

Shown with optional equipment and generator.

The products briefly described here represent Caterpillar® drilling modules for use as prime rig power on electric drill rigs. These Cat® engines, generators, radiators, and bases are a result of years of experience in the oilfields and an extensive design and testing program aimed at developing oilfield drilling modules that meet the demands of the drilling contractor.

It is essential to have a properly designed base for diesel electric drilling modules used on drilling rigs. Misalignment between engine and generator can cause

CATERPILLAR® ENGINE SPECIFICATIONS

Bore 170 mm (6.7 in.)
Stroke 215 mm (8.5 in.)
Displacement..... 69 L (4209 cu. in.)
Low idle 450 rpm
Rotation..... Counterclockwise
Weight with Base — 25 ft. (dry) .. 38 200 kg (17,328 lb.)

vibration and shorten the life of couplings and bearings. Caterpillar has recognized this fact and designed a base which provides a built-in three-point mounting system. The engine and generator are mounted by Caterpillar on this base and aligned to exacting tolerances at the factory.

The entire drilling module is manufactured and assembled by Caterpillar, providing single source responsibility.

FEATURES

Single Source Supplier

Caterpillar

- Casts engine blocks, heads, cylinder liners, and flywheel housings

- Machines critical components

- Assembles complete engine

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

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

Testing

Prototype testing on every model:

- proves computer design

- verifies system torsional stability

- functionality tests every model

Every Caterpillar engine is dynamometer tested under full load to ensure proper engine performance.

Unmatched Product Support Offered Through Worldwide Caterpillar Dealer Network

More than 2,100 dealer outlets with Caterpillar factory-trained dealer technicians service every aspect of your engine.

99.7% of parts orders filled within 24 hours worldwide.

Caterpillar parts and labor warranty

Preventive maintenance agreements available for repair before failure.

S•O•SSM program matches your oil sample to Caterpillar set standards to determine:

- internal engine component condition

- presence of unwanted fluids

- presence of combustion by-products

Web Site

For all your petroleum power requirements, visit www.cat-oilandgas.com.

STANDARD EQUIPMENT

Air Inlet System

- Aftercooler core, corrosion resistant coating
- Air cleaners, regular duty, installed

Base Arrangement

- Engine and generator three-point mounted into outer base, oil drain extension, oil drip pan

Control System

- ADEM™ II modules with electronically controlled unit injectors (24 volt DC power from SCR control system)

Cooling System

- To ensure emissions compliance, optional or customer supplied heat exchangers or radiators must be capable of rejecting enough heat to allow proper operation at worst case site conditions and also must supply 60° C (140° F) SCAC cooling water to the aftercooler inlet, with an SCAC flow rate of at least 130 gpm with an ambient temperature of 30° C (86° F) and at site conditions.
- Heat exchanger cooled offshore: inlet controlled thermostats and housing, jacket water pump — gear driven, engine mounted expansion tank, aftercooler fresh water cooling pump — gear driven centrifugal, SCAC pump circuit contains a thermostat to keep the aftercooler coolant from falling below 30° C (85° F)
- Radiator cooled offshore: outlet controlled thermostat and housing, jacket water pump — gear driven, single outlet, aftercooler fresh water cooling pump — gear driven centrifugal, SCAC pump circuit contains a thermostat to keep the aftercooler coolant from falling below 30° C (85° F)

Exhaust System

- Dry gas-tight manifolds with thermo-laminated heat shields
- Dual turbochargers with thermo-laminated heat shields and watercooled bearing housing
- Flexible exhaust fitting/weldable exhaust flange

Flywheels and Flywheel Housings

- Flywheel, SAE No. 00, 183 teeth
- Flywheel housing, SAE No. 00, SAE standard rotation

Fuel System

- Electronically controlled unit injectors
- Fuel filter, LH
- Fuel transfer and priming pumps
- Flexible fuel lines

Instrumentation

- Electronic instrument panel
 - LH with analog gauges for: oil and fuel pressure, oil and fuel filter differential, system DC voltage, exhaust and water temperature, fuel pressure, air inlet restriction
 - digital display for: tachometer, hours, fuel, service meter consumption — total and instantaneous

Lube System

- Crankcase breather, top mounted
- Deep sump oil pan
- Oil filler and dipstick
- Oil filter, cartridge type, LH
- Oil pump, gear type

STANDARD EQUIPMENT (continued)

Protection System

- ADEM™ II monitoring system provides engine deration, alarm, or shutdown strategies to protect against adverse operating conditions. Selected parameters are customer programmable. Status available on engine mounted instrument panel and can be broadcast through the optional customer communications module or programmable relay control module(s). Initially set as follows:
 - Safety shutoff protection, electrical: oil pressure, water temperature, overspeed, crankcase pressure, aftercooler temperature, air inlet shutoff activated on overspeed or emergency stop included
 - Alarms, electrical: ECU voltage, oil pressure, water temperature (low and high), overspeed, crankcase pressure, aftercooler temperature (SCAC only), low water level (sensor shipped loose if no mounted expansion tank or radiator), air inlet restriction, exhaust stack temperature, filter differential pressure (oil and fuel)

