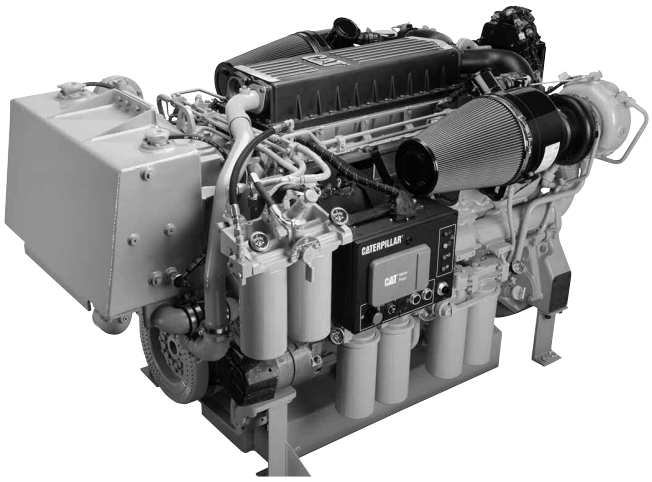
CATERPILLAR®

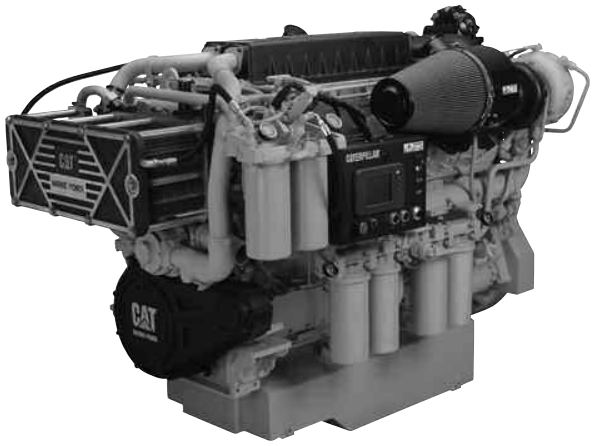
C32 ACERT™ MARINE PROPULSION

492-1194 bkW
(660-1600 bhp)



C32 ACERT™ Keel Cooled

Images shown may not reflect actual engines



C32 ACERT™ Heat Exchanger Cooled

SPECIFICATIONS

V-12, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO/EPA Tier 2 Compliant; EU Stage 3A Inland Waterway; Accepted as equivalent CCNR Stage II; DnV clean design compliant
Displacement . . . . . 32.1 L (1958.8 in^3)
Rated Engine Speed 1600-2300
Bore. . . . . 145 mm (5.7 in.)
Stroke . . . . . 162 mm (6.4 in.)
Aspiration. . . . . Twin Turbocharged-Aftercooled
Governor . . . . . Electronic
Cooling System . . . Heat Exchanger or Keel Cooled
Weight, Net Dry (approx.). . . . . 3220 kg (7100 lb)
Refill Capacity
  Cooling System (engine only). . . 80 L (21.1 gal)
  Lube Oil System (refill). . . . . 138 L (36.5 gal)
Oil Change Interval. . . . . 500 hr
  Caterpillar Diesel Engine Oil 10W30 or 15W40
Rotation (from flywheel end). . . . . Counterclockwise
Flywheel and flywheel housing . . . . . SAE No. 0
Flywheel Teeth 136

A-Ratings
(available Keel Cooled or Heat Exchanger Cooled):
492 bkW (660 bhp) @ 1800 rpm (WOSR)
560 bkW (750 bhp) @ 1800 rpm (WOSR)
634 bkW (850 bhp) @ 1800 rpm (WOSR)
709 bkW (950 bhp) @ 1600 rpm
746 bkW (1000 bhp) @ 1800 rpm (WOSR)

B-Ratings
(available Keel Cooled or Heat Exchanger Cooled):
970 bkW (1300 bhp) @ 2100 rpm

C-Ratings
(available Keel Cooled or Heat Exchanger Cooled):
970 bkW (1300 bhp) @ 1800 rpm
1082 bkW (1450 bhp) @ 2300 rpm (WOSR)

D-Rating
(available Heat Exchanger Cooled only):
1194 bkW (1600 bhp) @ 2300 rpm (WOSR)

STANDARD ENGINE EQUIPMENT

Air Inlet System
Corrosion resistant sea water/separate circuit aftercooler, air cleaner/fumes disposal system (closed)

Control System
Electronic governor, Mechanically actuated Electronically controlled Unit Injection (MEUI) fuel system, A4 Electronic Control Unit (ECU), programmable low idle, momentary start/stop logic: ECU controlled prelube, cranking and cooldown

Cooling System
Gear-driven centrifugal auxiliary sea water pump, gear-driven centrifugal jacket water pump, titanium plate heat exchanger with coolant recovery system or keel cooler with expansion tank, engine oil cooler

Exhaust System
Watercooled exhaust manifold and turbocharger, round flanged outlet

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter – RH or LH service

Instrumentation
Marine Power Display of: engine speed and hours; engine oil pressure and temperature; engine jacket water temperature; fuel pressure, consumption, and temperature; transmission pressure and temperature; 24-pin connector; on/off keyswitch; backup ECU ready and active light; overspeed shutdown and remote stop notification lights

Lube System
Crankcase breather, oil filter – RH or LH service, oil level gauge – RH or LH service, oil filler, deep center sump oil pan

Mounting System
Adjustable front support

General
Vibration damper, lifting eyes, RH or LH service options, literature, side access block, single groove U-bolt crankshaft pulley

ISO Certification
Factory-designed systems built at Caterpillar ISO9001:2000 certified facilities

OPTIONAL EQUIPMENT

Emissions Certification
IMO certifications for GL and CCS

Emissions Certification
EU Inland Waterway certification (replaces CCNR)

Engine Certification
CCS has given type approval for the C32 ACERT engine. Marine Classification Society type approval from ABS, DNV, GL, KR, LR, BV in process at time of print.

Charging System
Battery charger 10 amp.

