

ENGINES

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Asia

Caterpillar Asia Pte., Ltd.

Jurong, Singapore
Tel: 65-6828-7118
Fax: 65-6828-7414

Australia

Caterpillar of Australia Pty. Ltd.

Victoria, Australia
Tel: 61-3-9953-9301
Fax: 61-3-9338-9021

China

Caterpillar China Ltd.

Beijing, China
Tel: 86-10-5921-0339
Fax: 86-10-5921-0022

Eastern Europe

Commonwealth of Independent States Caterpillar Overseas S.A.

Moscow, Russia
Tel: 7-095-755-8161
Fax: 7-095-785-5688

Europe, Africa,

Middle East

Caterpillar S.A.R.L.

Geneva, Switzerland
Tel: 41-22-849-4444
Fax: 41-22-849-4139

Japan

Caterpillar Power Systems, Inc.

Tokyo, Japan
Tel: 81-3-5786-3800
Fax: 81-3-5786-3809

Mexico, The Caribbean, South America Latin America Commercial Division

Miami, Florida, U.S.A.
Tel: 305-476-6800
Fax: 305-476-6850

North America

Caterpillar Inc.

Peoria, Illinois, U.S.A.
Tel: 309-578-6298
Fax: 309-578-2559





E Mail:

Cat_Power@Cat.com

Web Site/Dealer Locator

www.Cat-engines.com

For more information contact your local Cat dealer, or visit the Cat engine and generator set website on www.cat-engines.com.

	TYPE	NO. OF MODELS	RANGE
	INDUSTRIAL Diesel	33	8.2 to 4920 kW 10.2 to 6598 hp EPA Certified
	Gaseous Fueled	13	56 to 3762 kW 75 to 5045 hp EPA Certified
	GENERATOR SETS		50 Hz kVA w/fan Prime 275-2825 Standby 300-3100 60 Hz ekW w/fan Prime 12-2825 Standby 13-3100
	Diesel High Speed Area		
	Gaseous Fueled		50 Hz kVA w/o fan Continuous 80-4825 60 Hz ekW w/o fan Continuous 72-3480
	OLYMPIAN GENERATOR SETS*		50 Hz kVA w/fan Prime 6.8-72 Standby 7.5-80 60 Hz ekW w/fan Prime 12-54 Standby 13-60
	Diesel		
	Gaseous Fueled		50 Hz kVA w/o fan Standby 13-30 60 Hz ekW w/o fan Continuous 25-300
	MARINE		
	Propulsion	24	93 to 5420 kW 125 to 7268 hp
	Generator Sets	14	50 Hz kVA 10.0 to 5200 Prime 60 Hz kW 12.0 to 4840 Prime

*Olympian Generator Sets are manufactured exclusively for Cat dealers.

DESIGN DATA**Diesel Engines**

Bearings — Precision-type steel-backed aluminum alloy with lead-tin overlay copper bonded to bearing surface. High load carrying ability and exceptional fatigue strength.

Block — Cast from high tensile strength grey iron. Internal ribbing provides added strength.

Cooling — Built-in, gear driven centrifugal pump (belt driven for 3116 and 3208) circulates jacket water through engine at all times. Water temperature is thermostatically controlled. Heat exchangers and radiators are available.

Crankshaft — Forged steel, dynamically balanced, heat treated and superfinished.

Cylinder Liners — Internal surface induction hardened (1.7 L, 3300, 3400, 3500 and 3600 Families) for excellent wear life. Full-length watercooled for efficient heat transfer.

Fuel System — Adjustment free for reduced engine maintenance, individual fuel injection pumps have built-in calibration — no adjustment required after fuel nozzle replacement (1.7 L, 1.9 L, 3406E, 3456, 3500 and 3600 families have unit injectors). 3126, 3408E and 3412E use the Cat HEUI system.

Governor — Hydra-mechanical (Woodward 3161 on 3500 and 3600 Families) for reliability, good response and smooth, stable load changes. Electronically controlled engines use Caterpillar proprietary software and hardware.

Lubrication — Positive displacement gear pump maintains continuous flow of lubricant under pressure to all moving parts. Full-flow filtration is provided by replaceable cellulose filters. Watercooled oil cooler maintains proper oil temperature.

Pistons — Three-ring design (two-ring on 3208) reduces friction, provides excellent oil control, and increases engine efficiency.

Starting — Electric and air starting systems are offered for most models.

Valves — Hardened steel alloy. Valves rotate 3° each time they lift to seat in a new position and allow even heat distribution (except for 3116).

Gaseous Fueled Engines

Combustion System — The piston design and compression ratios available provide the ability to utilize a wide variety of gaseous fuels as well as provide low emission output (below 2.0 grams/bhp-hr NO_x).

Fuel System — Heavy-duty, industrial-type carburetors designed to maintain optimum air-fuel ratio at all loads and speeds.

Ignition System — Cat Gaseous Fueled Engines employ a low tension magneto, together with an ignition transformer (one at each cylinder), to provide up to 34 kV to spark plugs. The Cat Electronic Ignition system is also available on certain engines.

RATING EXPLANATIONS

All engine ratings listed include such standard accessories as air cleaner and fuel, lube, and jacket water pumps. Power required for auxiliaries such as cooling fans, air compressors, charging alternators, special pumps, etc., must be deducted to arrive at the net power available to drive the load (except as noted). Other ratings are available for specific application and customer requirements, i.e., locomotive, oil field, fire pump, irrigation, etc. Consult your Cat dealer.

Rating Conditions

Performance is based on SAE J1995 standard conditions of 100 kPa (29.61 in Hg) and 25° C (77° F). Performance also applies at ISO 3046/1 (except for Spark Ignited Engines), DIN 6271 and BS 5514 standard conditions of 100 kPa (29.61 in Hg), 27° C (81° F) and 60% relative humidity.

Fuel consumption is based on fuel oil having an LHV of 42 780 kJ/kg (18,390 Btu/lb) and weighing 838.9 g/liter (7.001 lb/U.S. gal). All ratings are based on distillate fuel.

Altitude and Temperature Capabilities

Industrial Diesel Engines — Most intermittent and continuous ratings are applicable to at least 1320 m (5000 ft) elevation without derating. Consult factory for specific applications.

Gaseous Fueled Engines — Ratings for turbocharged and aftercooled engines are generally applicable to 1500 m (5000 ft). Naturally aspirated engines are applicable to 150 m (500 ft).

Diesel Truck Engines — Refer to specification sheets for altitude capability of individual truck engine ratings.

Basic Specifications

Model	Displacement		Config.	Bore x Stroke		Fuel System	Power Range				Elec. Power Gen.	Oil/ Gas	Rail Power
	L	in ³		mm	in		Marine		Diesel Industrial				
							kW	hp	kW	hp			
C0.5	0.5	30.9	I2	67x72	2.6x2.8	PC			8.2-10.2	11.0-13.7			
C0.7	0.7	46.5	I3	67x72	2.6x2.8	PC			12.2-15.3	16.3-20.5			
C1.1	1.1	69	I3	77x81	3.0x3.2	PC			13.7-21.0	18.4-28.2			
C1.5	1.5	91	I3	84x90	3.3x3.5	PC			20.7-30.0	27.8-40.2			
C1.6	1.5	92	I4	77x81	3.0x3.2	PC			24.6 & 26.5	33.0 & 35.5			
C1.7	1.66	101	I2	84x100	3.3x3.9	PC			24.7 & 26	33.2 & 34.8			
C2.2	2.2	135	I4	84x100	3.3x3.9	PC			27.5-49.2	36.9-66.0			
C3.4	3.3	201	I4	94x120	3.7x4.72	Mech			47-62	63-83			
3054C	4.4	269	I4	105x127	4.1x5.0	Mech			50-97	67-130			
3054E	4.4	269	I4	105x127	4.1x5.0	Elect			64-97	86-130			
C4.4	4.4	269	I4	105x127	4.1x5.0	Mech			54-83	72-111.3			
C4.4 ACERT	4.4	269	I4	105x127	4.1x5.0	Elect			61.5-106	82.5-142			
C6.6 ACERT	6.6	402.8	I6	105x127	4.1x5.0	Elect			89-205	119.4-274.9			
3056	6	365	I6	100x127	3.94x5.0	MUI	93-153	125-205					
3126B	7.24	442	I6	110x127	4.33x5.0	HEUI							
C7	7.24	442	I6	110x127	4.33x5.0	HEUI	187-276	250-270					
C11 ACERT	11.1	677	I6	130x140	5.12x5.51	EUI			242-336	325-450			
C12	12	732	I6	130x150	5.1x5.9	EUI	254-448	340-600					
C12 ACERT	12	732	I6	130x150	5.1x5.9	EUI	492-526	660-705					
3406	14.6	893	I6	137x165	5.4x6.5								
3406C	14.6	893	I6	137x165	5.4x6.5				201-392	270-525			
C15 ACERT	14.6	891	I6	137x165	5.4x6.5	EUI	597-636	800-853					
C16	15.8	964	I6	140x171	5.5x6.75	EUI							
3408	18	1099	V8	137x152	5.4x6.0								
C18	18.1	1106	I6	145x183	5.7x7.2	HEUI	339-747	454-1001					
C18 ACERT	18.1	1106	I6	145x183	5.7x7.2	HEUI	339-847	454-1136	429-597	575-800			
3412	27	1649	V12	137x152	5.4x6.0								
C27 ACERT	27	1648	V12	137.7x152.4	5.42x5.99	MEUI			597-858	800-1150			
C32	32.1	1959	V12	145x162	5.7x6.4	EUI	1156-1232	1550-1652					
C32 ACERT	32.1	1959	V12	145x162	5.71x6.38		492-1342	660-1800	708-1007	950-1350			
3508	34.5	2105	V8	170x190	6.7x7.5	MUI	526-857	705-1150	507-746	680-1000			
3508B	34.5	2105	V8	170x190	6.7x7.5	EUI	578-1118	775-1500	746-820	1000-1100			
3508C	34.5	2107	V8	170x190	6.7x7.5	EUI	578-820	775-1100					
3512	51.8	3158	V12	170x190	6.7x7.5	MUI	900-1305	1207-1750	761-1119	1020-1500			
3512B	51.8	3158	V12	170x190	6.7x7.5	EUI	820-1678	1100-2250	1119-1231	1500-1650			
3512B HD	58.6	3576	V12	170x215	6.7x8.5	MUI	1118-1500	1500-2012					
3512C	51.8	3161	V12	170x190	6.69x7.48	EUI	1119-1230	1500-1650					
3512C HD	58.6	3574	V12	170x215	6.69x8.46	EUI	1350-1902	1810-2551					
3516	69	4210	V16	170x190	6.7x7.5	MUI	1195-1640	1603-2200	1011-1492	1355-2000			
3516B	69	4210	V16	170x190	6.7x7.5	EUI	1230-2237	1650-3000	1492-1566	2000-2100			
3516B HD	78	4766	V16	170x215	6.7x8.5	EUI	1398-2000	1875-2682					
3516C	69	4211	V16	170x190	6.69x7.48	EUI	1492-1641	2000-2200					
3516C HD	78	4765	V16	170x215	6.69x8.46	EUI	1825-2525	2448-3386					
C280-6	111	6773	I6	280x300	11.0x11.8	EUI	1730-2030	2320-2722					
3606	110.8	6774	I6	280x300	11x11.8	MUI			1490-1850	1998-2481			
C280-8	148	9031	I8	280x300	11.0 x 11.8	EUI	2300-2710	3084-3634					
3608	148	9031	I8	280x300	11x11.8	MUI			1980-2460	2655-3300			
C280-12	222	13,546	V12	280x300	11.0x11.8	EUI	3460-4060	4640-5444					
3612	221.7	13,527	V12	280x300	11x11.8	MUI			2980-3700	3996-4962			
C280-16	296	18,062	V16	280x300	11.0x11.8	EUI	4600-5420	6169-7268					
3616	295.6	18,036	V16	280x300	11x11.8	MUI			3960-4920	5310-6598			

