

# + WEATHER COMPENSATION KIT

**LOGIC COMBI C**

**LOGIC COMBI ESP1**

**LOGIC CODE COMBI ESP1**

**I-MINI C**

**LOGIC SYSTEM S**

**LOGIC SYSTEM S IE**

**LOGIC HEAT H**

**INDEPENDENT COMBI**

**INDEPENDENT+ COMBI**

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.

**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 for the following boilers:**

LOGIC COMBI C24 .....	G.C.No 47-349-18
LOGIC COMBI C30 .....	G.C.No 47-349-19
LOGIC COMBI C35 .....	G.C.No 47-349-20
LOGIC COMBI ESP1 24 .....	G.C.No 47-349-21
LOGIC COMBI ESP1 30 .....	G.C.No 47-349-22
LOGIC COMBI ESP1 35 .....	G.C.No 47-349-23
I-MINI C24 .....	G.C.No 47-349-30
I-MINI C30 .....	G.C.No 47-349-31
LOGIC + COMBI C24 .....	G.C.No 47-349-15
LOGIC + COMBI C30 .....	G.C.No 47-349-16
LOGIC + COMBI C35 .....	G.C.No 47-349-17
LOGIC SYSTEM S15 .....	G.C.No 41-750-61
LOGIC SYSTEM S18 .....	G.C.No 41-750-62
LOGIC SYSTEM S24 .....	G.C.No 41-750-63
LOGIC SYSTEM S30 .....	G.C.No 41-750-64
LOGIC CODE COMBI ESP1 26 .....	G.C.No 47-349-35
LOGIC CODE COMBI ESP1 33 .....	G.C.No 47-349-36
LOGIC CODE COMBI ESP1 38 .....	G.C.No 47-349-37
INDEPENDENT COMBI 24 .....	G.C.No 47-349-24
INDEPENDENT COMBI 30 .....	G.C.No 47-349-25

INDEPENDENT COMBI 35 .....	G.C.No 47-349-26
INDEPENDENT+ COMBI 24 .....	G.C.No 47-349-27
INDEPENDENT+ COMBI 30 .....	G.C.No 47-349-28
INDEPENDENT+ COMBI 35 .....	G.C.No 47-349-29
LOGIC SYSTEM S15IE .....	G.C.No 41-750-73
LOGIC SYSTEM S18IE .....	G.C.No 41-750-74
LOGIC SYSTEM S24IE .....	G.C.No 41-750-75
LOGIC SYSTEM S30IE .....	G.C.No 41-750-76
LOGIC + SYSTEM S15 .....	G.C.No 41-750-65
LOGIC + SYSTEM S18 .....	G.C.No 41-750-66
LOGIC + SYSTEM S24 .....	G.C.No 41-750-67
LOGIC + SYSTEM S30 .....	G.C.No 41-750-68
LOGIC HEAT H12 .....	G.C.No 41-750-77
LOGIC HEAT H15 .....	G.C.No 41-750-78
LOGIC HEAT H18 .....	G.C.No 41-750-79
LOGIC HEAT H24 .....	G.C.No 41-750-80
LOGIC HEAT H30 .....	G.C.No 41-750-81
LOGIC + HEAT H12 .....	G.C.No 41-750-82
LOGIC + HEAT H15 .....	G.C.No 41-750-83
LOGIC + HEAT H18 .....	G.C.No 41-750-84
LOGIC + HEAT H24 .....	G.C.No 41-750-85
LOGIC + HEAT H30 .....	G.C.No 41-750-86

**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**

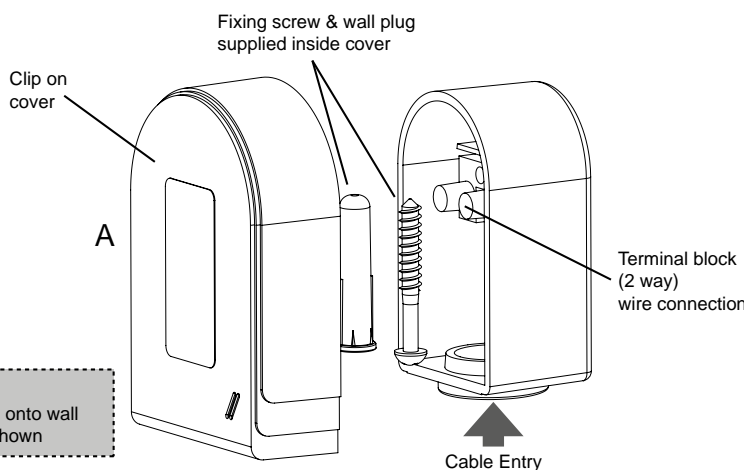
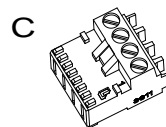
This kit provides the facility to apply outside air temperature control to the boiler water flow temperature which provides energy savings. The outside sensor provided measures outside air temperature and sends a signal to the boiler, which adjusts the maximum boiler flow temperature in response. If 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



**NOTE.**  
 To be mounted onto wall in orientation shown

**B**

**ideal**  
IDEAL BOILERS LTD

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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: \_\_\_\_\_

