

PERFORMANCE DATA [C15DECE]

NOVEMBER 10, 2021

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Perf No: DM8153

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SALES MODEL:	C15	COMBUSTION:	DIRECT INJECTION
BRAND:	CAT	ENGINE SPEED (RPM):	1,800
ENGINE POWER (BHP):	689	HERTZ:	60
GEN POWER WITH FAN (EKW):	450.0	FAN POWER (HP):	32.6
COMPRESSION RATIO:	16.1	ASPIRATION:	TA
RATING LEVEL:	STANDBY	AFTERCOOLER TYPE:	ATAAC
PUMP QUANTITY:	1	AFTERCOOLER CIRCUIT TYPE:	JW+OC, ATAAC
FUEL TYPE:	DIESEL	INLET MANIFOLD AIR TEMP (F):	120
MANIFOLD TYPE:	DRY	JACKET WATER TEMP (F):	192.2
GOVERNOR TYPE:	ELEC	TURBO CONFIGURATION:	SINGLE
CAMSHAFT TYPE:	STANDARD	TURBO QUANTITY:	1
IGNITION TYPE:	CI	TURBOCHARGER MODEL:	GTA5518BS-56T-1.58
INJECTOR TYPE:	EUI	CERTIFICATION YEAR:	2006
REF EXH STACK DIAMETER (IN):	6	PISTON SPD @ RATED ENG SPD (FT/MIN):	2,025.0
MAX OPERATING ALTITUDE (FT):	4,921		

INDUSTRY	SUB INDUSTRY	APPLICATION
ELECTRIC POWER	STANDARD	PACKAGED GENSET
OIL AND GAS	LAND PRODUCTION	PACKAGED GENSET

General Performance Data [Top](#)

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	BRAKE MEAN EFF PRES (BMEP)	BRAKE SPEC FUEL CONSUMPTN (BSFC)	ISO BRAKE SPEC FUEL CONSUMPTN (BSFC)	VOL FUEL CONSUMPTN (VFC)	ISO VOL FUEL CONSUMPTN (VFC)	ELEC SPEC FUEL CONSUMPTN (ESFC)	ISO ELEC SPEC FUEL CONSUMPTN (ESFC)
EKW	%	BHP	PSI	LB/BHP-HR	LB/BHP-HR	GAL/HR	GAL/HR	LB/EKW-HR	LB/EKW-HR
450.0	100	689	327	0.353	0.347	34.3	33.7	0.541	0.531
405.0	90	619	294	0.360	0.354	31.5	30.9	0.551	0.541
360.0	80	551	262	0.372	0.365	28.9	28.4	0.570	0.559
337.5	75	518	246	0.379	0.372	27.7	27.1	0.582	0.571
315.0	70	485	230	0.385	0.378	26.3	25.8	0.593	0.582
270.0	60	420	199	0.398	0.390	23.6	23.1	0.619	0.607
225.0	50	356	169	0.410	0.403	20.6	20.2	0.650	0.638
180.0	40	294	139	0.413	0.405	17.1	16.8	0.673	0.661
135.0	30	231	110	0.415	0.407	13.5	13.2	0.710	0.696
112.5	25	199	95	0.418	0.410	11.7	11.5	0.741	0.727
90.0	20	167	79	0.428	0.419	10.1	9.9	0.794	0.779
45.0	10	101	48	0.490	0.481	7.0	6.9	1.102	1.081

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	INLET MFLD PRES	INLET MFLD TEMP	EXH MFLD TEMP	EXH MFLD PRES	ENGINE OUTLET TEMP	COMPRESSOR OUTLET PRES	COMPRESSOR OUTLET TEMP
EKW	%	BHP	IN-HG	DEG F	DEG F	IN-HG	DEG F	IN-HG	DEG F
450.0	100	689	72.4	117.6	1,229.7	52.3	916.3	76	410.5
405.0	90	619	67.4	116.3	1,198.5	47.5	897.6	71	390.4
360.0	80	551	62.9	114.0	1,169.5	44.2	878.7	66	375.2
337.5	75	518	60.5	112.9	1,154.9	42.4	871.7	64	366.8
315.0	70	485	57.7	111.7	1,139.7	40.2	866.6	61	356.7
270.0	60	420	51.3	109.2	1,109.0	35.3	856.2	54	332.4

