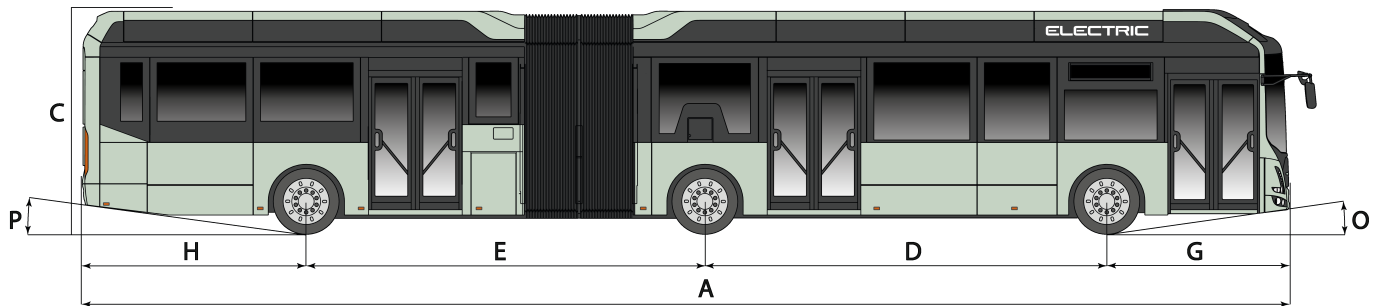




Volvo Buses. Driving quality of life

# VOLVO 7900 ELECTRIC ARTICULATED



Model	Articulated, 18.0 m	Articulated, 18.7 m
-------	---------------------	---------------------

Overall dimensions		
A Overall length (mm)	17,849	18,557
Overall width (mm)	2,550	2,550
C Overall height (mm)	3,320	3,320
D Front wheelbase (mm)	5,945	5,945
E Rear wheelbase (mm)	5,897 (4,037 + 1,860)	6,605 (4,745 + 1,860)
Max horizontal/vertical turning angle of articulated joint (°)	52/10	52/10
G Front overhang (mm)	2,699	2,699
H Rear overhang (mm)	3,308	3,308
O Approach angle (°)	7.0	7.0
P Departure angle (°)	7.0	7.0
Turning radius (outer front corner) (mm)	12,305	12,305
Turning radius (outer front wheel) (mm)	10,750	10,750
Overall height, approach and departure angles with tyres	275/70 R22.5	275/70 R22.5

Weights		
Permitted front axle load (kg)	7,500	7,500
Permitted drive axle load (kg)	12,500	12,500
Permitted middle axle load (kg)	10,000	10,000
Permitted GVW (kg)	29,000	29,000

Electrical motor		
Output, max (kW)	R85 max 2x200	R85 max 2x200
	R85 30 min 170	R85 30 min 170
Max wheel torque (Nm)	31,000	31,000

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

# VOLVO 7900 ELECTRIC ARTICULATED

Model	Articulated, 18.0 m	Articulated, 18.7 m
-------	---------------------	---------------------

Steering and suspension		
Steering wheel side	LHD	LHD
Power steering	Electric driven hydraulic steering	Electric driven hydraulic steering
Kneeling	Standard	Standard

## Charging system

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

### Volvo Opportunity Charging (OppCharge)

Maximum charge power 450 kW  
 Roof-mounted interface, installed above front axle for conductive charging (The 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.

## Energy storage system

- Lithium-ion battery
- Coolant cooled and heated
- Automatic temperature controlling of batteries

### Voltage

600 V

### Capacity (total energy)

264- 396 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 ARTICULATED

## 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

### AC unit:

Cooling capacity max (35/40/47%)

31 kW

Heating capacity at Q80

56 kW

### Roof heating unit (when not specified with AC):

Heating capacity at Q80

50 kW

9 kW Heat pump (Air/Air)

### Convectors:

Heating capacity at Q100

918 W/m

### Defroster:

Heating capacity at Q80

18 kW

Cooling capacity max

5.5 kW

Airflow max at dP 0

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

### Driver AC:

Electrical roof-mounted driver AC, connected to defroster

### Auxiliary heater:

Heating capacity

41 kW (18 kW electric and 23 kW fuel)

Fuel: Diesel/HVO/Biodiesel

## Interior

- Spacious and bright
- Comfortable
- Integrated position for passenger
- Information displays
- Interior LED lights

## 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
- Instrument cluster:
  - - speedometer
  - - power meter
  - - 4.3" display
  - - indicators
  - - warning lamps
- Volvo Alcolock
- Outdoor temperature meter
- ISRI driver's seat

## 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

## Ready to run

- The bus will keep the batteries in working temperature, to ensure that the bus can be started directly when needed without pre-heating period
- 24V batteries will be charged from 600V battery
- Pre-heating of interior can be done via setting timer

# VOLVO

Volvo Bus Corporation

volvobuses.com