Mech — Mechanical pump and line
 MUI — Mechanical Unit Injection
 EUI — Electronic Unit Injection
 *See Truck Listing for EUR02 Ratings.

PC — Precombustion Chamber
 Elect — Electronic

See our listings for Generator Sets and Power Modules for complete information.

See our listings for Oil and Gas Engines for complete information.

See our listings for Railway Power for complete information.

Basic Specifications

MaK Model	Output range		Config.	Speed	Displacement		Bore x Stroke		Fuel System	Electric Power Gen.
	kW	mph		rpm	L	in ³	mm	in		
6 M 20 C	1020	1390	inline	900	57	3478	200x300	7.9x11.8	UP	
	1140	1550	inline	1000	57	3478	200x300	7.9x11.8	UP	
8 M 20 C	1360	1850	inline	900	75	4576	200x300	7.9x11.8	UP	
	1520	2070	inline	1000	75	4576	200x300	7.9x11.8	UP	
9 M 20 C	1530	2080	inline	900	85	5187	200x300	7.9x11.8	UP	
	1710	2325	inline	1000	85	5187	200x300	7.9x11.8	UP	
6 M 25 C	1800	2450	inline	720	123	7506	255x400	10x15.75	UP	
	1900	2585	inline	720	123	7506	255x400	10x15.75	UP	
	1850	2525	inline	750	123	7506	255x400	10x15.75	UP	
	2000	2720	inline	750	123	7506	255x400	10x15.75	UP	
8 M 25 C	2320	3155	inline	720	163	9946	255x400	10x15.75	UP	
	2540	3455	inline	720	163	9946	255x400	10x15.75	UP	
	2400	3265	inline	750	163	9946	255x400	10x15.75	UP	
	2660	3620	inline	750	163	9946	255x400	10x15.75	UP	
9 M 25 C	2610	3550	inline	720	184	11,228	255x400	10x15.75	UP	
	2850	3875	inline	720	184	11,228	255x400	10x15.75	UP	
	2700	3670	inline	750	184	11,228	255x400	10x15.75	UP	
	3000	4080	inline	750	184	11,228	255x400	10x15.75	UP	
6 M 32 C	2880	3915	inline	600	232	14,158	320x480	12.6x18.9	UP	
	3000	4080	inline	600	232	14,158	320x480	12.6x18.9	UP	
8 M 32 C	3840	5220	inline	600	309	18,856	320x480	12.6x18.9	UP	
	4000	5440	inline	600	309	18,856	320x480	12.6x18.9	UP	
9 M 32 C	4320	5875	inline	600	347	21,175	320x480	12.6x18.9	UP	
	4500	6120	inline	600	347	21,175	320x480	12.6x18.9	UP	
12 M 32 C	5760	7835	vee	720	405	24,715	320x420	12.6x16.5	UP	
	6000	8160	vee	750	405	24,715	320x420	12.6x16.5	UP	
16 M 32 C	7680	10,445	vee	720	541	33,014	320x420	12.6x16.5	UP	
	8000	10,880	vee	750	541	33,014	320x420	12.6x16.5	UP	
6 M 43 C	5400	7345	inline	500	531	32,404	430x610	16.93x24	UP	
	5400	7345	inline	514	531	32,404	430x610	16.93x24	UP	
	6000	8160	inline	500	531	32,404	430x610	16.93x24	UP	
	6000	8160	inline	514	531	32,404	430x610	16.93x24	UP	
7 M 43 C	6300	8570	inline	500	620	37,835	430x610	16.93x24	UP	
	6300	8570	inline	514	620	37,835	430x610	16.93x24	UP	
	7000	9520	inline	500	620	37,835	430x610	16.93x24	UP	
	7000	9520	inline	514	620	37,835	430x610	16.93x24	UP	
8 M 43 C	7200	9790	inline	500	709	43,266	430x610	16.93x24	UP	
	7200	9790	inline	514	709	43,266	430x610	16.93x24	UP	
	8000	10,880	inline	500	709	43,266	430x610	16.93x24	UP	
	8000	10,880	inline	514	709	43,266	430x610	16.93x24	UP	
9 M 43 C	8100	11,015	inline	500	797	48,636	430x610	16.93x24	UP	
	8100	11,015	inline	514	797	48,636	430x610	16.93x24	UP	
	9000	12,240	inline	500	797	48,636	430x610	16.93x24	UP	
	9000	12,240	inline	514	797	48,636	430x610	16.93x24	UP	
12 M 43 C	10 800	14,690	vee	500	1063	64,868	430x610	16.93x24	UP	
	10 800	14,690	vee	514	1063	64,868	430x610	16.93x24	UP	
	12 000	16,320	vee	500	1063	64,868	430x610	16.93x24	UP	
	12 000	16,320	vee	514	1063	64,868	430x610	16.93x24	UP	
16 M 43 C	14 400	19,585	vee	500	1417	86,471	430x610	16.93x24	UP	
	14 400	19,585	vee	514	1417	86,471	430x610	16.93x24	UP	
	16 000	21,760	vee	500	1417	86,471	430x610	16.93x24	UP	
	16 000	21,760	vee	514	1417	86,471	430x610	16.93x24	UP	

See our listings for Generator Sets for complete information.

UP — Unit Pump

Off-Highway Engine Ratings

C7 ACERT Ratings

Advertised hp	Maximum hp	Peak Torque lb-ft	Advertised Speed
190	207	520	2500
210 AT	216	520	2500
210	210	520	2500
210	210	605	2500
230	230	540	2400
230	230	660	2400
250	250	660	2400
250	250	800	2400
275	275	800	2400
275	275	860	2400
300	300	800	2400
300	300	860	2400
330	330	860	2400

AT — Automatic Transmission

C9 ACERT Ratings

Advertised hp	Maximum hp	Peak Torque lb-ft	Advertised Speed
275	275	860	2100
330	330	1150	2100
335	350	1050	2100
350	350	1100	2100
400	400	1100	2100

C11 ACERT Ratings

Advertised hp	Maximum hp	Peak Torque lb-ft	Advertised Speed
305	315	1050	2100
335	350	1250	2100
350	365	1350	2100

C13 ACERT Ratings

Advertised hp	Maximum hp	Peak Torque lb-ft	Advertised Speed
335	420	1550	2100
410	425	1450	2100
410	425	1550	2100
430	445	1550	2100
430	445	1650	2100
470	485	1550	2100
525	525	1650	2100
410	425	1450/1550	2100

C15 ACERT Ratings

Advertised hp	Maximum hp	Peak Torque lb-ft	Advertised Speed
435	450	1550	2100
435	450	1650	2100
475	490	1650	2100
475	490	1850	2100
500	515	1850	2100
550	550	1850	2100
435/500	515	1550/1650	2100
500	515	1650	2100
500	515	1850	2100
550	550	1850	2100

Olympian Generator Sets

Outside North America Diesel Ratings

Model	60 Hz			50 Hz		
	rpm	Standby	Prime	rpm	Standby	Prime
		ekW			kVA	
3-Phase Output*						
GEP9.5-2	—	—	—	1500	9.5	8.5
GEP13.5-4	1800	13	12	1500	13.8	12.5
GEP18.4	1800	17	15.5	1500	18	16.5
GEP22.4	1800	20	18	1500	22	20
GEP30-2	—	—	—	1500	30	27
GEP33-2	—	—	—	1500	33	30
GEP44-5	1800	40	36	1500	44	40
GEP50-5	1800	45	40	1500	50	45
GEP55-2	—	—	—	1500	55	50
GEP65-5	1800	60	55	1500	65	60
GEP88-2	—	—	—	1500	88	80
GEP110-2	1800	100	90.4	1500	110	100
GEP150-2	—	—	—	1500	150	135
GEP165-2	—	—	—	1500	165	150
GEP200-2	1800	175	157.5	1500	200	180
GEH220-2	1800	200	180	1500	220	200
GEH250-2	—	—	—	1500	250	230
GEH275-2	—	—	—	1500	275	250
GEP400-4	—	—	—	1500	400	350
GEP450-4	—	—	—	1500	450	400
GEP500-2	—	—	—	1500	500	450
GEP550-2	—	—	—	1500	550	500
GEP605-2	—	—	—	1500	605	550
GEP650-2	—	—	—	1500	650	591
GEP660-1	—	—	—	1500	660	600
GEP700-1	—	—	—	1500	700	635
GEP750-1	1800	600	540	—	—	—
GEP1650-1	—	—	—	1500	1650	—
GEP1875-1	—	—	—	1500	1875	—
GEP2000-1	—	—	—	1500	2000	—
GEP2200-1	—	—	—	1500	2200	—

*Ratings at 0.8 pf and 43° C (100° F).

Rating Definitions:

Standby — (for GEL 3000/3600 rpm models and GEP models with suffix “E”): These ratings are applicable for supplying continuous power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternators on these models are peak continuous rated (as defined in ISO 8523-3) at 25° C (77° F).

Prime — (for GEL 1500/1800 rpm models and all other GEP models): These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and GEP models can supply 10% overload power for 1 hour in 12 hours.

