

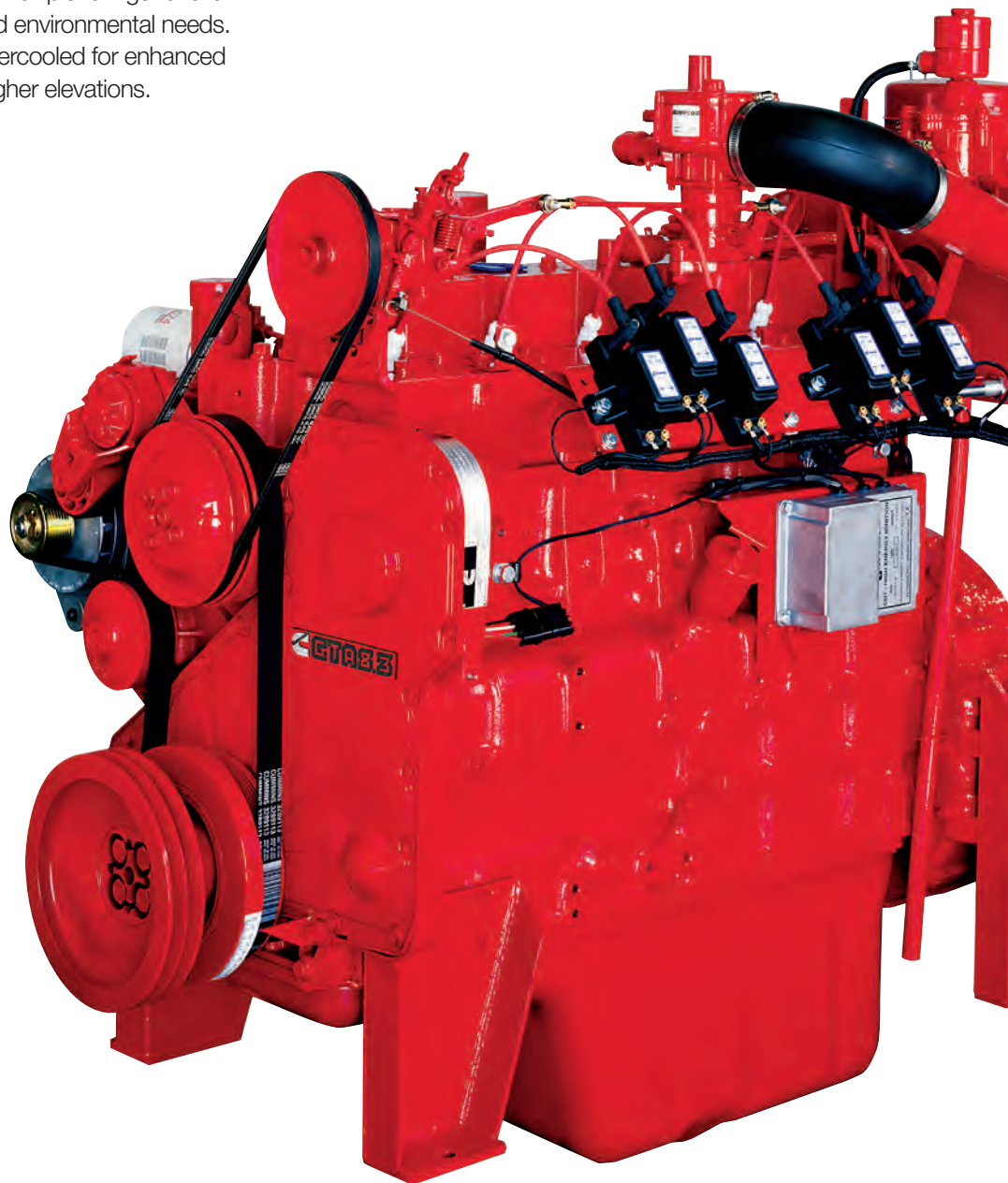
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# G8.3 AND GTA8.3

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## NATURAL GAS ENGINES FOR GAS COMPRESSION

Designed specifically for the oil and gas market, the G8.3 and GTA8.3 deliver exceptional dependability and low cost of operation in artificial lift, gas lift and wellhead compression applications. The G8.3 is naturally aspirated for power and responsiveness, with multiple ratings to tailor performance to meet application and environmental needs. The GTA8.3 is turbocharged and aftercooled for enhanced power and better performance at higher elevations.