Cooling System
Jacket water flange kit, RH or LH service

Exhaust System
8" elbows, flexible fitting

Fuel System
Fuel cooler, water separator, and duplex fuel filters

Instrumentation
OEM wiring harness, engine-to-engine harness, gauges and instrument panels, marine analog power display, pilot house instrument panel

Lube System
Duplex oil filters, RH or LH service, prelube solenoid

Power Take-Offs
Hydraulic pump drives (RH or LH rear) (SAE A or B)

Starting System
Air starting motors (ECU-controlled), battery sets (24 volt dry), starting aid (120 volt and 240 volt block heaters)

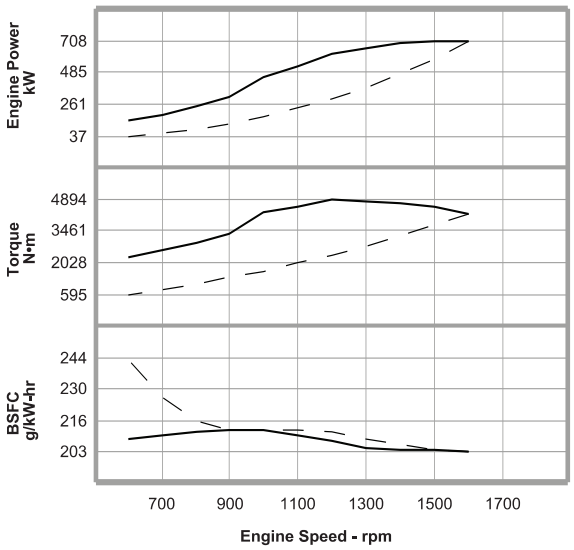
Packing
Engine protective cover, storage preservation, export packing

General
Adapter kit, filter cover kit, tool set, literature, EEC certification, damper guards

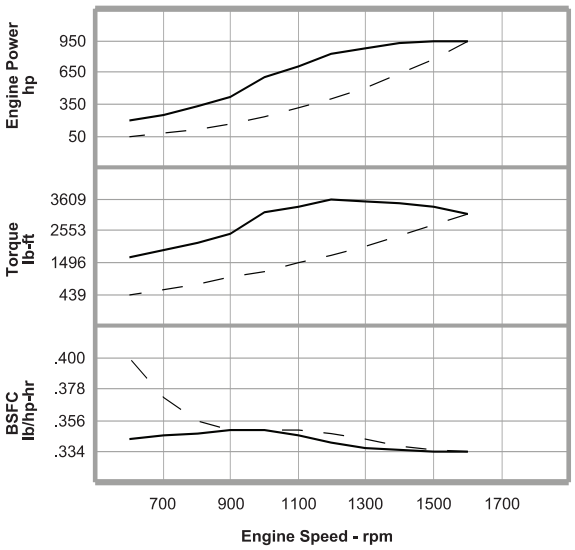
C32 DITA ACERT Performance Data

709 kW (950 hp) @ 1600 rpm
A Rating — DM9607-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power | Prop Demand | 709 kW



English | Maximum Power | Prop Demand | 950 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1600	708.5	4229	202.8	171.3
	1500	708.5	4510	203.2	171.6
	1400	695.0	4741	203.6	168.7
	1300	655.0	4811	204.4	159.6
	1200	615.0	4894	207.0	151.7
	1100	525.0	4558	209.9	131.4
	1000	450.0	4297	212.2	113.8
	900	314.0	3332	211.7	79.2
	800	245.0	2924	210.7	61.5
	700	188.0	2565	209.5	47.0
	600	145.0	2308	207.8	35.9
Prop Demand Data	1600	708.5	4229	202.8	171.3
	1500	583.8	3717	203.6	141.7
	1400	474.6	3237	205.4	116.2
	1300	380.0	2792	208.0	94.2
	1200	298.9	2379	210.7	75.1
	1100	230.2	1999	211.6	58.1
	1000	173.0	1652	211.8	43.7
	900	126.1	1338	212.3	31.9
	800	88.6	1057	216.4	22.8
	700	59.3	809	226.7	16.0
	600	37.4	595	243.5	10.8

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1600	950.1	3119	.333	45.3
	1500	950.1	3326	.334	45.3
	1400	932.0	3497	.335	44.6
	1300	878.4	3548	.336	42.2
	1200	824.7	3609	.340	40.1
	1100	704.0	3362	.345	34.7
	1000	603.5	3169	.349	30.1
	900	421.1	2457	.348	20.9
	800	328.6	2157	.346	16.2
	700	252.1	1892	.344	12.4
	600	194.4	1702	.342	9.5
Prop Demand Data	1600	950.1	3119	.333	45.3
	1500	782.9	2741	.335	37.4
	1400	636.4	2387	.338	30.7
	1300	509.6	2059	.342	24.9
	1200	400.8	1755	.346	19.8
	1100	308.7	1474	.348	15.3
	1000	232.0	1218	.348	11.5
	900	169.1	987	.349	8.4
	800	118.8	780	.356	6.0
	700	79.5	597	.373	4.2
	600	50.2	439	.400	2.9

Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

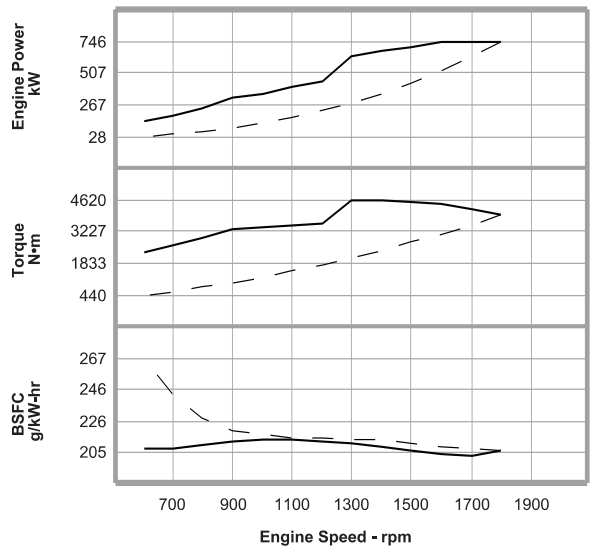
For most current information, please refer to TMI.