- Derate, electrical: high water temperature, crankcase pressure, aftercooler temperature, air inlet restriction, altitude, exhaust temperature
- Emergency stop pushbutton (on instrument panel)
- Alarm switches (oil pressure and water temperature), for connection to customer supplied alarm panel — unwired

Starting and Control

- Air-driven prelube pump, air silencer, air starting motor

General

- Lifting eyes, front and rear
- Paint, Caterpillar yellow
- Vibration damper and guard

ACCESSORY EQUIPMENT

- Crankcase explosion relief valves
- Customer communication module
- Duplex fuel and oil filters
- Jacket water heaters
- Mufflers
- Primary fuel filter
- Fuel cooler shell and tube
- Pyrometer and cylinder thermocouples
- Additional instrumentation: air cleaner restriction (2), intake manifold temperature, lubricating oil temperature, fuel filter differential
- Direct rack control interface
- Marine Society certificates
- Bypass centrifugal oil filters
- Metal particle detector

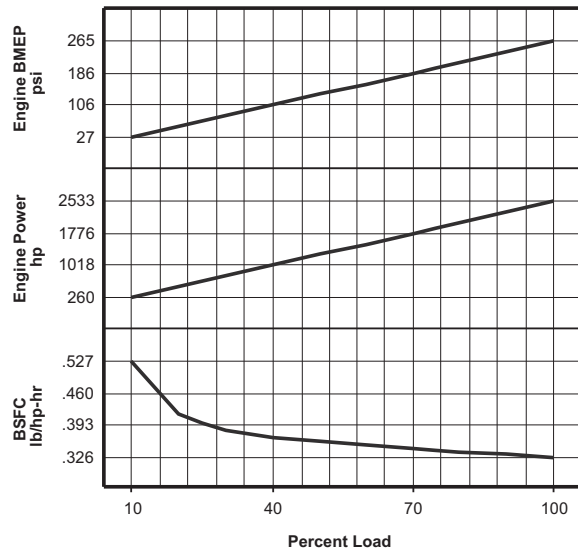
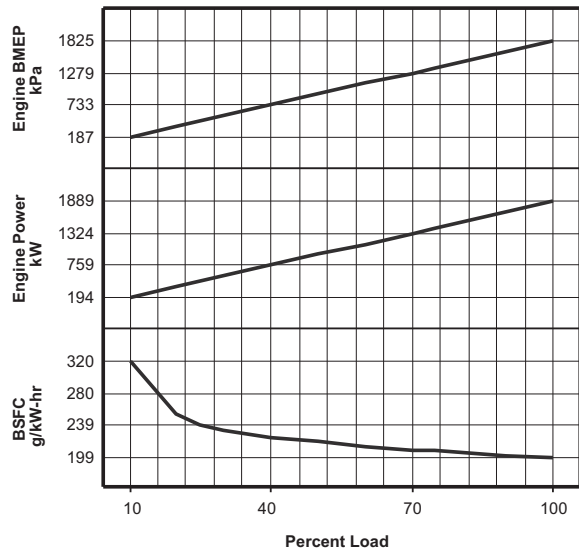
OIL & GAS PERFORMANCE DATA

3516B DITA

1825 kW — 60 Hz @ 1800 rpm

Prime Rating — DM6955-02

IMO/EPA Certified — Aftercooler Temperature 60°C (140°F)



Gen Power ekW	Percent Load	Engine Power kW	Engine BMEP kPa	BSFC g/kW-hr	Fuel Rate L/hr
1825	100	1889.2	1825	199	447.8
1643	90	1699.0	1641	202	408.2
1460	80	1509.8	1459	205	368.8
1369	75	1415.5	1368	207	349.1
1278	70	1321.1	1276	209	329.0
1095	60	1133.1	1095	213	288.1
913	50	945.6	914	219	246.5
730	40	761.2	735	224	203.5
548	30	574.5	555	234	159.9
456	25	480.3	464	241	137.9
365	20	385.4	372	254	116.5
183	10	193.9	187	320	74.1

Gen Power ekW	Percent Load	Engine Power hp	Engine BMEP psi	BSFC lb/hp-hr	Fuel Rate gph
1825	100	2533.5	265	.327	118.3
1643	90	2278.4	238	.331	107.8
1460	80	2024.7	212	.337	97.4
1369	75	1898.2	198	.340	92.2
1278	70	1771.6	185	.343	86.9
1095	60	1519.5	159	.351	76.1
913	50	1268.1	133	.359	65.1
730	40	1020.8	107	.369	53.8
548	30	770.4	80	.384	42.2
456	25	644.1	67	.396	36.4
365	20	516.8	54	.417	30.8
183	10	260.0	27	.527	19.6

