



# WEATHER COMPENSATION KIT

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Boilers.

**For the very latest copy of literature for specification and maintenance practices visit our website [www.idealboilers.com](http://www.idealboilers.com) where you can download the relevant information in PDF format.**

**This kit is suitable only for the domestic gas boilers listed below:**

**COMBI BOILERS**

- \*Logic Combi C
- \*Logic Combi C IE
- Logic Combi ESP1
- Logic Code Combi ESP1
- Logic+ Combi C
- \*Independent Combi
- \*Independent+ Combi
- \*i-mini C
- Vogue Combi C GEN2
- Vogue Combi C IE GEN2
- Logic Max Combi C
- Vogue Max Combi

**HEAT BOILERS**

- Logic Heat H
- Logic Heat H IE
- Logic+ Heat H
- Logic Max Heat H

**SYSTEM BOILERS**

- Logic System S
- Logic System S IE
- Logic+ System S
- Vogue System S GEN2
- Vogue System S IE GEN2
- Logic Max System S
- Vogue Max System

\* Refer to Frame 1, item C.

**Ideal OS2 (Outside Sensor 2)**

Class II used in isolation, Class VI used with Ideal PRT4  
 Contribution to Seasonal Space Heating Energy - 2% (Class II), 4% (Class VI)

**INTRODUCTION**

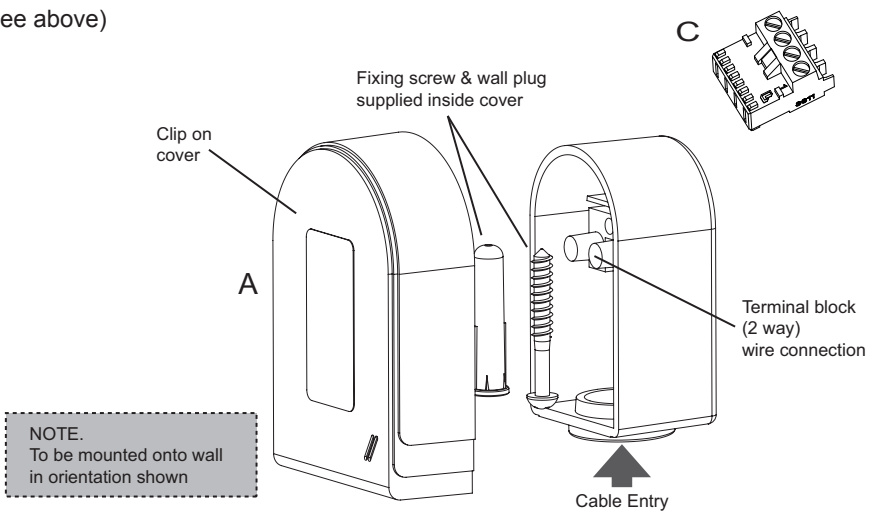
This kit provides the facility to apply outside air temperature control to the boiler water flow temperature which provides energy savings. The outside sensor provided measures outside air temperature and sends a signal to the boiler, which adjusts the maximum boiler flow temperature in response. If outside air temperature is greater than the system design temperature, the boiler flow temperature is reduced providing running cost savings. The boiler will operate in the condensing mode more frequently increasing savings.

Once the sensor is fitted it is automatically detected.

The sensor operation may be configured by adjustment of the boiler operating parameters, if necessary.

**1 KIT CONTENTS**

- A. Outside Air Sensor
- B. SAP Registration Label
- C. Connector  
(Required only for boilers marked with \*. See above)



**B**

**ideal**  
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Model Name: **OS2**  
 Model Qualifier: **ErP Class II**

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I certify that this boiler is connected to a weather compensation temperature sensor which is compatible with the boiler and provides weather compensation control that has been permanently enabled. The boiler has been commissioned in accordance with manufacturer instructions, which have been supplied to the householder. The central heating temperature control knob should normally be set in the mid-position.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

UN 212050 A01

## 2 FITTING THE KIT

### Notes.

1. A timer should be fitted to the system so that CH will be switched off when appropriate.
2. The Connector (Frame 1, item C). is prefitted to certain boilers. Boilers that don't have this fitted are marked with an \* on page 2.

### FITTING THE SENSOR

The air sensor should be located on an external wall of the building to be heated. Fix the sensor to a north/north-east facing wall to avoid direct radiation from the sun. The air sensor should be located to avoid any heating effect from the boiler flue.

