

POWRTROL

Installation & Users Instructions

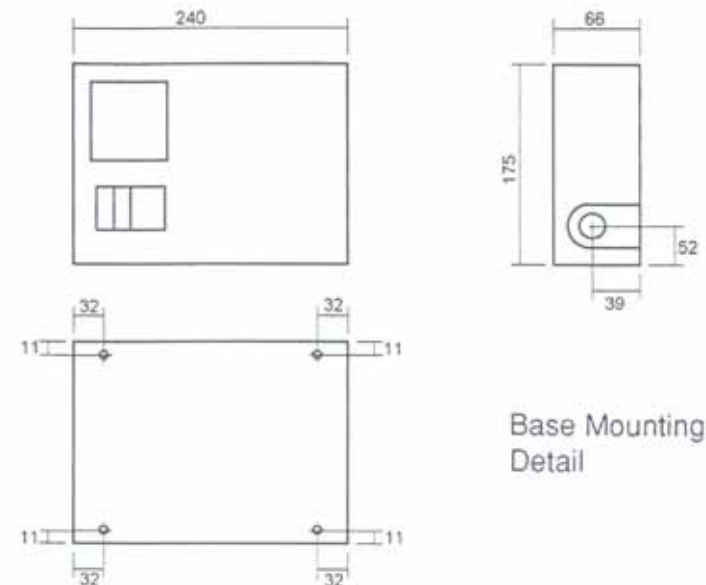
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1. Introduction

The Powrmatic POWRTROL is a time and temperature controlled device to be used in conjunction with any Powrmatic warm air heater.

The unit contains an electro-mechanical time switch, day thermostat, and frost thermostat together with front panel mounted switches for Summer/Winter operation and Auto/Manual/Off.

2. Technical Data (Dimensions)



3. Specifications

Electrical supply	240V 50Hz 3A
Summer/Winter switch	240V ac 10A (resistive) 2A (inductive)
Ambient temperature	-5°C-55°C
Operating temperature range	0°C-30°C
Thermostats	240V ac (resistive) 2A (inductive)

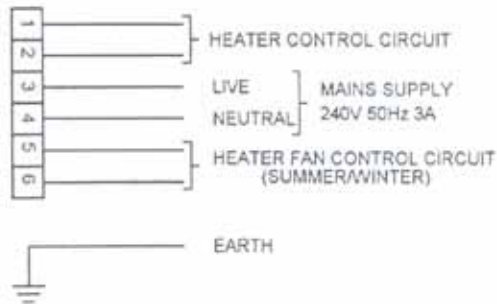
4. Siting

The POWRTROL must be sited at a point which is generally representative of the area in which the air temperature should be maintained.

Areas which are draughty or subjected to direct heat (such as sun, radiators, heater outlets etc.), and areas with very little or no air movement should all be avoided.

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The POWRTROL should be wired in accordance with the connection diagram below:-



The mains supply for the POWRTROL may be taken from the heater control panel or from a separate supply. In either case there must be a facility to allow for complete electrical isolation of the unit.

The use of the Summer/Winter switch is optional and is only necessary if specified by the end user or the unit is controlling a heater where the fan selection switch is not easily accessible.

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5. Installation

IMPORTANT

The structure to which the POWRTROL is to be mounted must be stable and vibration free.

1. Mounting

Remove the cover of the POWRTROL by releasing the two screws on the front of the unit.

Offer the unit up to its mounting position and mark the positions of the four fixing holes.

Using suitable fixings secure the unit to the structure.

2. Electrical Connections

IMPORTANT

Wiring external to the POWRTROL must be in accordance with the I.E.E. regulations together with any local authority regulations which may apply.

Wiring should be completed in conduit for which a 20mm entry is provided.

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NOTE

The mains supply for the heater **MUST NOT** be supplied through the POWRTROL in any case. External wiring should be carried out in cables of not less than 0.5mm² and Summer/Winter switch wiring of not less than 1.5mm²

Caution

High voltage insulation tests on site wiring (i.e. Megger), must be carried out prior to making connections to the POWRTROL. Continuity tests must only be made using a low voltage piece of test equipment (i.e. Avo).

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6. Operation

1. Summer/Winter Switch

If the heating equipment being controlled by the POWRTROL is an air heater and this switch has been connected, then:

-In **WINTER** position

The air heater will operate at the dictate of the timeswitch and thermostat.

-In **SUMMER** position

The air circulation fans of the air heater will run continuously. The timeswitch and thermostats having no control.

2. Auto/Off/Manual Switch

Auto

Heating operates automatically at dictate of timeswitch and thermostats.

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7. Setting of time switch

The timer enables ON and OFF switch selections to be made automatically by setting the week day and time of day and selecting the ON and OFF periods required.

7.1 Time of day and Week Day setting.

Rotate the dial lens in either direction to align the correct day and approximate time with the setting arrow, then set exact time of day on the clock dial.

7.2 Switching periods

Select the captive switch actuators by sliding them either:-

- OUT - for ON (I) times required (red programme disc will be visible)
- IN - for OFF (O) times required (red programme disk will be concealed).

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Off

Timeswitch and day thermostat off, heating equipment only controlled by frost thermostat.

Manual

Timeswitch override, heating equipment only controlled by thermostat.

3. Thermostats



Frost (Night set back) Thermostat

The frost (night set back) thermostat is set low (0°C-5°C)* and operates when the timeswitch is switched OFF.



Day Thermostat

The day thermostat is set high (15°C-20°C)* and operates when the timeswitch is ON.



*Suggested ranges.

The switch actuators can be selected for each day of the week as required.

Minimum interval between 2 actions - 2 hours

Programming interval - 1 hour

These will activate the switch contacts as they align with the switching point arrow during the clock rotation.

7.3 Manual override

Rotate the manual override knob to 0 or I to change the switching status. The normal program will be resumed after the next programmed switching action.

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