

Performance Number: DM8759

Change Level: 01

SALES MODEL:	3516C	COMBUSTION:	DIRECT INJECTION
BRAND:	CAT	ENGINE SPEED (RPM):	1,800
MACHINE SALES MODEL:		HERTZ:	60
ENGINE POWER (BKW):	2,225.0	ASPIRATION:	TA
COMPRESSION RATIO:	14.7	AFTERCOOLER TYPE:	SCAC
RATING LEVEL:	ELECTRIC PROP - B RATING	AFTERCOOLER CIRCUIT TYPE:	JW+OC, AC
PUMP QUANTITY:	2	AFTERCOOLER TEMP (C):	40
FUEL TYPE:	DIESEL	JACKET WATER TEMP (C):	99
MANIFOLD TYPE:	DRY	TURBO CONFIGURATION:	PARALLEL
GOVERNOR TYPE:	ADEM3	TURBO QUANTITY:	2
ELECTRONICS TYPE:	ADEM3	TURBOCHARGER MODEL:	GTB7083BLN-52T-1.91
CAMSHAFT TYPE:	STANDARD	CERTIFICATION YEAR:	2009
IGNITION TYPE:	CI	CRANKCASE BLOWBY RATE (M3/HR):	84.4
INJECTOR TYPE:	EUI	FUEL RATE (RATED RPM) NO LOAD (L/HR):	60.6
FUEL INJECTOR:	2501368	PISTON SPD @ RATED ENG SPD (M/SEC):	12.9
REF EXH STACK DIAMETER (MM):	305		
MAX OPERATING ALTITUDE (M):	700		

INDUSTRY	SUBINDUSTRY	APPLICATION
MARINE	FISHING	MARINE AUXILIARY ENGINE
MARINE	GENERAL CARGO	MARINE AUXILIARY ENGINE
MARINE	OFFSHORE	MARINE AUXILIARY ENGINE
MARINE	GOVERNMENT	MARINE AUXILIARY ENGINE
MARINE	DREDGE	MARINE AUXILIARY ENGINE

General Performance Data

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)
%	BKW	KPA	G/BKW-HR	G/BKW-HR	L/HR	L/HR
100	2,225	1,900	200.6	196.8	525.2	515.2
90	2,002	1,710	201.5	197.7	474.7	465.7
80	1,780	1,520	203.5	199.6	426.1	417.9
75	1,669	1,425	205.0	201.1	402.4	394.7
70	1,558	1,330	206.7	202.7	378.7	371.5
60	1,335	1,140	209.7	205.7	329.4	323.1
50	1,112	950	213.5	209.4	279.4	274.1
40	890	760	220.1	215.9	230.4	226.0
30	668	570	232.7	228.3	182.8	179.3
25	556	475	243.5	238.9	159.4	156.3
20	445	380	261.4	256.4	136.8	134.2
10	222	190	358.3	351.5	93.8	92.0

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
%	BKW	KPA	DEG C	DEG C	KPA	DEG C	KPA	DEG C
100	2,225	254.7	47.0	568.2	192.6	390.7	266	213.1
90	2,002	225.3	46.9	555.4	165.8	391.6	236	195.2
80	1,780	197.5	48.1	543.6	142.0	394.3	207	176.3
75	1,669	182.9	47.5	537.8	131.9	388.4	192	171.9
70	1,558	167.8	46.7	532.1	122.0	382.7	176	166.6
60	1,335	135.4	46.0	517.8	99.3	384.5	143	146.5
50	1,112	103.3	45.7	498.3	76.6	389.6	110	126.9
40	890	75.8	45.8	470.1	60.3	381.6	81	107.6
30	668	52.8	46.0	428.6	46.1	360.6	57	89.2
25	556	42.8	46.0	403.0	38.1	346.0	47	80.3
20	445	34.0	45.8	371.2	28.3	328.2	38	72.4
10	222	19.7	45.0	291.8	5.0	283.3	23	58.9

General Performance Data (Continued)

