

ecoStat 3 PRE5000EC3 Series

Intelligent thermostats

Wiring diagram - Electric heating -
Panel heaters & Fluid filled Radiators

page 1 of 4



Cleverly simple
control of energy.



PRE5203EC3 MODEL WITH MICROWAVE
PRESENCE/ABSENCE SENSOR



PRE5003EC3 MODEL

Specification:

SIZE: Standard single gang plate size.
Requires a 30mm deep surface pattress
or 25mm or greater sunken box. When
mounting into a sunken wall box or metal
clad box remove the top and bottom
mounting lugs of the box.

SUPPLY VOLTAGE: 216-253V AC at 50Hz.

LOAD: 16A Resistive at 230V AC, 5A at 24V
DC not suitable for use with quartz heaters.
No controls heaters only

ELECTRICAL CONNECTIONS: Live in (L),
Neutral (N), Common (COM), Normally
open/live out (Swout), 216-253V AC 50Hz
Boost Trigger (TRIG).

TERMINAL CAPACITY: 6mm² Maximum
cable CSA, internal terminal size 2.9mm x
4mm.

DETECTION MODES:

PRE5203EC3 model only - Absence,
Presence, disabled selectable.

DETECTION RANGE:

PRE5203EC3 model only -
5m maximum (theoretical)

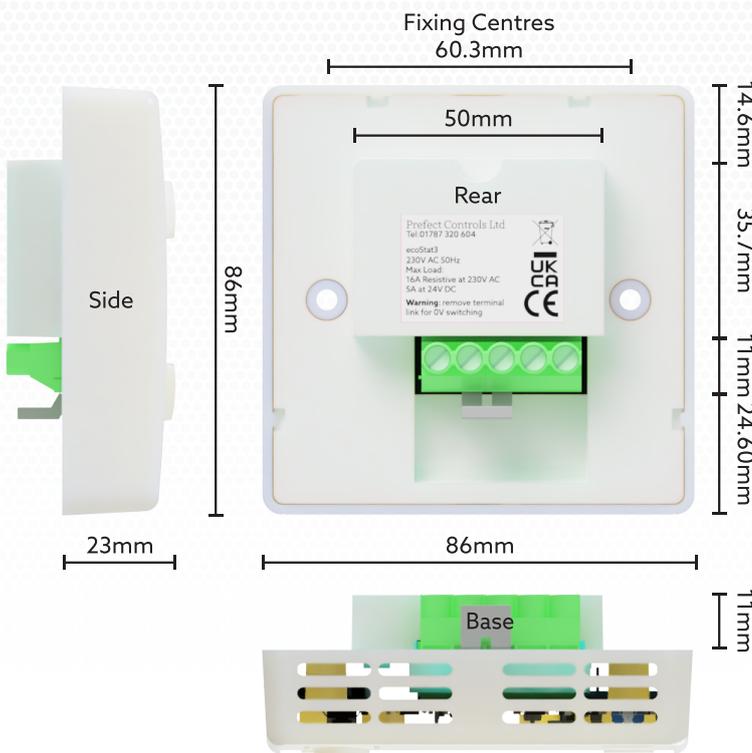
CONFORMANCE:

EMC-2004/108/EC LVD-2006/95/EC
PRE5203EC3 model only -
RED 2014/35/EU, RER 2017.

IP RATING: IP3X

OPERATING ENVIRONMENT:

0-40°C, 20-90% RH non-condensing



Due to our policy of continuous improvement, we reserve the right to change specifications without notice.
All information was correct at time of when this product file was produced - February 2024

