

## STAGING RELAY for HEVAC HRC- 4B HTC Analogue Controllers 2 Heat 2 Cool + On/Off Economy Cycle Relay 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
- Auxiliary On/Off Economy Cycle Cooling Output

### Use

The HRC-4B Staging Relay is intended for use with the Slave Output on the HTC Analogue Range of Controllers.

The HRC-4B allows you to expand any HTC Analogue Controller with an additional Two Heating and Two Cooling Stages plus a Third Cooling Stage relay output.

This stage provides a Normally Open set of contacts and can be interlocked with a fresh air ambient High or Low limit thermostat and is ideal for use as an On/Off Economy Cycle Output.

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 HRC-4B Staging Relay is ideally suited for DIN rail mounting in a switchboard or directly inside the A/C unit if required.



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

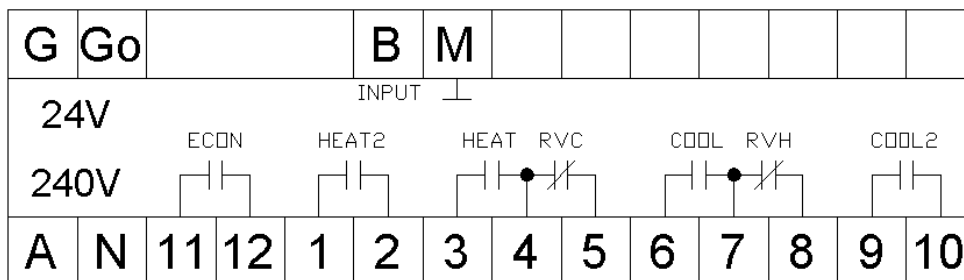
## Technical Data

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
	Input Terminal	
	Input Terminal Voltage	DC 0...10 Volts
	Input Terminal Voltage Range vs Setpoint	0V at 16oC...10V at 28oC
	Input Terminal Voltage Range	0...10 Volts over the entire Setpoint Range coming from the controller feeding the HRC4
	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	0.5 oC (NON Adjustable)
Auxiliary On/Off Cooling Output		
Stage Start Point Adjustment for Stage 1 & 2	0.5...5.0 oC (From Setpoint)	
Stage Start Point for Auxiliary Cooling Stage 3	0.5 oC Above Setpoint (NON Adjustable)	
Output Indication		
Heating	2 x Red LED's	
Cooling	2 x Green LED's	
Auxiliary Cooling Stage	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

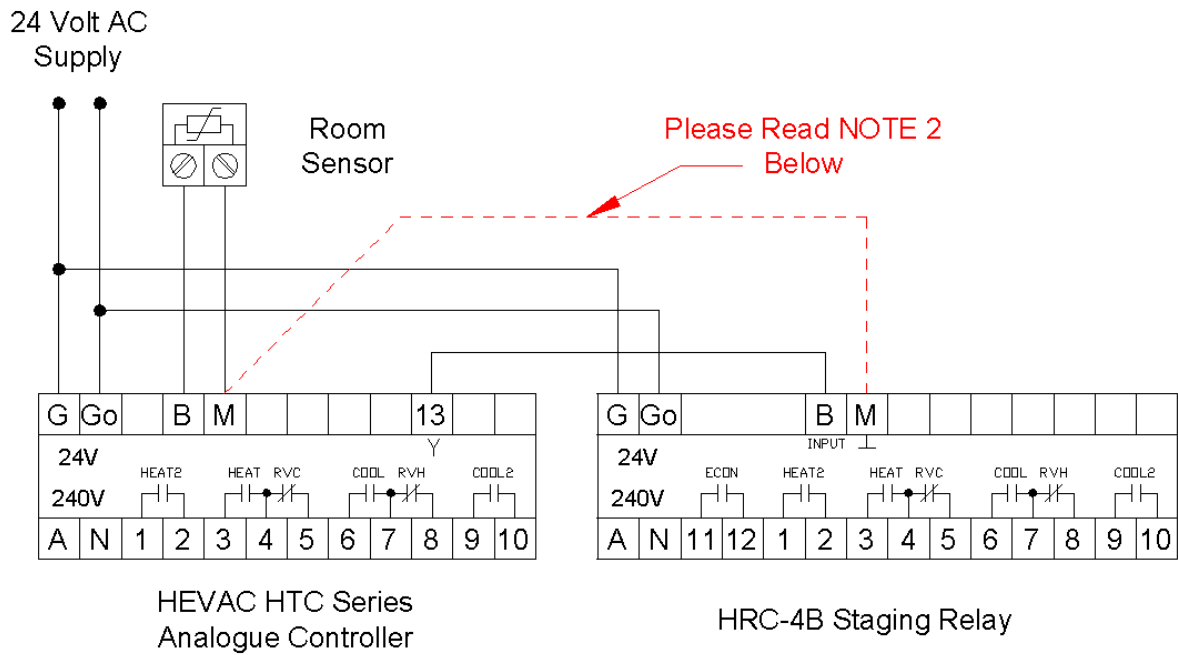
Housing	Colour	Grey
	Material	ABS POLYCARB
	UV Stabilised	YES
	Fire Retardant	YES
	Size	L105mm x W105mm x D60mm
	Mounting Method	35mm Din Rail Mountable

### Terminal Designations

- G 24 Volt AC Supply Active
- Go 24 Volt AC Supply Ground Reference
- B 0-10VDC Input from HTC Controller
- M Input Signal Common/Ground
- 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 Auxiliary Cooling Stage Common
- 12 Auxiliary Cooling Stage Output



## Application Example (1)



### Technical Notes

- Supply Voltage (Note 1) The Controller requires either a 240Volt AC or 24 Volt AC Supply Above diagram depicts a 24 VAC Connection
- Supply Voltage (Note 2) **If the HRC-4B and the HTC Controller are powered from a 240 Volt AC Supply then a link must be connected as shown above**
- Warnings Use ONE Supply Voltage Only Either 240 or 24 Volts AC