

RSC SERIES



RSC-2

WALL MOUNT ROOM SENSOR/CONTROLLER with MODULATING OUTPUTS

The RSC-2 is a wall mount room sensor and temperature controller.

It incorporates a reverse acting and direct acting 0-10VDC modulating output.

Constructed from high impact ABS plastic, the housing is specifically designed with sensor sensitivity in mind making the RSC-2 very responsive even in low airflow situations.

Cable entry is from the rear with side knockouts for cable duct on three sides, allowing for easy electrical installation.

Features

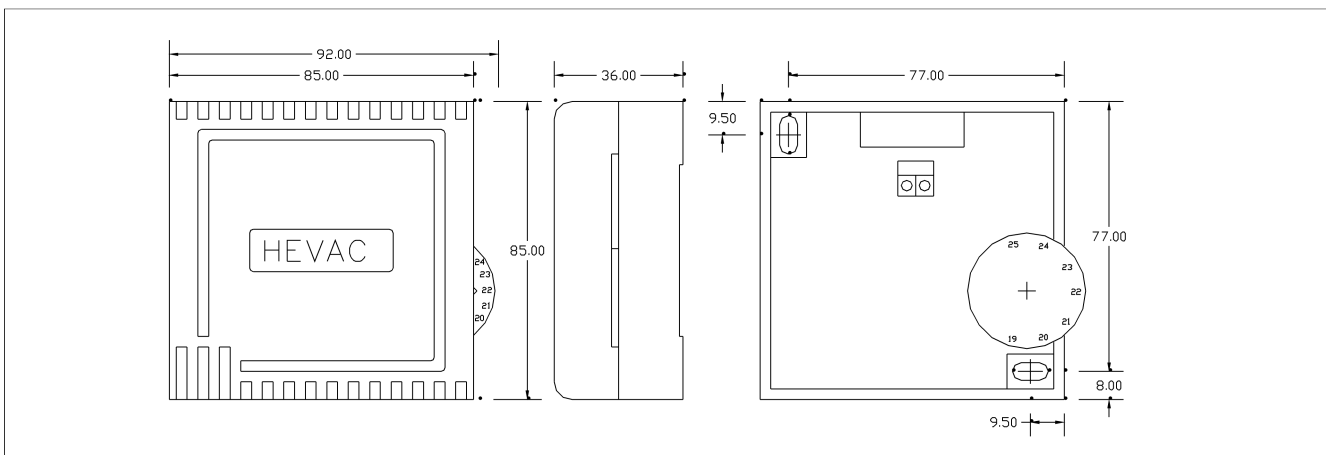
- Australian made and designed.
- Aesthetic neutral coloured cream housing.
- Housing designed to reduce wall temperature offset.
- Large air grilles allowing for maximum air flow sensing.
- Measures radiant heat and air temperature.
- Incorporates a user Test facility.
- R/A and D/A modulating 0-10VDC outputs.



Technical Specifications

<i>Power supply</i>	<i>24VAC</i>
<i>Power consumption 24 volts</i>	<i>1 VA</i>
<i>Temperature range</i>	<i>16 to 28 Degrees Centigrade</i>
<i>Temperature Adjustment-Convertible</i>	<i>Exposed or Concealed Adjustment</i>
<i>Reverse Acting Output (YH)</i>	<i>0-10VDC</i>
<i>Direct Acting Output (YC)</i>	<i>0-10VDC</i>
<i>Deviation Output (Y)</i>	<i>0-10VDC over full Setpoint Range</i>
<i>Proportional Band Adjustment (Factory Default = PB LINK UNCUT)</i>	<i>YH=1.50 YC=1.50 Y=10.0 Degrees C</i>
<i>Proportional Band Adjustment (PB LINK CUT)</i>	<i>YH=0.5 YC=0.5 Y=3.0 Degrees C</i>
<i>DeadZone between Heating and Cooling start</i>	<i>0.5 Degrees Centigrade</i>
<i>Output indication (Intensity of ALL LED'S vary with the Signal Output)</i>	<i>Green LED for Cooling Red LED for Heating</i>
<i>Test Facility Jumper in TEST position (Factory Default = NORM Position)</i>	<i>Simulates 22.0 Degrees Centigrade</i>
<i>VAV / FCU OUTPUT JUMPER (Factory Default = F.C.U Position)</i>	<i>Set to VAV position for VAV Systems Set to FCU position for Fan Coil Systems</i>

Dimensions



Terminal Designations

G	24 VOLT AC SUPPLY ACTIVE
Go	24 VOLT AC SUPPLY GROUND REFERENCE
Y	0-10VDC DEVIATION OUTPUT
YH	0-10VDC REVERSE ACTING HEATING OUTPUT
YC	0-10VDC DIRECT ACTING COOLING OUTPUT

Electrical Schematic for typical Variable Air Volume System

TECHNICAL NOTES

Duct Thermostat
The Duct Mounted Capillary Thermostat shown is a PENN Model A19ABC41. Alternative brands can be used. The thermostat should be set to 24 o Celsius.

Damper Motors
Damper Motor shown is a BELIMO KM,LM,NM or SM, 24SR Series Motor. Alternative brand damper motors can be used provided they can accept a 0-10VDC Reverse and Direct Acting Control Signal

Supply Voltage
The controller requires a 24VAC Supply. The (Go) terminal on the RSC-2 must be referenced to the ground terminal on the Damper Motor.

Electrical Schematic for Cooling and Heating Valve Configurations

TECHNICAL NOTES

Option 1
Typical Chill Water Valve detail.

Option 2
Typical Heating Water Valve Detail.

Valve Motors
Valve Motor terminals depicted are typical for most European Valves such as TA, INVENSYS and SIEMENS.

Valves
Valves can be either 2 Way or 3 Way.

Supply Voltage
The (Go) terminal on the RSC-2 must be referenced to the ground terminal on the Valve Motor.

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 RSC-2 Room Sensor/Controller 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.
- STEP 2: Dial the Setpoint Up and confirm that the HEATING (Red) LED goes to full brightness.
- STEP 3: Dial the Setpoint Down and confirm that the COOLING (Green) LED goes to full brightness.
- STEP 4: **Return the TEST jumper back to the NORM Position.**