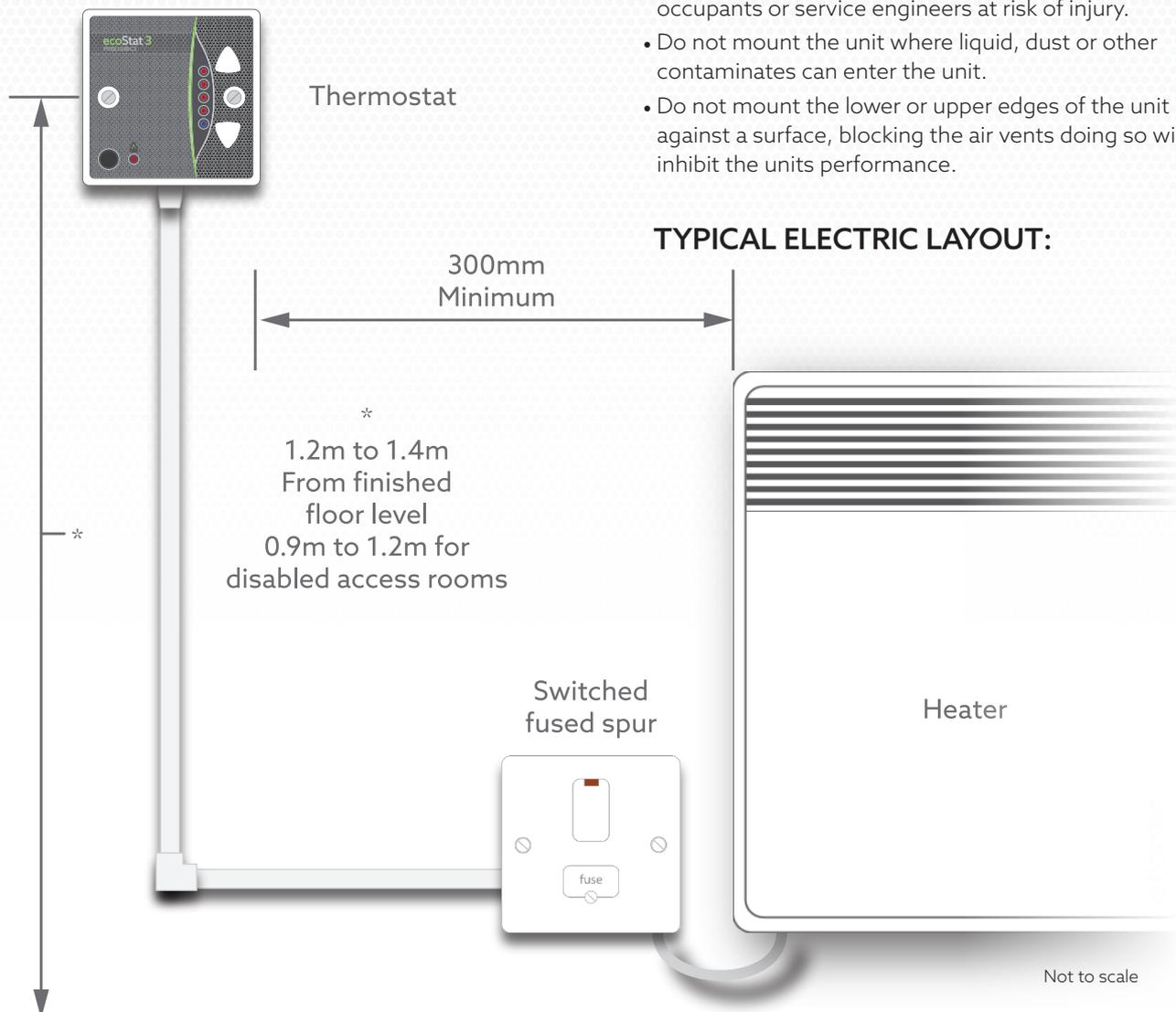
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ELECTRIC HEATER INSTALLATION

- All installation and wiring works must be completed by a competent person/s and conform to relevant regulations in-force at time of installation.
- Locate the unit at least 300mm away from the nearest edge of the heater. Ensure the unit is placed where it cannot be affected by extraneous heat sources, for example: televisions, desktop computers, fridges. Doing so will cause the unit to function incorrectly.
- Do not mount the unit above a heater. Mount at the centre point of the room where possible. Do not mount behind curtains or room dividers.
- The unit is equipped with a microwave sensor for Occupancy detection. For the detector to function correctly the unit must be sited in a suitable location, see page 4 of the PRE5203EC3 instruction manual for details.
Note: This only applies to the PRE5203Ec3 model
- Mount the unit between 1.2m and 1.4m from finished floor level. Special consideration should be made for

rooms designed for disabled occupants, mounting height of 900-1200mm from FFL is recommended. The unit should be mounted at least 350mm from a room corner to allow access for wheel chair users. See page 16 of the PRE5003EC3 instruction manual for details. See page 20 of the PRE5203EC3 instruction manual for further details.

- Ensure the unit has a local means of safe isolation. A double pole isolator must be used. A suitably rated double pole switched fused spur is recommended.
- The unit can be mounted in a surface or sunken 1G box. When mounting into a metal clad pattress or sunken box the upper and lower box lugs must be removed.
- Ensure the unit is not mounted within 1m of forced heating or ventilation systems.
- Ensure the unit is not in a position to be covered or isolated from the room environment. Do not mount directly next to a window.
- Ensure the unit is easily accessible and does not put occupants or service engineers at risk of injury.
- Do not mount the unit where liquid, dust or other contaminants can enter the unit.
- Do not mount the lower or upper edges of the unit against a surface, blocking the air vents doing so will inhibit the units performance.



