

## CHONGQING CUMMINS ENGINE CO.,Ltd.

CHONGQING, P.R.CHINA, 400031

Marine Performance Curves

| Basic Engine Model:   | Curve Number: |           |
|-----------------------|---------------|-----------|
| N855-DM               | FR898         |           |
| Engine Configuration: | CPL Code:     | Date:     |
| D093641MX02           | CQ168         | 14-Jul-11 |

Displacement: 14 liter [855 in<sup>3</sup>]

Bore: 140 mm [5.50 in]

Stroke: 152 mm [6.00 in]

Fuel System: Direct Injection Cummins PT Cylinders:

Advertised Power:

kW [hp] @ rpm 284[380]@1500

Aspiration: Turbocharged / LTA

Exhaust Type:

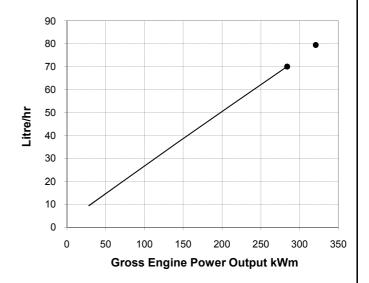
CERTIFIED: This marine diesel engine complies with or is certified to the:

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               | ВНР | kWm         | ВНР | kWm              | ВНР  |
| 1500         | 321               | 430 | 284         | 380 | N.A.             | N.A. |

## Engine Performance Data @ 1500 rpm

| OUTPUT POWER     |                       |      | FUEL CONSUMPTION |              |                |                   |  |  |
|------------------|-----------------------|------|------------------|--------------|----------------|-------------------|--|--|
| %                | kWm                   | BHP  | kg/kWh           | Lb/<br>BHP-h | Liter/<br>hour | U.S. Gal/<br>hour |  |  |
| 10% OV           | 10% OVERLOAD CAPACITY |      |                  |              |                |                   |  |  |
| 110%             | 321                   | 430  | 0.211            | 0.347        | 79.5           | 21.00             |  |  |
| PRIME I          | PRIME POWER           |      |                  |              |                |                   |  |  |
| 100%             | 284                   | 380  | 0.210            | 0.346        | 70.1           | 18.51             |  |  |
| 75%              | 213                   | 285  | 0.213            | 0.351        | 53.4           | 14.10             |  |  |
| 50%              | 142                   | 190  | 0.220            | 0.362        | 36.7           | 9.69              |  |  |
| 25%              | 71                    | 95   | 0.235            | 0.388        | 19.6           | 5.19              |  |  |
| 10%              | 28                    | 38   | 0.282            | 0.464        | 9.4            | 2.48              |  |  |
| CONTINUOUS POWER |                       |      |                  |              |                |                   |  |  |
| 80%              | N.A.                  | N.A. | N.A.             | N.A.         | N.A.           | N.A.              |  |  |



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 (7.1 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, all data is at rated power conditions and can vary ± 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.