GE Power & Water

Waukesha* gas engines VHP* Series Four*

L7044GSI

1120 - 1680 BHP (835 - 1253 kWb)

GE's Waukesha Series Four rich-burn engines are the engines of choice for the harshest and most demanding gas compression, power generation and mechanical drive applications. The Series Four engines can reliably produce more power on hot field gases, at high altitudes, and in remote locations, all while delivering low emissions when paired with a 3-way catalyst (NSCR).

technical data

Cylinders	V12
Piston displacement	7040 cu. in. (115 L)
Compression ratio	8:1
Bore & stroke	9.375" x 8.5" (238 x 216)
Jacket water system capacity	100 gal. (379 L)
Lube oil capacity	190 gal. (719 L)
Starting system	125 - 150 psi air/gas 24V electric

Dimensions l x w x h inch (mm)

147 (3734) x 85 (2159) x 97.83 (2485)

Weights lb (kg)

21,000 (9,525)

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*Trademark of General Electric Company

performance data

Intercooler Water Temperature 130°F (54°C)		1200 RPM	1000 RPM
	Power bhp (kWb)	1680 (1253)	1400 (1044)
	BSFC (LHV) Btu/bhp-hr (kJ/kWh)	7881 (11149)	7693 (10882)
	Fuel Consumption Btu/hr x 1000 (kW)	13240 (3881)	10781 (3156)
Emissions	NOx g/bhp-hr (mg/Nm^3 @ 5% O_2)	13.30 (4922)	12.90 (4782)
	CO g/bhp-hr (mg/Nm^3 @ 5% O_2)	11.20 (4140)	9.40 (3477)
	NMHC g/bhp-hr (mg/Nm^3 @ 5% 0_2)	0.35 (131)	0.34 (127)
	THC g/bhp-hr (mg/Nm^3 @ 5% O_2)	2.40 (873)	2.30 (844)
Heat Balance	Heat to Jacket Water Btu/hr x 1000 (kW)	3849 (1128)	3227 (946)
	Heat to Lube Oil Btu/hr x 1000 (kW)	567 (166)	462 (135)
	Heat to Intercooler Btu/hr x 1000 (kW)	179 (53)	122 (36)
	Heat to Radiation Btu/hr x 1000 (kW)	724 (212)	642 (188)
	Total Exhaust Heat Btu/hr x 1000 (kW)	3900 (1143)	2962 (868)
Intake/ Exhaust System	Induction Air Flow scfm (Nm^3/hr)	2424 (3651)	1972 (2970)
	Exhaust Flow lb/hr (kg/hr)	11273 (5113)	9171 (4160)
	Exhaust Temperature °F (°C)	1179 (637)	1112 (600)

All data according to full load and subject to technical development and modification.

Consult your local GE Power & Water's representative for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.

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APPLICATION INFORMATION

DRIVER

Make:	Waukesha
Model:	L7044GSI
Horsepower:	1680
RPM:	1200
Compression Ratio:	8
Exhaust Flow Rate:	8253
Exhaust Temperature:	1179
Reference:	7044GSI EngCalc
Fuel:	Natural Gas
Annual Operating Hours:	8760

UNCONTROLLED EMISSIONS DATA

	g/bhp-hr	lb/hr	Tons/Year
NO_x:	13.30	49.26	215.76
CO:	11.50	42.59	186.56
THC:	2.40	8.89	38.93
NMHC:	0.36	1.33	5.84
NMNEHC:	0.06	0.22	0.97
HCHO:	0.05	0.19	0.81
Oxygen:	0.30%		

CATALYST ELEMENT

Model:	RT-2415-T
Catalyst Type:	NSCR, Standard Precious Metals Group
Substrate Type:	Brazed
Element Size:	Rectangle, 24" x 15" x 3.5"
Element Quantity:	5

POST CATALYST EMISSIONS DATA

	g/bhp-hr	lb/hr
NO_x:	< 0.41	1.52
CO	< 0.34	1.26
VOC	< 0.14	0.52

****POST CATALYST EMISSIONS ARE ONLY GUARANTEED FOR CATALYST ELEMENTS SUPPLIED BY EMIT**