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	INLET MFLD PRES	INLET MFLD TEMP	EXH MFLD TEMP	EXH MFLD PRES	ENGINE OUTLET TEMP	COMPRESSOR OUTLET PRES	COMPRESSOR OUTLET TEMP
225.0	50	356	43.7	106.5	1,077.1	29.7	841.8	46	302.3
180.0	40	294	31.9	98.6	1,023.0	22.3	818.6	34	250.8
135.0	30	231	20.2	91.1	948.5	15.3	781.9	22	198.0
112.5	25	199	14.9	88.1	903.1	12.1	758.2	16	173.3
90.0	20	167	10.6	86.3	848.1	9.6	724.1	12	152.2
45.0	10	101	4.9	86.4	698.9	6.4	607.3	6	121.3

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	WET INLET AIR VOL FLOW RATE	ENGINE OUTLET WET EXH GAS VOL FLOW RATE	WET INLET AIR MASS FLOW RATE	WET EXH GAS MASS FLOW RATE	WET EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)	DRY EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)
EKW	%	BHP	CFM	CFM	LB/HR	LB/HR	FT3/MIN	FT3/MIN
450.0	100	689	1,479.3	3,929.1	6,431.8	6,674.9	1,404.0	1,282.8
405.0	90	619	1,409.3	3,680.8	6,112.4	6,335.6	1,333.4	1,221.3
360.0	80	551	1,359.8	3,491.1	5,888.0	6,093.2	1,282.5	1,178.3
337.5	75	518	1,331.0	3,391.2	5,757.9	5,954.0	1,252.3	1,152.2
315.0	70	485	1,294.9	3,276.3	5,595.3	5,782.0	1,214.6	1,119.0
270.0	60	420	1,206.9	3,014.8	5,201.8	5,368.8	1,126.4	1,040.2
225.0	50	356	1,096.7	2,707.4	4,712.6	4,858.8	1,022.8	946.5
180.0	40	294	918.2	2,230.2	3,933.9	4,055.0	857.8	795.2
135.0	30	231	739.1	1,742.1	3,155.4	3,251.1	689.9	640.4
112.5	25	199	657.6	1,511.7	2,801.8	2,885.1	610.3	566.8
90.0	20	167	590.5	1,310.0	2,511.3	2,582.7	544.1	506.3
45.0	10	101	502.2	997.0	2,130.7	2,180.2	459.4	431.9

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GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	REJECTION TO JACKET WATER	REJECTION TO ATMOSPHERE	REJECTION TO EXH	EXHAUST RECOVERY TO 350F	FROM OIL COOLER	FROM AFTERCOOLER	WORK ENERGY	LOW HEAT VALUE ENERGY	HIGH HEAT VALUE ENERGY
EKW	%	BHP	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN
450.0	100	689	10,047	4,000	28,699	16,066	3,976	7,546	29,228	74,650	79,521
405.0	90	619	9,392	4,012	26,513	14,705	3,644	6,712	26,261	68,425	72,890
360.0	80	551	8,860	3,878	24,764	13,617	3,352	6,157	23,385	62,937	67,044
337.5	75	518	8,595	3,764	23,911	13,114	3,205	5,855	21,975	60,174	64,101
315.0	70	485	8,320	3,625	22,997	12,597	3,050	5,490	20,573	57,267	61,004
270.0	60	420	7,749	3,399	20,952	11,439	2,728	4,648	17,820	51,226	54,569
225.0	50	356	7,144	3,275	18,528	10,036	2,388	3,694	15,111	44,826	47,751
180.0	40	294	6,396	3,324	15,013	7,961	1,979	2,398	12,455	37,161	39,586
135.0	30	231	5,621	3,047	11,473	5,864	1,564	1,351	9,795	29,370	31,287
112.5	25	199	5,235	2,727	9,844	4,909	1,361	956	8,451	25,546	27,213
90.0	20	167	4,813	2,417	8,356	4,013	1,167	663	7,088	21,908	23,338
45.0	10	101	3,781	2,106	5,716	2,297	809	299	4,287	15,197	16,189

