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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**	50	4.1 to 4920 kW 5.5 to 6598 hp EPA & EU Certified, Other Global Regulated & Non-Regulated
	Gaseous Fueled	14	71 to 6100 kW 95 to 8180 hp EPA Certified
GENERATOR SETS 	**Diesel High Speed Area**		50 Hz kVA w/fan Prime 275-3600 Standby 300-4000 60 Hz ekW w/fan Prime 36-3600 Standby 40-4000
	Gaseous Fueled		50 Hz ekW w/o fan Continuous 66-9700 60 Hz ekW w/o fan Continuous 235-9700
OLYMPIAN GENERATOR SETS*	**Diesel**		50 Hz kVA w/fan Prime 6.8-635 Standby 7.5-700 60 Hz ekW w/fan Prime 8-540 Standby 8.8-600
	Gaseous Fueled		50 Hz kVA w/o fan Standby 13-30 60 Hz ekW w/o fan Continuous 25-300
MARINE 	**Propulsion**	26	93 to 5650 kW 125 to 7577 hp
	Generator Sets	18	50 Hz kVA 10.0 to 5200 Prime 60 Hz kW 12.0 to 4840 Prime
POWER AND PRODUCTION 	**Generator Sets**	28	50 Hz 1140 to 18 000 kW Prime 1529 to 24,138 hp Prime 60 Hz 1020 to 18 000 kW 1368 to 24,138 hp
	Pump Application	11	1140 to 6100 kW 1529 to 8180 hp

*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 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).

*Except for MaK and CM engines.

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 L	Displacement in³	Config.	Bore x Stroke mm	Bore x Stroke in	Fuel System	Power Range: Marine kW	Power Range: Marine hp	Power Range: Diesel Industrial	Power Range: Elec. Power Gen.	Power Range: Oil/ Gas	Power Range: Rail Power
C0.5	0.5	**31**	I2	67x72	**2.6x2.8**	PC			**See our listings for Diesel Industrial for complete information.**	**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.**
C0.7	0.7	**46.4**	I3	67x72	**2.6x2.8**	PC						
C1.1	1.1	**69**	I3	77x81	**3.0x3.2**	PC						
C1.5*	1.5	**91**	I3	84x90	**3.3x3.5**	PC						
C1.5	1.5	**91**	I3	84x90	**3.3x3.5**	PC						
C1.6	1.5	**92**	I4	77x81	**3.0x3.2**	PC						
C1.7	1.66	**101**	I3	84x100	**3.3x3.9**	PC						
C2.2*	2.2	**135**	I4	84x100	**3.3x3.9**	PC						
C2.2	2.2	**135**	I4	84x100	**3.3x3.9**	PC						
C3.4	3.3	**201**	I4	94x120	**3.7x4.72**	Common Rail						
C3.4*	3.3	**201**	I4	94x120	**3.7x4.72**	Common Rail						
C3.4B	3.4	**207.5**	I4	99x110	**3.9x4.3**	Common Rail						
C4.4*	4.4	**269**	I4	105x127	**4.1x5.0**	Common Rail						
C4.4 ACERT™*	4.4	**269**	I4	105x127	**4.1x5.0**	Common Rail						
C4.4 ACERT	4.4	**269**	I4	105x127	**4.1x5.0**	Common Rail						
C6.6 ACERT*	6.6	**402.8**	I6	105x127	**4.1x5.0**	Common Rail						
C6.6 ACERT	6.6	**402.8**	I6	105x127	**4.1x5.0**	Common Rail						
3056	6	**365**	I6	100x127	**3.94x5.0**	MEUI™	93-153	**125-205**				
C7	7.24	**442**	I6	110x127	**4.33x5.0**	HEUI	187-276	**250-370**				
C7 ACERT*	7.2	**442**	I6	110x127	**4.33x5.0**	HEUI	339	**455**				
C7.1*	7	**427.7**	I6	105x135	**4.13x5.3**							
C7.1 ACERT	7	**427.7**	I6	105x135	**4.13x5.3**							
C9 ACERT*	8.8	**537**	I6	112x149	**4.41x5.87**		375-423	**503-567**				
C9.3 ACERT	9.3	**567.5**	I6	115x149	**4.53x5.87**							
C11 ACERT*	11.1	**677**	I6	130x140	**5.12x5.51**	MEUI						
C11 ACERT	11.1	**677**	I6	130x140	**5.12x5.51**	MEUI						
C12	12	**732**	I6	130x150	**5.1x5.9**	MEUI	254-448	**340-600**				
C12 ACERT	12	**732**	I6	130x150	**5.1x5.9**	MEUI	492-526	**660-705**				
C13 ACERT*	12.5	**763**	I6	130x157	**5.1x6.2**	MEUI						
C13 ACERT	12.5	**762.8**	I6	130x157	**5.1x6.2**	MEUI						
3406C*	14.6	**893**	I6	137x165	**5.4x6.5**							
C15 ACERT*	15.2	**927.6**	I6	137.2x171.4	**5.4x6.75**	MEUI						
C15 ACERT	15.2	**927.6**	I6	137x171	**5.4x6.73**	MEUI						
C16	15.8	**964**	I6	140x171	**5.5x6.75**	MEUI						
C18 ACERT*	18.1	**1104.5**	I6	145x183	**5.7x7.2**	MEUI						
C18 ACERT	18.1	**1104.5**	I6	145x183	**5.7x7.2**	MEUI						
C18	18.1	**1106**	I6	145x183	**5.7x7.2**	MEUI	339-847	**454-1136**				
C27 ACERT*	27	**1648**	V12	137.2x152.4	**5.4x6.0**	MEUI						
C27 ACERT	27	**1649.5**	V12	137.2x152.4	**5.4x6.0**	MEUI						
C32 ACERT*	32.1	**1959**	V12	145x162	**5.7x6.4**	MEUI						
C32 ACERT	32.1	**1959**	V12	145x162	**5.7x6.4**	MEUI	492-1417	**660-1900**				

PC — Precombustion Chamber
MEUI — Mechanical Unit Injection
HEUI — Hydraulically Actuated Electronically Controlled
NOTE: Industrial models conform with U.S. EPA Tier 4 Interim or Final, EU Stage IIIA or IIIB emission standards, unless otherwise noted with an *. Models with an * are available for other global regulated and non-regulated areas.

Basic Specifications

Model	Displacement L	Displacement in³	Config.	Bore x Stroke mm	Bore x Stroke in	Fuel System	Power Range: Marine kW	Power Range: Marine hp	Power Range: Diesel Industrial	Power Range: Elec. Power Gen.	Power Range: Oil/ Gas	Power Range: Rail Power
3508*	34.5	**2105**	V8	170x190	**6.7x7.5**	MEUI	526-857	**705-1150**	See our listings for Diesel Industrial for complete information.	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.
3508B*	34.5	**2105**	V8	170x190	**6.7x7.5**	MEUI	578-1118	**775-1500**				
3508C	34.5	**2107**	V8	170x190	**6.7x7.5**	MEUI	578-820	**775-1100**				
3512*	51.8	**3158**	V12	170x190	**6.7x7.5**	MEUI	900-1305	**1207-1750**				
3512B*	51.8	**3158**	V12	170x190	**6.7x7.5**	MEUI	820-1678	**1100-2250**				
3512B HD	58.6	**3576**	V12	170x215	**6.7x8.5**	MEUI	1118-1500	**1500-2012**				
3512C	51.8	**3161**	V12	170x190	**6.69x7.48**	MEUI	955-1765	**1280-2366**				
3512C HD	58.6	**3574**	V12	170x215	**6.69x8.46**	MEUI	1118-1902	**1500-2551**				
3516*	69	**4210**	V16	170x190	**6.7x7.5**	MEUI	1195-1640	**1603-2200**				
3516B*	69	**4210**	V16	170x190	**6.7x7.5**	MEUI	1230-2237	**1650-3000**				
3516B HD	78	**4766**	V16	170x215	**6.7x8.5**	MEUI	1398-2000	**1875-2682**				
3516C	69	**4211**	V16	170x190	**6.69x7.48**	MEUI	1230-2525	**1650-3385**				
3516C HD	78	**4765**	V16	170x215	**6.69x8.46**	MEUI	1686-2525	**2260-3386**				
C175-16	84.67	**5167**	V16	175x220	**6.88x8.66**	Common Rail	2001-2168	**2683-2907**				
C280-6	111	**6773**	I6	280x300	**11.0x11.8**	MEUI	1730-2030	**2320-2722**				
C280-8	148	**9031**	I8	280x300	**11.0x11.8**	MEUI	2300-2710	**3084-3634**				
C280-12	222	**13,546**	V12	280x300	**11.0x11.8**	MEUI	3460-4060	**4640-5444**				
C280-16	296	**18,062**	V16	280x300	**11.0x11.8**	MEUI	4600-5650	**6169-7577**				

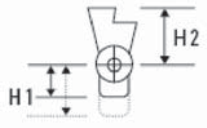
MEUI — Mechanical Unit Injection

NOTE: Industrial models conform with U.S. EPA Tier 4 Interim or Final, EU Stage IIIA or IIIB emission standards, unless otherwise noted with an *. Models with an * are available for other global regulated and non-regulated areas.

Basic Specifications — MaK Marine Propulsion Engines

	Output Range		Speed	Mean Eff. Pressure	Mean Piston Speed	Bore	Stroke	Swept Volume	Dimensions						Weight
									Length	Width	Height 1 Dry/Wet Sump	Height 2	RCLTD*	RCLLD**	
MaK Model	kW	mhp	rpm	bar	m/s	mm	mm	L	mm	mm	mm	mm	mm	mm	t
6 M 20 C	1020	1390	900	24.1	9.0	200	300	57	4049	1558	630/941	1714	1910	2085	10.9
	1080	1469	900	25.5	9.0	200	300	57	4049	1558	630/941	1714	1910	2085	10.9
	1140	1550	1000	24.2	10.0	200	300	57	4049	1558	630/941	1714	1910	2085	10.9
	1200	1632	1000	25.5	10.0	200	300	57	4049	1558	630/941	1714	1910	2085	10.9
8 M 20 C	1360	1850	900	24.1	9.0	200	300	75	4846	1693	630/941	1856	1910	2085	13.8
	1440	1958	900	25.5	9.0	200	300	75	4846	1693	630/941	1856	1910	2085	13.8
	1520	2070	1000	24.2	10.0	200	300	75	4846	1693	630/941	1856	1910	2085	13.8
	1600	2176	1000	25.5	10.0	200	300	75	4846	1693	630/941	1856	1910	2085	13.8
9 M 20 C	1530	2082	900	24.1	9.0	200	300	85	5176	1693	630/941	1856	1910	2085	15.0
	1620	2203	900	25.5	9.0	200	300	85	5176	1693	630/941	1856	1910	2085	15.0
	1710	2326	1000	24.2	10.0	200	300	85	5176	1693	630/941	1856	1910	2085	15.0
	1800	2448	1000	25.5	10.0	200	300	85	5176	1693	630/941	1856	1910	2085	15.0
6 M 25 C	1740	2370	720	23.7	9.6	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
	1800	2450	750	23.5	10.0	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
	2000	2720	720	27.2	9.6	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
	2000	2720	750	26.1	10.0	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
	2100	2856	720	28.5	9.6	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
	2100	2856	750	27.4	10.0	255	400	123	5345	2261	861/1191	2526	2510	2735	23.5
8 M 25 C	2320	3160	720	28.5	9.6	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
	2400	3260	750	27.4	10.0	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
	2666	3630	720	23.7	9.6	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
	2666	3630	750	23.5	10.0	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
	2800	3808	720	27.2	9.6	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
	2800	3808	750	26.1	10.0	255	400	163	6289	2316	861/1191	2578	2510	2735	30.0
9 M 25 C	2610	3550	720	23.7	9.6	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
	2700	3670	750	23.5	10.0	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
	3000	4080	720	27.2	9.6	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
	3000	4080	750	26.1	10.0	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
	3150	4284	720	28.5	9.6	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
	3150	4284	750	27.4	10.0	255	400	184	6719	2316	861/1191	2578	2510	2735	32.0
6 M 32 C	2880	3920	600	24.9	9.6	320	480	232	5934	2418	1052/1387	2784	3040	3405	39.5
	3000	4080	600	25.9	9.6	320	480	232	5934	2418	1052/1387	2784	3040	3405	39.5
8 M 32 C	3840	5220	600	24.9	9.6	320	480	309	7298	2229	1052/1387	2969	3040	3405	49.0
	4000	5440	600	25.9	9.6	320	480	309	7298	2229	1052/1387	2969	3040	3405	49.0
9 M 32 C	4320	5880	600	24.9	9.6	320	480	347	7828	2229	1052/1387	2969	3040	3405	52.0
	4500	6120	600	25.9	9.6	320	480	347	7828	2229	1052/1387	2969	3040	3405	52.0
6 M 32 E	3300	4488	720	24.8	11.0	320	460	222	5934	2418	1052/1387	2784	3040	3405	39.5
	3300	4488	750	23.8	11.5	320	460	222	5934	2418	1052/1387	2784	3040	3405	39.5
8 M 32 E	4400	5984	720	24.8	11.0	320	460	296	7298	2229	1052/1387	2969	3040	3405	49.0
	4400	5984	750	23.8	11.5	320	460	296	7298	2229	1052/1387	2969	3040	3405	49.0
9 M 32 E	4950	6732	720	24.8	11.0	320	460	333	7828	2229	1052/1387	2969	3040	3405	52.0
	4950	6732	750	23.8	11.5	320	460	333	7828	2229	1052/1387	2969	3040	3405	52.0