Gen Power ekW	Intake Manifold Temp °C	Intake Manifold Pressure kPa	Intake Air Flow m³/min	Exh Manifold Temp °C	Exh Stk Temp °C	Exh Gas Flow m³/min
1825	70.4	202.20	148.0	606.2	493.8	395.8
1643	68.9	176.60	135.7	600.8	498.7	365.1
1460	67.7	151.10	123.4	595.4	504.5	334.6
1369	67.1	138.30	117.3	592.7	507.8	319.2
1278	66.6	125.10	110.4	589.3	511.3	302.2
1095	65.7	98.70	96.9	580.2	518.2	267.5
913	64.9	72.40	83.4	568.1	524.9	232.0
730	64.4	49.30	71.5	539.4	510.5	196.2
548	63.9	28.20	60.8	495.0	479.2	159.9
456	63.7	18.50	55.9	466.8	457.1	141.6
365	63.5	10.30	51.7	430.3	426.3	125.5
183	63.1	3.50	45.0	339.7	345.9	95.9

Gen Power ekW	Intake Manifold Temp °F	Intake Manifold Pressure in-hg	Intake Air Flow cfm	Exh Manifold Temp °F	Exh Stk Temp °F	Exh Gas Flow cfm
1825	158.7	59.88	5226.6	1123.2	920.8	13977.6
1643	156.0	52.30	4792.2	1113.4	929.7	12893.4
1460	153.9	44.75	4357.8	1103.7	940.1	11816.3
1369	152.8	40.96	4142.4	1098.9	946.0	11272.5
1278	151.9	37.05	3898.7	1092.7	952.3	10672.1
1095	150.3	29.23	3422.0	1076.4	964.8	9446.7
913	148.8	21.44	2945.2	1054.6	976.8	8193.0
730	147.9	14.60	2525.0	1002.9	950.9	6928.7
548	147.0	8.35	2147.1	923.0	894.6	5646.8
456	146.7	5.48	1974.1	872.2	854.8	5000.6
365	146.3	3.05	1825.8	806.5	799.3	4432.0
183	145.6	1.04	1589.2	643.5	654.6	3386.7

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW kW	Rej to Atmos kW	Rej to Exh kW	From Oil Clr kW
1825	100	691	136.0	1773	223.0
1643	90	646	134.0	1639	203.0
1460	80	601	132.0	1505	184.0
1369	75	578	132.0	1438	174.0
1278	70	554	131.0	1366	164.0
1095	60	504	128.0	1215	144.0
913	50	451	125.0	1054	123.0
730	40	393	117.0	873	101.0
548	30	331	108.0	689	80.0
456	25	297	102.0	597	69.0
365	20	263	97.0	510	58.0
183	10	190	84.0	340	37.0

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW Btu/min	Rej to Atmos Btu/min	Rej to Exh Btu/min	From Oil Clr Btu/min
1825	100	39297	7734.3	100830	12682.0
1643	90	36738	7620.6	93210	11544.6
1460	80	34179	7506.8	85589	10464.1
1369	75	32871	7506.8	81779	9895.4
1278	70	31506	7450.0	77684	9326.7
1095	60	28662	7279.3	69097	8189.3
913	50	25648	7108.7	59941	6995.0
730	40	22350	6653.8	49647	5743.9
548	30	18824	6141.9	39183	4549.6
456	25	16890	5800.7	33951	3924.0
365	20	14957	5516.4	29004	3298.5
183	10	10805	4777.1	19336	2104.2

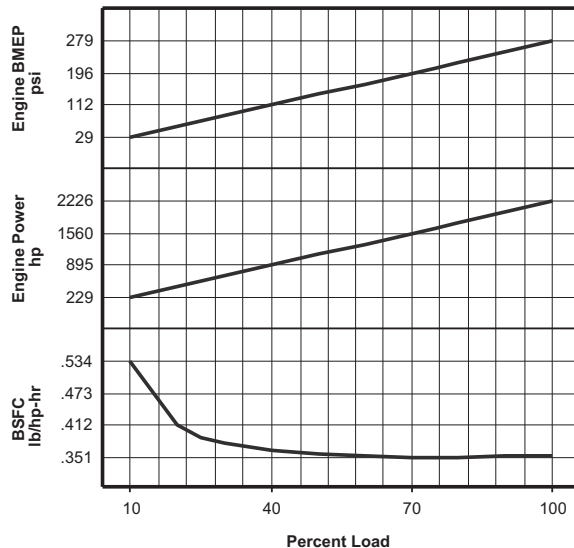
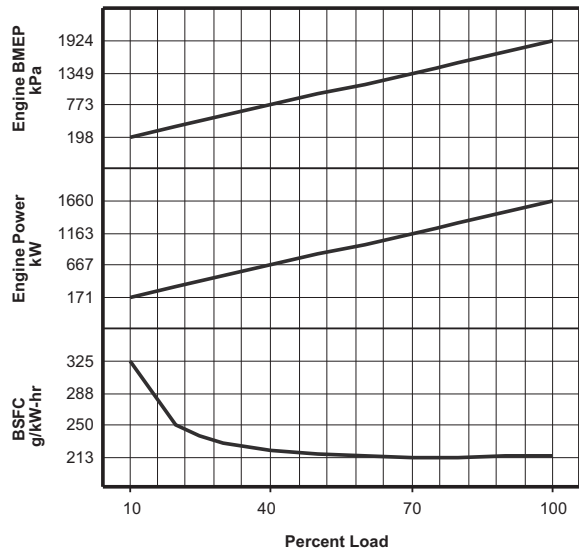
OIL & GAS PERFORMANCE DATA