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Units Filter

DIESEL

RATED SPEED NOMINAL DATA: 1800 RPM

GENSET POWER WITH FAN	EKW	450.0	337.5	225.0	112.5	45.0
ENGINE POWER	BHP	689	518	356	199	101
PERCENT LOAD	%	100	75	50	25	10
TOTAL NOX (AS NO2)	G/HR	2,518	1,210	655	610	396
TOTAL CO	G/HR	177	678	1,157	423	281
TOTAL HC	G/HR	18	36	51	29	49
TOTAL CO2	KG/HR	344	275	205	115	67
PART MATTER	G/HR	17.7	16.6	13.9	32.6	29.6

GENSET POWER WITH FAN ENGINE POWER		EKW	450.0	337.5	225.0	112.5	45.0
PERCENT LOAD		BHP	689	518	356	199	101
		%	100	75	50	25	10
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	1,704.7	999.6	735.7	1,237.9	1,248.3
TOTAL CO	(CORR 5% O2)	MG/NM3	118.2	593.1	1,291.8	769.2	1,034.7
TOTAL HC	(CORR 5% O2)	MG/NM3	10.6	26.4	49.8	55.2	159.2
PART MATTER	(CORR 5% O2)	MG/NM3	9.9	11.8	13.5	57.1	85.2
TOTAL NOX (AS NO2)	(CORR 15% O2)	MG/NM3	632.6	370.9	273.0	459.3	463.2
TOTAL CO	(CORR 15% O2)	MG/NM3	43.8	220.1	479.3	285.4	383.9
TOTAL HC	(CORR 15% O2)	MG/NM3	3.9	9.8	18.5	20.5	59.1
PART MATTER	(CORR 15% O2)	MG/NM3	3.7	4.4	5.0	21.2	31.6
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	830	487	358	603	608
TOTAL CO	(CORR 5% O2)	PPM	95	474	1,033	615	828
TOTAL HC	(CORR 5% O2)	PPM	20	49	93	103	297
TOTAL NOX (AS NO2)	(CORR 15% O2)	PPM	308	181	133	224	226
TOTAL CO	(CORR 15% O2)	PPM	35	176	383	228	307
TOTAL HC	(CORR 15% O2)	PPM	7	18	34	38	110
TOTAL NOX (AS NO2)		G/HP-HR	3.68	2.35	1.85	3.07	3.93
TOTAL CO		G/HP-HR	0.26	1.32	3.27	2.13	2.79
TOTAL HC		G/HP-HR	0.03	0.07	0.14	0.15	0.49
PART MATTER		G/HP-HR	0.03	0.03	0.04	0.16	0.29
TOTAL NOX (AS NO2)		G/KW-HR	5.01	3.19	2.51	4.18	5.34
TOTAL CO		G/KW-HR	0.35	1.79	4.44	2.89	3.80
TOTAL HC		G/KW-HR	0.04	0.09	0.20	0.20	0.66
PART MATTER		G/KW-HR	0.04	0.04	0.05	0.22	0.40
TOTAL NOX (AS NO2)		LB/HR	5.55	2.67	1.44	1.34	0.87
TOTAL CO		LB/HR	0.39	1.50	2.55	0.93	0.62
TOTAL HC		LB/HR	0.04	0.08	0.11	0.06	0.11
TOTAL CO2		LB/HR	758	606	451	254	149
PART MATTER		LB/HR	0.04	0.04	0.03	0.07	0.07
OXYGEN IN EXH		%	9.9	11.0	12.0	12.5	14.3
DRY SMOKE OPACITY		%	0.4	0.5	0.8	2.3	1.7
BOSCH SMOKE NUMBER			0.68	0.72	0.81	1.21	1.06