Olympian Generator Sets
Outside North America Diesel Ratings

Model	60 Hz			50 Hz		
	rpm	Standby	Prime	rpm	Standby	Prime
		ekW			kVA	
Single Phase Output*						
GEP7.5SP2	—	—	—	1500	7.5	6.8
GEP11SP4	1800	11	10	1500	11	10
GEP14SP4	1800	17	15.5	1500	14	13
GEP16SP4	1800	20	18	1500	16.5	15
GEP26SP2	—	—	—	1500	26	24
GEP35SP5	1800	40	36	1500	35	32
GEP44SP2	—	—	—	1500	44	40
GEP50SP5	1800	55	50	1500	50	45
GEP64SP2	—	—	—	1500	64	58
GEP80SP2	1800	90	82	1500	80	72
GEP105SP1	1800	112.5	100	1500	105	96

*Ratings at 1.0 pf and 32° C (90° F).

Rating Definitions:

Standby — (for GEL 3000/3600 rpm models and GEP models with suffix “E”): These ratings are applicable for supplying continuous power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternators on these models are peak continuous rated (as defined in ISO 8523-3) at 25° C (77° F).

Prime — (for GEL 1500/1800 rpm models and all other GEP models): These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and GEP models can supply 10% overload power for 1 hour in 12 hours.

Olympian Generator Sets
Diesel Power Module Rating

50 Hz			
Model	rpm	Standby	Prime
		kVA	
3-Phase Output			
XQE20	1500	—	20
XQE30	1500	—	30
XQE60	1500	—	60
XQE80	1500	—	80
XQE100	1500	—	100
XQE150	1500	—	150
XQE200	1500	—	200
XQE250	1500	—	250
60 Hz			
Model	rpm	Standby	Prime
		ekW	
XQ20	1500	20	18
XQ30	1500	30	27
XQ45	1500	45	41
XQ60	1500	60	54
XQ80	1500	80	70
XQ100	1500	100	90
XQ230	1800	230	210
XQ300	1800	300	275
XQ400	1500	400	365
XQ600	1800	600	545
XQ1000	1800	1000	910
XQ2000	1800	2000	1825

Rating Definitions:

Standby — Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

Prime — These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10 percent overload power for 1 hour in 12 hours.

Olympian Generator Sets

North America Gas Ratings (Standard)

60 Hz				
Model	rpm	Standby		
		ekW		
		LP	Natural	
Single Phase & 3-Phase Output				
G25LTA	1800	25	25	
G55LTA	1800	55	55	
G70LTA	1800	70	70	
G80LTA	2650	80	80	
G100LTA	2300	100	100	
G130LTA	3000	130	130	
G150LTA	3600	150	150	

North America Gas Ratings (Customizable)

60 Hz				
Model	rpm	Standby		
		ekW		
		LP	Natural	
3-Phase Output				
G70LG	1800	70	70	
G80LG	2300	80	80	
G100LG	2300	100	100	
G130LG	3000	130	130	
G150LG	3600	150	150	
G175LG	1800	175	175	
G200LG	1800	200	200	
G230LG	2300	230	230	
G250LG	2300	250	250	
G275LG	2300	275	275	
G300LG	2300	300	300	
Single Phase Output				
G70LG	1800	70	70	
G80LG	2300	80	80	
G100LG	2300	100	100	
G130LG	3000	130	130	
G150LG	3600	150	150	
G175LG	1800	175	175	
G200LG	1800	200	200	

Outside North America Gas Ratings

60 Hz					
Model	rpm	Standby		Prime	
		ekW		ekW	
		LP	Natural	LP	Natural
3-Phase Output*					
GEUG16-1	1800	16	15	13.5	13.5
GEUHG30-1	3600	25	25	—	—
GEPG450-2	1500	—	—	—	—
GEPG620-2	1500	—	—	—	—
Single Phase Output**					
GEUG13S1	1800	16	15	13.5	13
GEUHG24S1	3600	25	25	—	—
50 Hz					
Model	rpm	Standby		Prime	
		kVA		kVA	
		LP	Natural	LP	Natural
3-Phase Output*					
GEUG16-1	1500	16.5	15	14	12.5
GEUHG30-1	3000	30	30	—	—
GEPG450-2	1500	—	450	—	—
GEPG620-2	1500	—	620	—	—
Single Phase Output**					
GEUG13S1	1500	13	11.8	11	10
GEUHG24S1	3000	24	24	—	—

*Ratings at 0.8 pf and 43° C (100° F).

**Ratings at 1.0 pf and 32° C (90° F).

Rating Definitions:

Standby — These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. Natural gas ratings have been established on natural gas with net calorific value of approximately 36.8 mJ/m³ (988 Btu/ft³).

Prime — These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10 percent overload power for 1 hour in 12 hours.

Cat Generator Sets

Gas Ratings

Model	60 Hz	
	Standby	Continuous
	ekW	
1800 rpm		
G3306	—	72
G3306	—	75
G3306	—	85
G3306	—	100
G3406	—	132
G3306	—	135
G3406	—	137
G3306	—	140
G3406	150	150
G3412	—	177
G3406	240	190
G3412	—	191
G3406	260	—
G3406	275	—
G3412	350	—
G3412C	375	—
G3412	410	350
G3412	435	—
G3412	445	—
G3412C	450	375
G3412	460	—
G3412	470	—
G3412	480	—
G3412	495	—
G3412	515	—
G3516	1040	—
G3516B	—	1300
G3516B	—	1400
G3516C	—	1660
G3520C	—	1900
G3520C	—	2055

Rating Definitions:

Standby — These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. Natural gas ratings have been established on natural gas with net calorific Low Heat Value (LHV) of approximately 36.2 mJ/m³ (920 Btu/ft³).

Continuous — Output available without varying load for an unlimited time. Continuous power in accordance with ISO 8528, ISO 3046/1, AS2789, DIN6271, and BS5514. Natural gas ratings have been established on natural gas with net calorific Low Heat Value (LHV) of approximately 36.2 mJ/m³ (920 Btu/ft³).

Model	60 Hz	
	Standby	Continuous
	ekW	
1200 rpm		
G3508	—	360
G3508	—	370
G3508	—	375
G3508	—	380
G3508	—	385
G3508	—	390
G3508	—	400
G3512	—	555
G3512	—	560
G3512	—	570
G3512	—	585
G3512	—	600
G3516	—	695
G3516	—	735
G3516	—	750
G3516	—	755
G3516	—	770
G3516	—	795
G3516	—	815
G3516	—	820
G3520C	—	1600
900 rpm		
G3606	—	1155
G3606	—	1235
G3608	—	1540
G3608	—	1640
G3612	—	2310
G3612	—	2335
G3612	—	2465
G3612	—	2595
G3612	—	2615
G3616	—	3080
G3616	—	3105
G3616	—	3408
G3616	—	3480

Cat Generator Sets
Gas Ratings

Model	50 Hz	
	Continuous	
	kVA	ekW
	1500 rpm	
G3306	80	64
G3306	83	66
G3306	87	70
G3306	106	85
G3406	129	103
G3406	133	106
G3306	138	110
G3306	156	125
G3406	156	125
G3406	200	160
G3412	204	163
G3412	215	172
G3412	350	280
G3412	450	360
G3508	600	480
G3508	619	495
G3508	631	505
G3508	638	510
G3512	906	725
G3512	931	745
G3512	956	765
G3512	963	770
G3516	1218	974
G3516	1256	1005
G3516	1287	1030
G3516B	1356	1085
G3516B	1380	1104
G3516B	1388	1110
G3516B	1431	1145
G3516B	1456	1165
G3516C	1944	1555
G3516C	1986	1589
G3516E	2000	1600
G3520C	2438	1950
G3520C	2458	1966
G3520C	2500	2000
G3520E	2500	2000

Model	50 Hz	
	Continuous	
	kVA	ekW
	1000 rpm	
G3606	1606	1285
G3606	1712	1370
G3608	2143	1714
G3608	2281	1825
G3612	3212	2570
G3612	3425	2740
G3612	3593	2874
G3612	3625	2900
G3616	4281	3425
G3616	4562	3650
G3616	4825	3860

Rating Definitions:

Standby — These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. Natural gas ratings have been established on natural gas with net calorific Low Heat Value (LHV) of approximately 36.2 mJ/m³ (920 Btu/ft³).

Continuous — Output available without varying load for an unlimited time. Continuous power in accordance with ISO 8528, ISO 3046/1, AS2789, DIN6271, and BS5514. Natural gas ratings have been established on natural gas with net calorific Low Heat Value (LHV) of approximately 36.2 mJ/m³ (920 Btu/ft³).

MaK Marine Generator Sets
Medium Speed Ratings

MaK Model	Output range	Output range	Output range	Frequency	Speed	Bore	Stroke
	kW	ekW	kVA	Hz	rpm	mm	mm
6 M 20 C	1020/1140	970/1080	1210/1355	60/50	900/1000	200	300
8 M 20 C	1360/1520	1290/1445	1615/1805	60/50	900/1000	200	300
9 M 20 C	1530/1710	1450/1625	1820/2030	60/50	900/1000	200	300
6 M 25 C	1800/1900	1710/1800	2140/2250	60	720	255	400
	1850/2000	1760/1900	2200/2380	50	750	255	400
8 M 25 C	2320/2540	2200/2400	2750/3000	60	720	255	400
	2400/2660	2280/2530	2850/3160	50	750	255	400
9 M 25 C	2610/2850	2480/2700	3100/3370	60	720	255	400
	2700/3000	2570/2850	3210/3560	50	750	255	400
6 M 32 C	2880/3000	2765/2880	3456/3600*	60/50	600	320	480
8 M 32 C	3840/4000	3686/3840	4608/4800*	60/50	600	320	480
9 M 32 C	4320/4500	4147/4320	5184/5400*	60/50	600	320	480
12 M 32 C	5760/6000	5530/5760	6912/7200*	60/50	720/750	320	420
16 M 32 C	7680/8000	7373/7680	9216/9600*	60/50	720/750	320	420

Generator efficiency: 0.95, cos φ 0.8.

