

## RTC3 SERIES

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### RTC30

#### ELECTRONIC ROOM THERMOSTAT

*The RTC30 thermostat is an ideal replacement or alternative to mechanical thermostats, having a far superior accuracy and response time.*

*The thermostat is designed to be used in conjunction with a remote System ON/OFF Switch or a Time Clock.*

*Heating & Cooling changeover is automatic with a Deadband adjustment between 2 or 3 degrees.*

*The setpoint adjuster can be concealed or exposed.*

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#### Features

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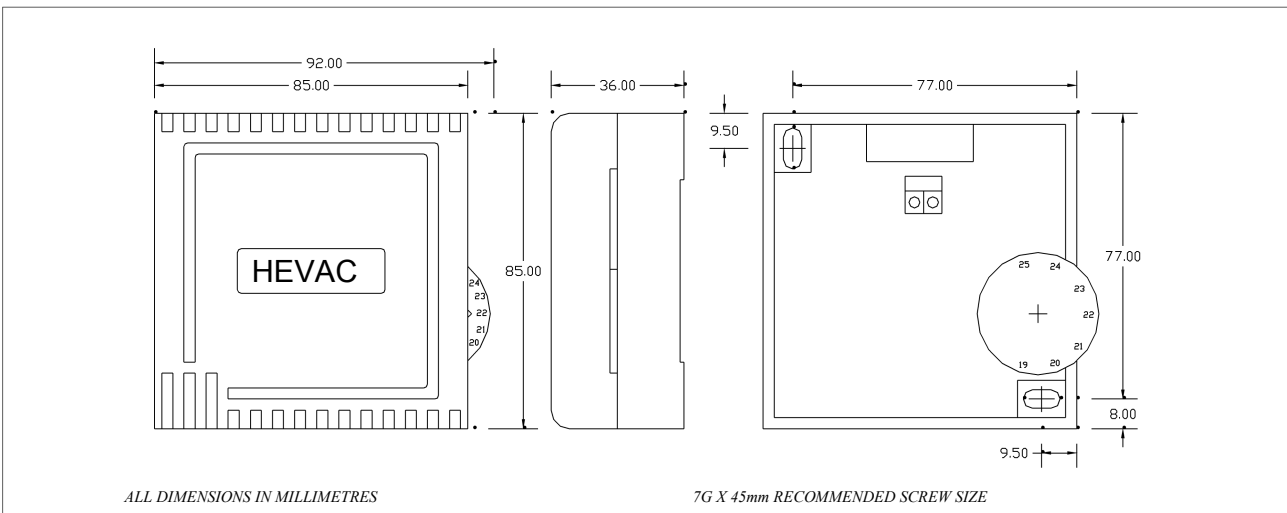
- Australian made and designed.
- Dual supply voltage 24v or 240v A.C (User selectable).
- 5 AMP (Resistive) Potential free relay contacts.
- L.E.D Indication of all outputs.
- Selectable dead zone between Heat and Cool.
- Concealed or exposed setpoint adjustment.
- Compatibility to package AC units and Heat Pumps.



**Technical Specifications**

Power supply	24VAC or 240VAC
Power consumption 240 volts	7 VA
Power consumption 24 volts	1 VA
Heating and Cooling relay outputs	240VAC 5 amp resistive 2 amp inductive
Reversing valve relay outputs	240VAC 3 amp resistive 1.5 amp inductive
Temperature range	16 to 28 Degrees Centigrade
Switching differential	0.5 Degrees Centigrade
Deadzone <u>between</u> heat & cool (Factory Set to 2oC)	Selectable, 2 or 3 Degrees Centigrade
Output indication	Green LED for Cooling Red LED for Heating