General definition of engine ratings: ISO 3046/1 – (IACS)
Meets No_x limits acc. to IMO code MARPOL 73/78, Annex VI
Reference Conditions: Air Temperature: 25° C Air Pressure: 1 bar
Cooling water temperature at charge air cooler inlet: mean 30° C, max. 38° C



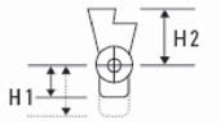
***R**emoval of **C**ylinder **L**iner in **T**ransverse **D**irection.
****R**emoval of **C**ylinder **L**iner in **L**ongitudinal **D**irection.

Dimensions of engine length for turbocharger at driving end, dimensions for turbocharger at free end on request.

Basic Specifications — MaK Marine Propulsion Engines

	Output Range		Speed	Mean Eff. Pressure	Mean Piston Speed	Bore	Stroke	Swept Volume	Dimensions						Weight
									Length	Width	Height 1 Dry/Wet Sump	Height 2	RCLTD*	RCLLD**	
MaK Model	kW	mhp	rpm	bar	m/s	mm	mm	L	mm	mm	mm	mm	mm	mm	t
12 M 32 C	5760	7830	720	23.7	10.1	320	420	305	6956	2985	1205/—	2319	2836	—	65.0
	6000	8160	720	22.5	11.0	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
	6000	8160	750	23.7	10.5	320	420	305	6956	2985	1205/—	2319	2836	—	65.0
	6000	8160	750	21.6	11.5	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
	6360	8650	720	23.9	11.0	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
	6360	8650	750	22.9	11.5	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
	6720	9139	720	25.2	11.0	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
	6720	9139	750	24.2	11.5	320	460	444	6956	2985	1205/—	2319	2836	—	65.0
16 M 32 C	7680	10,445	720	23.7	10.1	320	420	541	8328	2985	1205/—	2319	2836	—	82.0
	8000	10,880	720	22.5	11.0	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
	8000	10,880	750	23.7	10.5	320	420	541	8328	2985	1205/—	2319	2836	—	82.0
	8000	10,880	750	21.6	11.5	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
	8480	11,533	720	23.9	11.0	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
	8480	11,533	750	22.9	11.5	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
	8960	12,186	720	25.2	11.0	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
	8960	12,186	750	24.2	11.5	320	460	592	8328	2985	1205/—	2319	2836	—	82.0
6 M 34 DF	3000	4080	720	19.9	11.0	340	460	250	5934	2418	1052/1387	2784	3040	3405	39.5
	3000	4080	750	19.1	11.5	340	460	250	5934	2418	1052/1387	2784	3040	3405	39.5
8 M 34 DF	4000	5440	720	19.9	11.0	340	460	334	7298	2229	1052/1387	2969	3040	3405	49.0
	4000	5440	750	19.1	11.5	340	460	334	7298	2229	1052/1387	2969	3040	3405	49.0
9 M 34 DF	4500	6120	720	19.9	11.0	340	460	376	7828	2229	1052/1387	2969	3040	3405	52.0
	4500	6120	750	19.1	11.5	340	460	376	7828	2229	1052/1387	2969	3040	3405	52.0
6 M 43 C	5400	7344	500	24.4	10.2	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
	5400	7344	514	23.7	10.5	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
	6000	8160	500	27.1	10.2	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
	6000	8160	514	26.4	10.5	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
	6300	8568	500	28.4	10.2	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
	6300	8568	514	27.7	10.5	430	610	531	8271	2878	1396/—	3734	4165	4610	94.0
7 M 43 C	6300	8568	500	24.4	10.2	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
	6300	8568	514	23.7	10.5	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
	7000	9520	500	27.1	10.2	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
	7000	9520	514	26.4	10.5	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
	7350	9996	500	28.4	10.2	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
	7350	9996	514	27.7	10.5	430	610	620	9068	2878	1396/—	4105	4165	4610	107.0
8 M 43 C	7200	9792	500	24.4	10.2	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0
	7200	9792	514	23.7	10.5	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0
	8000	10,880	500	27.1	10.2	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0
	8000	10,880	514	26.4	10.5	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0
	8400	11,424	500	28.4	10.2	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0
	8400	11,424	514	27.7	10.5	430	610	709	9798	2878	1396/—	4105	4165	4610	114.0

General definition of engine ratings: ISO 3046/1 – (IACS)
Meets NO_x limits acc. to IMO code MARPOL 73/78, Annex VI
Reference Conditions: Air Temperature: 25° C Air Pressure: 1 bar
Cooling water temperature at charge air cooler inlet: mean 30° C, max. 38° C



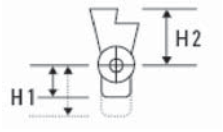
***R**emoval of **C**ylinder **L**iner in **T**ransverse **D**irection.
****R**emoval of **C**ylinder **L**iner in **L**ongitudinal **D**irection.

Dimensions of engine length for turbocharger at driving end, dimensions for turbocharger at free end on request.

Basic Specifications — MaK Marine Propulsion Engines

	Output Range		Speed	Mean Eff. Pressure	Mean Piston Speed	Bore	Stroke	Swept Volume	Dimensions						Weight
									Length	Width	Height 1 Dry/Wet Sump	Height 2	RCLTD*	RCLLD**	
MaK Model	kW	mhp	rpm	bar	m/s	mm	mm	L	mm	mm	mm	mm	mm	mm	t
9 M 43 C	8100	11,016	500	24.4	10.2	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
	8100	11,016	514	23.7	10.5	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
	9000	12,240	500	27.1	10.2	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
	9000	12,240	514	26.4	10.5	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
	9450	12,852	500	28.4	10.2	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
	9450	12,852	514	27.7	10.5	430	610	797	10 528	2878	1396/—	4105	4165	4610	127.0
12 M 43 C	10 800	14,688	500	24.4	10.2	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
	10 800	14,688	514	23.7	10.5	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
	12 000	16,320	500	27.1	10.2	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
	12 000	16,320	514	26.4	10.5	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
	12 600	17,136	500	28.4	10.2	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
	12 600	17,136	514	27.7	10.5	430	610	1063	9842	3890	1625/—	3497	3700	—	160.0
16 M 43 C	14 400	19,584	500	24.4	10.2	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
	14 400	19,584	514	23.7	10.5	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
	16 000	21,760	500	27.1	10.2	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
	16 000	21,760	514	26.4	10.5	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
	16 800	22,848	500	28.4	10.2	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
	16 800	22,848	514	27.7	10.5	430	610	1417	11 943	4027	1625/—	3473	3700	—	220.0
6 M 46 DF	5400	7344	500	21.3	10.2	460	610	608	8271	2878	1396/—	3734	4165	4610	94.0
	5400	7344	514	20.7	10.5	460	610	608	8271	2878	1396/—	3734	4165	4610	94.0
7 M 46 DF	6300	8568	500	21.3	10.2	460	610	709	8985	2878	1396/—	4105	4165	4610	107.0
	6300	8568	514	20.7	10.5	460	610	709	8985	2878	1396/—	4105	4165	4610	107.0
8 M 46 DF	7200	9792	500	21.3	10.2	460	610	811	9800	2878	1396/—	4105	4165	4610	114.0
	7200	9792	514	20.7	10.5	460	610	811	9800	2878	1396/—	4105	4165	4610	114.0
9 M 46 DF	8100	11,016	500	21.3	10.2	460	610	912	10 525	2878	1396/—	4105	4165	4610	127.0
	8100	11,016	514	20.7	10.5	460	610	912	10 525	2878	1396/—	4105	4165	4610	127.0
12 M 46 DF	10 800	14,688	500	21.3	10.2	460	610	1216	9847	3890	1625/—	3497	3700	—	160.0
	10 800	14,688	514	20.7	10.5	460	610	1216	9847	3890	1625/—	3497	3700	—	160.0
16 M 46 DF	14 400	19,584	500	21.3	10.2	460	610	1621	11 943	4027	1625/—	3473	3700	—	220.0
	14 400	19,584	514	20.7	10.5	460	610	1621	11 943	4027	1625/—	3473	3700	—	220.0

General definition of engine ratings: ISO 3046/1 – (IACS)
Meets No_x limits acc. to IMO code MARPOL 73/78, Annex VI
Reference Conditions: Air Temperature: 25° C Air Pressure: 1 bar
Cooling water temperature at charge air cooler inlet: mean 30° C, max. 38° C



***R**emoval of **C**ylinder **L**iner in **T**ransverse **D**irection.
****R**emoval of **C**ylinder **L**iner in **L**ongitudinal **D**irection.

Dimensions of engine length for turbocharger at driving end, dimensions for turbocharger at free end on request.

