VOLKSWAGEN

AKTIENGESELLSCHAFT

The new TDI 2.0 Industrial Engines

Volkswagen Industrial Engines

The advantages are crystal-clear - engine technology proven a million times over.

All Volkswagen industrial engines are backed by the experience, innovative expertise and R&D strength of one of the world's largest diesel engine manufacturers.

Whether it's reliability, quality, technical standards, cost efficiency or environmental sensitivity - the result is a keen cutting edge across the board.

What else would you expect from the Volkswagens among industrial engines?

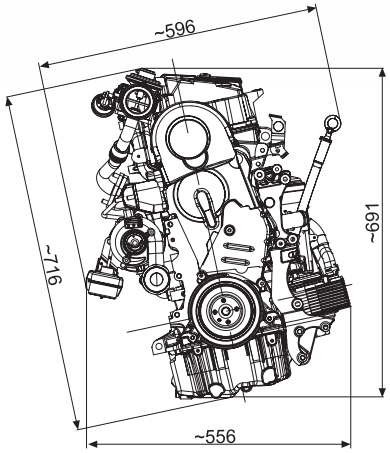
The
proven a million times
new
experienced
TDI 2.0
cutting-edge
Industrial Engines
reliable
with maintenance free
qualitative
valve drive
economical
by hydro-tappet.
environment friendly

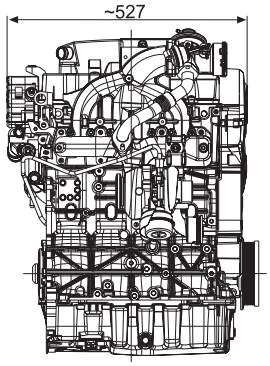
Engine names

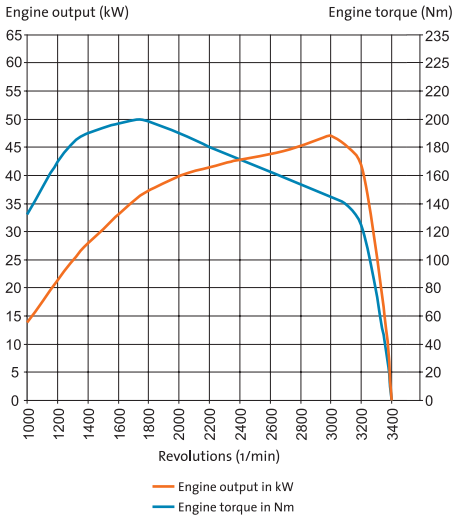
TDI 2.0 - 463 MC

- Emission certification
  - mobile working machinery — M — C = Stage 3a, D = Stage 3b — 97/68 EG
  - Commercial vehicle (light) — N — C =Euro III, D =Euro IV — 99/96 EG
  - USA Environmental Protection Agency — U — C =Step 3, D =Step 4 — US EPA
- No of cylinder / Power
- Displacement
- Injection / fuel

The TDI 2.0 - 447 MC in detail







Displacement	1.968 cm^3
Bore/Stroke	81,0 mm / 95,5 mm
Power (89/491/EWG)	47 kW @ 3.000 rpm
Max.Torque (89/491/EWG)	200 Nm @ 1.750 rpm
Compression ratio	18,5 : 1
Weight (dry)	appr. 150 kg
Spec. fuel consumption (best point)	212 g/kWh
Crank case	Grey cast iron
Cylinder head	overhead camshaft powered by drive belt with unit-injectors cams
Crankshaft	with one-mass flywheel
Emission certification	97/68 EG Stage 3a

Technology

Bosch electronically controlled unit injectors (EDC)

Engine electrical equipment

Alternator 14 V	14 V, 90 A (opt. 140 A)
Starter	12 V
Glow plugs	electronically controlled

