

TCD 7.8

For mobile machinery

160 - 250 kW | 214 - 335 hp at 1800 - 2200 min⁻¹ | rpm
EU Stage IIIB & IV / US EPA Tier 4 interim & Tier 4

- Water-cooled 6-cylinder inline engine with turbocharging, charge air cooling and cooled external exhaust gas recirculation.
- Engine and exhaust aftertreatment (EAT) are adapted to an optimum efficiency of the total system and therefore ensure minimum fuel and total running costs.
- Consistent installation and connection dimensions of the engine facilitate the changeover of existing installations to the next stage of the emission legislation.
- The engines have a modular exhaust aftertreatment system (EAT) with components from the DVERT® kit and optional configuration variants. This means a high flexibility in machine integration for the OEM.



- The powerful DEUTZ Common Rail (DCR®) injection system and the electronic engine control (EMR 4) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.
- Best cold starting performance even under extreme conditions.

- Long oil change intervals and easy changing of the engine fluids reduce the running costs and increase the availability of the machinery.
- The extremely compact engine design and customer friendly accessories reduce the installation costs and increase the number of applications.
- 100% power take-off at flywheel and front end, and additionally up to two PTO drives with a total torque of up to 395 Nm.
- The engines meet the requirements of the EU Stage IIIB and US EPA Tier 4 interim with DVERT® particulate filter (DPF). Additionally for EU Stage IV / US Tier 4 with SCR. A variant without EAT is available as an option for less regulated markets.

Technical data

Engine type		TCD 7.8 L6
No. of cylinders		6
Bore/stroke	mm in	110/136 4.3/5.4
Displacement	l cu in	7.8 476
Max. nominal speed	min ⁻¹ rpm	2200
Power output ¹⁾		TCD 7.8 L6
Power output as per ISO 14396	kW hp	250 335
at speed	min ⁻¹ rpm	2200
Max. torque	Nm lb/ft	1400 1033
at speed	min ⁻¹ rpm	1450
Minimum idling speed	min ⁻¹ rpm	600
Specific fuel consumption ²⁾	g/kWh lb/hph	203 0.33
Weight as per DIN 70020 Part 7A ³⁾	kg lb	725 1598

1) Power data without deduction of fan power.

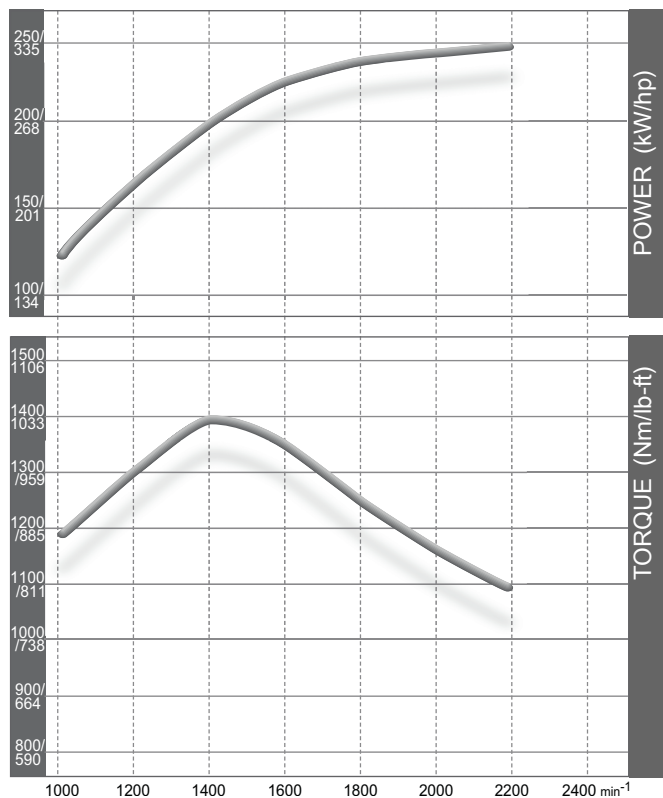
2) Best full load consumption refers to diesel with a density of 0.835 kg/dm³ at 15°C | 6.96 lb/US gallon at 60°F.

3) Without starter/alternator, cooler and fluids but with flywheel and flywheel housing.

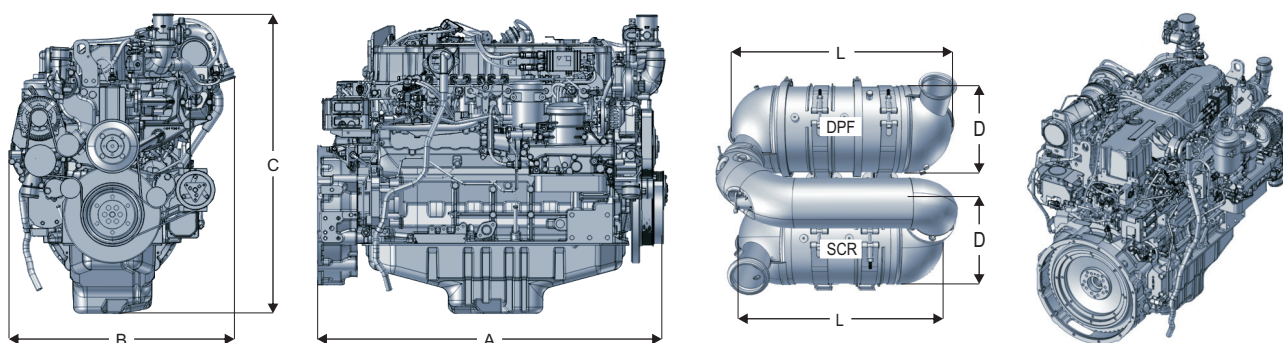
The data on this data sheet are for information purposes only and are not binding values. The data in the quotation is definitive.

Torque curve

TCD 7.8 L 6 - 250 kW|335 hp



Dimensions



						DPF		SCR		DVERT® EAT	
		A	B	C		D	L	D	L	DPF	SCR
TCD 7.8 L6 T4i	mm in	1214 46.1	793 31.2	1046 41.2		307 12.1	845 33.3	-	-	-	-
TCD 7.8 L6 T4	mm in	1214 46.1	793 31.2	1046 41.2		318 12.5	816 32.1	318 12.5	775 30.5		

■ Standard

Note: The engine dimensions and weights vary depending on the scope of delivery.

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For more information please contact the DEUTZ AG Köln or the responsible sales partner.