*Generator efficiency: 0.96, cos φ 0.8.

ekW — Electrical Kilowatts = kVA × 0.8 pf

Cat Generator Sets

Diesel Ratings

60 Hz			
Model	rpm	Standby	Prime
		ekW	
3-Phase Output*			
D13-4	1800	13	12
D20-6	1800	20	18
D25-8	1800	25	22.8
D30-10	1800	30	27
D40-6	1800	40	36
D50-6	1800	50	45
D60-6	1800	60	54.6
D80-6	1800	80	72
D100-6	1800	100	90
D125-6	1800	125	114
D150-8	1800	150	135
D175-2	1800	175	157.5
Single Phase Output**			
D13-4S	1800	13	11.8
D17-2S	1800	17	16
D20-6S	1800	20	18
D25-8S	1800	25	22.5
D30-8S	1800	30	27
D40-6S	1800	40	36
D50-6S	1800	50	45
D60-8S	1800	60	55
D80-2S	1800	80	72
D100-6S	1800	100	90

*All ratings at 0.8 pf.

**All ratings at 1.0 pf.

Rating Definitions:

Emergency Standby Power (ESP) — Output available with varying load for the duration of an emergency outage. Average power output is 70% of the standby power rating. Typical operation is 50 hours per year, with maximum expected usage of 200 hours per year. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Standby Power Rating — Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Prime Power Rating — Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Prime power in accordance with ISO3046.

60 Hz			
Model	Standby	Prime	Continuous
	ekW		
1800 rpm			
C9 ACERT	200	180	—
C9 ACERT	250	225	—
C9 ACERT	300	275	—
C15 ACERT	350	320	—
C15 ACERT	400	365	—
C15 ACERT	450	410	—
C15 ACERT	500	455	—
C15 ACERT*	550	—	—
C18 ACERT	550	500	—
C18 ACERT	600	545	—
C27 ACERT	650	591	—
C27 ACERT	700	635	—
C27 ACERT	750	680	—
C27 ACERT	800	725	—
C32 ACERT	900	810	740
C32 ACERT	1000	910	830
3512	1100	1000	890
3512	1250	1135	1010
3512B	1400	1275	1230
3512C	1500	1360	1230
3516	1750	1600	1450
3516C	1750	—	1650
3516C	2000	1825	1640
3516B	2250	—	—
3516C-HD	2500	2250	2050
C175-16	3000	2725	2500
C175-16	3100	2825	2600

*ESP — Emergency Standby.

Prime ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the alarm temperature.

Continuous Power Rating — Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of operating hours. Continuous power in accordance with ISO3046.

Continuous ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature below the alarm temperature.

Meets or Exceeds International Specifications: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 72/23/EEC, 98/37/EC, 2004/108/EC.

Fuel rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lb/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

Cat Generator Sets

Diesel Ratings

60 Hz			
Model	Standby	Prime	Continuous
	ekW		
1200 rpm			
3508B	—	600	520
3512B	—	1015	890
3516	—	1250	1100
3516B	—	1285	1145
3516B	—	1450	1325
900 rpm			
6CM20	—	—	980
8CM20	—	—	1300
9CM20	—	—	1470
3606	2000	1820	1650
3608	2660	2420	2200
3612	4000	3640	3300
3616	5320	4840	4400
720 rpm			
3606	1680	1525	1375
6CM25	—	—	1730
3608	2200	2020	1830
8CM25	—	—	2230
9CM25	—	—	2500
3612	3360	3050	2750
3616	4440	4040	3660
12CM32	—	—	5590
16CM32	—	—	7450
600 rpm			
6CM32	—	—	2765
8CM32	—	—	3725
9CM32	—	—	4190
514 rpm			
6CM43	—	—	5240
7CM43	—	—	6110
8CM43	—	—	6980
9CM43	—	—	7860
12CM43	—	—	10 475
16CM43	—	—	13 970

Rating Definitions:

Emergency Standby Power (ESP) — Output available with varying load for the duration of an emergency outage. Average power output is 70% of the standby power rating. Typical operation is 50 hours per year, with maximum expected usage of 200 hours per year. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Standby Power Rating — Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Prime Power Rating — Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Prime power in accordance with ISO3046.

Prime ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the alarm temperature.

Continuous Power Rating — Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated ekW for 100% of operating hours. Continuous power in accordance with ISO3046.

Continuous ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature below the alarm temperature.

Meets or Exceeds International Specifications: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 72/23/EEC, 98/37/EC, 2004/108/EC.

Fuel rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lb/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

Cat Generator Sets

Diesel Ratings

50 Hz			
Model	Standby	Prime	Continuous
	kVA		
1500 rpm			
3406C	300	275	—
3406C	350	320	—
3406C	400	365	—
C15 ACERT	400	365	—
C15 ACERT	450	410	—
C15 ACERT	500	455	—
C15 ACERT	550	—	—
C18 ACERT	550	500	—
C18 ACERT	600	545	—
C18 ACERT	650	591	—
C18 ACERT	700	635	—
3412C	750	680	—
3412C	800	725	—
3412C	900	810	—
C32 ACERT	1000	910	830
C32 ACERT	1100	1000	910
3512B	1250	1135	1010
3512	1250	1150	1000
3512B	1400	1275	1206
3512B	1400	1275	1230
3512B	1500	1360	1320
3512B	1600	1500	—
3512B-HD	1750	1600	1500
3512B-HD	1875	1700	—
3516	2000	1825	1600
3516	2000	1825	1640
3516B	2250	2000	1750
3516B-HD	2500	2275	2000
C175-16	3000	2725	2500
C175-16	3100	2825	2600

Rating Definitions:

Emergency Standby Power (ESP) — Output available with varying load for the duration of an emergency outage. Average power output is 70% of the standby power rating. Typical operation is 50 hours per year, with maximum expected usage of 200 hours per year. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Standby Power Rating — Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Prime Power Rating — Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Prime power in accordance with ISO3046.

Prime ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the alarm temperature.

Continuous Power Rating — Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of operating hours. Continuous power in accordance with ISO3046.

Continuous ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature below the alarm temperature.

Meets or Exceeds International Specifications: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 72/23/EEC, 98/37/EC, 2004/108/EC.

Fuel rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lb/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

Cat Generator Sets

Diesel Ratings

50 Hz			
Model	Standby	Prime	Continuous
	kVA		
1000 rpm			
3508B	—	738	638
3512	—	1050	969
3512B	—	1100	1013
3516	—	1400	1225
3516B	—	1475	1288
6CM20	—	—	1368
8CM20	—	—	1825
9CM20	—	—	2025
3606	2688	2425	2200
3608	3575	3250	2938
3612	5375	4850	4400
3616	7150	6500	5875
750 rpm			
3606	2163	1963	1775
6CM25	—	—	2225
8CM25	—	—	2875
3608	2863	2600	2363
9CM25	—	—	3238
3612	4325	3925	3550
3616	5725	5200	4725
12CM32	—	—	6988
16CM32	—	—	9313
600 rpm			
6CM32	—	—	3456
8CM32	—	—	4656
9CM32	—	—	5238
500 rpm			
6CM43	—	—	6550
7CM43	—	—	7638
8CM43	—	—	8725
9CM43	—	—	9825
12CM43	—	—	13 094
16CM43	—	—	17 463

Rating Definitions:

Emergency Standby Power (ESP) — Output available with varying load for the duration of an emergency outage. Average power output is 70% of the standby power rating. Typical operation is 50 hours per year, with maximum expected usage of 200 hours per year. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Standby Power Rating — Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

Prime Power Rating — Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year. Prime power in accordance with ISO3046.

Prime ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the alarm temperature.

Continuous Power Rating — Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of operating hours. Continuous power in accordance with ISO3046.

Continuous ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature below the alarm temperature.

Meets or Exceeds International Specifications: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 72/23/EEC, 98/37/EC, 2004/108/EC.

Fuel rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lb/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

Cat Marine Engines

Propulsion Ratings

Engine Model	bkW Rating Range	mhp Rating Range
C280-16 DITA	4600-5420	6169-7268
C280-12 DITA	3460-4060	4640-5444
C280-8 DITA	2300-2710	3084-3634
C280-6 DITA	1730-2030	2320-2722
3516C DITA	2350-2525	3151-3386
3516B HP DITA	2000-2237	2682-3000
3516B HD DITA	1398-2000	1875-2682
3516B DITA	1230-1640	1650-2200
3516 DITA	1195-1640	1603-2200
3512C DITA	1765-1895	2367-2541
3512B HP DITA	1342-1678	1800-2250
3512B HD DITA	1118-1500	1500-2012
3512B DITA	820-1230	1100-1650
3512 DITA	900-1305	1207-1750
3508B HP DITA	895-1118	1200-1500
3508B DITA	578-820	775-1100
3508 DITA	526-857	705-1150
C32 DITA	820-1232	1100-1652
C32 ACERT DITA	1343	1800
C18 DITTA	651-747	873-1001
C18 DITA	339-533	454-715
C15 ACERT DITA	597-636	800-853
C12 DITA	254-448	340-600
C12 ACERT DITA	492-526	660-705
C9 ACERT DITA	375-423	503-567
C7 DITA	187-276	250-370
C7 ACERT DITA	339	455
3056 DITA	138-153	185-205
3056 DINA	93	125

Generator Ratings

Engine Model	50 Hz ekW @ rpm	60 Hz ekW @ rpm
C280-16 DITA	4700/5200 @ 1000	4400/4840 @ 900
C280-12 DITA	3520/3880 @ 1000	3300/3640 @ 900
C280-8 DITA	2350/2600 @ 1000	2200/2420 @ 900
C280-6 DITA	1760/1940 @ 1000	1650/1825 @ 900
3516B DITA	1460/1600 @ 1500	1825 @ 1800
3516B DITA	1180 @ 1000	1285 @ 1200
3512B DITA	965/1200 @ 1500	1070/1360 @ 1800
3512B DITA	880 @ 1000	1030 @ 1200
3508B DITA	630/800 @ 1500	715/910 @ 1800
3508B DITA	590 @ 1000	600 @ 1200
3412C DITA	350-500 @ 1500	400-590 @ 1800
C18 DITA	275-450 @ 1500	340-425 @ 1800
C18 DITTA	—	500-550 @ 1800
3406C DITA	200-245 @ 1500	250-320 @ 1800
C9 DITA	150-200 @ 1500	175-250 @ 1800
C4.4 DIT	65-86 @ 1500	72 @ 1800
C2.2 DINA	17.5/18 @ 1500	21/21.5 @ 1800
C1.5 DINA	11/12 @ 1500	14.5/13.5 @ 1800

For more information on IMO regulations and compliance contact:

- IMO headquarters for “Annex VI of MARPOL 73/78...” London, phone: 011-44 (0) 171-735-7611
- EPA paper “Frequently Asked Questions about MARPOL 73/78...” download from web site: epa.gov/oms/marine.htm or call Michigan: (734) 214-4822
- ABS guide “Notes on Prevention of Air Pollution from Ships,” Texas, phone: (281) 877-6306, fax: (281) 877-5801, e-mail: jpatterson@eagle.org

