



SEA E-450 EV

Class 4

SEA ... the Future

The SEA E-450 EV is built on a E4E-450 cab chassis platform with a GVWR range from 14,000lbs to 14,500lbs and a 1,470Nm (1,084 ft lb) electric motor. The 100kWh (133 Hp) battery pack, delivers class leading range of up to 350km* (220 miles) and a typical breakeven period of less than 4 years.

SEA E450-EV

SEA-Drive® 100b

- Powered by SEA-Drive® 100b
- Range: Up to 350km* (220 miles) (unladen)
- Operating temperature range: -20°C to +55°C
- Controller: Centralised for optimisation of entire system

100% Electric Drivetrain

- Type: Permanent magnet motor
- Continuous Power: 80kW (107 hp)
- Maximum Power: 125kW (168 hp)
- Maximum Torque: 1,4700Nm (1,084 ft lb)
- Efficiency: 95% peak efficiency

Batteries

- 100kWh (133 Hp) battery capacity
- Life Cycle: 10+ Years
- Cell Type: Lithium-Ion (LiNiMnCoO₂) – Known as NMC
- Balancing: Passive Cell
- Energy Density: 127.7 Wh/Kg (18.8% increase in late 2019)
- Certified To: GB31467 and R100/02

Charging

- Standard charging is provided through an IEC 62196 Mode 3 charging using a 32 Amp three phase plug, with 22kW maximum charge, up to 6 hours. The DC to DC converter is 4kW with 24V power supply EN61851 compliant

Cooling System

- Variable speed IP67 radiator fans to increase power usage and efficiency

Electrical System

- Type: 24V negative earth
- System Batteries: 2x12V 100 Ah – maintenance free

HVAC - Air Conditioning and Heating

- Scroll permanent magnet motor – 6.5kW
- High pressure relief valve
- HVDC powered
- Isolation > 10 M ohm
- CAN communication to increase power usage efficiency
- PTC fluid heater – 6.6kW
- HVDC powered
- Overheat protection

Telematics SEA-Connect®

- World-wide GSM certification with fast internal modem (3G)
- External antenna with strong signal strength
- High-end industrial grade micro SD card
- Very low-power-draw and passive operation
- Based on TDDR principal, with 1 and 2 standard, and 3 and 4 future optional extras
(T)ruck = vehicle diagnostics and operational optimisation
(D)river = driver and vehicle interaction optimisation
(D)elivery = interface the 'Smart Truck' with payload deliveries and freight receiver communication
(R)oute = route data collection for route planning and real time route optimisation

System Warranty

- 5 years for batteries
- Remaining system warranty tied to OEM chassis

*Range figures are intended for comparison purposes only and are based on unladen, cab chassis or van test drive conditions. Actual range achieved will depend upon a number of factors including; load and body design, road conditions and topography, regenerative braking configuration and utilisation of electrical accessories.