Single Stage Electronic Thermostat

The TPES range of electronic thermostats are suitable for applications involving single stage control. There are two temperature ranges 0-50°C or 40-90°C and both types can have a remote setting, external ON/OFF as well as an option for night setpoint. The controller output relay is rated at 15 amp max.

The electronic thermostats will operate on 24V AC/DC or 240V AC dependant on product ordered and they are designed for DIN rail mounting.

Specification

Power Supply:	24VAC/DC or 240V AC +/- 15%
Input:	10K3 thermistor temperature sensor
	Remote setpoint (resistance)
Output:	VFC relay rated at 15 amp max.
Control Accuracy:	+ 0.5°C
Power Consumption:	40mA max.
Settings:	Setpoint
	Hysteresis
	Remote setpoint
	Night setpoint
LED Indication:	Relay ON
Operating Temperature:	-10 to +40°C
Dimensions:	92mm high x 53mm wide x 62mm deep
Country of Origin:	UK
Product Codes:	See table

Product Codes

Thermostats 24V or 240V Options

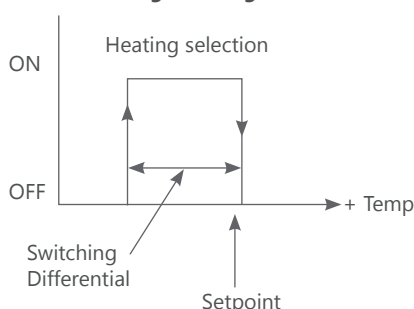| Product Code	Description
TPES1/50N/24V/H	Single stage 0-50°C
TPES1/90N/24V/H	Single stage 40-90°C
TPES1/50N/240V/H	Single stage 0-50°C
TPES1/90N/240V/H	Single stage 40-90°C

Compatible Temperature Sensors (10K3A1)

Product Code	Description
TPTRS	Room temperature sensor
TPTDS/S	Duct temperature sensor
TPTIS	Immersion temperature sensor
TPTCS	Clamp-on temperature sensor

Remote Setpoint Adjuster (2 wire 10560 ohms to 560 ohms)

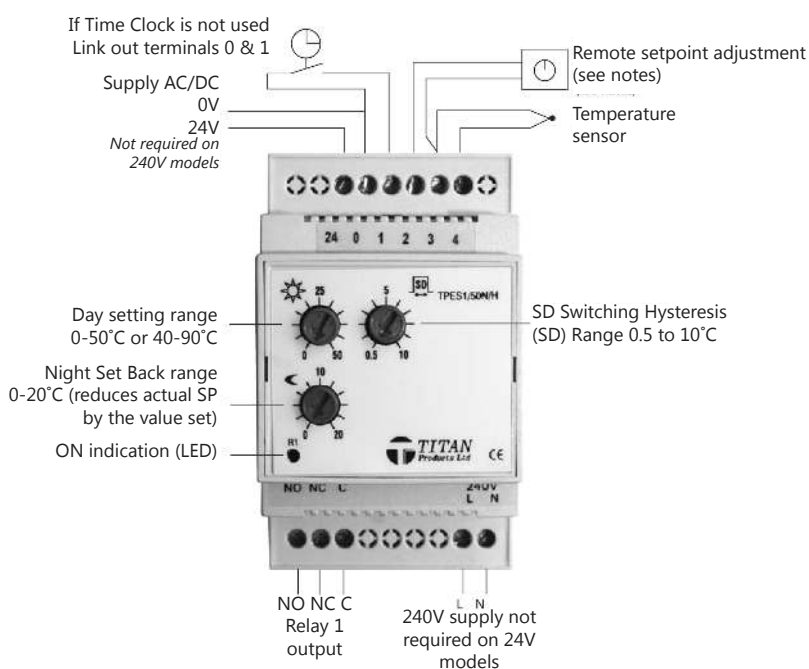| Product Code	Description
TPT/RSA+/-	Room enclosure with temperature sensor and setpoint scale +/-
TPT/RSA5	Room enclosure with temperature sensor and setpoint scale +/-5
RSA50	Room enclosure range 0-50°C
TPT/RSA50	Room enclosure with temperature sensor and setpoint scale 0-50°C
RSA5/PM	Panel mount +/-5°C
RSA50/PM	Panel mount 0-50°C
RSA90/PM	Panel mount 40-90°C

Wiring and Setup Notes:

If no time clock is used fit link across terminals 0 and 1.

If time clock is required but Night setting is not required then fit time clock in main supply to remove power for OFF condition (no NSB) and fit link across terminals 0 and 1.

If remote setpoint is connected the control setting is automatically moved to the remote SP. See notes of RSA action for operation.

1 Stage heating

Remote Setpoint Operation

All setpoint potentiometers are of the same resistance value and there are two options for the operation of the Remote Setpoint Adjuster (RSA).

Full range operation

Turn the controller setpoint down to zero/minimum (fully anticlockwise) and connect the RSA as shown in the circuit diagram. This automatically moves the full scale setting range to the RSA (when the controller is powered up).

Restricted Range +/-5°C

Select the desired operational setpoint on the controller SP (this must be above 5°C from the minimum setting). When an RSA is connected it is automatically detected and provides a +/-5°C of adjustment from the actual controller SP. There are a number of different remote setpoint adjusters available and these are listed in the product code section.