

OIL & GAS RATINGS GUIDE

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OIL & GAS RATINGS GUIDE



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Table of Contents

Table of Contents

Caterpillar: Making Sustainable Progress Possible	5
Abbreviations and Definitions	6-10
Rating Conditions	10
Well Service Ratings	11
Well Service Engine Ratings	12
C2.2	13
C4.4 • C4.4 ACERT™	14
C6.6 ACERT	15
C7 ACERT • C7.1 ACERT	16
C9 ACERT • C9.3B	17
C11 ACERT	18
C13 ACERT	19
C15 ACERT	20
C18 ACERT	21
C27 ACERT	22
C32 ACERT	23
3512B	24
3512C HD	25
3512E • 3512E DGB™	26
3516C HD	27
G3520 NRM	28
Hazardous Location	29
Watercooled Manifold	30-31
Transmission Application Chart	32
CX31-P600 Transmission	33
CX35-P800 Transmission	34
CX48-P2300 Transmission	35
TH53-E60 Transmission	36
CX48-P3060 Transmission	37
TH48-E70 Transmission	38
TH55-E70 Transmission	39
TH55-E90 Transmission	40
Land Drilling Ratings	41
C15 ACERT	42
C18 ACERT	43-44
C27 ACERT	45
C32 ACERT	46

Land Drilling Ratings (continued)	
3500	47
3500B	48
3500C	49
3500E	50
G3512	51
PGS1260	51
Drilling Transmission Application Chart	52
Land Production Ratings	53
Diesel Generator Sets – 50 Hz	54-55
Diesel Generator Sets – 60 Hz	56-59
Dual Fuel Generator Sets	60
Gas Generator Sets – 50 Hz	61
Gas Generator Sets – 60 Hz	62
Diesel Engines – Mechanical Drive	63
Diesel Fuel Engines – Mechanical Drive	64
Gas Engines – Mechanical Drive	65
Mobile Gas Solution	66
G3306B	67
CG137-12	68
G3512	69
G3520	70
Energy Storage Systems	71
PGS1260	72
Controls & Automation	73
Cat Smart Energy Management System	74
Offshore Drilling and Production Ratings	75
Hazardous Location	76
3500B	77
3500C • 3500E	78
C175	79
C280	80-81
Gas Compression Ratings	82
Gas Compression Engine Ratings	83
G3300	84
G3400	85
CG137	86
G3500	87-88
G3600	89-90
Electric Drive Motors	91-92
Formulas	93

Caterpillar: Making Sustainable Progress Possible

A sustainable product life cycle includes efficient and safe equipment operation for our customers – and technology for improved sustainability performance. Caterpillar continues to develop technologies to comply with today’s emission standards with progress including advancements with non-road mobile equipment, battery energy storage, and electric motors.

Improvement through fuel diversity

Delivering customer value with greater operational flexibility and lower fuel costs is at the heart of our natural gas strategy. Dynamic Gas Blending™ (DGB™) technology, for example, has led to the first-ever dual-fuel engine – using both diesel and natural gas – for select Cat® 3500 Series engines. In production since April 2013 on land drilling, production and well-service applications, the DGB system allows an engine to run on diesel and natural gas simultaneously, with gas substitution rates of up to 70 percent. In 2020, Caterpillar received the EPA Clean Air Excellence award, for the Cat 3512E Dynamic Gas Blending engine - the first and only DGB engine on the market certified to meet the U.S. EPA Tier 4 Final emission standards In North America. Exported engines are available with DGB dual-fuel capability from the factory, along with retrofit kit offerings. The customer benefits are clear: DGB can lower fuel costs by up to 50 percent compared to traditional diesel operation, while providing equivalent performance, as well as the flexibility to run on a wide variety of fuels – from associated gas to liquefied natural gas (LNG).

Abbreviations and Definitions

Duty Types

Drill-EI Land electric drilling rating; output available with varying load for an unlimited time. Prime rating in accordance with ISO 8525. Typical load factor 60-70%

Drill-M Land mechanical drilling rating; 100% of advertised engine rating used occasionally, but not over one hour followed by one hour period below 90% load per day for mechanical pumping and mechanical drilling applications. Typical load factor 60%

Cont Continuous rating; 100% of engine operating hours at 100% of rated power

Prime Prime no overload rating for power generation in oil and gas applications; output available with varying load for an unlimited time; output in accordance with ISO 8525.

OS-Prime Offshore prime rating with 10% overload capability for MCS certification; output available with varying load for an unlimited time; output in accordance with ISO 8525.

MCR Maximum Continuous Rating (MCR) following reference conditions according to the International Association of Classification Societies (ACS) for main and auxiliary engines. An overload of 10% is permitted for one hour within 12 hours of operation.

A For pumping, ventilation, well service mixing units, and customer specs – the power and speed capability of the engine which can be used to power well service equipment. The engine can be operated at maximum power and speed for up to 100% of the time without interruption or load cycling.

B For oil field mechanical pumping/drilling, independent rotary drive, well service blenders, cementers, and stationary plant air compressors – the power and speed capability of the engine which can be used to power well service equipment. The maximum average load factor is 85% of rated engine power. The maximum time at rated load and speed is not to exceed 80% of the duty cycle, or 4 hour continuously.

C For fire pump, offshore cranes, well service kill pumps, cementers, production pumps, and drills – the power and speed capability of the engine which can be used to power high pressure well service equipment. Also the power and speed capability of the engine which can be used to power mud pumps, rotary table, and drawworks through a mechanical drive. For intermittent service where maximum power and/or speed are cyclic. The maximum average load factor is 70% for C32 and smaller engines. The maximum average load factor for larger engines is 80%. the maximum time at rated load and speed is not to exceed 50% of the duty cycle, or one hour continuously, followed by a one hour period below 90% load. When used as a fire pump and NFPA certification is required, size the pump power to 90% of the advertised rating.

D For fire pump, offshore cranes, and portable air compressors – the power and speed capability of the engine where maximum power is required for periodic overloads. The maximum average load factor is 50%, and the maximum time at rated load and speed is not to exceed 10% of the duty cycle, or 30 minutes continuously. When used as a fire pump and NFPA certification is required, size the pump power to 90% of the advertised rating.

E For fire pump, offshore cranes, well fracturing, and cementing/kill pump – the power and speed capability of the engine which can be used to power high pressure well service equipment. For C32 engines and smaller, the maximum average load factor is 35%. For well fracturing engines, the maximum average load factor is 50%, and the maximum time at rated load and speed is less than 2.5 hours per year. For cementing and kill pump engines, the maximum average load factor is 40%, and the maximum time at rated load and speed is less than two hours per year. When used as a fire pump and NFPA certification is required, size the pump power to 90% of the advertised rating.

*Duty type abbreviations do not apply to model number.

*Duty type abbreviations do not apply to model number.

Emissions

CARB	California Air Resources Board
CARB T3 NR	California Air Resources Board U.S. EPA Tier 3 Nonroad Equivalent (Not Currently EPA Certified)
BSFC	Brake Specific Fuel Consumption
CCNR (Expired)	Central Commission for Navigation on the Rhine
CCNR Stage 2 (Expired)	Central Commission for Navigation on the Rhine Stage 2
China On-hwy IV	China On-highway Phase IV
China II NRNC	China Stage II and Non-Certified
China III NR	China Stage III Mobile
China Nonroad Stage IV	China Nonroad Stage IV
EPA ESE	EPA Certified for Stationary Emergency Application
EPA T1 M	U.S. EPA Marine Tier 1 Commercial
EPA T1 NR	U.S. EPA Tier 1 Nonroad Equivalent (Not Currently EPA Certified)
EPA T2 M	U.S. EPA Marine Tier 2 Commercial
EPA T2 NR	U.S. EPA Tier 2 Nonroad Equivalent (Not Currently EPA Certified)
EPA T2 NR ¹	EPA Certified for Stationary Emergency Application (Emits Equivalent U.S. EPA Tier 2 Nonroad Standards)
EPA T3 M	U.S. EPA Marine Tier 3 Commercial
EPA T3 NR	U.S. EPA Tier 3 NR Nonroad Equivalent (Not Currently EPA Certified)
EPA T3 NR ¹	EPA Certified for Stationary Emergency Application (Emits Equivalent U.S. EPA Tier 3 NR Nonroad Standards)
EPA T4f	U.S. EPA Tier 4 Final
EPA T4f NRG	U.S. EPA Tier 4 Final Nonroad Genset (Certified to U.S. EPA & California ARB Tier 4 Final Nonroad Genset Standards)
EPA T4f NRNG	U.S. EPA Tier 4 Final Nonroad Non-Genset (Certified to U.S. EPA & California ARB Tier 4 Final Nonroad Non-Genset Standards)
EPA T4i	U.S. EPA Tier 4 Interim Equivalent
EPA T4i NRG	U.S. EPA Tier 4 Interim Nonroad Genset Equivalent (Not Currently EPA Certified)
EPA T4i NRNG	U.S. EPA Tier 4 Interim Nonroad Non-Genset Equivalent (Not Currently EPA Certified)
EU II NRNC	EU Stage II Nonroad and Non-Certified
EU IIIA NR	EU Stage IIIA Nonroad Equivalent (Non-Current for EU)
EU IIIB NR	EU Stage IIIB Nonroad Equivalent (Non-Current for EU)
EU IV NR	EU Stage IV Nonroad Equivalent
EU Stage V	EU Stage V Nonroad Standards
IMO I	International Maritime Organization (IMO) Tier I

Emissions (continued)

IMO II	International Maritime Organization (IMO) Tier II
IMO III	International Maritime Organization (IMO) Tier III
Japan 2014 (T4f)	Japan 2014 (Tier 4 Final) Nonroad Standards
Korea (T4f)	Korea Tier 4 Final Nonroad Standards
Low Emissions	Lean-burn stationary gas-fueled engine without mobile certification
Mobile Gas Genset	Mobile Gas Genset
NC	Non-certified
NRM	Nonroad Mobile Certified (40 CFR Part 1048)
NRG	Nonroad Genset
NRNG	Nonroad Non-genset
NSPS Site Compliant	New Source Performance Standards Site Compliant Capable
Stationary	Certified for Stationary use (40CFR Part 60)
UNECE	United Nations Economic Commission for Europe
UN R96 IIIA	UNECE Regulation No. 96 Tractor and NRMM Engine Emissions Stage IIIA
UN R96 IIIB	UNECE Regulation No. 96 Tractor and NRMM Engine Emissions Stage IIIB

Engine Configuration

ATAAC	Air-to-air Aftercooled
FMT	Front-mounted Turbochargers
Haz Loc	Hazardous Location Certified
HD	High Displacement
REMAC	Remote-mounted Aftercooler
RMT	Rear-mounted Turbochargers
SCAC	Separate-circuit Aftercooler

Fuels

CNG	Compressed Natural Gas
CRU	Crude Fuel
FG	Field Gas
HFO	Heavy Fuel Oil
LNG	Liquefied Natural Gas
MDO	Marine Diesel Oil
NG	Natural Gas

Performance

bhp	Brake engine power (horsepower)
bkW	Brake engine power (kilowatt)
BSFC	Brake Specific Fuel Consumption
ekW	Generator set electrical output (kilowatt)
kVA	Generator set electrical output (kilo Volt-Amp)
LE	Low Emissions

Emissions (continued)

NA Naturally Aspirated
TA Turbocharged-aftercooled

Rating Conditions

Diesel Engines –

up to 6.6 liter All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

Diesel Engines –

7 liter and higher All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42 780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.

Gas Engines Ratings are based on SAE J1349 standard conditions of 100 kPa (29.61 in Hg) and 25°C (77°F). These ratings also apply at ISO3046, DIN6271, and BS5514 standard conditions of 100 kPa (29.61 in Hg) and 27°C (81°F); and API 7B-11C standard conditions of 99 kPa (29.28 in Hg) and 29°C (85°F) also apply.

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

ISO 9001:2000 Certification

Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

To find spec sheets referenced in this guide go to:
www.cat.com/oilandgas

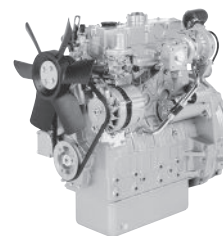


From well stimulation and pressure pumping to cementing the well, the well service industry presents a unique set of challenges. Cat® engines and transmissions meet these challenges with outstanding reliability across a wide range of available power. They meet the emissions standards and are backed by the expert support of the worldwide Cat dealer network.



Well Service Engine Ratings

bhp Range	Engine	Page Number
41.6-66	C2.2	13
72-142	C4.4 • C4.4 ACERT™	14
128-275	C6.6 ACERT	15
188-300	C7 ACERT • C7.1 ACERT	16
275-400	C9 ACERT • C9.3 ACERT	17
325-450	C11 ACERT	18
385-520	C13 ACERT	19
440-595	C15 ACERT	20
575-800	C18 ACERT	21
800-1150	C27 ACERT	22
800-1350	C32 ACERT	23
2000-2250	3512B	24
2150-2500	3512C HD	25
2250-3000	3512E	26
3000-3300	3516C HD	27
205-1110	Hazardous Location	28
205-1225	Watercooled Manifold	29
680-1800	Watercooled Manifold	30



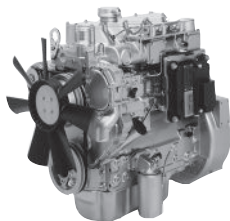
Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C	31	41.6	2200	EPA T3 NR, EU IIIA NR	Naturally Aspirated
C	34.1	45.7	2400	EPA T3 NR, EU IIIA NR	Naturally Aspirated
C	35.7	47.9	2600	EPA T3 NR, EU IIIA NR	Naturally Aspirated, Derate to 31.4 bhp/42.1 bkW
C	37.3	50	2800	EPA T3 NR, EU IIIA NR	Naturally Aspirated, Derate to 32.8 bhp/43.9 bkW
C	38	51	3000	EPA T3 NR, EU IIIA NR	Naturally Aspirated, Derate to 34 bhp/45.6 bkW
C	40	53.3	2600	EPA T3 NR, EU IIIA NR	Turbocharged
C	43	57.7	2600	EPA T3 NR, EU IIIA NR	Turbocharged
C	44.7	60	2800	EPA T3 NR, EU IIIA NR	Turbocharged
C	45.5	61	3000	EPA T3 NR, EU IIIA NR	Turbocharged
C	49.2	66	2800	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
NA	661.5 (26)	439 (17.3)	676 (26.6)	184 (406)	2.2 (135)
T, TA	662 (26.1)	489 (19.3)	698 (27.5)	194 (427.7)	2.2 (135)
Bore x Stroke – mm (in) 84 x 100 (3.3 x 3.9)					

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C4.4					
C	54	72	2200	EPA T3 NR, EU IIIA NR	Naturally Aspirated
C	56	75	2200	EPA T3 NR, EU IIIA NR	Naturally Aspirated
C	56-75	75-100	2200-2400	EPA T3 NR, EU IIIA NR	Turbocharged
C4.4 ACERT					
C	62-75	83-99	2200	EPA T3 NR, EU IIIA NR	Turbocharged
C	68-83	91-111	2200-2400	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	75-106	100-142	2200	EPA T3 NR, EU IIIA NR, EPA T4f NRRG	Turbocharged-Aftercooled

Specifications

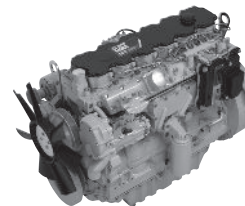
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C4.4	663 (26.1)	597 (23.5)	810 (32)	306 (675)	4.4 (269)
C4.4 ACERT	631 (24.8)	626 (24.7)	824 (32)	360 (794)	4.4 (269)

Bore x Stroke – mm (in) 105 x 127 (4.1 x 5)

Please see spec sheet for more information:

C4.4 ACERT LEHH0551, LEHH0569

For diesel engine rating definitions please see page 10.