3516B DITA

1600 ekW — 50 Hz @ 1500 rpm

Prime Rating — DM6951-01

IMO Certified — Aftercooler Temperature 60°C (140°F)



Gen Power ekW	Percent Load	Engine Power kW	Engine BMEP kPa	BSFC g/kW-hr	Fuel Rate L/hr
1600	100	1659.8	1924	214	423.5
1440	90	1491.2	1729	214	381.1
1280	80	1324.1	1535	213	336.3
1200	75	1241.0	1439	213	314.9
1120	70	1157.8	1342	213	294.1
960	60	992.6	1151	214	253.6
800	50	828.2	960	217	214.2
640	40	667.5	774	221	176.0
480	30	504.4	585	230	138.1
400	25	421.9	489	237	119.3
320	20	338.8	393	250	101.1
160	10	170.7	198	325	66.2

Gen Power ekW	Percent Load	Engine Power hp	Engine BMEP psi	BSFC lb/hp-hr	Fuel Rate gph
1600	100	2225.8	279	.352	111.9
1440	90	1999.7	251	.352	100.7
1280	80	1775.6	223	.350	88.8
1200	75	1664.2	209	.350	83.2
1120	70	1552.6	195	.350	77.7
960	60	1331.1	167	.352	67.0
800	50	1110.6	139	.357	56.6
640	40	895.1	112	.364	46.5
480	30	676.4	85	.377	36.5
400	25	565.8	71	.390	31.5
320	20	454.3	57	.412	26.7
160	10	228.9	29	.534	17.5

Gen Power ekW	Intake Manifold Temp °C	Intake Manifold Pressure kPa	Intake Air Flow m³/min	Exh Manifold Temp °C	Exh Stk Temp °C	Exh Gas Flow m³/min
1600	74.9	235.40	142.2	623.5	492.8	382.2
1440	73.0	204.90	131.2	604.4	485.1	348.9
1280	70.9	173.40	118.4	588.5	474.5	310.5
1200	69.8	153.30	110.6	581.0	477.3	290.9
1120	69.0	134.40	102.9	573.7	480.0	271.8
960	68.1	101.70	88.7	558.4	483.0	235.4
800	67.2	73.50	75.7	542.0	481.7	200.3
640	65.9	49.30	63.9	507.8	466.2	166.2
480	64.2	28.00	53.3	462.0	434.7	132.8
400	63.1	18.40	48.5	435.7	413.3	116.3
320	61.7	9.50	44.3	408.1	386.4	101.8
160	58.0	6.20	37.2	347.7	318.0	76.4

Gen Power ekW	Intake Manifold Temp °F	Intake Manifold Pressure in-hg	Intake Air Flow cfm	Exh Manifold Temp °F	Exh Stk Temp °F	Exh Gas Flow cfm
1600	166.8	69.71	5021.8	1154.3	919.0	13497.3
1440	163.4	60.68	4633.3	1119.9	905.2	12321.3
1280	159.6	51.35	4181.3	1091.3	886.1	10965.2
1200	157.6	45.40	3905.8	1077.8	891.1	10273.1
1120	156.2	39.80	3633.9	1064.7	896.0	9598.5
960	154.6	30.12	3132.4	1037.1	901.4	8313.1
800	153.0	21.77	2673.3	1007.6	899.1	7073.5
640	150.6	14.60	2256.6	946.0	871.2	5869.3
480	147.6	8.29	1882.3	863.6	814.5	4689.8
400	145.6	5.45	1712.8	816.3	775.9	4107.1
320	143.1	2.81	1564.4	766.6	727.5	3595.0
160	136.4	1.84	1313.7	657.9	604.4	2698.0

