



HW E3

24vAC WIRE SAVER / CT

Features

- Australian Made and designed
- Weather Proof
- 10 Amp (Resistive) Potential free relay contacts
- L.E.D Indication of power & output status
- Adjustable current trip point
- Shunt & Load resistor replaceable

Use

The HW E3 is intended as a wire saving device where normally two 24vAC power supply wires and a return switch wire would normally be required (3 wires) for an on/off control system. Using this module only the two power supply wires are required to respond to a remote control device. The HW E3 works on the principle of measuring a voltage drop across an in-line shunt resistor, dropping ~1 volt AC to the 24vAC device its connected to. The contacts in the 24v control device are used to just to switch a supplied 2k resistor between the 24v active & neutral thus increasing the devices current draw on the monitored power supply. A typical application is for use with an existing 2 wire thermostat & gas heating system that now requires 3 wires to power a new modern WiFi type thermostat. WiFi thermostats usually need a permanent 24vAC supply and a switching wire to control a gas heater, but using this device typically located at the heater, the control system can be made to operate with just the two existing wires. The relay trip point due to change of current is user adjustable to suit different loads, also the shunt resistor can be changed to a different value if required which is fitted to terminals inside the module.



Made in Australia
100% Australian Owned Company

Technical Data

General Specifications	Operating Voltage	24 Volts AC or DC
	Power Consumption	
	24 Volts	1 VA
	Added current draw due to switched 2K resistor	12mA
	Typical volt drop due to shunt resistor	1vAC
	Switching Capacity of Relay	
	Voltage	AC 0....250 Volts
	Current	10 (3) A
	Resistors	
	Series Shunt Resistor	750 ohm (factory fitted)
Control Device load resistor	2K (factory supplied)	
Environmental Conditions	Indication	
	Power	Red LED
	Relay On	Green LED
	Operation	
	Ambient Temperature	0...45oC
	Humidity	< 95 % RH (Non Condensing)
	Storage and Transport	
	Ambient Temperature	-5...65oC
	Humidity	< 90 % RH (Non Condensing)
	Product Standards	Manufactured to Australian standards
Weight	Including Packaging	150 grams
Housing	Colour	Black
	Material	ABS POLYCARB
	UV Stabilised	YES
	Fire Retardant	YES
	Size	L130mm x W120mm x D35mm
	Mounting Method	Wall mount 4 screw locations