Olympian Generator Sets

Outside North America Diesel Ratings

	60 Hz			50 Hz		
		Standby	Prime		Standby	Prime
Model	rpm	ekW		rpm	kVA	
3-Phase Output*						
GEK 7.5	1800	7.2	6.4	1500	7.5	6.5
GEP9.5	1800	8.8	8	1500	9.5	8.5
GEK12.5	1800	7.2	6.4	1500	7.5	6.5
GEP13.5	1800	13.2	12	1500	13.5	12.5
GEP18	1800	17.6	16	1500	18	16.5
GEP22	1800	20	18	1500	22	20
GEP33	1800	30	27	1500	33	30
GEP44	1800	40	36	1500	44	40
GEP50	1800	45	40	1500	50	45
GEP55	1800	50	45	1500	55	50
GEP65	1800	60	55	1500	65	60
GEP88	1800	80	72	1500	88	80
GEP110	1800	100	90.4	1500	110	100
GEP150	1800	132	120	1500	150	135
GEP165	—	—	—	1500	165	150
GEP200	1800	174	157	1500	200	180
GEH220	1800	200	180	1500	220	200
GEH250	1800	212	192	1500	250	230
GEH275	—	—	—	1500	275	250
GEP750	1800	600	540	—	—	—

*Ratings at 0.8 pf and 25° C **(77° F)**.

Rating Definitions:

Standby — 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).

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 models can supply 10% overload power for 1 hour in 12 hours.

Olympian Generator Sets

Outside North America Diesel Ratings

	60 Hz			50 Hz		
		Standby	Prime		Standby	Prime
Model	rpm	ekW		rpm	kVA	
Single Phase Output*						
GEK6SP	1800	7	6	1500	6	5.5
GEP7.5SP	1800	8.8	8.8	1500	7.5	6.8
GEK10SP	1800	12	10.9	1500	10	9
GEP11SP	1800	13	12	1500	11	10
GEP14SP	1800	17	15.5	1500	14	13
GEP16SP	1800	20	18	1500	16.5	15
GEP26SP	—	—	—	1500	26	24
GEP35SP	1800	40	36	1500	35	32
GEP40SP	1800	45	40	1500	40	36
GEP50SP	1800	55	50	1500	50	45
GEP80SP	1800	90	82	1500	80	72

*Ratings at 1.0 pf and 25° C **(77° F)**.

Rating Definitions:

Standby — 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 — 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 models can supply 10% overload power for 1 hour in 12 hours.

Olympian Generator Sets

North America Gas Ratings (Standard)

60 Hz			
		Standby	
		ekW	
Model	rpm	LP	Natural
Single Phase & 3-Phase Output			
G25LTA	1800	25	25

North America Gas Ratings (Customizable)

60 Hz			
		Standby	
		ekW	
Model	rpm	LP	Natural
Single Phase & 3-Phase Output			
G35LG	1800	35	35
G40LG	1800	40	40
G45LG	1800	42*, 43**	45
G50LG	1800	50	50
G60LG	1800	60	60
G70LG	1800	64*, 67**	67*, 70**
G80LG	2300	80	80
G100LG	2300	89*, 94**	100
G130LG	3000	117*, 122**	130
G150LG	3600	136*, 142**	144*, 150**
G175LG	1800	—	175
G200LG	1800	—	200*, 206**
G230LG	2300	—	230
G250LG	2300	—	250
G275LG	2300	—	275
G300LG	2300	—	300

*Single Phase
**3-phase

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/m^3 **(988 Btu/ft^3)**.

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.

Rental Generator Sets

Diesel Power Module Rating

		50 Hz		
		Standby	**Prime**	**Continuous**
Model	**rpm**		**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		
		Standby	**Prime**	**Continuous**
Model	**rpm**		**ekW**	
XQ20	1800	20	18	—
XQ30	1800	30	27	—
XQ60	1800	60	54	—
XQ100	1800	100	90	—
XQ200	1800	200	182	—
XQ350	1800	350	320	—
XQ375	1800	375	345	—
XQ500	1800	500	455	—
XQ800	1800	800	725	—

Gas Power Module Rating

		Standby	**Prime**	**Continuous**
Model	**rpm**		**ekW**	
XQ135G	1800	—	—	135
XQ400G	1800	—	—	400
XQ1250G	1800	—	—	1250
XQ1475G	1500	—	—	1475

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.

Cat Generator Sets

Gas Ratings

60 Hz		
	Standby	Continuous
Model	ekW	
1800 rpm		
G3306	—	76
G3306	—	104
G3406	—	137
G3306	—	143
G3406	—	155
G3412	—	194
G3406	—	217
G3406	235	—
G3412	—	253
CG132-8	—	400
G3412	—	403
G3412	450	—
G3412C	—	453
CG132-12	—	600
CG132-16	—	800
G3516	1040	—
G3516C	—	1663
G38520C	—	2077

60 Hz		
	Standby	Continuous
Model	ekW	
1500 rpm		
CG170-12	—	1200
CG170-16	—	1550
CG170-20	—	2000
G3520E	—	2026
1200 rpm		
G3508	—	373
G3508	—	408
G3512	—	564
G3512	—	581
G3512	—	615
G3516	—	779
G3516	—	824
G3516B	—	1312
G3520C	—	1626
900 rpm		
G3608	—	1549
G3612	—	2347
CG260-12	—	2530
CG260-12	—	3000
G3616	—	3121
CG260-16	—	3370
CG260-16	—	4000
720 rpm		
G16CM34	—	6520
G20CM34	—	9700

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/m^3 **(920 Btu/ft^3)**.

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/m^3 **(920 Btu/ft^3)**.

Cat Generator Sets

Gas Ratings

50 Hz	
	Continuous
Model	ekW
1500 rpm	
G3306	66
G3306	86
G3306	107
G3406	115
G3406	126
G3406	166
G3412	174
G3412	282
G3412	374
CG132-8	400
G3508	457
G3508	485
CG132-12	600
G3512	777
CG132-16	800
G3516	983
G3512E	1017
G3516	1041
G3516	1088
G3516	1105
CG170-12	1200
G3512E	1211
CG170-16	1560
G3516E	1603
G3516C	1605
G3608	1722
G3520C	1982
CG170-20	2000
G3520C	2010
G3516H	2027

50 Hz	
	Continuous
Model	ekW
1000 rpm	
G3612	2582
CG260-12	2830
CG260-12	3333
G3616	3440
CG260-16	3770
CG260-16	4300
750 rpm	
G16CM34	6520
G20CM34	9700

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/m^3 **(920 Btu/ft^3)**.

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/m^3 **(920 Btu/ft^3)**.

MaK Marine Generator Sets

Medium Speed Ratings

	Output Range			Frequency	Speed	Bore	Stroke	Dimensions*			Weight*
								Single Length	Single Width	Single Height	
MaK Model	kW	kWe	kVA	Hz	rpm	mm	mm	mm	mm	mm	t
6 M 20 C	1020	979	1224	60	900	200	300	6073	1680	2833	18.8
	1080	1036	1296	60	900	200	300	6073	1680	2833	18.8
	1140	1094	1368	50	1000	200	300	6073	1680	2833	18.8
	1200	1151	1440	50	1000	200	300	6073	1680	2833	18.8
8 M 20 C	1360	1306	1632	60	900	200	300	6798	1816	3010	23.1
	1440	1381	1728	60	900	200	300	6798	1816	3010	23.1
	1520	1459	1824	50	1000	200	300	6798	1816	3010	23.1
	1600	1534	1920	50	1000	200	300	6798	1816	3010	23.1
9 M 20 C	1530	1468	1836	60	900	200	300	7125	1816	3010	30.0
	1620	1553	1944	60	900	200	300	7125	1816	3010	30.0
	1710	1641	2052	50	1000	200	300	7125	1816	3010	30.0
	1800	1726	2160	50	1000	200	300	7125	1816	3010	30.0
6 M 25 C	1740	1669	2088	60	720	255	400	8070	2479	3911	43.0
	1800	1726	2160	50	750	255	400	8070	2479	3911	43.0
	2000	1918	2400	60	720	255	400	8070	2479	3911	43.0
	2000	1918	2400	50	750	255	400	8070	2479	3911	43.0
	2100	2014	2520	60	720	255	400	8070	2479	3911	43.0
	2100	2014	2520	50	750	255	400	8070	2479	3911	43.0
8 M 25 C	2320	2225	2784	60	720	255	400	9130	2534	3963	53.0
	2400	2302	2880	50	750	255	400	9130	2534	3963	53.0
	2666	2557	3199	60	720	255	400	9130	2534	3963	53.0
	2666	2557	3199	50	750	255	400	9130	2534	3963	53.0
	2800	2685	3360	60	720	255	400	9130	2534	3963	53.0
	2800	2685	3360	50	750	255	400	9130	2534	3963	53.0
9 M 25 C	2610	2503	3132	60	720	255	400	9516	2534	3963	56.0
	2700	2589	3240	50	750	255	400	9516	2534	3963	56.0
	3000	2877	3600	60	720	255	400	9516	2534	3963	56.0
	3000	2877	3600	50	750	255	400	9516	2534	3963	56.0
	3150	3021	3780	60	720	255	400	9516	2534	3963	56.0
	3150	3021	3780	50	750	255	400	9516	2534	3963	56.0
6 M 32 C	2880	2762	3456	50/60	600	320	480	9302	2639	4801	73.0
	3000	2877	3600	50/60	600	320	480	9302	2639	4801	73.0
8 M 32 C	3840	3683	4608	50/60	600	320	480	10 886	2600	4869	92.0
	4000	3836	4800	50/60	600	320	480	10 886	2600	4869	92.0
9 M 32 C	4320	4143	5184	50/60	600	320	480	11 419	2600	4869	98.0
	4500	4316	5400	50/60	600	320	480	11 419	2600	4869	98.0
6 M 32 E	3300	3165	3960	60	720	320	460	9302	2639	4801	73.0
	3300	3165	3960	50	750	320	460	9302	2639	4801	73.0
8 M 32 E	4400	4220	5280	60	720	320	460	10 886	2600	4869	92.0
	4400	4220	5280	50	750	320	460	10 886	2600	4869	92.0
9 M 32 E	4950	4747	5940	60	720	320	460	11 419	2600	4869	98.0
	4950	4747	5940	50	750	320	460	11 419	2600	4869	98.0

*Weights and measures depend on generator make/type.

