



Image is representative of engine model

# Waukesha\* gas engines VHP\* Series Four\* Enginator\* generating system VHP3604GSI/GSID

500 - 600 kW

GE's Waukesha VHP generator sets are built for efficiency, durability and longevity providing reliable power for continuous power applications.

Reliable six cylinder VHP generator sets, rated at 315-540 kWe at 50 Hz and 345-600 kWe at 60 Hz, are ideal for remote applications.

## technical data

Waukesha engine	F3524GSI, four cycle
Cylinders	Inline 6
Piston displacement	3520 cu. in. (58 L)
Compression ratio	8:1
Bore & stroke	9.375" x 8.5" (238 x 216 mm)
Jacket water system capacity	48.5 gal. (184 L)
Lube oil capacity	72 gal. (273 L)
Starting system	24V electric

### Dimensions l x w x h inch (mm)

Heat exchanger	205 (5260) x 68 (1730) x 106 (2690)
Water connection	188 (4780) x 66 (1680) x 106 (2690)
Radiator	217 (5510) x 85 (2160) x 124 (3150)

### Weights lb (kg)

Heat exchanger	24750 (11225)
Water connection	23750 (10775)
Radiator	27500 (12475)



imagination at work

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# performance data

## Continuous Power

Intercooler Water Temperature 130°F (54°C)

		60 Hz 1200 RPM	50 Hz 1000 RPM
	Power kW (heat exchanger/water connection cooling)	600	540
	Power kW (radiator cooling)	560	500
	BSFC (LHV) Btu/bhp-hr (kJ/kWh)	8035 (11366)	7626 (10789)
	Fuel Consumption Btu/hr x 1000 (kW)	6749 (1976)	5872 (1720)
Emissions	NOx g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )	15.60 (5795)	15.50 (5748)
	CO g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )	12.80 (4755)	12.40 (4578)
	NMHC g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )	0.15 (57)	0.16 (58)
	THC g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )	0.50 (203)	0.60 (215)
Heat Balance	Heat to Jacket Water Btu/hr x 1000 (kW)	2046 (600)	1773 (520)
	Heat to Lube Oil Btu/hr x 1000 (kW)	297 (87)	248 (73)
	Heat to Intercooler Btu/hr x 1000 (kW)	114 (33)	79 (23)
	Heat to Radiation Btu/hr x 1000 (kW)	379 (111)	346 (101)
	Total Exhaust Heat Btu/hr x 1000 (kW)	1905 (558)	1581 (463)
Intake/Exhaust System	Induction Air Flow scfm (Nm <sup>3</sup> /hr)	1236 (1861)	1076 (1620)
	Exhaust Flow lb/hr (kg/hr)	5752 (2609)	5005 (2270)
	Exhaust Temperature °F (°C)	1196 (647)	1144 (618)
	Radiator Air Flow scfm (m <sup>3</sup> /min) (radiator cooling)	57000 (1614)	54000 (1529)

**Rating Standard:** The Waukesha Enginotor ratings are based on ISO 3046/1-1995 with an engine mechanical efficiency of 90% and auxiliary water temperature T<sub>cr</sub> as specified limited to ±10°F (±5°C). Ratings also valid for ISO 8528 and DIN 6271, BS 5514 standard atmospheric conditions.

**Continuous Power Rating:** The highest electrical power output of the Enginotor available for an unlimited number of hours per year, less maintenance. It is permissible to operate the Enginotor with up to 10% overload for two hours in each 24 hour period.

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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