Well Service Ratings

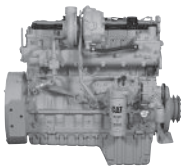
Rating Tier	bkW	bhp	rpm	Emissions	Notes
C	95	128	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	116	156	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	129	173	2000-2500	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	130	174	1800-2500	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	136	182	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	140	188	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	144	193	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	146	196	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	151	203	1800-2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	159	213	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	168	225	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	176	236	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	186	250	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled
C	205	275	2200	EPA T3 NR, EU IIIA NR	Turbocharged-Aftercooled

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C6.6 ACERT	929 (34)	668 (26.3)	797 (31.4)	506 (1116)	6.6 (403)

Bore x Stroke – mm (in) 105 x 127 (4.1 x 5)

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C7 ACERT					
D	205	275	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Watercooled, SCAC, REMAC avail
B	153	205	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC only
C	172	230	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC only
B	168	225	2200	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Dry Manifold, ATAAC
C	186	250	2200	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Dry Manifold, ATAAC
D	224	300	2200	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Dry Manifold, ATAAC
C7.1 ACERT					
B	141	188	1800-2200	EPA T4i NRG, EU IIIB NR	Dry Manifold
B	168	225	1800-2200	EPA T4f NRRNG, EU IV NR	Dry Manifold
C	168	250	1800-2200	EPA T4f NRRNG, EU IV NR	Dry Manifold
C	205	275	1800-2200	EPA T4f NRRNG, EU IV NR	Dry Manifold

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C7 ACERT	1053 (41.5)	758 (29.8)	1032 (40.6)	629 (1386)	7.2 (439)
C7.1 ACERT	1065 (41.9)	820 (32.3)	907 (35.7)	715 (1576)	7.01 (427.7)
Bore x Stroke – mm (in)					
C7 ACERT	110 x 127 (4.3 x 5)				
C7.1 ACERT	105 x 135 (4.1 x 5.3)				

Please see spec sheet for more information:

C7 ACERT LEHW0043, LEHW0044, LEHW0045

For diesel engine rating definitions please see page 10.

Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C9 ACERT					
C	242	325	2200	IMO II, EPA T3 NR, EU IIIA NR	Watercooled, SCAC, REMAC avail
D	254	340	2200	IMO II, EPA T3 NR, EU IIIA NR	Watercooled, SCAC, REMAC avail
D	254	340	2200	IMO II, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC & REMAC avail, Derate option
A	205	275	2200	IMO II, EPA T3 NR, China NR III, EU IIIA NR	Dry Manifold
B	224	300	2200	IMO II, EPA T3 NR, EU IIIA NR, China NR III	Dry Manifold
C	242	325	2200	IMO II, EPA T3 NR, EU IIIA NR, China NR III	Dry Manifold
C	261	350	2200	IMO II, EPA T3 NR, EU IIIA NR, China NR III	Dry Manifold
D	280	375	2200	IMO II, EPA T3 NR, EU IIIA NR	Dry Manifold

Specifications

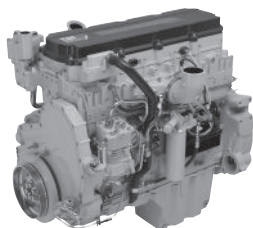
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C9 ACERT	1092 (43)	828 (32.6)	1024 (40.3)	716 (1578)	8.8 (537)
C9.3B	1125 (44.3)	791 (31.1)	1068 (42)	865 (1907)	9.3 (567.5)
Bore x Stroke – mm (in)					
C9 ACERT	112 x 149 (4.4 x 5.8)				
C9.3B	115 x 149 (4.5 x 5.9)				

Please see spec sheet for more information:

C9 ACERT LEHW0014, LEHW0046, LEHW0047

C9.3 B LEHH0578, LEHE0598

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	242	325	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
B	261	350	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
C	287	385	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
D	313	420	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
E	336	450	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold

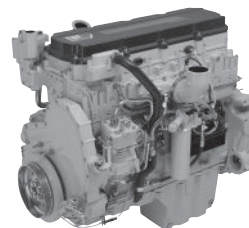
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C11 ACERT	1201 (47.3)	1057 (41.6)	1176 (46.3)	892 (1967)	11.15 (681)
Bore x Stroke – mm (in)	130 x 140 (5.12 x 5.5)				

Please see spec sheet for more information:

C11 ACERT LEHW0063

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	287	385	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
B	309	415	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
C	328	440	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
D	354	475	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
E	388	520	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold

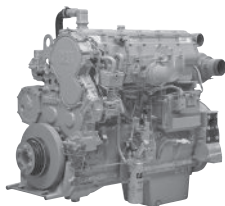
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
C13 ACERT	1201 (47.3)	1013 (39.9)	1186 (46.7)	896 (1976)	12.5 (763)
C13B T4	1203 (47.4)	933.14 (36.74)	1186 (46.7)	1350 (2976)	12.5 (763)
Bore x Stroke – mm (in)	130 x 157 (5.1 x 6.2)				

Please see spec sheet for more information:

C13 ACERT LEHW0062, LEHW0096

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	328	440	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
B	354	475	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Avail with Cat Compression Brake, Dry Manifold
C	403	540	1800-2100	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Avail with Cat Compression Brake, Dry Manifold
D	433	580	2100	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Dry Manifold
E	444	595	2100	IMO II, EPA T3 NR, EU IIIA NR, China II NR	Dry Manifold
D	400	536	1800-2000	EPA T2 M, IMO II, EPA T3 M	SCAC, Watercooled
D	403	540	1800-2000	EPA T2 M, IMO II, EPA T3 M	SCAC & REMAC, Watercooled
A/B	354	475	1800-2100	EPA T4f NRRNG, EU IV NR	Dry Manifold
C	403	540	1800-2100	EPA T4f NRRNG, EU IV NR	Dry Manifold
D	433	580	1800-2100	EPA T4f NRRNG, EU IV NR	Dry Manifold

Specifications

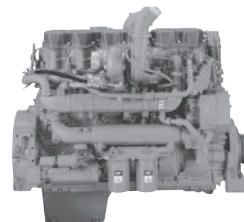
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C15 ACERT	1377 (54)	927 (37)	1227 (48)	1245 (2743)	15.2 (927.6)
C15 ACERT T4	1530 (60.2)	961 (37.8)	1282 (51)	1666 (3673)	15.2 (927.6)

Bore x Stroke – mm (in) 137.2 x 171.5 (5.4 x 6.75)

Please see spec sheet for more information:

C15 ACERT LEHW0097, LEHW0061

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	429	575	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
B	447	600	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
C	470	630	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Avail with Cat Compression Brake, Dry Manifold
C	522	700	2100	IMO II, EPA T3 NR, EU IIIA NR, China III NR	Dry Manifold
D	570	765	2100	IMO II, EPA T2 NR	Dry Manifold
E	597	800	2100	IMO II, EPA T2 NR	Dry Manifold
C	563	755	1800	EPA T4f NRRNG	Dry Manifold
D	597	800	1800	EPA T4f NRRNG	Dry Manifold
A	429	575	2000	EPA T4f NRRNG, EU IV NR	Dry Manifold
B	447	600	2000	EPA T4f NRRNG, EU IV NR	Dry Manifold
C	470	630	2000	EPA T4f NRRNG, EU IV NR	Dry Manifold

Specifications

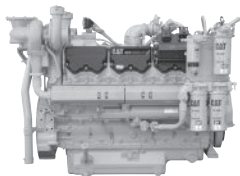
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C18 ACERT	1389 (54.7)	919 (36.2)	1227 (49.5)	1273 (2807)	18.1 (1105)
C18 ACERT T4	1530 (60.2)	961 (37.8)	1282 (51)	1580 (3482)	18.1 (1105)

Bore x Stroke – mm (in) 145 x 183 (5.7 x 7.2)

Please see spec sheet for more information:

C18 ACERT LEHW0098, LEHW0053, LEHW0109

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	597	800	1800-2100	EPA T2 NR, China III NR	Dry Manifold
B	652	875	1800-2100	EPA T2 NR, China III NR	Dry Manifold
C	708	950	1800-2100	EPA T2 NR, China III NR	Dry Manifold
D	783	1050	1800-2100	EPA T2 NR, China III NR	Dry Manifold
E	858	1150	1800-2100	China III NR	Dry Manifold
A	597	800	1800	EPA T4f NRNG	Narrow Config, Dry Manifold
B	652	875	1800	EPA T4f NRNG	Narrow Config, Dry Manifold
C	708	950	1800	EPA T4f NRNG	Narrow Config, Dry Manifold

Specifications

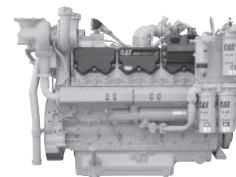
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C27 ACERT	1918 (75.5)	1463 (57.6)	1321 (52)	2895 (6382)	27 (1648)
C27 ACERT T4	2160 (85)	1270 (50)	1650 (65)	2956 (6516)	27 (1648)

Bore x Stroke – mm (in) 137.7 x 152.4 (5.42 x 6)

Please see spec sheet for more information:

C27 ACERT LEHW0052, LEHW0101

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
A	597	800	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
A	642	860	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
B	686	920	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
C	746	1000	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
D	828	1110	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
E	914	1225	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC+ HEX, & REMAC
A	597	800	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
A	642	860	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
B	686	920	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
D	828	1110	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
A	597	800	2100	EPA T2 NR, IMO II	Dry Manifold
B	708	950	1800-2100	China III NR, EPA T2 NR, IMO II	Dry Manifold
C	839	1125	1800-2100	China III NR, EPA T2 NR, IMO II	Dry Manifold
D	895	1200	1800-2100	China III NR, EPA T2 NR, IMO II	Dry Manifold
E	1007	1350	1800-2100	China III NR, EPA T2 NR, IMO II	Dry Manifold
C	839	1125	1800	EPA T4f NRNG	Dry Manifold

Specifications

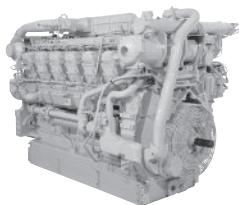
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C32 ACERT	1934.9 (76.18)	1431 (56.34)	1388.3 (54.66)	2286 (5040)	32 (1953)
C32 ACERT T4	1905 (75)	1600 (63)	1549 (61)	3107 (6850)	32 (1953)

Bore x Stroke – mm (in) 145 x 162 (5.7 x 6.4)

Please see spec sheet for more information:

C32 ACERT LEHW0049, LEHW0050, LEHW0051, LEHW0100

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions
E	1491	2000	1900	EPA T1 NR, EPA T1 M
E	1603	2150	1900	EPA T1 NR, EPA T1 M
E	1678	2250	1900	EPA T1 NR, EPA T1 M

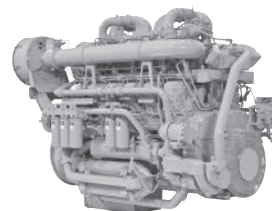
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3512B	2827 (111.3)	1793 (70.6)	1862 (73.3)	4803.6 (10,590)	52 (3173)
Bore x Stroke – mm (in)	170 x 190 (6.7 x 7.5)				

Please see spec sheet for more information:

3512B LEHW0055

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	1603	2150	1900	EPA T2 NR, IMO II, China III NR	ATAAC, 1.6% or 7% Torque Rise
E	1678	2250	1900	EEPA T2 NR, IMO II, China III NR	ATAAC, 1.6% or 7% Torque Rise
E	1752	2350	1900	EPA T2 NR, IMO II, China III NR	ATAAC, 7% Torque Rise
E	1864	2500	1900	EPA T2 NR, IMO II, China III NR	ATAAC, 7% Torque Rise
E	1678	2250	1900	EPA T2 NR, IMO II, China III NR	SCAC, 1.6% or 7% Torque Rise
E	1864	2500	1900	EPA T2 NR, IMO II, China III NR	SCAC, 7% Torque Rise

Dynamic Gas Blending – Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	1678	2250	1900	EPA T2 NR	Retrofit Kit Only
E	1864	2500	1900	EPA T2 NR	Retrofit Kit Only

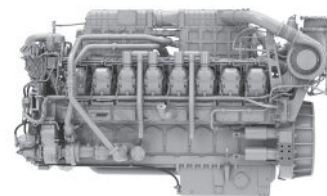
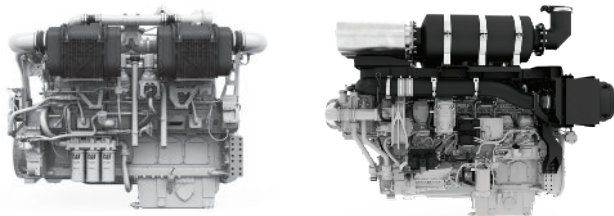
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3512C HD ATAAC	2804 (110.4)	1504 (59.2)	2192 (86.3)	6200 (13,669)	58.9 (3596)
3512C HD SCAC	2880 (113.8)	1630 (64.2)	2185 (86.1)	6402 (14,115)	58.9 (3596)
Bore x Stroke – mm (in)	170 x 215 (6.7 x 8.5)				

Please see spec sheet for more information:

3512C HD LEHW0056, LEHW0090

For diesel engine rating definitions please see page 10.



Diesel Only - Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	1678	2250	1800	EPA T4F NR	ATAAC , SCAC
E	1865	2500	1800	EPA T4F NR	ATAAC , SCAC

*Dynamic Gas Blending - Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	1678	2250	1800	EPA T4F	ATAAC , SCAC
E	1865	2500	1800	EPA T4F	ATAAC , SCAC

China Stage III - Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	2237	3000	1900	China Stage III, NR	ATAAC 7% Torque Rise

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
EPA T4F Diesel					
3512E ATAAC	3099 (122)	2235 (88)	2718 (107)	9646 (21,266)	58.9 (3596)
3512E SCAC	3490 (137.4)	2235 (88)	2718 (107)	10277 (22,657)	58.9 (3596)
DGB					
3512E ATAAC	3099 (122)	2235 (88)	2718 (107)	9778 (21,486)	58.9 (3596)
3512E SCAC	3490 (137.4)	2235 (88)	2718 (107)	10414 (22,959)	58.9 (3596)
China Stage III					
3512E ATAAC	2242 (88.3)	1982 (78)	2208 (86.9)	6270 (13,823)	58.9 (3596)
Bore x Stroke – mm (in)	170 x 215 (6.69 x 8.46)				

* The 3512E DGB Tier 4 Final engine is certified in only 49 states, not including California. This engine does not contain a CARB certification and is not for sale in California

Please see spec sheet for more information:

3512E LEHW0239, LEHW0240, LEHW0345

For diesel engine rating definitions please see page 10.

Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
E	2237	3000	1900	EPA T2 NR, China III NR	SCAC
E	2349	3150	1900	EPA T2 NR, China III NR	SCAC
E	2461	3300	1900	EPA T2 NR, China III NR	SCAC
E	2237	3000	1900	EPA T1 NR	SCAC
E	2349	3150	1900	EPA T1 NR	SCAC
E	2461	3300	1900	EPA T1 NR	SCAC

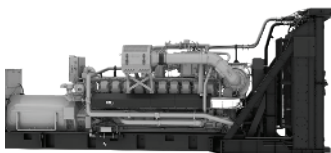
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in³)
3516C HD SCAC	3450 (135.83)	1688 (66.5)	2040 (80.3)	8516 (18,775)	78 (4765)
Bore x Stroke – mm (in)	170 x 215 (6.69 x 8.46)				

Please see spec sheet for more information:

3516C HD LEHW0159, LEHW0160

For diesel engine rating definitions please see page 10. For diesel engine rating definitions please see page 10.