Fuel

Diesel according to DIN EN 590, min. 51 CZ

Lubrication system

Pressure lubrication system, full flow oil filter

Oil consumption	0,2% of fuel consumption

Cooling system

Sealed cooling system

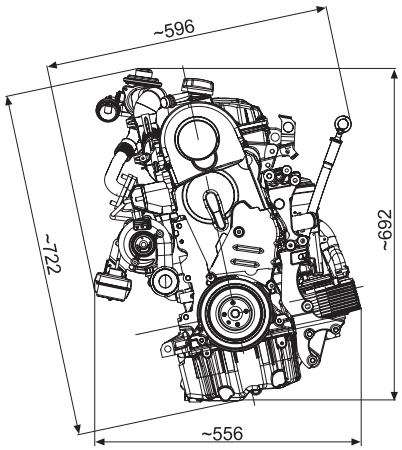
Permitted engine operating data

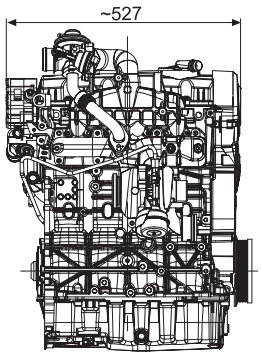
Min. permitted cold start temperature	-24° C (-11° F)
Max. permitted engine oil temp. (in sump)	120° C (248° F)
Max. permitted coolant temp. (outlet)	105° C (221° F)
Upper idling speed	3.400 rpm
Lower idling speed	830 +50/-25 rpm

Installation position

Standard inclination (viewed from flywheel)	15°

The TDI 2.0 - 463 MC in detail





Displacement	1.968 cm^3
Bore/Stroke	81,0 mm / 95,5 mm
Power (89/491/EWG)	63 kW @ 3.000 rpm
Max.Torque (89/491/EWG)	250 Nm @ 1.750 rpm
Compression ratio	18,5 : 1
Weight (dry)	appr. 150 kg
Spec. fuel consumption (best point)	201 g/kWh
Crank case	Grey cast iron
Cylinder head	overhead camshaft powered by drive belt with unit-injectors cams
Crankshaft	with one-mass flywheel
Emission certification	97/68 EG Stage 3a

Technology

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Engine electrical equipment

Alternator 14 V	14 V, 90 A (opt. 140 A)
Starter	12 V
Glow plugs	electronically controlled

Fuel

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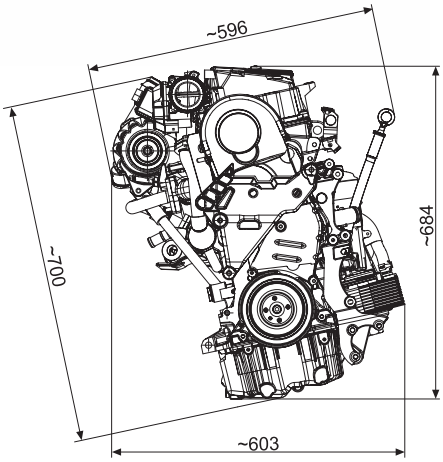
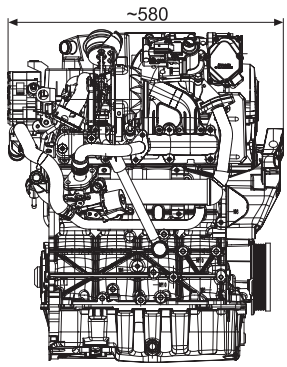
Upper idling speed	3.400 rpm
Lower idling speed	830 +50/-25 rpm

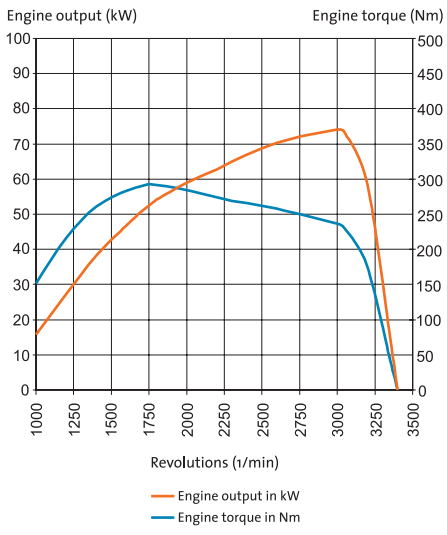
Installation position

Standard inclination (viewed from flywheel)	15°

The TDI 2.0 - 474 ND in detail







Displacement	1.968 cm^3
Bore/Stroke	81,0 mm / 95,5 mm
Power (89/491/EWG)	74 kW @ 3.000 rpm
Max.Torque (89/491/EWG)	285 Nm @ 1.750 rpm
Compression ratio	18,5 : 1
Weight (dry)	appr. 150 kg
Spec. fuel consumption (best point)	214 g/kWh
Crank case	Grey cast iron
Cylinder head	overhead camshaft powered by drive belt with unit-injectors cams
Crankshaft	with one-mass flywheel
Emission certification	99/96/EG Euro IV

Technology

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Engine electrical equipment

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Volkswagen AG
Industrial Engines Sales
Letter box 1961
D - 38436 Wolfsburg

Phone: +49 (5361) 9 - 4 05 20
Fax: +49 (5361) 9 - 3 56 65
E-Mail: industrialengines@volkswagen.de
Internet: www.vw-industrial-engines.com