Modulatic® 
Packaged Once-Through Steam Generators

SPECIFICATIONS 150 BHP

DESIGN DETAILS
General Information
Type of Boiler: Watertube
Model Series: 4742
Rated Capacity: 150 BHP
Equivalent Evaporation: 5,175 lb/hr from and at 212°F
Thermal Output: 5,025,000 Btu/hr
Construction Codes: ASME, Hartford, National Board
Boiler Shell Insulation: Mineral Wool Insulation
Approx. Shipping Weight: 7,200 lbs

Power Requirements
Main Power: 230/460/575 VAC, 3 Ph, 60 Hz
Control Power: 120 VAC, 1 Ph, 60Hz
HP required by pump: 7 1/2 HP – for 300 psi
HP required by blower: 5 HP – for 300 psi

Overall Dimensions
L x W x H: 100” x 60” x 109”

Pressure psig
<table>
<thead>
<tr>
<th>Design</th>
<th>Operating</th>
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</thead>
<tbody>
<tr>
<td>15</td>
<td>13 max.</td>
</tr>
<tr>
<td>300</td>
<td>250 max.</td>
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<tr>
<td>600</td>
<td>540 max.</td>
</tr>
<tr>
<td>900</td>
<td>810 max.</td>
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* Consult factory for pressures up to 3200 psig

Performance Data
Fuel Consumption @ Rated Output
Gas: 6,350 scfh
Oil (No. 2): 59.4 gal/hr

Turndown Ratios:
Oil & Gas: 8 to 1

Combustion and Ventilating Air Required:
Oil & Gas: 1,738 scfm

Customer Connections
Stack Outlet: 18” O.D.
Steam Outlet:
15 psi: 6” ASA
300, 600 psi: 3” NPT
900 psi: 1 1/2” 600#
Main Gas Supply: 3” NPT
Pilot Gas Supply: 1/2” NPT
Oil Supply: 3/4” NPT
Oil Return: 1/2” NPT
Atomizing Air: 3/8” NPT
Feedwater Inlet: 2 1/2” NPT
Blowdown Outlet: 1” NPT
Coil Blowdown Outlet: 1” NPT
Water Pump Relief Valve: 1/2” NPT
Trap Return:
15, 300, 600 psi: 1” NPT
900 psi: 1” NPT
Safety Valve Outlet: 2 1/2” NPT

- Note: varies based on set pressure

Controls
Steam Pressure, Low Water Cutoff, Flame Failure Protection, Coil Temperature Limit.

Burner
Manufacturer: Vapor Power
Fuel: Natural Gas, No. 2 Fuel Oil, or Combination
Type (gas): Multiple Orifice Nozzle
Type (oil): Air Atomized

Fuel Specifications:
Oil (No. 2): 141,000 Btu/U.S. gal
Gas: 1000 Btu/cu ft
Main Burner: 1 psig
Pilot Burner: 6” W.C.

Atomizing Air Requirements:
Oil (No. 2): 10 scfm @ 70 psig
Gas: None required

Ignition Type:
Oil & Gas: Electric spark - interrupted gas pilot

VAPOR POWER INTERNATIONAL

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