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW kW	Rej to Atmos kW	Rej to Exh kW	From Oil Cir kW
1600	100	655	156.0	1709	211.0
1440	90	603	151.0	1533	190.0
1280	80	550	147.0	1359	168.0
1200	75	524	145.0	1274	157.0
1120	70	497	143.0	1190	147.0
960	60	443	139.0	1026	126.0
800	50	389	134.0	867	107.0
640	40	335	130.0	717	88.0
480	30	279	126.0	569	69.0
400	25	250	124.0	496	59.0
320	20	221	122.0	423	50.0
160	10	160	118.0	281	33.0

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW Btu/min	Rej to Atmos Btu/min	Rej to Exh Btu/min	From Oil Cir Btu/min
1600	100	37250	8871.7	97191	11999.5
1440	90	34293	8587.4	87182	10805.3
1280	80	31278	8359.9	77286	9554.1
1200	75	29800	8246.1	72452	8928.6
1120	70	28264	8132.4	67675	8359.9
960	60	25193	7904.9	58349	7165.6
800	50	22122	7620.6	49306	6085.1
640	40	19051	7393.1	40776	5004.5
480	30	15867	7165.6	32359	3924.0
400	25	14217	7051.9	28207	3355.3
320	20	12568	6938.1	24056	2843.5
160	10	9099	6710.6	15980	1876.7

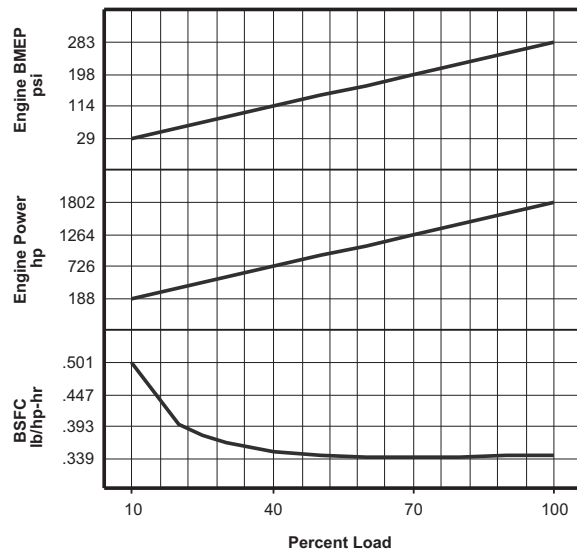
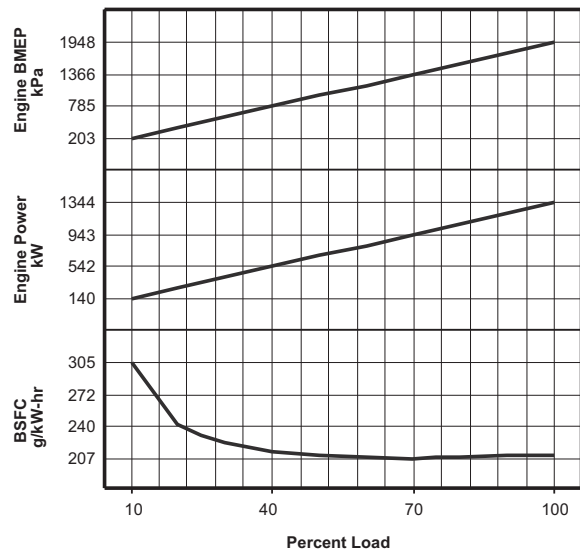
OIL & GAS PERFORMANCE DATA

3516B DITA

1285 kW — 60 Hz @ 1200 rpm

Prime Rating — DM6959-01

IMO/EPA Certified — Aftercooler Temperature 60°C (140°F)



Gen Power kW	Percent Load	Engine Power kW	Engine BMEP kPa	BSFC g/kW-hr	Fuel Rate L/hr
1285	100	1344.1	1948	210	336.6
1157	90	1208.3	1751	209	301.3
1028	80	1073.9	1556	208	266.7
964	75	1007.1	1459	208	249.4
900	70	940.2	1363	207	232.1
771	60	807.3	1170	207	199.6
643	50	674.9	978	210	168.6
514	40	545.2	790	214	139.0
386	30	412.9	598	223	109.5
321	25	345.8	501	230	94.8
257	20	278.0	403	242	80.2
129	10	140.4	203	305	51.0

Gen Power kW	Percent Load	Engine Power hp	Engine BMEP psi	BSFC lb/hp-hr	Fuel Rate gph
1285	100	1802.5	283	.345	88.9
1157	90	1620.4	254	.344	79.6
1028	80	1440.1	226	.342	70.5
964	75	1350.5	212	.341	65.9
900	70	1260.8	198	.340	61.3
771	60	1082.6	170	.341	52.7
643	50	905.1	142	.344	44.5
514	40	731.1	115	.352	36.7
386	30	553.7	87	.366	28.9
321	25	463.7	73	.378	25.0
257	20	372.8	58	.398	21.2
129	10	188.3	29	.501	13.5

