

# WEATHER COMPENSATION KIT

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**LOGIC** Combi

**LOGIC** + Combi

**LOGIC** Code Combi

**i-mini**

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.

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UIN 204955 A03

This kit is suitable for the following boilers:

Logic Combi 24.....GC No. 47-348-56  
Logic Combi 30.....GC No. 47-348-57  
Logic Combi 35.....GC No. 47-348-58  
Logic + Combi 24 .....GC No. 47-348-65  
Logic + Combi 30 .....GC No. 47-348-66  
Logic + Combi 35 .....GC No. 47-348-67

Logic Code Combi 26.....GC No. 47-348-74  
Logic Code Combi 33.....GC No. 47-348-75  
Logic Code Combi 35.....GC No. 47-348-76  
i-mini 24.....GC No. 47-348-77  
i-mini 30.....GC No. 47-348-78

## INTRODUCTION

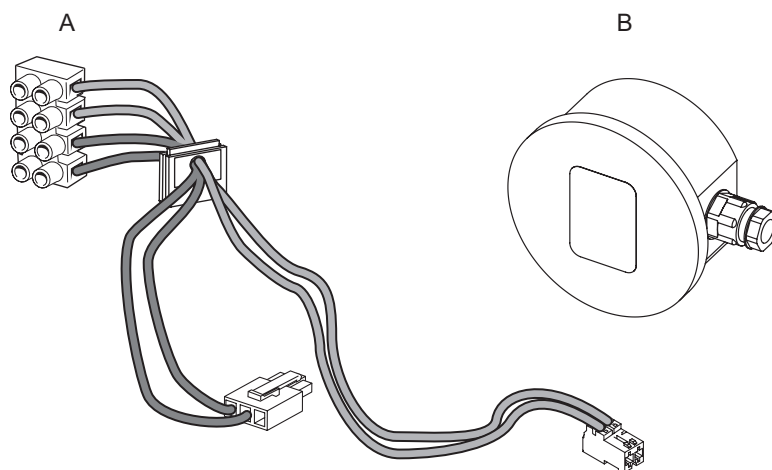
This kit provides the facility to apply outside air temperature control to the boiler water flow temperature which provides energy savings. The outside sensor provided measures outside air temperature and sends a signal to the boiler, which adjusts the maximum boiler flow temperature in response. If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



3G9730

## 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.

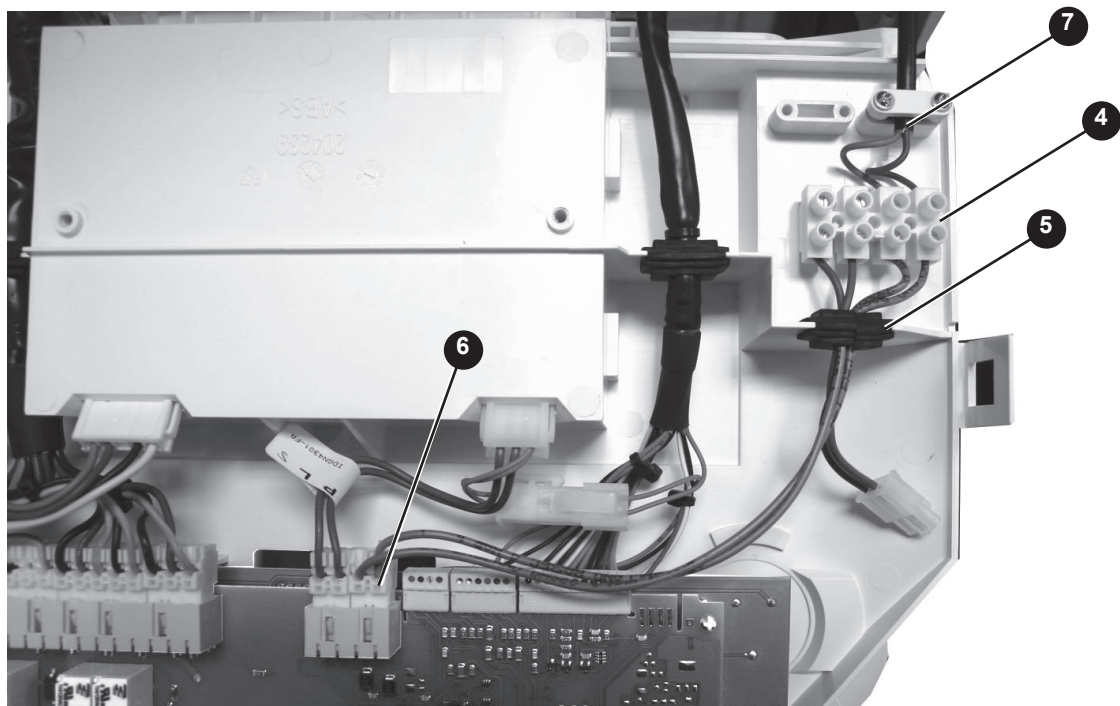
### Wiring the Weather Compensation Kit to the Logic Combi & i-mini

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 and remove the 2 screws retaining the control box cover and release the 4 retaining clips (refer to boiler installation instructions).
4. Clip the 4 way terminal block into the position shown towards the top right hand side of the control box.
5. Remove the grommet and push the new grommet encasing the wires into the slot.
6. Push the connector attached to the grey wires into the unfilled position on the PCB.
7. Connect the wires from the Outside Sensor into the two connections on the right hand side of the 4 way terminal block (the Outside Sensor will then be connected to the grey wires on the other side of the terminal block) and secure with a cable clamp.
8. Re-assemble in reverse order.

### Wiring the Weather Compensation Kit to the Logic + Combi

Note: the wiring harness provided in the kit is only required for the Logic boiler (not the Logic +) so this can be disposed of

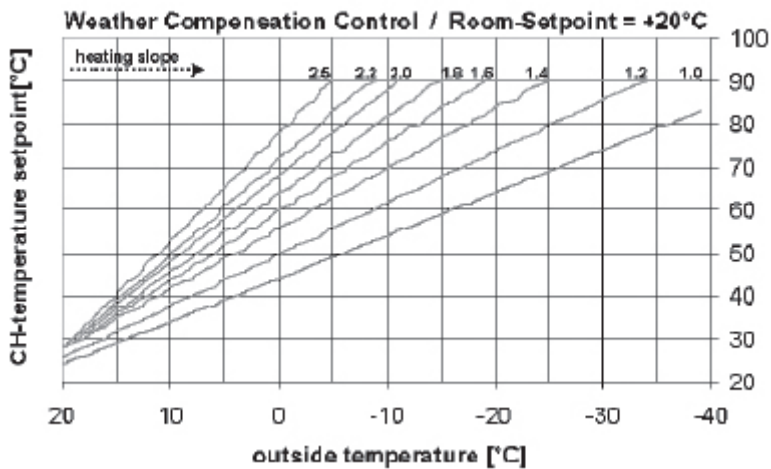
9. Isolate the electricity supply to the boiler.
10. Remove the boiler front panel (refer to boiler installation instructions).
11. Hinge down the control box.
12. Connect the sensor wiring into the RHS of the 4 way terminal block and secure with a cable clamp.
13. Re-assemble in reverse order.



### 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 Logic/Logic + 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)

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