



## TEMPERATURE CONTROLLER HTC- 43S 3 Heat 3 Cool Specifically designed for Triple Compressor Heat Pump Units

### 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
- Third relay stage for Triple Compressor Heat Pumps

### Use

The HTC-43S Temperature Controller is primarily designed for the control of 3 Stage Heat and 3 Stage Cool Heat Pump Units.

The third relay stage is set to energise 3 oC above setpoint and also 3 oC below setpoint.

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


ON/OFF Relay status is displayed via LED indicators.

The HTC-43S Temperature Controller is ideally suited for DIN rail mounting in a switchboard or directly inside the Heat Pump unit if required.

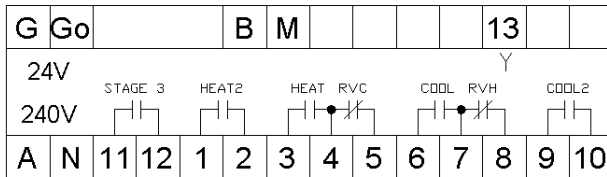


**Made in Australia**  
**100% Australian Owned Company**

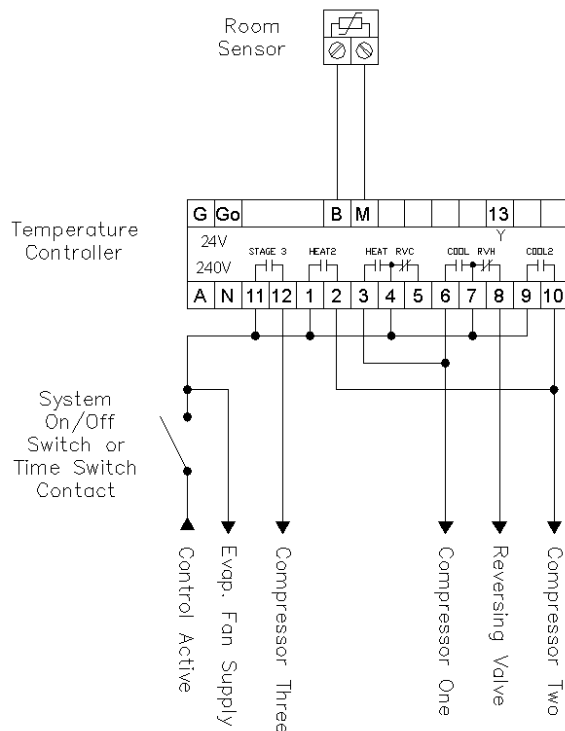
## Technical Data

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
	Switching Differential Stage 1	0.3 oC (NON Adjustable)
	Switching Differential Stage 2	0.7 oC (NON Adjustable)
	Switching Differential Stage 3	1.0 oC (NON Adjustable)
	Stage Start Point Adjustment for Stage 1 & 2	0.5...5.0 oC (From Setpoint)
	Stage Start Point for Stage 3	3.0 oC Above & Below Setpoint (NON Adjustable)
	Output Indication	
Heating	2 x Red LED's	
Cooling	2 x Green LED's	
Third Compressor On/Off status	1 x Yellow LED	
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

- 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)
- A 240 Volt AC Supply Active
- N 240 Volt AC Supply Neutral
- 1 Heating Stage 2 Common
- 2 Heating Stage 2 Output
- 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
- 9 Cooling Stage 2 Common
- 10 Cooling Stage 2 Output
- 11 Compressor Stage 3 Common
- 12 Compressor Stage 3 Output



### Application Example (1)

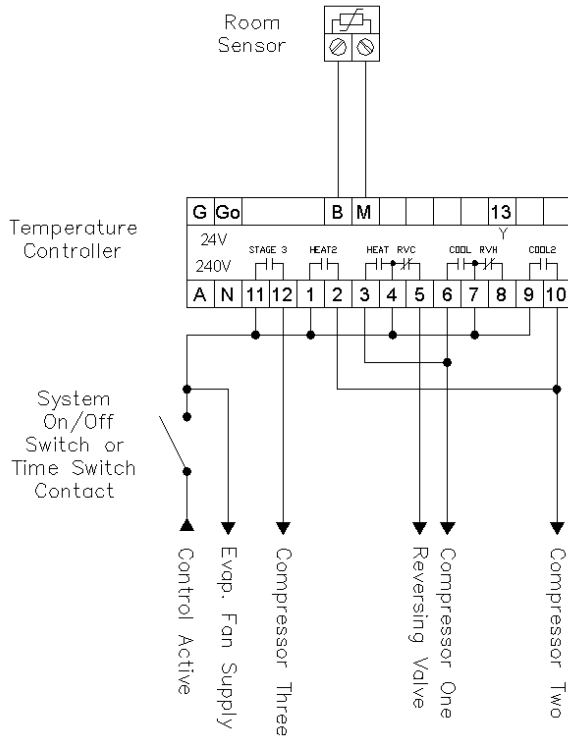


### Technical Notes

- Supply Voltage** The Controller requires either a 240Volt AC or 24 Volt AC Supply
- Warnings** Use ONE Supply Voltage Only Either 240 or 24 Volts AC
- Reversing Valve Mode** Reversing Valve Energises for Heating
- Stage 3 Output (Compressor 3)** Energises 3oC Above & 3oC Below setpoint

Typical for Compressor Reversing Valve type A/C Units where the R/V energises on Heating

## Application Example (2)



### Technical Notes

- Supply Voltage** The Controller requires either a 240Volt AC or 24 Volt AC Supply
- Warnings** Use ONE Supply Voltage Only Either 240 or 24 Volts AC
- Reversing Valve Mode** Reversing Valve Energises for Cooling
- Stage 3 Output (Compressor 3)** Energises 3oC Above & 3oC Below setpoint

Typical for Compressor Reversing Valve type A/C Units where the R/V energises on Cooling