CUMMINS INC. Charleston, SC 29405	Basic Engine Model:	Curve Number:	
Marine Performance Curves	**K19-DM**	**FR-4345**	
	Engine Configuration:	CPL Code:	Date:
	D193099MX02	**2910**	**10-Oct-11**

Displacement: **19 liter** **[1154.48 in³]**
Bore: **159 mm** **[6.26 in]**
Stroke: **159 mm** **[6.25 in]**
Fuel System: **Direct injection Cummins PT**
Cylinders: **6**

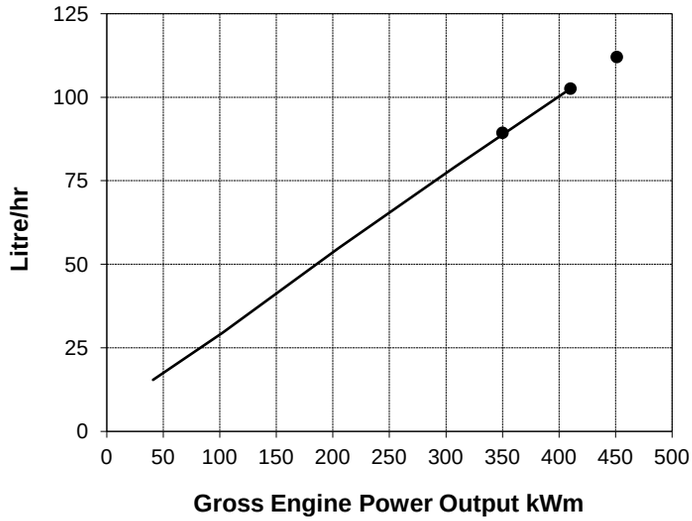
kW [hp] @ rpm
Advertised Power: **410[550]@1500**
Aspiration: **Turbocharged/Aftercooled**
Exhaust Type: **Dry**

CERTIFIED: This marine diesel engine complies with or is certified to the:
IMO Tier II (Two) NOx requirements of International Maritime Organization (IMO), MARPOL 73/78 Annex VI, Regulation 13

Engine Speed	Overload Capacity		Prime Power		Continuous Power	
RPM	kWm	BHP	kWm	BHP	kWm	BHP
1500	451	605	410	550	350	470

Engine Performance Data @ 1500 rpm

OUTPUT POWER			FUEL CONSUMPTION			
%	kWm	BHP	kg/kWh	Lb/ BHP-h	Liter/ hour	U.S. Gal/ hour
10% OVERLOAD CAPACITY						
110%	451	605	0.211	0.347	112.0	29.6
PRIME POWER						
100%	410	550	0.213	0.350	102.6	27.1
75%	308	413	0.219	0.360	79.1	20.9
50%	205	275	0.228	0.374	54.9	14.5
25%	103	138	0.245	0.403	29.5	7.8
10%	41	55	0.319	0.525	15.4	4.1
CONTINUOUS POWER						
80%	350	470	0.217	0.357	89.3	23.6



Rating Conditions: Ratings are in accordance with ISO 15550 and ISO 8528-5 reference conditions; air pressure at 100 kPa (29.61 in Hg), air temperature 25°C (77°F), and 30% relative humidity. The fuel consumption data is based on No. 2 diesel fuel weight at 0.85 kg/liter (7.0011 lb/U.S. gal).
Power output curves are based on the engine operating with fuel system, water pump, and lubricating oil pump; not included are battery charging alternator, fan, optional equipment, and driven components.
Values from engine control modules and displayed on instrument panels are not absolute. Tolerance varies, but is generally less than +/-5% when operating within 30% of rated power.
Unless otherwise specified, tolerance on all values is +/-5%.

Prime Power Rating is applicable for supplying continual electrical power at varied load. The following are the Prime Rating parameters:
* Prime Power is available for an unlimited number of hours per year in a variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 250 hours.
* The total operating time at 100% Prime Power shall not exceed 500 hours per year.
* There is a 10% overload capability for a period of 1 hour within a 12 hour period of operation. Total operating time at 10% overload shall not exceed 25 hours per year.

TECHNICAL DATA DEPT. **CHIEF ENGINEER**