



## ZF electric drives Terra+ integrated generator platform for TERRAMATIC series

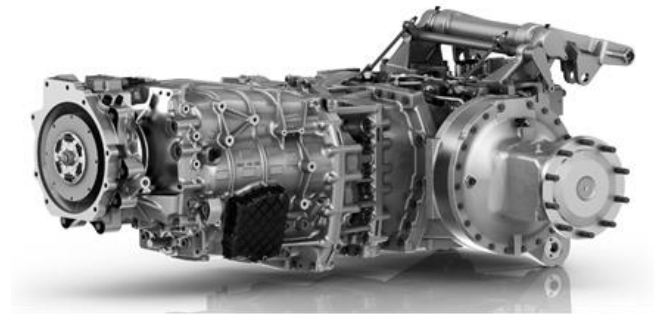
ZF-Terra+ offers a solution for high voltage and low voltage generator systems used in stepless tractor transmissions of the TerraMatic series. For the TerraMatic series from TMT 16 to TMT 32 the generator platform provides solutions which are integrated into the transmission housing. The generator module is integrated into the structural housing of the transaxles.

Power supplied by the engine is converted into electric power and can be used directly on the implement or on the tractor.

Through the generation and use of electric power it is possible to allow a higher power on the diesel engine as it is not transferred into the mechanical transmission drivetrain but directly converted into electric power.

A relatively large engine, for example, can thus be combined with a smaller transmission (transmission downsizing). By using the available electric power it is also possible that a lighter tractor is used to operate more powerful implements in combination with an electric traction drive.

The ZF Terra+ generator platform is built on synergies with other ZF divisions (passenger car and truck).



- Up to 80kW continuous electric power
- Integrated between engine and transmission
- Minimum effect on the existing vehicle architecture
- Transmission downsizing possible
- Electric power can be transmitted directly to an electric traction drive
- Electric power can be transmitted on the tractor or on the implement

Technical Data	ZF TERRAMATIC with TERRA+				
	TMT 16	TMT 20	TMT 25	TMT 27	TMT 32
<b>Vehicle Data</b>					
Engine power (max) [kW/PS] acc. ISO 14396	126/171 *	151/205 *	179/243 *	191/260 *	247/336 *
Nominal engine speed	2,000-2,200				
Vehicle speed max. [km/h] (@reduced engine speed)	50				
Gross vehicle weight [kg]	11,500	12,500	14,500	14,500	18,000
Rear axle load [N]	85,000	92,000	98,000	98,000	118,000
SRI max. [m]	0,875	0,925	0,975	0,975	1,025
<b>ZF Transaxle Data</b>					
Transmission input power max. regular [kW/PS]	116/157 *	151/205 *	167/227 *	179/243 *	231/314 *
Transmission Input torque max. regular [Nm]	670	875	965	1,035	1,300
Transaxle weight [kg]	1,670	2,075	2,429	2,434	2,510
Max. rear lift capacity [kg] **	9,200	9,600	11,000	11,000	12,700
<b>ZF TERRA+ Generator Option</b>	High Voltage: 650V; Low Voltage: 48V (possibly up to 72V)				
High voltage power S1 [kW]	60	60	80	80	80
Low voltage power S1 [kW]	18	18	18	18	18

\*Power increase with boost depending on transmission type between 8-12%

\*\*at hitch point; pending on OEM rear lift kinematics

S1: continuous duty at constant load

S2: short-time duty with a maximum continuous running time