For additional information on Cat Marine Power, see our new marine site: www.cat-marine.com

Engines

MaK Marine Engines

- Propulsion Ratings
- Generator Ratings

MaK Marine Engines

Propulsion Ratings

MaK Model	kW Rating Range	mhp Rating Range
6 M 20 C	1020	1390
	1140	1550
8 M 20 C	1360	1850
	1520	2070
9 M 20 C	1530	2080
	1710	2325
6 M 25 C	1800	2450
	1900	2585
	1850	2525
	2000	2720
8 M 25 C	2320	3155
	2540	3455
	2400	3265
	2660	3620
9 M 25 C	2610	3550
	2850	3875
	2700	3670
	3000	4080
6 M 32 C	2880	3915
	3000	4080
8 M 32 C	3840	5220
	4000	5440
9 M 32 C	4320	5875
	4500	6120
12 M 32 C	5760	7835
	6000	8160
16 M 32 C	7680	10,445
	8000	10,880
6 M 43 C	5400	7340
	5400	7340
	6000	8160
	6000	8160
7 M 43 C	6300	8570
	6300	8570
	7000	9520
	7000	9520

Propulsion Ratings

MaK Model	kW Rating Range	mhp Rating Range
8 M 43 C	7200	9790
	7200	9790
	8000	10,880
	8000	10,880
9 M 43 C	8100	11,015
	8100	11,015
	9000	12,240
	9000	12,240
12 M 43 C	10 800	14,690
	10 800	14,690
	12 000	16,320
	12 000	16,320
16 M 43 C	14 400	19,585
	14 400	19,585
	16 000	21,760
	16 000	21,760

Generator Ratings

MaK Model	50 Hz ekW @ rpm	60 Hz ekW @ rpm
6 M 20 C	1080 @ 1000	970 @ 900
8 M 20 C	1445 @ 1000	1290 @ 900
9 M 20 C	1625 @ 1000	1450 @ 900
6 M 25 C	1760/1900 @ 750	1710/1800 @ 720
8 M 25 C	2280/2530 @ 750	2200/2400 @ 720
9 M 25 C	2570/2850 @ 750	2480/2700 @ 720
6 M 32 C	2765/2880 @ 600	2765/2880 @ 600
8 M 32 C	3686/3840 @ 600	3686/3840 @ 600
9 M 32 C	4147/4320 @ 600	4147/4320 @ 600
12 M 32 C	5760 @ 750	5530 @ 720
16 M 32 C	7680 @ 750	7373 @ 720

Cat Marine Engines

Auxiliary Ratings

Engine Model	bkW/bhp				
C280-16 DITA	4600-5420/6169-7268				
C280-12 DITA	3460-4060/4640-5444				
C280-8 DITA	2300-2710/3084-3634				
C280-6 DITA	1730-2030/2320-2722				
Engine Model	50 Hz 1500 rpm bkW/bhp	50 Hz 1000 rpm bkW/bhp	60 Hz 1800 rpm bkW/bhp	60 Hz 1200 rpm bkW/bhp	60 Hz 900 rpm bkW/bhp
C280-16 DITA	—	4920-5420/ 6598-7268	—	—	4600-5060/ 6169-6785
C280-12 DITA	—	3700-4060/ 4962-5444	—	—	3460-3800/ 4640-5096
C280-8 DITA	—	2460-2710/ 3299-3634	—	—	2300-2530/ 3084-3393
C280-6 DITA	—	1850-2030/ 2481-2722	—	—	1730-1900/ 2320-2548
3516C DITA	—	—	2095-2350/ 2809-3151	—	—
3512C DITA	—	—	1628-1786/ 2183-2394	—	—
3516B DITA	1566-1717/ 2100-2303	1287/ 1726	1901/ 2549	1383/ 1855	—
3512B DITA	1020-1257/ 1368-1686	933/ 1251	1125-1424/ 1509-1910	1102/ 1478	—
3508B DITA	673-856/903-1148	649/870	760-968/1019-1298	682/915	—
3516 DITA	1355/1817	1100/1475	1511/2026	1230/1650	—
3512 DITA	1020/1368	860/1153	1125/1509	955/1281	—
3508 DITA	673/903	446/598	760/1019	599/804	—
3412C DITA (R)	413-513/ 554-688	—	427-583/573-782	—	—
3408C DITA (R)	332/445	—	396/531	—	—
3406C DITA (R)	224-254/ 300-341	—	267-336/ 358-451	—	—
3412C DITA (HE)	431-534/578-716	—	450-620/603-831	—	—
3408C DITA (HE)	340/456	—	410/550	—	—
3406C DITA (HE)	229-260/307-349	—	228-345/306-462	—	—
C18 DITTA	—	—	547-601/ 733-806	—	—
C18 DITA	301-492/ 404-660	—	372-465/ 499-624	—	—
C9 DITA	162-215/ 217-288	—	189-269/ 253-361	—	—

**For more information on
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London, phone: 011-44 (0) 171-735-7611
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73/78..." download from web site: epa.gov/oms/marine.htm
or call Michigan: (734) 214-4822
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e-mail: jpatterson@eagle.org

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Cat Industrial Diesel Applications

Model	Type	“IND A”			“IND B”			“IND C”			“IND D”			“IND E”		
		bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
C0.5	NA	—	—	—	—	—	—	8.2	11.0	2800	—	—	—	—	—	—
		—	—	—	—	—	—	10.2	13.7	3600	—	—	—	—	—	—
C0.7	NA	—	—	—	—	—	—	12.2	16.3	2800	—	—	—	—	—	—
		—	—	—	—	—	—	15.3	20.5	3600	—	—	—	—	—	—
C1.1	NA	—	—	—	—	—	—	14.7/13.7	19.7/18.3	2200	—	—	—	—	—	—
		—	—	—	—	—	—	16.1/14.6	21.6/19.6	2400	—	—	—	—	—	—
		—	—	—	—	—	—	17.3/15.8	23.2/21.2	2600	—	—	—	—	—	—
		—	—	—	—	—	—	18.5/16.8	24.8/22.5	2800	—	—	—	—	—	—
		—	—	—	—	—	—	19.7/17.7	26.4/23.7	3000	—	—	—	—	—	—
		—	—	—	—	—	—	21.0	28.2	3400	—	—	—	—	—	—
C1.5	NA	—	—	—	—	—	—	20.7	27.8	2200	—	—	—	—	—	—
		—	—	—	—	—	—	22.3	29.9	2400	—	—	—	—	—	—
		—	—	—	—	—	—	23.4	31.4	2600	—	—	—	—	—	—
		—	—	—	—	—	—	24.4	32.7	2800	—	—	—	—	—	—
		—	—	—	—	—	—	25.1	33.7	3000	—	—	—	—	—	—
C1.5	T	—	—	—	—	—	—	23.1	31.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	25.2	33.8	2400	—	—	—	—	—	—
		—	—	—	—	—	—	27.3	36.6	2600	—	—	—	—	—	—
		—	—	—	—	—	—	29.4	39.4	2800	—	—	—	—	—	—
C1.6	NA	—	—	—	—	—	—	24.6	33.0	2800	—	—	—	—	—	—
		—	—	—	—	—	—	26.5	35.5	3000	—	—	—	—	—	—
C1.7	NA	—	—	—	—	—	—	24.7	33.2	2400	—	—	—	—	—	—
		—	—	—	—	—	—	26.0	34.8	2600	—	—	—	—	—	—

C0.5, C0.7, C1.1, C1.5, C1.6, C1.7 — Meets Tier 2, Stage II emissions requirements. Designed to meet Tier 3, Stage IIIA and Tier 4, Stage IIIB emissions requirements. Tier 2, Tier 3, and Tier 4 refer to EPA (U.S.) requirements. Stage IIIA and Stage IIIB refer to European requirements.

Rating Definitions:

NOTE: Application examples are for reference only. For an exact determination of the appropriate rating, contact the factory or your local Cat dealer.

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 (0.295 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/N·m³ (905 btu/ft³). Variations in altitude, temperature, and gas composition from standard conditions may require a reduction in engine horsepower. Turbocharged-Aftercooled ratings apply to 1525 m (5000 ft) and 25° C (77° F).

A Rating (Continuous):

- For heavy-duty services when engine is operated at rated load and speed up to 100% of the time without interruption or load cycling.
- Time at full load up to 100% of the duty cycle.

B Rating:

- For service where power and/or speed are cyclic.
- Time at full load not to exceed 80% of the duty cycle.

C Rating (Intermittent):

- For intermittent service where maximum power and/or speed are cyclic.
- Time at full load not to exceed 50% of the duty cycle.

D Rating:

- For service where maximum power is required for periodic overloads.
- Time at full load not to exceed 10% of the duty cycle.

E Rating:

- For service where rated power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable.
- Time at full load not to exceed 5% of the duty cycle.

NA — Naturally Aspirated
T — Turbocharged
TA — Turbocharged-Aftercooled
ATAAC — Air-to-Air Aftercooled
DI — Direct Injection
PC — Precombustion Chamber (Indirect Injection)
hp — Horsepower
kW — Metric equivalent of horsepower

