

Olympian OG20 Gas Generator Set

Engine Model	3.6L NA Inline
No. of Cylinders	4
Bore x Stroke	105.54 mm x 102.87 mm
Displacement	3.6 Liter
Compression Ratio	9.8:1
Aspiration	Naturally Aspirated
Fuel / Ignition System	Electronic Regulator / Spark Ignition
Governor	Electronic – G2 Class ¹ capable

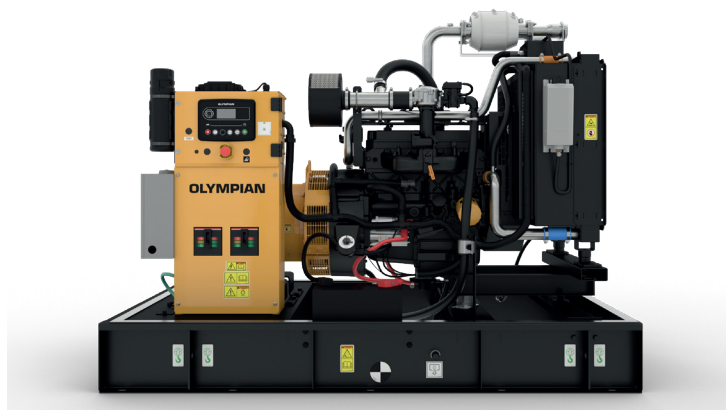


Image shown may not reflect actual configuration

Model	Emergency Standby		Demand Response		Prime		Emission Strategy
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane	
OG20	20 kW						U.S. EPA Certified for Emergency and Non-Emergency Applications

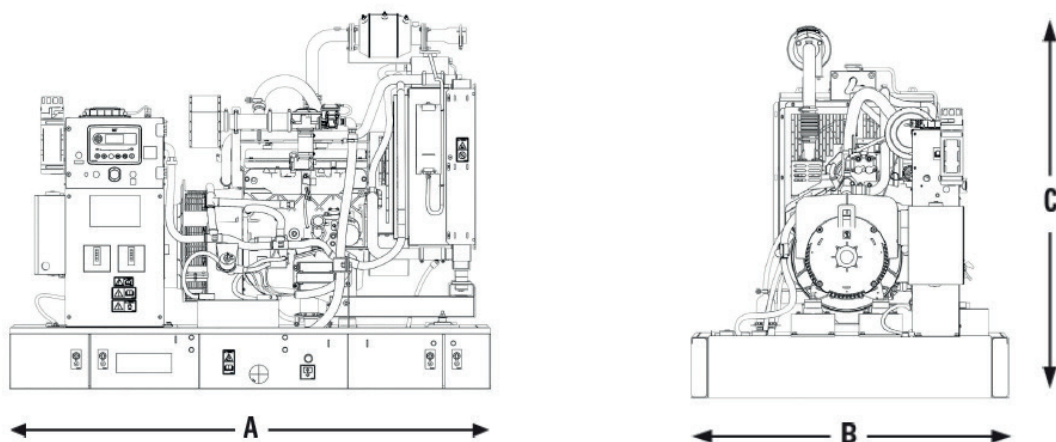
Package Performance

Performance	Emergency Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Frequency, Hz	60					
Genset power rating with fan, kW (3-Phase / 1-Phase)	20 / 20					
Performance number	EM7752 / EM7754	EM7748 / EM7750	EM7768 / EM7770	EM7764 / M7766	EM7760 / EM7762	EM7756 / EM7758
Fuel System / Fuel Consumption						
Minimum required fuel delivery pressure at rail connector, psi (in. water)	0.28 (8)					
Maximum required fuel delivery pressure at rail connector, psi (in. water)	0.43 (12)					
100% load with fan, kg/hr (CFH)	6.7 (303)	6.7 (125)	6.7 (303)	6.7 (125)	9.6 (433)	10.1 (188)
75% load with fan, kg/hr (CFH)	5.3 (240)	5.3 (99)	5.3 (240)	5.3 (99)	8.0 (360)	8.6 (160)
50% load with fan, kg/hr (CFH)	4.2 (190)	4.2 (78)	4.2 (190)	4.2 (78)	6.8 (307)	7.3 (134)
Cooling System²						
Radiator air flow, m³/min (CFM)	53.7 (1896)					
Radiator air flow restriction (system), kPa (in. water)	0.12					
Engine coolant capacity, L (gal)	2.5 (0.6)					
Radiator coolant capacity, L (gal)	18.3 (4.8)					
Total coolant capacity, L (gal)	20.8 (5.5)					
Inlet Air						
Combustion air inlet flow rate, m³/min (CFM) (kg/hr)	1.7 (59) (111)				1.6 (57) (104)	1.6 (57) (105)
Maximum allowable intake air restriction, kPa (in. water)	3.5 (14)					
Exhaust System						
Exhaust gas temperature, °C (°F)	688 (1270)	749 (1380)	688 (1270)	749 (1380)	743 (1369)	741 (1366)
Exhaust gas flow rate, m³/min (CFM) (kg/hr)	5.9 (208) (117)				8.1 (286) (114)	8.1 (286) (116)
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (40.0)		—			
Heat Rejection						
Heat rejection to jacket water, kW (BTU/min)	30 (1706)	36 (2047)	30 (1706)	36 (2047)	32 (1819)	91.8 (5221)
Heat rejection to atmosphere from engine, kW (BTU/min)	38.5 (2189)	71 (4037)	38.5 (2189)	71 (4037)	75 (4265)	183.0 (10407)
Heat rejection to exhaust (total), kW (BTU/min)	23 (1308)	50 (2843)	23 (1308)	50 (2843)	24 (1365)	45.0 (2559)

