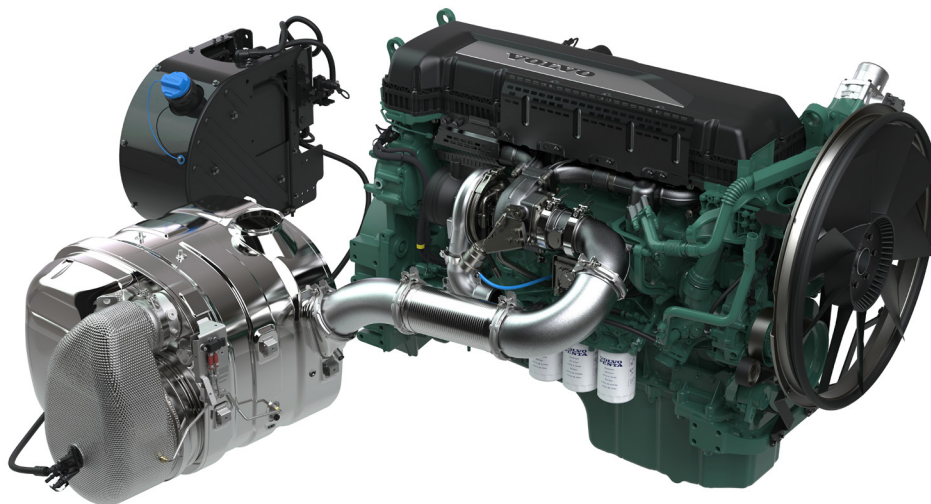


TAD1384-1385VE-MARE

12.78 liter, in-line 6 cylinder – 375 and 405 kW

EU Stage V for Inland Waterways



TAD1384-1385VE-MARE is a powerful, reliable and fuel efficient Diesel Engine range built on the Volvo in-line six concept.

The MARE version of TAD 1384-1385 VE is certified for Inland Waterway Propulsion (MARE) and Inland Waterway Auxiliary (IWA). To comply with the ES-TRIN rules, marine adaptations are done by selected dealers. For more information, please contact your local Volvo Penta representative.

Low cost of ownership

World class fuel efficiency combined with a reliable Exhaust Aftertreatment System (EATS) gives high uptime as well as low cost of ownership.

Compact & simple installation

System concepts lowers amount of cooling capacity needed hence minimizing the size of the cooling system. Installation guidelines as well as drawings and CAD models are easy to access.

Durability & low noise

Long experience with DPF/SCR systems in combination with great knowledge of base engine development reduces risk of downtime. The in-line six cylinder engine together with common rail system produces smooth operation with low noise.

Power & torque

Maximum torque is reached at low rpm and continues to rated power. The power and torque layout ensures the

engine to operate in a wide engine speed range.

Low exhaust emission

Chosen engine design combined with optimized DPF/SCR technology ensures that TAD1384-1385VE-MARE complies with EU Stage V emissions.

Easy service & maintenance

Easily accessible service and maintenance points contribute to the ease of service of the engine. As optional equipment remotely mounted filters and service points can

- Proven and straight-forward design - built on Volvo Group technology
- High torque already at low engine speed
- SCR, DPF+DOC and uncooled EGR
- Wide range of optional equipment
- Excellent passive soot regeneration
- Extended oil service intervals 1000h
- HVO 100 approved

	TAD1384VE-MARE	TAD1385VE-MARE
Power output, kW/hp	375/510	405/551
at speed, rpm	1900	1710
Max. torque, Nm/lb/ft	2540/1874	2650/1954
at speed, rpm	1200	1200
Min. idling speed, rpm	600	600

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Technical data

Configuration and no. of cylinders in-line 6
Displacement, l (in³) 12.78 (780)
Method of operation 4-stroke
Bore, mm (in.) 131 (5.16)
Stroke, mm (in.) 158 (6.22)
Dry weight ^{*)}, engine only, kg (lb) 1215 (2679)
Compression ratio 16.8:1
Direction of rotation (viewed towards flywheel) counterclockwise

^{*)} The engine is weighed with components that consist of the minimum running weight including standard flywheel and excluding cooling package, hoses and air filters.