Cat Industrial Diesel Applications

Model	Type	"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
		bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
C2.2	NA	—	—	—	—	—	—	31.0/27.5	41.6/36.9	2200	—	—	—	—	—	—
		—	—	—	—	—	—	34.1/29.7	45.7/39.8	2400	—	—	—	—	—	—
		—	—	—	—	—	—	35.7/31.4	47.9/42.1	2600	—	—	—	—	—	—
		—	—	—	—	—	—	37.3/32.8	50.0/44.0	2800	—	—	—	—	—	—
		—	—	—	—	—	—	38.0/34.0	51.0/45.6	3000	—	—	—	—	—	—
C2.2	T	—	—	—	—	—	—	40.0	53.6	2600	—	—	—	—	—	—
		—	—	—	—	—	—	45.5	61.0	3000	—	—	—	—	—	—
C2.2	TA	—	—	—	—	—	—	49.2	66.0	2800	—	—	—	—	—	—
C3.4	NA	—	—	—	—	—	—	47.0	63.0	2500	—	—	—	—	—	—
C3.4	T	—	—	—	—	—	—	55.0	73.7	2500	—	—	—	—	—	—
		—	—	—	—	—	—	62.0	83.0	2500	—	—	—	—	—	—
3054C	NA	—	—	—	—	—	—	50.0	67.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	54.0	72.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	62.0	83.0	2400	—	—	—	—	—	—
		—	—	—	—	—	—	60.0	80.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	64.0	86.0	2400	—	—	—	—	—	—
3054C	T	—	—	—	—	—	—	60.0	80.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	64.5	86.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	72.5	97.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	72.5	97.0	2400	—	—	—	—	—	—
		—	—	—	—	—	—	74.5	99.5	2400	—	—	—	—	—	—
3054C	TA	—	—	—	—	—	—	78.5	105.0	2400	—	—	—	—	—	—
		—	—	—	—	—	—	83.5	112.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	87.0	117.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	95.0	127.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	97.0	130.0	2200	—	—	—	—	—	—
3054E	NA	—	—	—	—	—	—	64.0	86.0	2400	—	—	—	—	—	—
3054E	T	—	—	—	—	—	—	86.0	115.0	2500	—	—	—	—	—	—
3054E	TA	—	—	—	—	—	—	97.0	130.0	2200	—	—	—	—	—	—
C4.4	NA	—	—	—	—	—	—	54.5	73.0	2200	—	—	—	—	—	—
		—	—	—	—	—	—	56.0	75.0	2200	—	—	—	—	—	—
C4.4	T	—	—	—	—	—	—	55.5-74.5	75.0-99.9	2200-2400	—	—	—	—	—	—
C4.4	TA	—	—	—	—	—	—	74.5-83.0	99.9-111.3	2200-2400	—	—	—	—	—	—
C4.4	T ACERT	—	—	—	—	—	—	61.5-74.5	82.5-99.0	2200	—	—	—	—	—	—
C4.4	TA ACERT	—	—	—	—	—	—	74.5-106.0	99.5-142.0	2200	—	—	—	—	—	—

*Specific application rating.

C2.2, C3.4, 3054C and E — Meets Tier 2, Stage II emissions requirements. Tier 2 refers to EPA (U.S.) requirements. Stage II refers to European requirements.

C2.2, C3.4 — Designed to meet Tier 3, Stage IIIA and Tier 4, Stage IIIB emissions requirements. Tier 3 and Tier 4 refer to EPA (U.S.) requirements. Stage IIIA and Stage IIIB refer to European requirements.

C4.4 and C4.4 ACERT — Meets Tier 3, Stage IIIA emissions requirements. Tier 3 refers to EPA (U.S.) requirements. Stage IIIA refers to European requirements.

Cat Industrial Diesel Applications

Model	Type	“IND A”			“IND B”			“IND C”			“IND D”			“IND E”		
		bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
C6.6 ACERT	TA	—	—	—	—	—	—	89.0	119.4	2200	—	—	—	—	—	—
		—	—	—	—	—	—	116.5	156.2	2200	—	—	—	—	—	—
		—	—	—	—	—	—	129.5	173.7	2200	—	—	—	—	—	—
		—	—	—	—	—	—	129.0	173.0	2500	—	—	—	—	—	—
		—	—	—	—	—	—	130.0	174.3	2500	—	—	—	—	—	—
		—	—	—	—	—	—	136.0	182.4	2200	—	—	—	—	—	—
		—	—	—	—	—	—	140.0	187.7	2200	—	—	—	—	—	—
		—	—	—	—	—	—	144.0	193.1	2200	—	—	—	—	—	—
		—	—	—	—	—	—	146.0	195.8	2200	—	—	—	—	—	—
		—	—	—	—	—	—	151.0	202.5	1800	—	—	—	—	—	—
		—	—	—	—	—	—	151.0	202.5	2200	—	—	—	—	—	—
		—	—	—	—	—	—	159.0	213.2	2200	—	—	—	—	—	—
		—	—	—	—	—	—	168.0	225.3	2200	—	—	—	—	—	—
		—	—	—	—	—	—	176.5	236.7	2200*	—	—	—	—	—	—
		—	—	—	—	—	—	186.0	249.4	2200	—	—	—	—	—	—
—	—	—	—	—	—	205.0	274.9	2200*	—	—	—	—	—	—		
C6.6 ACERT	TA IOPU	—	—	—	—	—	—	129.5	173.7	2200	—	—	—	—	—	
		—	—	—	—	—	—	130.0	174.3	2500	—	—	—	—	—	
		—	—	—	—	—	—	151.0	202.5	1800	—	—	—	—	—	
		—	—	—	—	—	—	151.0	202.5	2200	—	—	—	—	—	
		—	—	—	—	—	—	168.0	225.3	2200	—	—	—	—	—	
C7 ACERT	ATAAC	—	—	—	168	225	1800-2200	187.0	250.0	1800-2200	224	300	2100-2200	—	—	
C9 ACERT	ATAAC	205	275	1800-2200	224	300	1800-2200	242.0	325.0	1800-2200	280	375	1800-2200	—	—	
		—	—	—	—	—	—	261.0	350.0	1800-2200	—	—	—	—	—	
C11 ACERT	ATAAC	242	325	1800-2100	261	350	1800-2100	287.0	385.0	1800-2100	313	420	1800-2100	336	450	
C13 ACERT	ATAAC	287	385	1800-2100	310	415	1800-2100	328.0	440.0	1800-2100	354	475	1800-2100	388	520	
3406C	T	201	270	1800	224	300	2000	242.0	325.0	2100	283	380	2100	291	390	
3406C	TA	199	267	1300	—	—	—	199.0	267.0	1300	—	—	—	—	—	
		205	275	1800	242	325	2000	269.0	360.0	2100	313	420	2100	336	450	
		242	325	1800	242	325	2000	242.0	325.0	1800	—	—	—	—	—	
		—	—	—	—	—	—	242.0	325.0	2100	—	—	—	—	—	
		242	325	1800	276	370	2000	298.0	400.0	2100	358	480	2100	373	500	
		257	345	1800	254	340	2000	250.0	335.0	2100	—	—	—	—	—	
		—	—	—	—	—	—	257.0	345.0	1800	—	—	—	—	—	
		—	—	—	—	—	—	269.0	360.0	1800	283	380	2100	291	390	
		268	360	1800	268	360	2000	269.0	360.0	2100	298	400	2100	324	435	
		—	—	—	—	—	—	280.0	375.0	2000	—	—	—	—	—	
		—	—	—	—	—	—	280.0	375.0	2100	—	—	—	—	—	
		—	—	—	—	—	—	298.0	400.0	1800	—	—	—	—	—	
		—	—	—	—	—	—	298.0	400.0	2000	—	—	—	—	—	
		280	375	1800	291	390	2000	298.0	400.0	2100	324	435	2100	362	485	
		—	—	—	—	—	—	321.0	430.0	2100	—	—	—	—	—	
		—	—	—	—	—	—	328.0	440.0	1800	—	—	—	—	—	
		—	—	—	—	—	—	328.0	440.0	1900	366	490	2100	—	—	
—	—	—	—	—	—	328.0	440.0	2000	—	—	—	384	515			
287	385	1800	328	440	2000	343.0	460.0	2100	373	500	2100	384	515			
313	420	1800	328	440	2000	343.0	460.0	2100	384	515	2100	392	525			

*Specific application rating.

C6.6 ACERT, C7 ACERT, C9, C9 ACERT, C10, C11, C12, C13 ACERT — Meets Tier 3, Stage IIIA emission requirements. Tier 3 refers to EPA (U.S.) requirements. Stage IIIA refers to European requirements.

Cat Industrial Diesel Applications

Model	Type	“IND A”			“IND B”			“IND C”			“IND D”			“IND E”		
		bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
C15 ACERT	ATAAC	328	440	1800-2100	354.0	475	1800-2100	403	540	1800-2100	433	580	1800-2100	444	595	1800-2100
C18 ACERT	ATAAC	429	575	1800-2100	447.5	600	1800-2100	470	630	1800-2100	—	—	—	—	—	—
C18 ACERT	TTA (ATAAC)	—	—	—	—	—	—	522	700	1800-2100	571	765	1800-2100	597	800	1800-2100
C27 ACERT	TA (ATAAC)	597	800	1800-2100	653.0	875	1800-2100	708	950	1800-2100	783	1050	1800-2100	858	1150	1800-2100
C32 ACERT	TA (ATAAC)	—	—	—	708.0	950	1800-2100	839	1125	1800-2100	895	1200	1800-2100	1007	1350	1800-2100
3508	TA	507	680	1200	—	—	—	612	820	1300	—	—	—	—	—	—
		578	775	1800	—	—	—	634	850	1800	—	—	—	—	—	—
		638	855	1800	—	—	—	746	1000	1800	—	—	—	—	—	—
3508B	TA	746	1000	1800	—	—	—	820	1100	1800	—	—	—	—	—	—
3512	TA	761	1020	1200	—	—	—	858	1150	1300	—	—	—	—	—	—
		877	1175	1800	—	—	—	1007	1350	1800	—	—	—	—	—	—
		955	1280	1800	—	—	—	1119	1500	1800	—	—	—	—	—	—
3512B	TA	1119	1500	1800	—	—	—	1231	1650	1800	—	—	—	—	—	—
3516	TA	1011	1355	1200	—	—	—	1242	1665	1300	—	—	—	—	—	—
		1156	1550	1800	—	—	—	1268	1700	1800	—	—	—	—	—	—
		1275	1710	1800	—	—	—	1492	2000	1800	—	—	—	—	—	—
3516B	TA	1492	2000	1800	—	—	—	1566	2100	1800	—	—	—	—	—	—
3606	TA	1490	1998	750	—	—	—	—	—	—	—	—	—	—	—	—
		1560	2092	800	—	—	—	—	—	—	—	—	—	—	—	—
		1730	2319	900	—	—	—	—	—	—	—	—	—	—	—	—
		1850	2481	1000	—	—	—	—	—	—	—	—	—	—	—	—
3608	TA	1980	2655	750	—	—	—	—	—	—	—	—	—	—	—	—
		2080	2787	800	—	—	—	—	—	—	—	—	—	—	—	—
		2300	3080	900	—	—	—	—	—	—	—	—	—	—	—	—
		2460	3300	1000	—	—	—	—	—	—	—	—	—	—	—	—
3612	TA	2980	3996	750	—	—	—	—	—	—	—	—	—	—	—	—
		3120	4184	800	—	—	—	—	—	—	—	—	—	—	—	—
		3460	4640	900	—	—	—	—	—	—	—	—	—	—	—	—
		3700	4962	1000	—	—	—	—	—	—	—	—	—	—	—	—
3616	TA	3960	5310	750	—	—	—	—	—	—	—	—	—	—	—	—
		4160	5579	800	—	—	—	—	—	—	—	—	—	—	—	—
		4600	6169	900	—	—	—	—	—	—	—	—	—	—	—	—
		4920	6598	1000	—	—	—	—	—	—	—	—	—	—	—	—

C15 ACERT — Meets Tier 3, Stage IIIA emissions requirements. Tier 3 refers to EPA (U.S.) requirements. Stage IIIA refers to European requirements.
 C18 ACERT — A, B, and C ratings meet Tier 3, Stage IIIA emissions requirements. Tier 3 refers to EPA (U.S.) requirements. Stage IIIA refers to European requirements.
 D and E ratings meet Tier 2 emissions requirements above 559 bkW (751 bhp). Tier 2 refers to EPA (U.S.) requirements.
 C27 and C32 — Meets Tier 2 emissions requirements. Tier 2 refers to EPA (U.S.) requirements.

