



## SEA Drive™ 120

*SEA ... the Future*

The SEA-Drive™ 120a is built on a cab/chassis platform with GVM range from 6.5t to 9t (14,300lbs to 19,800lbs), and a 1500Nm electric motor. The 136kWh battery pack delivers class leading range of up to 350km (220 miles) and a typical breakeven period of less than 4 years.

The SEA-Drive™ 120b is built on a cab/chassis platform with GVM range from 9t to 14t (19,800lbs to 30,900lbs), and a 2300Nm electric motor. The 136kWh battery pack delivers class leading range of up to 350km (220 miles) and a typical breakeven period of less than 4 years.

## SEA Drive™ 120

### SEA-Drive™ 120

- Powered by SEA-Drive™ 120
- Range: Up to 350km (220 miles)
- Operating Temperature Range: -20°C to +45°C
- Controller: Centralised for optimisation of entire system

### 100% Electric Drivetrain 120a

- Type: Permanent Magnet Motor
- Continuous Power: 80kW
- Maximum Power: 125kW
- Maximum Torque: 1470Nm
- Efficiency: 95.0% peak efficiency

### 100% Electric Drivetrain 120b

- Type: Permanent Magnet Motor
- Continuous Power: 150kW
- Maximum Power: 250kW
- Maximum Torque: 2500Nm
- Efficiency: 95.0% peak efficiency

### Batteries

- 136kWh battery capacity
- Life Cycle: 10+ Years
- Cell Type: Lithium-Ion (LiNiMnCoO<sub>2</sub>) – Known as NMC
- Balancing: Passive Cell
- Energy Density: 127.7 Wh/Kg (18.8% increase in 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 charging is 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: 2x 12V 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

### Battery Warranty

- 5 years
- EV component warranty tied to OEM chassis warranty