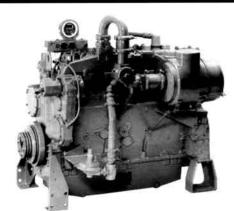
CATERPILLAR®





NA Engine Shown

FEATURES

DIESEL STRENGTH BUILT IN

Blocks, crankshafts, heads, liners, and connecting rods are common with Cat® Diesel Engines. Gas engine pressures are 40% to 50% lower: Result . . . extra long life.

■ SIMPLICITY

Time proven solid state magnetos provide ignition power without the need for belt driven alternators and batteries. A magneto powered Murphy panel offers mechanical readout of engine water temperature, oil pressure, and inlet air temperature (on TA engines) plus contacts within the gauges are the safeties for these critical systems.

Gas Irrigation Engines

G3406 143-345 hp 1100-1800 rpm

SPECIFICATIONS

In-Line 6, 4-Stroke-Cycle, Gas
Bore—in (mm)
Stroke—in (mm) 6.5 (165)
Displacement—cu in (L)
Rotation (from flywheel end) Counterclockwise
Compression Ratio
Jacket Water System
Capacity w/out radiator-gal (L) 8.5 (32)
Gas Pressure Requirements
Naturally Aspirated0.1 bar (1.5 psi)
Turbocharged-Aftercooled 1.8 bar (25 psi)
Lube Oil System—gal (L)
Naturally Aspirated
Turbocharged-Aftercooled 44 (167)
Weight, Net Dry (approx)—lb (kg)
Naturally Aspirated 2,900 (1,315)
Turbocharged-Aftercooled3,000 (1,361)

■ APPLICATION FLEXIBILITY

Constant torque over a wide speed range offers more flexibility for matching engine power output to job needs.

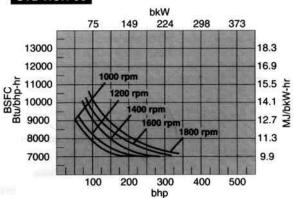
DURABILITY

Gas engine exhaust temperatures are higher than diesel. Watercooled exhaust manifolds provide longer life because they operate at lower temperatures resulting in fewer cracks and less warpage.

FUEL CONSUMPTION

3406 NA bkW 298 373 75 149 224 18.3 13000 1000 rpm 12000 16.9 1200 rpm 15.5 ≿ 11000 1400 rpm 14.1 × 30 12.7 × 1600 rpm 9000 8000 11.3 7000 9.9 100 200 300 400 500

STD HCR-90



STANDARD EQUIPMENT

Air cleaner, two-stage, with rain cap and service indicator

Breather, crankcase

Carburetor, natural gas

Cooler, lubricating oil

Filter, lubricating oil

bypass (TA only)

Flywheel

Housing SAE 1

Ignition system

Altronic V (NA)

Altronic III (TA)

Instrument panel, LH

oil pressure, coolant temperature gauges

Lifting eyes

Manifold, exhaust, watercooled

Pumps, gear driven

auxiliary water, gear driven, centrifugal,

non-self-priming (TA only)

jacket water, gear-driven

Regulator, gas pressure

SAE standard rotation

Service meter

Shutoff system; shutoffs for:

oil pressure

coolant temperature

overspeeds (2)

inlet air temperature (TA)

Supports, engine

Thermostats and housing

Torsional vibration damper

OPTIONAL EQUIPMENT

Air cleaners and accessories

Bases and foundations

Cooling systems,

heat exchangers

aftercooler groups

expansion tank

Controls and governors

Exhaust fittings

Fuel systems

gas valve

Gauges and instrument panels

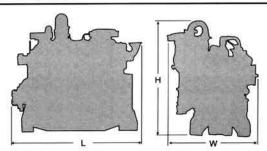
Mufflers

Power takeoffs

Protection devices

Starting systems

DIMENSIONS



G3406 NA G3406 TA

L		Н		W	
in	mm	in	mm	in	mm
64.1	1629	56.3	1431	45.4	1153
78.4	1992	56.3	1431	49.8	1265

HORSEPOWER AT TYPICAL IRRIGATION SPEEDS

	1800 rpm	1760 rpm	1600 rpm	1466 rpm	1400 rpm	1320 rpm
Gear Ratio		1:1	10:11	5:6	4:5	3:4
NA	225	220	200	183	175	165
TA*	345	345	325	297	284	268

Bhp @ rated conditions of 500' and 77° F *90°F Rating

RATING CONDITIONS AND DEFINITIONS

Ratings are based on SAE J1349 standard conditions of 29.61 in-Hg (100 kPa) and 77°F (25°C). These ratings also apply at ISO 3046, DIN6271, BS5514 standard conditions of 29.61 in-Hg (100 kPa), 81°F (27°C); and API 7B-11C standard conditions of 29.38 in-Hg (99 kPa), 85°F (29°C).

Ratings are based on dry natural gas having a low heat value of 905 btu/ft³ (35.54 MJ/Nm³). Variations in altitude, temperature and gas composition from standard conditions may require a reduction in engine horsepower.

Turbocharged-aftercooled ratings apply to 5,000 ft (1525 m) and 77°F (25°C). Naturally aspirated engines apply to 500 ft (150 m) and 77°F (29°C). For applications which exceed these limits contact your Caterpillar dealer.

90°F (32°C) refers to aftercooler water inlet temperature. All data is based on standard conditions. 77°F (25°C) 500 ft Alt. These ratings do not allow for overload capability.

Materials and specifications are subject to change without notice.

The International System of Units (SI) is used in this publication.