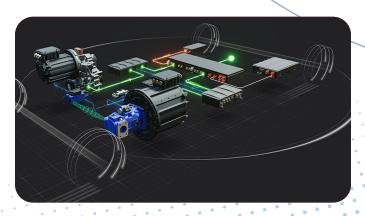




eLion High-Voltage Mobile Electrification

To meet the demands for increased productivity and performance in the mobile/off-highway industry while reducing operational costs, enhancing efficiency, and lowering exhaust and noise emissions, Evolution Motion Solutions provides high-voltage electrification solutions through Bosch Rexroth's 700 V eLION portfolio and our application, system, and technological expertise in motion control and electrification.

The eLION high-voltage class is designed for heavier-duty mobile/off-highway applications but is especially suited for intermittent-duty applications such as stump grinders, drill rigs, and forklifts. Whether driving, working, hydraulic, hybrid, or fully electric, we offer highly efficient, low-noise, and powerful electric motors, generators, inverters, and hydraulics combined with modular software applications for high-voltage mobile applications.



Benefits of the eLION Electrification

- Core Components needed for high-voltage mobile electrification
- High Efficiency from electric motors, gear units, and hydraulic pumps for traction and implement functions
- Specific Design for the mobile/off-highway market, including functional safety solutions
- Reduced Emissions from sustainable, reduced-noise solutions
- **Scalability** with four sizes of the 700 V motor-generators with different lengths and winding configurations
- BODAS Software for electronic control that perfectly matches the eLION portfolio



Application Software and Safety

- · Modular software for traction and implement control tailored for mobile machines across various electric topologies, featuring power management and application-specific functions
- · Integrated functional safety in accordance with ISO13849
- · Safety levels up to Category 3, PL d, and AgPL

Application Engineering

- Decades of extensive experience in the mobile market and electrification of mobile/off-highway applications
- · Evolution team provides design recommendations, identifies the best electrification solution, and helps you bring it to life
- · Comprehensive portfolio of functionalities that help to develop the desired vehicle architectures and performances

eLION Electrification Solutions

Motors, Generators, and Inverters

- Permanent magnet synchronous motors with reluctance for unparalleled power density and efficiency
- · Modular and scalable variants
- · Broad performance power range from 8 to 200 kW
- · Nominal torques of up to 1050 Nm and a maximum torque of up to 2400 Nm
- · Flexible components that tailor to your traction and implement function needs

Gear Units and Pumps

 Innovative single- and multi-speed central drive gear units for compact and robust drivetrain solutions





- · Advanced electrohydraulic functionalities to boost efficiency and implement control
- · 1 and 2-speed gear drives for wheel and axle-driven mobile solutions
- · Compact and robust components designed for limited installation space