C32 DITA ACERT Performance Data

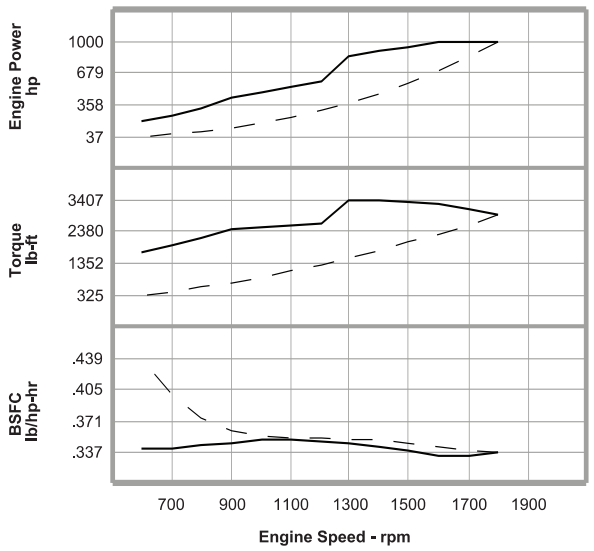
746 kW (1000 hp) @ 1800 rpm

EPA Tier 2 and IMO Certified

A Rating — DM9609-00



Metric | Maximum Power | Prop Demand | 746 kW



English | Maximum Power | Prop Demand | 1000 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	746.0	3958	204.9	182.2
	1700	746.0	4190	202.3	179.9
	1600	746.0	4452	202.7	180.2
	1500	707.0	4501	205.3	173.0
	1400	671.0	4577	208.1	166.4
	1200	450.0	3581	211.4	113.4
	1100	400.0	3472	212.5	101.3
	1000	355.0	3390	212.4	89.9
	900	315.0	3342	210.8	79.1
	700	190.0	2592	207.1	46.9
	600	145.0	2308	206.5	35.7
Prop Demand Data	1800	746.0	3958	204.9	182.2
	1700	628.4	3530	206.1	154.4
	1600	523.9	3127	207.9	129.9
	1500	431.7	2748	210.2	108.2
	1400	351.0	2394	212.3	88.8
	1200	221.0	1759	213.3	56.2
	1100	170.3	1478	213.8	43.4
	1000	127.9	1221	215.6	32.9
	900	93.3	989	219.9	24.4
	700	43.9	599	243.4	12.7
	600	27.6	440	267.1	8.8

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	1000.4	2919	.337	48.1
	1700	1000.4	3090	.333	47.5
	1600	1000.4	3283	.333	47.6
	1500	948.1	3320	.338	45.7
	1400	899.8	3376	.342	44.0
	1200	603.5	2641	.348	30.0
	1100	536.4	2561	.349	26.8
	1000	476.1	2500	.349	23.7
	900	422.4	2465	.347	20.9
	700	254.8	1912	.340	12.4
	600	194.4	1702	.339	9.4
Prop Demand Data	1800	1000.4	2919	.337	48.1
	1700	842.7	2603	.339	40.8
	1600	702.6	2306	.342	34.3
	1500	578.9	2027	.346	28.6
	1400	470.7	1766	.349	23.5
	1200	296.4	1297	.351	14.8
	1100	228.4	1090	.351	11.5
	1000	171.5	901	.354	8.7
	900	125.1	729	.362	6.4
	700	58.9	442	.400	3.4
	600	37.0	325	.439	2.3

Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

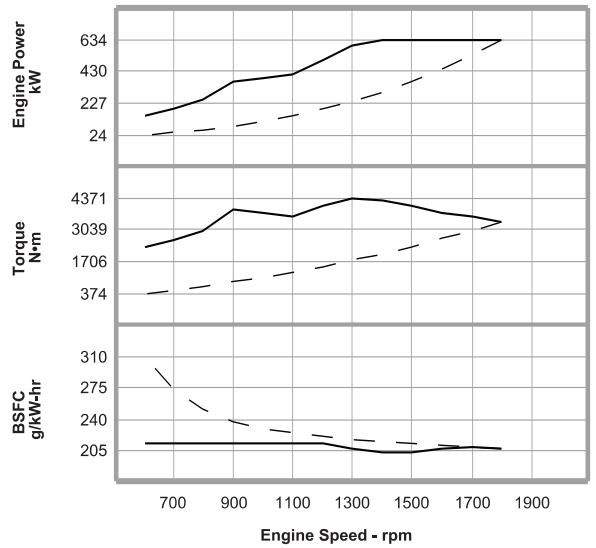
For most current information, please refer to TMI.

C32 DITA ACERT Performance Data

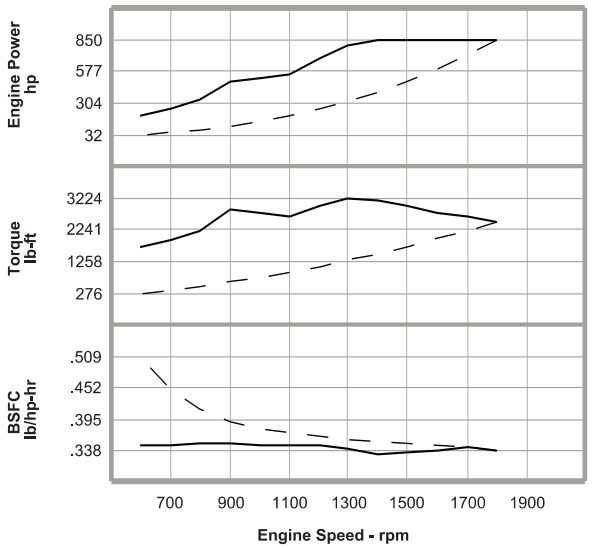
634 kW (850 hp) @ 1800 rpm

A Rating — DM9610-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power, Prop Demand | 634 kW