Cat Industrial Diesel Applications

Cat Diesel Engines for Fire Pump Packages

Model	No. of Cylinders	1460 rpm		1750 rpm		1900 rpm		2100 rpm		2200 rpm		2300 rpm	
		bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp
3406C* T	I6	183	247	218	292	233	312	246	330	—	—	261	350
3406C* T	I6	242	325	276	370	280	375	280	375	—	—	—	—
3406C* TA	I6	224	300	313	420	317	425	321	430	—	—	339	455
3406C* TA	I6	—	—	343	460	343	460	359	482	—	—	—	—
3412C** T	V12	466	625	401	538	507	680	427	573	—	—	466	625
3412C** T	V12	—	—	492	660	—	—	522	700	—	—	—	—
3412C** TA	V12	—	—	476	638	551	739	551	739	—	—	649	870
3412C** TA	V12	—	—	597	800	642	860	649	870	—	—	—	—
3508** TA	V8	709	950	794	1065	—	—	—	—	—	—	—	—
3512** TA	V12	1067	1430	1193	1600	—	—	—	—	—	—	—	—
3516** TA	V16	1417	1900	1480	1985	—	—	—	—	—	—	—	—

*New Source Performance Standard (NSPS) compliant.

**For export out of the U.S. only.

T — Turbocharged

TA — Turbocharged-Aftercooled

Rating Definition:

Standby: Fire pump engine ratings represent the output which may be utilized to drive stationary fire pumps where the pumping equipment has been sized according to ULI and FM procedures.

Cat Oil and Gas Engines

Gas Industrial Ratings

Model	900 rpm		1000 rpm		1200 rpm		1400 rpm		1500 rpm		1600 rpm		1800 rpm	
	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp
G3304 NA	—	—	—	—	—	—	56	75	—	—	64	85	71	95
G3306 NA	—	—	—	—	—	—	—	—	—	—	—	—	108	145
G3306 TA	—	—	—	—	—	—	—	—	—	—	—	—	157	211
G3306 TA ²	—	—	—	—	—	—	—	—	—	—	—	—	151	203
G3306 TA ¹	—	—	—	—	—	—	—	—	—	—	—	—	164	220
G3406 NA	—	—	—	—	—	—	131	175	—	—	—	—	160	215
G3406 TA ^{2,4}	—	—	—	—	—	—	—	—	—	—	—	—	206	276
G3406 TA ⁴	—	—	—	—	—	—	—	—	—	—	—	—	218	292
G3406 TA ²	—	—	—	—	—	—	187	250	—	—	—	—	242	325
G3406 TA ¹	—	—	—	—	—	—	—	—	—	—	—	—	257	345
G3406 TA ¹	—	—	—	—	—	—	209	280	—	—	—	—	272	365
G3408 NA	—	—	—	—	—	—	157	210	—	—	—	—	190	255
G3408 TA ²	—	—	—	—	—	—	223	300	—	—	—	—	—	—
G3408 TA ²	—	—	—	—	—	—	223	300	—	—	—	—	298	400
G3408 TA ¹	—	—	—	—	—	—	246	330	—	—	—	—	—	—
G3408 TA ^{2,4}	—	—	—	—	—	—	—	—	248	332	—	—	—	—
G3408 TA ^{1,4}	—	—	—	—	—	—	261	350	—	—	—	—	302	405
G3408 TA ^{2,3}	—	—	—	—	—	—	—	—	—	—	—	—	317	425
G3408 TA ¹	—	—	—	—	—	—	261	350	—	—	—	—	336	450
G3412 NA	—	—	—	—	—	—	235	315	—	—	—	—	272	365
G3412 TA ^{2,4}	—	—	—	—	—	—	302	405	—	—	—	—	—	—
G3412 TA ^{2,4}	—	—	—	—	—	—	—	—	373	500	—	—	—	—
G3412 TA ²	—	—	—	—	—	—	335	450	—	—	—	—	—	—
G3412 TA ²	—	—	—	—	—	—	347	465	—	—	—	—	448	600
G3412 TA ^{1,3}	—	—	—	—	—	—	369	495	—	—	—	—	—	—
G3412 TA ¹	—	—	—	—	—	—	392	525	—	—	—	—	—	—
G3412 TA ^{1,4}	—	—	—	—	—	—	—	—	—	—	—	—	453	607
G3412 TA ^{2,3}	—	—	—	—	—	—	—	—	—	—	—	—	475	637
G3412 TA ^{1,3,4}	—	—	—	—	—	—	—	—	—	—	—	—	504	675

¹ 32° C (90° F) water to aftercooler.

² 54° C (130° F) water to aftercooler.

³ Low Emissions.

⁴ Catalyst Rating.

Ratings listed are for 25° C (77° F) ambient temperature, 152 m (500 ft) altitude, and pipeline quality gas.

NA — Naturally Aspirated

TA — Turbocharged-Aftercooled

bhp — Brake horsepower

bkW — Metric equivalent of brake horsepower

Rating Definition:

Continuous: Output available without varying load for an unlimited time. Continuous power in accordance with ISO 8528, ISO 3046/1, AS2789, DIN6271, and BS5514.

Cat Oil and Gas Engines

Gas Industrial Ratings

Model	900 rpm		1000 rpm		1200 rpm		1400 rpm		1500 rpm		1600 rpm		1800 rpm	
	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp
G3508	NA	—	—	—	—	231	310	—	—	—	—	—	—	—
G3508	TA ^{3,4}	—	—	—	—	384	515	472	630	—	—	—	—	—
G3805	TA ³	—	—	—	—	391	524	—	—	—	—	—	—	—
G3508	TA ^{2,4}	—	—	—	—	395	530	485	650	—	—	—	—	—
G3508	TA ²	—	—	—	—	399	535	—	—	—	—	—	—	—
G3508	TA ¹	—	—	—	—	406	545	—	—	—	—	—	—	—
G3508	TA ^{1,4}	—	—	—	—	407	545	500	670	—	—	—	—	—
G3512	NA	—	—	—	—	391	525	—	—	—	—	—	—	—
G3512	TA ³	—	—	—	—	589	790	—	—	—	—	—	—	—
G3512	TA ²	—	—	—	—	595	800	—	—	—	—	—	—	—
G3512	TA ^{3,4}	—	—	—	—	604	810	705	945	—	—	—	—	—
G3512	TA ¹	—	—	—	—	607	815	—	—	—	—	—	—	—
G3512	TA ^{2,4}	—	—	—	—	623	835	727	975	—	—	—	—	—
G3512	TA ^{3,4}	—	—	—	—	642	860	749	1005	—	—	—	—	—
G3516	NA	—	—	—	—	492	660	—	—	—	—	—	—	—
G3516	TA ³	—	—	—	—	783	1050	—	—	—	—	—	—	—
G3516	TA ²	—	—	—	—	794	1065	—	—	—	—	—	—	—
G3516	TA ^{3,4}	—	—	—	—	809	1085	943	1265	—	—	—	—	—
G3516	TA ^{2,4}	—	—	—	—	831	1115	969	1300	—	—	—	—	—
G3516	TA ^{3,4}	—	—	—	—	858	1150	1000	1340	—	—	—	—	—
G3520B	TA	—	—	—	—	965	1294	1286	1725	—	—	—	—	—
G3606	TA ^{2,3}	1193	1600	1324	1775	—	—	—	—	—	—	—	—	—
G3606	TA ^{1,3}	1271	1705	1413	1895	—	—	—	—	—	—	—	—	—
G3608	TA ^{2,3}	1591	2133	1767	2370	—	—	—	—	—	—	—	—	—
G3608	TA ^{1,3}	1693	2270	1879	2520	—	—	—	—	—	—	—	—	—
G3612	TA ^{2,3}	2383	3195	2647	3550	—	—	—	—	—	—	—	—	—
G3612	TA ^{1,3}	2539	3405	2822	3785	—	—	—	—	—	—	—	—	—
G3616	TA ^{2,3}	3178	4261	3531	4735	—	—	—	—	—	—	—	—	—
G3616	TA ^{1,3}	3389	4545	3762	5045	—	—	—	—	—	—	—	—	—
G16CM34	TA	—	—	—	—	—	—	—	—	—	—	—	—	—

¹ 32° C (90° F) water to aftercooler.² 54° C (130° F) water to aftercooler.³ Low Emissions.⁴ Catalyst Rating.

Ratings listed are for 25° C (77° F) ambient temperature, 152 m (500 ft) altitude, and pipeline quality gas.

NA — Naturally Aspirated

TA — Turbocharged-Aftercooled

bhp — Brake horsepower

bkW — Metric equivalent of brake horsepower

Rating Definition:**Continuous:** Output available without varying load for an unlimited time. Continuous power in accordance with ISO 8528, ISO 3046/1, AS2789, DIN6271, and BS5514.

- Cat Oil and Gas Engines
- Offshore Power Module Ratings
- Land Rig Power Module Ratings

Engines

Cat Oil and Gas Engines

Offshore Power Module Ratings

Model	L with Base		W of Base		H with Base		Approximate Weight with Base	
	m	ft	mm	in	mm	in	kg	lb
3512B	5.44	17'10"	1790	71	2225	90	13 970	30,800
3512B HD	5.44	17'10"	1790	71	2225	90	14 515	32,000
3516B	6.10	20'0"	1790	71	2225	90	16 740	36,900
3516B HD	6.40	21'0"	1790	71	2225	90	17 236	38,000
3606	7.39	24'3"	1905	75	3250	128	37 194	82,000
3608	9.91	32'6"	1905	75	3250	128	44 452	98,000
3612	9.45	31'0"	2085	82	3300	130	55 340	122,000
3616	10.06	33'0"	2085	82	3300	130	65 317	144,000
12CM32	11.05	36'2"	2800	110	5357	211	121 000	266,200
16CM32	12.40	40'8"	2800	110	5357	211	148 000	325,600

Land Rig Power Module Ratings

Model	L Bases Available*	W of Base		Radiator Height with Base		Approximate Weight with Base	
	7.85 m (25'9")	mm	in	mm	in	kg	lb
3508	X	2390	94	2896	114	13 155	29,000
3508B	X	2390	94	2896	114	13 155	29,000
3512	X	2390	94	2896	114	15 875	35,000
3512B	X	2390	94	2896	114	15 875	35,000
3512B HD	X	2390	94	2896	114	16 798	37,000
3516	X	2390	94	2896	114	18 600	41,000
3516B	X	2390	94	2896	114	18 600	41,000

*9.37 m (30'9") and 12.4 m (40'9") bases also available.