Gen Power kW	Intake Manifold Temp °C	Intake Manifold Pressure kPa	Intake Air Flow m³/min	Exh Manifold Temp °C	Exh Stk Temp °C	Exh Gas Flow m³/min
1285	72.3	255.50	115.8	622.3	416.9	277.2
1157	70.3	232.90	109.3	590.4	393.5	252.0
1028	69.2	205.80	100.9	563.5	376.3	226.5
964	68.4	190.50	96.2	551.0	368.4	213.1
900	67.2	174.50	91.0	538.7	361.0	199.2
771	65.6	141.80	78.7	516.1	362.4	171.9
643	64.4	109.30	66.3	493.8	365.3	145.7
514	63.6	79.80	55.7	465.3	360.0	121.9
386	63.0	54.50	47.5	420.9	337.4	100.2
321	62.7	43.20	44.0	393.3	320.5	90.0
257	62.3	33.20	40.9	359.6	298.5	80.3
129	61.6	17.50	36.0	271.8	236.9	62.8

Gen Power kW	Intake Manifold Temp °F	Intake Manifold Pressure in-hg	Intake Air Flow cfm	Exh Manifold Temp °F	Exh Stk Temp °F	Exh Gas Flow cfm
1285	162.1	75.66	4089.4	1152.1	782.4	9789.2
1157	158.5	68.97	3859.9	1094.7	740.3	8899.3
1028	156.6	60.94	3563.3	1046.3	709.3	7998.8
964	155.1	56.41	3397.3	1023.8	695.1	7525.6
900	153.0	51.68	3213.6	1001.7	681.8	7034.7
771	150.1	41.99	2779.3	961.0	684.3	6070.6
643	147.9	32.37	2341.4	920.8	689.5	5145.4
514	146.5	23.63	1967.0	869.5	680.0	4304.9
386	145.4	16.14	1677.4	789.6	639.3	3538.5
321	144.9	12.79	1553.8	739.9	608.9	3178.3
257	144.1	9.83	1444.4	679.3	569.3	2835.8
129	142.9	5.18	1271.3	521.2	458.4	2217.8

Heat Rejection Data

Gen Power kW	Percent Load	Rej to JW kW	Rej to Atmos kW	Rej to Exh kW	From Oil Clr kW
1285	100	610	141.0	1174	168.0
1157	90	562	131.0	1037	150.0
1028	80	513	124.0	910	133.0
964	75	488	120.0	847	124.0
900	70	462	117.0	783	116.0
771	60	413	113.0	677	100.0
643	50	364	108.0	575	84.0
514	40	316	102.0	477	69.0
386	30	264	95.0	377	55.0
321	25	237	91.0	327	47.0
257	20	209	87.0	278	40.0
129	10	149	79.0	184	25.0

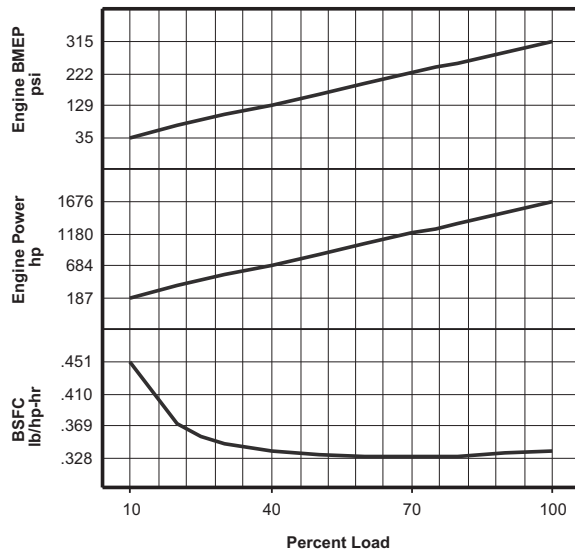
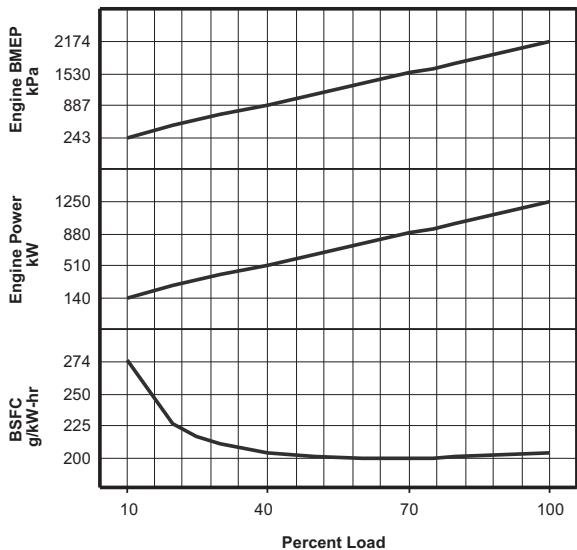
Heat Rejection Data

