VHP Series Five L7044GSI S5

With ESM2 and emPact Emission Control System

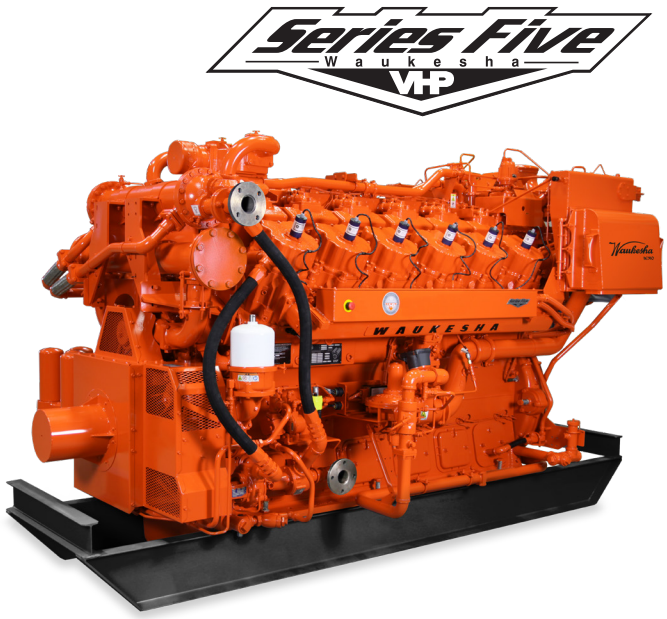
1900 BHP (1416 kWb) @ 1200 RPM

Technical Data

Cylinders	V12
Piston displacement	7040 cu. in. (115 L)
Compression ratio	9.7:1
Bore & stroke	9.375" x 8.5" (238 x 216mm)
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)
24,250 (11,000)



INNIO's Waukesha* VHP* Series Five rich-burn engines combine the most advanced technology available with the history and experience of the VHP platform, resulting in an engine with 13% more power, better fuel flexibility, 10% lower fuel consumption, up to 20% lower lifecycle costs, and over 30% longer service intervals.

Although Series Five engines are capable of higher power levels than previous versions, the stresses on the components have not increased. This is made possible by enhanced rich-burn combustion through the Miller Cycle, an improved cylinder head design that reduces temperatures in key regions, and an optimized piston design.

Used previously on the P9394GSI engine, the Miller Cycle moves work from the piston to the turbocharger, reducing combustion and exhaust temperatures and making the L7044GSI S5 the most fuel efficient VHP engine ever.

The improved cylinder head design reduces key internal temperatures by up to 40%, increasing reliability and extending the life of the head.

Performance Data

Intercooler Water Temperature 130°F (54°C)		1200 RPM	1000 RPM
	Power bhp (kWb)	1900 (1416)	1583 (1181)
	BSFC (LHV) Btu/bhp-hr (kJ/kWh)	7063 (9993)	6913 (9780)
	Fuel Consumption Btu/hr x 1000 (kW)	13385 (3923)	10962 (3213)
Engine-Out Emissions	NOx g/bhp-hr (mg/Nm³ @ 5% O_2)	10.9 (4680)	10.8 (4748)
	CO g/bhp-hr (mg/Nm³ @ 5% O_2)	9.2 (3950)	7.6 (3340)
	NMHC g/bhp-hr (mg/Nm³ @ 5% O_2)	0.11 (48)	0.11 (48)
	THC g/bhp-hr (mg/Nm³ @ 5% O_2)	0.4 (172)	0.5 (220)
	Formaldehyde g/bhp-hr (mg/nm³ @ 5% O_2)	0.05 (19)	
Heat Balance	Heat to Jacket Water Btu/hr x 1000 (kW)	3512 (1029)	2947 (864)
	Heat to Lube Oil Btu/hr x 1000 (kW)	518 (152)	395 (116)
	Heat to Intercooler Btu/hr x 1000 (kW)	517 (152)	356 (104)
	Heat to Radiation Btu/hr x 1000 (kW)	731 (214)	636 (186)
	Total Exhaust Heat Btu/hr x 1000 (kW)	3612 (1059)	2860 (838)
Intake/ Exhaust System	Induction Air Flow scfm (Nm³/hr)	2391 (3601)	1958 (2949)
	Exhaust Flow lb/hr (kg/hr)	11622 (5272)	9521 (4319)
	Exhaust Temperature °F (°C)	1108 (598)	1080 (582)

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

Data based on commercial quality natural gas, 100 °F ambient temperature and 850 ft elevation. Contact your local Waukesha representative for site specific technical data. Fuel consumption and BSFC data based on fuel LHV with a tolerance per ISO 3046/1 of -0/+5%. Heat balance and intake/exhaust data is nominal.

Consult your local Waukesha 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.

INNIO* is a leading solutions provider of gas engines, power equipment, a digital platform and related services for power generation and gas compression at or near the point of use. With our Jenbacher* and Waukesha* product brands, INNIO pushes beyond the possible and looks boldly toward tomorrow. Our diverse portfolio of reliable, economical and sustainable industrial gas engines generates 200 kW to 10 MW of power for numerous industries globally. We can provide life cycle support to the more than 48,000 delivered gas engines worldwide. And, backed by our service network in more than 100 countries, INNIO connects with you locally for rapid response to your service needs. Headquartered in Jenbach, Austria, the business also has primary operations in Welland, Ontario, Canada, and Waukesha, Wisconsin, US.

Find your local support online:
www.innio.com/en/company/providers

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