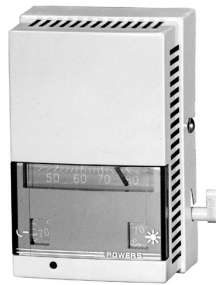


## Powerstar Day/Night/Vent Pneumatic Room Thermostats



192 DN Thermostat chassis.



Typical wall plate and screws.



192 DN Thermostat with plastic cover. Chassis wall plate with easy maintenance plug-in adapters shown (optional).



### Description

Providing proportional dual setpoint, 2-pipe or 3-pipe high air capacity pneumatic room temperature control, the 192 DN or DNV Powerstar Pneumatic Room Thermostat automatically resets the room temperature setpoint during unoccupied hours by changing the air pressure to the thermostat. A manual override feature allows occupants to switch to day mode. The override returns to night mode the following night.

### Features

- Dual setpoint dial available in Fahrenheit or Celsius scales
- Available in direct or reverse acting models
- Sensitive bimetal responds to temperature changes
- Manual override selector for off-hour occupant comfort
- Adjustable changeover pressure
- Large volume air capacity relay
- Integral, field adjustable limit stops
- Wall mounting plate for connection to a variety of rough-in terminal boxes included
- Test port for fast check of output pressure without removing the cover
- Field replaceable thermometer, setpoint dial, restrictor and filters

### Options

- Fixed limit stops to meet government specifications
- Quick-connect air connections for ease of installation and service
- Large, 1/2" setpoint knob for convalescent homes

### Applications

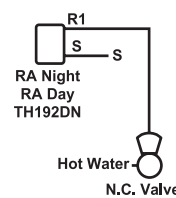
The 192 DN and DNV Powerstar Pneumatic Room Thermostat controls valves and damper actuators in cooling equipment, automatically performing setback changes from day to night. The 192 DNV also performs a purge sequence at night to bring in "vent" outside air to cool the building. A manual override selector switch allows individual room or zone "day" control locally during the night cycle.

During the night control cycle, the 192 DNV models provide a separate output signal (full air supply) allowing ventilation control. Periodic resetting to the "night" control mode during evening or weekend periods using time clocks ensures optimal energy management.

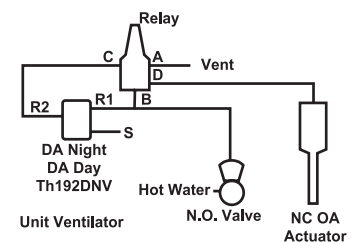
### Recommendation

Use 192 DN or DNV for multiple valves and actuators, with or without high/low limiting controls.

### Application Drawings



Day/Night.



Day/Night/Vent.

Chassis Port R2 Pressure	Operation Mode (Air Supply)	Switching Relay Connection
Full Air Supply	Night (S=25 psi)	A-D
0 psi	Night Occupied	B-D
0 psi	Day (S=18 psi)	B-D

# 192 DN/DNV Thermostat Specifications



For complete conversion kits, refer to the Retroline® Retrostats starting on page F-15.

**Scale; Range**  
Major (minor) Divisions..... 45 to 85°F, 10(2)°F  
(7 to 30°C, 5(1)°C)

**Factory Calibration** .....72°F, 7.5 psi  
(22°C, 31 kPa)

**Sensitivity Adjustment Range** ..... 1 to 4 psi/°F (12 to 50 kPa/°C)

**Factory Setting** ..... 2.5 psi/°F (31 kPa/°C)

**Limit Stop**  
Field Adjustment Range ..... 45/85°F (7/30°C)  
Fixed Limit Stop Range..... 55/75°F (3/24°C)

**Temperature**  
Storage..... -10 to +140°F (-23 to +60°C)  
Ambient Operating ..... 40 to 140°F (4 to 60°C)

**Accuracy at Factory**  
Calibration ..... ±2°F (±1.1°C)  
Response ..... 0.1°F (0.06°C)

**Supply Air Pressure**  
Two Pressure  
Day (recommended)..... 18 psi (124 kPa)  
Night (recommended)..... 25 psi (172 kPa)  
Vent-Day/Night ..... 0 psi (0 kPa)/25 psi (172 kPa)