Well Service Ratings

Model	Duty	ekW	rpm	Emissions
G3520	Continuous	2500	1500	EPA NRM, T2

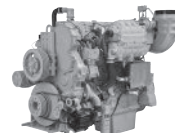
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3520 NRM	8534 (336)	2386 (91)	3230 (128s)	22,000(48,501)	97.6 (5956)
Bore x Stroke – mm (in)	170 x 215 (6.69 x 8.46)				

Please see spec sheet for more information:

G3520 NRM LEHW20286

For diesel engine rating definitions please see page 10. For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C7 ACERT					
B	153	205	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC only, Watercooled
C	172	230	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC only Watercooled
C9 ACERT					
D	254	340	2200	IMO II, EPA T3 NR, EU IIIA NR	Haz Loc, SCAC & REMAC avail, Derate Option, Watercooled
C15 ACERT					
D	400	536	1800-2000	EPA T2 M, IMO II, EPA T3 M	Haz Loc, SCAC, Watercooled
D	400	536	1800-2100	EU IIIA NR Constant Speed, IMO II	Haz Loc, SCAC, Watercooled
D	403	540	1800-2000	EPA T2 M, IMO II, EPA T3 M	Haz Loc, SCAC & REMAC, Watercooled
C32 ACERT					
A	597	800	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
A	641	860	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
B	686	920	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled
D	826	1110	2100	EPA T2 NR, EPA T2 M, IMO II	Haz Loc, SCAC only, Watercooled

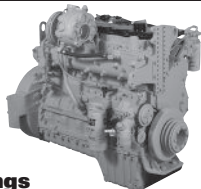
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C7 ACERT	1053 (41.5)	758 (29.8)	1032 (40.6)	629 (1386)	7.2 (439)
C9 ACERT	1092 (43)	828 (32.6)	1024 (40.3)	716 (1578)	8.8 (537)
C15 ACERT	1377 (54)	927 (37)	1227 (48)	1245 (12,743)	15.2 (927.6)
C32 ACERT	1918 (75.5)	1473 (58)	1321 (52)	2286 (5040)	32 (1953)
Bore x Stroke – mm (in)					
C7 ACERT	110 x 127 (4.3 x 5)			C18 ACERT	145 x 183 (5.7 x 7.2)
C9 ACERT	112 x 149 (4.4 x 5.8)			C32 ACERT	145 x 162 (5.7 x 6.4)
C15 ACERT	137.2 x 171.5 (5.4 x 6.75)				

Please see spec sheet for more information:

C7 ACERT .. LEHW0044 C9 ACERT .. LEHW0014 C15 ACERT .. LEHW0113 C32 ACERT .. LEHW0051

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
C7 ACERT					
B	153	205	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Watercooled, SCAC & REMAC avail
C	172	230	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Watercooled, SCAC & REMAC avail
D	205	275	2200	IMO II, EPA T2 M, EPA T3 NR, EU IIIA NR	Watercooled, SCAC & REMAC avail
C9 ACERT					
C	242	325	2200	IMO II, EPA T3 NR, EU IIIA NR	Watercooled, SCAC & REMAC avail
D	254	340	2200	IMO II, EPA T3 NR, EU IIIA NR	Watercooled, SCAC & REMAC avail
C15 ACERT					
D	400	536	1800-2000	EPA T2 M, IMO II, EPA T3 M	Haz Loc, SCAC, Watercooled
D	403	540	1800-2000	EPA T2 M, IMO II, EPA T3 M	Haz Loc, SCAC & REMAC, Watercooled
C32 ACERT					
A	597	800	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail
A	641	860	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail
B	686	920	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail
C	746	1000	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail
D	828	1110	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail
E	913	1225	2100	EPA T2 NR, EPA T2 M, IMO II	Watercooled, SCAC, SCAC + HEX & REMAC avail

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C7 ACERT	1053 (41.5)	758 (29.8)	1032 (40.6)	629 (1386)	7.2 (439)
C9 ACERT	1092 (43)	828 (32.6)	1024 (40.3)	716 (1578)	8.8 (537)
C32 ACERT	1918 (75.5)	1473 (58)	1321 (52)	2286 (5040)	32 (1953)

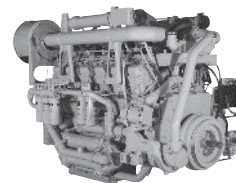
Bore x Stroke – mm (in)

C7 ACERT	110 x 127 (4.3 x 5)
C9 ACERT	112 x 149 (4.4 x 5.8)
C32 ACERT	145 x 162 (5.7 x 6.4)

Please see spec sheet for more information:

C7 ACERT LEHW0045 C9 ACERT LEHW0046 C32 ACERT LEHW0050

For diesel engine rating definitions please see page 10.



Well Service Ratings

Rating Tier	bkW	bhp	rpm	Emissions	Notes
3508					
A	507	680	1200	NC	Watercooled
C	611	820	1300	NC	Watercooled
A	638	855	1800	NC	Watercooled
C	746	1000	1800	NC	Watercooled
C	846	1135	1900	NC	Watercooled
3512					
A	761	1020	1200	NC	Watercooled
C	858	1150	1300	NC	Watercooled
A	954	1280	1800	NC	Watercooled
C	1119	1500	1800	NC	Watercooled
C	1342	1800	1900	NC	Watercooled
3516					
A	1010	1355	1200	NC	Watercooled
C	1242	1665	1300	NC	Watercooled

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3508	2136.14 (84.1)	1701.8 (67)	1719.58 (67.7)	4309 (9500)	34.5 (2105)
3512	2674.62 (105.3)	1701.8 (67)	1719.58 (67.7)	5203.75 (11,462)	51.8 (3158)
3516	3251 (128)	1701 (66.9)	2004 (78.9)	8660 (19,090)	69 (4210)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Please see spec sheet for more information:

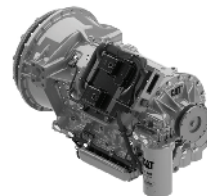
3512 LEHW0055
3516 LEHW0160

For diesel engine rating definitions please see page 10.

Engine	Transmission	Max hp	Page Number
C9 ACERT	CX31-P600	600	32
C11 ACERT	CX31-P600	600	32
C13 ACERT	CX31-P600	600	32
C15 ACERT	CX31-P600	600	32
	CX35-P800	800	33-34
C18 ACERT	CX35-P800	800	33-34
C27 ACERT	TH48-E70	1200	38
C32 ACERT	TH48-E70	1500	38
3512B	CX48-P2300	2300	35
3512C	CX48-P2300	2300	35
	TH53-E60	2500	36
	TH55-E70	3300	39
3512E	TH55-E90	3300	40
	CX48-P2300	2300	35
	TH53-E60	2500	36
3512E	CX48-P3060	3000	37
	TH55-E70	3300	39
	TH55-E90	3300	40
3516C	TH55-E70	3300	39
	TH55-E90	3300	40



CX31-P600 IPD Version



CX31-P600 Standard Version

Ratings

Gross Input Power	447 kW (600 hp)
Gross Input Torque	2746 N•m (2025 lb-ft)
Rated Input Speed	2100 rpm
Maximum Input Speed	2500 rpm

Output Connection Options

1710 output yoke, 1810 yoke, 1810 companion flange, ISO-8667 flange

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Standard Configuration:
10-bolt, 199 kW/267 hp at 8 o'clock and 1 o'clock**

Optional Integral Pump Drive

Configuration:
SAE J744 B-size (2- and 4-bolt) 149 kW/200 hp at 1 o'clock and 11 o'clock facing input**

SAE J744 C-size (2- and 4-bolt) 149 kW/200 hp at 1 o'clock and 11 o'clock facing output**

Cat® 8-bolt 355 kW/476 hp at 5 o'clock rear

Transmission Speed Ratios

Gear	Ratio
1F	4.40
2F	2.33
3F	1.53
4F	1.00
5F	0.72
6F	0.61
1R	3.97

Stall Torque Ratio @ Rated Speed	
< 400 hp engine	2.669
> 400 hp engine	2.324

Dimensions

Height:	719 mm (28.3 in)
Width:	613 mm (24.1 in)
Length:	1098 mm (43.2 in)

Weight

Approximate Dry Weight	
STD Configuration	456 kg (1006 lbs)
Integral Pump Drive	496 kg (1094 lbs)

Spec Sheet

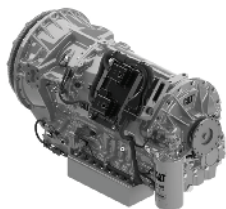
LEHW0008

*Viewed from rear

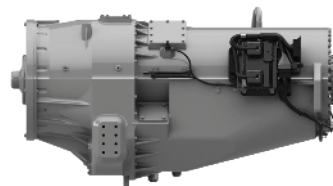
**Please see Application and Installation Guide (REHS3513) for details on combined PTO power rating



CX35-P800 IPD Version



CX35-P800 Standard Version



Ratings

Gross Input Power	597 kW (800 hp)
Gross Input Torque	
1F -3F	3354 N•m (2400 lb-ft)
4F -8F	3661 N•m (2700 lb-ft)
Rated Input Speed	2100 rpm
Maximum Input Speed	2500 rpm

Output Connection Options

1810 yoke, 1810 companion flange,
ISO-8667 flange

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Standard Configuration:
10-bolt, 199 kW/267 hp at 8 o'clock and 1 o'clock

Cat 8-bolt 355 kW/476 hp at 5 o'clock*

Optional Integral Pump Drive
Configuration:

SAE J744 B size (2- and 4-bolt) 149 kW/
200 hp at 1 o'clock and 11 o'clock
facing input**

SAE J744 C size (2- and 4-bolt) 149 kW/
200 hp at 1 o'clock and 11 o'clock
facing input**

Cat 8-bolt 355 kW/476 hp at 5 o'clock*

Transmission Speed Ratios

Gear	Ratio
1F	5.73
2F	3.57
3F	2.72
4F	1.95
5F	1.43
6F	1.00
7F	0.74
8F	0.63
1R	-4.46
Stall Torque Ratio	1.962

Dimensions

Height:	872 mm (34.4 in)
Width:	654 mm (25.8 in)
Length:	1265 mm (49.8 in)

Weight

Approximate Dry Weight	
STD Configuration	651 kg (1435 lbs)
Integral Pump Drive	731 kg (1612 lbs)

Spec Sheet

LEHW0007

Ratings

Gross Input Power	1715 kW (2300 hp)
Gross Input Torque	9024 N•m (6656 lb-ft)
Rated Input Speed	1900 rpm
Maximum Input Speed	2150 rpm

Output Connection (Yoke)

GWB 390.60/GWB 390.65

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive:	Engine-driven PTO
Location:	12 o'clock
Mountings:	SAE J704 8 bolt
	SAE J744 C-Size (Optional Cat bolt-on PTO)

Maximum PTO Power:

150 hp @1900 rpm (Cat PTO)
20 hp @1900 rpm (Third-Party PTOs)

Transmission Speed Ratios

Gear	Ratio
1F	3.34
2F	2.45
3F	2.20
4F	1.81
5F	1.62
6F	1.36
7F	1.19
8F	0.99
Stall Torque	2.20

Dimensions

Height:	1049 mm (41.3 in)
Width:	1128 mm (44.4 in)
Length:	1893.2 mm (74.5 in)

Weight

Approximate Dry Weight	
Transmission	1601 kg (3530 lbs)
Engine/Transmission Coupling	156 kg (343 lbs)

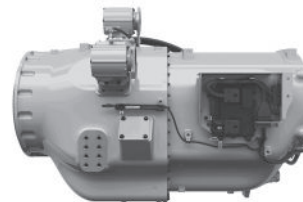
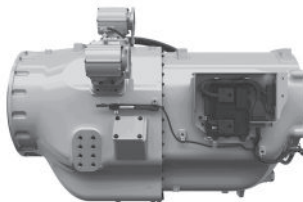
Spec Sheet

LEHW0148
LEHW20261 - Cat PTO

**Viewed from rear

***Please see Application and Installation Guide (REHS3515) for details on combined PTO power rating

*Viewed from rear



Ratings

Gross Input Power* 1864 KW (2500 hp)
 Gross Input Torque 12086 N•m (8914 lb-ft)
 Rated Input Speed 1900 rpm
 Maximum Input Speed 2025 rpm

Output Connection Options

GWB 390.60, GWB 390.65

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive: Engine-driven PTO
 Location: 12 o'clock, 10 o'clock
 Mountings: SAE J704 8 bolt
 SAE J744 C-Size (Optional Cat bolt-on PTO)

Maximum PTO Power:

150 hp @1900 rpm (Cat PTO)
 20 hp @1900 rpm (Third-Party PTOs)

Transmission Speed Ratios

Gear	Ratio
1F	4.54
2F	3.33
3F	2.99
4F	2.46
5F	2.20
6F	1.62

Dimensions

Height: 1122 mm (44.2 in)
 Width: 1215 mm (48.0 in)
 Length: 1793 mm (70.6 in)

Weight

Approximate Weight
 With Coupling 2005 kg (4420 lbs)

Spec Sheet

LEHW0374
 LEHW20261 - Cat PTO

**Viewed from rear

***Please see Application and Installation Guide (M0090883) for details on combined PTO power rating

Ratings

Gross Input Power* 2235KW (3000 hp)
 Gross Input Torque 12086 N•m (8914 lb-ft)
 Rated Input Speed 1900 rpm
 Maximum Input Speed 2025 rpm

Output Connection Options

GWB 390.70

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive: Engine-driven PTO
 Location: 12 o'clock, 10 o'clock
 Mountings: SAE J704 8 bolt
 SAE J744 C-Size (Optional Cat bolt-on PTO)

Maximum PTO Power:

150 hp @1900 rpm (Cat PTO)
 20 hp @1900 rpm (Third-Party PTOs)

Transmission Speed Ratios

Gear	Ratio
1F	4.54
2F	3.33
3F	2.99
4F	2.46
5F	2.20
6F	1.62

Dimensions

Height: 1122 mm (44.2 in)
 Width: 1269 mm (50.0 in)
 Length: 1793 mm (70.6 in)

Weight

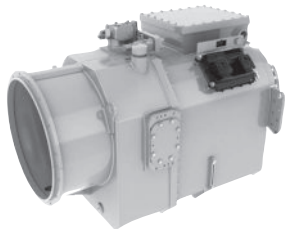
Approximate Weight
 With Coupling 2050 kg (4520 lbs)

Spec Sheet

LEHW0344
 LEHW20261 - Cat PTO

**Viewed from rear

***Please see Application and Installation Guide (M0090883) for details on combined PTO power rating



Ratings

Gross Input Power	895 kW (1200 hp) 1118 kW (1500 hp)
Gross Input Torque	5995 N•m (4422 lb-ft)
Rated Input Speed	2100 rpm
Maximum Input Speed	2200 rpm

Output Connection (Yoke)

GWB 390.60/GWB 390.65

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive: Engine-driven PTO
Location: 3 o'clock, 5 o'clock,
& 9 o'clock

Mountings: SAE J704 8 bolt
SAE J744 C-Size (Optional Cat bolt-on PTO)

Maximum PTO Power:
3 o'clock - 150 hp @ 1900 rpm (Cat PTO)
5 o'clock - 90 hp @ 1900 rpm (Cat PTO)
9 o'clock - 150 hp @ 1900 rpm (Cat PTO)
20 hp @ 1900 rpm All locations (Third-Party PTO)

** Transmission provided with SAE J704 8-bolt interface at 3 o'clock and 5 o'clock PTO locations. Optional SAE J704 8-bolt interface at 9 o'clock location.

