D6-435

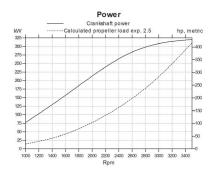


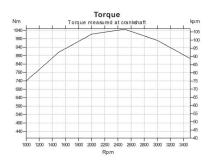
Technical Data

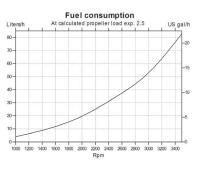
Engine designation	D6-435 I
Crankshaft power, kW (hp)	320 (435)
Propeller shaft power, kW (hp)	310 (422)
Engine speed, rpm	3500
Displacement, I (in ³)	5.5 (336)
Number of cylinders	6
Bore/stroke, mm (in.)	103/110 (4.06/4.33)
Compression ratio	17.5:1
Dry weight with HS85AE, kg (lb)	699 (1541)
Ratio HS80AE	1.9:1, 1.57:1
Ratio HS80IVE	2.01:1
Ratio HS85AE	2.52:1
Ratio HS85IVE	2.49:1
Emission compliance	IMO NOx, EU RCD Stage II, US EPA Tier 3
Rating	R5*

Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at $15\,^{\circ}$ C (60 °F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

* RATING 5. This power is intended for pleasure craft applications, and can be used for high speed planing crafts in commercial applications









D6-435

Technical description:

Engine block and head

- Cylinder block and cylinder head made of cast-iron
- · Ladder frame fitted to engine block
- 4-valve technology with hydraulic lash adjusters
- · Double overhead camshafts
- Oil-cooled pistons with two compression rings and one oil scraper ring
- Integrated cylinder liners
- · Replaceable valve seats
- Seven-bearing crankshaft
- · Rear-end transmission

Engine mounting

Flexible engine mounting

Lubrication system

- Easily replaceable separate full-flow and bypass oil filter
- Seawater-cooled tubular oil cooler

Fuel system

- · Common rail fuel injection system
- · Control unit for processing the injection
- · Fine filter with water separator

Air inlet and exhaust system

- Belt-driven compressor with silencer of absorption type on both inlet and output port
- Air filter with replaceable insert
- · Crankcase gases vented into the air inlet
- Exhaust elbow or exhaust riser
- Freshwater-cooled turbochargerLoss of sea water alarm

Cooling system

- Thermostatically regulated freshwater cooling
- Tubular heat exchanger with separate large volume expansion tank
- Coolant system prepared for hot water outlet
- Easily accessible seawater impeller pump

Electrical system

- 12V or 24V two-pole electrical system
- 14V/115A or 28V/80A marine alternator with Zener-diodes to protect the system from peak voltage, and integrated charging regulator with battery sensor cable for maximum use of alternator
- Fuses with automatic reset (12V) and fuses with manual reset (24V)
- Auxiliary stop button

Instruments/control

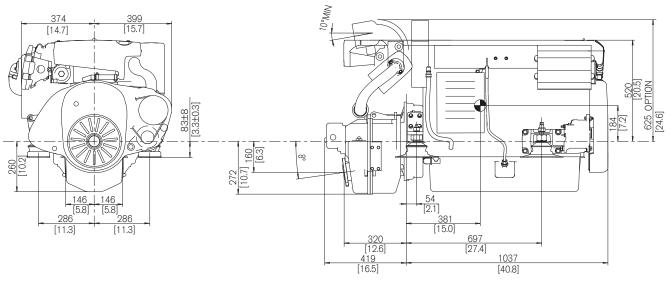
- Complete instrumentation/display packages, including e-key, the electronic key from Volvo Penta
- · Electronic shift and throttle
- · Plug-in connections

Reverse gear

- Reverse gear with matched drop center and 8° down angle for compact installation and minimum propeller shaft angle. V-drive available.
- Bevel gears which results in smooth running at all speeds
- Hydraulically operated clutch for smooth shifting
- Electronic shifting performed by electromagnetic valves
- When under sail propeller shaft can rotate 24 hours without engine start
- · Seawater-cooled oilcooler
- · Low speed as option

Dimensions D6-435/HS80AE/HS85AE

Not for installation



More information

Contact your nearest Volvo Penta dealer for more information about Volvo Penta engines and optional equipment/accessories or go to www.volvopenta.com





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