## DEUTZ TCD 3.6

For mobile machinery ■ 55,4-105 kW / 75-141 hp at 2000-2600 min<sup>-1</sup>/rpm ■ EU Stage IIIB, IV and V / US EPA Tier 4

- Water-cooled 4-cylinder inline engine with cooled, external exhaust gas recirculation with turbocharging and optionally with and without charge air cooling.
- The powerful Common Rail injection system and the electronic engine control (EMR) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.
- The DVERT®oxidation catalyst for EU Stage IIIB and US EPA Tier 4 enables maintenance-free operation under all application and ambient conditions. A DVERT® particulate filter (DPF) is available as an option. With the introduction of EU Stage V, DPF will be available for all engine types. Through the use of the diesel particulate filter, the engines already comply with the EU Stage V emissions standard expected from 2019\*.
- For ease of machine installation engine foot print and all major installation interfaces will stay unchanged for Stage V.
- Up to 500 h oil change intervals and a maintenance-free valve train result in low maintenance costs and increased machine availability.
- 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. Additionally up to two PTO drives with a total torque of up to 310 Nm.

- A variant without EAT is optionally available for less regulated markets up to emission level EU Stage IIIA.
- New High Torque engine version for extraordinary strong performance below 56 kW. TCD 3.6 is available with 100 kW (Stage IV) and 105 kW (Stage V).



## **TECHNICAL DATA**

Engine type		TD 3.6 L4	TCD 3.6 L4 HT**)	TCD 3.6 L4	TCD 3.6 L4 HP***)
No. of cylinders		4	4	4	4
Bore/stroke	mm   in	98/120   3,9/4,7	98/120   3,9/4,7	98/120   3,9/4,7	98/120   3,9/4,7
Displacement	I   cu in	3,6   221	3,6   221	3,6   221	3,6   221
Max. nominal speed	min <sup>-1</sup>   rpm	2600	2300	2300	2300

	TD 3.6 L4	TCD 3.6 L4 HT**)	TCD 3.6 L4	TCD 3.6 L4 HP***)
kW   hp	55,4   74	55,4   74	100   136	105   141
min <sup>-1</sup>   rpm	2600	2300	2300	2300
Nm   lb/ft	330   243 4)	390   288 5)	500   369	550   406
min <sup>-1</sup>   rpm	1600	1300	1600	1600
min <sup>-1</sup>   rpm	800	800	800	800
g/kWh   lb/hph	220   0,36	210   0,35	210   0,35	210   0,35
kg   lb	350   772	350   772	350   772	350   772
	min <sup>-1</sup>   rpm Nm   lb/ft min <sup>-1</sup>   rpm min <sup>-1</sup>   rpm g/kWh   lb/hph	kW   hp 55,4   74   min-1   rpm 2600   Nm   lb/ft 330   243 4)   min-1   rpm 1600   min-1   rpm 800   g/kWh   lb/hph 220   0,36	kW   hp 55,4   74 55,4   74   min <sup>-1</sup>   rpm 2600 2300   Nm   lb/ft 330   243 <sup>-4</sup> ) 390   288 <sup>-5</sup> min <sup>-1</sup>   rpm 1600 1300   min <sup>-1</sup>   rpm 800 800   g/kWh   lb/hph 220   0,36 210   0,35	kW   hp 55,4   74 55,4   74 100   136   min <sup>-1</sup>   rpm 2600 2300 2300   Nm   lb/ft 330   243 49 390   288 59 500   369   min <sup>-1</sup>   rpm 1600 1300 1600   min <sup>-1</sup>   rpm 800 800 800   g/kWh   lb/hph 220   0,36 210   0,35 210   0,35

 $<sup>^{\</sup>star}$  Based on the proposal by the EU Commission COM (2014) 581 final from 25.09.2014

\*\*) HT = High Torque \*\*\*) HP = High Power



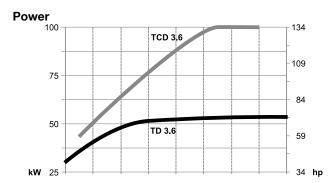
Power data without deduction of fan power

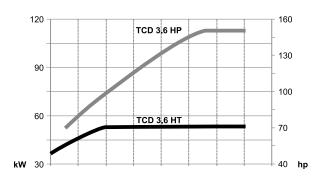
<sup>2)</sup> Best point consumption refers to diesel with a density of 0.835 kg/dm3 at 15°C.

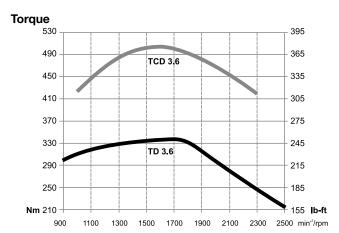
<sup>3)</sup> Without starter/alternator, cooler and fluids but with flywheel and flywheel housing

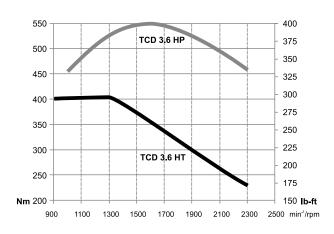
<sup>4) 340</sup> Nm | 251 lb/ft in Stage V

<sup>5) 405</sup> Nm | 299 lb/ft in Stage V

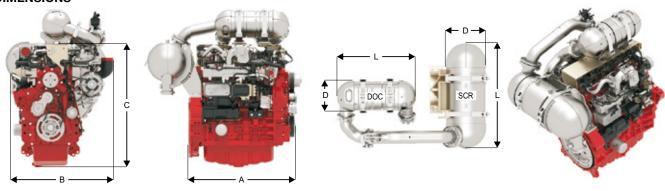








## **DIMENSIONS**



					DOC		SCR		DPF		DVERT® EAT		.AT
Engine type		A	В	С	D	L	D	L	D	L	DOC	SCR	DPF
TD 3.6	mm   in	701   27,6	592   23,3	790   31,1	199   7.8	523   20,6	-	-	199   7,8	613   24,1		-	•
TCD 3.6 HT	mm   in	701   27,6	592   23,3	790   31,1	199   7.8	523   20,6	-	-	199   7,8	613   24,1		-	•
TCD 3.6	mm   in	701   27,6	592   23,3	790   31,1	-	-	246   9,7	659   25,9	199   7,8	613   24,1			•
TCD 3.6 HP	mm   in	701   27,6	592   23,3	790   31,1	-	-	246   9,7	659   25,9	199   7,8	613   24,1	-	•	•

Standard for EU Stage IV / T4 Standard for EU Stage V

For TCD 3.6 Stage IV the DVERT® oxidation catalyst (DOC) does not satisfy the regulations of certain markets that have specified additional limit values for the number of particles (e.g.

DEUTZ offers the DVERT® wallflow particulate filter as an option for these markets.

All connection variants are available either in 0° or 90° positions for inlet and outlet flanges. Note: The engine dimensions and weights vary depending on the scope of delivery.

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

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