Transmission Speed Ratios

Gear	Ratio
1F	6.16
2F	4.52
3F	3.33
4F	2.47
5F	1.82
6F	1.36
7F	1.00

Stall Torque Ratio 2.20

Dimensions

Height: 1092 mm (43 in)
Width: 866 mm (34 in)
Length: 1681 mm (66 in)

Weight

Approximate Dry Weight
Transmission 1694 kg (3735 lbs)
Engine/Transmission Coupling
108 kg (238 lbs)

Spec Sheet

LEHW1002
LEHW20261 - Cat PTO

Ratings

Gross Input Power	2461 kW (3300 hp)
Gross Input Torque	12 667 N•m (9350 lb-ft)
Rated Input Speed	1900 rpm
Maximum Input Speed	1970 rpm

Output Connection (Yoke)

GWB 390.65 – 2500 hp
GWB 390.70 – 3000+ hp

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive: Engine-driven PTO
Location: 3 o'clock & 11 o'clock
Mountings: SAE J704 (8-bolt) at 3 o'clock
(Optional Cat bolt-on PTO)
SAE J744 C-size (2- and 4-bolt) at 11 o'clock

Maximum PTO Power:
3 o'clock-150 hp @1900 rpm (Cat PTO)
20 hp @1900 rpm (Third-Party PTOs)
11 o'clock- 150 hp @1900 rpm

*Viewed from rear

Transmission Speed Ratios

Gear	Ratio
1F	6.25
2F	4.59
3F	3.38
4F	2.48
5F	1.83
6F	1.36
7F	1.00

Stall Torque Ratio 2.23

Dimensions

Height: 1288 mm (51 in)
Width: 1246 mm (49 in)
Length: 2132 mm (84 in)

Weight

Approximate Dry Weight
Transmission 2871 kg (6330 lbs)
Engine/Transmission Coupling
2500 hp 136 kg (300 lbs)
3000+ hp 181 kg (400 lbs)

Spec Sheet

LEHW1006
LEHW20261 - Cat PTO

*Viewed from rear



Ratings

Gross Input Power 2461 kW (3300 hp)
 Gross Input Torque 12 677 N•m (9350 lb-ft)
 Rated Input Speed 1900 rpm
 Maximum Input Speed 1970 rpm

Output Connection (Yoke)

GWB 390.65 – 2500 hp
 GWB 390.70 – 3000+ hp

Power Take Off

(Pump Auxiliary Drive)

PTO Mountings and Locations*

Drive: Engine-driven PTO
 Location: 3 o'clock & 11 o'clock
 Mountings: SAE J704 (8-bolt) at 3 o'clock (Optional Cat bolt-on PTO)
 SAE J744 C-size (2- and 4-bolt) at 11 o'clock

Maximum PTO Power:

3 o'clock-150 hp @1900 rpm (Cat PTO)
 20 hp @1900 rpm (Third-Party PTOs)
 11 o'clock- 150 hp @1900 rpm

Transmission Speed Ratios

Gear	Ratio
1F	4.67
2F	3.43
3F	3.03
4F	2.53
5F	2.22
6F	1.85
7F	1.64
8F	1.36
9F	1.00
Stall Torque Ratio	2.23

Dimensions

Height:	1288 mm (51 in)
Width:	1246 mm (49 in)
Length:	2137 mm (84 in)

Weight

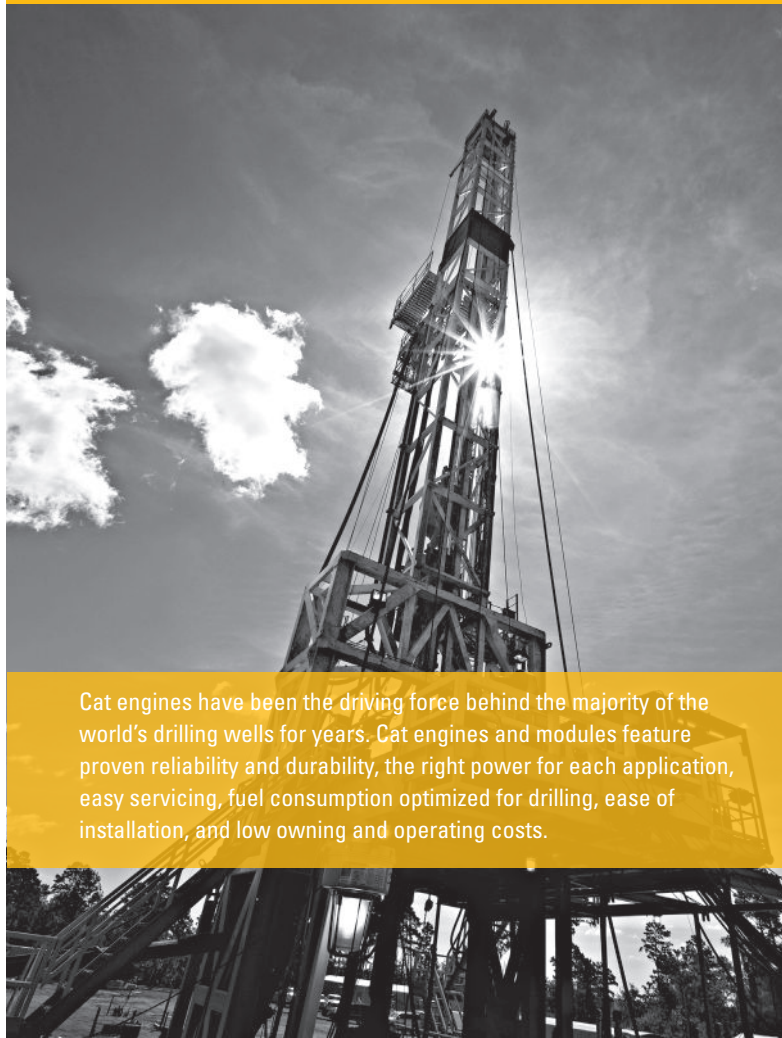
Approximate Dry Weight	
Transmission	2755 kg (6075 lbs)
Engine/Transmission Coupling	
2500 hp	136 kg (300 lbs)
3000+ hp	181 kg (400 lbs)

Spec Sheet

LEHW1006
 LEHW20261 - Cat PTO

*Viewed from rear

Land Drilling Ratings



Cat engines have been the driving force behind the majority of the world's drilling wells for years. Cat engines and modules feature proven reliability and durability, the right power for each application, easy servicing, fuel consumption optimized for drilling, ease of installation, and low owning and operating costs.



Land Mechanical Drilling Engine Ratings

Rating Tier	bkW	bhp	rpm	Emissions
A/B	354	475	1800-2100	EPA T4 NRNG, EU V NR COMPLIANT
C	403	540	1800-2100	EPA T4 NRNG, EU V NR COMPLIANT
D	433	580	1800-2100	EPA T4 NRNG, EU V NR COMPLIANT
A*	328	440	1800-2100	EPA T3 NR, EPA ESE, UN R96 IIIA, China III NR, IMO II
B*	354	475	1800-2100	EPA T3 NR, EPA ESE, UN R96 IIIA, China III NR, IMO II
C*	403	540	1800-2100	EPA T3 NR, EU IIIA NR, UN R96 IIIA, China III NR, IMO II
A/B	354	475	1800-2100	EPA T4i NRNG, EU IIIB NR, IMO III
C	403	540	1800-2100	EPA T4i NRNG, EU IIIB NR, IMO III, China Phase IV
D	433	580	1800-2100	EPA T4i NRNG, EU IIIB NR, IMO III
D	400	536	1800-2000	IMO II, EPA T3M, Haz Loc
D	403	540	1800-2000	IMO II, EPA T3M, Haz Loc

*Available with Cat compression brake

Land Drilling Module Ratings

Duty	bkW	ekW	kVA	bhp	Emissions
50 Hz/1500 rpm					
Prime	331	292	365	444	China II NRNC, EU II NRNC
Prime	410	365	456	550	China II NRNC, EU II NRNC
60 Hz/1800 rpm					
Prime	366	320	400	491	EPA ESE
Prime	409	365	456	549	EPA ESE
Prime	530	455	569	711	EPA ESE

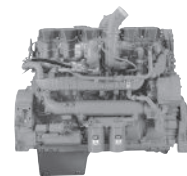
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C15 ACERT	1377 (54)	927 (37)	1227 (48)	1245 (2743)	15 (928)
C15 ACERT T4	1530 (60.2)	961 (37.8)	1282 (51)	1580 (3482)	15 (928)
C15 ACERT Module	3518 (138.5)	1524 (60)	2110 (83.1)	4760 (10,500)	15 (928)
Bore x Stroke – mm (in)	137 x 171 (5.4 x 6.75)				

Please see spec sheet for more information:

C15 ACERT (T3).....LEHW0061 C15 ACERT (T4) LEHW0097
 C15 ACERT Module.....LEHW0010

For diesel engine rating definitions please see page 10.



Land Mechanical Drilling Engine Ratings

Rating Tier	bkW	bhp	rpm	Emissions
A*	429	575	1800- 2100	EPA T3 NR, EPA ESE, EU Stage IIIA, China III NR, IMO II, NC
B*	447	600	1800- 2100	EPA T3 NR, EPA ESE, EU Stage IIIA, China III NR, IMO II, NC
C*	470	630	1800- 2100	EPA T3 NR, EPA ESE, EU Stage IIIA, China III NR, IMO II, NC
C	522	700	1800- 2100	EPA T3 NR, EPA ESE, EU Stage IIIA, China III NR, IMO II, NC
D	570	765	1800- 2100	EPA T2 NR, China III NR, IMO II
E	597	800	1800- 2100	EPA T2 NR, China III NR, IMO II
A/B	447	600	1800- 1900	EPA T4i NR, EU IIIB
A	429	575	1800 -2000	EPA T4F NRNG, EU V NR
B	447	600	1800 -2000	EPA T4F NRNG, EU V NR
C	470	630	1800 -1900	EPA T4i NR, EU IIIB
C	522	700	1800 -1900	EPA T4i NR, EU IIIB
C	563	755	1800 -1900	EPA T4i NR
C	470	630	1800 -2000	EPA T4F NRNG, EU V NR
C	563	755	1800	EPA T4F NRNG, EU V NR
D	597	800	1800	EPA T4F NRNG, EU V NR

*Available with Cat compression brake

Land Drilling Module Ratings

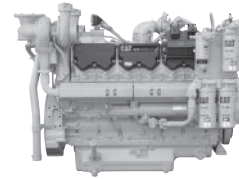
Duty	bkW	ekW	kVA	bhp	Emissions
50 Hz/1500 rpm					
Prime	490	436	545	657	China II NRNC, EU II NRNC
60 Hz/1800 rpm					
Prime	576	500	625	772	EPA ESE
Prime	624	545	681	837	EPA ESE
Prime	528	455	569	708	EPA T4F NRNG

Ratings continued on page 44

Ratings continued from page 43

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C18 ACERT	1389 (54.7)	919 (36.2)	1227 (49.5)	1273 (2807)	18 (1105)
C18 ACERT T4	1530 (60.2)	961 (37.8)	1282 (51)	1580 (3482)	18 (1105)
C18 ACERT Module	3632 (143)	1524 (60)	2115 (83.3)	5033 (11,095)	18 (1105)
Bore x Stroke – mm (in)	145 x 183 (5.7 x 7.2)				



Land Mechanical Drilling Engine Ratings

Rating	Tier	bkW	bhp	rpm	Emissions
A	597	800	1800-2100		IMO II
B	653	875	1800-2100		IMO II
C	708	950	1800-2100		IMO II
D	783	1050	1800-2100		IMO II
E	858	1150	1800-2100		IMO II
A	597	800	1800-2100		EPA T4i NRNG
B	653	875	1800-2100		EPA T4i NRNG
C	708	950	1800-2100		EPA T4i NRNG
D	783	1050	1800-2100		EPA T4i NRNG
A	597	800	1800		EPA T4F NRNG, EU V
B	652	875	1800		EPA T4F NRNG, EU V
C	708	950	1800		EPA T4F NRNG, EU V
D	783	1050	1800		EPA T4F NRNG, EU V

Land Electric Drilling Module Ratings

Duty	bkW	ekW	kVA	bhp	Emissions
60 Hz/1800 rpm					
Prime	824	725	1035	1105	NC
Prime	824	725	907	1105	NC

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C27 ACERT	1918 (75.5)	1463 (57.6)	1321 (52)	2895 (6382)	27 (1648)
C27 ACERT T4	2160 (85)	1270 (50)	1650 (65)	2956 (6516)	27 (1648)
C27 ACERT Module	5228 (205.8)	1950 (76.8)	2180 (85.8)	9072 (20,000)	27 (1648)
Bore x Stroke – mm (in)	137.7 x 152.4 (5.42 x 6)				

Please see spec sheet for more information:

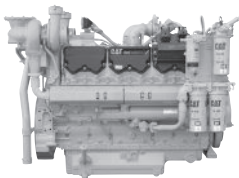
C27 ACERT (T2)..... LEHW0052 C27 ACERT Module..... LEHW0115
 C27 ACERT (T4i) LEHW0101

For diesel engine rating definitions please see page 10.

Please see spec sheet for more information:

C18 ACERT (T3)..... LEHW0053 C18 ACERT Module (T4F) LEHW0333
 C18 ACERT (T4i) LEHW0098 C18 ACERT Module..... LEHW7450
 C18 ACERT (T4F)..... LEHW0109

For diesel engine rating definitions please see page 10.



Land Mechanical Drilling Engine Ratings

Rating Tier	bkW	bhp	rpm	Emissions
A	597	800	1800-2100	EPA T2 NR, China III NR, IMO II
B	708	950	1800-2100	EPA T2 NR, China III NR, IMO II, EPA ESE
C	839	1125	1800-2100	EPA T2 NR, China III NR, IMO II, EPA ESE
D	895	1200	1800-2100	EPA T2 NR, China III NR, IMO II, EPA ESE
E	1007	1350	1800-2100	EPA T2 NR, China III NR, IMO II, EPA ESE
E	1119	1500	1800-2100	IMO II
B	708	950	1800-2100	EPA T4i NRNG
C	839	1125	1800-2100	EPA T4i NRNG
D	895	1200	1800-2100	EPA T4i NRNG
B	746	1000	1800	EPA T4f NRNG
C	839	1125	1800	EPA T4f NRNG
D	895	1200	1800	EPA T4f NRNG

Land Electric Drilling Module Ratings

Duty	bkW	ekW	kVA	bhp	Emissions
50 Hz/1500 rpm					
Prime	882	700	1000	1182	NC
60 Hz/1800 rpm					
Prime	1008	910	1300	1351	NC

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C32 ACERT	1918 (75.5)	1473 (58)	1321 (52)	2895 (6382)	32 (1953)
C32 ACERT T4	1905 (75)	1600 (63)	1549 (61)	3107 (6850)	32 (1953)
C32 ACERT Module	5228 (206)	1905 (75)	2180 (86)	9299 (20,500)	32 (1953)

Bore x Stroke – mm (in) 145 x 162 (5.7 x 6.4)

Please see spec sheet for more information:

C32 ACERT (T2).....	LEHW0049
C32 ACERT (T4i).....	LEHW0100
C32 ACERT Module.....	LEHW0110

For diesel engine rating definitions please see page 10.