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

GENSET POWER WITH FAN ENGINE POWER		EKW	450.0	337.5	225.0	112.5	45.0
PERCENT LOAD		BHP	689	518	356	199	101
		%	100	75	50	25	10
TOTAL NOX (AS NO2)		G/HR	3,046	1,464	793	738	479
TOTAL CO		G/HR	331	1,268	2,164	790	526
TOTAL HC		G/HR	34	68	97	55	93
PART MATTER		G/HR	34.4	32.5	27.0	63.6	57.7
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	2,062.7	1,209.5	890.2	1,497.8	1,510.4
TOTAL CO	(CORR 5% O2)	MG/NM3	221.0	1,109.1	2,415.6	1,438.4	1,934.9
TOTAL HC	(CORR 5% O2)	MG/NM3	20.0	50.0	94.1	104.3	300.8
PART MATTER	(CORR 5% O2)	MG/NM3	19.4	22.9	26.4	111.4	166.1
TOTAL NOX (AS NO2)	(CORR 15% O2)	MG/NM3	765.4	448.8	330.3	555.8	560.5
TOTAL CO	(CORR 15% O2)	MG/NM3	82.0	411.6	896.4	533.8	718.0
TOTAL HC	(CORR 15% O2)	MG/NM3	7.4	18.5	34.9	38.7	111.6
PART MATTER	(CORR 15% O2)	MG/NM3	7.2	8.5	9.8	41.3	61.6
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,005	589	434	730	736
TOTAL CO	(CORR 5% O2)	PPM	177	887	1,932	1,151	1,548
TOTAL HC	(CORR 5% O2)	PPM	37	93	176	195	562
TOTAL NOX (AS NO2)	(CORR 15% O2)	PPM	373	219	161	271	273
TOTAL CO	(CORR 15% O2)	PPM	66	329	717	427	574
TOTAL HC	(CORR 15% O2)	PPM	14	35	65	72	208
TOTAL NOX (AS NO2)		G/HP-HR	4.45	2.84	2.24	3.72	4.76
TOTAL CO		G/HP-HR	0.48	2.46	6.11	3.98	5.22
TOTAL HC		G/HP-HR	0.05	0.13	0.27	0.28	0.92
PART MATTER		G/HP-HR	0.05	0.06	0.08	0.32	0.57
TOTAL NOX (AS NO2)		G/KW-HR	6.06	3.87	3.04	5.06	6.47
TOTAL CO		G/KW-HR	0.66	3.35	8.30	5.41	7.10
TOTAL HC		G/KW-HR	0.07	0.18	0.37	0.38	1.25
PART MATTER		G/KW-HR	0.07	0.09	0.10	0.44	0.78
TOTAL NOX (AS NO2)		LB/HR	6.72	3.23	1.75	1.63	1.06
TOTAL CO		LB/HR	0.73	2.80	4.77	1.74	1.16
TOTAL HC		LB/HR	0.08	0.15	0.21	0.12	0.20
PART MATTER		LB/HR	0.08	0.07	0.06	0.14	0.13

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EPA TIER 3

2005 - 2010

GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 89 SUBPART D AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE NON-ROAD REGULATIONS.

Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
U.S. (INCL CALIF)	EPA	NON-ROAD	TIER 3	CO: 3.5 NOx + HC: 4.0 PM: 0.20

EPA TIER 3

2005 - 2010

EPA EMERGENCY STATIONARY

2011 - ----

GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 60 SUBPART IIII AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE EMERGENCY STATIONARY REGULATIONS.

Locality U.S. (INCL CALIF)	Agency EPA	Regulation STATIONARY	Tier/Stage EMERGENCY STATIONARY	Max Limits - G/BKW - HR CO: 3.5 NOx + HC: 4.0 PM: 0.20
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Altitude Derate Data [Top](#)

STANDARD

ALTITUDE CORRECTED POWER CAPABILITY (BHP)

AMBIENT OPERATING TEMP (F)	30	40	50	60	70	80	90	100	110	120	130	140	NORMAL
ALTITUDE (FT)													
0	689	689	689	689	689	689	689	689	689	689	689	689	689
1,000	689	689	689	689	689	689	689	689	689	689	689	689	689
2,000	689	689	689	689	689	689	689	689	689	689	689	689	689
3,000	689	689	689	689	689	689	689	689	689	687	676	664	689
4,000	689	689	689	689	689	689	689	685	673	661	650	639	689
5,000	689	689	689	689	689	683	671	659	647	636	625	615	689
6,000	689	689	689	682	669	657	645	633	622	611	601	591	686
7,000	689	682	668	655	643	631	620	609	598	588	578	568	664
8,000	668	655	642	630	618	606	595	585	574	564	555	546	642
9,000	642	629	617	605	593	582	572	562	552	542	533	524	621
10,000	616	604	592	581	570	559	549	539	530	520	512	503	600
11,000	591	579	568	557	547	536	527	517	508	499	491	483	580
12,000	567	556	545	534	524	515	505	496	488	479	471	463	560
13,000	544	533	522	512	503	493	484	476	467	459	452	444	541
14,000	521	511	501	491	482	473	464	456	448	440	433	426	523
15,000	499	489	480	470	462	453	445	437	429	422	415	408	504