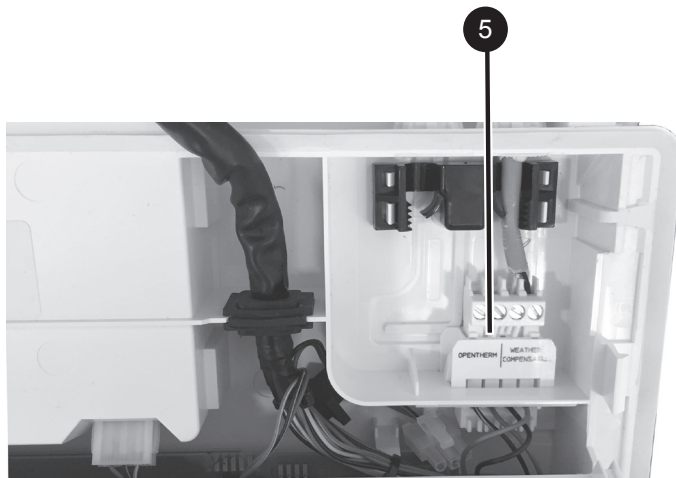
To fix the air sensor to the wall, unscrew the sensor box plastic cover and screw/plug the sensor body to the wall.

Wire a twin core 0.5mm<sup>2</sup> cable from the sensor to the boiler through a RH grommet located on the underside of the boiler. Cable length between sensor and boiler should be no greater than 20m. Note that this connection is protected extra low voltage. It is not necessary for the person carrying out the wiring to be approved to Part P of the Building Regulations.

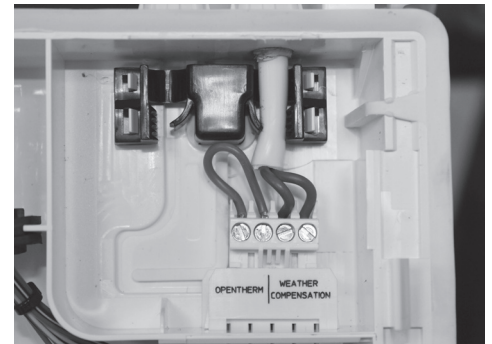
Avoid running this cable alongside mains voltage cables.

### WIRING THE WEATHER COMPENSATION KIT TO THE BOILER

1. Isolate the electricity supply to the boiler.
2. Remove the boiler front panel (refer to boiler installation instructions).
3. Hinge down the control box.
4. Unclip and rotate the installer connections cover towards you until it clips into the retention holes.
5. Connect the wires from the outside sensor into the RHS two terminals of the 4 way connector. Insert the connector into the socket marked 'OPENTHERM / WEATHER COMPENSATION'
6. Re-assemble in reverse order.
7. Record your name and today's date on the enclosed label and adhere it to the boiler in a position which will be visible for future inspection.



