



## TEMPERATURE CONTROLLER HTC- 2HC 1 Heat 1 Cool + Modulating 0-10VDC Heating & 0-10VDC Cooling Output

### Features

- Australian Made and designed
- Power Supply can be either 24V or 240V AC
- 10 Amp (Resistive) Potential free relay contacts
- L.E.D Indication of all outputs
- Various remote sensor options available
- Mounts in most M.C.B din rail enclosures
- Compatibility to a vast range of AC Units & Heat Pumps
- Modulating 0-10VDC Heating Output
- Modulating 0-10VDC Cooling Output

### Use

The HTC-2HC Temperature Controller is primarily designed for the control of 1 Stage Heat and 1 Stage Cool Air-conditioning units and also incorporates a modulating 0-10 VDC Heating and a 0-10VDC Cooling Output.

The Heating Output can be used to modulate either a Hot water valve or an Electric Element Current Valve and the Cooling Output can modulate a Chill Water valve.


All output relays are voltage free permitting use on either 240 Volt or 24 Volt circuitry.

Stage switch on points are individually adjustable with their ON/OFF status displayed via LED indicators.

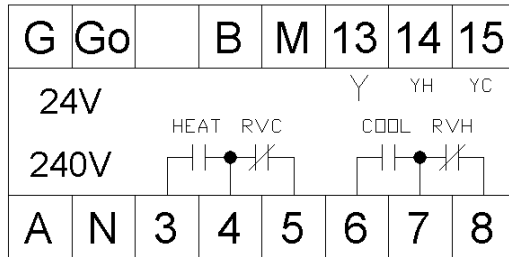


**Made in Australia**  
**100% Australian Owned Company**

## Technical Data

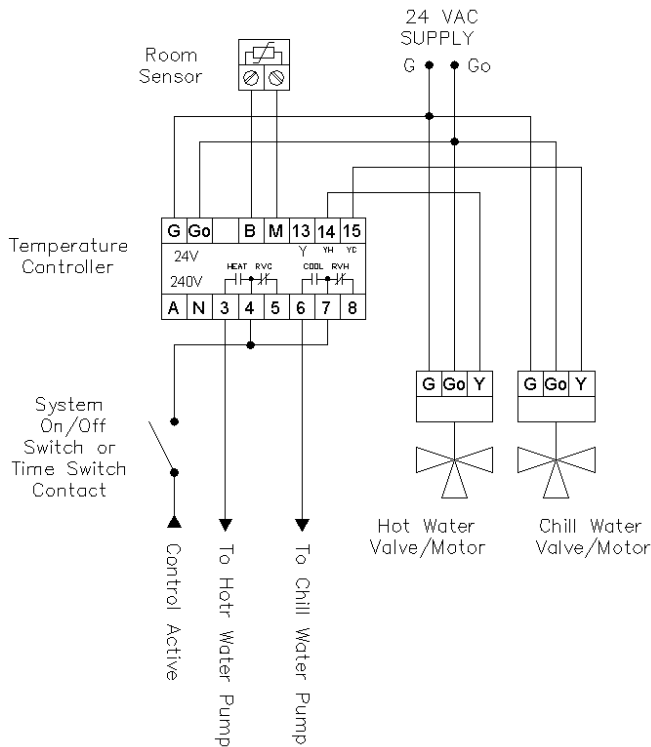
General Specifications	Operating Voltage	24 Volts AC or 240 Volts AC
	Power Consumption	
	At 240 Volts	7 VA
	At 24 Volts	1 VA
	Switching Capacity of Relays	
	Voltage	AC 0...250 Volts
	Current	10 (3) A
	Setpoint Setting Range	16...28 oC
	Stage Start Point Adjustment	0.5...5.0 oC (From Setpoint)
	Switching Differential	0.3 oC (NON Adjustable)
	Modulating Outputs Proportional Bands	1.0 Degrees Celsius (NON Adjustable)
	Modulating Output Signals	0...10 Volts DC
	Output Indication	
	Heating On/Off Stage	1 x Red LED
Heating Modulating Output	1 x Red LED Intensity of LED varies with the Signal Output	
Cooling	1 x Green LED	
Cooling Modulating Output	1 x Green LED Intensity of LED varies with the Signal Output	
Environmental Conditions	Operation	
	Ambient Temperature	0...45oC
	Humidity	< 85 % RH (Non Condensing)
	Storage and Transport	
	Ambient Temperature	-5...65oC
	Humidity	< 90 % RH (Non Condensing)
Product Standards	C-tick	 N10842
Weight	Including Packaging	470 grams
Housing	Colour	Grey
	Material	ABS POLYCARB
	UV Stabilised	YES
	Fire Retardant	YES
	Size	L105mm x W105mm x D60mm
	Mounting Method	35mm Din Rail Mountable

## Terminal Designations



- G 24 Volt AC Supply Active
- Go 24 Volt AC Supply Ground Reference
- B Sensor Input
- M Sensor Input Common
- 13 Y Signal Output (For HRC Slave Relay ONLY)
- 14 YH 0-10VDC Modulating Heating Output
- 15 YC 0-10VDC Modulating Cooling Output
- A 240 Volt AC Supply Active
- N 240 Volt AC Supply Neutral
- 3 Heating Stage 1 Output
- 4 Heating Stage 1 & R/V for Cool Common
- 5 Reversing Valve for Cool Output
- 6 Cooling Stage 1 Output
- 7 Cooling Stage 1 & R/V for Heat Common
- 8 Reversing Valve for Heat Output

## Application Example



### Technical Notes

- Supply Voltage** The Controller requires either a 240Volt AC or 24 Volt ACV Supply (Drawing depicts a 24VAC Connection)
- 0-10VDC Signal Outputs** If the controller is powered from a 240V supply then the Valve Motor 24V Ground (Go) must be connected to terminal 'M' on the HTC-2HC controller
- Warnings** Use ONE Supply Voltage Only Either 240 or 24 Volts AC

Typical for a Modulating 0-10VDC Hot Water and Chill Water Valve System with Pump start.