Shown with optional equipment.

Cat® G3608 with ADEM™4 GAS ENGINE

Cat® G3600 ADEM™4 (A4) engines provide a wide range of power options to fit your gas compression application. G3600 A4 engines bring the highest uptime in the industry and long operating intervals between overhaul. Operators that use G3600 A4 engines in their fleet enjoy virtually no unscheduled downtime, the right power for their application, the lowest operating costs, and emissions compliance. Ideal applications for G3600 A4 engines include centralized gathering stations, gas processing, transmissions, and storage applications.

Cat G3608 A4 Gen 1 gas engine with standard ratings: 1864 bkW (2500 bhp) @ 1000 rpm and Cat G3608 A4 Gen 2 gas engine standard ratings: 1864 bkW (2500 bhp) @ 1000 rpm and uprated ratings: 2051 bKW (2750 bhp) @ 1000 rpm. NSPS site compliant capable.

FEATURES AND BENEFITS:

ENGINE DESIGN

- A4 engine control system provides complete engine control, monitoring, and protection while maintaining emissions.
- Widest fuel tolerance in the industry for application flexibility.
- Proven reliability and durability with the lowest owning and operating costs.

EMISSIONS

- Meets U.S. EPA Spark Ignited Stationary NSPS emissions for 2010 with the use of an oxidation catalyst.

ADVANCED DIGITAL ENGINE MANAGEMENT

- A4 engine management system integrates speed control, air/fuel ratio control, and ignition/detonation controls into a complete engine management system. The A4 has an improved: user interface, display system, shutdown controls, and system diagnostics.

FULL RANGE OF ATTACHMENTS

- Large variety of factory-installed engine attachments reduces packaging time.

TESTING

- Every engine is full-load tested to ensure proper engine performance.

MOVES MORE GAS, MORE POWER:

- Increased horsepower rating delivers up to 10% more gas production, helping operators boost throughput, maximizing revenue and meet growing demand.

LOWER EMISSIONS:

- Designed to support environmental goals, this system delivers ultra-low NOx emissions (0.3 g/bhp-h) and eliminates crankcase emissions, cutting greenhouse gases and ensuring global compliance for cleaner, more sustainable operations.

FUEL FLEXIBILITY:

- Engineered for multi-fuel use, this solution cuts fuel treatment costs while boosting efficiency and ensuring reliable performance, across all fuel types.

Specifications

In-Line 8, 4 -Stroke-Cycle		Cooling System Capacity	
Serial Prefix	NSF	**Total**	503 L (133 gal)
Bore	300 mm (11.8 in)	**JW**	413 L (109 gal)
Stroke	300 mm (11.8 in)	**SCAC**	90 L (24 gal)
Displacement	169.6 L (10,350 cu in)	**Lube Oil System (refill**	912 L (241 gal)
Aspiration	Turbocharged-Aftercooled	**Oil Change Interval**	5000 hours
Digital Engine Management		**Rotation (from flywheel end)**	Counterclockwise
Governor and Protection	Electronic (A4)	**Flywheel Teeth**	255
Combustion	Low Emission (Lean Burn)		

Technical Data

	EM6493-02	EM6494-02	EM6491-02	EM6492-02
Rating	0.3 g NOx NTE	0.5 g NOx NTE	0.3 g NOx NTE	0.5 g NOx NTE
Engine Power – bkW (bhp)	1864 (2500)	1864 (2500)	2051 (2750)	2051 (2750)
Engine Speed – rpm	1000	1000	1000	1000
Max Altitude @ Rated Torque and 38 °C (100 °F) – m (ft)	2380 (7808)	2345 (7694)	1540 (5052)	1460 (4790)
Aftercooler Temperature				
Stage 1 (JW) – °C (°F)	88 (190)	88 (190)	88 (190)	88 (190)
Stage 2 (SCAC) – °C (°F)	54 (130)	54 (130)	54 (130)	54 (130)
Emissions (NTE)*				
NOx – g/bkW-hr (g/bhp-hr)	0.4 (0.3)	0.67 (0.5)	0.4 (0.3)	0.67 (0.5)
CO – g/bkW-hr (g/bhp-hr)	2.88 (2.15)	2.26 (1.68)	2.88 (2.15)	2.26 (1.68)
CO_2 – g/bkW-hr (g/bhp-hr)	584 (435)	587 (438)	571 (426)	581 (433)
VOC** – g/bkW-hr (g/bhp-hr)	0.23 (0.17)	0.20 (0.15)	0.2 (0.17)	0.19 (0.15)
Fuel Consumption @ 100% load* – MJ/bkW-hr (btu/bhp-hr)**	9.46 (6687)	9.33 (6595)	9.35 (6608)	9.21 (6510)
Heat Balance @ 100% Load – bkW (btu/min)				
Head Rejection to Jacket Water – bkW (btu/min)	489 (27,817)	466 (26,513)	528 (30,047)	507 (28,821)
Heat Rejection to Oil Cooler – bkW (btu/min)	221 (12,557)	223 (12,667)	218 (12,411)	220 (12,531)
Heat Rejection to Aftercooler				
Stage 1 (JW) – bkW (btu/min)	370 (21,027)	331 (18,811)	461 (26,193)	416 (23,679)
Stage 2 (SCAC) – bkW (btu/min)	156 (8855)	147 (8352)	183 (10,412)	174 (9893)
Heat Rejection to Exhaust LHV to 25 °C (77 °F) – bkW (btu/min)	1667 (94,817)	1667 (94,828)	1763 (100,250)	1755 (99,779)
Heat Rejection to Atmosphere – bkW (btu/min)	199 (11,344)	200 (11,347)	200 (11,383)	200 (11,353)
Exhaust System				
Exhaust Stack Temperature – °C (°F)	435 (815)	446 (835)	420 (788)	429 (804)
Gas Pressure – kPag (psig)	400-485 (58.0-70.3)	400-485 (58.0-70.3)	485-552 (70.3-80.1)	485-552 (70.3-80.1)

