



Volvo Buses. Driving quality of life

# VOLVO 7900 ELECTRIC



<b>Model</b>	<b>4 x 2, 12.0 m</b>
--------------	----------------------

<b>Overall dimensions</b>		
A	Overall length (mm)	12000
	Overall width (mm)	2550
C	Overall height (mm)	3300
D	Wheelbase (mm)	6000
G	Front overhang (mm)	2700
H	Rear overhang (mm)	3300
O	Approach angle (°)	7.0
P	Departure angle (°)	7.0
	Turning radius (outer front corner) (mm)	11000
	Turning radius (outer front wheel) (mm)	8900
	Overall height, approach and departure angles with tyres	275/70 R22.5

<b>Weights</b>		
	Permitted front axle load (kg)	7500
	Permitted drive axle load (kg)	12000
	Permitted GVW (kg)	19500

<b>Electrical motor</b>		
	Output, max (kW)	180
	Torque (Nm)	425

<b>Transmission and axles</b>		
	Gearbox	Volvo 2-Speed Automated Manual Transmission
	Front axle	Volvo RFS-L
	Rear axle	ZF AV133
	Differential lock	No

# VOLVO 7900 ELECTRIC

<b>Model</b>	<b>4 x 2, 12.0 m</b>
--------------	----------------------

<b>Steering and suspension</b>	
Steering wheel side	LHD/RHD
Power steering	Electric driven hydraulic steering
Kneeling	Standard

## 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 (The same position as on Electric Hybrid)  
Fully automatic charging sequence

## CCS

Maximum charge power 150 kW 600 V DC  
Front charging comes as standard  
Side and rear charging are optional  
European standard connector  
Manual Connection

## Low power charging

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

## Voltage

600 V

## Capacity (total energy)

150, 200 or 250 kWh

## Cooling system

- Electrically driven fans with improved speed control
- No coolant filter
- Coolant level warning in instrument cluster
- Higher allowed coolant temperature for better cooling performance

## Tyres and rims

Steel rims available

Rims	Tyres
7.5 x 22.5"	275/70 R22.5

## 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

# VOLVO 7900 ELECTRIC

## 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

## Capacity

### Roof heating mode:

28 kW Water

9 kW Heat pump (Air/Air)

### AC mode (35/40/47%):

25 kW

### Defroster:

Heating Q80

18 kW

Cooling

5.5 kW

Air flow

880 m<sup>3</sup>/h

### Convectors:

551 W/m at  $\Delta$  temp. 60 °C

### Driver AC:

- For hot markets: Electrical roof-mounted driver AC, connected to defroster
- Standard: Defroster connected to passenger AC unit

### Auxiliary heater:

Fuel (Diesel/HVO/Biodiesel) 16 kW

Electric 14 kW

## 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

### Number of batteries

2 x 12 V

### Battery capacity

105 Ah

## Audio system

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

# VOLVO

Volvo Bus Corporation

volvobuses.com