Marine Diesel Engine

**V180TI**

- Compact Design
- Excellent Performance
- Low Fuel Consumption
- Easy Maintenance

**Rating output**
- 603kW (820PS)

**Displacement**
- 18,273cc

**Dimension (L × W × H)**
- 1,495 × 1,223 × 1,169mm
- Without Reduction Gear
Main Specification

Model | Units | V180TI (D2840LB)
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**Engine type**
4cycle, V type, direct-injection, water cooled with wet turbo charger & inter-cooler

**Rating output**
PS(kW) / rpm 600(441)/1,800

**Displacement**
c c 18,273

**Cylinder number - bore × stroke**
mm 10 - 128×142

**Low idling rpm**
rpm 725 ± 25

**No load max. rpm**
rpm below 2,070 below 2,415 below 2,645

**Compression ratio**
15 : 1 14.6 : 1

**Firing order**
1 - 6 - 5 - 10 - 2 - 7 - 3 - 8 - 4 - 9

**Governor type of injection pump**
Mechanical variable speed (R.Q.V)

**Fuel consumption(only Ref.)**
g / PS.h 150 156 158

**Starting system**
Electric Starting by starter motor

**Starter motor capacity**
V - kW 24 - 6.6

**Alternator capacity**
V - A 24 - 50

**Battery**
V - Ah 24 - 200

**Cooling system**
Indirect sea water cooling with heat exchanger

**Cooling water capacity**
Max. / Min. lit 92 / 81

**Fresh water pump type**
Centrifugal type, driven belt

**Sea water pump type**
Bronze impeller type driven by belt

**Lubricating oil(Engine)**
Pan capacity lit Max : 35, Min : 28 (Engine total : 38)

**Direction of revolution**
Crankshaf Counter clockwise viewed from stern side

**Engine Size(L × W × H)**
Without M/G mm 1,495 × 1,223 × 1,169

**Engine dry weight**
Without M/G kg 1,550 1,630

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**Engine Dimension**

![Engine Image](image)

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**Performance Curve**

<table>
<thead>
<tr>
<th>Engine Speed (r.p.m)</th>
<th>Heavy Duty</th>
<th>Medium Duty</th>
<th>Light Duty</th>
</tr>
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<tbody>
<tr>
<td>1000</td>
<td>1100</td>
<td>1300</td>
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<td>1400</td>
<td>1700</td>
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<td>1800</td>
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<td>2000</td>
<td>2600</td>
<td>2700</td>
<td>2900</td>
</tr>
</tbody>
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**Marine rating to ISO 3046**

(c) **Heavy Duty**

Operation hours are unlimited per year, at average load is up to 90 %, at full load is up to 80 %
Typical gearbox ratio: 2.5 ~ 6
(Fishing trawler, Tug boat, Pushing vessel, Cargo boat, Freightier, Ferry)

(b) **Medium Duty**

Operation hours are up to 3,000 per year, at average load is up to 70 %
At full load is (up to 30 % / 4hrs per 12 hour operation period)
Typical gearbox ratio: 2 ~ 3.5
(Fishing boat, Pilot boat, Escort boat, Passenger boat, Ferry, Cruising vessel)

(g) **Light Duty**

Operation hours are up to 1,000 per year, at average load is up to 50 %
At full load is (up to 20 % / 2hrs per 12 hour operation period)
Typical gearbox ratio: 1 ~ 2.5
(Light weight fishing boat, Yacht, Coastguard boat, Fast boat, Fire pump, Navy)

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AUTHORIZED DEALER

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*Specifications are subject to change without prior notice.*