Cat Oil and Gas Engines

Electric Drive Engine Ratings for SCR and DC Powered Rigs

Model	No. Cyl.	60 Hz								50 Hz					
		720 rpm		900 rpm		1200 rpm		1800 rpm		750 rpm		1000 rpm		1500 rpm	
		bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp
C16	I-6	—	—	—	—	—	—	410	550¹	—	—	—	—	—	—
3412E	V-12	—	—	—	—	—	—	577	760¹	—	—	—	—	—	
3412E	V-12	—	—	—	—	354	475¹	—	—	—	—	—	—	—	
3508	V-8	—	—	—	—	641	860¹	—	—	—	—	—	—	—	
3508B	V-8	—	—	—	—	682	915¹	—	—	—	—	—	—	880	1180
3512	V-12	—	—	—	—	709	950¹	—	—	—	—	—	—	1090	1462
3512C	V-12	—	—	—	—	1678	2250	—	—	—	—	—	—	—	—
3512C HD	V-12	—	—	—	—	1101	1475	—	—	—	—	—	—	1310	1757
3516C HD	V-16	—	—	—	—	1345	1804¹	—	—	—	—	—	—	—	—
3516C	V-16	—	—	—	—	1384	1855³	—	—	—	—	—	—	—	—
3516C HD	V-16	—	—	—	—	1604	2150³	—	—	—	—	—	—	—	—
3606C	I-6	1565	2100²	1880	2520²	—	—	—	—	1645	2210²	2010	2700²	—	—
3608	I-8	2085	2800²	2533	3395²	—	—	—	—	2155	2890²	2700	3630²	—	—
3612	V-12	3130	4200²	3802	5096²	—	—	—	—	3285	4410²	4025	5400²	—	—
3616	V-16	4180	5600²	4604	6172²	—	—	—	—	4315	5790²	5415	7260²	—	—
12CM32	V-12	5760	7724	—	—	—	—	—	—	6000	8160	—	—	—	—
16CM32	V-16	7680	10,300	—	—	—	—	—	—	8000	10,880	—	—	—	—

¹ EPA certified.² IMO certified.³ EPA and IMO certified.

bhp — Brake horsepower

bkW — Metric equivalent of brake horsepower

Requires Separate Circuit Aftercooling (SCAC), without fan power, when emissions compliant.

Cat Oil and Gas Engines

Mechanical Drill Rig Ratings

Model	Pumping and Drilling Ratings (B Level)				
	No. Cyl.	1400 rpm		1200 rpm	
		bkW	bhp	bkW	bhp
3412E***	V-12	466	625	—	—
3508**	V-8	—	—	567	760
3508B*	V-8	—	—	567	760
3508B*	V-8	—	—	671	900
3512B	V-12	—	—	783	1050
3512B	V-12	—	—	1044	1400
3516**	V-16	—	—	1044	1400
3516**	V-16	—	—	1230	1649

*2002 U.S. EPA and IMO certified, Separate Circuit Aftercooling (SCAC), without fan.

**Not U.S. EPA and IMO certified, Jacket Water Aftercooling (JWAC), without fan.

***2002 U.S. EPA and IMO certified, Air to Air Aftercooled (ATAAC), without fan.

bhp — Brake horsepower

bkW — Metric equivalent of brake horsepower

Fracturing/Acidizing/Cementing Ratings

Dry Manifolds (E Level)				
Model	bkW	bhp	rpm	2002 EPA, Carb & EU 97/68/EC
C10	317	425	2100	X
C12	373	500	2100	X
C15	428	575	2100	X
C16	492	660	2100	X
C32	1119	1500	2100	X
3512B*	1492	2000	1900	X
3512B	1604	2150	1900	X
3512B	1679	2250	1900	X

Water Cooled Manifolds (E Level)				
Model	bkW	bhp	rpm	2002 EPA and IMO
C10*	272	365	2100	X
C15*	373	500	2100	X
3126**	172	230	2600	X
3406*	365	490	2100	X
3412E*	642	860	2100	X
3412E	780	1050	2100	X

*D Rating Level — cementing.

**C Rating Level.

STA — Series Turbocharged-Aftercooled

bhp — Brake horsepower

bkW — Metric equivalent of brake horsepower

E Rating Level — fracturing.

Rating Definitions:

The horsepower and speed capability of the engine which can be used to power high pressure well servicing equipment.

NOTE: For a transmission match, consult your transmission supplier.

Engines

Cat Railway Power

- Locomotive Traction Engine Ratings
- Auxiliary Electric (Head End) Power Engine Ratings

Cat Railway Power

Locomotive Traction Engine Ratings

Model	Rated Speed	Low Rating		High Rating	
	rpm	kW	hp	kW	hp
C9 ACERT	1800-2200	205	275	280	375
C11 ACERT	1800-2100	242	325	336	450
C13 ACERT	1800-2100	287	385	388	520
3406C	1300-2100	199	267	392	525
C15 ACERT	1800-2100	328	440	444	595
C18 ACERT	1800-2100	429	575	597	800
C18 ACERT- Horizontal*	1800	—	—	522	700
C27 ACERT	1800-2100	597	800	858	1150
C32 ACERT	1800-2100	708	950	1007	1350
C175-16 ACERT	1800	2500	3351	2700	3620
3508	1300-1800	503	675	970	1300
3512	1300-1800	746	1000	1700	2280
3516	1300-1800	1200	1600	2300	3085
3606	750-1000	1640	2200	2030	2720
3608	750-1000	2180	2925	2710	3635
3612	750-1000	3280	4400	4060	5445
3616	750-1000	4360	5850	5420	7270

*Preliminary rating.

Auxiliary Electric (Head End) Power Engine Ratings

Model	Rating (Hz)	Power (ekW)	Emissions Tier
C15 ACERT	50	292	STAGE II
C15 ACERT	50	328	STAGE II
C15 ACERT	50	364	STAGE II
C15 ACERT	50	400	STAGE II
C15 ACERT	60	320	TIER 3
C15 ACERT	60	365	TIER 3
C15 ACERT	60	410	TIER 3
C15 ACERT	60	455	TIER 3
C18 ACERT	50	400	STAGE II
C18 ACERT	50	436	STAGE II
C18 ACERT	50	508	STAGE II
C18 ACERT	50	573	STAGE II
C18 ACERT	60	500	TIER 2
C18 ACERT	60	545	TIER 2
C27 ACERT	60	590	TIER 2
C27 ACERT	60	635	TIER 2
C27 ACERT	60	680	TIER 2
C27 ACERT	60	725	TIER 2

All 60 Hz ratings are EPA Tier 2 or Tier 3 and CARB emission certified (non-road mobile regulations).

All 50 Hz ratings are EU emission certified (non-road mobile regulations).

Maintenance of Way Engine Ratings

Model	Aspiration	Rated Speed	Low Rating		High Rating	
		rpm	kW	hp	kW	hp
C0.5	NA	2800-3600	8.2	11.0	10.2	13.7
C0.7	NA	2800-3600	12.2	16.3	15.3	20.5
C1.1	NA	2200-3400	13.7	18.3	21.0	28.2
C1.5	NA	2200-3000	20.7	27.8	25.1	33.7
C1.5	T	2200-3000	23.1	30.0	30.0	40.2
C1.6	NA	2800-3000	24.6	33.0	26.5	35.5
C1.7	NA	2400-2600	24.7	33.2	26.0	34.8
C2.2	NA	2200-3000	27.5	36.9	38.0	51.0
C2.2	T	2600-3000	40.0	53.6	45.5	61.0
C2.2	TA	2800	—	—	49.2	66.0
C3.4	NA	2500	—	—	47.0	63.0
C3.4	T	2500	55.0	73.7	62.0	83.0
3054C	NA	2200-2400	50.0	67.0	64.0	86.0
3054C	T	2200-2400	60.0	80.0	74.5	99.5
3054C	TA	2200-2400	78.5	105.0	97.0	130.0
3054E	NA	2400	—	—	64.0	86.0
3054E	T	2500	—	—	86.0	115.0
3054E	TA	2200	—	—	97.0	130.0
C4.4	NA	2200	54.5	73.0	56.0	75.0
C4.4	T	2200-2400	55.5	75.0	74.5	99.9
C4.4	TA	2200-2400	74.5	99.9	83.0	111.3
C4.4 ACERT	T	2200	61.5	82.5	74.5	99.0
C4.4 ACERT	TA	2200	74.5	99.5	106.0	142.0
C6.6 ACERT	TA	1800-2500	89.0	119.4	205.0	274.9
C7 ACERT	TA	1800-2200	168.0	225.0	224.0	300.0
C9 ACERT	TA	1800-2200	205.0	275.0	280.0	375.0
C11 ACERT	TA	1800-2100	242.0	325.0	336.0	450.0
C13 ACERT	TA	1800-2100	287.0	385.0	388.0	520.0
3406C	T	1800-2100	201.0	270.0	291.0	390.0
3406C	TA	1300-2100	199.0	267.0	392.0	525.0
C15 ACERT	TA	1800-2100	328.0	440.0	444.0	595.0
C18 ACERT	TA	1800-2100	429.0	575.0	597.0	800.0
C27 ACERT	TA	1800-2100	597.0	800.0	858.0	1150.0
C32 ACERT	TA	1800-2100	708.0	950.0	1007.0	1350.0
3508	TA	1200-1800	507.0	680.0	746.0	1000.0
3512	TA	1200-1800	761.0	1020.0	1119.0	1500.0
3516	TA	1200-1800	1011.0	1355.0	1492.0	2000.0

Ratings meet appropriate non-road mobile emissions regulations.
 Specific EPA or EU emissions information is available through your Cat dealer.

NA — Naturally Aspirated
 T — Turbocharged
 TA — Turbocharged/Aftercooled

