

eDS – electric Drive System Mid+

This eDrive with next-gen technologies provides up to 180 kW for 30 seconds and up to 4,000 Nm at the wheels. It can be applied to both hybrid and battery electric vehicles as primary and secondary drive. Next-gen technology options in the e-motor, inverter, gearbox and intelligent software strategy contribute to best-in-class efficiency, drivability and safety. Up to -24% less weight, +7% more power and -22% less volume in packaging compared to other available products in the market.



Features and Specifications

- Scalable from 120 to 180 kWp and 400 to 800 V while providing affordable cost via building block approach
- PSM e-motor, highly-optimized bearing concept, smart lubrication concept
- Inverter attached or axially integrated with optional SiC power module
- Advanced e-motor speed control interface enables intelligent launch vehicle function

Competitive advantage/differentiators

- Optimized and scalable to best-in-class efficiency (aiming > 95% peak efficiency)
- Best-in-class drivability, performance, and safety with TV option
- Optimized and flexible package
- Affordable cost

Applications/benefits

- C, D, E Segment BEVs / PHEVs
- Advanced direct stator cooling concept enabling increased continuous power performance
- Safety integrity level ASIL “D”
- Optional park lock or disconnect, and small packaged twin-clutch torque vectoring

SOP