English | Maximum Power, Prop Demand | 850 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	634.0	3363	205.3	155.1
	1700	634.0	3561	208.1	157.3
	1600	634.0	3784	205.5	155.3
	1500	634.0	4036	201.9	152.6
	1400	627.0	4277	201.7	150.8
	1200	510.0	4058	211.3	128.5
	1100	415.0	3603	211.5	104.6
	1000	390.0	3724	211.3	98.3
	900	365.0	3873	211.7	92.1
	700	190.0	2592	211.6	47.9
	600	145.0	2308	211.3	36.5
Prop Demand Data	1800	634.0	3363	205.3	155.1
	1700	534.1	3000	208.6	132.8
	1600	445.3	2658	210.5	111.7
	1500	366.9	2336	212.0	92.7
	1400	298.3	2035	213.7	76.0
	1200	187.9	1495	220.0	49.3
	1100	144.7	1256	224.6	38.7
	1000	108.7	1038	230.6	29.9
	900	79.3	841	238.9	22.6
	700	37.3	509	274.1	12.2
	600	23.5	374	309.6	8.7

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	850.2	2480	.338	41.0
	1700	850.2	2626	.342	41.6
	1600	850.2	2791	.338	41.0
	1500	850.2	2977	.332	40.3
	1400	840.8	3154	.332	39.8
	1200	683.9	2993	.347	33.9
	1100	556.5	2657	.348	27.6
	1000	523.0	2747	.347	26.0
	900	489.5	2856	.348	24.3
	700	254.8	1912	.348	12.7
	600	194.4	1702	.347	9.6
Prop Demand Data	1800	850.2	2480	.338	41.0
	1700	716.2	2213	.343	35.1
	1600	597.2	1960	.346	29.5
	1500	492.0	1723	.349	24.5
	1400	400.0	1501	.351	20.1
	1200	252.0	1103	.362	13.0
	1100	194.0	926	.369	10.2
	1000	145.8	766	.379	7.9
	900	106.3	620	.393	6.0
	700	50.0	375	.451	3.2
	600	31.5	276	.509	2.3

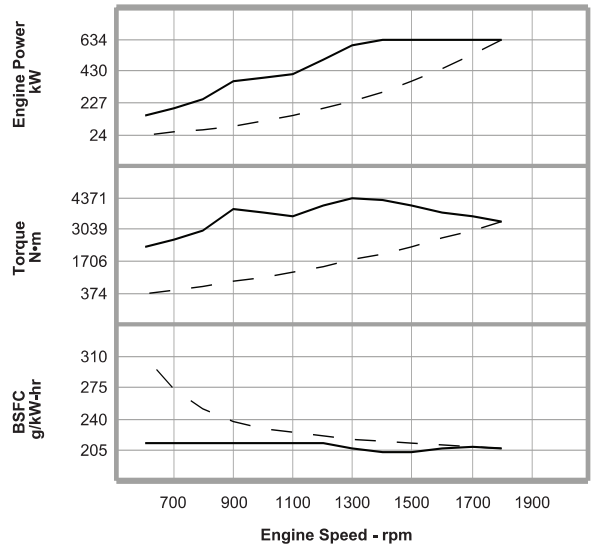
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

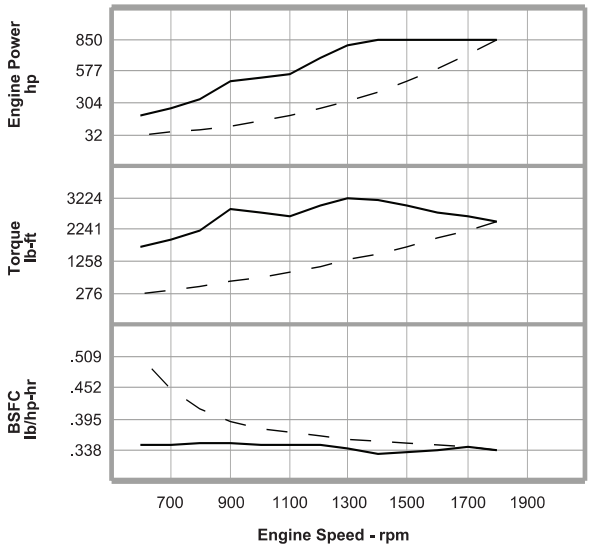
C32 DITA ACERT Performance Data

559 kW (750 hp) @ 1800 rpm
A Rating — DM9611-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power | Prop Demand | 634 kW



English | Maximum Power | Prop Demand | 850 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	634.0	3363	205.3	155.1
	1700	634.0	3561	208.1	157.3
	1600	634.0	3784	205.5	155.3
	1500	634.0	4036	201.9	152.6
	1400	627.0	4277	201.7	150.8
	1200	510.0	4058	211.3	128.5
	1100	415.0	3603	211.5	104.6
	1000	390.0	3724	211.3	98.3
	900	365.0	3873	211.7	92.1
	700	190.0	2592	211.6	47.9
	600	145.0	2308	211.3	36.5
Prop Demand Data	1800	634.0	3363	205.3	155.1
	1700	534.1	3000	208.6	132.8
	1600	445.3	2658	210.5	111.7
	1500	366.9	2336	212.0	92.7
	1400	298.3	2035	213.7	76.0
	1200	187.9	1495	220.0	49.3
	1100	144.7	1256	224.6	38.7
	1000	108.7	1038	230.6	29.9
	900	79.3	841	238.9	22.6
	700	37.3	509	274.1	12.2
	600	23.5	374	309.6	8.7

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	850.2	2480	.338	41.0
	1700	850.2	2626	.342	41.6
	1600	850.2	2791	.338	41.0
	1500	850.2	2977	.332	40.3
	1400	840.8	3154	.332	39.8
	1200	683.9	2993	.347	33.9
	1100	556.5	2657	.348	27.6
	1000	523.0	2747	.347	26.0
	900	489.5	2856	.348	24.3
	700	254.8	1912	.348	12.7
	600	194.4	1702	.347	9.6
Prop Demand Data	1800	850.2	2480	.338	41.0
	1700	716.2	2213	.343	35.1
	1600	597.2	1960	.346	29.5
	1500	492.0	1723	.349	24.5
	1400	400.0	1501	.351	20.1
	1200	252.0	1103	.362	13.0
	1100	194.0	926	.369	10.2
	1000	145.8	766	.379	7.9
	900	106.3	620	.393	6.0
	700	50.0	375	.451	3.2
	600	31.5	276	.509	2.3

Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

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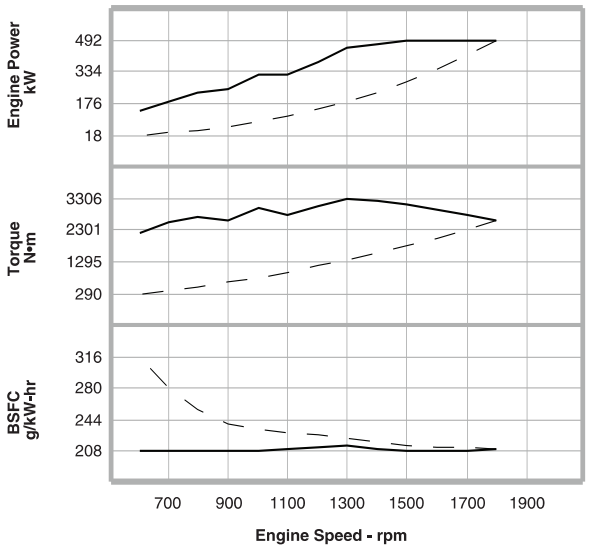
For most current information, please refer to TMI.

C32 DITA ACERT Performance Data

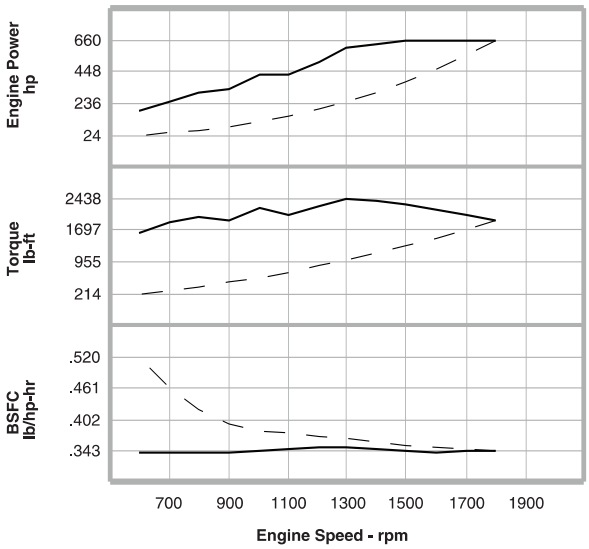
492 kW (660 hp) @ 1800 rpm

EPA Tier 2 and IMO Certified

A Rating — DM9612-00



Metric | Maximum Power, Prop Demand | 492 kW



English | Maximum Power, Prop Demand | 660 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	492.0	2610	208.4	122.2
	1700	492.0	2764	207.0	121.4
	1600	492.0	2936	206.4	121.0
	1500	492.0	3132	207.3	121.6
	1400	475.0	3240	209.8	118.8
	1200	382.0	3040	211.9	96.5
	1100	320.0	2778	209.5	79.9
	1000	315.0	3008	207.1	77.8
	900	245.0	2600	206.2	60.2
	700	185.0	2524	206.5	45.5
	600	140.0	2228	206.5	34.5
Prop Demand Data	1800	492.0	2610	208.4	122.2
	1700	414.5	2328	210.5	104.0
	1600	345.5	2062	212.1	87.4
	1500	284.7	1813	213.9	72.6
	1400	231.5	1579	217.5	60.0
	1200	145.8	1160	224.6	39.0
	1100	112.3	975	227.2	30.4
	1000	84.4	806	231.1	23.2
	900	61.5	653	240.3	17.6
	700	28.9	395	280.8	9.7
	600	18.2	290	316.5	6.9

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	659.8	1925	.343	32.3
	1700	659.8	2039	.340	32.1
	1600	659.8	2165	.339	32.0
	1500	659.8	2310	.341	32.1
	1400	637.0	2390	.345	31.4
	1200	512.3	2242	.348	25.5
	1100	429.1	2049	.344	21.1
	1000	422.4	2218	.340	20.6
	900	328.6	1918	.339	15.9
	700	248.1	1861	.339	12.0
	600	187.7	1643	.339	9.1
Prop Demand Data	1800	659.8	1925	.343	32.3
	1700	555.9	1717	.346	27.5
	1600	463.3	1521	.349	23.1
	1500	381.8	1337	.352	19.2
	1400	310.4	1165	.358	15.9
	1200	195.5	856	.369	10.3
	1100	150.6	719	.374	8.0
	1000	113.2	594	.380	6.1
	900	82.5	482	.395	4.6
	700	38.8	291	.462	2.6
	600	24.4	214	.520	1.8

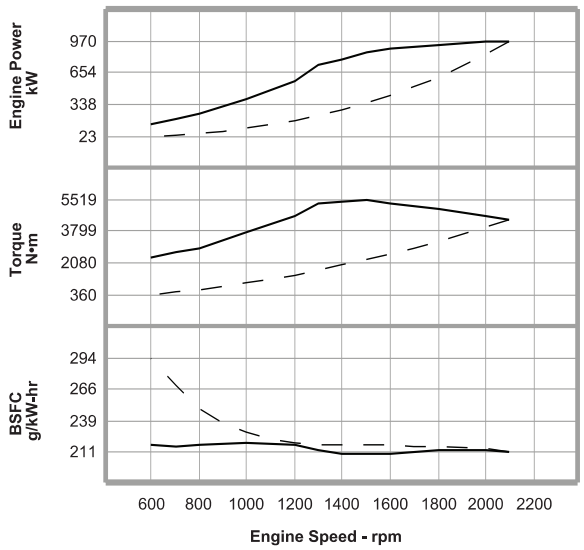
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

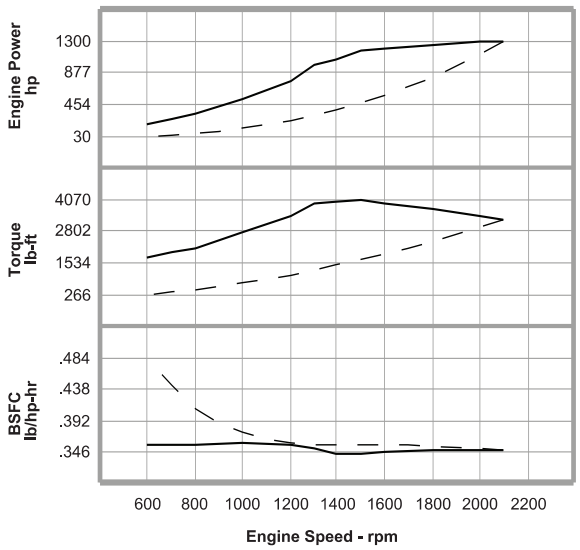
C32 DITA ACERT Performance Data

970 kW (1300 hp) @ 2100 rpm
B Rating — DM9605-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power, Prop Demand | 970 kW



