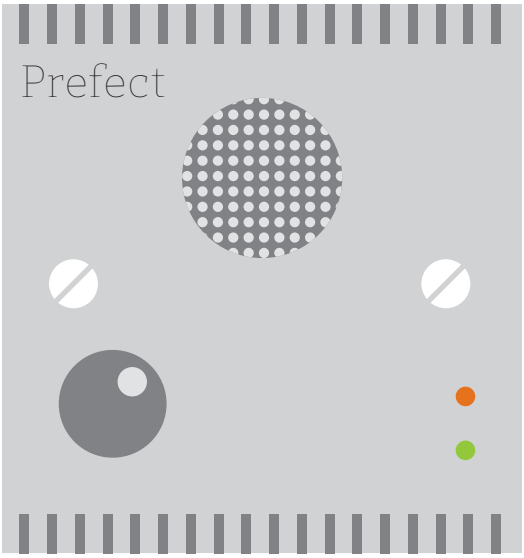
PRE5203 PIR activated Thermostat with user adjust, remote trigger & IR Programming

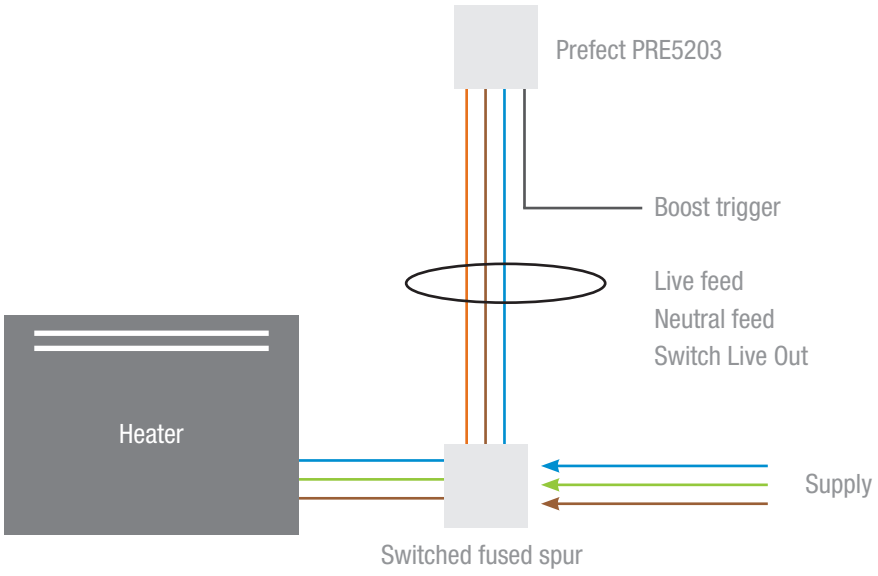


Specification:

SIZE: Standard 1 gang. Requires minimum 35mm back box (45mm recommended if practical) If the back box has 4 lugs, the upper and lower lugs must be removed.
TEMPERATURE/TIME RANGE: Comfort temperature (boost) 15 to 30ºC Time to set-back 5 to 480 minutes. Set-back Temperature 1 to 20ºC. Time to frost 1 to 72 Hours. Frost temperature 1 to 20ºC
ADJUSTMENT METHOD: AUTO LOCK SYSTEM © Infra red setting via the PRE5900 Programming handset (Sold separately)
ELECTRICAL SPEC: 220-240VAC 50 Hz

LOAD: 16A resistive
CONNECTIONS: Live in, Switched live out, 230V Live Boost, Neutral.
INDICATORS: Green LED- Boost Heating. Red LED- Heating
CONFORMANCE: EMC- 89/336/EEC. LVD - 73/23/EEC
CE approved
POSITIONING: Ideally chest height. Can be positioned higher or lower, however temperature setting must be biased accordingly.

PRE5203 PIR activated schematic wiring diagram



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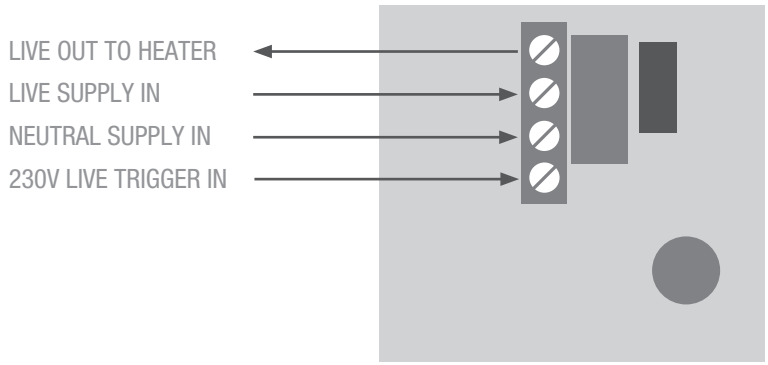
Installation Instructions:

1. Isolate the circuit supplying the heating points, which are to be connected to the PRE5203. This should be undertaken at the distribution board ensure safe working practices.
2. The PRE5203 should be positioned where operation will not be affected by local heat sources such as lighting, the heating load or by limited airflow or cold drafts for example. The unit should be mounted ideally at chest height (1200mm from finished floor level)
3. Carry out any adjustments to the heating circuits to allow for the correct operation of the system. Adjust the circuit wiring to allow for the following connections:
   - Terminals 'L' & 'N' - connect a 240V 24-hour supply.
   - Terminal 'LIVE OUT' - connect to the heater or contactor coil.
   - Terminal "LIVE BOOST" 230V Live supply to trigger boost cycle
   - Any CPC or earthing conductor should be connected ONLY to the mounting box.
4. We recommend this product is installed by a competent person to IEE regulations in force at the time.