Generator efficiency: 0.96, cos φ 0.8

Specific lubricating oil consumption 0.6 g/kWh, ± 0.3 g/kWh

LCV = 42 700 kJ/kg, without engine-driven pumps, tolerance 5%

MaK Marine Generator Sets

Medium Speed Ratings

	Output Range			Frequency	Speed	Bore	Stroke	Dimensions*			Weight*
								Single Length	Single Width	Single Height	
MaK Model	kW	kWe	kVA	Hz	rpm	mm	mm	mm	mm	mm	t
12 M 32 C	5760	5524	6912	60	720	320	420	10 703	3526	4639	120.0
	6000	5754	7200	50	750	320	420	10 703	3526	4639	120.0
	6000	5754	7200	60	720	320	460	10 703	3526	4639	120.0
	6000	5754	7200	50	750	320	460	10 703	3526	4639	120.0
	6360	6099	7632	60	720	320	460	10 703	3526	4639	120.0
	6360	6099	7632	50	750	320	460	10 703	3526	4639	120.0
	6720	6444	8064	60	720	320	460	10 703	3526	4639	120.0
	6720	6444	8064	50	750	320	460	10 703	3526	4639	120.0
16 M 32 C	7680	7365	9216	60	720	320	420	12 149	3526	4639	140.0
	8000	7672	9600	50	750	320	420	12 149	3526	4639	140.0
	8000	7672	9600	60	720	320	460	12 149	3526	4639	140.0
	8000	7672	9600	50	750	320	460	12 149	3526	4639	140.0
	8480	8132	10 176	60	720	320	460	12 149	3526	4639	140.0
	8480	8132	10 176	50	750	320	460	12 149	3526	4639	140.0
	8960	8593	10 752	60	720	320	460	12 149	3526	4639	140.0
	8960	8593	10 752	50	750	320	460	12 149	3526	4639	140.0
6 M 34 DF	3000	2877	3600	60	720	340	460	9302	2639	4801	63.0
	3000	2877	3600	50	750	340	460	9302	2639	4801	63.0
8 M 34 DF	4000	3836	4800	60	720	340	460	10 886	2600	4869	82.0
	4000	3836	4800	50	750	340	460	10 886	2600	4869	82.0
9 M 34 DF	4500	4316	5400	60	720	340	460	11 419	2600	4869	88.0
	4500	4316	5400	50	750	340	460	11 419	2600	4869	88.0
6 M 43 C	5400	5179	6480	50/60	500/514	430	610	12 202	3400	6278	178.0
	6000	5754	7200	50/60	500/514	430	610	12 202	3400	6278	178.0
	6300	6042	7560	50/60	500/514	430	610	12 202	3400	6278	178.0
7 M 43 C	6300	6042	7560	50/60	500/514	430	610	12 999	3400	6649	195.0
	7000	6713	8400	50/60	500/514	430	610	12 999	3400	6649	195.0
	7350	7049	8820	50/60	500/514	430	610	12 999	3400	6649	195.0
8 M 43 C	7200	6905	8640	50/60	500/514	430	610	13 729	3400	6649	210.0
	8000	7672	9600	50/60	500/514	430	610	13 729	3400	6649	210.0
	8400	8056	10 080	50/60	500/514	430	610	13 729	3400	6649	210.0
9 M 43 C	8100	7768	9720	50/60	500/514	430	610	14 459	3400	6649	240.0
	9000	8631	10 800	50/60	500/514	430	610	14 459	3400	6649	240.0
	9450	9063	11 340	50/60	500/514	430	610	14 459	3400	6649	240.0
12 M 43 C	10 800	10 357	12 960	50/60	500/514	430	610	14 740	3890	6517	275.0
	12 000	11 508	14 400	50/60	500/514	430	610	14 740	3890	6517	275.0
	12 600	12 083	15 120	50/60	500/514	430	610	14 740	3890	6517	275.0
16 M 43 C	14 400	13 810	17 280	50/60	500/514	430	610	16 870	4027	6493	345.0
	16 000	15 344	19 200	50/60	500/514	430	610	16 870	4027	6493	345.0
	16 800	16 111	20 160	50/60	500/514	430	610	16 870	4027	6493	345.0
6 M 46 DF	5400	5179	6480	50/60	500/514	460	610	12 202	3400	6278	178.0
7 M 46 DF	6300	6042	7560	50/60	500/514	460	610	12 999	3400	6649	195.0
8 M 46 DF	7200	6905	8640	50/60	500/514	460	610	13 729	3400	6649	210.0
9 M 46 DF	8100	7768	9720	50/60	500/514	460	610	14 459	3400	6649	240.0
12 M 46 DF	10 800	10 357	12 960	50/60	500/514	460	610	14 740	3890	6517	275.0
16 M 46 DF	14 400	13 810	17 280	50/60	500/514	460	610	16 870	4027	6493	345.0

*Weights and measures depend on generator make/type.

Generator efficiency: 0.96, cos φ 0.8

Specific lubricating oil consumption 0.6 g/kWh, ± 0.3 g/kWh

LCV = 42 700 kJ/kg, without engine-driven pumps, tolerance 5%

Cat Generator Sets

Diesel Ratings

60 Hz			
		Standby	Prime
Model	rpm	ekW	
3-Phase Output*			
D40	1800	40	36
D50	1800	50	45
D60	1800	60	55
D80	1800	80	72
D100	1800	100	90
D125	1800	125	114
D150	1800	150	136
D175	1800	175	158
Single Phase Output**			
D40S	1800	40	36
D50S	1800	50	45
D60S	1800	60	55
D80S	1800	80	72
D100S	1800	100	90

*All ratings at 0.8 pf.
**All ratings at 1.0 pf.

60 Hz			
	Standby	Prime	Continuous
Model	ekW		
	1800 rpm		
C9	200	180	—
C9	250	225	—
C9	300	275	—
3406C	300	275	—
3406C	350	320	—
C15	350	320	—
C13	350	320	—
C13	400	350	—
3406C	400	365	—
C15	400	365	—
C15	450	410	—
C15	500	455	—
C18	550	500	—
C18	600	545	—
3412C	650	591	—
3412C	700	635	—
C27	750	680	—
3412C	750	680	—
C27	800	725	—
3412C	800	725	—
C32	1000	910	830
3512	1100	1000	890
3512	1250	1135	1010
3512B	1400	1275	1230
3512B	1500	1360	1230
3512C	1500	1360	1230
3516	1750	1600	1450
3516B	2000	1825	1640
3516C	2000	1825	1650
3516B	2250	—	—
3516C-HD	2500	2250	2050
C175-16	3000	2725	2500
C175-16	3100	2825	2600
C175-20	4000	3600	3250

Rating Definitions:

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.

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.

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.

Applicable Codes and Standards: AS1359, CSAC22.2 No100-04, UL142, UL489, UL601, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-22, NEMA MG 1-33, 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			
	Standby	Prime	Continuous
Model	ekW		
900 rpm			
6CM20C	—	979	832
8CM20C	—	1306	1110
9CM20C	—	1469	1248
720 rpm			
6CM25C	—	1920	1632
8CM25C	—	2559	2175
9CM25C	—	2880	2448
12CM32C	—	5820	4947
16CM32C	—	7760	6596
600 rpm			
6CM32C	—	2880	2448
8CM32C	—	3840	3264
9CM32C	—	4320	3672
514 rpm			
6CM43C	—	5820	4947
7CM43C	—	6790	5772
8CM43C	—	7760	6596
9CM43C	—	8730	7421
12CM43C	—	11 640	9894
16CM43C	—	15 520	13 192

NOTE: All CM engines rated in accordance with IMO2.

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Cat Generator Sets

Diesel Ratings

50 Hz			
	Standby	**Prime**	**Continuous**
Model	**kVA**		
1500 rpm			
3406C	300	275	—
3406C	350	320	—
C13	400	350	—
3406C	400	365	—
C13	450	400	—
C15 ACERT	450	410	—
C15 ACERT	500	455	—
C15 ACERT	550	500	—
C18 ACERT	605	550	—
C18 ACERT	660	600	—
C18 ACERT	700	635	—
3412C	750	680	—
3412C	800	725	—
3412C	900	810	—
C32 ACERT	1100	1000	910
C32 ACERT	1250	1150	1000
3512	1400	1275	1206
3512B	1500	1360	—
3512B	1600	1500	1320
3512B-HD	1750	1600	—
3512B-HD	1875	1700	1500
3516	2000	1825	1600
3516B	2250	2000	1750
3516B-HD	2500	2275	2000
3516C	2750	2500	—
C175-16	3000	2725	2500
C175-16	3100*	2825*	2600*
C175-20	4000	3600	3250

*Rating does not include package mounted radiator.

Rating Definitions:

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.

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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			
	Standby	Prime	Continuous
Model	kVA		
1000 rpm			
6CM20C	—	1360	1156
8CM20C	—	1810	1539
9CM20C	—	2050	1743
750 rpm			
6CM25C	—	2400	2040
8CM25C	—	3180	2703
9CM25C	—	3600	3060
12CM32C	—	7270	6180
16CM32C	—	9700	8245
600 rpm			
6CM32C	—	3630	3086
8CM32C	—	4850	4123
9CM32C	—	5450	4633
500 rpm			
6CM43C	—	7270	6180
7CM43C	—	8480	7208
8CM43C	—	9700	8245
9CM43C	—	10 910	9274
12CM43C	—	14 550	12 368
16CM43C	—	19 400	16 490

NOTE: All CM engines rated in accordance with IMO2.

Rating Definitions:

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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.

Applicable Codes and Standards: AS1359, CSAC22.2 No100-04, UL142, UL489, UL601, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-22, NEMA MG 1-33, 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	bhp Rating Range
C280-16	**DITA**	4600-5650	**6169-7577**
C280-12	**DITA**	3460-4060	**4640-5444**
C280-8	**DITA**	2300-2710	**3084-3634**
C280-6	**DITA**	1730-2030	**2320-2722**
C175-16		2001-2168	**2683-2907**
3516C HD		1686-2525	**2260-3386**
3516C	**DITA**	1230-2525	**1650-3386**
3516B HP	**DITA**	2000-2237	**2682-3000**
3516B HD	**DITA**	1398-2000	**1875-2682**
3516B		1230-1640	**1650-2200**
3516B	**DITA**	1230-2237	**1650-3000**
3516	**DITA**	1195-1640	**1603-2200**
3512C HD		1118-1902	**1500-2551**
3512C	**DITA**	1000-1765	**1280-2366**
3512B HP	**DITA**	1342-1678	**1800-2250**
3512B HD	**DITA**	1118-1500	**1500-2012**
3512B	**DITA**	820-1678	**1100-2250**
3512	**DITA**	900-1305	**1207-1750**
3508C	**DITA**	578-820	**775-1100**
3508B HP	**DITA**	895-1118	**1200-1500**
3508B		578-820	**775-1100**
3508B	**DITA**	578-1118	**775-1500**
3508	**DITA**	526-857	**705-1150**
C32 ACERT		492-1417	**660-1900**
C32 ACERT	**DITA**	1081-1417	**1450-1900**
C18 ACERT	**DITA**	339-847	**454-1136**
C12	**DITA**	254-448	**340-600**
C12 ACERT	**DITA**	492-526	**660-705**
C9 ACERT	**DITA**	375-423	**503-567**
C7.1	**DITA**	100-500	**118-200**
C7	**DITA**	187-276	**250-370**
C7 ACERT	**DITA**	339	**455**
3056	**DITA**	93-153	**125-205**

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	1650/1820 @ 900
3516B	**DITA**	1460/1600 @ 1500	1825 @ 1800
3516B	**DITA**	1180 @ 1000	1285 @ 1200
3512C	**DITA**	N/A	1550/1770 @ 1800
3512B	**DITA**	965/1200 @ 1500	1070/1360 @ 1800
3512B	**DITA**	880-1200 @ 1000	1030-1360 @ 1200
3508B	**DITA**	630/800 @ 1500	715/910 @ 1800
3508B	**DITA**	590-800 @ 1000	600-910 @ 1200
C32 ACERT	**DITTA**	550/830 @ 1500	730/940 @ 1800
C18 ACERT	**DITA**	275-450 @ 1500	340-550 @ 1800
C9	**DIT**	142-200 @ 1500	163-250 @ 1800
C6.6 ACERT	**—**	93-143 @ 1500	113-170 @ 1800
C4.4	**DITA**	36-86 @ 1500	42-99 @ 1800
C2.2	**DIT**	16/22.5 @ 1500	19.5/27 @ 1800
C1.5	**DINA**	10-11 @ 1500	12/13 @ 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

Cat Marine Engines

Auxiliary Ratings

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**	—	—	1921-2368/ **2576-3176**		
3512C	**DITA**	—	—	1432-1821/ **1920-2442**		
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**	
C9	**DITTA**	162-215/**217-288**	—	189-269/**253-361**	—	
C18 ACERT	**DITTA**	—	—	547-601/**733-806**	—	
C18 ACERT	**DITA**	301-492/**404-660**	—	372-465/**499-624**	—	
C32 ACERT	**DITA**	590-874/**791-1172**	—	683-994/**916-1333**	—	

