eMobility – HV electric drive (Mid+ Power)

eDS – electric Drive System Mid+ w/ Decoupling+

The eDrive system is equipped with Decoupling+ a combination of an integrated decoupling unit and a predictive controls strategy. Together with next-gen technology options in the e-motor, inverter, gearbox and intelligent software strategy it contributes to best-in-class efficiency, safety, convenience and dynamics.



Features and Specifications

Feature:

Peak axle power: 160 kW for 30 s*
Boost axle power: 204 kW for 7 s**
Peak axle torque: 4,000 Nm
Cont. axle torque: 2,000 Nm
Output speed: 1,400 rpm

*Nominal battery voltage 350 V
**Nominal battery voltage 400V

Competitive advantage/differentiators

Efficiency
 35 W drag loss at 50 kph or
 94 % max. efficiency
 91.6 % avg. efficiency WLTC

- Safety
 - < 200 ms fast reconnect time
- Convenience
 1 ms control loop of native speed interface
- Dynamics
- + 8 % torque boost (7 sec.)
- + 22 % power boost (7 sec.)

Applications/benefits

· C, D, E, VAN Segment BEVs / PHEVs

SOP

Discovery Concept Development

Serial Preparation

in Production

Decoupling+