



## E4B Commuter Bus

*SEA ... the Future*

The SEA E4B is the world's first commercially viable, 100% electric 15 seat commuter bus. With unparalleled performance delivered through SEA's unique, all electric power-system known as SEA-Drive™ 70, the E4B delivers class leading comfort, range, emissions and total-cost-of-ownership (TCO).

# SPECIFICATIONS



## Dimensions

Length: 5995mm	Front overhang: 1195mm
Width: 1880mm	Rear overhang: 1080mm
Height: 2285mm	Front Tread: 1650mm
Wheelbase: 3720mm	Rear Tread: 1080mm

## The E4B

- Powered by SEA-Drive™ 70
- Range: Up to 350km
- Top Speed: 110 km/h
- Operating Temperature Range: -20°C to +45°C
- Gradeability: 25%
- Controller: Centralised for optimisation of entire system
- 0 - 50km/h in 5 seconds
- VSB6, VSB14 and ADR compliant

## Mass

- Gross Vehicle Mass (GVM): 4,000kg
- Payload Approx: 1,300kg and 10.5m³

## 100% Electric Drivetrain

- Type: Permanent Magnet Motor
- Continuous Power: 75kW
- Maximum Power: 134kW
- Maximum Torque: 700Nm
- Efficiency: 95.5% peak system efficiency

## Batteries

- 88kWh battery capacity
- Life Cycle: 10+ Years
- Cell Type: Lithium-Ion (LiNiMnCoO2) – Known as NMC
- Battery System Mass: Approx 400kg
- Balancing: Passive Cell
- Energy Density: 127.7 Wh/Kg (18.8% increase in 2019)
- Certified To: ECE Reg 100 REV 02 and GB31467

## Charging

- Standard charging is provided through an IEC 62196 Mode 3 charging unit, with 22kW maximum charging in under 4 hours. The DC to DC converter is 4kW with 12V power supply EN61851 compliant.
- Optional 3 phase or 240V charging

## Cooling System

- Variable speed IP67 Radiator Fans to increase power usage and efficiency.

## Steering

- Type: Recirculating ball with power assist

## Exterior

- Standard: Driver's and passenger's side door
- Optional: Passenger side door
- Halogen headlamps

## Interior

- Seating: Driver and passenger seating
- Day Saloon with AM/FM radio, USB input for iPod or USB memory stick and Bluetooth capable system with 2 speakers
- Centre console with 4 cupholders
- Instruments and Controls: Power windows and mirrors. Central locking. Adjustable steering wheel (with drivers airbag)
- GPS
- Reversing camera

## Braking System

- Service: Vacuum over Hydraulic– dual circuit with ABS and EBD
- Park/Emergency System: Single drum brakes/rear booster
- System: Regenerative braking

## Electrical System

- Type: 12V negative earth
- System Batteries: 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 – 5 kW
- 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

## New Vehicle Warranty

- 3 years or 100,000km • 5 years for batteries