Land Mechanical Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
3508	A	507	680	1200	NC
3508	Drill-M	567	760	1200	NC
3508	C	611	820	1300	NC
3508	A	638	855	1800	NC
3508	C	746	1000	1800	NC
3512	A	761	1020	1200	NC
3512	Drill-M	764	1025	1200	NC
3512	C	858	1150	1300	NC
3512	Drill-M	932	1250	1200	NC
3512	A	955	1280	1800	NC
3512	C	1119	1500	1800	NC
3516	Drill-M	1230	1649	1200	NC

Land Electric-Drive Drilling Module Ratings

Model	Duty	bkW	ekW	kVA	bhp	Emissions
50 Hz/1500 rpm						
3512	Drill-EI	1090	990	1680	1462	NC

Specifications

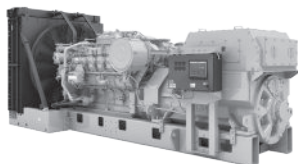
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3508 Engine	2136 (84.1)	1702 (67.0)	1720 (67.7)	4309 (9500)	35 (2105)
3508 Module	7874 (310)	2385 (93.9)	2779 (109.4)	14,443 (31,847)	35 (2105)
3512 Engine	2675 (105.3)	1702 (67.0)	1720 (67.7)	5203 (11,471)	52 (3158)
3512 Module	7874 (310)	2385 (93.9)	2936 (115.6)	15,714 (34,643)	52 (3158)
3516 Engine	3251 (128)	1701 (67.0)	2004 (78.9)	8659 (19,090)	69 (4210)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Please see spec sheet for more information:

3508 Engine.....	LEHW0058	3512 Engine.....	LEHW0060
3508 Module.....	LEHW0069	3512 Module.....	LEHW0066

For diesel engine rating definitions please see page 10.



Land Mechanical Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
3508B	Drill-M	671	900	1200	NC

Land Electric-Drive Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
3508B	Drill-EI	682	915	1200	NC
3512B	Drill-EI	1101	1475	1200	NC
3512B with DGB	Drill-EI	933	1251	1000	NC

Land Electric-Drive Drilling Module Ratings

Model	Duty	bkW	ekW	kVA	bhp	Emissions
60 Hz/1200 rpm						
3512B	Drill-EI	1101	995	1673	1476	NC
3512B with DGB	Drill-EI	1101	995	1673	1476	NC
3516B	Drill-EI	1383	1285	2150	1855	NC
50 Hz/1500 rpm						
3512B	Drill-EI	1310	1200	1993	1757	NC
3512B with DGB	Drill-EI	1310	1200	1993	1757	NC

Specifications

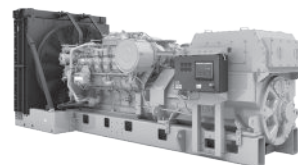
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3508B Engine	2136 (84.1)	1702 (67)	2024 (79.7)	4309 (9500)	35 (2105)
3508B Module	4986 (196.3)	2319 (91.3)	2596 (102.2)	15 352 (33,846)	35 (2105)
3512B Engine	2675 (105.3)	1702 (67)	1720 (67.7)	5203 (11,471)	52 (3158)
3512B Module	6051 (238.2)	2318 (91.2)	2659 (104.7)	14 000 (30,864)	52 (3158)
3516B DGB Module	5841 (230.0)	2318 (91.2)	2662 (104.8)	13 545 (29,861)	52 (3158)
3516B Module	7874 (310.0)	2385 (93.9)	2520 (99.2)	18 810 (41,469)	69 (4210)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Please see spec sheet for more information:

3508B Engine	LEHW0057	3512B DGB Module	LEHW0200
3508B Module	LEHW0070	3516B Module	LEHW0065
3512B Module	LEHW0067, LEHW0170		

For diesel engine rating definitions please see page 10.



Land Mechanical Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
3508C	Drill-M	671	900	1200	China III NR, EPA T2 NR
3512C HD	Drill-M	932	1250	1200	China III NR, EPA T2 NR
3512C	Drill-M	1100	1475	1200	China III NR, EPA T2 NR

Land Electric-Drive Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
3508C	Drill-EI	682	915	1200	China III NR, EPA T2 NR
3512C	Drill-EI	1101	1475	1200	EPA T2 NR
3512C	Drill-EI	1305	1750	1200	EPA T2 NR

Land Electric-Drive Drilling Module Ratings

Model	Duty	bkW	ekW	kVA	bhp	Emissions
50 Hz/1500 rpm						
3512C	Drill-EI	1310	1245	1993	1757	China III NR
60 Hz/1200 rpm						
3512C	Drill-EI	1101	995	1673	1476	EPA T2 NR, China III NR
3512C	Drill-EI	1305	1190	2113	1750	EPA T2 NR

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3508C Engine	2136 (84.1)	1702 (67.0)	2024 (79.7)	4582 (10,101)	35 (2105)
3512C Module	6051 (238.2)	2318 (91.2)	2659 (104.7)	14 453 (31,864)	52 (3158)
3512C HD					
Engine	2682 (105.6)	1790 (70.5)	2019 (79.5)	5423 (11,945)	59 (3574)
Module	6035 (237.6)	2320 (91.4)	2636 (103.8)	14 720 (32,452)	59 (3574)

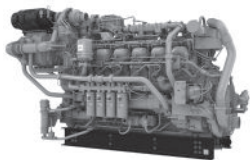
Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Bore x Stroke HD – mm (in) 170 x 215 (6.7 x 8.5)

Please see spec sheet for more information:

3508C Engine	LEHW0059, LEHW0071	3512C Module	LEHW0068
3512C HD Engine	LEHW0048	3512C (DGB) Module	LEHW0138
3512C HD China III NR	LEHW0241	3512C HD Module	LEHW0013

For diesel engine rating definitions please see page 10.



Land Electric-Drive Drilling Engine Ratings

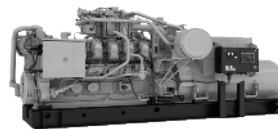
Model	Duty	bkW	bhp	rpm	Emissions
3512E	Drill-EI	1102	1477	1200	EPA T4F NRNG
3512E	Drill-EI	1306	1750	1200	EPA T4F NRNG

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3512E Engine	3327 (131)	1829 (72)	1981 (78)	7711 (17,000)	59 (3600)
Bore x Stroke – mm (in) 170x216 (6.7x8.5)					

Please see spec sheet for more information:
 3500E Engine..... LEHW0282

For diesel engine rating definitions please see page 10.



Land Electric-Drive Drilling Engine Ratings

Model	Duty	bkW	bhp	rpm	Emissions
G3512	Continuous	1095	1468	1800	EPA NRM, T2



Land Drilling Energy Storage System Ratings

Model	Duty	Power (kW)	Energy(kWh)
PGS1260 HD	Continuous	1000	672

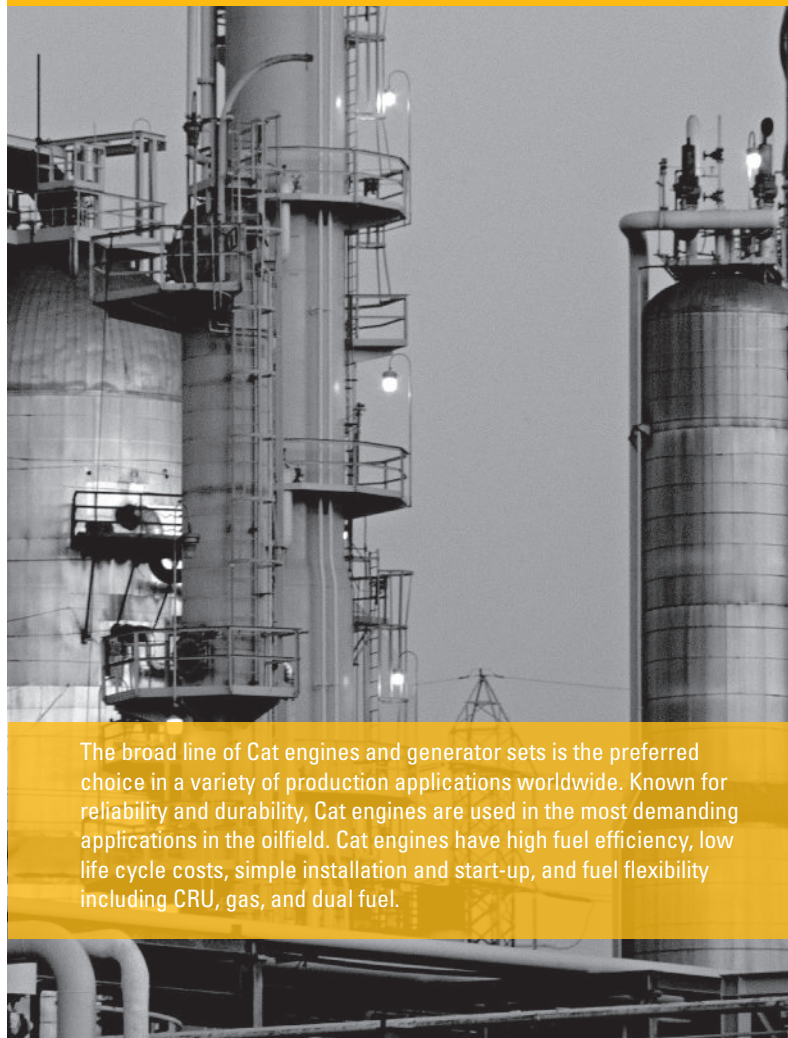
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Disp – L (in ³)
G3512 Engine	4979.3 (196.0)	2154.4 (84.8)	2277.1 (89.6)	52 (3173)
Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)				
	L – m (ft)	W – m (ft)	H – m (ft)	Weight - kg (lbs)
PGS1260 HD	6.1(20)	2.4 (8)	2.8 (9.5)	16,500 (36,376)

Please see spec sheet for more information:
 G3512 Engine LEHW20188
 PGS1260 HD LEHW0282

For diesel engine rating definitions please see page 10.

Engine	Transmission	Max hp	Page Number
C15 ACERT	CX31-P600	600	33
	CX38-P892	875	35
C18 ACERT	CX38-P892	875	35
C27 ACERT	TH48-E70	1200	39
C32 ACERT	TH48-E70	1500	39



The broad line of Cat engines and generator sets is the preferred choice in a variety of production applications worldwide. Known for reliability and durability, Cat engines are used in the most demanding applications in the oilfield. Cat engines have high fuel efficiency, low life cycle costs, simple installation and start-up, and fuel flexibility including CRU, gas, and dual fuel.

50 Hz Oilfield Diesel Generator Set Ratings – 365-1000 kVA

Model	Duty	kW		kVA		bhp	Emissions
		bkW	ekW	kVA	bhp		
1500 rpm							
C15 ACERT	Prime	331	292	365	444	EU II NRNC, China II NRNC, NC	
C15 ACERT	Prime	410	364	455	549	EU II NRNC, China II NRNC, NC	
C18 ACERT	Prime	483	436	545	647	EU II NRNC, China II NRNC, NC	
C32 ACERT	Prime	882	800	1000	1182	NC	

50 Hz Generator Set Ratings – 365-7150 kVA

Standby	kVA		kW		Generator Set Model	Emissions/ Configuration
	Prime	Cont.	Standby	Prime		
1500 rpm						
–	350	–	–	280	–	C13 China III NR
–	400	–	–	320	–	C13 China III NR
–	450	–	–	360	–	C15 NC
–	500	–	–	400	–	C15 NC
500	450	–	400	360	–	C15 NC
550	500	–	440	400	–	C15 NC
605	550	–	484	440	–	C18 NC
660	600	–	528	480	–	C18 NC
715	650	–	572	520	–	C18 NC
800	725	–	640	580	–	3412C Low BSFC
900	810	–	720	648	–	3412C Low BSFC
1250	1100	–	1000	880	–	C32 Low BSFC
1100	1000	910	880	800	728	C32 Low BSFC
1250	1150	1000	1000	920	800	3512 Low BSFC
1400	1275	1206	1120	1020	965	3512 Low BSFC
1500	1360	–	1200	1088	–	3512B Low BSFC, Low Emissions
1600	1500	1320	1280	1200	1056	3512B Low BSFC, Low Emissions
1750	1600	–	1400	1280	–	3512B HD Low BSFC, Low Emissions
1875	1700	1500	1500	1360	1200	3512B HD Low BSFC, Low Emissions
2000	1825	1600	1600	1460	1280	3516 Low BSFC
–	2000	1750	–	1600	1400	3516B Low BSFC, Low Emissions

Ratings continued on page 55

Ratings continued from page 54

Standby	kVA		kW		Generator Set Model	Emissions/ Configuration
	Prime	Cont.	Standby	Prime		
1500 rpm						
2500	2275	2000	2000	1820	1600	3516B HD Low BSFC, Low Emissions
2750	2500	–	2200	2000	–	3516C HD Low BSFC
3000	2725	2500	2400	2180	2000	C175-16 Low BSFC
3000	–	–	2400	–	–	C175-16 Low Emissions
3100	2825	2600	2480	2260	2080	C175-16 Low BSFC
3100	–	–	2480	–	–	C175-16 Low Emissions
3900	3500	3150	3120	2800	2520	C175-20 Low BSFC
3900	–	–	3120	–	–	C175-20 Low Emissions
4000	3600	3250	3200	2880	2600	C175-20 Low BSFC
4000	–	–	3200	–	–	C175-20 Low Emissions
1000 rpm						
–	2425	2200	–	1940	1760	3606 NC
–	–	2000	–	–	1600	3606 NC
–	–	2938	–	–	2350	3608 NC
–	3250	–	–	2600	–	3608 NC
–	4850	4400	–	3880	3520	3612 NC
5375	–	–	4300	–	–	3612 NC
–	6500	–	–	5200	–	3616 NC
7150	–	5875	5720	–	4700	3616 NC
–	2425	2200	–	1940	1760	C280-6 NC
–	3250	–	–	2600	–	C280-8 NC
–	–	2938	–	–	2350	C280-8 NC
–	4850	4400	–	3880	3520	C280-12 NC
–	6500	5875	–	5200	4700	C280-16 NC

60 Hz Generator Set Ratings – 180-4600 ekW

kVA			ekW			Generator Set Model	Emissions/ Configuration
Standby	Prime	Cont.	Standby	Prime	Cont.		
1800 rpm							
156	142	–	125	114	–	C7.1 ACERT	EPA ESE
187	169	–	150	135	–	C7.1 ACERT	EPA ESE
219	197	–	175	157	–	C7.1 ACERT	EPA ESE
250	–	–	200	–	–	C7.1 ACERT	EPA ESE + T4F
250	225	–	200	180	–	C9 ACERT	EPA ESE
313	281	–	250	225	–	C9 ACERT	EPA ESE
375	344	–	300	275	–	C9 ACERT	EPA ESE
438	400	–	350	320	–	C13 ACERT	EPA ESE
500	456	–	400	365	–	C13 ACERT	EPA ESE
438	400	–	350	320	–	C15 ACERT	EPA ESE
500	456	–	400	365	–	C15 ACERT	EPA ESE
563	513	–	450	410	–	C15 ACERT	EPA ESE
625	569	–	500	455	–	C15 ACERT	EPA ESE
688	625	–	550	500	–	C18 ACERT	EPA ESE
750	681	–	600	545	–	C18 ACERT	EPA ESE
813	750	–	650	600	–	C18 ACERT	EPA ESE
875	794	–	700	635	–	C18 ACERT	EPA ESE
938	850	–	750	680	–	C18 ACERT	EPA ESE
875	794	–	700	635	–	3412STA	NC
1000	906	–	800	724	–	3412STA	NC

