



BLS50 Brushless Motor Scooter Controller

- **Designed Utilizing Curtiss-Wright's 30+ Years' Mobility Industry Experience**
- **FDA Master File (MAF) for 510(k) Submissions**
- **MDR CE-Marking Documentation**
- **TÜV Certified**
- **Closed-Loop Drive Algorithm**
- **50 Arms Current Rating**
- **Battery Discharge Indicator Algorithm for Li-ion Batteries**
- **Under- and Overvoltage Management**
- **Battery Management System Interface (Future Use)**
- **Mounting and Footprint as S45**



The BLS50 brushless motor controller for mobility scooters has been designed and delivered from over three decades of proven engineering excellence, and extensive in-market knowledge and experience.

Independent certification and auditing are essential for responsible product compliance, and the BLS50 brushless motor controller meets the highest international standards. With certification from TÜV and supporting documentation for the FDA, the MDR, and ISO 7176-14 and -21, the BLS50 simplifies regulatory submissions for manufacturers, importers, and distributors, operating in highly regulated markets. This commitment demonstrates a responsible, trusted and fully compliant process.

The BLS50 sets a new benchmark in mobility with outstanding gradient performance, accommodating a wide range of user weights and scooter speeds, to support a diverse array of scooter models. With a powerful 50 Arms output, the BLS50 delivers exceptional performance, efficiency and reliability for mobility scooters.

The controller features an improved battery gauge algorithm that delivers greater charge accuracy when used with Li-ion batteries. Programmable under- and over-voltage functions facilitate smooth control of a scooter in such situations. The BLS50 is also fitted with a Battery Management System (BMS) interface connector for future use.

Finally, to aid installation, the BLS50 maintains the current footprint and mounting dimensions of the industry-standard, existing S45 from Curtiss-Wright.