Lube System	Emergency Standby		Demand Response		Prime	
	Natural Gas	Propane	Natural Gas	Propane	Natural Gas	Propane
Oil dry fill capacity, L (gal)	8.3 (2.2)					
Maximum oil temperature, °C (°F)	101 (214)					
Maximum oil capacity, L (gal)	7.6 (2.0)					
Minimum oil capacity, L (gal)	5.7 (1.5)					
Emissions Meets (EPA Stationary Non-Emergency Limits)						
NOx + HC, g/kW-hr	0.8					
CO, g/kW-hr	20.6					

Alternator ³	60 Hz	60 Hz				
	1-Phase	3-Phase				
Voltages, V	240 / 120	480 / 277	240 / 120	240 / 139	208 / 120	600 / 346
Temperature rise ⁴ , °C	105					
Motor starting capability @ 30% Voltage Dip, skVA	46	52	41	41	41	59
Frame Size	M1736L4	M1713L4				
Excitation	SE					AREP
Rated Current, Amps – Natural Gas / Propane						
Emergency Standby	83 / 83	30 / 30	60 / 60	60 / 60	69 / 69	24 / 24
Demand Response	83 / 83	30 / 30	60 / 60	60 / 60	69 / 69	24 / 24
Prime	83 / 83	30 / 30	60 / 60	60 / 60	69 / 69	24 / 24

Weights & Dimensions



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight kg (lb)
1950 (77)	1300 (51)	1530 (60)	664 (1463)

Note: General configuration not to be used for installation. See general dimension drawings for detail.

Applicable Codes and Standards

CSA C22.2 No 100-04, UL 489, UL 869, ULC 2200, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-22, NEMA MG 1-33 and facilitates the compliance to NFPA 37, NFPA 70, NFPA 99, NFPA 110.

Codes may not be available for all model configurations. Site level review needed for NFPA70. Please consult your local Olympian representative for availability.

EMERGENCY STANDBY POWER (ESP): Typical usage of 50 hours per year with a maximum of 200 hours per year with varying loads. Average variable load factor is 70% of the ESP rating. No overload is available. Not for maintained utility paralleling applications.

DEMAND RESPONSE POWER: Output available with varying load when participating in a demand response or economic dispatch program. Average power output is 70% of the standby rated kW. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME POWER: Output available with varying load for an unlimited time. Average power output is 70% of the prime rated kW. Typical peak demand is 100% of prime rated kW.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046 standard conditions.

1 CFH = 1000 BTU/HR

Fuel Rates are based on LHV of 35.83 MJ/Nm³ for Natural Gas and 92.1 MJ/Nm³ for Propane Vapor @77°F (25°C) and 328 ft (100 m) above sea level and a relative humidity of 30%. Temperatures and elevations greater than this standard must be accounted for as follows: A derate of 1.5% for every 5°C above 20°C air inlet temperature. Derate of 6% for every 500 m. Refer derate chart for more details.

Definitions and Conditions

- ¹ Governing Class capability as per ISO-8528-5. Consult your local Olympian representative for configuration and site specific transient performance classification.
- ² For ambient and altitude capabilities, consult your Olympian representative. Air flow restriction (system) is added to the existing restriction from the factory.
- ³ Motor starting capability is based on the assumption of 0.6 pf. Temperature rise is based on the rating type and the respective site conditions.
- ⁴ Generator temperature rise is based on 40°C (104°F) ambient per NEMA MG1-32.