* Package available through DTO

Ratings continued on page 57

Ratings continued from page 58

60 Hz Generator Set Ratings – 180-4600 ekW

kVA			ekW			Generator Set Model	Emissions/ Configuration
Standby	Prime	Cont.	Standby	Prime	Cont.		
1800 rpm (continued)							
938	906	–	750	680	–	C27 ACERT	EPA ESE
1000	906	–	800	725	–	C27 ACERT	EPA ESE
–	1035	–	–	725	–	C27 ACERT	NC, LOW BSFC
–	907	–	–	725	–	C27 ACERT	NC, LOW BSFC
–	1035	–	–	725	–	C27 ACERT	NC, LOW EMISSIONS
–	907	–	–	725	–	C27 ACERT	NC, LOW EMISSIONS
1250	1138	1038	1000	910	830	C32 ACERT	NC, EPA ESE, EPA T2
–	1300	–	–	910	–	C32 ACERT	NC
–	1137	–	–	910	–	C32 ACERT	NC
1375	1250	1113	1100	1000	890	3512	NC
–	1594	–	–	1275	–	3512B	NC, LOW BSFC
–	1700	1538	–	1360	1230	3512B	NC, LOW BSFC
1875	–	–	1500	–	–	3512C	EPA ESE
–	1700	1538	–	1360	1230	3512C	NC, EPA ESE
2188	–	–	1750	–	–	3512C	NC, EPA ESE
2188	2000	1813	1750	1600	1450	3516	NC
2500	–	–	2000	–	–	3516B	NC
–	2281	2050	–	1825	1640	3516B	NC
2813	–	–	2250	–	–	3516B	NC
–	2281	2063	–	1825	1650	3516C	NC, EPA ESE
2500	–	–	2000	–	–	3516C	NC, EPA ESE
–	2813	2563	–	2250	2050	3516C	NC, EPA ESE
3125	–	–	2500	–	–	3516CHD	NC, EPA ESE
2500	2281	–	2000	1825	–	3516CHD	EPA T4F
3125	2813	–	2500	2250	–	3516CHD	EPA T4F

Ratings continued on page 59

Ratings continued on page 59

60 Hz Generator Set Ratings – 180-4600 ekW

kVA			ekW			Generator Set Model	Emissions/ Configuration
Standby	Prime	Cont.	Standby	Prime	Cont.		
900 rpm							
–	2275	2063	–	1820	1650	3606	NC
–	–	1875	–	–	1500	3606	NC
–	–	2500	–	–	2000	3608	NC
–	3025	–	–	2420	–	3608	NC
–	–	2750	–	–	2200	3608	NC
–	4550	4125	–	3640	3300	3612	NC
5000	–	–	4000	–	–	3612	NC
–	–	3750	–	–	3000	3612	NC
–	6050	–	–	4840	–	3616	NC
6650	–	5500	5320	–	4400	3616	NC
–	–	5000	–	–	4000	3616	NC
–	2275	2063	–	1820	1650	C280-6	NC
–	3025	2750	–	2420	2200	C280-8	EPA T4F
–	3025	2750	–	2420	2200	C280-8	NC
–	4550	4125	–	3640	3300	C280-12	NC
–	4550	4125	–	3640	3300	C280-12	EPA T4i
–	6050	5750	–	4840	4600	C280-16	EPA T4i
–	6050	5500	–	4840	4400	C280-16	NC

Ratings continued from page 58

60 Hz Generator Set Ratings – 180-4600 ekW

kVA			ekW			Generator Set Model	Emissions/ Configuration
Standby	Prime	Cont.	Standby	Prime	Cont.		
720/750 rpm							
–	1963	–	–	1570	–	3606	NC
–	1906	–	–	1525	–	3606	NC
–	2600	–	–	2080	–	3608	NC
–	2525	–	–	2020	–	3608	NC
–	3925	–	–	3140	–	3612	NC
–	3813	–	–	3050	–	3612	NC
–	5200	–	–	4160	–	3616	NC
–	5050	–	–	4040	–	3616	NC

¹Dependent on generator selection and power factor.

Generator Set Ratings – 1056-1600 ekW

ekW	kVA	Duty	Generator Set Model	Notes
60 Hz – 1800 rpm				
1360	1700	Prime	3512B with DGB	Diesel with up to 70% NG/LNG/CNG/FG
50 Hz – 1500 rpm				
1056	1320	Cont	3512B with DGB	Diesel with up to 70% NG/LNG/CNG/FG
1200	1500	Prime	3512B with DGB	Diesel with up to 70% NG/LNG/CNG/FG
1600	2000	Prime	3516B with DGB	Diesel with up to 70% NG/LNG/CNG/FG

50 Hz Oilfield Generator Set Ratings – 110-1560 ekW

ekW	rpm	Generator Set Model
1500 rpm		
1560	1500	CG170-16

50 Hz Generator Set Ratings – 70-4300 ekW

ekW	rpm	Generator Set Model
1500 rpm		
125	1500	G3406
160	1500	G3406
360	1500	G3412C
400	1500	CG132-8
480/495/510	1500	G3508
600	1500	CG132-12
725	1500	G3512
800	1500	CG132-16
984	1500	G3512E
975/1030	1500	G3516
1184	1500	G3512E
1200	1500	CG170-12
1555	1500	G3516C
1560	1500	CG170-16
1990/2000	1500	G3516H
1972	1500	G3520C
1995	1500	G3520E
2000	1500	CG170-20
2000	1500	G3520
2486	1500	G3520H
1000 rpm		
1679	1000	G3608
2515	1000	G3612
3333	1000	CG260-12
3355	1000	G3616
4300	1000	CG260-16

60 Hz Oilfield Generator Set Ratings - 131-1500 ekW

ekW	rpm	Generator Set Model	Emissions
1800 rpm			
131	1800	G3306B	NRM, Stationary
400	1800	CG137-12	NRM
1200 rpm			
360	1200	G3508	NC
555/560/570	1200	G3512	NC
765/770	1200	G3516	NC

60 Hz Generator Set Ratings - 85-4050 ekW

ekW	rpm	Generator Set Model
1500 rpm with gearbox		
1966	1500	G3516H
2476	1500	G3520H
1800 rpm		
400	1800	CG137-12
400	1800	CG132-8
350/375	1800	G3412 TA
423	1800	G3412C
600	1800	CG132-12
800	1800	CG132-16
1300	1800	G3516B
1650/1660	1800	G3516C
2050	1800	G3520C
2500	1800	G3520 ¹
900 rpm		
1510	900	G3608
2263	900	G3612
3000	900	CG260-12
3020	900	G3616
4000	900	CG260-16
4050	900	CG260-16

¹EPA NRM emission compliant

Mechanical Drive Engine Ratings; Highly Regulated Areas - 116-839 bkW

Model	bkW	bhp	rpm	Emissions
C9.3B ATAAC	250	335	1800-2200	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	280	375	1800-2200	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	310	415	1800-2200	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	340	455	1800-2200	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	340	456	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	370	496	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	400	536	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	430	577	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	403	540	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	433	580	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,
C9.3B ATAAC	470	630	1800-2100	EPA T4f, EU Stage V, Japan 2014 (T4f), Korea T4f, UNECE R96 Stage IV,

Ratings continued on page 64

Ratings continued from page 63

Mechanical Drive Engine Ratings; Lesser Regulated Areas - 168-1275 bkW

Model	bkW	bhp	rpm	Fuel
C7.2 ACERT	167	255	1800-2200	China Stage II, EPA T3, EU Stage III A, IMO II
C7.2 ACERT	187	250	1800-2200	China Stage II, EPA T3, EU Stage III A, IMO II
C7.2 ACERT	224	300	1800-2200	China Stage II, EPA T3, EU Stage III A, IMO II
C15 ACERT	403	540	1800-2100	China Stage II, EPA T3, EU Stage III A, IMO II
C15 ACERT	433	580	1800-2100	China Stage II, EPA T3, EU Stage III A, IMO II
C18 ACERT	522	700	1800-2100	China Stage II, EPA T3, EU Stage III A, IMO II
C27 ACERT	708	950	1800-2100	EPA T2, IMO II
C27 ACERT	783	1050	1800-2100	EPA T2, IMO II
3508	637	855	1800	NC
3508	578	775	1800	NC
3508B	671	900	1200	NC
C32	839	1125	1800-2100	EPA T2, IMO II
C32	895	1200	1800-2100	EPA T2, IMO II
3512	955	1280	1800	NC
3516	1275	1710	1800	NC
3516	1011	1355	1200	NC
3516	1230	1649	1200	NC

Mechanical Drive Engine Ratings - 71-10000 bkW

Model	bkW	bhp	rpm
G3304B	71	95	1800
G3306B	108, 151, 157	145, 203, 211	1800
G3406 TA	242	325	1800
G3408	190/298	255/400	1800
G3408C	317	425	1800
G3412 TA	448	600	1800
CG137-8	298	400	1800
CG137-12	447	600	1800
G3412C	475	637	1800
G3508 TA	391	524	1200
G3508	500	670	1400
G3508B	515	690	1400
G3512 TA	589	790	1200
G3512 LE	642	860	1200
G3512 LE	749	1005	1400
G3512B	772	1035	1400
G3516 NA	492	660	1200
G3516 LE	858	1150	1200
G3516 TA	1030	1380	1400
G3516 LE	1000	1340	1400
G3516B	1029	1380	1200
G3516J	1029	1380	1400
G3520B	1104	1480	1200
G3520B	1286	1725	1400
G3606 A4	1398, 1454, 1499	1875, 1950, 2010	1000
G3608 A4	1864, 1931, 1995	2500, 2590, 2675	1000
G3612 A4	2796, 2890, 2983	3750, 3875, 4000	1000
G3616 A4	3728, 3859, 3989	5000, 5175, 5350	1000

Mobile Gas Solutions



Mobile Gas Generator Set Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3306B NA	Cont	108	145	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx
G3306B NA	Cont	108	145	1800	Export Only	2% O ₂ Emission Rating
G3306B TA¹	Cont	151	203	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx
G3306B TA¹	Cont	151	203	1800	Export Only	2% O ₂ Emission Rating
G3306B TAA¹	Cont	157	211	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx

*Dependent upon engine configuration selected.

¹54°C/130°F Water to Aftercooler

Ratings listed are for 25°C (77°F) ambient temperature, 500' altitude, and pipeline quality gas.

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3304	1158 (46)	744 (29)	1170 (46)	757 (1670)	7 (425)
G3306	1539 (60)	978 (38)	1261 (50)	948 (2090)	10.5 (640)

Bore x Stroke – mm (in) 121 x 152 (4.75 x 6.0)

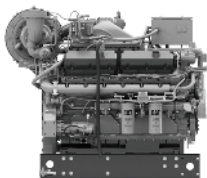
Please see spec sheet for more information:

G3306B TA LEHW8815

G3306B NA LEHW0111

For gas engine rating conditions please see page 10.

The Mobile Gas Solutions portfolio includes products with a proven reliability designed to enable lower cost of ownership and decrease NOx and greenhouse gas emissions. Additional benefits include efficient gas power, high efficiency and power density, and a versatile EPA mobile certification.



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
CG137-12	Cont	447	600	1800	NSPS Site Compliant Capable	

Specifications

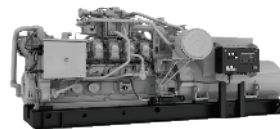
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
CG137-12	2092 (82.4)	1423 (56)	1778 (70)	2835 (6250)	27 (1649)
Bore x Stroke – mm (in)	137 x 152 (5.4 x 6)				

Please see spec sheet for more information:

CG137-12 Integrated Catalyst LEHW0119

CG137-12 LEHW0270

For gas engine rating conditions please see page 10.



Mobile Gas Generator Set Ratings

Model	Duty	bkW	bhp	rpm	Emissions
G3512	Continuous	1095	1468	1800	EPA NRM

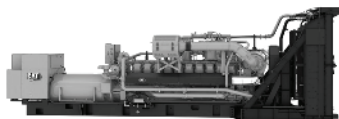
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Disp – L (in ³)
G3512 Engine	4979.3 (196.0)	2154.4 (84.8)	2277.1 (89.6)	52 (3173)
Bore x Stroke – mm (in)	170 x 190 (6.7 x 7.5)			

Please see spec sheet for more information:

G3512 Engine LEHW20188

For diesel engine rating definitions please see page 10.



Mobile Gas Generator Set Ratings

Model	Duty	ekW	rpm	Emissions
G3520	Continuous	2000	1500	EPA NRM, T2

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Disp – L (in ³)
G3520 Engine	8534 (336)	2386 (94)	3230 (128)	97.6(5956)
Bore x Stroke – mm (in)	170 x 215 (6.7 x 8.5)			

Please see spec sheet for more information:
 G3520 Engine LEHW20286

For diesel engine rating definitions please see page 10.

Energy Storage Solutions



A scalable, mobile, energy storage system with a heavy-duty battery structure, the Cat Energy Storage System (ESS) has proven field success in land drilling applications and can be applied in any oilfield application where electric power is required. ESS can integrate with microgrid or utility power, including solar and other renewable sources, to enable short-duration peak shaving and load management, further reducing fuel burn while also managing peak grid power demands.



Energy Storage Solutions Ratings

Model	Duty	Power (kW)	Energy(kWh)
PGS1260 HD	Continuous	1000	672

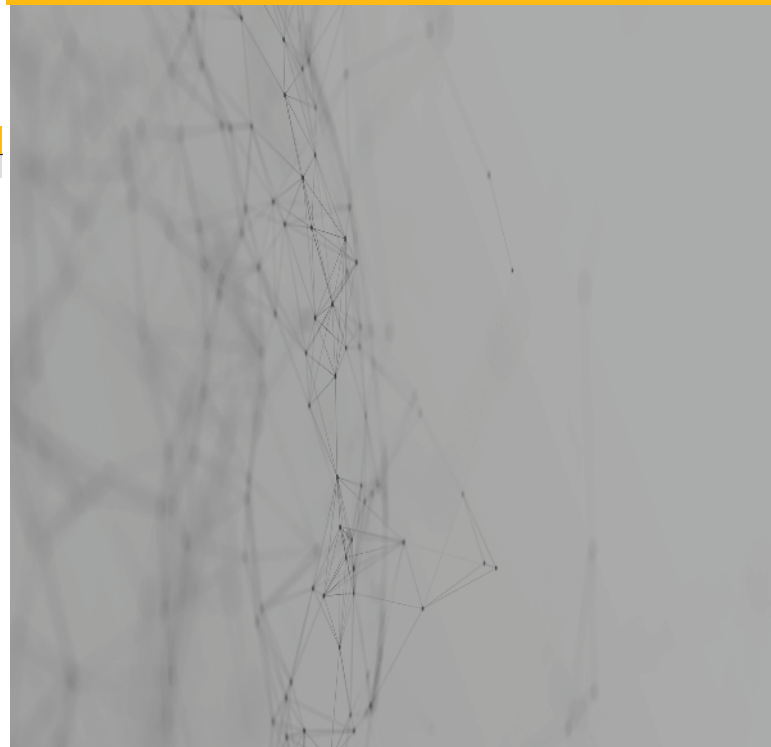
Specifications

	L – m (ft)	W – m (ft)	H – m (ft)	Weight - kg (lbs)
PGS1260 HD	6.1(20)	2.4 (8)	2.8 (9.5)	16,500 (36,376)

Please see spec sheet for more information:
 PGS1260 HDLEHW0282

For diesel engine rating definitions please see page 10.

