SENSORSTAT PRODUCT DATA SHEET

Chalmor

Total Energy Saving Solutions
for Your Environment

SPECIFICATION

PRODUCT CODE:	IRS/INT/TEMP
MAXIMUM LOAD:	16 Amp resistive heating
	Not suitable for controlling quartz heaters
SUPPLY VOLTAGE:	220-240 Volts AC 50 Hz
OCCUPANCY TIME DELAY:	Adjustable 30 seconds to 4 hours
SETBACK TEMERATURE:	Adjustable 5°C to 20°C
BOOST TEMPERATURE:	Adjustable 15°C to 30°C
FIXING METHOD:	Surface mount PVC box supplied.
	Flush mounting 35mm steel wall box only
	(ensure top and bottom lugs are removed) or
	35mm deep cavity wall PVC box.
TERMINAL CAPACITY:	4.0mm2
MATERIAL:	Flame retardant ABS
TYPE:	Class 2
TEMPERATURE:	-10°C to 40°C
CONFORMITY:	EMC-89/336/EEC
	LVD-73/23/EEC

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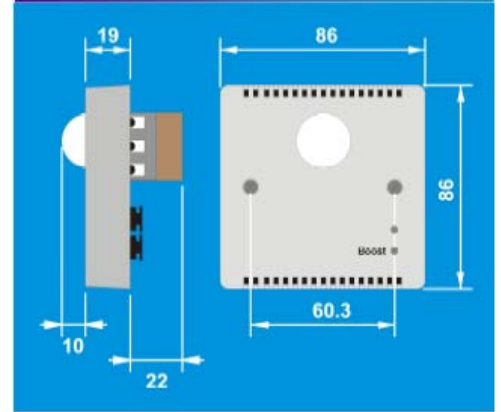
OPERATION INFROMATION

The SENSORSTAT heating controller will accurately maintain the temperature of a room at two levels (or setpoints):

A setback temperature which provides a lower level of heat when the room is unoccupied.

A boost temperature which provides the upper room temperature or comfort temperature and is activated by the PIR detector.

When the PIR detects the room is occupied the controller will adjust and monitor the room temperature at the upper level or boost setting. This is maintained until the PIR sensors there is no longer occupancy and the occupancy time delay has ceased. The time delay is set by adjusting the 'TIME ADJUSTMENT" dial.

Example: The setback level would be used to maintain a background heat in a room or perhaps 17°C. When the room becomes occupied the PIR will detect use and adjust the temperature to the upper level and if required active the heater.

If the room becomes unoccupied the PIR will detect this and the time delay will active and count down to zero if at this point the room is still unoccupied the controller will return to monitoring the setback temperature.

This makes the SENSORSTAT ideal for the control of electric panel heaters.

CONNECTION INFROMATION

Connect the SENSORSTAT controller as shown in the diagram below.
To ensure accurate temperature measurement it is important to install the unit in the correct location:

♦ Only wall mount this product
♦ Install >1m from the heater and other heat sources
♦ Install at a height of 1.5m above floor level
♦ Avoid installing near drafts of airflow
♦ Do not install in a corner or where the PIR cannot detect the occupied area
♦ Do not cover the slots at the top and bottom
♦ Mounting on an internal wall or partition gives the best measurement accuracy
♦ Avoid direct sunlight entering the PIR sensor
♦ Do not fix to a vibrating surface
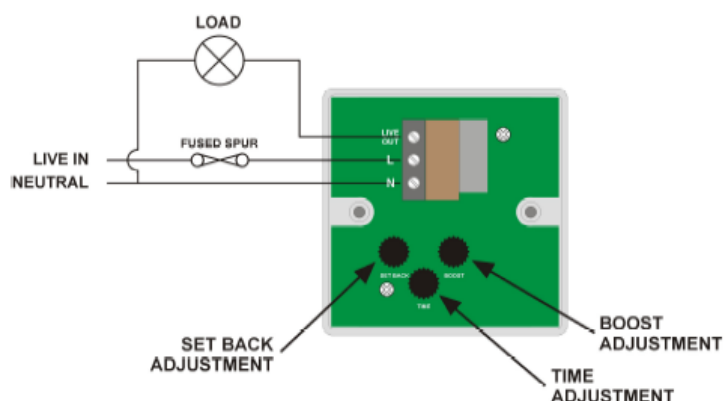
INSTALLATION & COMMISSIONING INFORMATION

Warning. This device works at mains potential. Be sure to take care when working with electricity.