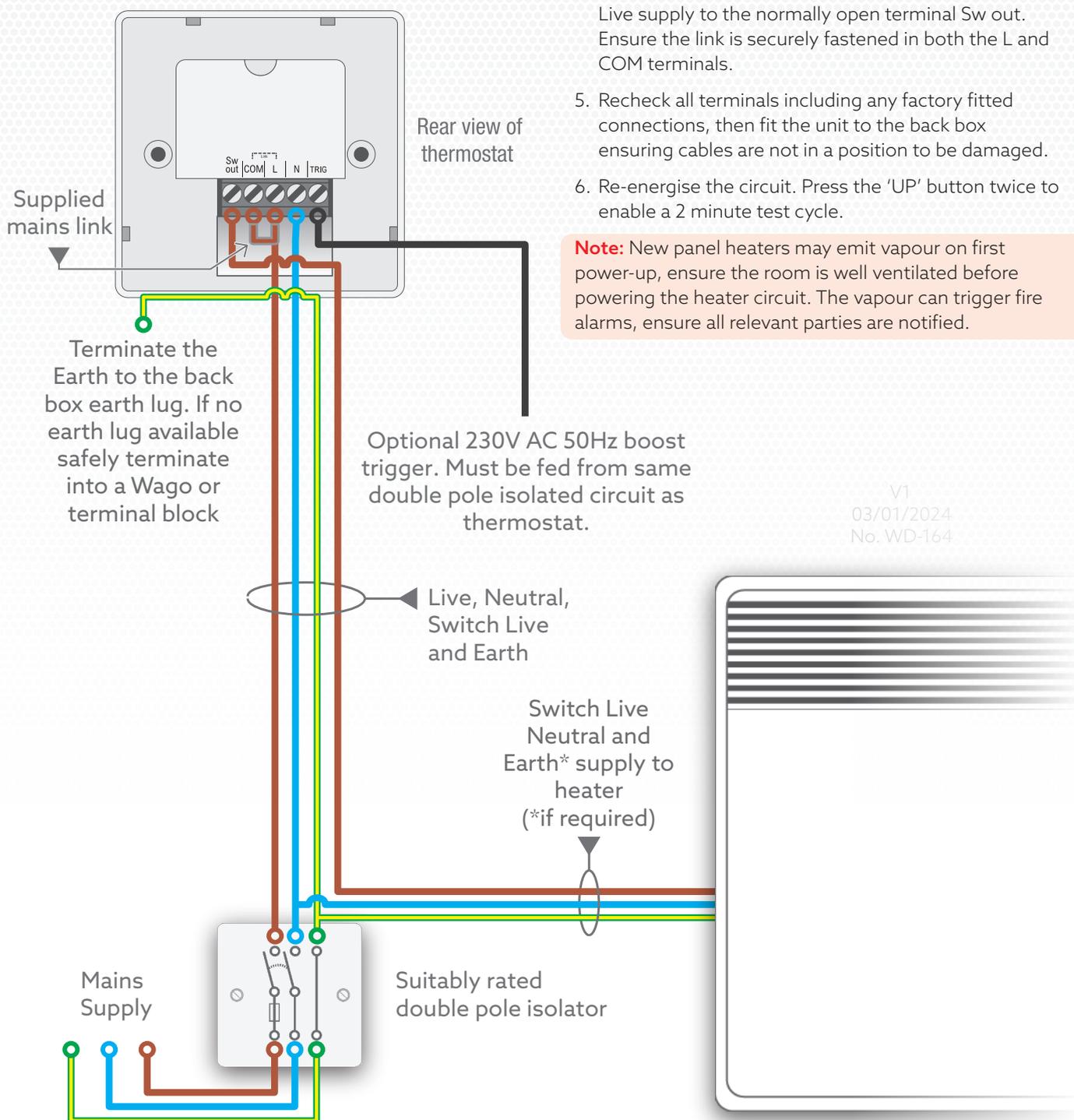
WIRING

Electric panel or fluid filled heater

1. All wiring works should be completed by a competent person/s. Isolate the appropriate circuit that the unit is to be supplied from. Perform safe isolation procedure to ensure the circuit is completely isolated. Ensure the supply has been locked in the off position. Always ensure safe working practices.