Combi boiler



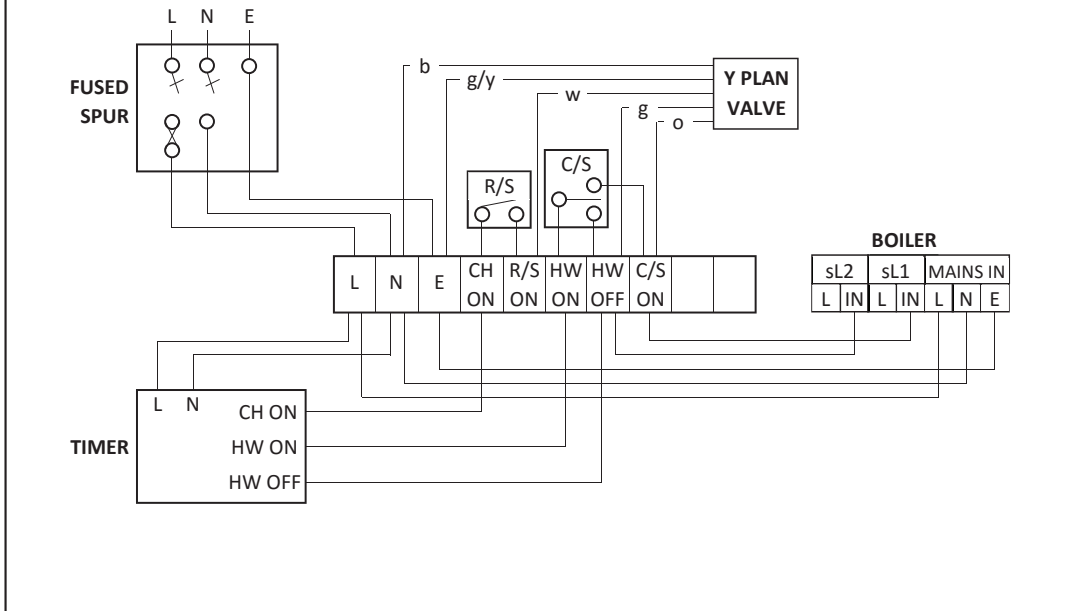
Heat & System

## 3 INSTALLER WIRING - HEAT & SYSTEM BOILERS ONLY

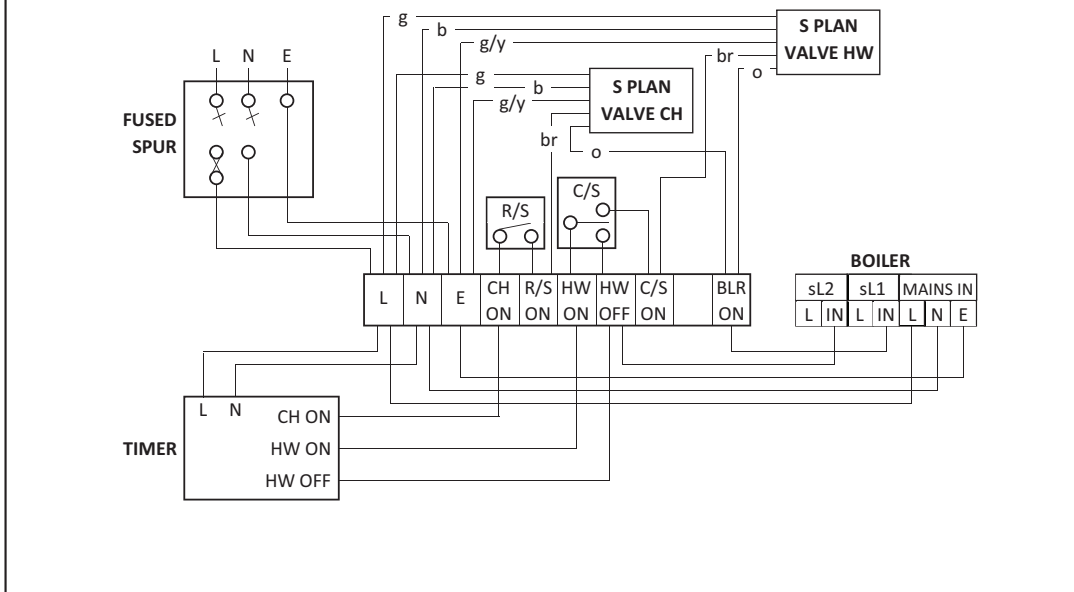
When fitting the outside sensor to the Heat or System boiler, refer to the changes required to the S and Y plan wiring on the following pages.

