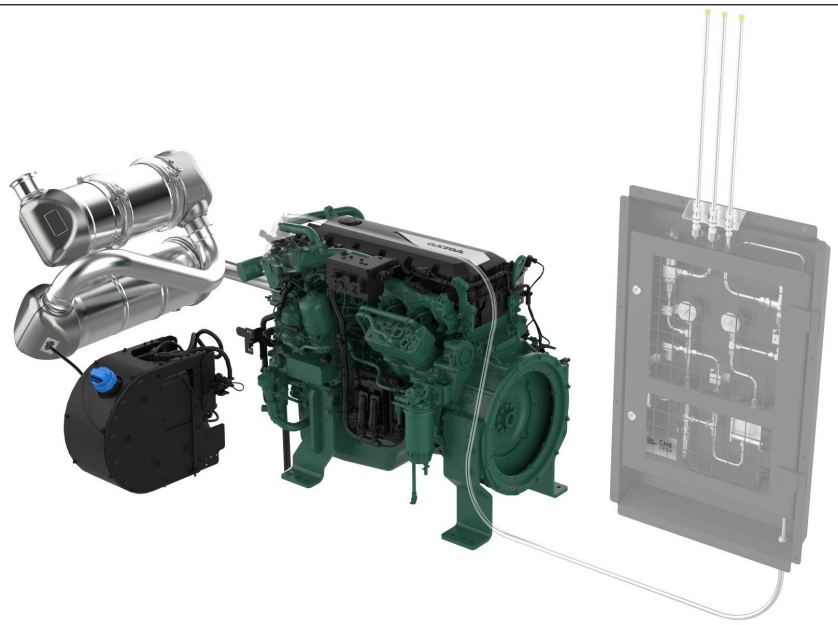
VOLVO PENTA

TADH880-884VE

7.7 liter, in-line 6 cylinder - 160, 185, 210, 235 and 250 kW
EU Stage V



TADH880-884VE is a dual-fuel-ready engine that's able to run on a fuel mix of diesel/HVO and hydrogen after being fitted with a CMB.TECH hydrogen kit.

Benefits of hydrogen dual-fuel engines
A hydrogen dual-fuel engine can offer a cost-effective path toward decarbonization, leveraging proven combustion technology and its reliability and familiarity. By displacing a large share of diesel with hydrogen, it significantly reduces CO_2 emissions, while other exhaust emissions remain similar or lower than conventional diesel engines.

Performance and uptime
Performance remains uncompromised, delivering the same power and torque curves operators expect from a standard diesel unit. Installation requirements for OEMs are minimal, ensuring swift integration without major design overhauls. With full diesel backup capability, uptime remains maximized - providing both sustainability and operational security in one solution.

Low exhaust emission
Combined with optimized DPF/SCR technology, the TAD880-884VE complies with EU Stage V emissions. After being fitted with CMB.TECH's hydrogen kit, and depending on load and performance, this engine can see up to an 80% reduction in CO2 emissions while still meeting Stage V emissions regulation.

Service and Maintenance
The engine includes accessible service points, with optional remotely mounted filters and components. Standard engine maintenance and is handled by Volvo Penta's service network, with support from CMB.TECH for the hydrogen kit.

- **Proven and straight-forward design - built on Volvo Group technology**
- **High torque at low engine speeds**
- **Compact, simple installation and easy to service**
- **Continues to meet emission standards**
- **Wide range of optional equipment**
- **Full diesel back up to ensure high uptime**

	TADH880VE	TADH881VE	TADH882VE	TADH883VE	TADH884VE
Power output, kW/hp	160/218	185/252	210/286	235/320	250/340
at speed, rpm	2200	2200	2200	2200	2200
Max. torque, Nm/lb/ft	1075/793	1175/867	1255/926	1330/980	1360/1002
at speed, rpm	1400	1400	1400	1400	1400
Min. idling speed, rpm	600	600	600	600	600

TADH880-884VE

7.7 liter, in-line 6 cylinder - 160, 185, 210, 235 and 250 kW
EU Stage V

Technical data

Configuration and no. of cylinders	in-line 6
Displacement, l (in³)	7.7 (470)
Method of operation	4-stroke
Bore, mm (in.)	110 (4.33)
Stroke, mm (in.)	135 (5.31)
Dry weight *), engine only, kg (lb)	703 (1550)
Compression ratio	17.2:1
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
- Replaceable valve guides and valve seats
- Overhead camshaft and four valves per cylinder

