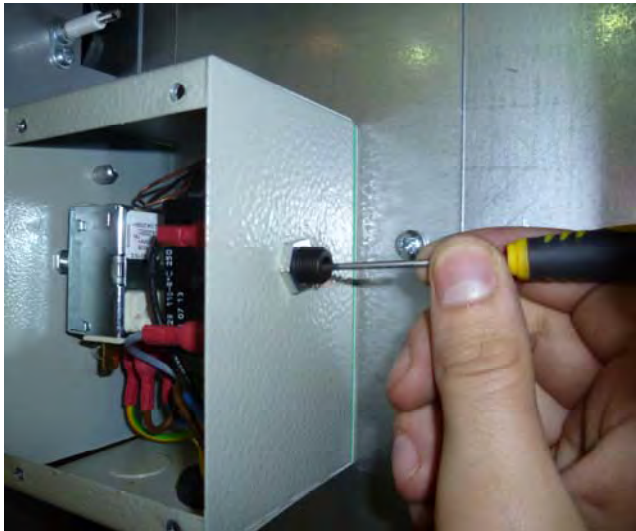
Fit lid to box using 4 screws provided



Upon completion the heater should be tested for correct operation of the fan control and overheat limit.

### 3: Overheat thermostat reset:

In the event of the overheat thermostat tripping, once the cause has been remedied, it can be reset by removing the protective screw cap, then pushing in the green button as shown below.



### 4: Fit new contactor and din rail (Cabinet models 60, 75 and 85 only):

Remove the brown wire link from between terminals 6 and 7 (see photo) then temporarily unclip MCB from din rail.

Fit assembly into original cut-out.

Remove old din rail then replace with new din rail from the kit.

Re-fit existing MCB to new din rail.

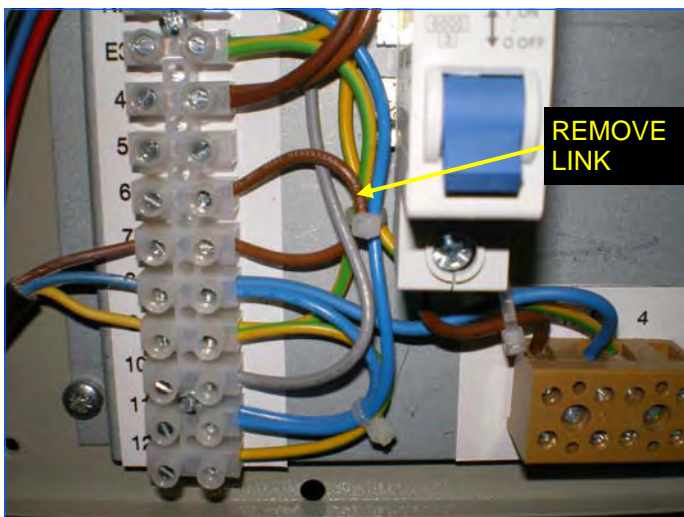
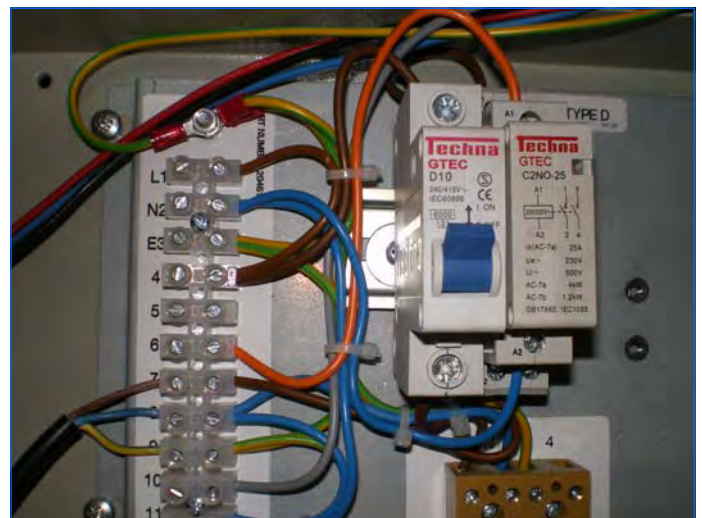
Fit new contactor to din rail as shown.

Fit new brown cable from top of existing MCB to terminal 1 on new contactor.

Fit new orange cable from A1 on the new contactor to terminal 6.

Fit new blue cable from A2 on the new contactor to N2 on the terminal rail.

Fit new brown cable from terminal 2 on the new contactor to terminal 7 on the terminal rail.



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