English | Maximum Power, Prop Demand | 1300 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	2100	969.5	4409	210.8	243.6
	2000	969.5	4629	211.7	244.6
	1800	936.0	4966	211.4	235.9
	1600	895.0	5342	209.3	223.3
	1500	867.0	5519	208.2	215.2
	1400	792.0	5402	208.6	196.9
	1300	726.0	5333	212.2	183.6
	1200	578.0	4600	216.0	148.8
	1000	388.0	3705	217.8	100.7
	700	193.0	2633	215.6	49.6
	600	146.0	2324	216.9	37.7
Prop Demand Data	2100	969.5	4409	210.8	243.6
	2000	837.5	3999	212.9	212.6
	1800	610.5	3239	214.9	156.4
	1600	428.8	2559	216.0	110.4
	1500	353.3	2249	215.9	90.9
	1300	230.0	1689	215.9	59.2
	1200	180.9	1440	217.7	46.9
	1000	104.7	1000	227.9	28.4
	900	76.3	810	236.9	21.6
	700	35.9	490	269.4	11.5
	600	22.6	360	294.3	7.9

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	2100	1300.1	3252	.347	64.4
	2000	1300.1	3414	.348	64.6
	1800	1255.2	3663	.348	62.3
	1600	1200.2	3940	.344	59.0
	1500	1162.7	4070	.342	56.8
	1400	1062.1	3984	.343	52.0
	1300	973.6	3933	.349	48.5
	1200	775.1	3393	.355	39.3
	1000	520.3	2733	.358	26.6
	700	258.8	1942	.354	13.1
	600	195.8	1714	.357	10.0
Prop Demand Data	2100	1300.1	3252	.347	64.4
	2000	1123.1	2949	.350	56.2
	1800	818.7	2389	.353	41.3
	1600	575.0	1887	.355	29.2
	1500	473.8	1659	.355	24.0
	1300	308.4	1246	.355	15.6
	1200	242.6	1062	.358	12.4
	1000	140.4	738	.375	7.5
	900	102.3	597	.389	5.7
	700	48.1	361	.443	3.0
	600	30.3	266	.484	2.1

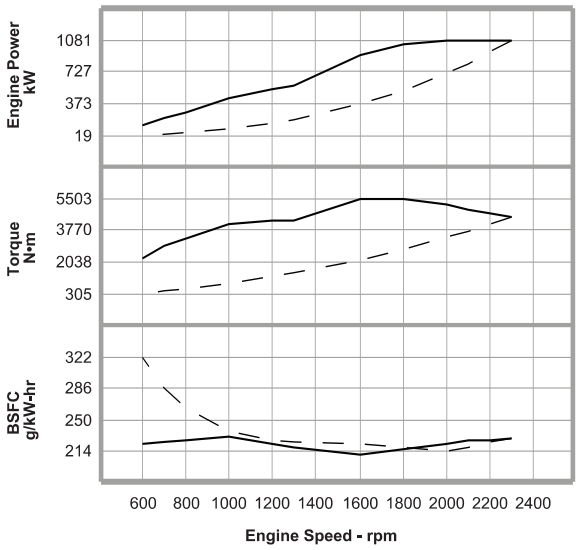
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

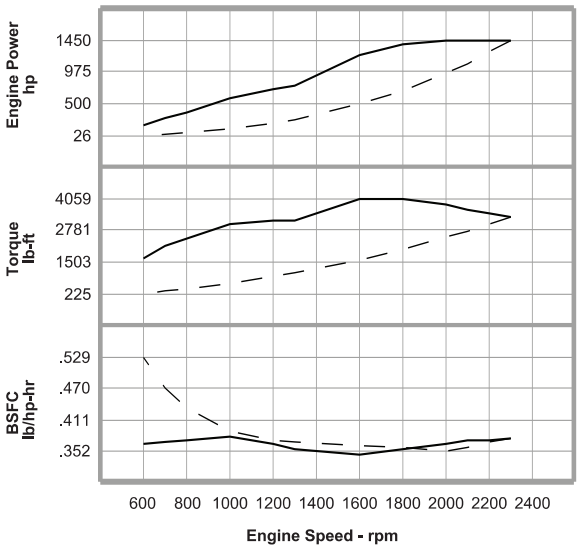
C32 DITA ACERT Performance Data

1081 kW (1450 hp) @ 2300 rpm
C Rating — DM9603-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power | Prop Demand | 1081 kW



English | Maximum Power | Prop Demand | 1450 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	2300	1081.0	4488	227.3	292.9
	2200	1081.0	4692	226.1	291.3
	2100	1081.0	4916	224.6	289.4
	2000	1081.0	5161	222.2	286.3
	1800	1028.0	5454	215.0	263.5
	1600	922.0	5503	209.3	230.0
	1300	581.0	4268	216.2	149.7
	1200	539.0	4289	221.1	142.1
	1000	427.0	4078	229.6	116.8
	700	211.0	2878	223.3	56.2
	600	140.0	2228	220.4	36.8
Prop Demand Data	2300	1081.0	4488	227.3	292.9
	2200	946.0	4106	223.0	251.4
	2100	822.8	3742	217.6	213.5
	2000	710.8	3394	213.8	181.2
	1800	518.2	2749	216.4	133.7
	1600	363.9	2172	220.3	95.6
	1300	195.2	1434	223.0	51.9
	1200	153.5	1222	224.7	41.1
	1000	88.8	848	235.3	24.9
	700	30.5	416	287.3	10.4
	600	19.2	305	321.9	7.4