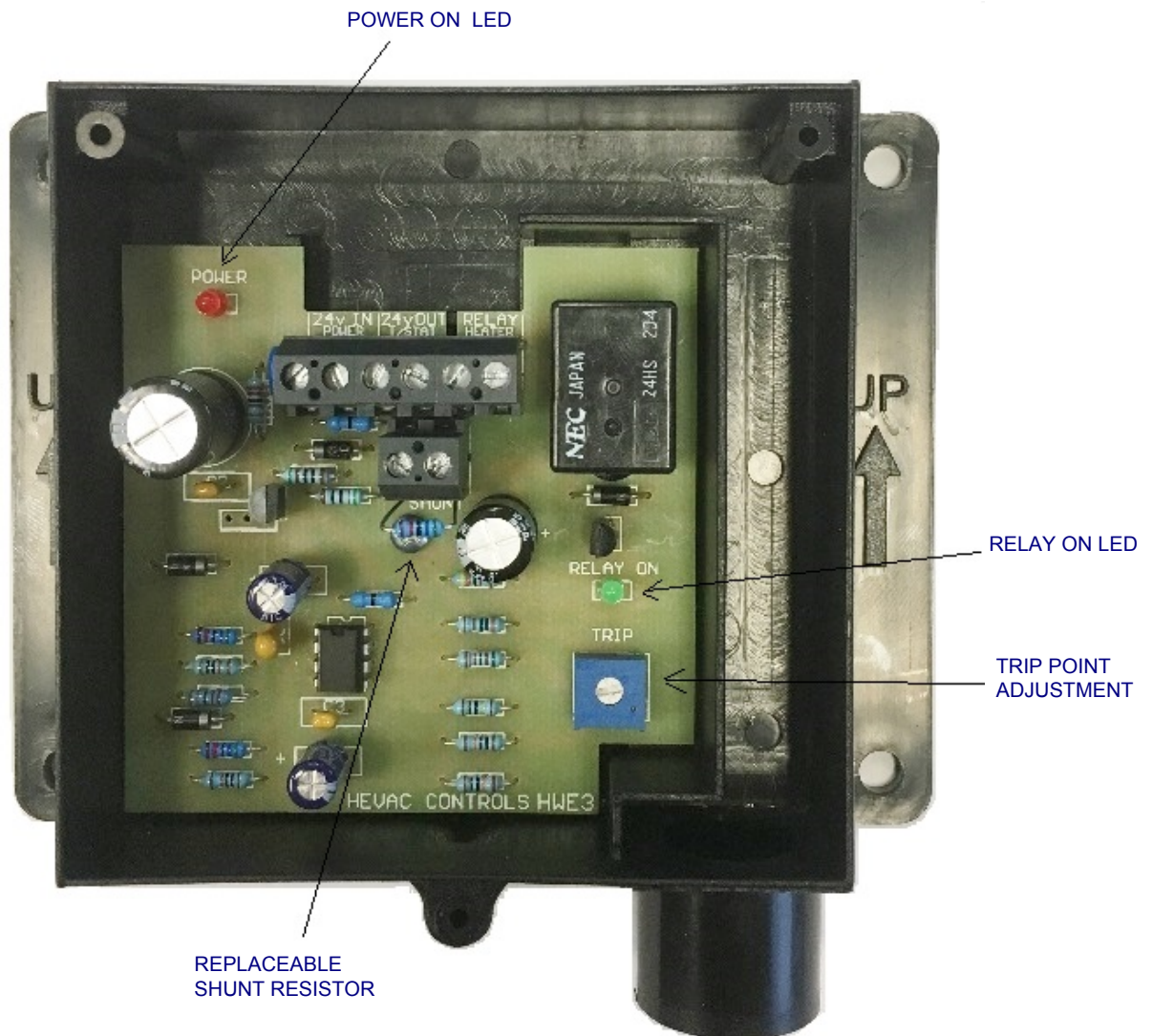
Terminal Designations

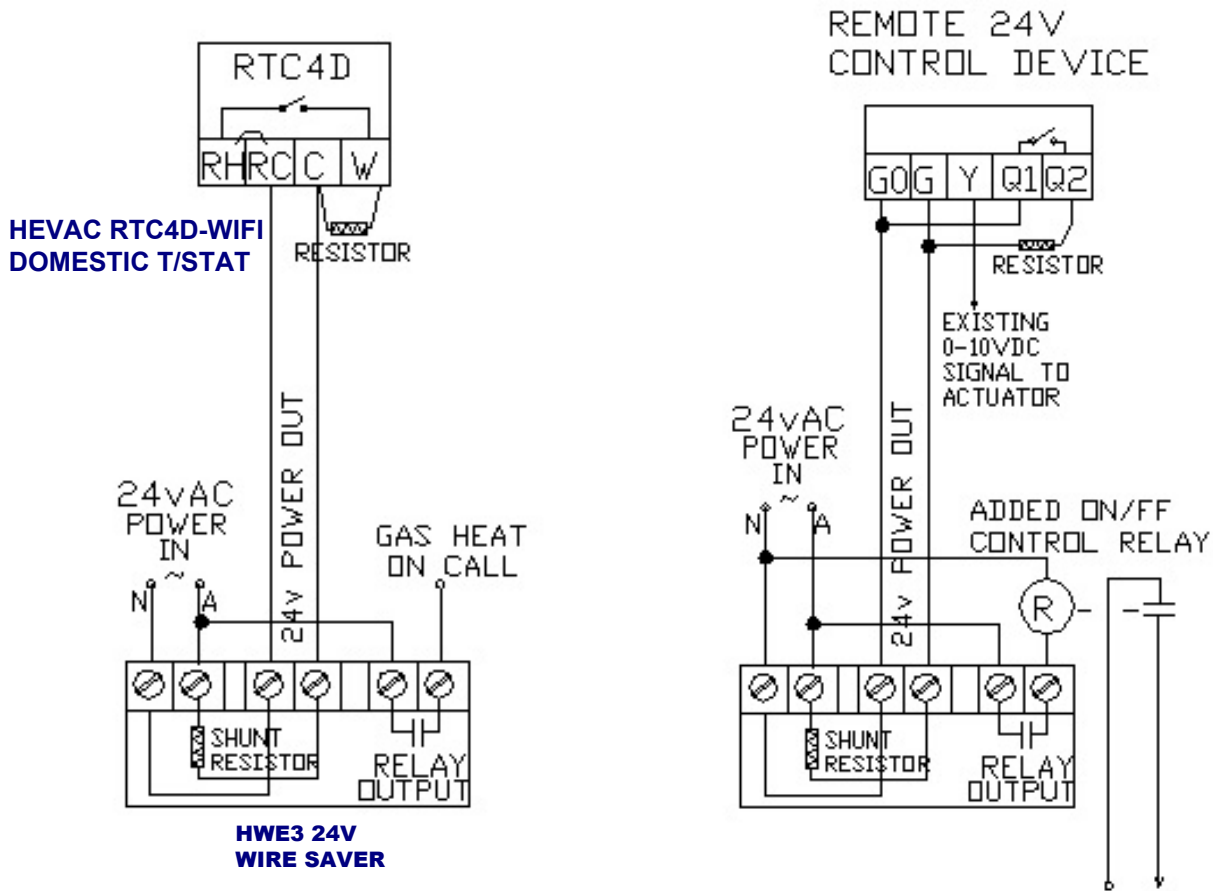
24v IN : ACTIVE & NEUTRAL INPUT POWER SUPPLY TERMINALS

24V OUT : ACTIVE & NEUTRAL OUTPUT POWER SUPPLY TO REMOTE CONTROL DEVICE.

RELAY (HEATER) : N/O RELAY CONTACTS

Pcb Layout





HWE3 24V WIRE SAVER

