Compressor-charged Hi-Tech propulsion package
Volvo Penta’s 6-cylinder KAD300 is packed with virtually everything. Compressor, turbo and aftercooler, which are precisely controlled by the EDC system (Electronic Diesel Control), all help to produce unmatched diesel performance. This coupled to the efficient Duoprop drive gives power to the most demanding boat owners.

The compressor – fitted with silencers – is controlled by the EDC unit and acts as a “torque controller”. It supplies compressed air at low engine speed and while accelerating, when the extra torque is needed.

The interaction of compressor and turbo produces high torque over the whole speed range, and this contributes to cleaner exhaust gases and fuel economy, giving excellent acceleration and driving characteristics.

Innovative EDC
Equipped with EDC (Electronic Diesel Control) – an electronically controlled processing system, which optimizes engine performance. The system determines the precise quantity of fuel required at any given moment, taking full account of variation in operating temperatures, air pressure and other contributing factors.

A great advantage with the EDC system is its monitoring of fuel temperature, which keeps the engine on a constant output from 5 to 55°C (41–131°F).

The EDC system includes electric shift and throttle control with wiring giving precise and smooth operation, with no noise transmitted along the cables.

If twin engines are fitted, a synchronizing function keeps the engines on the same rpm.

The original Duoprop drive
The reinforced and new-designed DP drive with its twin counter-rotating stainless steel propellers produces a harmonious drive unit with unbeatable characteristics in the boat in terms of top speed, acceleration and drivability.

It also produces less noise and vibrations, better steering and maneuvering characteristics, a good grip in the water and a short time to planing.

The drive features standard power steering for maximum driving comfort.

High output, excellent power/weight ratio
The engine is compact with no remote-mounted functions, and has an advantageous weight to power ratio making it excellent for both single- and multi-engine installation in planing craft.

Low exhaust emission levels and a professional exhaust system
Direct injection, 4-valve technology, EDC and the advanced combustion system all minimize noxious exhaust emissions and enhance overall enjoyment of boating.

The DP-G drive has been designed to lead exhaust gases into the propeller path, to avoid the “wagon-back effect” and keep noise level at a minimum.

The engine is certified according to SAV and IMO.

A propulsion package fully matched, tested and supported by one company
The combination of power and unbeaten propulsion efficiency ensures maximum thrust for excellent acceleration, top speed performance and driving comfort.

Easy installation and maintenance
The installation does not require any extra through-hull fittings. All necessary connections like exhaust, seawater inlet etc. are integrated in the drive. Only a minimum of loose parts, making installation easy and time-saving.

Electronic control and instrument wiring are of plug-in type. The EDC system includes a self-diagnostic facility.

Service points such as seawater strainer, cooling water tank and oil dipstick are easily accessible on the engine.

Comprehensive service network
Volvo Penta has a well-established network of authorized service dealers in more than 100 countries throughout the world. These service centers offer Genuine Volvo Penta Parts as well as skilled personnel to ensure that you enjoy the best possible service.
KAD300/DP

Technical Data

<table>
<thead>
<tr>
<th>Engine designation</th>
<th>KAD300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crankshaft power, kW (hp)</td>
<td>210 (285)</td>
</tr>
<tr>
<td>Propeller shaft power, kW (hp)</td>
<td>200 (272)</td>
</tr>
<tr>
<td>Engine speed, rpm</td>
<td>3800</td>
</tr>
<tr>
<td>Displacement, l (in³)</td>
<td>3.6 (219)</td>
</tr>
<tr>
<td>Number of cylinders</td>
<td>6</td>
</tr>
<tr>
<td>Bore/stroke, mm (in.)</td>
<td>92/90 (3.62/3.54)</td>
</tr>
<tr>
<td>Compression ratio</td>
<td>16.9:1</td>
</tr>
<tr>
<td>Volvo Penta Duoprop drive</td>
<td>DP-G</td>
</tr>
<tr>
<td>Ratio</td>
<td>1.68:1, (1.59:1)</td>
</tr>
<tr>
<td>Dry weight with DP, incl. prop., kg (lb)</td>
<td>576 (1270)</td>
</tr>
</tbody>
</table>

Technical description:

**Engine and block**
- Cylinder block and cylinder head made of cast iron for good corrosion resistance and long service life
- 4-valve technology
- Oil-cooled pistons with two compression rings and one oil scraper ring
- Replaceable wet cylinder liners
- Replaceable valve seats
- Seven-bearing crankshaft

**Engine mounting**
- Flexible mounting providing sound and vibration insulation. Two adjustable rubber mounts in front and rubber suspension between flywheel housing and transom shield

**Lubrication system**
- Pressure lubrication system with easily replaceable full-flow oil filter
- Tubular oil cooler that can be cleaned

**Fuel system**
- Rotor-type injection pump with electronic actuator
- EDC unit for processing the input for precise engine governing
- Two-stage injectors
- Fine filter with water separator
- Feed pump with hand primer
- Electrically operated stopping device

**Air inlet and exhaust system**
- Inlet system designed to produce optimal air rotation which provides perfect combustion
- Air inlet silencer with replaceable filter
- Crankcase gases vented into the air inlet
- Seawater-cooled exhaust elbow of cast iron with a stainless steel insert
- Complete connection for exhaust outlet through the drive
- Exhaust-driven freshwater-cooled turbocharger
- Belt-driven compressor with silencer of absorption type on both inlet and outlet port

**Cooling system**
- Thermostatically regulated freshwater cooling
- Tubular heat exchanger with separate transparent expansion tank
- Coolant system prepared for hot water outlet
- Seawater strainer and easily accessible impeller pump

**Electrical system**
- 12V two-pole electrical system
- 14V/60A marine alternator with Zener-diodes to protect entire system from peak voltage
- Charging regulator with battery sensor for maximum use of alternator
- Automatic fuses with manual reset
- Starter motor power 3.0 kW
- Extension cable harness with plug-in connection available in various lengths

**Instruments/control**
- Complete instrument panel with key switch, instruments and interlocked alarm. Alternatively separate instruments.
- Digital instrument for drive trim angle
- EDC monitoring panels for single or twin installations
- Electronic remote control for throttle and shift
- Plug-in connections for both EDC and electronics

**Drive**
- Complete with transom shield, flywheel cover and installation components
- The drive can be tilted up by 42°
- Protective zinc anodes prevent corrosion
- Coolant water inlet at the front of the drive
- Built-in kick-up function to reduce possible damage, in the event the drive strikes an underwater object
- Electrical shifting performed by electronic actuator controlled by the EDC unit
- Power Trim is an electrically operated hydraulic system for trimming the drive for best driving comfort
- Power steering

**Accessories**
An extensive range of accessories are available. For detailed information, please see Accessory catalogs.

Dimensions

Contact your local Volvo Penta dealer for further information.

Duty rating RB.

Technical data according to ISO 8665. Fuel with a lower calorific value of 42,700 kJ/kg and density of 840 g/liter at 15°C (60°F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption. The engine is certified according to SAV and IMO.

Dimensions Not for installation