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	2300	1449.6	3310	.374	77.4
	2200	1449.6	3460	.372	77.0
	2100	1449.6	3626	.369	76.5
	2000	1449.6	3806	.365	75.6
	1800	1378.6	4022	.353	69.6
	1600	1236.4	4059	.344	60.8
	1300	779.1	3148	.355	39.5
	1200	722.8	3163	.363	37.5
	1000	572.6	3008	.377	30.9
	700	283.0	2123	.367	14.8
	600	187.7	1643	.362	9.7
Prop Demand Data	2300	1449.6	3310	.374	77.4
	2200	1268.6	3028	.367	66.4
	2100	1103.4	2760	.358	56.4
	2000	953.2	2503	.351	47.9
	1800	694.9	2027	.356	35.3
	1600	488.0	1602	.362	25.3
	1300	261.8	1058	.367	13.7
	1200	205.8	901	.369	10.9
	1000	119.1	625	.387	6.6
	700	40.9	307	.472	2.7
	600	25.7	225	.529	2.0

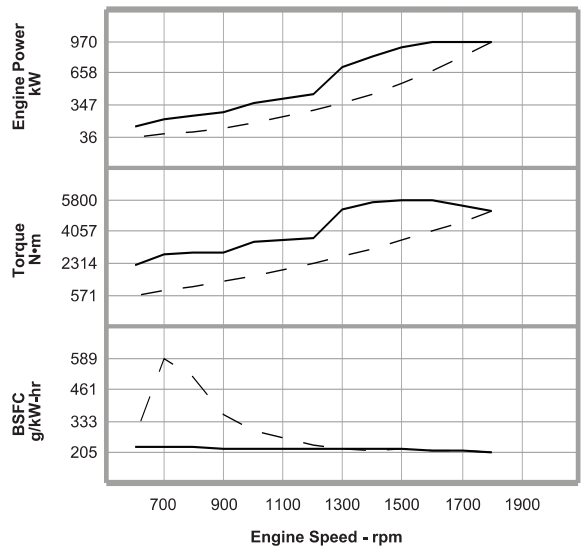
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

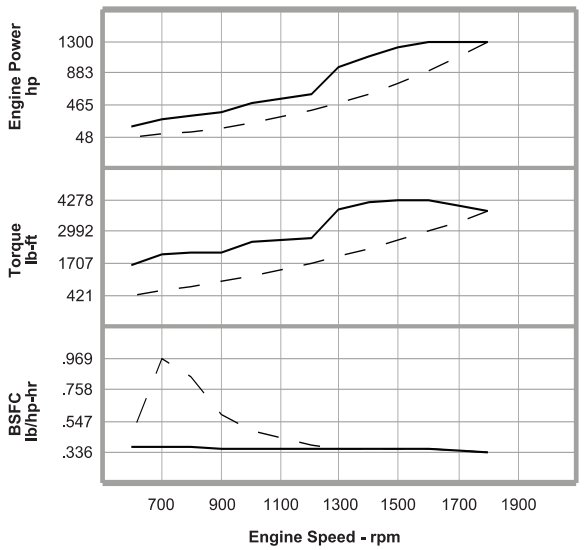
C32 DITA ACERT Performance Data

970 kW (1300 hp) @ 1800 rpm
C Rating — DM9604-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power / Prop Demand | 970 kW



English | Maximum Power / Prop Demand | 1300 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	969.5	5143	204.6	236.5
	1700	969.5	5446	210.1	242.8
	1600	969.5	5786	212.5	245.6
	1500	911.0	5800	213.8	232.2
	1400	826.0	5634	215.2	211.9
	1300	717.0	5267	217.0	185.5
	1200	460.0	3661	218.1	119.6
	1000	369.0	3524	218.4	96.1
	900	278.0	2950	219.1	72.6
	700	204.0	2783	223.1	54.3
	600	139.0	2212	220.1	36.5
Prop Demand Data	1800	969.5	5143	204.6	236.5
	1700	816.7	4588	210.2	204.6
	1600	680.9	4064	212.4	172.4
	1500	561.1	3572	212.8	142.3
	1400	456.2	3111	212.5	115.6
	1300	365.2	2683	216.4	94.2
	1200	287.3	2286	229.7	78.7
	1000	166.2	1587	288.2	57.1
	900	121.2	1286	364.3	52.6
	700	57.0	778	589.3	40.1
	600	35.9	571	268.7	11.5

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	1300.1	3793	.336	62.5
	1700	1300.1	4017	.345	64.1
	1600	1300.1	4267	.349	64.9
	1500	1221.7	4278	.351	61.3
	1400	1107.7	4155	.354	56.0
	1300	961.5	3885	.357	49.0
	1200	616.9	2700	.359	31.6
	1000	494.8	2599	.359	25.4
	900	372.8	2176	.360	19.2
	700	273.6	2053	.367	14.3
	600	186.4	1631	.362	9.6
Prop Demand Data	1800	1300.1	3793	.336	62.5
	1700	1095.2	3384	.346	54.0
	1600	913.1	2997	.349	45.5
	1500	752.4	2634	.350	37.6
	1400	611.8	2294	.349	30.5
	1300	489.7	1979	.356	24.9
	1200	385.3	1686	.378	20.8
	1000	222.9	1170	.474	15.1
	900	162.5	948	.599	13.9
	700	76.4	574	.969	10.6
	600	48.1	421	.442	3.0

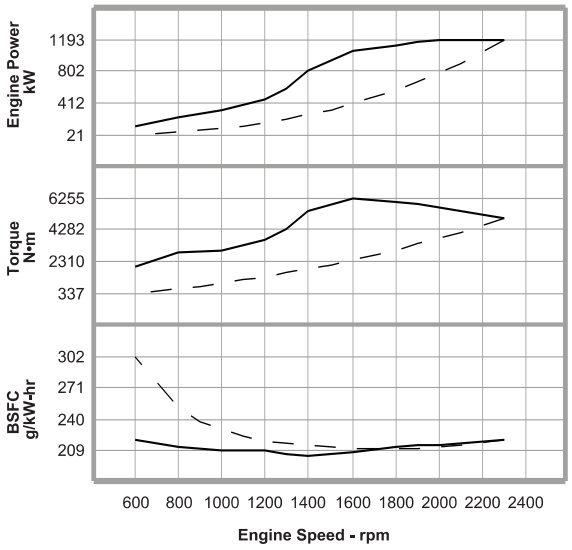
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