Two Pressure  
Day (range)..... 15 to 19 psi (103 to 131 kPa)  
Night (range)..... 23 to 30 psi (159 to 207 kPa)

Two Pressure (Honeywell Competitive Model)  
Day/Night..... 13 psi (90 kPa)/18 psi (124 kPa)

Two Pressure (Johnson Controls Competitive Model)  
Day/Night..... 15 psi (103 kPa)/20 psi (138 kPa)

**Nominal Air Consumption for Air Compressor Sizing** ..... 25 scim (6.8 ml/s)

**Nominal Air Capacity for Air Main Sizing** ..... 40 scim (11 ml/s)

**Nominal Chassis Air Capacity**  
Supply ..... 230 scim (63 ml/s)  
Exhaust ..... 150 scim (41 ml/s)

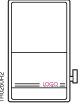
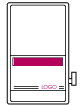
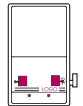

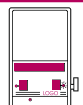
**Air Connections** ..... 5/32" (4 mm) OD tube

**Dimensions (with cover)**  
192 DN ..... 2.16" W x 3.34" H x 1.59" D  
(55 mm W x 85 mm H x 40 mm D)  
192 DNV ..... 2.5" W x 3.34" H x 1.59" D  
(64 mm W x 85 mm H x 40 mm D)

**Shipping Weights**  
Thermostat Chassis and Wall Plate .....0.53 lb. (0.24 kg)  
Plastic Cover .....0.07 lb. (0.04 kg)  
Metal Cover (dual).....0.27 lb. (0.12 kg)

## 192 DN/DNV Thermostat Product Ordering

Model #	Thermostat Chassis Type				Thermostat Chassis & Wall Plate		
	Output	Setpoint	Air Output Capacity	Thermometer & Setpoint Scales	Control Action		
					D (DA) / N (DA)	D (RA) / N (RA)	D (DA) / N (DA) (with Night Vent)
192 DN	Single	Dual (Day and Night)	High (Integral Relay)	°F	<b>192-204</b>	<b>192-205</b>	<b>192-206</b>
192 DNV 3-pipe				°C	<b>192-224</b>	<b>192-225</b>	<b>192-226</b>

Thermostat Covers (Sold Separately)	Plastic Part No.		Metal Part No.
	Desert Beige	White	
 <ul style="list-style-type: none"> <li>• Adjustment setpoint concealed</li> <li>• Indicator setpoint concealed</li> <li>• Chassis thermometer concealed</li> </ul>	<b>192-262</b>	<b>192-262W</b>	<b>192-362</b>
 <ul style="list-style-type: none"> <li>• Adjustment setpoint concealed</li> <li>• Indicator setpoint concealed</li> <li>• Chassis thermometer exposed</li> </ul>	<b>192-264</b>	—	<b>192-364</b>
 <ul style="list-style-type: none"> <li>• Adjustment setpoint key</li> <li>• Indicator setpoint exposed</li> <li>• Chassis thermometer concealed</li> <li>• Use with 1/2" setpoint knob option</li> </ul>	<b>192-269</b>	—	—
 <ul style="list-style-type: none"> <li>• Adjustment setpoint key</li> <li>• Indicator setpoint exposed</li> <li>• Chassis thermometer exposed</li> <li>• Use with 1/2" setpoint knob option</li> </ul>	<b>192-270</b>	—	<b>192-370</b>
 <ul style="list-style-type: none"> <li>• Adjustment setpoint key (night) exposed (day)</li> <li>• Indicator setpoint exposed</li> <li>• Chassis thermometer exposed</li> </ul>	<b>192-271</b>	<b>192-271W</b>	<b>192-371</b>

**Note:**

- DNV 3-pipe model provides full air supply on R2 vent port during night control cycle.
- "Exposed features" are indicated in **red** on corresponding illustration.
- For **194** refer to Powerstar Retroline section.
- Universal Cover sold on page **F-92**.

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Pneumatics