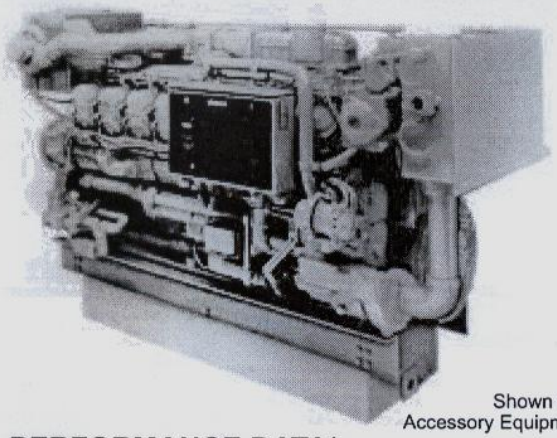
CATERPILLAR®

Marine Engine

3516B

2028-2230 mhp/2000-2200 bhp
1600-1800 rpm



Shown with Accessory Equipment

SPECIFICATIONS

V-16, 4-Stroke-Cycle Diesel
Bore — mm (in) 170 (6.7)
Stroke — in (mm) 190 (7.5)
Displacement — L (cu in) 69 (4,210)
Rotation (from flywheel end) . . . . . ccw or cw
Compression Ratio 14.0:1
Capacity for Liquids — L (U.S. gal)
Cooling System 384 (101.4)
Lube Oil System (refill) 830 (219.3)
Oil Change Interval . . . . . 1000 hrs
Minimum Lube Oil Grade (required) CF4
Engine Weight, Net Dry (approx) — kg (lb) . . 8,029 (17,700)

PERFORMANCE DATA*

Turbocharged-Separate Circuit Aftercooled

Optimized for fuel economy

Rating Level	C			B			A			C			B			A		
Rated rpm	1800			1800			1800			1800			1800			1800		
Engine Power @ rpm	1641 kW (2200 bhp) 2230 PS			1566 kW (2100 bhp) 2129 PS			1492 kW (2000 bhp) 2028 PS			1641 kW (2200 bhp) 2230PS			1566 kW (2100 bhp) 2129 PS			1492 kW (2000 bhp) 2028 PS		
rpm	1800	1635	1430	1800	1635	1430	1800	1635	1430	1800	1635	1430	1800	1635	1430	1800	1635	1430
kW	1641	1231	821	1566	1175	783	1492	1119	746	1641	1231	821	1566	1175	783	1492	1119	746
g/kW-hr	196	199	201	198	199	201	199	200	203	202	201	204	202	201	205	202	199	203
L/hr	383	292	197	370	279	188	354	267	181	395	295	200	377	281	191	359	265	181
bhp	2200	1650	1100	2100	1575	1050	2000	1500	1000	2200	1650	1100	2100	1575	1050	2000	1500	1000
lb/hp-hr	0.322	.0327	0.330	0.325	0.328	0.331	0.328	0.329	0.333	0.332	0.330	0.335	0.332	0.330	0.337	0.332	0.327	0.333
US gal/hr	101.3	77.1	51.9	97.5	73.8	49.6	93.7	70.4	47.6	104.3	77.7	52.6	99.6	74.2	50.5	94.8	70.1	47.6
NOx g/hp-hr**	9.25			9.26			9.30			6.10			6.10			6.10		

Optimized for low emissions

Rating Level	C			B			A			C			B			A		
Rated rpm	1600			1600			1600			1600			1600			1600		
Engine Power @ rpm	1641 kW (2200 bhp) 2230 PS			1566 kW (2100 bhp) 2129 PS			1492 kW (2000 bhp) 2028 PS			1641 kW (2200 bhp) 2230 PS			1566 kW (2100 bhp) 2129 PS			1492 kW (2000 bhp) 2028 PS		
rpm	1600	1453	1270	1600	1453	1270	1600	1453	1270	1600	1453	1270	1600	1453	1270	1600	1453	1270
kW	1641	1231	821	1566	1175	783	1492	1119	746	1641	1231	821	1566	1175	783	1492	1119	746
g/kW-hr	193	196	198	195	196	198	196	197	199	199	198	197	199	198	198	200	198	199
L/hr	378	288	194	364	274	185	349	263	177	389	290	193	371	277	185	356	264	177
bhp	2200	1650	1100	2100	1575	1050	2000	1500	1000	2200	1650	1100	2100	1575	1050	2000	1500	1000
lb/hp-hr	0.317	0.322	0.325	0.320	0.323	0.326	0.323	0.324	0.328	0.328	0.325	0.324	0.328	0.325	0.326	0.329	0.325	0.328
US gal/hr	99.5	75.9	51.0	95.9	72.7	48.9	92.3	69.4	46.9	103.1	76.5	50.9	98.4	73.1	58.9	94.0	69.6	46.9
NOx g/hp-hr**	9.20			9.20			9.11			6.10			6.10			6.10		

* Represents performance along a typical fixed pitch propeller curve. Fuel and emission rates based on 30°C (86°F) water supplied to the aftercooler.
** NOx per ISO8178 Part 4 Test Cycle E3.

RATING LEVEL DEFINITIONS

C – Planing hull vessels such as ferries, fishing boats moving at higher speeds out and back (i.e. lobster, crayfish, and tuna), off-shore service boats, and also displacement hull yachts and short trip coastal freighters where engine load and speed are cyclical.

B – Displacement hull vessels such as mid-water trawlers, purse seiners, crew and supply boats, ferries, and towboats where locks, sandbars, and curves dictate frequent slowing, and engine load and speed are constant with some cycling.

A – For heavy-duty service in ocean-going displacement hulls such as freighters, tugboats, bottom drag trawlers, and deep river towboats when the engine is operated at rated load and speed up to 100% of the time without interruption or load cycling.