

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

Pressure psig

Design	Operating
15	13 max.
300	250 max.
600	540 max.
900	810 max.

* Consult factory for pressures up to 3200 psig

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
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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"
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Performance Data

Fuel Consumption @ Rated Output

Gas	6,350 scfh
Oil (No. 2)	59.4 gal/hr

Turndown Ratios:

Oil & Gas	8 to 1
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Combustion and Ventilating Air Required:

Oil & Gas	1,738 scfm
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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

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