

SINGLE POINT TEMPERATURE OR VENTILATION CONTROLLER

Description and operation of the Single Point Temperature Controller

Design concepts

To produce a temperature controller to control air or water temperature in the range from 0°C to 30°C.

This versatile and accurate control is very simple to set up and use. The precise silicon sensing element is accurate from 0°C to 100°C and only part of this range is utilised. The sensor is factory calibrated and requires no onsite calibration. If the sensor is damaged it can be easily replaced with a new one requiring no re calibration. To use adjust the set point to the desired level, for instance 20°C. If the measured temperature is 18°C, heat will be applied until the measured temperature reaches 20.5°C, at this point heat is removed until the measured temperature falls below 19.5°C. The differential of 1°C provides a smooth control and prevents 'relay chatter' or hunting.

Technical Specifications:

1. The unit controls a temperature or ventilation regime from 0 degC to 30 degC.
2. Differential band set to switch at +/-1 degC.
3. Red LED indicator to indicate when heat or vent is being called for.
4. Temperature sensor can be remote from control unit.
5. PCB mounted terminal blocks enable easy connection to the mains supply and heater or vent motor.
6. Switched 240v AC live output rated at 12 amps.
7. Fused secondary supply 1 amp 24Vac.
8. Maximum load 2Kw resistive.
9. Maximum load 1Kw inductive.
10. Suitable for 2Kw electric heaters, gas and oil fired burners when used as a temperature controller.
11. Splashproof PVC box, dimensions 100mm x 100mm

Electrical Connections

PLEASE TAKE CARE WHEN CONNECTING CABLES TO THE TERMINAL BLOCKS. DO NOT USE UNDUE TORQUE IN TIGHTENING THE SCREWS AS THIS WILL 'RIP' THE COPPER TRACK FROM THE TERMINAL PIN AND RENDER THE UNIT COMPLETELY USELESS.

WE STRONGLY ADVISE THE USE OF AN E.L.C.B. ON THE MAINS SUPPLY TO THIS UNIT

Unscrew the four corner screws and with great care remove the front panel. This is a complete control unit fitted with either an air or soil integral temperature sensor.

Mount base of box utilising the mounting points located in the base of the enclosure.

A fused mains supply of 240Vac, correctly rated to supply the load needs to be connected to TB8 2 way terminal Block labeled **240Vac LIVE**.

The switched live to be connected to the load must be connected into TB8 2 way terminal block labeled **switched live**

Similarly Neutral and earth to be connected to the terminals below:

Neutral load and supply into 2 wayTB7

Earth load and supply into 2 wayTB6

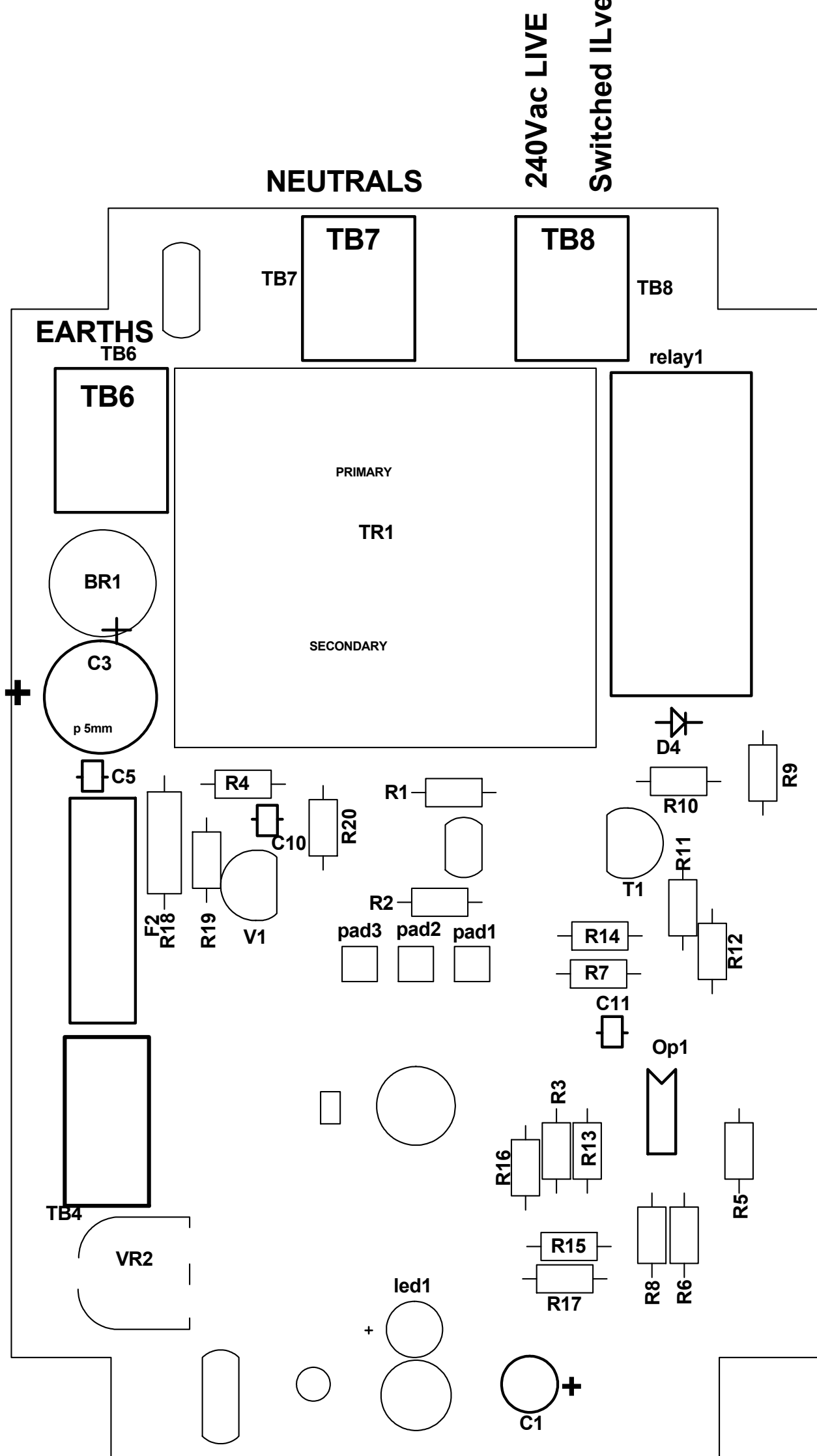
Please note that this supply must be externally fused at a value to suit the load.

The switched 240Vac load is connected to terminal block labelled TB8.

Load to switched live TB8

Load neutral TB7

The terminal block labeled TB6 is for the load Earth



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DECLARATION OF CONFORMITY

Name of manufacturer or supplier: E&TS Ltd
Full postal address including country of origin: 40 Acreville Rd,
Bebington, Wirral,
CH63 2HY U.K.

Description of product: Single Point Temperature Controller

Conforms to the following product specifications:

Low Voltage Directive 2006/95/EC

Standard EN61558-1:200 – A1:2009+AC:2006 - 08

Safety EN 60950-1:2006+AC:2011+A11:2009+A1:2010+A12:2011+A2:2013

IEC 60950-1:2005+A1:2009+A1:2012+A2:2012

EMC and harmonised European and national standards

Directive 2014/30/EU

Emissions EN55032-2012AC:2013

Immunity EN55024-2010

RoHS

This designated product is in conformity with the European Directive: 2011/65/EU

And does not contain substances which are listed as hazardous in EEE RoHS 2

Place of Issue: Bebington

Date: 31. 01. 2019

Name of authorised representative: John W Walker

Position of authorised representative: Managing Director

Declaration:

I declare that as the authorised representative, the above information in relation to the supply/manufacture of this product is in conformity with the stated standards and other related documents following the provisions of EEC Directives.

Signature of authorised representative:.....