MIMIC

DUAL VOLTAGE

GENERAL PURPOSE BUDGET REPLACEMENT TEMPERATURE CONTROLLER ***(FOR PASSIVE RESISTANCE SENSORS)***

CAN TYPICALLY REPLACE :

REGULATOR® ET45 & TC2000, SATCHWELL(DR), SIEMENS® RWD32,34,44,45,82 & RWF21.40. DELTA DORE® T2+2C. TOUR &ANDERSON® C80. & GENERAL TEMPERATURE CONTROLLERS USING 10K Type 1 1 SENSORS- ie SMARTTEMP®,HONEYWELL®, SCHNEIDER®,INNOTECH®.

TEMPERATURE CONTROLLER 2 STAGE ON/OFF HEAT & COOL + 0-10VDC HEAT & COOL O/P's

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 relay 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
- Selectable input card to use existing common sensors.

Use

The **MIMIC** Temperature Controller is designed using our tried & proven reliable analog technology in a similar style to our long lived HTC series of controllers that have continued to operate even after 30 years in the field. This controller version has been produced as a handy one size fits all controller to keep in the service van for quick replacement if the original controller isn't available or has proved to be unreliable or problematic.

The controller is typically suitable to replace an existing temperature controller of other brands where the basic control of up to 2 Stages of on/off Heating & 2 stages of Cooling (4 relay outputs) + 0-10vdc outputs for heating & cooling for modulation of damper & valve actuators or variable speed compressors as required.

As per our legendary HTC4, this controller can be powered by 24 or 240vAC and the output relays are voltage free permitting use with 12v ~ 240 Volt circuitry as required.
The heating & cooling ON/OFF relay status is displayed via LED indicators.
The MIMIC has a special input card that can be set to allow use of the existing temperature sensor of most common brands. The stage turn on points (deadband) are not adjustable on this budget controller and are fixed at 1 degree intervals which was the typical standard settings on most 2H/2C controllers. This controller can be connected to our range of slave modules (HRC...) if extra outputs are required or If features & outputs are required beyond the capability of this product look at using our HTC3, 5 or DIGITAL-LCD series controllers.

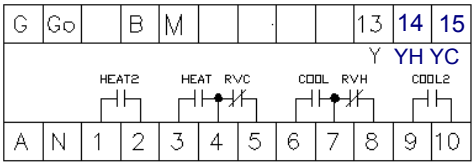
Technical Data

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 1 turn on point	1.0 from setpoint	
Stage 2 turn on point	2.0 from setpoint	
Switching Differential Stage 1	0.3 oC	
Switching Differential Stage 2	0.7 oC	
YH & YC 0-10VDC start point	0.5 from setpoint	
proportional band	1.0	
Output Indication	Heating	2 x Red LED's
	Cooling	2 x Green LED's
Environmental Conditions	Ambient Temperature Humidity In Operation	0...45oC < 85 % RH (Non Condensing)
	Ambient Temperature Humidity During Transport & Storage	-5...65oC < 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

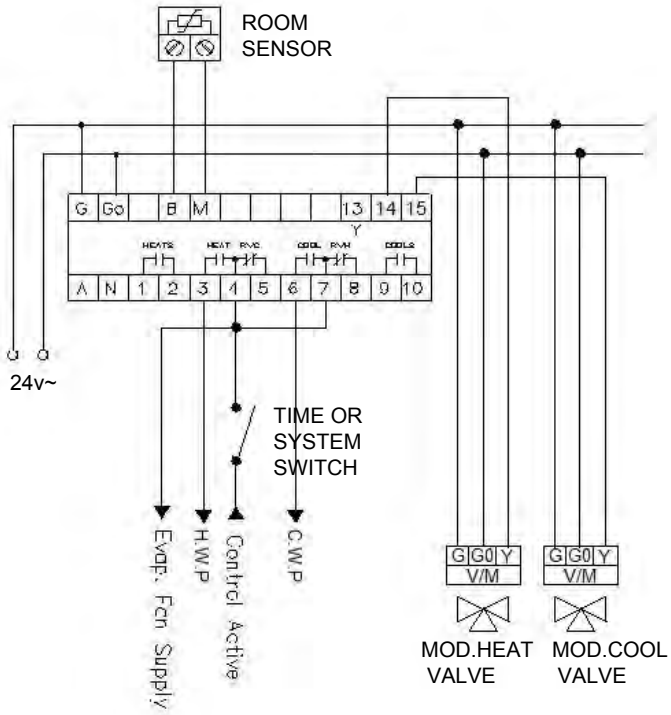
COMMISSIONING

Open housing removing top & bottom lid screws, and unplug input pcb. Set jumpers as per the table to match the existing temperature sensor, reinsert pcb and fit cover. After connecting inputs & output wiring, power up & test operation by adjusting the setpoint. It is recommended to measure the temperature at the temperature sensor with a trusted instrument and calibrate the MIMIC using the calibration potentiometer located on the right hand side of face plate. Adjust setpoint to the measured temperature and using a DC volt meter connected to terminals GO (-) & 13 (+) adjust cal pot till 4.6v DC is measured. The controller is now ready for operation.