2. Make any circuit adjustments required in accordance with current regulations.
3. If the trigger terminal is to be used ensure the trigger supply is fed from the same double pole isolated circuit as the unit to conform with current regulations.
4. Connect the Live and Neutral supply to the unit, note that the load Neutral must be fitted with the supply Neutral. Ensure the supplied mains link is fitted between L and COM terminals, terminate the loads Live supply to the normally open terminal Sw out. Ensure the link is securely fastened in both the L and COM terminals.
5. Recheck all terminals including any factory fitted connections, then fit the unit to the back box ensuring cables are not in a position to be damaged.
6. Re-energise the circuit. Press the 'UP' button twice to enable a 2 minute test cycle.

Note: New panel heaters may emit vapour on first power-up, ensure the room is well ventilated before powering the heater circuit. The vapour can trigger fire alarms, ensure all relevant parties are notified.



V1
03/01/2024
No. WD-164

Not to scale

ATLANTIC HEATERS WITH ENERGY LOCK



When using an Atlantic heater with Prefect Energy Lock, a key (Fig 1) needs to be installed before the heater can be used.

- Holding the key with the tooth at the top, note the T shape of the tooth. On the top right hand side of the heater is a plastic cover, on this cover you will see a corresponding T slot. Locate the key into the T slot on the heater (see fig. 2).
- Once the key is located into the T slot, push the key home until it is flush (see fig 3). Once the key is fitted the heater will be able to operate when the unit is calling for heat.

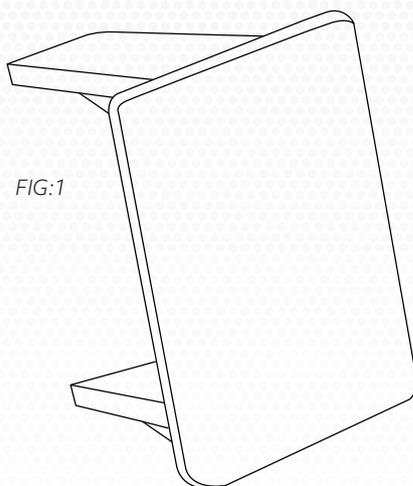


FIG:1

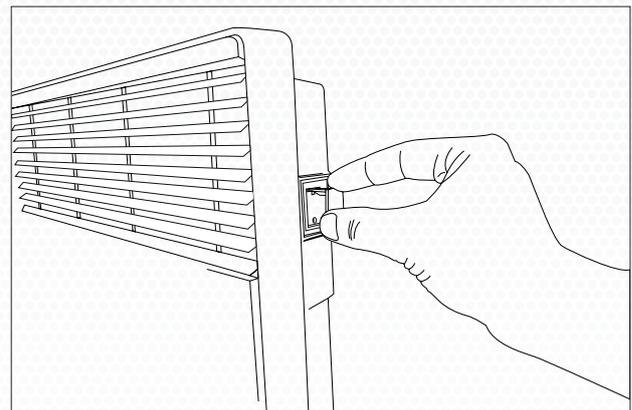


FIG:2

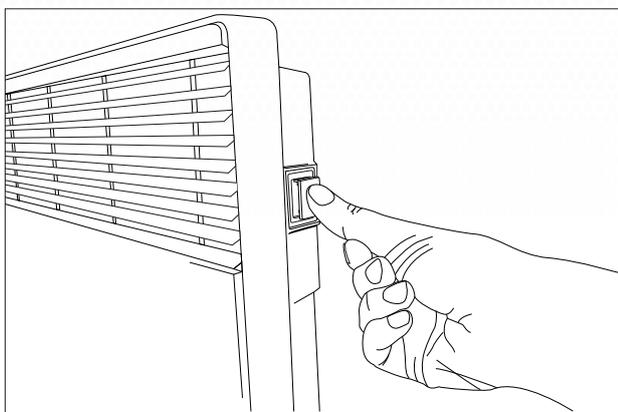


FIG:3

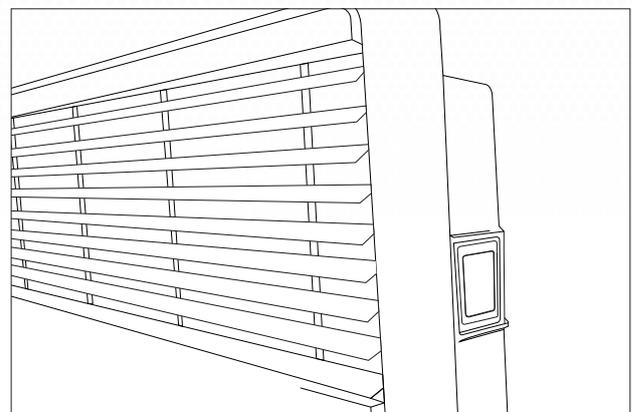


FIG:4