Cross Reference [Top](#)

Test Spec	Setting	Engine Arrangement	Engineering Model	Engineering Model Version	Start Effective Serial Number	End Effective Serial Number
0K6280	PP5610	2729743	GS282	-	FSE00001	
0K6280	PP5610	2864922	GS282	-	FTE00001	

Performance Parameter Reference [Top](#)

Parameters Reference: DM9600 - 14

PERFORMANCE DEFINITIONS

PERFORMANCE DEFINITIONS DM9600

APPLICATION: Engine performance tolerance values below are representative of a typical production engine tested in a calibrated dynamometer test cell at SAE J1995 standard reference conditions. Caterpillar maintains ISO9001:2000 certified quality management systems for engine test Facilities to assure accurate calibration of test equipment. Engine test data is corrected in accordance with SAE J1995. Additional reference material SAE J1228, J1349, ISO 8665, 3046-1:2002E, 3046-3:1989, 1585, 2534, 2288, and 9249 may apply in part or are similar to SAE J1995. Special engine rating request (SERR) test data shall be noted.

PERFORMANCE PARAMETER TOLERANCE FACTORS: Power +/- 3% Torque +/- 3% Exhaust stack temperature +/- 8% Inlet airflow +/- 5% Intake manifold pressure-gage +/- 10% Exhaust flow +/- 6% Specific fuel consumption +/- 3% Fuel rate +/- 5% Specific DEF consumption +/- 3% DEF rate +/- 5% Heat rejection +/- 5% Heat rejection exhaust only +/- 10% Heat rejection CEM only +/- 10% Heat Rejection values based on using treated water. Torque is included for truck and industrial applications, do not use for Gen Set or steady state applications. On C7 - C18 engines, at speeds of 1100 RPM and under these values are provided for reference only, and may not meet the tolerance listed. On 3500 and C175 engines, at speeds below Peak Torque these values are provided for reference only, and may not meet the tolerance listed. These values do not apply to C280/3600. For these models, see the tolerances listed below.

C280/3600 HEAT REJECTION TOLERANCE FACTORS: Heat rejection +/- 10% Heat rejection to Atmosphere +/- 50% Heat rejection to Lube Oil +/- 20% Heat rejection to Aftercooler +/- 5%

TEST CELL TRANSDUCER TOLERANCE FACTORS: Torque +/- 0.5% Speed +/- 0.2% Fuel flow +/- 1.0% Temperature +/- 2.0 C degrees Intake manifold pressure +/- 0.1 kPa OBSERVED ENGINE PERFORMANCE IS CORRECTED TO SAE J1995 REFERENCE AIR AND FUEL CONDITIONS.

REFERENCE ATMOSPHERIC INLET AIR FOR 3500 ENGINES AND SMALLER SAE J1228 AUG2002 for marine engines, and J1995 JAN2014 for other engines, reference atmospheric pressure is 100 KPA (29.61 in hg), and standard temperature is 25deg C (77 deg F) at 30% relative humidity at the stated aftercooler water temp, or inlet manifold temp. **FOR 3600 ENGINES** Engine rating obtained and presented in accordance with ISO 3046/1 and SAE J1995 JANJAN2014 reference atmospheric pressure is 100 KPA (29.61 in hg), and standard temperature is 25deg C (77 deg F) at 30% relative humidity and 150M altitude at the stated aftercooler water temperature.

MEASUREMENT LOCATION FOR INLET AIR TEMPERATURE Location for air temperature measurement air cleaner inlet at stabilized operating conditions.

REFERENCE EXHAUST STACK DIAMETER The Reference Exhaust Stack Diameter published with this dataset is only used for the calculation of Smoke Opacity values displayed in this dataset. This value does not necessarily represent the actual stack diameter of the engine due to the variety of exhaust stack adapter options available. Consult the price list, engine order or general dimension drawings for the actual stack diameter size ordered or options available.