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	ENGINE OUTLET WET EXH VOL FLOW RATE (0 DEG C AND 101	ENGINE OUTLET DRY EXH VOL FLOW RATE (0 DEG C AND 101
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						KPA)	KPA)
%	BKW	M3/MIN	M3/MIN	KG/HR	KG/HR	M3/MIN	M3/MIN
100	2,225	194.2	456.7	13,865.3	14,311.1	187.9	170.9
90	2,002	180.8	422.0	12,798.3	13,201.1	173.4	158.0
80	1,780	168.9	389.9	11,779.3	12,140.7	159.5	145.6
75	1,669	159.9	368.1	11,236.8	11,578.5	152.0	138.7
70	1,558	150.8	346.4	10,661.4	10,983.5	144.3	131.7
60	1,335	132.6	303.7	9,350.1	9,630.4	126.1	115.1
50	1,112	114.1	262.1	7,995.1	8,232.7	108.0	98.6
40	890	97.7	221.9	6,825.4	7,021.3	92.6	84.7
30	668	84.0	184.1	5,855.5	6,010.8	79.3	72.9
25	556	78.0	166.2	5,435.4	5,571.0	73.3	67.6
20	445	72.9	150.4	5,079.7	5,196.1	68.3	63.2
10	222	65.3	123.7	4,540.7	4,620.4	60.7	56.8

Heat Rejection Data

PERCENT LOAD	ENGINE POWER	REJECTION TO JACKET WATER	REJECTION TO ATMOSPHERE	REJECTION TO EXH	EXH RECOVERY TO 177C	FROM OIL COOLER	FROM AFTERCOOLER	WORK ENERGY	LOW HEAT VALUE ENERGY	HIGH HEAT VALUE ENERGY
%	BKW	KW	KW	KW	KW	KW	KW	KW	KW	KW
100	2,225	791	125	1,858	892	283	648	2,225	5,305	5,652
90	2,002	747	114	1,711	826	255	536	2,002	4,796	5,109
80	1,780	701	101	1,577	769	229	427	1,780	4,304	4,585
75	1,669	679	108	1,480	713	217	394	1,669	4,065	4,330
70	1,558	656	116	1,380	657	204	363	1,558	3,825	4,075
60	1,335	604	112	1,208	582	177	277	1,335	3,327	3,544
50	1,112	549	107	1,048	509	150	186	1,112	2,822	3,007
40	890	491	102	874	417	124	118	890	2,328	2,480
30	668	430	95.3	699	319	98.3	70.1	668	1,846	1,967
25	556	398	91.8	615	271	85.7	51.9	556	1,610	1,715
20	445	365	88.1	538	225	73.6	37.0	445	1,382	1,472
10	222	294	80.2	395	139	50.5	17.4	222	947	1,009

Emissions Data

THE CHINA STAGE 1 MARINE REGULATION HAS AN EFFECTIVE DATE OF JULY 1, 2019, AND IT ENDS ON JULY 1, 2021. CATERPILLAR, INC DIDN'T RECEIVE CERTIFICATION OF ITS ENGINES UNTIL JUNE 9, 2020. ENGINES BUILT BEFORE THIS DATE ARE NOT CONSIDERED CERTIFIED TO THE CHINA STAGE 1 MARINE REGULATION. SHIPYARDS HAVE UP UNTIL JULY 1, 2022 TO GET ENGINES INSTALLED IN SHIPS OTHERWISE THEY WOULD BE REQUIRED TO USE A CHINA STAGE 2 ENGINE.

DIESEL

RATED SPEED NOMINAL DATA: 1800 RPM

ENGINE POWER		BKW	2,225	1,669	1,112	556	222
PERCENT LOAD		%	100	75	50	25	10
TOTAL NOX (AS NO2)		G/HR	13,902	9,697	7,453	5,105	2,786
TOTAL CO		G/HR	1,049	1,298	2,094	1,408	1,078
TOTAL HC		G/HR	386	353	284	233	297
TOTAL CO2		KG/HR	1,371	1,063	726	404	222
PART MATTER		G/HR	135.8	119.7	180.0	127.8	65.6
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	1,893.4	1,709.0	1,921.1	2,306.7	2,195.8
TOTAL CO	(CORR 5% O2)	MG/NM3	170.7	272.5	648.8	759.7	1,037.6
TOTAL HC	(CORR 5% O2)	MG/NM3	54.5	64.4	75.0	110.8	248.8
PART MATTER	(CORR 5% O2)	MG/NM3	18.6	20.7	46.7	59.1	54.5
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	922	832	936	1,124	1,070
TOTAL CO	(CORR 5% O2)	PPM	137	218	519	608	830
TOTAL HC	(CORR 5% O2)	PPM	102	120	140	207	464
TOTAL NOX (AS NO2)		G/HP-HR	4.71	4.37	5.04	6.89	9.41
TOTAL CO		G/HP-HR	0.36	0.59	1.42	1.90	3.64
TOTAL HC		G/HP-HR	0.13	0.16	0.19	0.31	1.00
PART MATTER		G/HP-HR	0.05	0.05	0.12	0.17	0.22
TOTAL NOX (AS NO2)		LB/HR	30.65	21.38	16.43	11.25	6.14
TOTAL CO		LB/HR	2.31	2.86	4.62	3.10	2.38
TOTAL HC		LB/HR	0.85	0.78	0.63	0.51	0.65