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Cat Industrial Diesel Applications

U.S. EPA Tier 4 Interim or Tier 4 Final, EU Stage IIIA, Stage IIIB or Stage IV emission standards

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C0.5	**NA**	—	—	—	—	—	—	4.1	**5.5**	2000	—	—	—	—	—	—
		—	—	—	—	—	—	6.0	**8.0**	2700	—	—	—	—	—	—
		—	—	—	—	—	—	6.4	**8.6**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	8.2	**11.0**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	8.8	**11.8**	3000*	—	—	—	—	—	—
		—	—	—	—	—	—	10.2	**13.7**	3600*	—	—	—	—	—	—
C0.7	**NA**	—	—	—	—	—	—	8.8	**11.8**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	12.2	**16.4**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	13.2	**17.7**	3000*	—	—	—	—	—	—
		—	—	—	—	—	—	15.3	**20.5**	3600*	—	—	—	—	—	—
C1.1	**NA**	—	—	—	—	—	—	9.8	**13.1**	1800	—	—	—	—	—	—
		—	—	—	—	—	—	14.4	**19.3**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	13.7	**18.4**	2200*	—	—	—	—	—	—
		—	—	—	—	—	—	14.7	**19.7**	2200*	—	—	—	—	—	—
		—	—	—	—	—	—	16.1	**21.6**	2400*	—	—	—	—	—	—
		—	—	—	—	—	—	16.8	**22.5**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	17.2	**23.0**	2600*	—	—	—	—	—	—
		—	—	—	—	—	—	17.7	**23.7**	3000*	—	—	—	—	—	—
		—	—	—	—	—	—	18.4	**24.7**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	18.5	**24.8**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	19.7	**26.4**	3000*	—	—	—	—	—	—
		—	—	—	—	—	—	21.0	**28.2**	3400*	—	—	—	—	—	—
C1.5	**NA**	—	—	—	—	—	—	18.4	**24.7**	2100	—	—	—	—	—	—
		—	—	—	—	—	—	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*	—	—	—	—	—	—

Rating Conditions:

Diesel Engines — up to 7.1 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 EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15° C **(59° F)** and fuel inlet temperature 40° C **(104° F)**.

Diesel Engines — greater than 7.1 liter
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

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- Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

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

IND-E
- For service where maximum 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
bhp — Brake horsepower
bkW — Brake kilowatts

*Denotes rating is available in EU and other global regulated and non-regulated areas (Non-U.S.).

Cat Industrial Diesel Applications

U.S. EPA Tier 4 Interim or Tier 4 Final, EU Stage IIIA, Stage IIIB or Stage IV emission standards

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C1.5	**T**	—	—	—	—	—	—	18.4	**24.7**	1800	—	—	—	—	—	—
		—	—	—	—	—	—	23.1	**31.0**	2200*	—	—	—	—	—	—
		—	—	—	—	—	—	25.2	**33.8**	2400	—	—	—	—	—	—
		—	—	—	—	—	—	27.0	**36.2**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	27.3	**36.6**	2600*	—	—	—	—	—	—
		—	—	—	—	—	—	27.6	**37.0**	3000	—	—	—	—	—	—
		—	—	—	—	—	—	29.4	**39.4**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	30.0	**40.2**	3000*	—	—	—	—	—	—
C1.6	**NA**	—	—	—	—	—	—	24.6	**33.0**	2800*	—	—	—	—	—	—
		—	—	—	—	—	—	26.5	**35.5**	3000*	—	—	—	—	—	—
C1.7	**NA**	—	—	—	—	—	—	23.6	**31.6**	2400*	—	—	—	—	—	—
		—	—	—	—	—	—	26.1	**35.0**	2600*	—	—	—	—	—	—
C2.2	**NA**	—	—	—	—	—	—	31.0	**41.6**	2200*	—	—	—	—	—	—
		—	—	—	—	—	—	31.4	**42.1**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	34.1	**45.7**	2400*	—	—	—	—	—	—
		—	—	—	—	—	—	35.4	**47.5**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	35.7	**47.9**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	36.4	**48.8**	2800-3000	—	—	—	—	—	—
C2.2	**T**	—	—	—	—	—	—	36.4	**45.8**	2600 & 2800	—	—	—	—	—	—
		—	—	—	—	—	—	40.0	**53.6**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	41.5	**55.7**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	44.7	**60.0**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	45.5	**61.0**	3000	—	—	—	—	—	—
C3.4	**NA**	—	—	—	—	—	—	47.0	**63.0**	2500	—	—	—	—	—	—
C3.4	**T**	—	—	—	—	—	—	55.0	**73.7**	2500	—	—	—	—	—	—
C3.4B	**T**	—	—	—	—	—	—	45.0	**60.3**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	47.0	**63.0**	2500	—	—	—	—	—	—
		—	—	—	—	—	—	50.0	**67.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	55.4	**74.3**	2200 & 2500	—	—	—	—	—	—

Rating Conditions:

Diesel Engines — up to 7.1 liter
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- For service where power and/or speed are cyclic (time at full load not to exceed 80%).

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- Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

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

IND-E
- For service where maximum 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).

T — Turbocharged
NA — Naturally Aspirated
bhp — Brake horsepower
bkW — Brake kilowatts

*Denotes rating is available in EU and other global regulated and non-regulated areas (Non-U.S.).

Cat Industrial Diesel Applications

U.S. EPA Tier 4 Interim or Tier 4 Final, EU Stage IIIA, Stage IIIB or Stage IV emission standards

	"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model Type	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C3.4B TA	—	—	—	—	—	—	63.0	**84.5**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	66.0	**88.5**	2200 & 2500	—	—	—	—	—	—
	—	—	—	—	—	—	70.0	**94.0**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	75.0	**100.6**	2200 & 2500	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	83.0	**111.3**	2200	—	—	—
	—	—	—	—	—	—	—	—	—	86.0	**115.3**	2500	—	—	—
	—	—	—	—	—	—	—	—	—	90.0	**120.7**	2200	—	—	—
C4.4 TA	—	—	—	—	—	—	70.0	**93.9**	2200	—	—	—	—	—	—
ACERT	—	—	—	—	—	—	74.4	**99.8**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	82.0	**109.9**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	85.9	**115.2**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	91.0	**122.0**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	92.6	**124.2**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	97.9	**131.3**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	102.1	**136.9**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	106.0	**142.1**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	110.1	**147.6**	2200	—	—	—	—	—	—
C4.4 TTA	—	—	—	—	—	—	105.0	**140.8**	2200	—	—	—	—	—	—
ACERT	—	—	—	—	—	—	112.0	**150.2**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	117.0	**156.9**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	129.4	**173.5**	2200	—	—	—	—	—	—
C7.1 TA	—	—	—	116	**156**	2200	—	—	—	—	—	—	—	—	—
ACERT	—	—	—	129	**173**	2200	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	151.0	**202.0**	2200	—	—	—	—	—	—
C7.1 TTA	—	—	—	151	**202**	2200	—	—	—	—	—	—	—	—	—
ACERT	—	—	—	168	**225**	2200	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	186.0	**249.0**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	205.0	**275.0**	2200	—	—	—	—	—	—
	—	—	—	—	—	—	225.0	**302.0**	2200	—	—	—	—	—	—

Rating Conditions:

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- For service where maximum 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).

TA — Turbo Aftercooled
TTA — Twin or Series Turbo Aftercooled
bhp — Brake horsepower
bkW — Brake kilowatts

Cat Industrial Diesel Applications

U.S. EPA Tier 4 Interim or Tier 4 Final, EU Stage IIIB or Stage IV emission standards

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C9.3 ACERT	**TA**	224	**300**	1800-2200	242	**325**	1800-2200	261	**350**	1800-2200	290	**389**	1800-2200	—	**—**	—
		—	**—**	—	—	**—**	—	—	**—**	—	298	**400**	2000	—	**—**	—
C13 ACERT	**TA**	287	**385**	1800-2100	309	**415**	1800-2100	328	**440**	1800-2100	354	**475**	1800-2100	388	**520**	1800-2100
C15 ACERT	**TA**	354	**475**	1800-2100	354	**475**	1800-2100	403	**540**	1800-2100	433	**580**	1800-2100	—	**—**	—
C18 ACERT	**TA**	429	**575**	1800-2000	447	**600**	1800-1900	470	**630**	1800-2000	—	**—**	—	—	**—**	—
C18 ACERT	**TTA**	—	**—**	—	—	**—**	—	563	**755**	1800	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	—	**—**	—	597	**800**	1800	—	**—**	—
C27 ACERT	**TA**	597	**800**	1800-2100	653	**875**	1800-2100	709	**950**	1800-2100	783	**1050**	1800-2100	—	**—**	—
C32 ACERT	**TA**	—	**—**	—	709	**950**	1800-2100	839	**1125**	1800-2100	895	**1200**	1800-2100	—	**—**	—

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TA — Turbo Aftercooled
TTA — Twin or Series Turbo Aftercooled
bhp — Brake horsepower
bkW — Brake kilowatts

Cat Industrial Diesel Applications

Other Global Regulated and Non-Regulated Areas

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C0.5	**NA**	—	—	—	—	—	—	8.2	**11.0**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	8.8	**11.8**	3000	—	—	—	—	—	—
		—	—	—	—	—	—	10.2	**13.7**	3600	—	—	—	—	—	—
C0.7	**NA**	—	—	—	—	—	—	12.2	**16.4**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	13.2	**17.7**	3000	—	—	—	—	—	—
		—	—	—	—	—	—	15.3	**20.5**	3600	—	—	—	—	—	—
C1.1	**NA**	—	—	—	—	—	—	13.7	**18.4**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	14.7	**19.7**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	16.1	**21.6**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	16.8	**22.5**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	17.3	**23.2**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	17.7	**23.7**	3000	—	—	—	—	—	—
		—	—	—	—	—	—	18.5	**24.8**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	19.7	**26.4**	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	—	—	—	—	—	—
		—	—	—	—	—	—	30.0	**40.2**	3000	—	—	—	—	—	—
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Other Global Regulated and Non-Regulated Areas

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C2.2	**NA**	—	—	—	—	—	—	31.0	**41.6**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	31.4	**42.1**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	34.1	**45.7**	2400	—	—	—	—	—	—
		—	—	—	—	—	—	35.7	**47.9**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	36.4	**48.8**	2800 & 3000	—	—	—	—	—	—
C2.2	**T**	—	—	—	—	—	—	36.3	**48.7**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	40.0	**53.3**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	43.0	**57.7**	2600	—	—	—	—	—	—
		—	—	—	—	—	—	44.7	**60.0**	2800	—	—	—	—	—	—
		—	—	—	—	—	—	45.5	**61.0**	3000	—	—	—	—	—	—
C2.2	**TA**	—	—	—	—	—	—	49.3	**66.1**	2800	—	—	—	—	—	—
C3.4	**T**	—	—	—	—	—	—	62.0	**83.0**	2500	—	—	—	—	—	—
C4.4	**NA**	—	—	—	—	—	—	54.0	**72.4**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	55.9	**75.0**	2200	—	—	—	—	—	—
C4.4	**T**	—	—	—	—	—	—	55.5-74.5	**74.4-99.9**	2200-2400	—	—	—	—	—	—
C4.4	**TA**	—	—	—	—	—	—	68.0-83.0	**91.2-111.3**	2200-2400	—	—	—	—	—	—
C4.4 ACERT	**T**	—	—	—	—	—	—	61.5-74.5	**82.5-99.0**	2200	—	—	—	—	—	—
C4.4 ACERT	**TA**	—	—	—	—	—	—	74.5-106.0	**99.5-142.0**	2200	—	—	—	—	—	—

Rating Conditions:

Diesel Engines — up to 7.1 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 EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15° C **(59° F)** and fuel inlet temperature 40° C **(104° F)**.