Controls & Automation



Experience data-driven solutions right at your fingertips for your engine management needs with Cat controls & automation. Cat Smart Engine Management System (EMS) is the latest engine and generator controller system developed by Caterpillar. This new technology efficiently manages the number of engines required to be online to meet rig power demands - allowing you to take control of your operation's digital transformation.

Cat Smart Energy Management System

Cat Smart EMS provides operators with a digital transportation enabling data driven power performance. Reduce costs, increase automation, and improve safety right at your fingertips with Smart EMS.

FUEL SAVINGS

- Reduce fuel consumption with increased engine load factor
- Upto 10% reduction in fuel consumption
- Improve gas substitution on Dynamic Gas Blending (DGB) engines

MAINTENANCE

- Reduce yearly maintenance cost with less engine run time
- Upto 25% reduction in engine runtime

SAFETY

- HMI provides remote access to engine controls
- Enhanced safety for rig crew working around engines with local lockouts, visual and audible alarm before engine start-up

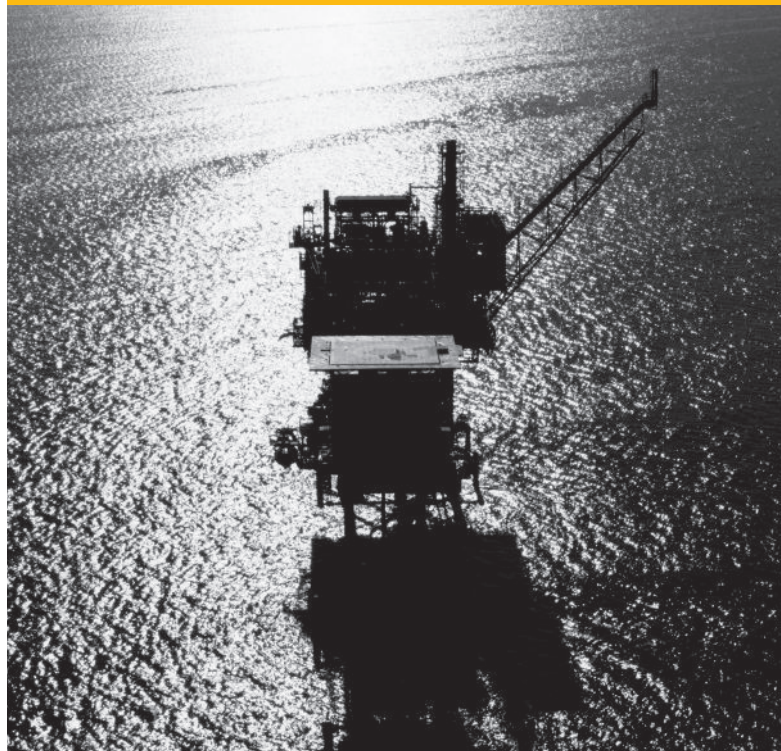
SIMPLIFIED RIG CONTROLS

- Reduced CAPEX for new rig builds since Cat Smart EMS replaces third party engine controllers
- Simplified power house layout and space savings with removing the engine controller from the power house
- Product differentiation with Cat Smart EMS

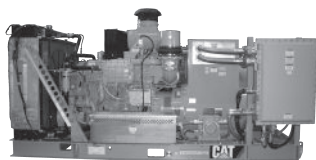


For diesel engine rating definitions please see page 10.

Offshore Drilling and Production Ratings



Cat engines and generator sets are widely known for performance, reliability, durability, and fuel flexibility in the offshore oil and gas industry. With ratings capable of operating on MDO, CRU, and dual fuel, offshore products include generator sets for main, essential, and emergency power plus a wide range of fire pump and crane engines. The global Cat dealer network covers offshore operations with warranty, parts, service, and technical support any time, anywhere.

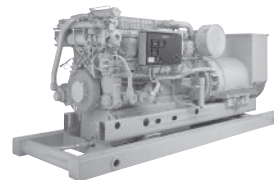


Generator Sets

Cat hazardous location generator sets combine the C32 ACERT – 1500 and 1800 rpm, 3512C – 1800 rpm and 3516C – 1800 rpm to meet Class I Division 2 requirements for core engine electronics and on-site needs. Contact the Application Support Center for additional information.

Offshore Hazardous Location Generator Set Ratings

Model	Duty	bkW	ekW	Configuration
1500 rpm/50 Hz				
C32 ACERT	OS-Prime	874	800	Haz Loc
1800 rpm/60 Hz				
C32 ACERT	OS-Prime	994	910	Haz Loc
3512C HD	OS-Prime	1802	1730	Haz Loc
3516C HD	OS-Prime	2210	2100	Haz Loc



Offshore Generator Set Ratings

Model	Duty	bkW	ekW ¹	kVA ¹	Emissions
1500 rpm/50 Hz					
3512B	OS-Prime	1257	1200	1500	IMO II
3516B	OS-Prime	1717	1600	2000	IMO II
1800 rpm/60 Hz					
3508B	OS-Prime	968	910	1138	IMO I
3512B	OS-Prime	1424	1360	1700	IMO I
3516B	OS-Prime	1901	1825	2281	IMO I

Specifications²

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3508B	4031 (158.7)	1784 (70.2)	2048 (80.6)	12 475 (27,503)	35 (2116)
3512B	4660 (183.5)	1988 (78.3)	2043 (80.4)	14 975 (33,014)	52 (3161)
3516B	6095 (240)	2147 (84.5)	2106 (82.9)	17 500 (38,580)	69 (4233)
3516B HD	6095 (240)	2147 (84.5)	2214 (87.2)	18 800 (41,400)	78 (4764)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Bore x Stroke – mm (in) HD 170 x 215 (6.7 x 8.5)

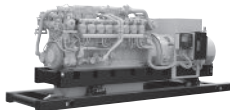
¹Dependent on generator selection and power factor.

²Dimensions and weights are dependent on generator and options selected. See general installation drawings for details.

Please see spec sheet for more information:

3508B	LEHW0123
3512B	LEHW0124, LEHW0125
3516B	LEHW0126, LEHW0127

For diesel engine rating definitions please see page 10.



Offshore Generator Set Ratings

Model	Duty	bkW	ekW ¹	kVA ¹	Emissions
1200 rpm/60 Hz					
3512C	MCR	1101	1030	1470	IMO II
3516C HD*	MCR	1383	1285	1836	IMO II/III ³
3516C HD*	MCR	1603	1530	2186	IMO II/III ³
1500 rpm/50 Hz					
3508C	OS-Prime	673	640	799	IMO II
3508C	OS-Prime	820	780	974	IMO II
3512C-HD	OS-Prime	1362	1294	1618	IMO II
3516C-HD	OS-Prime	1717	1631	2039	IMO II
3516C-HD	OS-Prime	1940	1843	2304	IMO II
1800 rpm/60 Hz					
3512C	OS-Prime	1432	1360	1700	IMO II
3512C HD	OS-Prime	1632	1550	1938	IMO II
3512C HD	OS-Prime	1790	1700	2125	IMO II
3516C HD	OS-Prime	2350	2250	2813	IMO II
3512E	OS- Prime	1632	1550	1938	IMO III
3512E	OS- Prime	1789	1700	2125	IMO III
3516E	OS- Prime	1921	1825	2281	IMO III
3516E	OS- Prime	2105	2000	2500	IMO III
3516E	OS- Prime	2368	2250	2813	IMO III

*Available with increased exhaust backpressure.

¹Dependent on generator selection and power factor.

²Dimensions and weights are dependent on generator and options selected. See general installation drawings for details.

³IMO III engines require SCR aftertreatment. Contact dealer for availability and technical details.

Specifications²

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
3512C	5448 (214.5)	1825 (71.9)	2313 (91)	14 975 (33,300)	51.8 (3161)
3516C HD	6705 (264)	1986 (78.2)	2535 (99.8)	18 800 (41,400)	78 (4764)
3512E min	2644 (104.1)	2113 (83.2)	2036 (80.2)	4960 (10,395)	34.5 (2107)
max	3272 (128.8)	2154 (84.8)	2160 (85.0)		
3512E min	3185 (125.4)	2130 (83.9)	2142 (84.3)	6532-7411 (14,400-16,340)	51.8 (161)
max	3185 (125.4)	2130 (83.9)	2142 (84.3)		

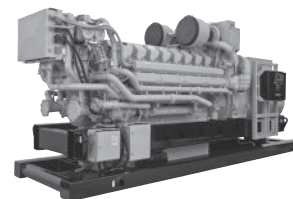
Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Bore x Stroke HD – mm (in) 170 x 215 (6.7 x 8.5)

Please see spec sheet for more information:

3512C LEHW0078 3516C HD LEHW0073, LEHW0155

For diesel engine rating definitions please see page 10.



Offshore Generator Set Rating

Model	Duty	bkW	ekW ¹	kVA ¹	Emissions
1200 rpm/60 Hz					
C175-16*	MCR	1930	1833	2619	IMO II/III ³
C175-16	MCR	2316	2200	3142	IMO II/III
1500 rpm/50 Hz					
C175-16	OS-Prime	2418	2300	2875	IMO II
1800 rpm/60 Hz					
C175-16	OS-Prime	2800	2660	3325	IMO II

Specifications²

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
C175-16 50 Hz	6782 (267)	2413 (95)	2928 (115)	25 991 (57,300)	85 (5164)
C175-16 60 Hz	6742 (265)	2125 (84)	2916 (115)	24 312 (53,599)	85 (5164)

Bore x Stroke – mm (in) 175 x 220 (6.9 x 8.7)

*Available with increased exhaust backpressure.

¹Dependent on generator selection and power factor.

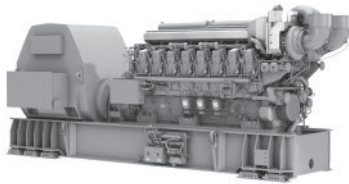
²Dimensions and weights are dependent on generator and options selected. See general installation drawings for details.

³IMO III engines require SCR aftertreatment. Contact dealer for availability and technical details.

Please see spec sheet for more information:

C175-16 50 Hz LEHW0151 C175-16 60 Hz LEHW6097

For diesel engine rating definitions please see page 10.



Offshore Generator Set Ratings

Model	Duty	bkW	ekW ¹	kVA ¹	Emissions
900 rpm/60 Hz					
C280-6	Cont	1730	1650	2063	IMO II
C280-6	Cont	1900	1820	2275	IMO II
C280-8	Cont	2300	2200	2250	EPA T4i / IMO III
C280-8	Cont	2530	2420	3025	EPA T4i / IMO III
C280-8	Cont	2300	2200	2750	IMO II
C280-8	Prime	2530	2420	3025	IMO II
C280-8	MCR	2530	2420	3025	IMO II
C280-12	Cont	3460	3300	4125	IMO II
C280-12	Prime	3800	3640	4550	IMO II
C280-12	Cont	3460	3300	4125	EPA T4i / IMO III
C280-12	MCR	3800	3650	4563	IMO II
C280-12	MCR	3800	3650	4563	IMO II
C280-16	Cont	4600	4400	5500	EPA T4i / IMO III
C280-16	Prime	5060	4840	6050	EPA T4i / IMO III
C280-16	Cont	4600	4400	5500	IMO II
C280-16	Prime	5060	4840	6050	IMO II
C280-16	MCR	5730	5500	6875	IMO II
C280-16	MCR	5730	5500	6875	IMO II
C280-16	MCR	5060	4840	6050	IMO II

* Available with front- or rear-mounted turbochargers.

** Front-mounted turbochargers, all other ratings are rear-mounted turbochargers.

¹Available with increased exhaust backpressure.

¹Dependent on generator selection and power factor.

²IMO III engines require SCR aftertreatment. Contact dealer for availability and technical details.

Ratings continued on page 81

Ratings continued from page 80

Model	Duty	bkW	ekW ¹	kVA ¹	Emissions
1000 rpm/50 Hz					
C280-6	Cont	1850	1760	2200	IMO II
C280-6	Cont	2030	1940	2425	IMO II
C280-8	Prime	2710	2600	3250	IMO II
C280-8	Cont	2460	2350	2938	IMO II
C280-8	MCR	2710	2600	3250	IMO II
C280-12	Cont	3700	3520	4400	IMO II
C280-12	Prime	4060	3880	4850	IMO II
C280-12	MCR	4060	3900	4875	IMO II
C280-16	Cont	4920	4700	5875	IMO II
C280-16	Prime	5420	5200	6500	IMO II
C280-16	MCR	5420	5200	6500	IMO II

Specifications³

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – tonnes (lbs)	Disp – L (in ³)
C280-8	8140 (320.5)	2326 (91.6)	3406 (134.1)	49 (108,027)	148 (9031)
C280-12	8125 (319.9)	2568 (101.1)	3973 (156.4)	56.5 (124,561)	222 (13,546)
C280-16 FMT	10283 (404.8)	2800 (110.2)	4092 (161.1)	66 (145,505)	296 (18,062)
C280-16 RMT	9873 (388.7)	2931 (115.4)	4092 (161.1)	64 (141,096)	296 (18,062)

Bore x Stroke – mm (in) 280 x 300 (11 x 11.8)

³Dimensions and weights are dependent on generator and options selected. See general installation drawings for details.

Please see spec sheet for more information:

C280-8 LEHW0086, LEHW0092
C280-12 LEHW0087, LEHW0093
C280-16 LEHW0088, LEHW0094, LEHW0182

For diesel engine rating definitions please see page 10.

Gas Compression Ratings



For pipeline, storage, gathering, and re-injection, Cat engines and motors are the prime choice for reliable gas compression. Caterpillar offers the widest range of prime mover choices, with power ratings from 71 bkW (95 bhp) to 4,100 bkW (5,500 bhp). Innovative electronic controls give you superior performance with excellent fuel economy, performance flexibility, and dependability for low owning and operating costs.

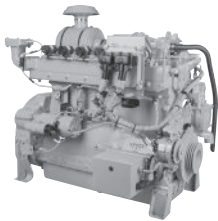
Gas Compression

Gas Compression Engine Ratings

Range	Engine	Page Number
95-211 bhp	G3300	85
215-637 bhp	G3400	86
400-600 bhp	CG137	87
524-1725 bhp	G3500	88-89
1875-5350 bhp	G3600	90-91

Electric Drive Motors Ratings

bhp	Engine	Page Number
1500	CN1586	92-93
2000	CN2086	92-93
2500	CN2586	92-93
3000	CN3086	92-93
3500	CN3586	92-93
3621	CN2785	92-93
4000	CN4086	92-93
5000	CN5086	92-93
5500	CN5586	92-93



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3304B NA	Cont	71	95	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx
G3304B NA	Cont	71	95	1800	Export Only	2% O ₂ Emission Rating
G3306B NA	Cont	108	145	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx
G3306B NA	Cont	108	145	1800	Export Only	2% O ₂ Emission Rating
G3306B TA ¹	Cont	151	203	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx
G3306B TA ¹	Cont	151	203	1800	Export Only	2% O ₂ Emission Rating
G3306B TAA ¹	Cont	157	211	1800	NSPS Site Compliant Capable	With Caterpillar or Customer-provided AFRC & Aftertreatment* 0.5 & 1.0 g/bhp-hr NOx

¹Dependent upon engine configuration selected.

¹54°C/130°F Water to Aftercooler

Ratings listed are for 25°C (77°F) ambient temperature, 500' altitude, and pipeline quality gas.

