



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF TRANSPORTATION AND AIR QUALITY  
WASHINGTON, DC 20460



CERTIFICATE OF CONFORMITY  
2011 MODEL YEAR

Manufacturer: **ELECTRO-MOTIVE DIESEL, INC.**  
Engine Family: **BEMDN233.GT2**  
Certificate Number: **EMD-MCI-11-01**  
Intended Service: **PROPULSION, AUXILIARY, AND STATIONARY**  
Intended Service Fuel: **DISTILLATE DIESEL [94.108(A)(1)]**  
FELs: NOx: N/A      THC+NOx: N/A      PM: N/A  
Effective Date: **11/29/2010**  
Date Issued: **11/29/2010**

Karl J. Simon, Director  
Compliance and Innovative Strategies Division  
Office of Transportation and Air Quality

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. §§ 7411 and 7547) and 40 CFR Part 60 and Part 94, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following stationary and marine engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and Part 94 and produced in the stated model year.

This certificate of conformity covers only those new stationary and marine compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and Part 94 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60 and Part 94.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR Part 94 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 94. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 94.

This certificate does not cover marine engines sold, offered for sale, introduced, or delivered for introduction into commerce in the U.S. prior to the effective date of the certificate. This certificate of conformity does not cover stationary or marine engines imported prior to the effective date of the certificate.



9301 W 55th St  
 LaGrange IL 60525 USA  
[www.emdiesels.com](http://www.emdiesels.com)

Emissions Data  
 Series 710GC-T2

EPA Class: Marine Tier 2  
 40 CFR 94 Table: B-2  
 Cycle: ISO E2 @ 900 rpm  
 Prop: Variable or Electric Drive  
 Engine Speed: Constant

**EMD CERTIFICATION LEVELS**

(g/kW-hr)

Measured Emission		EPA Standard	Certification Level (1)
NOx + Total Hydrocarbon	NO <sub>x</sub> + HC	7.8	7.2
Particulate	PM	0.27	0.17
Carbon Monoxide	CO	5.0	1.1

**ENGINE CONTINUOUS RATING (@ 900 RPM)**

No. of Cylinders	8	12	16	20
BHP	2000	3000	4000	5000
kW	1491	2237	2983	3729

**SELECT FAMILY INFO**

EMD Family: 710G7C-T2	EPA Family: 6EMDM0710GT2
Cycle: 2-stroke	Category: 2
Cylinders: 8, 12, 16, or 20	Type: Marine CI Commercial
Fuel Type: No. 2 Fuel Oil - Low Sulfur	Usage: Propulsion
Fuel: ISO 8217	A B & T: No
System Type: Electronic Direct Injection	NTE: 1.2 x Std & 1.5 x Std
Aspiration: Turbo Air-to-Water	EPA Useful Life: 10 yrs or 20,000 hrs

**EMD TEST DATA - DUTY CYCLE SUMMARY (2)**

	CO	NOx	HC	NOx + HC	PM
g/kW-hr	0.2	6.9	0.3	7.1	0.17

**MODE DETAIL - EMD TEST DATA (Family Representative Values)**

MODE (#)	WEIGHT (%)	POWER (3) (% of MTP)	SPEED (RPM)	POWER (kW)				EMISSION (g/kW-hr)			
				8-Cyl	12-Cyl	16-Cyl	20-Cyl	CO	NO <sub>x</sub>	HC	PM
1	20%	100%	900	1641	2461	3281	4101	0.2	6.8	0.2	0.17
2	50%	75%	900	1230	1846	2461	3076	0.2	6.3	0.2	0.15
3	15%	50%	900	820	1230	1641	2051	0.2	8.2	0.4	0.18
4	15%	25%	900	410	615	820	1025	0.5	9.4	0.7	0.30

**Notes:**

- 1) Deteriorated Test Results
- 2) Calculated from EMD Actual Engine Test Data
- 3) MTP = Maximum Test Power = EMD Continuous x 110%