**Dimensions**



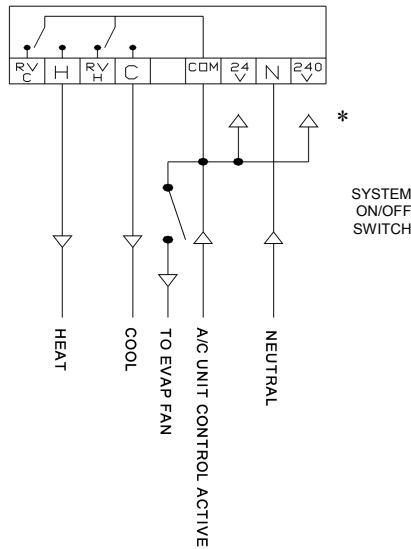
**Electrical Schematic**

INTERNAL CONTACTS SHOWN IN REST STATE

**USE ONLY ONE SUPPLY VOLTAGE**

<b>RVC</b>	REVERSING VALVE FOR COOLING
<b>H</b>	HEATING OUTPUT
<b>RVH</b>	REVERSING VALVE FOR HEATING
<b>C</b>	COOLING OUTPUT
<b>COM</b>	COMMON SUPPLY TO RELAYS
<b>24V</b>	24 VOLT AC SUPPLY INPUT
<b>N</b>	NEUTRAL CONNECTION
<b>240V</b>	240 VOLT SUPPLY INPUT

**Electrical Schematic for Heat / Cool A/C Units**



**TECHNICAL NOTES**

**“Common” Terminal**

The terminal labeled **COM** is a Potential Free Common to the Relay Outputs. Therefore the A/C Unit Control active can be either 240 Volt or 24 Volt.

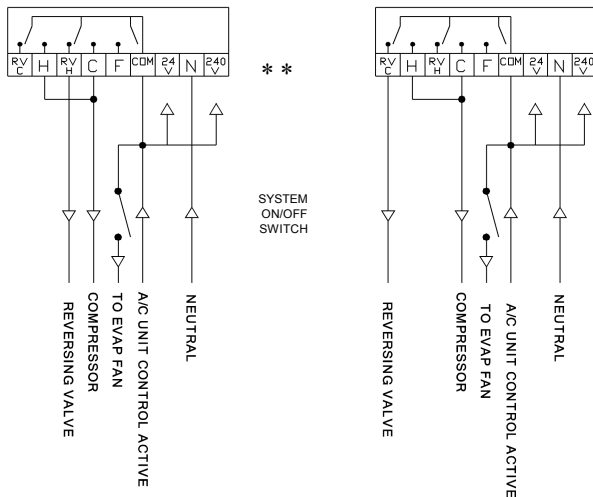
\* Typically this connection also loops to the appropriate supply terminal.

**Supply Voltage**

The RTC-30 requires either a 240Volt AC or 24 Volt AC Supply.  
(Use **ONE** Supply Voltage Only)

**Electrical Schematic for Compressor Reversing Valve Type A/c Units**

Option 1 Option 2



**TECHNICAL NOTES**

**Option 1**

Reversing Valve Energises on a HEATING CALL

**Option 2**

Reversing Valve Energises on a COOLING CALL

**“Common” Terminal**

The terminal labeled **COM** is a Potential Free Common to the Relay Outputs. Therefore the A/C Unit Control active can be either 240 Volt or 24 Volt.

\* Typically this connection also loops to the appropriate supply terminal.

**Supply Voltage**

The RTC-30 requires either a 240Volt AC or 24 Volt AC Supply.  
(Use **ONE** Supply Voltage Only)

**Quick Test Information**

All HEVAC Controllers are Factory Calibrated and Pre-set to Industry Standard Defaults prior to dispatch. If you require further information on these Settings please Refer to the Technical Specifications Page.

The RTC-30 Electronic Room Thermostat is equipped with a TEST Facility Jumper on the Circuit Board. Follow these Steps to perform a Quick Test.

STEP 1: Remove the shorting jumper from the NORM Position and place it in the TEST Position.

(Simulates a 22oC Setpoint)

STEP 2: Dial the Setpoint Up and confirm that the HEATING (Red) LED turns ON.

STEP 3: Dial the Setpoint Down and confirm that the COOLING (Green) LED ON.

STEP 4: **Return the TEST jumper back to the NORM Position.**