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IND-C (Intermittent)
- Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

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

IND-E
- For service where maximum 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 — Turbo Aftercooled
bhp — Brake horsepower
bkW — Brake kilowatts

Cat Industrial Diesel Applications

Other Global Regulated and Non-Regulated Areas

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C6.6 ACERT	**TA**	—	—	—	—	—	—	89.0	**119.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	95.0	**128.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	116.5	**156.2**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	129.0	**173.0**	2500	—	—	—	—	—	—
		—	—	—	—	—	—	129.5	**173.7**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	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 & 2200	—	—	—	—	—	—
		—	—	—	—	—	—	158.5	**212.6**	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	—	—	—	—	—	—
C7 ACERT	**TA**	—	—	—	168	**225**	1800-2200	186.0	**250.0**	1800-2200	224	**300**	2100-2200	—	—	—
		—	—	—	—	—	—	205.0	**275.0**	1800-2200	—	—	—	—	—	—
C7.1	**TA**	—	—	—	—	—	—	105.0	**140.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	112.0	**150.0**	1950	—	—	—	—	—	—
		—	—	—	—	—	—	129.0	**172.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	137.0	**183.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	145.0	**194.0**	2200	—	—	—	—	—	—
		—	—	—	—	—	—	162.0	**220.0**	2200	—	—	—	—	—	—

Rating Conditions:

Diesel Engines — up to 7.1 liter
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Diesel Engines — greater than 7.1 liter
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- For service where power and/or speed are cyclic (time at full load not to exceed 80%).

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- Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

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

IND-E
- For service where maximum 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).

TA — Turbo Aftercooled
bhp — Brake horsepower
bkW — Brake kilowatts

Cat Industrial Diesel Applications

Other Global Regulated and Non-Regulated Areas

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
C7.1 ACERT	**TA**	—	**—**	—	—	**—**	—	116	**156**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	129	**173**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	130	**174**	2500	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	151	**202**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	159	**215**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	162	**217**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	168	**225**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	186	**250**	2200	—	**—**	—	—	**—**	—
		—	**—**	—	—	**—**	—	205	**275**	2200	—	**—**	—	—	**—**	—
C9 ACERT	**TA**	205	**275**	1800-2200	223	**300**	1800-2200	242	**325**	1800-2200	280	**375**	1800-2200	—	**—**	—
		—	**—**	—	—	**—**	—	261	**350**	1800-2200	—	**—**	—	—	**—**	—
C11 ACERT	**TA**	242	**325**	1800-2100	261	**350**	1800-2100	287	**385**	1800-2100	313	**420**	1800-2100	336	**450**	1800-2100
3406C	**TA**	—	**—**	—	—	**—**	—	298	**400**	1800	347	**465**	1800	—	**—**	—
		—	**—**	—	—	**—**	—	343	**460**	2100	—	**—**	—	—	**—**	—
C13 ACERT	**TA**	287	**385**	1800-2100	310.0	**415**	1800-2100	328	**440**	1800-2100	354	**475**	1800-2100	388	**520**	1800-2100
C15 ACERT	**TA**	328	**440**	1800-2100	354.0	**475**	1800-2100	403	**540**	1800-2100	433	**580**	1800-2100	444	**595**	1800-2100
C18 ACERT	**TA**	429	**575**	1800-2100	447.5	**600**	1800-2100	470	**630**	1800-2100	—	**—**	—	—	**—**	—
C18 ACERT	**TTA**	—	**—**	—	—	**—**	—	522	**700**	1800-2100	571	**765**	1800-2100	597	**800**	1800-2100
C27 ACERT	**TA**	597	**800**	1800-2100	653.0	**875**	1800-2100	708	**950**	1800-2100	783	**1050**	1800-2100	858	**1150**	1800-2100
C32 ACERT	**TA**	—	**—**	—	708.0	**950**	1800-2100	839	**1125**	1800-2100	895	**1200**	1800-2100	1007	**1350**	1800-2100

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TTA — Twin or Series Turbo Aftercooled
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Cat Industrial Diesel Applications

Other Global Regulated and Non-Regulated Areas

		"IND A"			"IND B"			"IND C"			"IND D"			"IND E"		
Model	**Type**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**	**bkW**	**bhp**	**rpm**
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	783	**1050**	1800	820	**1100**	1800	—	—	—	—	—	—
3512	**TA**	761	**1020**	1200	—	—	—	858	**1150**	1300	—	—	—	—	—	—
		955	**1280**	1800	—	—	—	1119	**1500**	1800	—	—	—	—	—	—
3512B	**TA**	1119	**1500**	1800	1174	**1575**	1800	1231	**1650**	1800	—	—	—	—	—	—
3512C	**TA**	1120	**1500**	1800	—	—	—	—	—	—	—	—	—	—	—	—
3516	**TA**	1011	**1355**	1200	—	—	—	1242	**1665**	1300	—	—	—	—	—	—
		1275	**1710**	1800	—	—	—	1492	**2000**	1800	—	—	—	—	—	—
3516B	**TA**	1492	**2000**	1800	1566	**2100**	1800	1640	**2200**	1800	—	—	—	—	—	—
3606	**TA**	1490	**1998**	750	—	—	—	—	—	—	—	—	—	—	—	—
		1560	**2092**	800	—	—	—	—	—	—	—	—	—	—	—	—
		1730	**2319**	900	—	—	—	—	—	—	—	—	—	—	—	—
		1850	**2481**	1000	—	—	—	—	—	—	—	—	—	—	—	—
3608	**TA**	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**	4160	**5579**	800	—	—	—	—	—	—	—	—	—	—	—	—
		4600	**6169**	900	—	—	—	—	—	—	—	—	—	—	—	—
		4920	**6598**	1000	—	—	—	—	—	—	—	—	—	—	—	—

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TA — Turbo Aftercooled
bhp — Brake horsepower
bkW — Brake kilowatts

Cat Industrial Diesel Applications

Cat Diesel Engines for Fire Pump Packages

Model		No. of Cylinders	1460 rpm		1500 rpm		1750 rpm		1900 rpm		2100 rpm		2200 rpm		2300 rpm	
			bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp	bkW	bhp
C18 ACERT*	**TA**	6	—	**—**	—	**—**	597	**800**	597	**800**	597	**800**	—	**—**	—	**—**
C18 ACERT**	**TA**	6	—	**—**	—	**—**	522	**700**	522	**700**	522	**700**	—	**—**	—	**—**
			—	**—**	—	**—**	447	**600**	447	**600**	447	**600**	—	**—**	—	**—**
C18 ACERT***	**TA**	6	—	**—**	522	**700**	—	**—**	—	**—**	—	**—**	—	**—**	—	**—**
3406C***	**TA**	6	—	**—**	—	**—**	276	**370**	—	**—**	359	**482**	—	—	339	**455**
			—	**—**	—	**—**	343	**460**	—	**—**	—	**—**	—	—	—	**—**
3406C Wet Manifolds***	**TA**	6	—	**—**	—	**—**	218	**292**	—	**—**	321	**430**	—	—	—	**—**
			—	**—**	—	**—**	313	**420**	—	**—**	—	**—**	—	—	—	**—**
3412C Wet Manifolds******	**TA**	12	—	**—**	—	**—**	—	**—**	551	**739**	551	**739**	—	—	—	**—**
			—	**—**	—	**—**	476	**638**	—	**—**	—	**—**	—	—	—	**—**
3508******	**TA**	8	709	**950**	—	**—**	794	**1065**	—	**—**	—	**—**	—	—	—	**—**
3512******	**TA**	12	1066	**1430**	—	**—**	1193	**1600**	—	**—**	—	**—**	—	—	—	**—**
3516******	**TA**	16	1417	**1900**	—	**—**	1480	**1985**	—	**—**	—	**—**	—	—	—	**—**

*U.S. EPA Tier 2, FM Approved, UL Listed
**U.S. EPA Tier 3, FM Approved, UL Listed
***Non-EPA Certified, FM Approved, UL Listed
****Non-EPA Certified, Not FM Approved, Not UL Listed

TA — Turbo 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**	—	—	—	—	—	—	—	—	—	—	—	—	71	**95**
G3306	**NA**	—	—	—	—	—	—	—	—	—	—	—	—	108	**145**
G3306	**TAA**	—	—	—	—	—	—	—	—	—	—	—	—	157	**211**
G3306	**TAA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	157	**211**
G3306	**T**	—	—	—	—	—	—	—	—	—	—	—	—	112	**150**
G3306	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	151	**203**
G3306	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	164	**220**
G3306B	**NA**	—	—	—	—	—	—	—	—	—	—	—	—	108	**145**
G3306B	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	153	**205**
G3406	**NA**	—	—	—	—	—	—	—	—	—	—	—	—	160	**215**
G3406	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	206	**276**
G3406	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	242	**325**
G3408	**NA**	—	—	—	—	—	—	—	—	—	—	—	—	190	**255**
G3408	**TA[1]**	—	—	—	—	—	—	—	—	249	**332**	—	—	—	**—**
G3408	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	298	**400**
G3408C	**LE[1]**	—	—	—	—	—	—	—	—	—	—	—	—	317	**425**
G3412	**TA[1]**	—	—	—	—	—	—	—	—	373	**500**	—	—	—	**—**
G3412	**TA[1]**	—	—	—	—	—	—	—	—	—	—	—	—	448	**600**
G3412C	**LE[1]**	—	—	—	—	—	—	—	—	—	—	—	—	475	**637**

[1] 54° C **(130° F)** water to aftercooler.
Ratings listed are for 25° C **(77° F)** ambient temperature, 152 m **(500 ft)** altitude, and pipeline quality gas.

