



ES-TEMP Temperature Sensors Installation Guide

IMPORTANT! Please refer to the installation instructions of the fan to check the compatibility of this sensor.

Parts check list:

- ES-TEMP Temperature Sensor
- 1 off 10 metre length of plugged SELV cable

ES-TEMP Temperature Sensor

Designed to be compatible with the Ecosmart system, this temperature sensor unit is supplied with a pre-plugged, 10 metre length of communications cable. **Note: longer lengths are available if required.**

The sensor operates with Safe Extra Low Voltage (SELV) with power supplied from the fan unit via the communications cable. The ES-TEMP Sensor will vary the ventilation rate automatically according to the measured temperature.

Fault indication

The LED will change from green to red if any fan connected in that zone has failed.

Multiple Sensors

Multiple sensors can be connected to the network. Please refer to the actual fan installation instructions for exact quantities.

Installing the Sensor

The sensor unit should be installed away from any direct source of heat (e.g. radiators) and areas where it would be subjected to waterspray.

The Sensor is supplied complete with 10 metres of connecting cable with plugs attached. Sensors are also supplied with all fixings and are clipped into a backplate wall mounting bracket.

- a) Fix one end of the 10m cable to the fans customer connection box (connection sockets marked NET).
- b) Select a suitable location for the sensor and arrange the cable in position. Leave approx. 75mm of the cable free at the mounting point to ease the connection of the plug. (fig. 1).
- c) Carefully separate the sensor from the backplate using a small screwdriver (see Fig 2) **Note: the sensor will remain connected by its internal cable.**
- d) Release this cable from the bracket by simply pulling the plug off the socket pins in the backplate.

e) Before fixing the backplate to the wall, connect the wall fixed cable end plug to the upper set of pins on the bracket (fig 3)
Note: check the colour code matching on when fitting the plug onto the pins.

Arrange the cable to lay in the cable slot at the top of the backplate moulding and fix the bracket to the wall surface using the screws supplied.

f) The sensor plug can now be connected into the backplate **Note: check the colour code matching** when fitting the plug onto the pins.

Clip the sensor body in the backplate arms and adjust the sensor body to the desired position.

Data cable installation

A 4-core SELV data cable is used to connect devices.

Do not run data cable in the same conduit as the mains cables and ensure there is a 50mm separation between the data cable and other cables. The maximum cable run between any two devices is 300m when it is installed in accordance with the instructions.

Please note that the total data cable length used in any system must be less than 1000m. Keep the number of cable joints to a minimum to ensure the best data transmission efficiency between devices.

Adjusting the sensor set points
Adjustable temperature setting 10 -35 °C

Assuming the sensor(s) are installed, adjustment of the set points achieved by tilting the sensor forwards which exposes the adjustment aperture (see fig 5).

Using a small screwdriver, gently turn the dial either clockwise or anti-clockwise to increase or decrease the set point.

When adjustments are made to the sensor, the LED light on the sensor front will flash on and off to show the set point. First, green flashes will indicate the set point in TENS, then red flashes will indicate UNITS. For example 2 green flashes and three red flashes show a temperature set point of 23 °C.

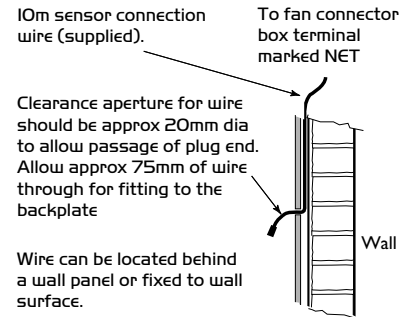


Figure 1.

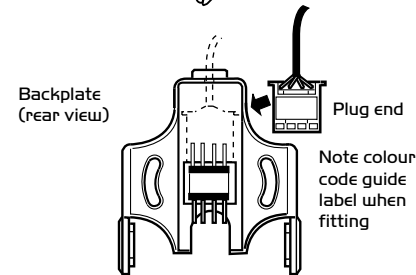
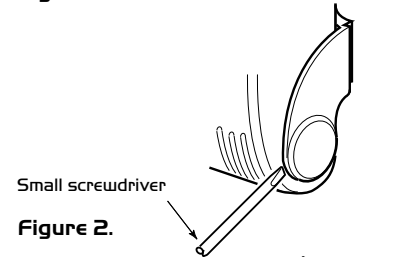


Figure 3.

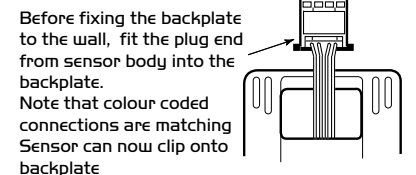
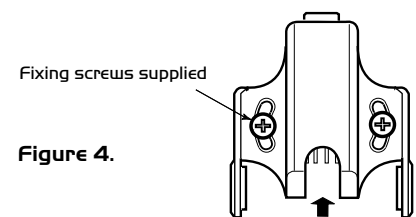


Figure 5.

Sensor Response

Normal operation

(Proportional band over ten 10 °C steps)

When temperature RISES, the fans will increase speed.

See figure 6 opposite, which shows a set point at 19 °C.

For single phase fans, the speed steps are approximate and the actual running speeds will be dictated by the operating pressure of the system and the type of impeller used in the blower.

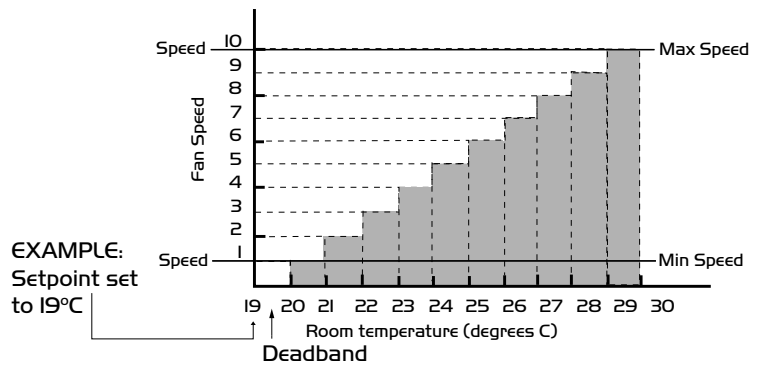


Figure 6.

Maintenance

The unit does not require any maintenance. However, for optimum performance, it is advisable to remove any accumulated dust with a low power vacuum cleaner.

NOTE: Installation and Maintenance of the equipment must be as directed in the instructions provided with the unit.

Warranty

The 5 year warranty starts from the day of delivery and includes parts and labour for the first year.

The remaining 4 years covers replacement parts only. This warranty is conditional on planned maintenance being undertaken.

Service Enquiries

Nuaire can assist you in all aspects of service. Our service department will be happy to provide any assistance required, initially by telephone and if necessary arrange for an engineer to call.

Telephone 029 2085 8585

Fax 029 2085 8586

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.