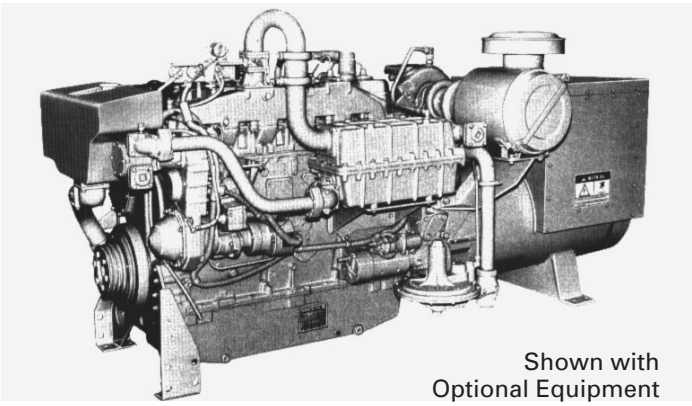
CATERPILLAR®

Gas Engine Generator Set

G3406

1800 rpm
60 Hz
210-225 kW

Continuous Power



Shown with Optional Equipment

CATERPILLAR® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle
Bore—in (mm) 5.4 (137)
Stroke—in (mm) 6.5 (164)
Displacement—cu in (L) 893 (14.6)
Aspiration . . . . . Turbocharged-Aftercooled

CATERPILLAR ENGINE FACILITIES ISO 9001 CERTIFIED

FEATURES

■ **CAT® GENERATOR SETS**
Factory designed, certified prototype tested with torsional analysis. Production tested and delivered to you in a package that is ready to be connected to your fuel and power lines. Supported 100% by your Caterpillar dealer with warranty on parts and labor; extended warranty available in some areas. The generator set was designed and manufactured in an ISO 9001 compliant facility. Generator set and components meet or exceed the following: AS1359, AS2789, BS4999, DIN6271, DIN6280, IEC 34/1, ISO3046/1, NEMA MG1-22.

■ **DIESEL STRENGTH BUILT IN**
Blocks, crankshafts, liners, and connecting rods are common with Cat diesel engines. Gas engine pressures are 40% to 50% lower; Result . . . extra long life with the economy of the gaseous fuel.

■ **CATERPILLAR® SR4 GENERATOR**
Single bearing, wye connected, static regulated brushless excited generator designed to match the performance and output characteristics of the Caterpillar engine that drives it.

■ **EXCLUSIVE CATERPILLAR VOLTAGE REGULATOR**
Three-phase sensing and Volts-per-Hertz regulation with constant voltage in the normal operating range gives precise control and excellent load acceptance.

CATERPILLAR® SR4 GENERATOR

Type . . . . . Static regulated brushless excited
Construction . . . . . Single bearing, close coupled
Three phase . . . . . Wye connected
Insulation . . . . . Class F
Enclosure . . . . . Drip proof
Alignment . . . . . Pilot shaft
Overspeed capability 125%
Waveform . . . . . Less than 5% deviation
Voltage regulator . . . . . 3-phase sensing with Volts-per-Hertz
Voltage regulation . . . . . Less than ± 1%
Voltage gain . . . . . Adjustable to compensate for engine speed droop and line loss
TIF . . . . . Less than 50
THF . . . . . Less than 3%

CATERPILLAR®

G3406 GAS ENGINE GENERATOR SET

STANDARD EQUIPMENT

Engine
Air cleaner, normal duty, with rain cap, service indicator
Breather, crankcase
Cooler
lubricating oil, RH
Filter
lubricating oil, LH
Flywheel housing
SAE No. 1
Governor
Woodward 1724
Ignition system
Altronic III
Lifting eyes
Manifold, exhaust, watercooled
Paint, Caterpillar yellow
Pumps, gear driven
auxiliary water, (TA only)
jacket water
Regulator, gas pressure
SAE standard rotation
Service meter
Supports, engine
Thermostats and housing
Torsional vibration damper