Terminal Designations



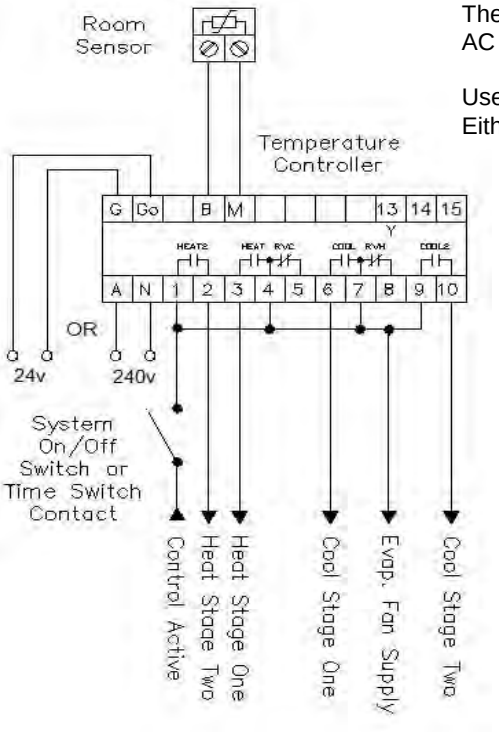
G	24 Volt AC Supply Active
Go	24 Volt AC Supply Ground Reference
B	Sensor Input
M	Sensor Input Common
13	Y Signal Output (For HRC Slave Relay ONLY)
14	Heating 0-10vdc signal
15	Cooling 0-10vdc signal



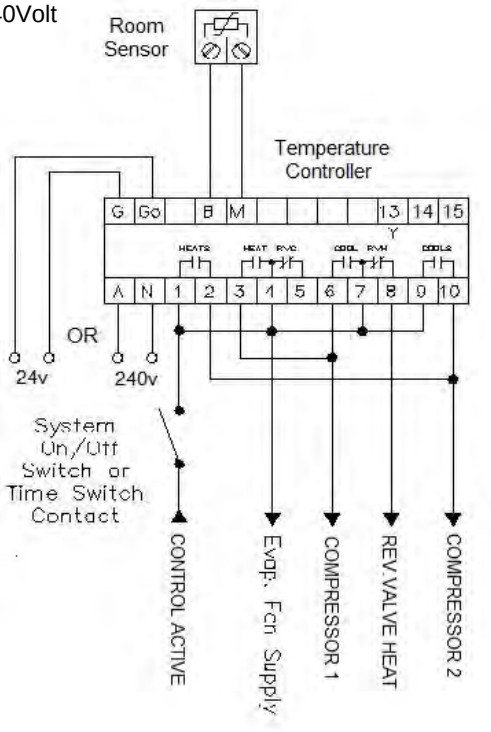
A	240 Volt AC Supply Active
N	240 Volt AC Supply Neutral
1	Heating Stage 2 Common
2	Heating Stage 2 Output
3	Heating Stage 1 Output
4	Heating Stage 1 & R/V for Cool Common
5	Reversing Valve for Cool Output
6	Cooling Stage 1 Output
7	Cooling Stage 1 & R/V for Heat Common
8	Reversing Valve for Heat Output
9	Cooling Stage 2 Common
10	Cooling Stage 2 Output

The Controller requires either a 240Volt AC or 24 Volt AC Supply.

