

ALT KING PALES







Number of cylinders Bore and stroke (mm) Total displacement (L) Compression ratio Engine rotation Idle speed (rpm) Flywheel Flywheel housing 6 in line 126 X 130 9.7 17/1 counter clockwise 650 SAE 1 SAE 14"

Customer benefits

Genuine marine design, our engine is designed specifically for Marine applications with Marine components **Global environment care** with low exhaust emissions at any running cycle

Simple technology with mechanical injection

Life cycle cost efficiency with extended MTBO, modular concept reducing number of components and interfaces

Rated power - Fuel consumption

| | | | | Fuel consumption | | | |
|------|-----|-----|------|------------------|-------|-------|-----|
| Duty | kW | HP | RPM | Optimum value | Rated | power | IMO |
| | | | | g/kWh | g/kWh | l/h | |
| P1 | 240 | 326 | 2100 | 214 | 218 | 61 | |
| P2 | 264 | 359 | 2100 | 216 | 225 | 69 | |

| | P1 | P2 | |
|----------------------------|-------------------------|--------------------|--|
| Application | Unrestricted Continuous | Continuous (Heavy) | |
| Engine load variations | Not important | Important | |
| Average Engine load factor | 80-100% | 30-80% | |
| Annual working time | More Than 5000 H | 3000 -5000 H | |
| Time at full load | Unlimited | 8h Each 12h | |

P1 Continuous Duty

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boats
- River tug boats
- Push boats
- Freighters
- Dredges
- LCT
- Ferries

P2 Heavy Duty

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boats
- River tug boats Push boats
- Freighters
- Dredges
- LCT
- Ferries

P3 Intermittent Duty

- Seasonal passenger vessels
- Fishing boats
- Pilot boats
- Commercial pleasure boats
- Pump boats Displacement sailboats
- Displacen
 Trawlers
- Bow thrusters

P4 Light Duty

- Private pleasure boats
- Multi-hull pleasure boats
- Survey or rescue fast vessels
- Military fast vessels.

P5 High performance Duty

- Private pleasure boats
- Multi-hull pleasure boats

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Dimensions and dry weight (mm/kg)



Standard equipment

| Engine & Block | Cast iron cylinder block, with replaceable cylinder liners Separate cast iron cylinder heads Replaceable valves guides and seats Steel forged crankshaft with 7 bearings Lube oil cooled light alloy piston with 3 high performance piston rings |
|-----------------------------|--|
| Cooling System | Fresh / raw water heat exchanger with integrated thermostatic valves and expansion tank Cast iron centrifugal fresh water pump, mechanically driven Bronze self-priming raw water pump, mechanically drive |
| Lubrication System | Full flow screwable oil filters Fresh water cooled lube oil cooler |
| Fuel System | In line injection pump with flanged mechanical governor Double wall injection bundle Duplex fuel filters replaceable engine running Water separator |
| Intake Air & Exhaust System | Insulated exhaust gas manifold Turbo blower with insulated turbine housing Low water temperature cooled intake air cooler |
| Electrical System | Voltage: 24Vcc Electrical starter on flywheel crown 35A battery charger |
| Optional Equipment | Cooling system adapted for box / keel cooling Connection for emergency raw water circuit Resilient mounts under engine Bilge pump Air starter Exhaust water injection after turbocharger Resilient mounts under engine Free end PTO |



Performance

P1 - 240kW - 326hp @2100rpm







P2 - 264kW - 360hp @2100rpm

Power definition

(Standard ISO 3046/1 - 1995 (F))

Reference conditions

Ambient temperature Barometric pressure Relative humidity Raw water temperature

| 25°C / 77°F | Re |
|-------------|----|
| 100 kPa | Lo |
| 30%R | С |

25°C / 77°F

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| Fuel oil

elative density ower calorific power Consumption tolerances

Inlet limit temperature

0,840 ± 0,005 42 700 kJ/kg + 5% (DIN ISO 3046-1) 35°C /95°F

Our ratings also comply with classification societies maximum temperature definition without power derating.

| Ambient temperature | 45°C / 113°F | |
|-----------------------|--------------|--|
| Raw water temperature | 32°C / 90°F | |