

Electrical Drives

eScooter drive system – wheel-hub motor and electronic control unit (ECU)



BOSCH

Invented for life



eScooter drive system

Customer benefits

- ▶ **Efficiency level up to 90%**
 - Lower battery consumption
 - Improved performance of the eScooter
- ▶ **Reduced energy consumption**
 - Up to 10 % longer driving distance
 - Up to 20 % longer battery lifetime
- ▶ **Higher performance** with up to 10 % higher torque at low rotation
 - Faster acceleration
 - Faster climbing while driving uphill
- ▶ **Field Oriented Control (FOC)**
 - Improved noise and efficiency
 - Smooth and dynamic driving pleasure
- ▶ **Intelligent recuperation**
 - Re-charging of the battery while driving
 - Automatic protection of battery overload
- ▶ **Thermal protection** of ECU for increased lifetime

Product description

The eScooter drive system combines the wheel-hub motor and electronic control unit (ECU) for optimized driving and climbing performance. The superior quality of the system has set an entirely new standard in the Chinese market.

In addition to field oriented control (FOC), the ECU Gen2.0 offers an improved noise and efficiency for unique and dynamic driving pleasure as well as an enhanced and controlled recovery of braking energy.

The wheel-hub motor, with its compact design, fits easily into the conventional rear rim of any existing eScooter frame. This makes the installation process remarkably simple.

Specification

Weight: Motor 6.5 to 11.5 kg; ECU 0.3 to 1.9 kg

Power (peak): 750 to 2000 W

Power (rated): 350 to 1500 W

Maximum efficiency: up to 90%

Efficiency plateau @ 80 %: 6 - 55 Nm

Torque @ 100 rpm: up to 95 Nm

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