*at 100% load and speed, listed as not to exceed

**Volatile organic compounds as defined in U.S. EPA 40 CFR 60, subpart JJJJ

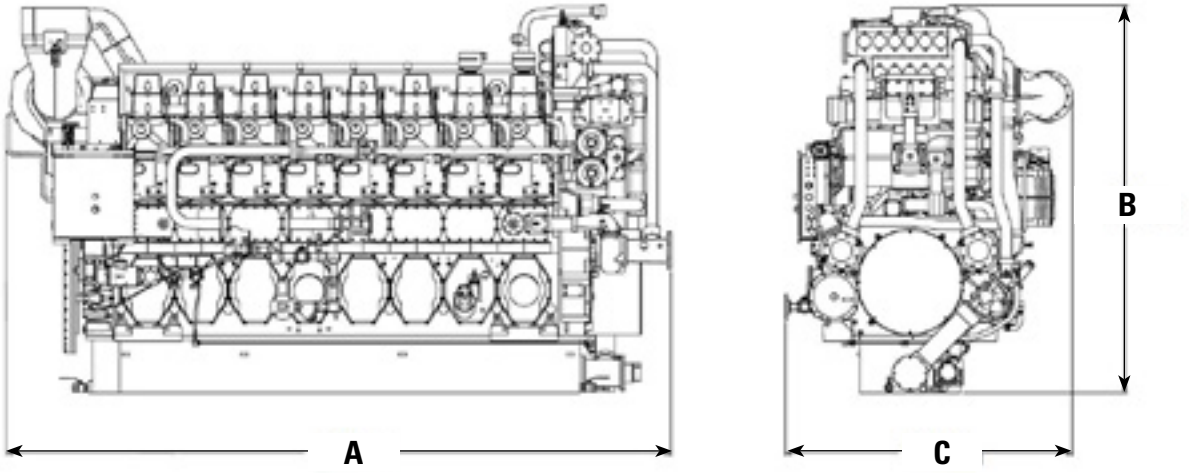
***ISO 3046/1

Rating Definitions and Conditions

Engine performance is obtained in accordance with SAE J1995, ISO3046/1, BS5514/1, and DIN6271/1 standards. Transient response data is acquired from an engine/generator combination at normal operating temperature and in accordance with ISO3046/1 standard ambient conditions. Also, in accordance with SAE J1995, BS5514/1, and DIN6271/1 standard reference conditions. Conditions: Power for gas engines is based on fuel having an LHV of 33.74 kJ/L (905 Btu/cu ft) at 101 kPa (29.91 in Hg) and 15 °C (59 °F). Fuel rate is based on a cubic meter at 100 kPa (29.61 in Hg) and 15.6 °C (60.1 °F). Air flow is based on a cubic foot at 100 kPa (29.61 in Hg) and 25 °C (77 °F). Exhaust flow is based on a cubic foot at 100 kPa (29.61 in Hg) and stack temperature.

Dimensions

All dimensions are approximate.



A	Length	5070.3 mm	199.62 in	**C**	Width	2188.8 mm	86.17 in
B	Height	2951 mm	116.18 in		Weight (wet)	21 092 kg	46,500 lb

Note: Do not use for installation design. See general dimension drawings for detail. Weights and dimensions are approximations.

Standard and Optional Equipment

Standard Equipment

Air Inlet System
- Air cleaner – standard duty
- Inlet air adapter

Cooling System
- Compressor Oil cooler connections
- Jacket Water pump
- Aftercooler/oil cooler pump
- Jacket Water thermostats and housing
- Two-stage aftercooler
- Jacket Water heater connections
- Standard ANSI connections

Starting System
- Single turbine starting motors

Exhaust System
- Dry exhaust manifolds
- Single vertical outlet adapter
- Dual layer heat shields
  - Layer 1: stainless steel foil
  - Layer 2: carbon steel

Fuel System
- Gas admission valves – electronically controlled fuel supply pressure

Instrumentation
- 8 inch HMI Engine Control Panel
- Interconnect Harness

Lubrication System
- Crankcase breather – top mounted
- Oil pan drain valve – front and rear

Optional Equipment

Air Inlet System
- Heavy-duty air cleaner with pre-cleaners

Charging Alternator
- 35 Amp and 65 Amp charging alternators – CSA approved

Exhaust System
- Flexible bellows adapters

Fuel System
- Fuel filter
- Gas pressure regulator
- Flexible connection

Lubrication System
- Air or electric motor-driven prelube
- Duplex oil filter
- Oil level regulator

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LEHW21988-02 (10-2025)
Replaces LEHW21988-01
(Global)