OPTIONAL EQUIPMENT

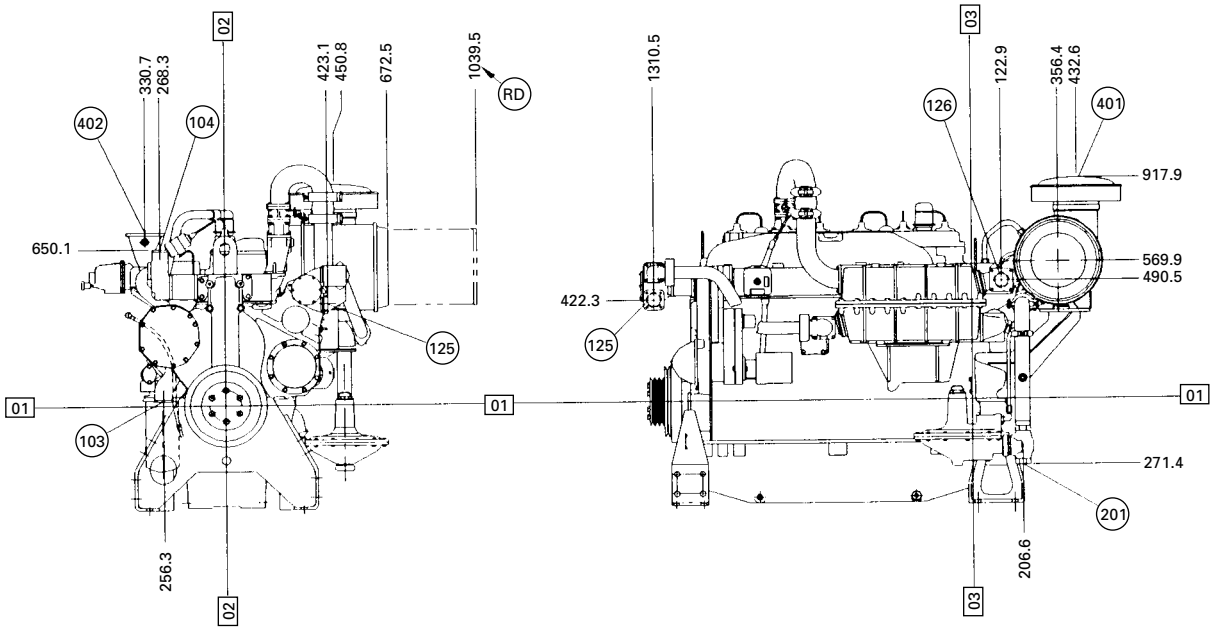
Engine
Cooling systems
heat exchangers
exhaust fittings
Fuel systems
Gauges and instrument panels
Generators
Ignition system
dual timing
Altronic III
Mounting system
base, narrow
Muffler
Power takeoffs
Protection devices with shutoffs for:
coolant temp.
energized to run
oil pressure
overspeed
Starting systems

TECHNICAL DATA

G3406 Gas Engine Generator Set–1800 rpm		TA 90 LCR	TA 130 LCR	TA 90 HCR	TA 130 HCR
Electrical Output @ 0.8 pf without Fan	kW	225	210	225	210
Voltage		480	480	480	480
Compression Ratio		9.4:1	9.4:1	10.3:1	10.3:1
Minimum Gas Pressure Required	psi	1.5	1.5	1.5	1.5
Shipping Weight	lb	4825	4700	4825	4700
Overall Length	in	128.0	128.0	128.0	128.0
Overall Width	in	52.0	52.0	52.0	52.0
Fuel Consumption (100% load) with Fan	BTU/hp-hr	6969	7004	7146	7329
Fuel Consumption (75% load) with Fan	BTU/hp-hr	7386	7450	7619	7775
Air Inlet Flow Rate	scfm	537	505	537	505
Exhaust Gas Flow Rate @ Stack F	cfm	1374	1296	1437	1370
Heat Rejection to Jacket Water (total)	Btu/min	11 943	11 772	11 658	11 658
Heat Rejection to Exhaust (to 350° F)	Btu/min	12 909	12 227	13 819	13 308
Heat Rejection to Aftercooler	Btu/min	1308	853	1024	626
Heat Rejection to Atmosphere from Engine	Btu/min	1990	1763	2673	2559
Exhaust Gas Stack Temperature	Deg F	896	902	957	976

90 refers to aftercooler water inlet temperature in °F.
130 refers to aftercooler water inlet temperature in °F.
All data is based on standard conditions.
These ratings do not allow for overload capability.
Consult your Caterpillar dealer for standby and catalyst ratings.

GAS GENERATOR SET ENGINE PHYSICAL FACTORS



01	Centerline of Crankshaft	104	Jacket Water Outlet	401	Air Inlet
02	Centerline of Engine	125	Aftercooler Water Inlet	402	Exhaust
03	Rear Face of Flywheel Housing	126	Aftercooler Water Outlet	RD	Removal Distance
103	Jacket Water Inlet	201	Fuel Inlet		

TA Configuration shown.
See General Dimension Drawing 4P5119 for additional details and NA information.

Note: General configuration not to be used for installation.

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 ISO3046/1, DIN6271, and BS5514 standard conditions of 29.61 in Hg (100 kPa) and 81° F (27° C); and API 7B-11C standard conditions of 29.38 in Hg (99 kPa) and 85° F (29° C) also apply.

Ratings are based on dry natural gas having a low heat value of 905 btu/ft³ (35.22 MJ/m³). Variations in altitude, temperature and gas composition from standard conditions may require a reduction in engine horsepower.

Turbocharged-aftercooled ratings apply to 5000 ft (1525 m) and 77° F (25° C). **Naturally aspirated** engines apply to 500 ft (150 m) and 85° F (29° C). For applications which exceed these limits consult your Caterpillar dealer.

Continuous – Output available without varying load for an unlimited time. Continuous power in accordance with ISO8528, ISO3046/1, AS2789, DIN6271, and BS5514.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for details.

LEHX6175
Supersedes LEHX0692