REFERENCE FUEL DIESEL Reference fuel is #2 distillate diesel with a 35API gravity; A lower heating value is 42,780 KJ/KG (18,390 BTU/LB) when used at 15 deg C (59 deg F), where the density is 850 G/Liter (7.0936 Lbs/Gal). **GAS** Reference natural gas fuel has a lower heating value of 33.74 KJ/L (905 BTU/CU Ft). Low BTU ratings are based on 18.64 KJ/L (500 BTU/CU FT) lower heating value gas. Propane ratings are based on 87.56 KJ/L (2350 BTU/CU Ft) lower heating value gas.

ENGINE POWER (NET) IS THE CORRECTED FLYWHEEL POWER (GROSS) LESS EXTERNAL AUXILIARY LOAD Engine corrected gross output includes the power required to drive standard equipment; lube oil, scavenge lube oil, fuel transfer, common rail fuel, separate circuit aftercooler and jacket water pumps. Engine net power available for the external (flywheel) load is calculated by subtracting the sum of auxiliary load from the corrected gross flywheel out put power. Typical auxiliary loads are radiator cooling fans, hydraulic pumps, air compressors and battery charging alternators. For Tier 4 ratings additional Parasitic losses would also include Intake, and Exhaust Restrictions.

ALTITUDE CAPABILITY Altitude capability is the maximum altitude above sea level at standard temperature and standard pressure at which the engine could develop full rated output power on the current performance data set. Standard temperature values versus altitude could be seen on TM2001.

When viewing the altitude capability chart the ambient temperature is the inlet air temp at the compressor inlet. Engines with ADEM MEUI and HEUI fuel systems operating at conditions above the defined altitude capability derate for atmospheric pressure and temperature conditions outside the values defined, see TM2001. Mechanical governor controlled unit injector engines require a setting change for operation at conditions above the altitude defined on the engine performance sheet. See your Caterpillar technical representative for non standard ratings.

REGULATIONS AND PRODUCT COMPLIANCE TMI Emissions information is presented at 'nominal' and 'Potential Site Variation' values for standard ratings. No tolerances are applied to the emissions data. These values are subject to change at any time. The controlling federal and local emission requirements need to be verified by your Caterpillar technical representative. Customer's may have special emission site requirements that need to be verified by the Caterpillar Product Group engineer.

EMISSION CYCLE LIMITS: Cycle emissions Max Limits apply to cycle-weighted averages only. Emissions at individual load points may exceed the cycle-weighted limit.

WET & DRY EXHAUST/EMISSIONS DESCRIPTION: Wet - Total exhaust flow or concentration of total exhaust flow Dry - Total exhaust flow minus water vapor or concentration of exhaust flow with water vapor excluded

EMISSIONS DEFINITIONS: Emissions : DM1176

EMISSION CYCLE DEFINITIONS

1. For constant-speed marine engines for ship main propulsion, including,diesel-electric drive, test cycle E2 shall be applied, for controllable-pitch propeller sets test cycle E2 shall be applied.
2. For propeller-law-operated main and propeller-law-operated auxiliary engines the test cycle E3 shall be applied.
3. For constant-speed auxiliary engines test cycle D2 shall be applied.
4. For variable-speed, variable-load auxiliary engines, not included above, test cycle C1 shall be applied.

HEAT REJECTION DEFINITIONS: Diesel Circuit Type and HHV Balance : DM9500

HIGH DISPLACEMENT (HD) DEFINITIONS: 3500: EM1500

RATING DEFINITIONS: Agriculture : TM6008

Fire Pump : TM6009

Generator Set : TM6035

Generator (Gas) : TM6041

Industrial Diesel : TM6010

Industrial (Gas) : TM6040

Irrigation : TM5749

Locomotive : TM6037

Marine Auxiliary : TM6036

Marine Prop (Except 3600) : TM5747

Marine Prop (3600 only) : TM5748
MSHA : TM6042
Oil Field (Petroleum) : TM6011
Off-Highway Truck : TM6039
On-Highway Truck : TM6038

SOUND DEFINITIONS: Sound Power : DM8702
Sound Pressure : TM7080

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