Gen Power kW	Percent Load	Rej to JW Btu/min	Rej to Atmos Btu/min	Rej to Exh Btu/min	From Oil Clr Btu/min
1285	100	34691	8018.7	66765	9554.1
1157	90	31961	7450.0	58974	8530.5
1028	80	29174	7051.9	51752	7563.7
964	75	27753	6824.4	48169	7051.9
900	70	26274	6653.8	44529	6596.9
771	60	23487	6426.3	38501	5687.0
643	50	20701	6141.9	32700	4777.1
514	40	17971	5800.7	27127	3924.0
386	30	15014	5402.6	21440	3127.8
321	25	13478	5175.2	18596	2672.9
257	20	11886	4947.7	15810	2274.8
129	10	8474	4492.7	10464	1421.7

OIL & GAS PERFORMANCE DATA

3516B DITA
1180 kW — 50 Hz @ 1000 rpm
Prime Rating — DM6957-01

IMO Certified — Aftercooler Temperature 60°C (140°F)



Gen Power kW	Percent Load	Engine Power kW	Engine BMEP kPa	BSFC g/kW-hr	Fuel Rate L/hr
1180	100	1250.0	2174	205	305.2
1062	90	1126.9	1960	203	273.0
944	80	1004.5	1747	201	241.0
885	75	943.5	1641	200	225.3
826	70	882.2	1534	200	210.4
708	60	760.0	1322	200	181.4
590	50	637.8	1109	202	153.3
472	40	521.5	907	205	127.2
354	30	400.0	696	211	100.6
295	25	337.1	586	217	87.1
236	20	272.8	474	226	73.5
118	10	139.6	243	274	45.7

Gen Power kW	Percent Load	Engine Power hp	Engine BMEP psi	BSFC lb/hp-hr	Fuel Rate gph
1180	100	1676.3	315	.337	80.6
1062	90	1511.2	284	.334	72.1
944	80	1347.1	253	.331	63.7
885	75	1265.3	238	.329	59.5
826	70	1183.0	222	.329	55.6
708	60	1019.2	192	.329	47.9
590	50	855.3	161	.331	40.5
472	40	699.3	132	.336	33.6
354	30	536.4	101	.347	26.6
295	25	452.1	85	.356	23.0
236	20	365.8	69	.371	19.4
118	10	187.2	35	.451	12.1

Gen Power kW	Intake Manifold Temp °C	Intake Manifold Pressure kPa	Intake Air Flow m³/min	Exh Manifold Temp °C	Exh Stk Temp °C	Exh Gas Flow m³/min
1180	77.2	276.30	99.7	617.7	429.7	246.1
1062	74.7	249.50	93.0	588.4	412.3	223.0
944	72.1	220.00	85.3	559.2	397.0	200.1
885	70.9	204.00	81.0	545.9	391.6	188.7
826	69.8	187.50	76.5	534.8	388.7	177.4
708	67.7	154.50	67.5	512.5	383.0	155.1
590	65.9	121.60	58.6	490.1	377.2	133.2
472	64.9	91.70	50.4	460.4	368.5	112.8
354	63.8	62.50	42.2	420.2	354.7	92.4
295	63.2	48.20	38.1	395.8	345.7	82.2
236	62.5	36.00	34.7	362.1	326.8	72.4
118	60.9	17.80	29.6	272.7	260.4	54.4

Gen Power kW	Intake Manifold Temp °F	Intake Manifold Pressure in-hg	Intake Air Flow cfm	Exh Manifold Temp °F	Exh Stk Temp °F	Exh Gas Flow cfm
1180	171.0	81.82	3520.9	1143.9	805.5	8690.9
1062	166.5	73.89	3284.3	1091.1	774.1	7875.2
944	161.8	65.15	3012.3	1038.6	746.6	7066.5
885	159.6	60.41	2860.5	1014.6	736.9	6663.9
826	157.6	55.53	2701.6	994.6	731.7	6264.8
708	153.9	45.75	2383.7	954.5	721.4	5477.3
590	150.6	36.01	2069.4	914.2	711.0	4703.9
472	148.8	27.16	1779.9	860.7	695.3	3983.5
354	146.8	18.51	1490.3	788.4	670.5	3263.1
295	145.8	14.27	1345.5	744.4	654.3	2902.9
236	144.5	10.66	1225.4	683.8	620.2	2556.8
118	141.6	5.27	1045.3	522.9	500.7	1921.1

