Outdoor sensor kit 7 716 192 764

## [en] Important notes on installation/assembly

The installation/assembly must be carried out by a professional who is authorised to do the work, and with due regard to the relevant regulations.

- Observe all the relevant instructions for other system components, accessories and spare parts.
- ► Before starting any work: disconnect the system from the power supply across all phases.
- Read these instructions in conjunction with the appliance Installation, Commissioning and Servicing Instruction manual.

#### **Compatible appliances**

- · Greenstar i Combi ErP appliances
- · Greenstar i System ErP appliances
- · Greenstar Heatslave II ErP appliances

#### **ErP Class**

The data represented in the table below is required for the completion of Energy Related Product (ErP) Directive System Package fiche and, subsequently, the ErP system data label. ErP Labelling obligation is applicable from 26th September 2015.

| Supplier                     | Model  | ErP Class   | Outdoor sensor kit<br>function and ErP<br>description   | Additional<br>seasonal<br>space<br>heating<br>efficiency<br>gain                  |
|------------------------------|--|---|---|---|
| Worcester,<br>Bosch<br>Group | sensor conjunction with Greenstari Combi and i System ErP appliances  Class III in Compensation contro  Class III in Compensation contro  The use of the Outdoor sensor kit as a stand-alone method of controlling the flow temperature of heating | +2% in<br>conjunction<br>with<br>Greenstar i<br>Combi and i<br>System ErP<br>appliances |   |   |
|                              |  | conjunction with<br>Greenstar<br>Heatslave II ErP                                       | water leaving the boiler<br>dependant upon<br>prevailing outside<br>temperature and<br>selected weather | +1.5% in<br>conjunction<br>with<br>Greenstar<br>Heatslave II<br>ErP<br>appliances |

Table 1



The appliance weather compensation programmes are designed for use with a system that has thermostatic radiator valves and a room thermostat.

# Contents of outdoor sensor kit

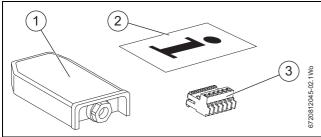


Fig. 1 Standard package

- [1] Outdoor sensor
- [2] Fitting instructions
- [3] Outdoor sensor connector (required for Greenstar i ErP appliances only)

## Installation of outdoor temperature sensor

- ▶ We recommend the use of screened cables, run inside conduits, e.g. LIY CY (TP).
  - Recommended cross-section: minimum 0.75mm<sup>2</sup>
  - The two wires are not polarity sensitive
  - To avoid inductive interference, lay all low voltage cables separately to cables carrying 230V or 400V with a minimum separation of 100mm.

| Cable length | Cross-section                           |
|--------------|---|
| ≤ 20m        | 0.75mm <sup>2</sup> 1.50mm <sup>2</sup> |
| ≤ 30m        | 1.00mm <sup>2</sup> 1.50mm <sup>2</sup> |
| ≥ 30m        | 1.50mm <sup>2</sup>                     |

Table 2

Sensor optimum siting indicated by black tick.

► Select installation location figure 1.

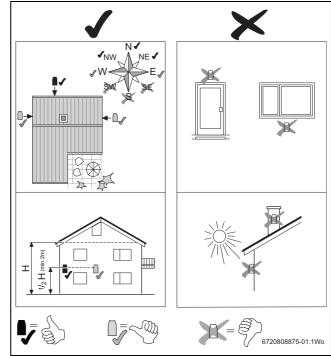


Fig. 2 Sensor location

- 1. Remove cover.
- 2. Fix sensor housing to external wall.

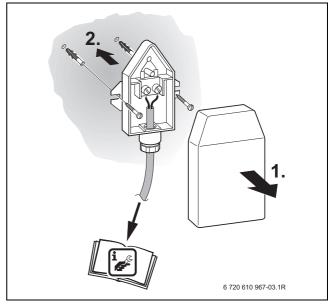


Fig. 3 Fixing sensor

6 720 812 045 (2014/05)

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## **Appliance connection**



The set up and parameters for weather compensation can be found in the commissioning section of the Installation, Commissioning and Servicing Instructions for the respective appliance.

➤ Sensor is wired into terminal connector in the low voltage terminal strip of the control box (→ appliance Installation, Commissioning and Servicing Instructions for details of accessing the electrical connections).

#### Greenstar i Combi and System ErP appliances

Refer to figure 4

- ▶ Wire in the sensor cable to the supplied connector.
- ▶ Plug the connector onto the control board.
- ► Refer to Installation, Commissioning and Servicing Instructions for details on weather compensation functionality, the appliance will auto-detect the connection of the outdoor sensor.

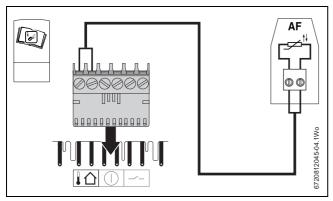


Fig. 4 Greenstar i Combi & System ErP sensor connection

## **Greenstar Heatslave II ErP appliances**

Refer to figure 5

- ▶ Wire the sensor cable to the outdoor sensor connection plug on the control board.
- Refer to Installation, Commissioning and Servicing Instructions for details on weather compensation functionality and to enable the weather compensation function.

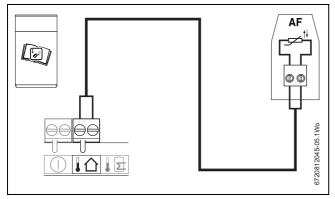


Fig. 5 Greenstar Heatslave II ErP sensor connection

## Using the weather compensation Greenstar i Combi and System ErP appliances

It is recommended that the CH flow temperature is set to 82  $^{\circ}\text{C}$  for the weather compensation to operate most effectively.

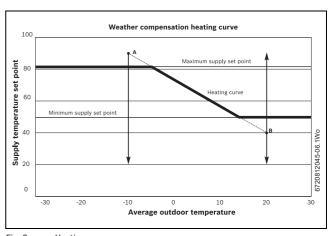


Fig. 6 Heating curve

#### Setting the heat curve

Point [A] is the projected value for the flow temperature at -10  $^{\circ}$ C outdoor temperature and point [B] is the projected value for the flow temperature at 20  $^{\circ}$ C outdoor temperature, (these values dictate the angle of the slope only they are not CH flow temperature limits).

### Frost protection

The normal condition for the appliance is that the weather compensation frost protection is turned OFF.

If required the frost protection is activated via Menu item W5: 0 = OFF, 1 = ON.

On activation of the weather compensation frost protection if the outdoor temperature is less than 5  $^{\circ}\text{C}$  the system frost protection is activated the same as if an external frost thermostat was activated.

