



## Optum brings leading edge condensing heat exchanger technology to Beacon Morris' successful unit heater product offering.

With tri-metal stainless steel heat exchanger technology, proprietary pre-mix burner design and fully modulating configurations, Optum provides industry leading efficiencies of up to 99%!

Available in 6 sizes (50 – 400 MBH), in both natural gas and LP gas, Optum can be vented through PVC and CPVC for application flexibility. All units are also field convertible to separated combustion.

- Tri-Metal Stainless Steel Heat Exchanger
  - -Unique Brass/Aluminum Fin Design
- Proprietary Pre-Mix Burner Design
  - -Auto Adjusts to Altitude

- 99% Thermal Efficiency\*
- 2-Stage and Modulating Gas Controls
- 3:1 Modulating Turndown
- Brushed Stainless Steel Jacket

\*Up to 99% maximum efficiency at full turndown, 95+% certified efficiency at high fire.

| Manufacturer                  | Modine   | Reznor   | Beacon Morris  |
|-------------------------------|--|--|--|
| Model                         | PTC  | UEAS   | Optum (BH)   |
| Sizes                         | 10   | 4  | 6  |
| MBH                           | 55-310   | 131-305  | 50-400   |
| CFM                           | 1,097-5,400  | 2.256-4.283  | 790-6,464  |
| ANSI 83.8 Efficiency          | 93%  | 91-93%   | 95+%   |
| Fan Type                      | Propeller  | Propeller  | Propeller  |
| Gas Control                   | 1-Stage  | 1-Stage  | 2-Stage/Modulating   |
| Turndown Ratio                | 1:1  | 1:1  | 3:1  |
| Venting Type                  | Separated Combustion   | Separated Combustion   | Standard Combustion Field Convertible to<br>Separated Combustion with Conversion Kit |
| Warranty                      | Unit: 1 Year<br>Heat Exchanger: 10 Years   | Unit: 1 Year<br>Heat Exchanger: 10 Years   | Unit: 1 Year<br>Heat Exchanger: 10 Years   |
| Voltage                       | 115/1/60<br>208/1/60<br>230/1/60<br>208/3/60<br>230/3/60<br>460/3/60<br>575/3/60             | 115/1/60   | 115/1/60<br>208/1/60<br>230/1/60<br>208/3/60<br>230/3/60<br>460/3/60<br>575/3/60     |
| Condensate Pump & Neutralizer | Optional   | Not Available  | Optional   |
| Convenience Outlet            | Optional   | Not Available  | Not Available  |
| Burner                        | Multiple In-Shot   | Patented Single Burner   | Proprietary Single Burner Design   |
| Orifice                       | Multiple Orifice   | Single Orifice   | Single Orifice   |
| Fan Guard                     | Size 110 and Smaller: Fingerproof Guard Sizes 135+: Standard Guard (Opt. Fingerproof)        | Standard Guard   | OSHA Guard   |
| Cabinet                       | 20 Ga. Aluminized Steel  | G30 Galvanized Steel   | 20 Ga. 430 Brushed Stainless Steel   |
| Paint                         | Electrostatically Applied, Baked-On Gray-Green<br>Polyester Powder Paint (7-mil Thickness)   | Pre-Coat or Powdercoat RAL 1001 White Paint Finish   | Brushed Stainless Steel  |
| Motor                         | TE   | ODP (Opt TE)   | ODP  |
| Heat Exchanger                | Primary: 18 Ga. Aluminized (Opt. 409 Stainless)<br>Secondary: 20 Ga. AL29-4C Stainless Steel | Primary: Tcore3 Titanium Stabilized Aluminized Steel (Opt. 409 Stainless)<br>Secondary: Extruded Aluminum MacroChannel | 0.043 in. Thickness 409 Stainless Steel Tube with Brass & Aluminum Fins              |
| Flue Collector                | 20 Ga. AL29-4C Stainless Steel   | N/A  | 321 Stainless Steel  |
| Condensate Float              | Yes  | No   | Yes  |
| External LED Status           | Yes  | No   | Yes  |
| Venting                       | Sizes 55-135 - 3 in. PVC<br>Sizes 156-260 - 4 in. PVC<br>Size 310 - 6 in. Steel              | 4 in. PVC Flue Vent, 6 in Single Wall Combustion Air   | Size 50/150 - 2 in. PVC<br>Size 200 - 3 in. PVC<br>Size 300/400 - 4 in. PVC          |
| Max Vent                      | 50 ft.   | 50 ft.   | 50 ft.   |
| 90° Elbow Equivalent Length   | 3 in. & 4 in. diameter = 6 ft.<br>6 in. diameter = 7 ft.                                     | 8 ft.  | 5 ft.  |
| Supply Gas Pressure           | 6-7 in WC Natural<br>11-14 in WC Propane   | 5-14 in WC Natural<br>11-14 in WC Propane  | 5-14 in WC Natural<br>8-14 in WC Propane   |
| Manifold Pressure             | 3.5 in WC Natural<br>10 in WC Propane  | 3.5 in WC Natural<br>10 in WC Propane  | 0 in WC (Neg Reg Valve)  |
| Altitude                      | Requires High Altitude Kit Above 2,000 ft.   | Manual Adjust Gas Valve  | Auto-Adjusts   |
| Suspension                    | 4 Point<br>Opt. 2 Point Kit  | 4 Point  | 4 Point  |
| Concentric Vent Kit           | Yes  | Yes  | Yes  |
| Disconnect or On/Off Switch   | Opt. On/Off Switch   | Disconnect Switch Door Safety Switch   | Not Available  |
| Propane Conversion            | Optional   | Included   | Included   |
| Condensate Connection         | Requires 2 Condensate Connections<br>(Vent Pipe and Secondary Heat Exchanger)                | Requires 2 Condensate Connections<br>(Vent Pipe and Secondary Heat Exchanger)  | One Condensate Connection<br>(Bottom of Unit)  |
| Condensate Trap               | Field Provided   | Field Provided   | Standard   |