NA — Naturally Aspirated
T — Turbocharged
TA — Turbo Aftercooled
TAA — Twin or SeriesTurbo Aftercooled
LE — Low Emissions
bhp — Brake horsepower
bkW — Brake kilowatts

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		720 rpm		750 rpm		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	bkW	bhp	bkW	bhp
G3508	**TA**[1]	—	—	—	—	—	—	—	—	391	**524**	—	—	—	—	—	—	—	—
G3508	**LE**[1]	—	—	—	—	—	—	—	—	—	—	500	**670**	—	—	—	—	—	—
G3508B	**LE**[1,2,3]	—	—	—	—	—	—	—	—	—	—	515	**690**	—	—	—	—	—	—
G3512	**TA**[1]	—	—	—	—	—	—	—	—	589	**790**	—	—	—	—	—	—	—	—
G3512	**LE**[1]	—	—	—	—	—	—	—	—	642	**860**	—	—	—	—	—	—	—	—
G3512	**LE**[1]	—	—	—	—	—	—	—	—	—	—	749	**1004**	—	—	—	—	—	—
G3512B	**LE**[1,2,3]	—	—	—	—	—	—	—	—	—	—	772	**1035**	—	—	—	—	—	—
G3516	**NA**	—	—	—	—	—	—	—	—	492	**660**	—	—	—	—	—	—	—	—
G3516	**TA**[1]	—	—	—	—	—	—	—	—	783	**1050**	—	—	—	—	—	—	—	—
G3516	**LE**[1]	—	—	—	—	—	—	—	—	858	**1150**	—	—	—	—	—	—	—	—
G3516	**LE**[1]	—	—	—	—	—	—	—	—	—	—	1000	**1340**	—	—	—	—	—	—
G3516B	**LE**[1,2,3]	—	—	—	—	—	—	—	—	—	—	1029	**1380**	—	—	—	—	—	—
G3520B	**LE**[1,2,3]	—	—	—	—	—	—	—	—	1104	**1480**	—	—	—	—	—	—	—	—
G3520B	**LE**[1,2,3]	—	—	—	—	—	—	—	—	—	—	1286	**1725**	—	—	—	—	—	—
G3606	**LE**[1,2,4]	—	—	—	—	—	—	1324	**1775**	—	—	—	—	—	—	—	—	—	—
G3606	**LE**[4,6]	—	—	—	—	—	—	1368	**1835**	—	—	—	—	—	—	—	—	—	—
G3606	**LE**[4,5]	—	—	—	—	—	—	1413	**1895**	—	—	—	—	—	—	—	—	—	—
G3608	**LE**[1,2,4]	—	—	—	—	—	—	1767	**2370**	—	—	—	—	—	—	—	—	—	—
G3608	**LE**[4,6]	—	—	—	—	—	—	1823	**2445**	—	—	—	—	—	—	—	—	—	—
G3608	**LE**[4,5]	—	—	—	—	—	—	1879	**2520**	—	—	—	—	—	—	—	—	—	—
G3612	**LE**[1,2,4]	—	—	—	—	—	—	2647	**3550**	—	—	—	—	—	—	—	—	—	—
G3612	**LE**[4,6]	—	—	—	—	—	—	2733	**3665**	—	—	—	—	—	—	—	—	—	—
G3612	**LE**[4,5]	—	—	—	—	—	—	2822	**3785**	—	—	—	—	—	—	—	—	—	—
G3616	**LE**[1,2,4]	—	—	—	—	—	—	3531	**4735**	—	—	—	—	—	—	—	—	—	—
G3616	**LE**[4,6]	—	—	—	—	—	—	3647	**4890**	—	—	—	—	—	—	—	—	—	—
G3616	**LE**[4,5]	—	—	—	—	—	—	3762	**5045**	—	—	—	—	—	—	—	—	—	—
G12CM34	**TA**	4840	**6580**	5040	**6850**	—	—	—	—	—	—	—	—	—	—	—	—	—	—
G16CM34	**TA**	6450	**8770**	6720	**9140**	—	—	—	—	—	—	—	—	—	—	—	—	—	—
G20CM34	**TA**	9600	**13,050**	10 000	**13,600**	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[1] 54° C **(130° F)** water to aftercooler.
[2] 250 mg/N·m³ dry No_x NTE emissions (corrected to 5% O_2).
[3] 500 mg/N·m³ dry No_x NTE emissions (corrected to 5% O_2).
[4] 350 mg/N·m³ dry No_x NTE emissions (corrected to 5% O_2).
[5] 32° C **(90° F)** aftercooler water and 88° C **(190° F)** jacket water.
[6] 43° C **(109° F)** aftercooler water and 88° C **(190° F)** jacket water.
Ratings listed are for 25° C **(77° F)** ambient temperature, 152 m **(500 ft)** altitude, and pipeline quality gas.

NA — Naturally Aspirated
TA — Turbo Aftercooled
LE — Low Emissions
bhp — Brake horsepower
bkW — Brake kilowatts

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.

CM Power Generation Offshore and Onshore

Emissions according to IMO2 or WB2

CM Model	Fuel Type	Output Range kW	Output Range hp	Speed rpm	Frequency	Bore x Stroke mm	Bore x Stroke in	Fuel Efficiency g/kWh	Fuel Efficiency MJ/kWh	Crude Oil/ Heavy Fuel Operation at COP
6CM20C	Diesel	1020	**1368**	900	60	200 x 300	**7.9 x 11.8**	189	8.07	x
6CM20C	Diesel	1140	**1529**	1000	50	200 x 300	**7.9 x 11.8**	190	8.11	x
8CM20C	Diesel	1360	**1824**	900	60	200 x 300	**7.9 x 11.8**	189	8.07	x
8CM20C	Diesel	1520	**2038**	1000	50	200 x 300	**7.9 x 11.8**	190	8.11	x
9CM20C	Diesel	1530	**2052**	900	60	200 x 300	**7.9 x 11.8**	189	8.07	x
9CM20C	Diesel	1710	**2293**	1000	50	200 x 300	**7.9 x 11.8**	190	8.11	x
6CM25C	Diesel	2000	**2682**	720	60	255 x 400	**10 x 15.7**	188	8.03	x
6CM25C	Diesel	2000	**2682**	750	50	255 x 400	**10 x 15.7**	186	7.94	x
8CM25C	Diesel	2666	**3575**	720	60	255 x 400	**10 x 15.7**	189	8.07	x
8CM25C	Diesel	2666	**3575**	750	50	255 x 400	**10 x 15.7**	187	7.98	x
9CM25C	Diesel	3000	**4023**	720	60	255 x 400	**10 x 15.7**	189	8.07	x
9CM25C	Diesel	3000	**4023**	750	50	255 x 400	**10 x 15.7**	187	7.98	x
6CM32E	Diesel	3300	**4425**	720	60	320 x 480	**12.6 x 18.9**	179	7.64	x
6CM32E	Diesel	3300	**4425**	750	50	320 x 480	**12.6 x 18.9**	179	7.64	x
8CM32E	Diesel	4400	**5900**	720	60	320 x 480	**12.6 x 18.9**	179	7.64	x
8CM32E	Diesel	4400	**5900**	750	50	320 x 480	**12.6 x 18.9**	179	7.64	x
9CM32E	Diesel	4950	**6638**	720	60	320 x 480	**12.6 x 18.9**	179	7.64	x
9CM32E	Diesel	4950	**6638**	750	50	320 x 480	**12.6 x 18.9**	179	7.64	x
12CM32C	Diesel	6720	**9012**	720	60	320 x 460	**12.6 x 18.1**	178	7.6	x
12CM32C	Diesel	6720	**9012**	750	50	320 x 460	**12.6 x 18.1**	179	7.64	x
16CM32C	Diesel	8960	**12,015**	720	60	320 x 460	**12.6 x 18.1**	181	7.73	x
16CM32C	Diesel	8960	**12,015**	750	50	320 x 460	**12.6 x 18.1**	182	7.77	x
6CM34DF	Dual Fuel	3000	**4023**	720	60	340 x 460	**13.4 x 18.1**	188	7.71*	x
6CM34DF	Dual Fuel	3000	**4023**	750	50	340 x 460	**13.4 x 18.1**	188	7.71*	x
8CM34DF	Dual Fuel	4000	**5364**	720	60	340 x 460	**13.4 x 18.1**	188	7.71*	x
8CM34DF	Dual Fuel	4000	**5364**	750	50	340 x 460	**13.4 x 18.1**	188	7.71*	x
9CM34DF	Dual Fuel	4500	**6035**	720	60	340 x 460	**13.4 x 18.1**	188	7.71*	x
9CM34DF	Dual Fuel	4500	**6035**	750	50	340 x 460	**13.4 x 18.1**	188	7.71*	x
6CM43C	Diesel	6000	**8046**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
6CM43C	Diesel	6000	**8046**	500	50	430 x 610	**16.9 x 24**	176	7.52	x
7CM43C	Diesel	7000	**9387**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
7CM43C	Diesel	7000	**9387**	500	50	430 x 610	**16.9 x 24**	176	7.52	x

*Heat rate (MJ/kWh) for gaseous fuel.

NOTES:

- Ratings: Prime power based on ISO 3046/1 standard reference conditions.
- Power output: May require adjustment for values other than ISO 3046/1 standard reference conditions.
- Fuel as specified per ISO 8217. Limiting Caterpillar specification for fuel is VD8738 for crude oil operation at continuous power operation (COP).
- Fuel consumption: Based on ISO 3046/1 standard reference conditions of 25° C **(77° F)** and 100 kPa **(29.61 in Hg)**, including one engine-driven lube oil pump, with 5% tolerance and LCV = 42 700 kJ/kg **(18,358 Btu/lb)**.
- Dual Fuel (DF) engines: Specific fuel consumption (g/kWh) for liquid fuel; heat rate MJ/kWh for gaseous fuel.
- Generator efficiency: Efficiency of 97.0% (96.0% for complete CM20 and CM25 model range, and for 6CM32E, 8CM32E, 9CM32C) based on power factor 0.8 with medium voltage class generator; actual efficiency will depend on generator selection.
- Crude oil operation only at continuous power generation.

CM Power Generation Offshore and Onshore

Emissions according to IMO2 or WB2

CM Model	Fuel Type	Output Range kW	Output Range hp	Speed rpm	Frequency	Bore x Stroke mm	Bore x Stroke in	Fuel Efficiency g/kWh	Fuel Efficiency MJ/kWh	Crude Oil/ Heavy Fuel Operation at COP
8CM43C	Diesel	8000	**10,728**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
8CM43C	Diesel	8000	**10,728**	500	50	430 x 610	**16.9 x 24**	176	7.52	x
9CM43C	Diesel	9000	**12,069**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
9CM43C	Diesel	9000	**12,069**	500	50	430 x 610	**16.9 x 24**	176	7.52	x
12CM43C	Diesel	12 000	**16,092**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
12CM43C	Diesel	12 000	**16,092**	500	50	430 x 610	**16.9 x 24**	176	7.52	x
16CM43C	Diesel	16 000	**21,456**	514	60	430 x 610	**16.9 x 24**	176	7.52	x
16CM43C	Diesel	16 000	**21,456**	500	50	430 x 610	**16.9 x 24**	176	7.52	x
6CM46DF	Dual Fuel	5400	**7241**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
6CM46DF	Dual Fuel	5400	**7241**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
7CM46DF	Dual Fuel	6300	**8448**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
7CM46DF	Dual Fuel	6300	**8448**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
8CM46DF	Dual Fuel	7200	**9655**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
8CM46DF	Dual Fuel	7200	**9655**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
9CM46DF	Dual Fuel	8100	**10,862**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
9CM46DF	Dual Fuel	8100	**10,862**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
12CM46DF	Dual Fuel	10 800	**14,483**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
12CM46DF	Dual Fuel	10 800	**14,483**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
16CM46DF	Dual Fuel	14 400	**19,310**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
16CM46DF	Dual Fuel	14 400	**19,310**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
20CM46DF	Dual Fuel	18 000	**24,138**	514	60	460 x 610	**18.1 x 24**	186	7.27*	x
20CM46DF	Dual Fuel	18 000	**24,138**	500	50	460 x 610	**18.1 x 24**	186	7.27*	x
Onshore only:										
G12CM34	Natural Gas	4575	**6135**	720	60	340 x 420	**13.4 x 16.5**	On Request		
G12CM34	Natural Gas	4575	**6135**	750	50	340 x 420	**13.4 x 16.5**	On Request		
G16CM34	Natural Gas	6720	**9012**	720	60	340 x 420	**13.4 x 16.5**	N/A	7.53	
G16CM34	Natural Gas	6720	**9012**	750	50	340 x 420	**13.4 x 16.5**	N/A	7.83	
G20CM34	Natural Gas	10 000	**14,310**	720	60	340 x 420	**13.4 x 16.5**	N/A	7.22	
G20CM34	Natural Gas	10 000	**14,310**	750	50	340 x 420	**13.4 x 16.5**	N/A	7.26	

*Heat rate (MJ/kWh) for gaseous fuel.