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TOTAL CO2	LB/HR	3,022	2,344	1,600	890	490
PART MATTER	LB/HR	0.30	0.26	0.40	0.28	0.14
OXYGEN IN EXH	%	11.3	11.7	12.0	13.7	16.0
DRY SMOKE OPACITY	%	0.5	1.3	2.3	2.0	0.7
BOSCH SMOKE NUMBER		0.22	0.46	0.78	0.67	0.28

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

ENGINE POWER	BKW	2,225	1,669	1,112	556	222
PERCENT LOAD	%	100	75	50	25	10
TOTAL NOX (AS NO2)	G/HR	16,682	11,637	8,944	6,126	3,343
TOTAL CO	G/HR	1,889	2,336	3,769	2,534	1,941
TOTAL HC	G/HR	514	470	377	310	394
PART MATTER	G/HR	190.1	167.6	252.0	178.9	91.8
TOTAL NOX (AS NO2) (CORR 5% O2)	MG/NM3	2,272.1	2,050.8	2,305.3	2,768.1	2,634.9
TOTAL CO (CORR 5% O2)	MG/NM3	307.2	490.5	1,167.8	1,367.5	1,867.6
TOTAL HC (CORR 5% O2)	MG/NM3	72.5	85.7	99.8	147.3	330.8
PART MATTER (CORR 5% O2)	MG/NM3	26.0	29.0	65.3	82.7	76.4
TOTAL NOX (AS NO2) (CORR 5% O2)	PPM	1,107	999	1,123	1,348	1,283
TOTAL CO (CORR 5% O2)	PPM	246	392	934	1,094	1,494
TOTAL HC (CORR 5% O2)	PPM	135	160	186	275	618
TOTAL NOX (AS NO2)	G/HP-HR	5.65	5.25	6.05	8.27	11.29
TOTAL CO	G/HP-HR	0.64	1.05	2.55	3.42	6.55
TOTAL HC	G/HP-HR	0.17	0.21	0.26	0.42	1.33
PART MATTER	G/HP-HR	0.06	0.08	0.17	0.24	0.31
TOTAL NOX (AS NO2)	LB/HR	36.78	25.65	19.72	13.50	7.37
TOTAL CO	LB/HR	4.16	5.15	8.31	5.59	4.28
TOTAL HC	LB/HR	1.13	1.04	0.83	0.68	0.87
PART MATTER	LB/HR	0.42	0.37	0.56	0.39	0.20

Regulatory Information

CHINA STAGE 1		2018 - 2021		CYCLE :E2
THIS ENGINE HAS BEEN TESTED IN ACCORDANCE WITH THE PROVISIONS OF THE PEOPLE'S REPUBLIC OF CHINA NATIONAL STANDARD #GB 15097-2016, AND COMPLIES WITH THE STATED LIMITS OF HC, CO, NOX, AND PM FOR MARINE STAGE 1.				
Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
CHINA	CHINA	MARINE	STAGE 1	CO: 5.0 NOx + HC: 7.2 PM: 0.20

EPA TIER 2		2007 - 2011		
GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 94.103 AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THIS ENGINE CONFORMS TO US EPA MARINE COMMERCIAL COMPRESSION-IGNITION EMISSION REGULATIONS. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE MARINE REGULATIONS.				
Locality U.S. (INCL CALIF)	Agency EPA	Regulation MARINE COMMERCIAL	Tier/Stage TIER 2	Max Limits - G/BKW - HR CO: 5.0 NOx + HC: 7.2 PM: 0.20

