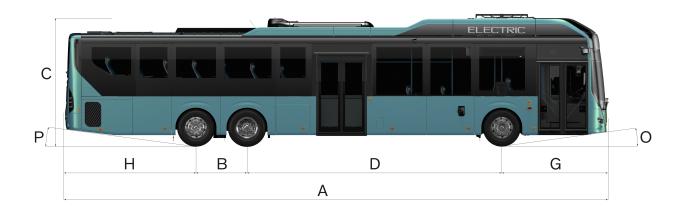
### V O L V O

# **VOLVO 8900 ELECTRIC**



Model		4x2, 12.3 m	6x2, 14.9 m
Over	all dimensions		
Α	Overall length (mm)	12,296	14,896
	Overall width (mm)	2,550	2,550
В	Bogie (mm)	n/a	1,400
С	Overall height (mm)*	3,625	3,625
D	Wheelbase (mm)	6,100	7,000
G	Front overhang (mm)	2,899	2,899
Н	Rear overhang (mm)	3,297	3,597
0	Approach angle (°)*	7.1	7.1
Р	Departure angle (°)*	7.6	7.0
	Turning radius (outer front corner) (mm)	11,055	12,325
	Turning radius (outer front wheel) (mm)	9,035	10,285
*)	Overall height, approach and departure angles with tyres	295/80 R22.5	295/80 R22.5

Weights			
Permitted front axle load (kg)	8,000	8,000	
Permitted drive axle load (kg)	12,600	11,500	
Bogie axle load (kg)	n/a	17,250 (19,000)	
Permitted tag axle load (kg)	n/a	5,750 (7,500)	
Permitted GVW (kg)	20,600	27,000	

Electric motor		
Output, max (kW)	R85 max 2x200	R85 max 2x200
	R85 30 min 2x167	R85 30 min 2x167
Max wheel torque (Nm)	31,000	31,000

## **VOLVO 8900 ELECTRIC**

	·	
Energy storage system (ESS)		
Available storage energy (battery capacity)	90 kWh	90 kWh
Available storage energy (4–6 batteries)	Up to 450 kWh	Up to 540 kWh
Battery chemistry type	Lithium-ion, NCA	Lithium-ion, NCA
Voltage	600 V	600 V
Mass per hattery (kg)	535 kg	535 kg

4x2, 12.3 m

Fuel tank (optional, if diesel heater selected)		
Volume (L)	60	60

Transmission and axles			
Gearbox	2-speed automated manual	2-speed automated manual	
Gearbox	transmission	transmission	
Front axle	Volvo RFS-L	Volvo RFS-L	
Rear axle	Volvo RS1228C	Volvo RS1228C	
Differential lock	No	No	

Steering and suspension		
Steering wheel side	LHD	LHD
Power steering	Electrically powered hydraulic	Electrically powered hydraulic
Power steering	steering	steering
Kneeling	Optional	Optional

#### **Charging system**

Charging systems available:

OppCharge

Model

· CCS charging

#### OppCharge

- Maximum charge power 450 kW
- Roof-mounted interface, installed above the front axle for conductive charging
- Fully automatic charging sequence

#### CCS DC

- Maximum charge power 250 kW
- Plug-in sockets in several locations to suit your depot layout. Double plug-in points are also available
- European standard connector
- Manual connection

#### Energy storage system (ESS) safety

- · Battery monitoring
- Safety on cell and pack level (monitoring)
- Insulation isolation resistance monitoring
- Charging safety
- · Workshop safety
- Mechanical protection
- E-info session
- Rescue sheet

#### **ESS** precondition

- The bus keeps the traction batteries in working temperature, to ensure that the bus can be started directly when needed without a pre-heating period
- The 24 V battery is monitored and charged if needed from the traction batteries or grid when connected

#### **Electrical system**

Automatic shut-off of main switch at low voltage level

#### **Battery capacity**

140 Ah (gel battery)

#### **Driveline cooling system**

- Electrically driven fans with speed control
- No coolant filter
- Coolant level warning in instrument cluster

#### Doors and door system

Electric door system:

Front door, single sliding or double inward gliding

6x2, 14.9 m

- Middle door, single sliding or double sliding
- Third door, single sliding or without third door

#### Tires and rims

Steel or aluminum rims

#### Tires and rims

Rims	Tires
8.25" x 22.5"	305/70
8.25" x 22.5"	295/80

#### Air and brake system

- Disc brakes
- Electronic Braking System (EBS 5)
- Electronic Stability Program (ESP)
- Anti-lock Braking System (ABS)
- Anti slip regulation (ASR)
- Electronic Stability Control
- Brake blending
- Hill Start Aid
- Brake temperature warning
- Brake assistance
- Brake pad wear indication
- Pneumatic system, easily accessible for external fill

### **VOLVO 8900 ELECTRIC**

#### **Exterior and structure**

- Volvo's patented lightweight aluminum body concept
- Front and rear wall in composite material and ABS elements
- Front and rear structure in anticorrosion steel
- Double tinted glazing
- Parts commonality between city and intercity buses to lower maintenance
- Anti-corrosion treatment of underbody with conservation sealing and silencing agents
- Three-in-one LED lamp with daytime running lights, position light and turn signal
- Auxiliary lights and fog lights as options
- Headlamps (low and high beam) Bi-LFD
- Electrically adjustable and heated external mirrors
- Aerodynamic front geometry reducing vehicle air drag

#### Interior

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

#### Passenger capacity

Model	Passenger capacity
	Up to 43 seats, up to 88
12.3 m	passengers in total
6x2,	Up to 57 seats, up to 110
14.9 m	passengers in total

#### Passenger seats

Volvo coach line, Volvo intercity line or Volvo city line seats featuring:

- Unique product design
- Superior ergonomics and comfort
- Safety designed seat with impact areas
- · Low weight
- Available in a wide range of specifications to meet the demands of individual customers
- Volvo service and spare parts handling

#### **Driver's station**

Cluster and controls transit-mounted. Also available with Volvo dashboard:

- Dashboard that moves with steering wheel adjustment
- Volvo Dynamic Steering
- Digital instrument cluster
- Steering wheel buttons for easy access
- Integrated infotainment
- Digital speed
- Charging information
- $\bullet\,$  State of charge in  $\%\,$
- Remaining distance
- Power meter
- · Volvo active safety systems
- Longer retarder stalk

#### **Audio system**

- Stereo radio with DAB
- Foot-controlled public address system

#### Passive safety

- Flammability according to ECE-R118.02
- Front Impact Protection System compliant with the R29 front impact requirement (option)
- Front Underrun Protection System compliant with the R93 underrun protection requirement
- Rear Underrun and Impact Protection System compliant with the R58 protection requirement
- Integrated seat belt for driver (standard)
- Closed driver's cabin for driver's safety (option)
- Passenger two-point or three-point seat belts (option)
- Child seat (option)
- Roll-over test ECE-R66 compliant

#### **Active safety systems**

- Front/rear camera
- Side/front radars
- Forward Collision Warning
- Side Collision Avoidance Support
- Front Short Range Assist
- Lane Keeping Support
- Lane Change Support
- Intelligent Speed Assist
- Driver Alert Support
- Tire Pressure Monitoring System

## **VOLVO 8900 ELECTRIC**

#### **Climate system**

- Roof-mounted heat pump in combination with coolant-based roof heating
- Floor heating with convectors and blowers
- Air blowers at doors
- Driver convector or blower
- Electrical coolant heaters
- Fuel operated heater (option)
- Separate climate zones for driver and passengers
  - For optimal climate and energy efficiency, the passenger area is controlled by a pre-defined temperature curve
  - The temperature in the driver's area is controlled automatically, but the driver can manually change the set temperature

Heat pump mode:	25 kW (Tout -10, Tin 16)
Coolant-based roof heating:	40 kW
AC mode:	28 kW (Tout 35, Tin 40)
Defroster: Heating	18 kW (Q80)
Defroster: Cooling	5.5 kW
Defroster: Air flow	880 m3/h
Convectors:	900W/m (Q80)
Electrical heaters:	2x12 kW
Fuel heater (optional):	23 kW