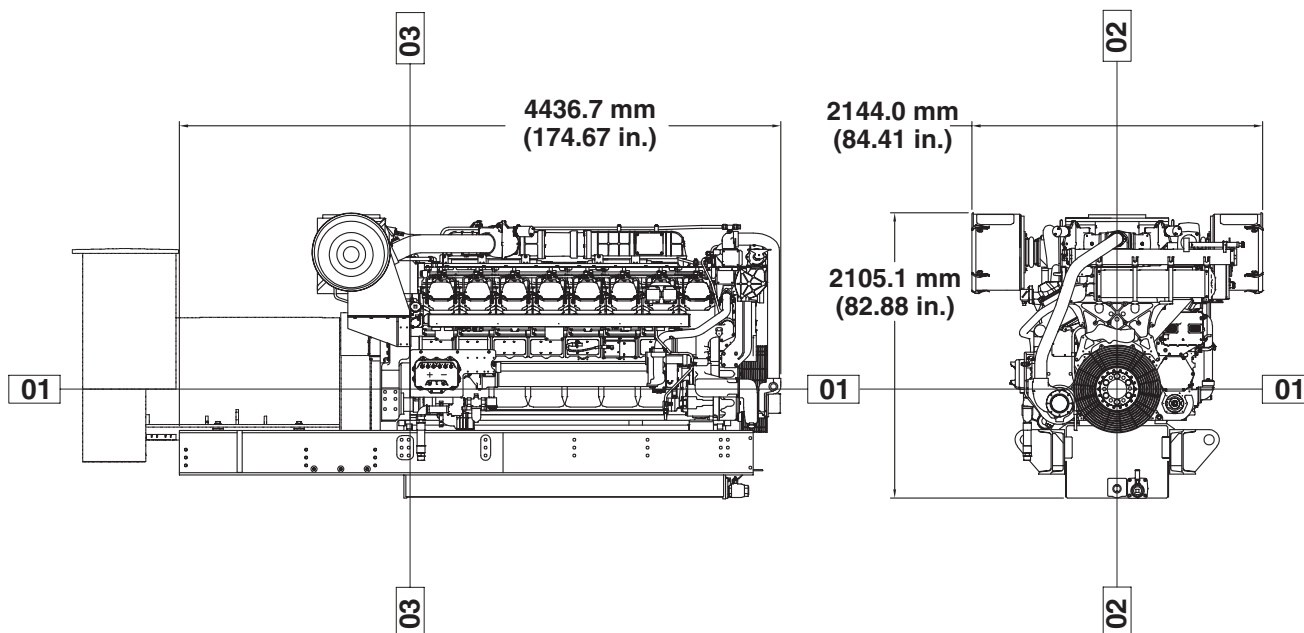
Heat Rejection Data

Gen Power kW	Percent Load	Rej to JW kW	Rej to Atmos kW	Rej to Exh kW	From Oil Clr kW
1180	100	490	141.0	1065	152.0
1062	90	447	132.0	947	136.0
944	80	404	124.0	830	120.0
885	75	383	120.0	774	112.0
826	70	363	117.0	724	105.0
708	60	321	112.0	626	90.0
590	50	280	107.0	533	76.0
472	40	241	102.0	445	63.0
354	30	199	95.0	356	50.0
295	25	177	92.0	310	43.0
236	20	154	88.0	264	37.0
118	10	105	79.0	169	23.0

Heat Rejection Data

Gen Power kW	Percent Load	Rej to JW Btu/min	Rej to Atmos Btu/min	Rej to Exh Btu/min	From Oil Clr Btu/min
1180	100	27866	8018.7	60566	8644.2
1062	90	25421	7506.8	53856	7734.3
944	80	22975	7051.9	47202	6824.4
885	75	21781	6824.4	44017	6369.4
826	70	20644	6653.8	41174	5971.3
708	60	18255	6369.4	35601	5118.3
590	50	15924	6085.1	30312	4322.1
472	40	13706	5800.7	25307	3582.8
354	30	11317	5402.6	20246	2843.5
295	25	10066	5232.0	17630	2445.4
236	20	8758	5004.5	15014	2104.2
118	10	5971	4492.7	9611	1308.0

DIMENSIONS



Engine Dimensions		
Length	4436.7 mm	174.67 in.
Width	2144.0 mm	84.41 in.
Height	2105.1 mm	82.88 in.
Engine Weight (dry)	38 200 kg	17,328 lb.

Note: Do not use for installation design. See general dimension drawings for detail.

RATING DEFINITIONS AND CONDITIONS

Ratings are based on SAE J1995 standard conditions of 100 kPa (29.61 in Hg) and 25° C (77° F). These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard conditions of 100 kPa (29.61 in Hg), 27° C (81° F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50° C (122° F).

Fuel consumption has a tolerance of +5% and is based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 82 780 kJ/kg (18 390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven.

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, S•O•S, ADEM, "Caterpillar Yellow" and the POWER EDGE trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.