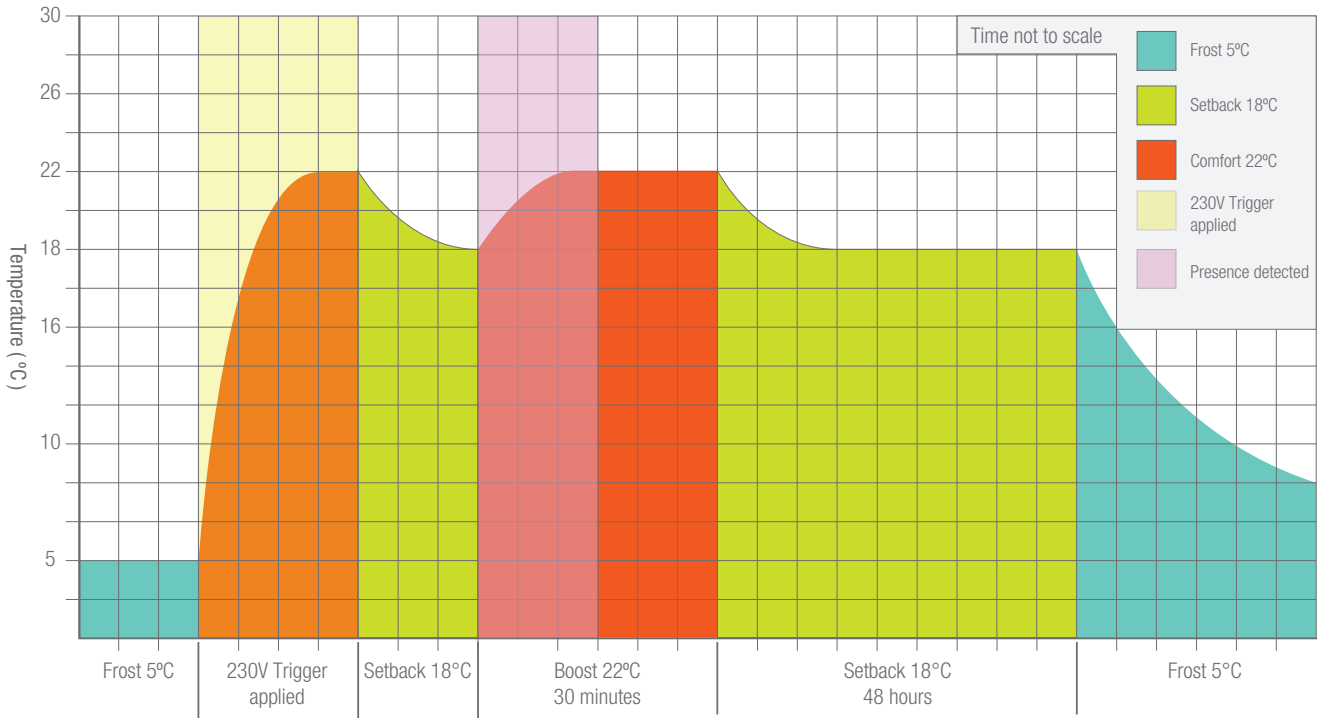
Back view of PRE5203



Important notice!
If the 230V boost trigger is not commonly isolated with the mains supply to the unit there must be a clear warning at the unit stating that there are multiple supplies.

Program Characteristics:

Program heating cycle graph:



Program characteristics continued:

The time/temperature profiles of the unit are factory set to precise client requirements. However, further adjustments can be made to the unit on site via the PRE5900 Infra red programming handset. Please note the PRE5901 and PRE5903 handsets *are not* compatible with this product.

Mount the unit in it's box and energise the supply circuit and allow 30 seconds for the unit to stabilise.

LED indicators:

The green LED (Boost Heat) Indicates the unit is in comfort/boost mode. The red LED (heating) indicates the contacts are closed and the unit is supplying power to the load.

Program states:

Comfort/Boost:

This mode is typically a relatively short run time and a comfortable room temperature setting used for when the room is occupied.

Setback:

This mode Typically uses a medium length run time and a temperature 30% less than the comfort temperature, this setting is used for short periods of occupant absence.

Frost:

This mode is used for long periods of occupant absence, typically the temperature is set around 5°C to protect the fabric of the building.

Program structure:

When the PIR is triggered by presence the Comfort/Boost temperature state is initiated and maintained. When the unit no longer detects movement the comfort/boost run time will start, if there is no movement detected within the comfort/boost runtime the unit will enter the setback state. If within the comfort/boost time movement is detected the runtime will be reset and start the time run again. If no movement is detected through the setback time (time to frost) the unit will enter the frost state. The unit will stay in this state until movement is detected at which point the unit will enter the comfort/boost state.

When 230V is applied to the "live boost " terminal the unit is triggered into the comfort/boost state, The unit will remain in comfort/boost mode until the trigger voltage is disconnected. The comfort/boost time does not apply when the unit is triggered into comfort/boost via the boost trigger terminal. Once the trigger voltage is disconnected if no presence is detected the unit will return to setback mode. If presence is detected the unit will continue in the comfort/boost state until no presence is detected and the time run elapses. (See program graph on page 2)

User adjustment:

The user adjustment wheel offers the occupant the option of adjusting the Comfort/boost temperature.

The Adjustment wheel only affects the Comfort/boost mode, setback and frost modes are not adjustable by the occupant.

The adjustment wheel ranges between the boost temperature and the setback temperatures. The minimum setting will be the setback temperature and the maximum temperature will be the comfort/boost temperature, the wheel will range between these two temperatures equally.

Setback Temperature

Boost Temperature