EU STAGE IIIA		2009 - 2019		CYCLE :E2
GASEOUS EMISSION DATA MEASUREMENTS ARE CONSISTENT WITH THOSE DESCRIBED IN EU 97/68/EC (AS AMENDED BY EU 2004/26/EC) AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. GASEOUS EMISSIONS VALUES ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE MARINE REGULATIONS.				
Locality EUROPE	Agency EU	Regulation MARINE COMMERCIAL	Tier/Stage STAGE IIIA	Max Limits - G/BKW - HR CO: 5.0 NOx + HC: 7.2 PM: 0.20

IMO	2000 - 2010
GASEOUS EMISSIONS DATA MEASUREMENTS ARE CONSISTENT WITH THOSE DESCRIBED IN REGULATION 13 OF ANNEX VI OF MARPOL 73/78 AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THIS ENGINE CONFORMS TO INTERNATIONAL MARINE ORGANIZATION'S (IMO) MARINE COMPRESSION-IGNITION EMISSION REGULATIONS.	

IMO II	2011 - ----	CYCLE :E2,D2
GASEOUS EMISSIONS DATA MEASUREMENTS ARE CONSISTENT WITH THOSE DESCRIBED IN REGULATION 13 OF REVISED ANNEX VI OF MARPOL 73/78 AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THIS ENGINE CONFORMS TO INTERNATIONAL MARINE ORGANIZATION'S (IMO) MARINE COMPRESSION-IGNITION EMISSION REGULATIONS.		

Altitude Derate Data

STANDARD

ALTITUDE CORRECTED POWER CAPABILITY (BKW)

AMBIENT OPERATING TEMP (C)	10	15	20	25	30	35	40	45	50	NORMAL
ALTITUDE (M)										
0	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225
250	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,196	2,162	2,225
500	2,225	2,225	2,225	2,225	2,225	2,203	2,168	2,134	2,101	2,225
750	2,225	2,225	2,225	2,212	2,176	2,140	2,106	2,073	2,041	2,225
1,000	2,225	2,223	2,185	2,149	2,113	2,079	2,046	2,014	1,982	2,190
1,250	2,197	2,159	2,122	2,087	2,052	2,019	1,987	1,956	1,925	2,139
1,500	2,134	2,097	2,061	2,027	1,993	1,961	1,929	1,899	1,870	2,089
1,750	2,072	2,036	2,001	1,968	1,935	1,904	1,873	1,844	1,815	2,039
2,000	2,011	1,977	1,943	1,910	1,879	1,848	1,819	1,790	1,762	1,991
2,250	1,952	1,919	1,886	1,854	1,824	1,794	1,765	1,738	1,711	1,944
2,500	1,895	1,862	1,830	1,800	1,770	1,741	1,713	1,687	1,660	1,897
2,750	1,839	1,807	1,776	1,746	1,718	1,690	1,663	1,637	1,611	1,852
3,000	1,784	1,753	1,723	1,695	1,667	1,640	1,613	1,588	1,563	1,807
3,250	1,731	1,701	1,672	1,644	1,617	1,591	1,565	1,541	1,517	1,764
3,500	1,679	1,650	1,622	1,595	1,568	1,543	1,518	1,494	1,471	1,721
3,750	1,629	1,600	1,573	1,547	1,521	1,497	1,473	1,450	1,427	1,679
4,000	1,579	1,552	1,526	1,500	1,475	1,451	1,428	1,406	1,384	1,638
4,250	1,532	1,505	1,479	1,454	1,430	1,407	1,385	1,363	1,342	1,598
4,500	1,485	1,459	1,434	1,410	1,387	1,364	1,343	1,321	1,301	1,558

Cross Reference

Test Spec	Setting	Engine Arrangement	Engineering Model	Engineering Model Version	Start Effective Serial Number	End Effective Serial Number
0K7850	LL6187	3065148	E889	-	JTS00100	
4369587	LL6471	3856966	EE151	-	DPD00001	
4485934	GG0978	3856966	EE151	XJ	BS200001	

Supplementary Data

Type	Classification	Performance Number
SOUND	SOUND PRESSURE	DM8779

General Notes

General Notes DM8759 - 01
SOUND PRESSURE DATA FOR THIS RATING CAN BE FOUND IN PERFORMANCE NUMBER - DM8779

Performance Parameter Reference

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:

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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 auxilliary load from the corrected gross flywheel out put power. Typical auxilliary 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

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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

Date Released : 10/27/21