Lubrication system

- Full flow cartridge insert filter
- Gear type lubricating oil pump, gear driven

Fuel system

- Electronically controlled common rail injectors
- Gear driven fuel feed pump
- Electronically controlled common rail injectors
- Fuel pre filter with water separator and water-in-fuel indicator/ alarm
- Manual feed pump on pre filter

Cooling system

- Belt driven coolant pump with high degree of efficiency

Electrical system

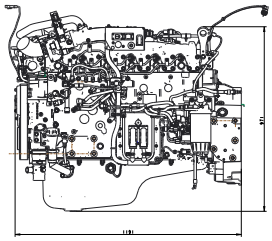
- Engine Management System (EMS), includes advanced features for diagnostics and fault tracing.
- The instruments and controls connect to the engine via the CAN SAE J1939 interface. Options available for engine control equipment.
- Software ready for dual fuel use

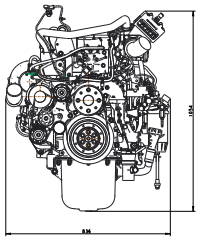
Exhaust after treatment system

- 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
- NOx sensor ready for dual fuel use

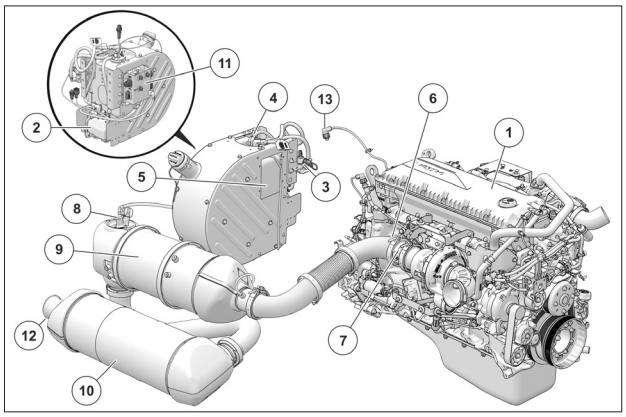
Dimensions

Not for installation. Dimensions in mm.





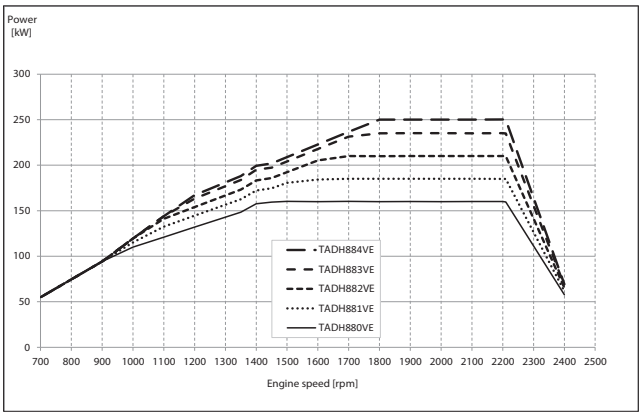
Main components

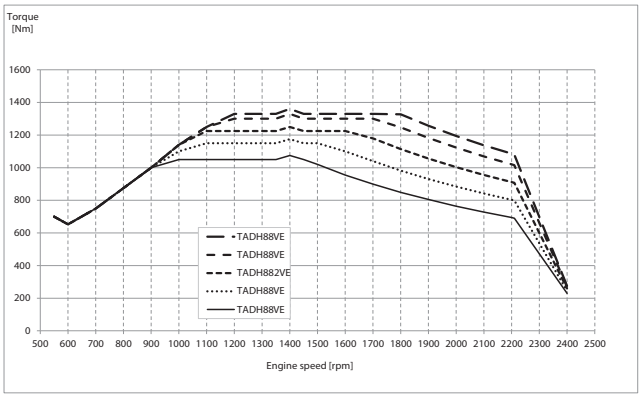


1. Engine with common rail fuel injection
2. AdBlue Pump Unit
3. Solenoid Valve, heating
4. Tank armature with sensors and heater
5. AdBlue tank, heated
6. NOx Sensor
7. Electrical Exhaust Pressure Governor
8. Dosage Valve
9. Diesel particular filter
10. Muffler with Catalytic Converter
11. After treatment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

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

Characteristics





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.

AB Volvo Penta
SE-405 08 Göteborg, Sweden
www.volvopenta.com