CUMMINS INC.	Basic Engine Model:	Curve Number:	
Charleston, SC 29405	**K19-DM**	**FR-4537**	
Marine Performance Curves	Engine Configuration:	CPL Code:	Date:
	D193099MX02	**3456**	**10-Oct-11**

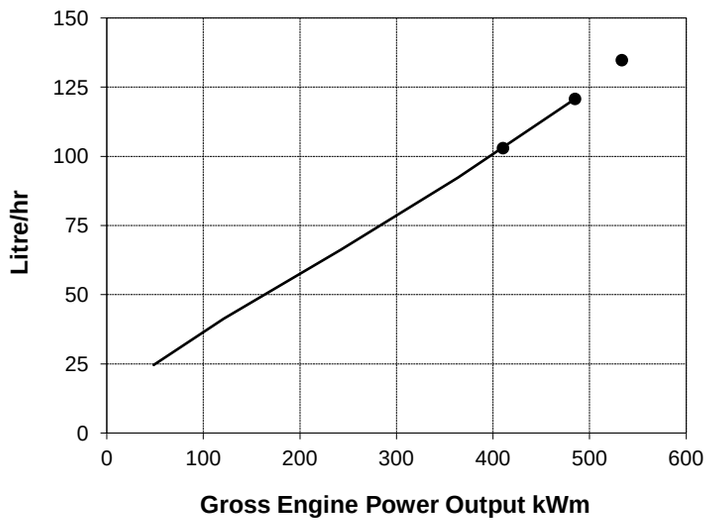
Displacement:	**19 liter**	**[1154.48 in³]**		kW [hp] @ rpm
Bore:	**159 mm**	**[6.26 in]**	Advertised Power:	**485[650]@1800**
Stroke:	**159 mm**	**[6.25 in]**	Aspiration:	**Turbocharged/Aftercooled**
Fuel System:	**Direct injection Cummins PT**		Exhaust Type:	**Dry**
Cylinders:	**6**			

CERTIFIED: This marine diesel engine complies with or is certified to the:
IMO Tier II - Tier 2 (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
1800	533	715	485	650	410	550

Engine Performance Data @ 1800 rpm

OUTPUT POWER			FUEL CONSUMPTION			
%	kWm	BHP	kg/kWh	Lb/ BHP-h	Liter/ hour	U.S. Gal/ hour
10% OVERLOAD CAPACITY						
110%	533	715	0.215	0.354	134.8	35.6
PRIME POWER						
100%	485	650	0.212	0.348	120.8	31.9
75%	364	488	0.216	0.355	92.4	24.4
50%	242	325	0.232	0.382	66.2	17.5
25%	121	163	0.289	0.476	41.3	10.9
10%	48	65	0.431	0.709	24.6	6.5
CONTINUOUS POWER						
80%	410	550	0.213	0.351	103.0	27.2



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.
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**