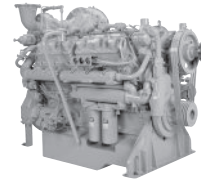
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3304	1158 (46)	744 (29)	1170 (46)	757 (1670)	7 (425)
G3306	1539 (60)	978 (38)	1261 (50)	948 (2090)	10.5 (640)
Bore x Stroke – mm (in)	121 x 152 (4.75 x 6.0)				

Please see spec sheet for more information:

G3304B LEHW0017 G3306B TA LEHW8815
 G3306B NA LEHW0111

For gas engine rating conditions please see page 10.



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3406 NA	Cont	160	215	1800	NSPS Site Compliant Capable	With Customer-supplied AFRC & Aftertreatment 0.5% O ₂ or 2% O ₂ Set Points
G3406 TA ¹	Cont	206	276	1800	NSPS Site Compliant Capable	With Customer-supplied AFRC & Aftertreatment 0.5% O ₂ Set Point
G3406 TA ¹	Cont	242	325	1800	Export Only	2% O ₂ Emission Rating
G3408 NA	Cont	190	255	1800	NSPS Site Compliant Capable	With Customer-supplied AFRC & Aftertreatment 0.5% O ₂ or 2% O ₂ Set Points
G3408 TA ¹	Cont	298	400	1800	Export Only	2% O ₂ Emission Rating
G3408C LE ¹	Cont	317	425	1800	NSPS Site Compliant Capable ²	With Customer-supplied Aftertreatment
G3412 TA ¹	Cont	448	600	1800	Export Only	2% O ₂ Set Point
G3412C LE ¹	Cont	475	637	1800	NSPS Site Compliant Capable ²	With Customer-supplied Aftertreatment

¹ 54°C/130°F Water to Aftercooler

² NSPS Site Compliant Capable with Customer-supplied SCR Aftertreatment

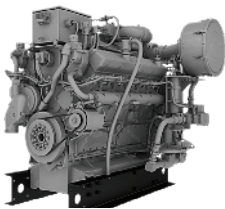
Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3406 TA	1934 (76)	1270 (50)	1433 (56)	1362 (3000)	14.6 (893)
G3408 TA	1738 (68)	1312 (52)	1542 (61)	2041 (4500)	18 (1099)
G3408C LE	1756 (69.1)	1563 (61.5)	1758 (69.2)	2041 (4500)	18 (1099)
G3412 TA	2087 (82)	1224 (48)	1542 (61)	2320 (5115)	27 (1649)
G3412C LE	2442 (96)	1598 (63)	1960 (77)	2800 (6173)	27 (1649)
Bore x Stroke – mm (in)	137 x 152 (5.4 x 6.0)				

Please see spec sheet for more information:

G3406 LEHW0029 G3408C LE LEHW0031 G3412C LE LEHW0033
 G3408 LEHW0030 G3412 LEHW0032

For gas engine rating conditions please see page 10.



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
CG137-8	Cont	298	400	1800	NSPS Site Compliant Capable	With Caterpillar-supplied AFRC & Customer-provided Aftertreatment, 0.5% O ₂ Set Point
CG137-12	Cont	447	600	1800	NSPS Site Compliant Capable	With Caterpillar-supplied AFRC, Caterpillar or Customer supplied Aftertreatment, 0.5% O ₂ Set Point

Specifications

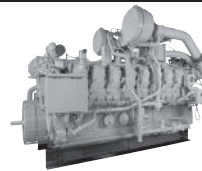
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
CG137-8	1627 (64.0)	1443 (56.8)	1758 (69.2)	2200 (4850)	18 (1099)
CG137-12	2036.9 (80.19)	1515.1 (59.65)	1701 (66.97)	2835 (6250)	27 (1649)

Bore x Stroke – mm (in) 137 x 152 (5.4 x 6)

Ratings listed are for 25°C (77°F) ambient temperature, 500' altitude, and pipeline quality gas.

Please see spec sheet for more information:
 CG137-8 LEHW0340
 CG137-12 Integrated Catalyst LEHW0119
 CG137-12 LEHW0270

For gas engine rating conditions please see page 10.



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3508 TA ¹	Cont	391	524	1200	NSPS Site Compliant Capable	With Customer-supplied AFRC & Aftertreatment, 0.5% O ₂ Set Point
G3508 LE ¹	Cont	500	670	1400	NSPS Site Compliant Capable ²	With Customer-supplied Aftertreatment, 2 g/bhp-hr NOx
G3508J LE ¹	Cont	514	690	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx
G3512 TA ¹	Cont	589	790	1200	NSPS Site Compliant Capable	With Customer-supplied AFRC & Aftertreatment, 0.5% O ₂ Set Point
G3512 LE ¹	Cont	642	860	1200	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 2 g/bhp-hr NOx
G3512 LE ¹	Cont	749	1004	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 2 g/bhp-hr NOx
G3512J LE ¹	Cont	772	1035	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx
G3516 NA	Cont	492	660	1200	Export Only	With Caterpillar supplied AFRC & Customer-supplied Aftertreatment, 0.5% O ₂ Set Point
G3516 TA ¹	Cont	1029	1380	1400	NSPS Site Compliant Capable	With Caterpillar supplied AFRC & Customer-supplied Aftertreatment, 0.4% O ₂ Set Point
G3516 LE ¹	Cont	858	1150	1200	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 2 g/bhp-hr NOx
G3516 LE ¹	Cont	1000	1340	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 2 g/bhp-hr NOx
G3516J LE ¹	Cont	1029	1380	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx

¹ 54°C/130°F Water to Aftercooler

² NSPS Site Compliant Capable with Customer-supplied SCR Aftertreatment

Ratings continued on page 88

Ratings continued from page 87

Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3516J LE ¹	Cont	1119	1500	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx
*G3520J LE ¹	Cont	1104	1480	1200	NSPS Site Compliant Capable ²	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx
*G3520J LE ¹	Cont	1286	1725	1400	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.5 g/bhp-hr NOx

¹ 54°C/130°F Water to Aftercooler

² NSPS Site Compliant Capable with Customer-supplied SCR Aftertreatment

³ G3516J 1500hp model to be mid-2022.

*Additional ratings available via DTD.

Specifications

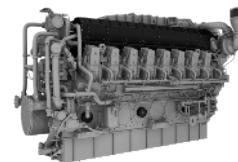
	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3508 LE	2440 (96)	1768 (70)	1907 (76)	5420 (11,950)	34.5 (2105)
G3508J LE	2546 (100.2)	2029 (79.9)	2140 (84.3)	6048 (13,306)	34.5 (2105)
G3512 LE	2786 (109)	1790 (71)	1863 (73)	6676 (14,720)	51.8 (3158)
G3512J LE	3037 (120)	2201 (86.7)	2135 (84.1)	7081 (15,611)	51.8 (3158)
G3516 TA	3654 (143.8)	1973 (77.7)	2281 (89.8)	9232 (20,352)	69 (4211)
G3516 LE	3339 (131)	1820 (72)	1863 (73)	8015 (17,670)	69 (4211)
G3516J LE	3586 (141)	1883 (74)	2285 (90)	9155 (20,183)	69 (4211)
G3520J LE	4113 (162)	1883 (74)	2361 (93)	10785 (23,776)	86 (5263)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Please see spec sheet for more information:

G3508 LE	LEHW0034	G3516 LE	LEHW0036
G3508J LE	LEHW0341	G3516J LE	LEHW0318
G3512 LE	LEHW0035	G3520J LE	LEHW0320
G3512J LE	LEHW0370		
G3516 TA	LEHW0329		

For gas engine rating conditions please see page 10.



Gas Ratings

Model	Rating Tier	bkW	bhp	rpm	Emissions	Notes
G3606 A4 ¹	Cont	1398	1875	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3606 A4 ²	Cont	1454	1950	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3606 A4 ³	Cont	1499	2010	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3608 A4 ¹	Cont	1864	2500	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3608 A4 ²	Cont	1931	2590	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3608 A4 ³	Cont	1995	2675	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3612 A4 ¹	Cont	2796	3750	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3612 A4 ²	Cont	2890	3875	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3612 A4 ³	Cont	2983	4000	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3616 A4 ¹	Cont	3729	5000	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3616 A4 ²	Cont	3859	5175	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx
G3616 A4 ³	Cont	3990	5350	1000	NSPS Site Compliant Capable	With Customer-supplied Aftertreatment, 0.3 and 0.5 g/bhp-hr NOx

¹ 54°C Aftercooler Water & 88°C Jacket Water

² 43°C Aftercooler Water & 88°C Jacket Water

³ 32°C Aftercooler Water & 88°C Jacket Water

Ratings continued on page 90

For gas engine rating conditions please see page 10.

Ratings continued from page 89

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)	Disp – L (in ³)
G3606 A4	4833.4 (190.3)	2225.2 (87.6)	2923.2 (115.1)	16 639 (36,683)	127.2 (7762)
G3608 A4	5656 (222.68)	2260 (89)	2922 (115)	21 092 (46,500)	169.6 (10,350)
G3612 A4	5431.9 (210.31)	2731.7 (107.56)	3279 (129)	26 535 (58,500)	254 (15,528)
G3616 A4	5652 (222.5)	2634 (104)	3278 (129)	32 659 (72,000)	339 (20,705)

Bore x Stroke – mm (in) 300x300 (11.8x11.8)



Caterpillar offers electric motor configurations, from 1,000 hp to 10,000 hp (750 kW – 7,500 kW), to meet your gas compression needs. To simplify the ordering process, Caterpillar offers a range of commonly ordered standard offerings. Other configurations are available via a Design to Order (DTO) request. Contact the Application Support Center for additional information.

All NEMA standard configuration electric motors come with WP11 (IP24W) enclosure, IC01 Cooling, Service Factor (Inverter Fed) - 1.15 SF (1.0 VFD), Class B Temperature Rise, Class F Insulation, and Hazardous Location - Class 1-Div. 2-Groups A,B,C, and (T3) certification. All IEC standard configuration motors come with IP55 enclosure, IC611 Cooling, EX px II T3 Ex Protection, Class B Temperature Rise, Class F Insulation, and Hazardous Location – Zone 1 certification.

Hazardous Location Electric Drive Motor Ratings

Model	Frame Size	bkW	bhp	Number of Poles	Voltages
1200 rpm/60 Hz (NEMA Standard)					
CN1586	450	1118	1500	6	4000V / 4160V
900 rpm/60 Hz (NEMA Standard)					
CN2086	500	1491	2000	8	4000V / 4160V
CN2586	500	1864	2500	8	4000V / 4160V
CN3086	560	2237	3000	8	4000V / 4160V
CN3586	560	2610	3500	8	4000V / 4160V
CN4086	560	2982	4000	8	4000V / 4160V
CN5086	560	3728	5000	8	4000V / 4160V
CN5586	560	4100	5500	8	4000V / 4160V
750 rpm/50 Hz (IEC Standard)					
CN2785	630	2700	3621	8	10kV

Please see spec sheet for more information:

G3606 A4 0.3g NOx.....	LEHW0258	G3612 A4 0.3g NOx.....	LEHW0260
G3606 A4 0.5g NOx.....	LEHW0234	G3612 A4 0.5g NOx.....	LEHW0236
G3608 A4 0.3g NOx.....	LEHW0259	G3616 A4 0.3g NOx.....	LEHW0261
G3608 A4 0.5g NOx.....	LEHW0235	G3616 A4 0.5g NOx.....	LEHW0198

For gas engine rating conditions please see page 10.

* Class B rise at nameplate rated load

Ratings continued on page 84

Ratings continued from page 83

Specifications

	L – mm (in)	W – mm (in)	H – mm (in)	Wt – kg (lbs)
CN1566	2110 (83.07)	2005 (78.94)	1860 (73.23)	3760 (8,289)
CN2086	2864 (112.8)	2345 (92.3)	2060 (81.1)	6931 (15,280)
CN2586	2864 (112.8)	2345 (92.3)	2060 (81.1)	6931 (13,306)
CN3086	3470 (136.61)	2570 (101.18)	2461 (96.87)	7770 (17,130)
CN3586	3770 (132.68)	2580 (101.57)	2465 (97.05)	8320 (18,342)
CN4086	3770 (132.68)	2580 (101.57)	2465 (97.05)	8750 (19,290)
CN5086	3770 (132.68)	2580 (101.57)	2465 (97.05)	9720 (21,429)
CN5586	3545 (139.57)	2575 (101.38)	2565 (97.05)	11167 (24,620)
CN2785	3927 (154.60)	2306 (90.78)	2326 (91.57)	13210 (29,123)

Bore x Stroke – mm (in) 170 x 190 (6.7 x 7.5)

Other configurations available from 1,000 hp to 10,000 hp (750 kW – 7,500 kW) via a DTO request

* Class B rise at nameplate rated load

Please see spec sheet for more information:

CN1566.....	LEHW0245, LEHW0256
CN2086.....	LEPW0117, LEPW0116
CN2586.....	LEPW0114, LEPW0115
CN3086.....	LEHW0267, LEHW0268
CN3586.....	LEHW0265, LEHW0266
CN4086.....	LEHW0263, LEHW0264
CN5086.....	LEHW0248, LEHW0255
CN5586.....	LEHE2030, LEHE2031
CN2785.....	LEPW0124

For gas engine rating conditions please see page 10.

Unit Conversions

Torque

$$1 \text{ N}\cdot\text{m} = 0.737562 \text{ ft}\cdot\text{lb}$$

Power

$$1 \text{ kW} = 1.341022 \text{ hp}$$

Volume

$$1 \text{ L} = 61.023744 \text{ in}^3$$

Length

$$1 \text{ mm} = 0.03937 \text{ in}$$

Mass

$$1 \text{ kg} = 2.204623 \text{ lb}$$

Energy

$$1 \text{ kJ} = 0.948452 \text{ BTU}$$

Pressure

$$1 \text{ kPa} = 0.145038 \text{ psi}$$

Temperature

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\frac{(^{\circ}\text{F} - 32)}{1.8} = ^{\circ}\text{C}$$

Plunger Load

$$\text{PD} \times \text{PD} \times .7854 \times \text{PSI}$$

PD = Plunger diameter

PSI = Fluid end pressure in PSI

Fuel Consumption

$$\frac{\text{g}}{\text{bkW}\cdot\text{hr}} \rightarrow \frac{\text{L}}{\text{hr}}$$

$$\left(\frac{\text{g}}{\text{bkW}\cdot\text{hr}} \right) \times \left(\frac{\text{Power (bkW)}}{1000 \times \text{fuel density (kg/L)}} \right) = \frac{\text{L}}{\text{hr}}$$

Torque

$$\frac{30,000}{p} \times \frac{\text{Power (bkW)}}{\text{Speed (rpm)}} = \text{Torque (N}\cdot\text{m)}$$

Displacement

$$\frac{p}{4 \times 10^6} \times [\text{bore (mm)}]^2 \times \text{stroke (mm)} \times \# \text{ cylinders} = \text{Displacement (L)}$$

BMEP

$$\frac{4 p \times \text{Torque (N}\cdot\text{m)}}{\text{Displacement (L)}} = \text{BMEP (kPa)}$$

Generator Set Ratings

$$\text{Real Power (ekW)} = \text{Brake Power (bkW)} \times \text{Generator Efficiency}$$

$$\text{Power Factor} = \frac{\text{Real Power (ekW)}}{\text{Apparent Power (kVA)}}$$

$$\text{Apparent Power (kVA)} = \frac{1.73 \times \text{Voltage} \times \text{Current}}{1000}$$

**For more information
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Materials and specifications are subject to change without notice. Rating ranges listed include the lowest and highest available for a specific engine or family of engines. Load factor and time at rated load and speed will determine the best engine/rating match.

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