Use ONE Supply Voltage Only
Either 240 or 24 Volts AC



Typical for Heat/Cool type Air-conditioning Units



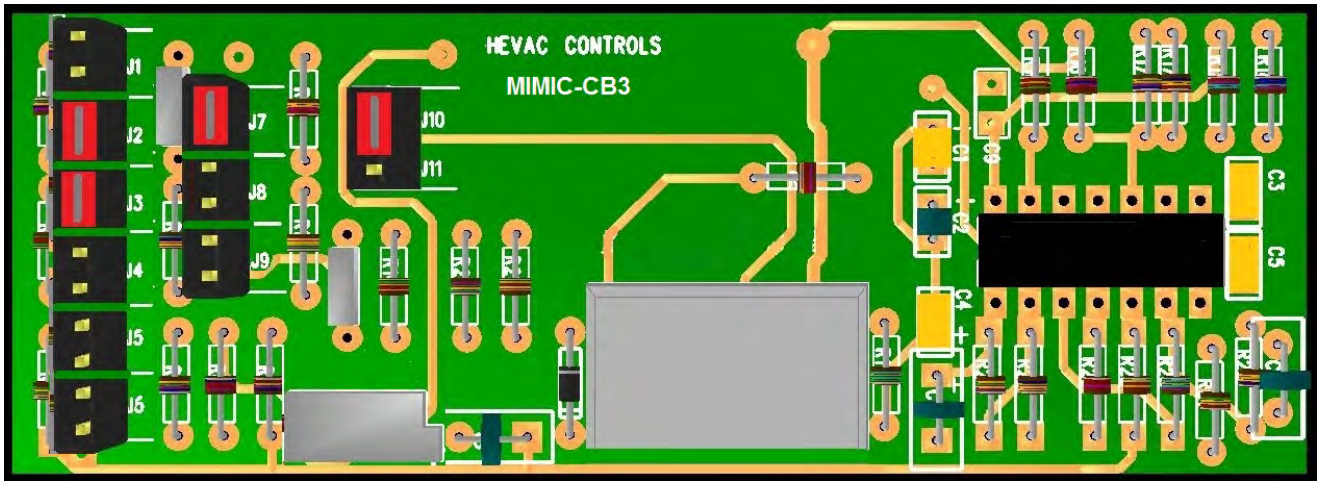
Typical for Compressor / R/V type Air-conditioning Units

TRANSPOSITION TERMINAL INFORMATION

** GUIDE ONLY CHECK CONNECTIONS PER SITE REQUIREMENTS, SOME CONTROLLERS HAVE USER SELECTABLE RELAY ASSIGNMENTS, SO BELOW DETAIL WILL NEED TO BE CHECKED PER INSTALLATION.*

FOR DUAL POWER SUPPLY CONTROLLERS USE ONLY ONE SUPPLY

		240v ACTIVE	240v NEUTRAL	24v ACTIVE	24v NEUTRAL/GND.	SENSOR	SENSOR /GND.	HEAT 2	HEAT 1	COOL 1	COOL 2	Y EXP.O/P	YH HEAT 0-10v	YC COOL 0-10v	
HEVAC	MIMIC	A	N	G	G0	B	M	1	2	3	4	5	6	7	8	9	10		13	14	15	
REGULATOR®	ET45																					*
REGULATOR®	TC2000																					*
DELTADORE®	T2+2C																					*
SMARTTEMP®	HVAC32	240v		24v		sensor		H2		H1			C1			C2						
INNOTECH®	IMT5022																					*
SIEMENS®	RWD32																					*
SIEMENS®	RWD34																					*
SIEMENS®	RWD44			G	G0	X1	M	Q14	Q11	Q24	Q21	Q22	Q34	Q31	Q32	Q44	Q41					
SIEMENS®	RWD45	full detail shown in box leaflet																				*
SIEMENS®	RWD82																					*
SIEMENS®	RWF21.4																					*



INTERNAL INPUT CARD SHOWING RED (or BLACK) INPUT TYPE SELECTOR JUMPERS

TO SUIT SIEMENS SENSORS FIT JUMPERS	**J1, J4, J5, J8, J9 & J10 (Factory default)**
TO SUIT TOUR&ANDERSON SENSORS FIT JUMPERS	**J1, J3, J5, J7, J8, J9 & J11**
TO SUIT DELTA DORE SENSORS FIT JUMPERS	**J3, J4, J5, J7, J8 & J11**
TO SUIT 10K TYPE-11 SENSORS FIT JUMPERS	**J1, J2, J3, J4, J5, J6, J7, J8 & J11**
TO SUIT REGULATOR SENSORS FIT JUMPERS	**J1, J3, J4, J7, J8, J9 & J11**
TO SUIT SATCHWELL using "DR" SENSORS FIT JUMPERS	**J1, J3, J7, J9 & J11**

IT IS ALSO POSSIBLE TO REPLACE HEVAC & SOME OTHER BRAND CONTROLLERS, CALL HEVAC FOR JUMPER SETTINGS