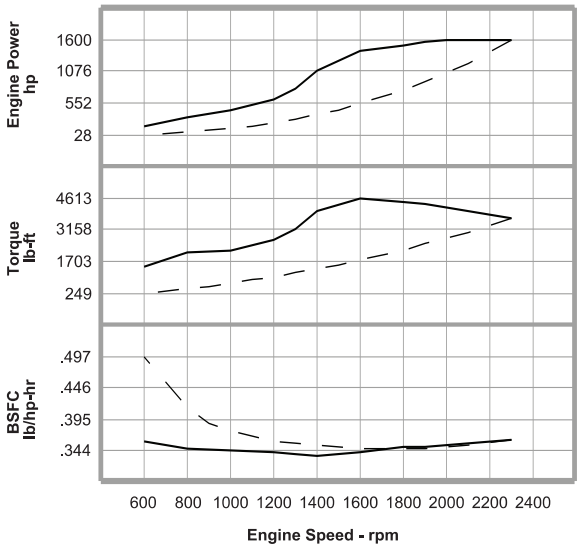
C32 DITA ACERT Performance Data

1193 kW (1600 hp) @ 2300 rpm
D Rating — DM9601-00

EPA Tier 2 and IMO Certified



Metric | Maximum Power | Prop Demand | 1193 kW



English | Maximum Power | Prop Demand | 1600 hp

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	2300	1193.0	4953	218.4	310.6
	2000	1193.0	5696	213.4	303.5
	1900	1165.0	5855	212.7	295.4
	1800	1132.0	6005	211.3	285.1
	1600	1048.0	6255	205.9	257.2
	1400	802.0	5470	203.0	194.1
	1300	581.0	4268	205.3	142.2
	1200	455.0	3621	207.5	112.6
	1000	312.0	2979	208.9	77.7
	800	237.0	2829	211.0	59.6
	600	125.0	1989	218.1	32.5
Prop Demand Data	2300	1193.0	4953	218.4	310.6
	2100	908.1	4129	213.8	231.5
	2000	784.4	3745	211.9	198.1
	1800	571.8	3034	209.4	142.8
	1600	401.6	2397	209.8	100.4
	1400	269.1	1835	213.5	68.5
	1300	215.4	1582	215.5	55.3
	1100	130.5	1133	222.2	34.6
	1000	98.1	936	228.6	26.7
	800	50.2	599	251.7	15.1
	600	21.2	337	302.2	7.6

Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb-ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	2300	1599.8	3653	.359	82.1
	2000	1599.8	4201	.351	80.2
	1900	1562.3	4318	.350	78.0
	1800	1518.0	4429	.347	75.3
	1600	1405.4	4613	.338	67.9
	1400	1075.5	4034	.334	51.3
	1300	779.1	3148	.338	37.6
	1200	610.2	2671	.341	29.7
	1000	418.4	2197	.343	20.5
	800	317.8	2086	.347	15.7
	600	167.6	1467	.359	8.6
Prop Demand Data	2300	1599.8	3653	.359	82.1
	2100	1217.8	3045	.351	61.2
	2000	1051.9	2762	.348	52.3
	1800	766.8	2238	.344	37.7
	1600	538.6	1768	.345	26.5
	1400	360.9	1353	.351	18.1
	1300	288.9	1167	.354	14.6
	1100	175.0	836	.365	9.1
	1000	131.6	690	.376	7.1
	800	67.3	442	.414	4.0
	600	28.4	249	.497	2.0

Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

For most current information, please refer to TMI.

CATERPILLAR®

C32 ACERT™ MARINE PROPULSION

492-1194 bkW (660-1600 bhp)

ENGINE DIMENSIONS

C32 ACERT Engine Dimensions (approx.)		
Length to Flywheel Housing (KC)	2072.6 mm	81.6 in.
Length to Flywheel Housing (HeX)	1992.0 mm	78.4 in.
Width	1442.7 mm	56.8 in.
Height	1521.5 mm	59.9 in.
Weight (dry)	3220 kg	7100 lb

RATING DEFINITIONS AND CONDITIONS

A Rating (Unrestricted Continuous)
Typical applications: For vessels operating at rated load and rated speed up to 100% of the time without interruption or load cycling (80% to 100% load factor). Typical applications could include but are not limited to vessels such as freighters, tugboats, bottom drag trawlers, or deep river tugboats. Typical operation ranges from 5000 to 8000 hours per year.

B Rating (Heavy Duty)
Typical applications: For vessels operating at rated load and rated speed up to 80% of the time, or 10 hours out of 12, with some load cycling (40% to 80% load factor). Typical applications could include but are not limited to vessels such as mid-water trawlers, purse seiner, crew and supply boats, ferries, or towboats. Typical operation ranges from 3000 to 5000 hours per year.

C Rating (Maximum Continuous)
Typical applications: For vessels operating at rated load and rated speed up to 50% of the time, or 6 hours out of 12, with cyclical load and speed (20% to 80% load factor). Typical applications could include but are not limited to vessels such as ferries, harbor tugs, fishing boats, offshore service boats, displacement hull yachts, or short trip coastal freighters. Typical operation ranges from 2000 to 4000 hours per year.

D Rating (Intermittent Duty)
Typical applications: For vessels operating at rated load and rated speed up to 16% of the time, or 2 hours out of 12, (up to 50% load factor). Typical applications could include but are not limited to vessels such as offshore patrol boats, customs boats, police boats, some fishing boats, fireboats, or harbor tugs. Typical operation ranges from 1000 to 3000 hours per year.

Power at declared engine speed is in accordance with ISO3046-1:2002E. Caterpillar maintains ISO9001:1994/QS-9000 approved engine test facilities to assure accurate calibration of test equipment. Electronically controlled engines are set at the factory at the advertised power corrected to standard ambient conditions. The published fuel consumption rates are in accordance with ISO3046-1:2002E.

Fuel rates are based on fuel oil of 125° 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/L (7.001 lb/U.S. gal). Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

Power produced at the flywheel will be within standard tolerances up to 49°C (120°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

U.S. Sourced
LEHM7227-00 (9-07)