# G8.3 AND GTA8.3

## STANDARD FEATURES AND BENEFITS

**Base engine** – Most major components, including the block, crank, cam, gears and liners, are common with the proven C Series diesel, with over 20 years of proven dependable service in a wide range of industrial applications. Heads and cylinders designed specifically for natural gas operation provide optimal air flow, fuel flow and combustion. Both the G8.3 and GTA8.3 have a factory warranty of 1 year/unlimited hours.

**Flywheel and flywheel housing** – The SAE flywheel is machined from cast iron. The flywheel housing is machined to accommodate starter-mounting.

**Power take-off (PTO)** – A two-groove front pulley is standard for driving the compressor cooler fan. An optional front stub shaft is available.

**Air handling** – The turbocharger design delivers maximum performance and life. It includes a factory-installed heavy-duty air cleaner.

**Fuel system** – An IMPCO® carburetor provides stable operation and fuel tracking across a range of fuel qualities and through all load ranges.

**Speed control** – A belt-driven governor provides adjustable speed and stable control under all load conditions. Electronic governor options are available.

**Ignition system** – A capacitive-discharge ignition module delivers dependable spark performance and easy timing adjustment. The easily accessible spark-plug location and a single coil per cylinder improve serviceability.

**Starting system** – The standard system features a robust Delco Remy® 39MT 24-volt starter with an SAE #3 mounting flange. A gas starter is optional.

**Electrical system** – Includes a 24-volt alternator.

**Lubrication system** – A deep, full-length, high-capacity oil pan offers extended drain intervals. Combo full-flow and bypass oil filters reduce maintenance costs while extending service intervals.

**Cooling system** – A durable belt-driven jacket water pump maintains steady coolant flow through the engine. The integrated coolant filter adds corrosion protection. The GTA8.3 utilizes a separate aftercooling circuit to maintain lower intake manifold temperatures.

**Exhaust system** – The dry exhaust manifold is standard on the GTA8.3 and optional on the G8.3. The water-cooled manifold, which reduces surface heat and exhaust gas temperatures, is standard on the G8.3.

## G8.3 AND GTA8.3 SPECIFICATIONS. IN-LINE, 6-CYLINDER, 4-CYCLE, NATURAL GAS.

Number of cylinders	6	
Displacement	505 cu in	8.3 L
Bore and stroke	4.49 in x 5.32 in	114 mm x 135 mm
Aspiration	Naturally aspirated or turbocharged and aftercooled	
Oil pan capacity	9 U.S. gal	34 L
Coolant capacity	2.9 U.S. gal	10.9 L
Length	52.5 in	1,334 mm
Width	34.3 in	871 mm
Height	51.8 in	1,315 mm
Weight (Dry)	1,650 lb	748 kg

## RATINGS GROSS HORSEPOWER (WITHOUT FAN).

Engine model	Emissions capability note	C/R (Note)	Continuous rating hp (kW) @ rpm		
			1500	1800	2200
G8.3	1, 3	10.5:1	–	99 (74)	–
		10.5:1	99 (74)	118 (88)	135 (101)
GTA8.3	2	8.5:1	–	175 (130)	–
		8.5:1	–	190 (142)	–

(1) This engine is capable of operating with a Three-Way Catalyst (TWC) at this rating. It is the responsibility of the owner/operator to upgrade the engine with an air/fuel ratio controller and a TWC capable of meeting New Source Performance Standards for spark-ignited engines (SI NSPS) regulations. The owner/operator is required to conduct site compliance testing and submit documentation per Environmental Protection Agency (EPA) SI NSPS requirements.

(2) This engine does not have a catalyst rating, and is not capable of meeting the U.S. EPA SI NSPS. This engine is offered only for use outside the U.S., in regions that do not have low-emissions requirements.

(3) Catalyst rating.

## EVERY QUESTION. ANSWERED.

Your Cummins distributor can provide you with additional details, answer questions and make recommendations for the best configuration of a Cummins G8.3 or GTA8.3 engine for your gas compression needs. See [cumminsengines.com](http://cumminsengines.com) to locate the distributor nearest you.

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