♦ Make sure the heater is correctly connected and fully operational before installing the controls

♦ Isolate the mains supply before making any adjustments to the circuit supplying the heater.

♦ Adjust the setback, boost and time settings according to the diagram below.

♦ Fix the controller mounting box and connect the wiring to the controller via the terminal block. Phase (Live) supply conductor to terminal 'L', Neutral supply to terminal 'N' and the heater Phase (Live) conductor to the terminal 'LIVE OUT'.

♦ Mount the controller on to the mounting box and apply the mains supply.

♦ Where the heater has an internal thermostat it should be set to maximum.

♦ When the RED LED is lit, this indicates that the unit is supplying power to the heater.

♦ When the GREEN LED is lit, the controller is in BOOST mode and has detected occupancy.

♦ Wait approximately 1 minute for the thermostat to operate.

♦ If the temperature in the room is lower than the setting of the controller the heater will active. Due to variations in room size, heater efficiency, airflow, mounting position, drafts etc. the temperature settings on the dial s should be used for guidance only. It may also be necessary to adjust the unit to different settings in order to achieve the required temperatures.

♦ To test that the unit is functioning correctly, repeat from step 2 and select maximum boost temperature and minimum timing.

♦ To test the PIR detector set to minimum timing. Stay extremely still for approximately 40 seconds and wait for the green light to go out.
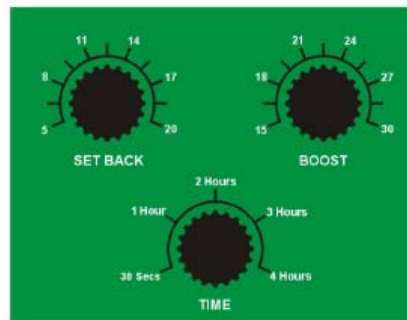
PIR DETECTION INFORMATION
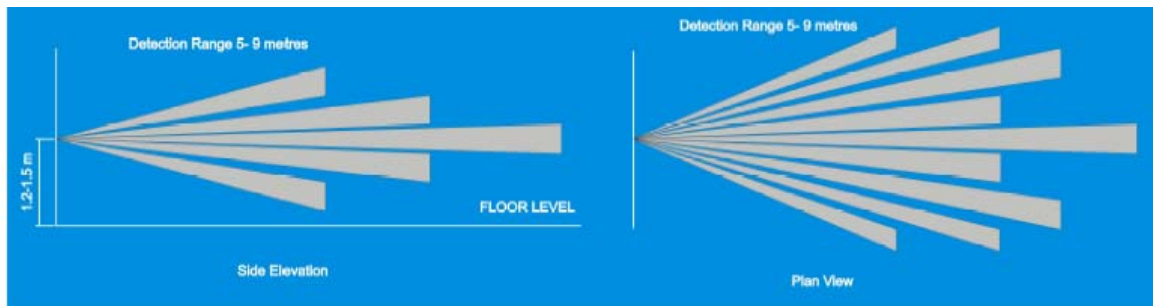
TROUBLE SHOOTING INFORMATION

HEATER DOES NOT COME ON
Note that there is a delay of approximately 1 minute from power being applied before anything will happen.
Check the heater operation and that the temperature in the room is below the boost setpoint.. Adjust the temperature settings accordingly.
Check that the boost has been selected with green LED illuminated Check the circuit by testing at L and LIVE OUT terminals.

BOOST LIGHT DOES NOT COME ON
Note that there is a delay of approximately 1 minute from power being applied before anything will happen.
Check that the unit has a power supply by measuring voltage across L and N.

BOOST LIGHT STAYS ON
Turn the time delay dial to minimum, reset the power supply and leave the area after around 1 minute the green LED will switch off.
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ROOM TOO COLD
Check that the heater is working and the thermostat on the heater is turned to maximum.
Check the temperature settings and increase if necessary.
Make sure that the thermostat is not installed to close to the heater or other heat source.

IMPORTANT INFORMATION
This product should only be installed by an electrically competent person
All connections and wiring must be completed in accordance with the current
edition of the IEE Regulations BS7671.