# VOLVO 7900 ELECTRIC

![VOLVO 7900 ELECTRIC Image](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>4 x 2, 12.0 m</th>
</tr>
</thead>
</table>

## Overall dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall length (mm)</td>
<td>12000</td>
</tr>
<tr>
<td>Overall width (mm)</td>
<td>2550</td>
</tr>
<tr>
<td>Overall height (mm)</td>
<td>3300</td>
</tr>
<tr>
<td>Wheelbase (mm)</td>
<td>6000</td>
</tr>
<tr>
<td>Front overhang (mm)</td>
<td>2700</td>
</tr>
<tr>
<td>Rear overhang (mm)</td>
<td>3300</td>
</tr>
<tr>
<td>Approach angle (°)</td>
<td>7.0</td>
</tr>
<tr>
<td>Departure angle (°)</td>
<td>7.0</td>
</tr>
<tr>
<td>Turning radius (outer front corner) (mm)</td>
<td>11000</td>
</tr>
<tr>
<td>Turning radius (outer front wheel) (mm)</td>
<td>8900</td>
</tr>
<tr>
<td>Overall height, approach and departure angles with tyres</td>
<td>275/70 R22.5</td>
</tr>
</tbody>
</table>

## Weights

<table>
<thead>
<tr>
<th>Weight</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitted front axle load (kg)</td>
<td>7500</td>
</tr>
<tr>
<td>Permitted drive axle load (kg)</td>
<td>12000</td>
</tr>
<tr>
<td>Permitted GVW (kg)</td>
<td>19500</td>
</tr>
</tbody>
</table>

## Electrical motor

<table>
<thead>
<tr>
<th>Motor Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output, max (kW)</td>
<td>R85 max 200</td>
</tr>
<tr>
<td>Max wheel torque (Nm)</td>
<td>19000</td>
</tr>
</tbody>
</table>

## Transmission and axles

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gearbox</td>
<td>Volvo 2-Speed Automated Manual Transmission</td>
</tr>
<tr>
<td>Front axle</td>
<td>Volvo RFS-L</td>
</tr>
<tr>
<td>Rear axle</td>
<td>ZF AV133</td>
</tr>
<tr>
<td>Differential lock</td>
<td>No</td>
</tr>
</tbody>
</table>
### Steer and suspension

<table>
<thead>
<tr>
<th>Steering wheel side</th>
<th>LHD/RHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power steering</td>
<td>Electric driven hydraulic steering</td>
</tr>
<tr>
<td>Kneeling</td>
<td>Standard</td>
</tr>
</tbody>
</table>

### Charging system
- Three different charging systems available
- Charging time depends on topography, load, climate and drive cycle

**Volvo Opportunity Charging (OppCharge)**
- Maximum charge power 300 kW
- Roof-mounted interface, installed above front axle for conductive charging (Same position as on Electric Hybrid)
- Fully automatic charging sequence

**CCS DC**
- Maximum charge power 150 kW
- Front charging comes as standard
- Side and rear charging are optional *
- European standard connector
- Manual Connection

* Removes front charging. Only one inlet can be installed per vehicle.

**CCS AC**
- Maximum charge power 11 kW 400 V AC
- European standard connector
- Manual Connection

### Energy storage system
- Lithium-ion battery
- Coolant cooled and heated
- Automatic temperature controlling of batteries

### Tyres and rims

<table>
<thead>
<tr>
<th>Rims</th>
<th>Tyres</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5 x 22.5&quot;</td>
<td>275/70 R22.5</td>
</tr>
</tbody>
</table>

### Air and brake system
- Volvo disc brakes
- Electronic Braking System (EBS 5)
- Anti-lock Braking System (ABS)
- Acceleration Slip Regulation (ASR)
- Brake blending
- Hill Start Aid
- Brake temperature warning
- Poor brake performance warning
- Door brake
- Brake Assistant
- Lining wear sensing and analysis
- Automatic calibration after brake pad change
- Compressed air system, easily filled from external circuit

### Exterior and structure
- Volvo’s patented lightweight aluminium body concept
- Front and rear wall in composite material and ABS elements
- Front and rear structure in anti-corrosion steel
- Double tinted glazing
- Multilayer exterior paint finish
- Easy repair of minor damages
- Parts commonality between city and intercity buses to lower maintenance cost
- Anti-corrosion treatment of underbody with conservation sealing and silencing agents
- LED headlamps
- LED Daytime running lights
- Auxiliary lights and fog lights as options
- Electrically adjustable and heated external mirrors

### Doors and door system
- Electric door system
- Inward gliding and outward sliding doors available
- Double glazing in all doors
- Electric sensitive edge for increased passenger safety
Climate system
• Roof-mounted HVAC unit (Heating, Ventilation and Air Conditioning, including heat pump functionality)
• Pipe convectors and air blowers
• Air blowers at doors
• Defroster with AC
• Driver convector or blower
• Auxiliary diesel/electric heater
• Separate climate zones for driver and passengers
  - For optimal climate and energy efficiency, the passenger temperature is controlled by a pre-set temperature curve
  - The temperature in the driver’s area is manually controlled

Interior
• Spacious and bright
• Comfortable
• Integrated position for passenger information displays
• Interior LED lights
• Low noise level

Passenger seats
Volvo city seats featuring:
• Optimised city bus seat
• Easy maintenance
• Available in a wide range of specifications to meet the demands of individual customers

Driver’s seat and station
• Volvo dashboard
• Dashboard moves with the steering column in height and tilt
• Available in Standard (fulfilling ISO16121) and VDV version. The VDV version with multistalk for wiper and direction indicator on left side of the steering wheel
• Instrument cluster:
  - speedometer
  - power meter
  - 4.3” display
  - indicators
  - warning lamps
• Data logging
• Volvo Alcolock
• Outdoor temperature meter
• ISRI driver’s seat
• Volvo Dynamic Steering (VDS)
• Pedestrian and Cyclist Detection System

Electrical system
Automatic shut off of main switch at low voltage level

Audio system
• Stereo radio with DAB
• Foot controlled public address system
• Amplifier adapted to city bus

Volvo Bus Corporation
volvobuses.com