## 4 INSTALLER WIRING S & Y PLAN DRAWINGS - LOGIC SYSTEM BOILERS ONLY

SYSTEM BOILER WITH Y PLAN SYSTEM & OUTSIDE SENSOR KIT

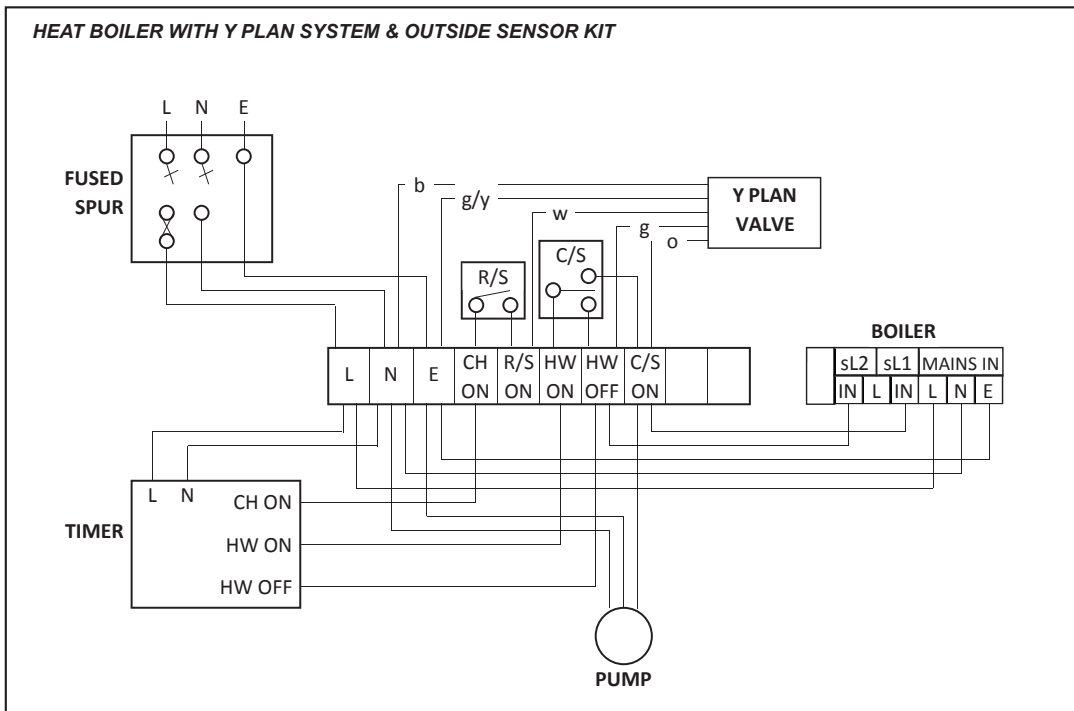


SYSTEM BOILER WITH S PLAN SYSTEM & OUTSIDE SENSOR KIT

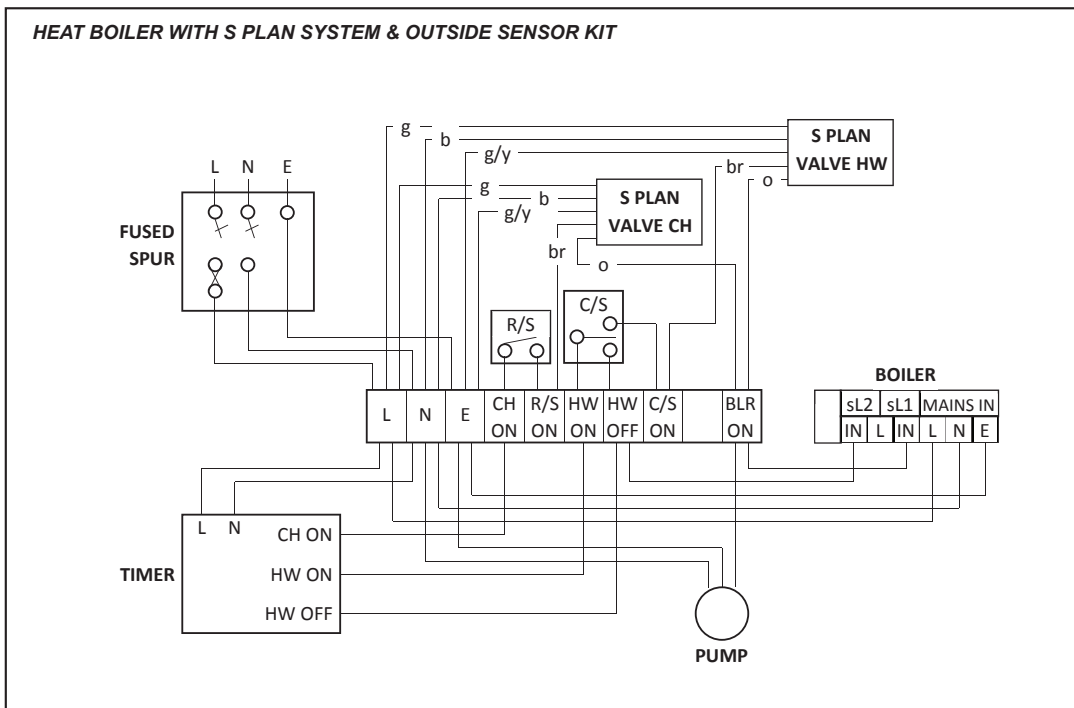


## 5 INSTALLER WIRING S & Y PLAN DRAWINGS - HEAT BOILERS ONLY

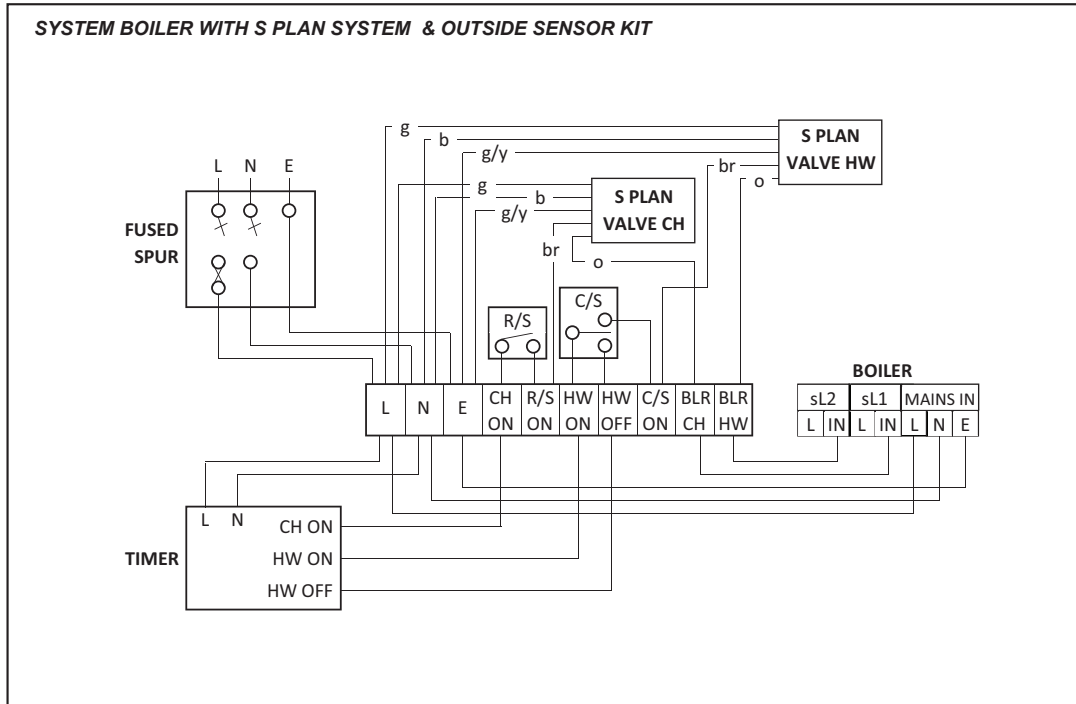
**HEAT BOILER WITH Y PLAN SYSTEM & OUTSIDE SENSOR KIT**



**HEAT BOILER WITH S PLAN SYSTEM & OUTSIDE SENSOR KIT**



## 6 INSTALLER WIRING S PLAN DRAWINGS - VOGUE SYSTEM BOILERS ONLY



## 7 WEATHER COMPENSATION KIT OPERATION

### CH OPERATION

The On and Off time control of central heating should be controlled by a separate timer.

During programmed On times the Central Heating Radiator Flow Temperature is controlled by the boiler relative to the Outside Temperature as shown in the diagram.

The Room temperature can be adjusted using the Central Heating Temperature Control Knob on the boiler as follows. Essentially rotating the knob clockwise increases the room temperature and rotating the knob anti-clockwise decreases the room temperature.

The Room Temperature Setpoint in the associated graph is not directly related to the Actual Room Temperature but is the Nominal Room Temperature during a programmed CH period.

This can be adjusted between 5 and 30 degrees by the CH Potentiometer Knob on the Boiler when the Outside Temperature Sensor is connected. The graph only shows temperatures between 12 and 30 degrees for clarity.

Examples:

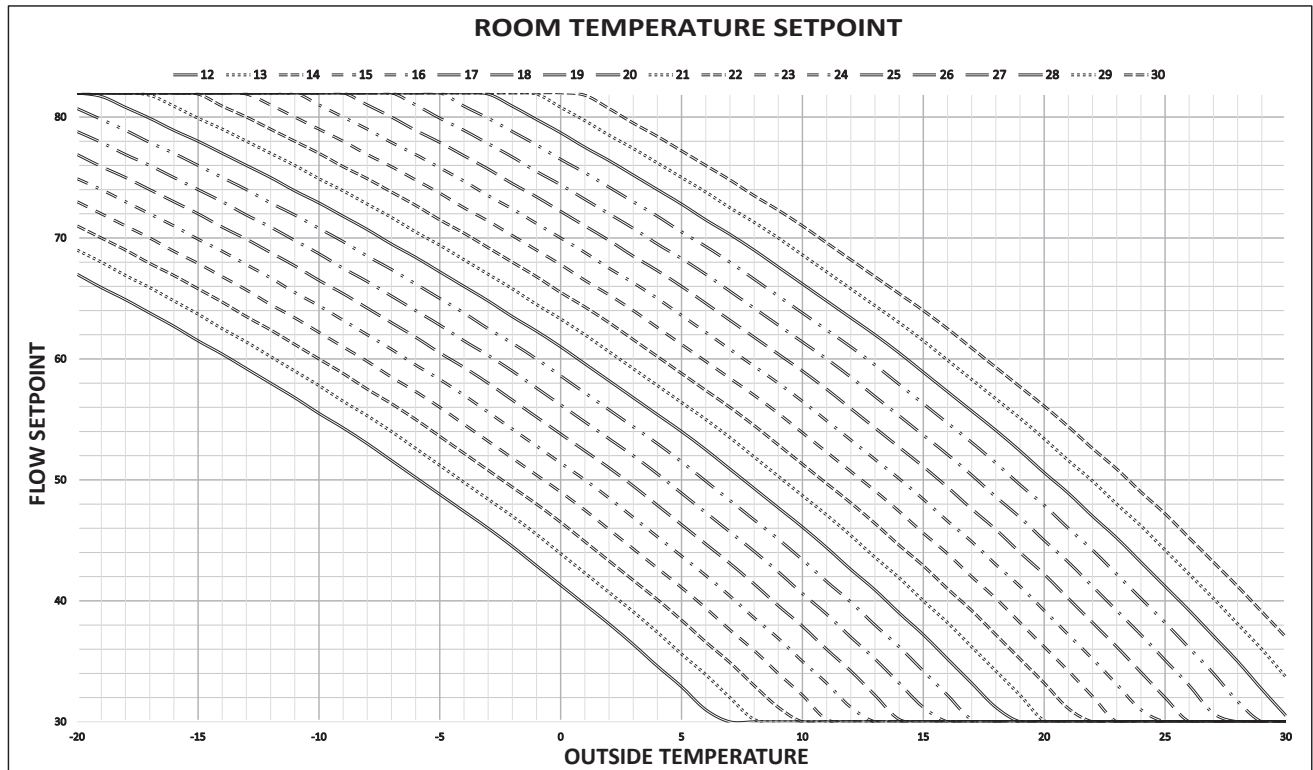
1. If the CH Potentiometer Knob is set to display 22°C on the Boiler Display the Room Temperature Setpoint will be 22°C and the curve 22 will be followed, indicated by 11th curve in from the left hand side. So as the outside temperature varies the Flow Setpoint to the CH circuit will increase and decrease proportionally.
2. If the CH Potentiometer Knob is rotated fully clockwise, the Boiler Display will read 30°C and the Room Temperature Setpoint will be 30°C hence the curve 30 will be followed.
3. If the CH Potentiometer Knob is rotated fully anticlockwise, the Boiler Display will read 5°C and the Room Temperature Setpoint will be 5°C. This is an unrealistic Room Temperature Setpoint for a CH period during an ON time, but it is calculated internally for managing Frost Protection for the system based upon Outside Temperature.

### DHW OPERATION

When the system is in a timed on period for DHW and the tank stat is not satisfied, OV will be generated on the switched live input SL2 of the boiler.

This will ensure that Weather Compensation adjustment is ignored at this time. The set point will be fixed at 80 degrees.

The demand is indicated on the display by 'ON' and the burner on symbol as appropriate.





#### WEEE DIRECTIVE 2012/19/EC

#### Waste Electrical and Electronic Equipment Directive

- At the end of the product life, dispose of the packaging and product in a corresponding recycling centre.
- Do not dispose of the unit with the usual domestic refuse.
- Do not burn the product.
- Remove the batteries.
- Dispose of the batteries according to the local statutory requirements and not with the usual domestic refuse.



#### Technical Training

The Ideal Technical Training Centre offers a series of first class training courses for domestic, commercial and industrial heating installers, engineers and system specifiers.

For details of courses please ring:..... 01482 498432

Ideal Boilers Ltd. pursues a policy of continuing improvement in the design and performance of its products. The right is therefore reserved to vary specification without notice.

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