

VGF F18GL

310 - 440 BHP (230 - 330 kWb)

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 | 120 psi max. air/gas 24V DC electric | |
| Cooling Water Flow at Jacket Water gpm (I/m) Aux. Water gpm (I/m) | 1500 rpm 103 (390) 25 (95) | 1800 rpm 130 (492) 40 (152) |

Dimensions I x w x h inch (mm)

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

Weights Ib (kg)

6,200 (2,812)



The Waukesha* VGF* series of highspeed 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.



Performance Data

| ercoo | ler 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/Nm³ @ 5% O ₂) | 1.30 (535) | 1.4 (563) |
| | NMHC g/bhp-hr (mg/Nm³ @ 5% 0 ₂) | 0.27 (108) | 0.31 (125) |
| | THC g/bhp-hr (mg/Nm³ @ 5% O ₂) | 1.7 (683) | 2.1 (835) |
| | Heat to Jacket Water Btu/hr x 1000 (kW) | 738 (216) | 627 (184) |
| 9 | Heat to Lube Oil Btu/hr x 1000 (kW) | 95 (28) | 68 (20) |
| Heat Balance | 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) |
| <u>~</u> ₩ ∪ | Induction Air Flow scfm (Nm³/hr) | 860 (1320) | 699 (1075) |
| Exhaust System | 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 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.

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