The Viridian VT2218 circulator is a temperature sensing, self-adjusting, variable speed wet rotor circulator with an ECM permanent magnet motor. Operating modes include Delta-T differential temperature, 4 fixed speeds, set point heat, set point cool and boiler protection.

**Viridian® — VT2218**

**Delta-T Variable Speed, ECM High-Efficiency Circulator**

The Viridian VT2218 circulator is a temperature sensing, self-adjusting, variable speed wet rotor circulator with an ECM permanent magnet motor. Operating modes include Delta-T differential temperature, 4 fixed speeds, set point heat, set point cool and boiler protection.

- Delta-T operation maximizes system efficiency and comfort
- High-efficiency ECM motor uses up to 85% less electricity
- Can save hundreds in fuel costs
- LCD displays operating mode, temperature or speed setting, watts, supply & return temperatures
- Easy to program and install
The ONLY temperature sensing pump in its class.

- 22’ Shut-off Head, 18 gpm max flow
- ECM High-Efficiency Motor
- Operates in 5 different modes:
  - Delta-T (5-50°F) Variable Speed [factory pre-set: 20°F ΔT]
  - Multi-Speed (4 fixed speeds)
  - Set Point Heat (50-220°F) variable speed with boiler protection option
  - Set Point Cool (32-100°F)
  - Boiler Protection (100-160°F), protects boiler from low return water temperature
- Full Speed Over-ride
  - For system fill and purging
- Full LCD display showing:
  - Operating mode, temperature or speed setting, watts, supply & return temperatures
  - Error code diagnostics
  - English or Metric units
- Use with a Taco ZVC Zone Valve Control or SR Switching Relay for ON/OFF operation.
- Sensors and Integral Flow Check (IFC®) included
- BIO Barrier® filter protects rotor/bearings from black iron oxide
- Whisper quiet operation
Applications & Performance

Typical Variable Speed Applications

Delta-T
Across a series loop system using zone valves

Delta-T
Across multi-zone radiant manifolds with loop actuators

Radiant Injection with boiler protection
Decreases speed to protect boiler from low return water temperature and flue gas condensation

Boiler Protection — by-pass loop
Increases speed to protect boiler from low return water temperature and flue gas condensation

Heating or Chilled Water Cooling
Fan coil fixed water temperature

Set Point Heat
Decreases speed on temperature rise

Set Point Cool
Increases speed on temperature rise

Performance Curves for the Viridian® VT2218
Specifications

- Maximum Shutoff Head: 22 feet
- Maximum Flow: 18 gpm
- Maximum Operating Pressure: 125 psi (862 kPa)
- Maximum Water Temp: 230°F (110°C)
- Electrical specifications:
  - Voltage: 110-120V, 50/60 Hz, Single phase
  - Operating Power Range: 9W to 58W
  - Maximum AMP Rating: 0.67
- Equipped with a cast iron casing and should be used for closed loop systems only.
- Taco circulator pumps are for indoor use only
- Acceptable for use with water or maximum of 50% water/glycol solution.

Materials of Construction:
- Casing: Cast Iron
- Integral Flow Check (IFC):
  - Body, Plunger: Acetal
  - O-ring Seal: EPDM
  - Spring: Stainless Steel
- Stator Housing: Aluminum/Composite
- Cartridge: Stainless Steel
- Impeller: Non-Metallic
- Shaft: Ceramic
- Bearings: Ceramic
- O-Ring & Gaskets: EPDM

Applications

The VT2218 is a temperature sensing, variable speed circulator ideal for Delta-T or setpoint temperature applications. Typical uses include hydronic systems zoned with zone valves, radiant loops, injection pumping, snow-melt or hydro-air fan coils. Can also be used in constant speed mode for zoning with circulators, indirect water heaters or primary boiler loops.

Pump Dimensions & Weights

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
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<td>207</td>
<td>6</td>
<td>153</td>
<td>3-1/4</td>
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Electrical Data

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<th>Hz</th>
<th>Ph</th>
<th>Max.Amps</th>
<th>RPM</th>
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Motor Type: ECM, Permanent Magnet, Electronically Protected

Maximum Watts

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<tr>
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<th>Speed 2</th>
<th>Speed 3</th>
<th>Speed 4</th>
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Mounting Positions

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<th>Flange Orientation</th>
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<td>Standard (S)</td>
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