VT2218 ECM High-Efficiency Circulator

Taco 00e™ series — VT2218 Delta-T Variable Speed circulator is a temperature sensing, self-adjusting, variable speed, high-efficiency 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
- Sure Start automatic unblocking mode
- Standard 2-bolt and universal 4-bolt flange configurations available
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 backlit LCD displays:
  - 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
- Whisper quiet operation
- BIO Barrier® protects the pump from black system contaminants
- Sure Start mode automatically corrects locked rotor condition
- Optional 4-bolt flange reduces SKU’s and provides universal fit-up to any flange position
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 Taco 00e™ series—VT2218
Specifications

- Maximum Shut-off Head: 22 feet
- Maximum Flow: 18 gpm
- Maximum Operating Pressure: 125 psi (862 kPa)
- Maximum Water Temp: 230°F (110°C)
- Minimum Water Temp: 36°F (2°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
- Stator Housing: Aluminum/Composite
- Cartridge: Stainless Steel
- Impeller: Non-Metallic
- Shaft: Ceramic
- Bearings: Ceramic
- O-Ring & Gaskets: EPDM
- Integral Flow Check (IFC®):
  - Body: Plunger
  - O-ring Seal: EPDM
  - Spring: Stainless Steel

Applications

The VT2218 is a temperature sensing, variable speed, high-efficiency wet rotor circulator with an ECM permanent magnet motor. It’s ideal for Delta-T or setpoint temperature applications. Typical uses include hydronic systems zoned with zone valves, radiant loops, injection pumping, snowmelt 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>Flange Code</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>Ship Wt.</th>
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<tbody>
<tr>
<td>VT2218F</td>
<td>S</td>
<td>8-1/8</td>
<td>207</td>
<td>6</td>
<td>153</td>
<td>3-1/4</td>
<td>82</td>
<td>2</td>
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<tr>
<td>VT2218U/4</td>
<td>U</td>
<td>8-1/8</td>
<td>207</td>
<td>6</td>
<td>153</td>
<td>3-1/4</td>
<td>82</td>
<td>2</td>
</tr>
</tbody>
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Electrical Data

- All Models: 110/120V 50/60 Hz
- Model: 1-Phase
- Max. Amps: 0.67
- RPM: 1650 - 4200

Motor Type: ECM, Permanent Magnet, Electronically Protected

Maximum Watts

- Speed 1: 9
- Speed 2: 24
- Speed 3: 40
- Speed 4: 58

Mounting Positions

- Standard (S)
- Universal (U)

Flange Orientation