Technical description

Engine and block

- Cast iron cylinder block
- Wet, replaceable cylinder liners
- Replaceable valve guides and valve seats
- Overhead camshaft and four valves per cylinder

Lubrication system

- Full flow disposable spin-on oil filter, for extra high filtration
- Gear type lubricating oil pump, gear driven by the transmission
- Oil level sensor

Fuel system

- Electronically controlled common rail injectors
- Fuel pre filter with water separator and water-in-fuel indicator/ alarm
- Gear driven low-pressure fuel pump
- Fine fuel filter with manual feed pump and fuel pressure valve

Cooling system

- Belt driven coolant pump with high degree of efficiency
- Fan and fan ring available as option

Electrical system

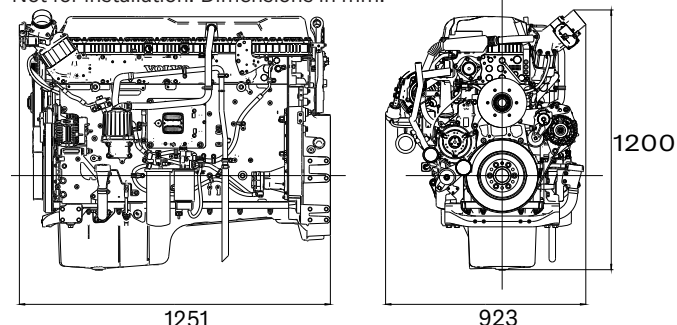
- Engine Management System (EMS), includes advanced features for diagnostics and fault tracing.
- The instruments and controls connect to the engine via the CAN SAE J1939 interface. Options available for engine control equipment.
- Inducement and Derate caused by SCR or DPF are removed. Instead the events that trigger an inducement will be stored in a on-volatile memory acc to ES-TRIN rules for MARE/IWA.

Exhaust after treatment system

- SCR, DPF+ DOC and uncooled EGR
- Airless urea injection
- Wide range of options available, including different sized AUS/ DEF tanks (also possible for OEM to design own tank).
- AUS/DEF Quality Level Temperature Sensor

Dimensions

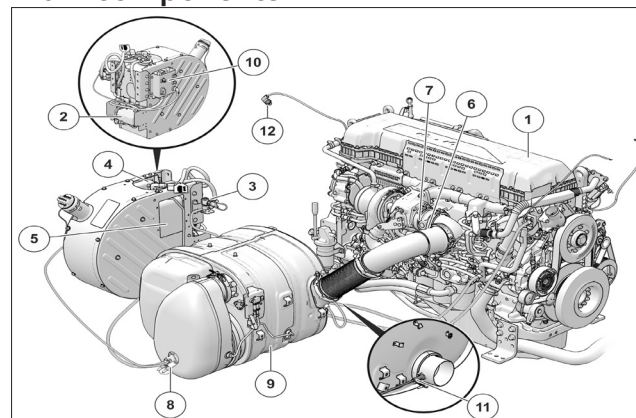
Not for installation. Dimensions in mm.



Please note that products illustrated may differ from production models.

Not all models and accessories are available in all markets, and standard equipment may vary between different markets. Every effort has been made to ensure that facts and figures are correct at the time of publication. However, Volvo Penta reserves the right to make changes without prior notice at any time.

Main components



1. Engine with common rail fuel injection
2. AdBlue Pump Unit
3. Solenoid Valve, heating
4. Tank armature with sensors and heater
5. AdBlue tank, heated
6. NOx Sensor
7. Electrical Exhaust Pressure Governor pressure sensor
8. Dosage Valve
9. Muffler with Catalytic Converter and diesel particular filter
10. After treatment Control Module (ACM)
11. NOx Sensor
12. Air inlet Temperature Sensor and

All necessary components are available in various lengths and sizes, cables, heated hoses and tanks. A complete system.

Characteristics

