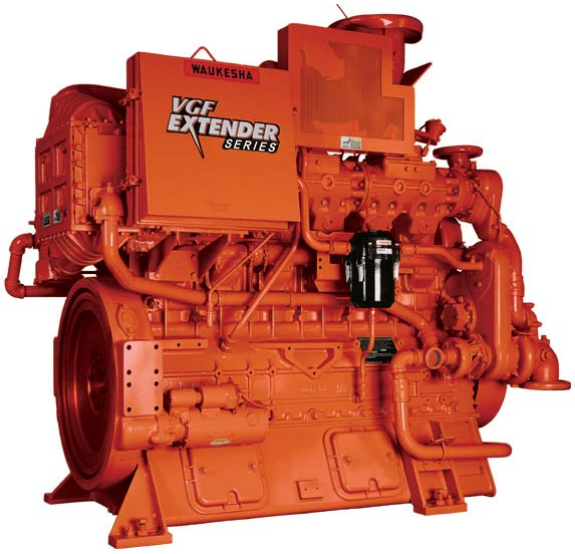
GE Energy
Gas Engines



Waukesha* gas engines VGF*

F18GL

310 - 440 BHP (230 - 330 kWb)

The VGF series of high-speed engines are built with the durability expected from a medium-speed engine. This series of engines is designed for a wide range of stationary, spark-ignited, gaseous fuel applications and has a high power-to-weight ratio operating up to 1800 RPM.

The VGF Series simplifies maintenance procedures. The engine design allows easy access to the oil pump, main bearings and rod bearings—without the need to lower the oil pan. Commonality of parts between VGF models reduces the amount of inventory needed for servicing a fleet. Standard design features, such as independent heads, simplify maintenance work.

technical data

Cylinders	Inline 6	
Piston displacement	1096 cu. in. (18 L)	
Compression ratio	LCR 8.7:1, HCR 11:1	
Bore & stroke	5.98" x 6.5" (152 x 165 mm)	
Jacket water system capacity	16 gal. (60 L)	
Lube oil capacity	44 gal. (166 L)	
Fuel Pressure Range	25 - 50 psi (1.72 - 3.45 bar)	
Starting system	150 psi max. air/gas 24V DC electric	
Cooling Water Flow at	**1500 rpm**	**1800 rpm**
Jacket Water gpm (l/m)	103 (390)	130 (492)
Aux. Water gpm (l/m)	25 (95)	40 (152)

Dimensions l x w x h inch (mm)

80.5 (2043) x 50 (1264) x 68 (1727)

Weights lb (kg)

5300 (2400)

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performance data

Intercooler Water Temperature 130°F (54°C)		1800 RPM	1500 RPM
	Power bhp (kWb)	400 (300)	335 (250)
	BSFC (LHV) Btu/bhp-hr (kJ/kWh)	7124 (10026)	6920 (9789)
	Fuel Consumption Btu/hr x 1000 (kW)	2850 (836)	2318 (680)
Emissions	NOx g/bhp-hr (mg/Nm^3 @ 5% O_2)	2.00 (810)	2.4 (982)
	CO g/bhp-hr (mg/Nm^3 @ 5% O_2)	1.30 (535)	1.4 (563)
	NMHC g/bhp-hr (mg/Nm^3 @ 5% 0_2)	0.27 (108)	0.31 (125)
	THC g/bhp-hr (mg/Nm^3 @ 5% O_2)	1.7 (683)	2.1 (835)
Heat Balance	Heat to Jacket Water Btu/hr x 1000 (kW)	738 (216)	627 (184)
	Heat to Lube Oil Btu/hr x 1000 (kW)	95 (28)	68 (20)
	Heat to Intercooler Btu/hr x 1000 (kW)	169 (49)	113 (33)
	Heat to Radiation Btu/hr x 1000 (kW)	74 (22)	69 (20)
	Total Exhaust Heat Btu/hr x 1000 (kW)	810 (237)	633 (186)
Intake/ Exhaust System	Induction Air Flow scfm (Nm^3/hr)	860 (1320)	699 (1075)
	Exhaust Flow lb/hr (kg/hr)	3748 (1699)	3048 (1383)
	Exhaust Temperature °F (°C)	836 (447)	807 (430)

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

Consult your local GE Energy'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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