NOTES:

- Ratings: Prime power based on ISO 3046/1 standard reference conditions.
- Power output: May require adjustment for values other than ISO 3046/1 standard reference conditions.
- Fuel as specified per ISO 8217. Limiting Caterpillar specification for fuel is VD8738 for crude oil operation at continuous power operation (COP).
- Fuel consumption: Based on ISO 3046/1 standard reference conditions of 25° C **(77° F)** and 100 kPa **(29.61 in Hg)**, including one engine-driven lube oil pump, with 5% tolerance and LCV = 42 700 kJ/kg **(18,358 Btu/lb)**.
- Dual Fuel (DF) engines: Specific fuel consumption (g/kWh) for liquid fuel; heat rate MJ/kWh for gaseous fuel.
- Generator efficiency: Efficiency of 97.0% (96.0% for complete CM20 and CM25 model range, and for 6CM32E, 8CM32E, 9CM32C) based on power factor 0.8 with medium voltage class generator; actual efficiency will depend on generator selection.
- Crude oil operation only at continuous power generation.

CM Pump Application

Emissions according to WB2

CM Model	Fuel Type	Output Range		Speed	Minimum Speed	Bore x Stroke		Fuel Efficiency		Crude Oil/ Heavy Fuel Operation at COP
		kW	hp	rpm	rpm	mm	in	g/kWh	MJ/kWh	
6CM20C	Diesel	1140	**1529**	1000	300	200 x 300	**7.9 x 11.8**	190	8.11	x
8CM20C	Diesel	1520	**2038**	1000	300	200 x 300	**7.9 x 11.8**	190	8.11	x
9CM20C	Diesel	1710	**2293**	1000	300	200 x 300	**7.9 x 11.8**	190	8.11	x
6CM25C	Diesel	2000	**2682**	750	250	250 x 400	**9.8 x 15.7**	186	7.94	x
8CM25C	Diesel	2666	**3575**	750	240	250 x 400	**9.8 x 15.7**	187	7.99	x
9CM25C	Diesel	3000	**4023**	750	250	250 x 400	**9.8 x 15.7**	187	7.99	x
6CM32C	Diesel	2700	**3621**	600	360	320 x 480	**12.6 x 18.9**	185	7.9	x
8CM32C	Diesel	3600	**4828**	600	360	320 x 480	**12.6 x 18.9**	185	7.9	x
9CM32C	Diesel	4050	**5431**	600	360	320 x 480	**12.6 x 18.9**	185	7.9	x
Gas Engines:										
G12CM34	Natural gas	4575	**6135**	750	450	340 x 420	**13.4 x 16.5**	N/A	7.92	
G16CM34	Natural gas	6100	**8180**	750	450	340 x 420	**13.4 x 16.5**	N/A	7.94	

*Heat rate (MJ/kWh) for gaseous fuel.

NOTES:

- Ratings: Prime power based on ISO 3046/1 standard reference conditions.
- Power output: May require adjustment for values other than ISO 3046/1 standard reference conditions.
- Fuel as specified per ISO 8217. Limiting Caterpillar specification for fuel is VD8738 for crude oil operation at continuous power operation (COP).
- Fuel consumption: Based on ISO 3046/1 standard reference conditions of 25° C **(77° F)** and 100 kPa **(29.61 in Hg)**, including one engine-driven lube oil pump, with 5% tolerance and LCV = 42 700 kJ/kg **(18,358 Btu/lb)**.
- Dual Fuel (DF) engines: Specific fuel consumption (g/kWh) for liquid fuel; heat rate MJ/kWh for gaseous fuel.
- Generator efficiency: Efficiency of 97.0% (96.0% for complete CM20 and CM25 model range, and for 6CM32E, 8CM32E, 9CM32C) based on power factor 0.8 with medium voltage class generator; actual efficiency will depend on generator selection.
- Crude oil operation only at continuous power generation.

Cat Oil and Gas Engines

Offshore Power Module Ratings

	L with Base		W of Base		H with Base		Approximate Weight with Base	
Model	**m**	**ft**	**mm**	**in**	**mm**	**in**	**kg**	**lb**
3508B	4.99	**16'4"**	2319	**91**	2596	**102**	14 443	**31,843**
3512B	7.87	**25'9"**	2385	**94**	2957	**116**	15 652	**34,507**
3512C	5.45	**17'11"**	1827	**71**	2315	**91**	15 566	**34,319**
3516B	7.87	**25'9"**	2385	**94**	2520	**99**	18 810	**41,469**

Land Rig Power Module Ratings

	L Bases Available*		W of Base		Radiator Height with Base		Approximate Weight with Base	
Model	**m**	**ft**	**mm**	**in**	**mm**	**in**	**kg**	**lb**
3508	7.85	**25'9"**	2385	**94**	2779	**109.0**	14 443	**31,843**
3508B	4.99	**16'4"**	2319	**91**	2596	**102.0**	15 352	**33,846**
3512	7.85	**25'9"**	2385	**94**	2936	**116.0**	15 714	**34,644**
3512B	7.85	**25'9"**	2385	**94**	2957	**116.0**	15 652	**34,507**
3512C	7.85	**25'9"**	2385	**94**	2957	**116.0**	15 566	**34,319**
3516	7.85	**25'9"**	2385	**94**	2497	**98.3**	18 340	**40,433**
3516B	7.85	**25'9"**	2385	**94**	2520	**99.0**	18 810	**41,469**

*9.37 m **(30'9")** and 12.4 m **(40'9")** bases also available for all models except 3508B.

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
3508	V-8	—	**—**	—	**—**	641	**860**[1]	—	**—**	—	**—**	—	**—**	—	**—**
3508B	V-8	—	**—**	—	**—**	682	**915**[1]	—	**—**	—	**—**	—	**—**	880	**1180**
3508C	V-8	—	**—**	—	**—**	682	**915**	—	**—**	—	**—**	—	**—**	—	**—**
3512	V-12	—	**—**	—	**—**	708-1070	**950-1435**	—	**—**	—	**—**	830-890	**1113-1194**	1090	**1462**
3512B		—	**—**	—	**—**	1102	**1478**	—	**—**	—	**—**	933	**1251**	1257-1310	**1686-1757**
3512C	V-12	—	**—**	—	**—**	1102	**1478**	—	**—**	—	**—**	—	**—**	—	**—**
3512C HD	V-12	—	**—**	—	**—**	1305	**1750**	—	**—**	—	**—**	—	**—**	1310	**1757**
3516	V-16	—	**—**	—	**—**	1345	**1804**	—	**—**	—	**—**	1200	**1609**	—	**—**
3516B	V-16	—	**—**	—	**—**	1383-1717	**1855-2303**	—	**—**	—	**—**	—	**—**	—	**—**
3516B HD	V-16	—	**—**	—	**—**	1603	**2150**	—	**—**	—	**—**	—	**—**	—	**—**
3516C HD	V-16	—	**—**	—	**—**	1383	**1855**	—	**—**	—	**—**	—	**—**	—	**—**
3516C HD	V-16	—	**—**	—	**—**	1603	**2150**[2]	—	**—**	—	**—**	—	**—**	—	**—**
C175-16[2]	V-16	—	**—**	—	**—**	1930	**2586**	—	**—**	—	**—**	—	**—**	—	**—**

[1] EPA certified.
[2] EPA and IMO certified.

bhp — Brake horsepower
bkW — Brake kilowatts

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

Cat Oil and Gas Engines

Mechanical Drill Rig Ratings

	Pumping and Drilling Ratings (B Level)			
Model	**No. Cyl.**	**rpm**	**bkW**	**bhp**
C15 ACERT	I-6	1800-2100	354	**475**
C18 ACERT	I-6	2100	447	**600**
C27 ACERT	V-12	1800-2100	652	**875**
C32 ACERT	V-12	1800-2100	708	**950**
3508	V-8	1200	567	**760**
3508B	V-8	1200	671	**900**
3508B	V-8	1200	567	**760**
3512	V-12	1200	932	**1250**
3512C HD	V-12	1200	1100	**1475**

bhp — Brake horsepower
bkW — Brake kilowatts

Fracturing/Acidizing/Cementing Ratings

Dry Manifolds (E Level)				
Model	**bkW**	**bhp**	**rpm**	**2002 EPA, Carb & EU 97/68/EC**
C11 ACERT	336	**450**	2100	X
C13 ACERT	388	**520**	2100	X
C15 ACERT	444	**595**	2100	X
C18 ACERT	597	**800**	2100	X
C32 ACERT	913-1119	**1225-1500**	2100	X
3512B	1491	**2000**	1900	X
3512B	1603	**2150**	1900	X
3512B	1678	**2250**	1900	X
3512C HD	1603	**2150**	1900	X
3512C HD	1678	**2250**	1900	X
3512C HD	1752	**2350**	1900	X
3512C HD	1864	**2500**	1900	X
Water Cooled Manifolds (E Level)				
Model	**bkW**	**bhp**	**rpm**	**2002 EPA and IMO**
C32 ACERT	913	**1225**	2100	X

bhp — Brake horsepower
bkW — Brake kilowatts

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.

Cat Railway Power

Locomotive Traction Engine Ratings

Model	Low Rating		High Rating		Rated Speed	Emissions
	bkW	bhp	bkW	bhp	rpm	Tier
C9.3 ACERT™	205	**275**	280	**375**	1800-2200	Tier 4, Stage IIIB
C13 ACERT	287	**385**	388	**520**	1800-2100	Tier 4, Stage IIIB
C15 ACERT	328	**440**	444	**595**	1800-2100	Tier 4, Stage IIIB
C18 ACERT	429	**575**	597	**800**	1800-2100	Tier 4, Stage IIIB
C27 ACERT	597	**800**	858	**1150**	1800-2100	Stage IIIA, IIIB
C32 ACERT	708	**950**	1007	**1350**	1800-2100	Tier 2, UIC2
3508*	503	**675**	1000	**1341**	1300-1800	Tier 3, Stage IIIA, IIIB
3512*	746	**1000**	1700	**2280**	1300-1800	Tier 3, Stage IIIA, IIIB
3516	1200	**1600**	2240	**3004**	1300-1800	Tier 2, UIC2
G3516B**	895	**1200**	1104	**1480**	1500	—
C175-16 ACERT*	2500	**3351**	2800	**3620**	1800	Stage IIIA, IIIB
3606/C280-6	1640	**2200**	2030	**2720**	750-1000	UIC2
3608/C280-8	2180	**2925**	2710	**3635**	750-1000	UIC2
3612/C280-12	3280	**4400**	4060	**5445**	750-1000	UIC2
3616/C280-16	4360	**5850**	5420	**7270**	750-1000	UIC2

*For EU Stage IIIB availability contact your Cat dealer.
**For gas engine product offerings contact your Cat dealer.

Auxiliary Electric (Head End) Power Engine Ratings

Model	Rating	Power	Emissions
	Hz	ekW	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 2 and Tier 4 Interim
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 and Tier 4 Interim

All 60 Hz ratings are EPA emission certified (non-road mobile regulations).
All 50 Hz ratings are EU emission certified (non-road mobile regulations).

Maintenance of Way Engine Ratings

Please refer to pages 4-22 through 4-30 Cat Industrial Diesel Applications for all Cat Railway Power Maintenance of Way Engine applications.