# Regulator Automation

## YOUR ONE STOP CONTROL SHOP



## **ET46**

## **TEMPERATURE CONTROLLER**

### DESCRIPTION

The ET46 Temperature Controller is a direct replacement for the ET45 and is much smaller in size. The controller is housed in a 4 DIN module 70 x 88 x 62mm enclosure. It comes with its own DIN rail mount or can be mounted on a standard 35mm DIN mounting rail.

It has a number of unique features including our universal power supply, which enables the controller to operate on 240V or 24Vac/dc. The power will operate over the range of 18 – 265Vac/dc.

The controller can operate with either 2K or 10K thermistor sensors, DIP switch selectable. The temperature at the thermistor can be measured at the controller with a voltmeter. An output voltage of 0 - 5Vdc corresponding to  $0 - 50^{\circ}C$  is available at terminal 6. All our standard remote setpoints will operate with this controller, again DIP switch selectable.

There are three 0 - 10Vdc analogue outputs available, one reverse acting on terminal 7 and two direct acting on terminals 8 & 9. The analogue outputs are short circuit proof for low voltages. They will even protect against 24Vac connected to them. The output will open circuit under fault conditions and will reset when the fault is removed.

The controller has four relay outputs, which are configured as two heat and two cool or as two stage reverse cycle via DIP switch settings. Relay 1 is a SPCO contact and relays 2, 3 & 4 are SPNO contacts. The relays are rated at 5A 250Vac. There are four blue relay status LED's on the front panel.

#### **DIP SWITCHES**

The DIP switches are piano style switches where down is ON and up is OFF. Up is Default. The switches are numbered right to left.

Switch 1 – Remote Setpoint Switch 2 – Reverse Cycle Switch 3 – Time Proportioning Switch 4 – 10K / 2K Sensor. 10K is Default. \* Please note : If the ET46 is replacing an ET45 Controller and using existing sensor, Switch 4 MUST be pushed to the down position.

#### **CONNECTION DIAGRAMS**



#### **TECHNICAL DATA**

ITEM	DESCRIPTION
Supply Voltage :	18 – 265Vac / dc
Power Consumption	2W Nominal
Model	ET46
Ambient Temp Operation	0 - 50°C
Ambient Humidity	Max. 90% RH
Dimensions	L 70 x H 88 x D 62mm
Weight	0.40Kg
Wiring Terminal Size	4.0mm <sup>2</sup>
Inputs – Resistive Sensors	Thermistor 2K & 10k
Analogue Outputs	AO1, AO2 & AO3 0 – 10Vdc 10mA. Short Circuit Protected.
Relay Outputs	RL-1 SPCO RL2, RL3 & RL4 SPNO 250Vac 5A Resistive

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