UIN 212050 A01

## 2 FITTING THE KIT

**Note.** A timer should be fitted to the system so that CH will be switched off when appropriate.

### 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.

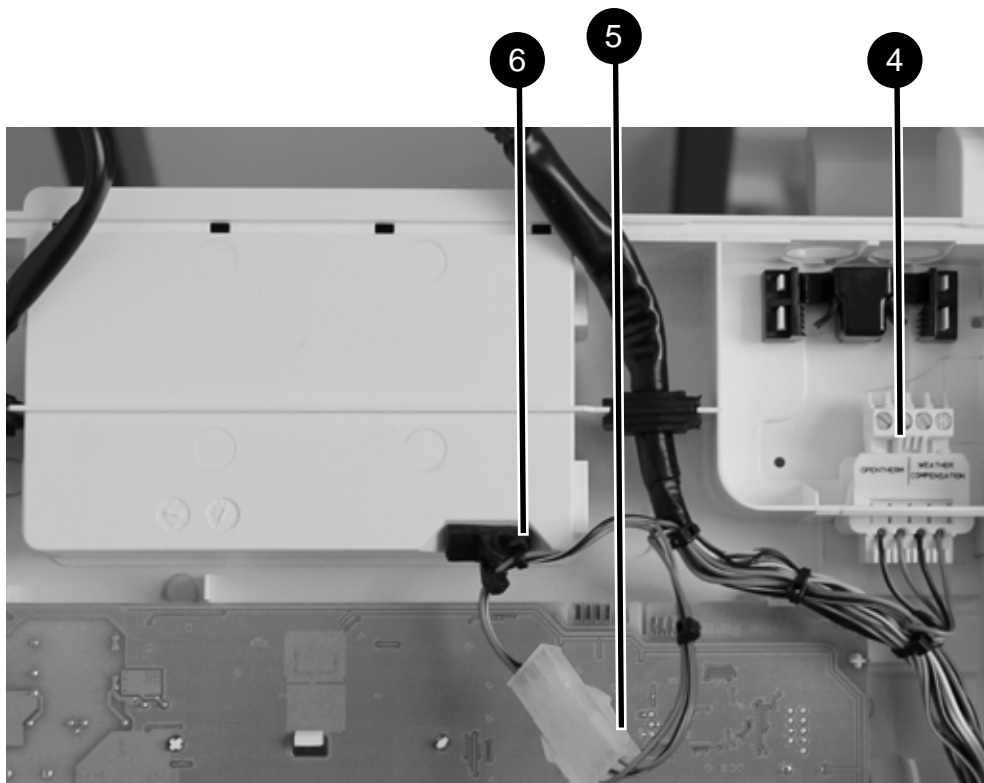
To fix the air sensor to the wall, unscrew the sensor box plastic cover and screw/plug the sensor body to the wall.

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 safety 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

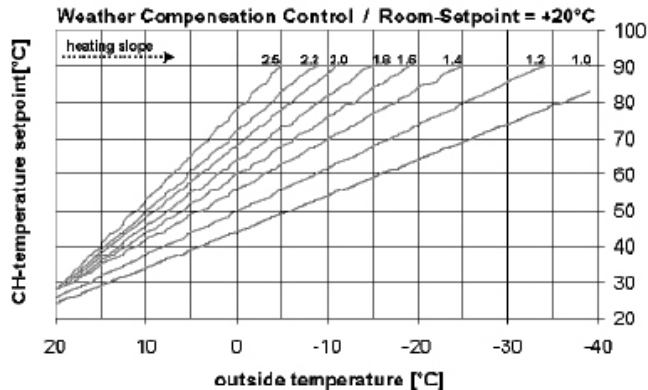
1. Isolate the electricity supply to the boiler.
2. Remove the boiler front panel (refer to boiler installation instructions).
3. Hinge down the control box.
4. Connect the wires from the outside sensor into the 4 way connector supplied. Insert the connector into the socket marked 'OPENTHERM / WEATHER COMPENSATION'
5. Remove the connector from the controls recess on the main control box body and connect it to the connector within the harness itself.
6. Insert the rubber bung that is attached to the harness into the hole in the controls recess on the main control box body.
7. Re-assemble in reverse order.
8. 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.



### 3 CH OPERATION

The On and Off time control of central heating should be controlled by a separate timer. This can be a standard unit or either of the boiler options available from Ideal Boilers (electro-mechanical or electronic).

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

If the Central Heating Temperature Control Knob is rotated fully clockwise then for an Outside Temperature of 15°C a Flow Temperature of 40°C will be provided. For an Outside Temperature of 0°C a Flow Temperature of 78°C will be provided with the relationship varying linearly in between these 2 points (line on the graph 2.5)

If the Central Heating Temperature Control Knob is in its mid position then for an Outside Temperature of 15°C a Flow Temperature of 36°C will be provided. For an Outside Temperature of 0°C a Flow Temperature of 65°C will be provided with the relationship varying linearly in between these 2 points (line on the graph between 1.6 and 1.8)

If the Central Heating Temperature Control Knob is rotated fully anti-clockwise then for an Outside Temperature of 15°C a Flow Temperature of 30°C will be provided. For an Outside Temperature of 0°C a Flow Temperature of 44°C will be provided with the relationship varying linearly in between these 2 points (line on the graph 1.0)

Note that these values are only true if the target room temperature set on the  dial is set to 20°C.



#### 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 498 432

**Ideal Boilers Ltd.**, P.O. Box 103, National Ave., Kingston upon Hull, HU5 4JN. Telephone: 01482 492 251 Fax: 01482 448 858. Registration No. London 322 137.

**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.



***Ideal Installer/Technical Helpline Tel: 01482 498663***

***www.idealboilers.com***