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Versatile, efficient and reliable

VOLVO BZR ELECTRIC RANGE





THE FUTURE-PROOF E-MOBILITY PLATFORM

The Volvo BZR Electric is a highly versatile electric vehicle platform for safe, sustainable and reliable operation, that comes in medium-floor and low-entry versions. It's suited for a wide range of applications, such as city traffic, commuting, intercity shuttles and school bus services. The Volvo BZR Electric is built on a common Volvo Group e-mobility architecture, which makes it a future-proof, reliable and cost-efficient choice.

Made to just keep running

All models of the Volvo BZR Electric are reliable moneymakers in city, intercity and commuter applications. They are built with your business in mind, and at Volvo we know what it takes to run a profitable operation. The Volvo BZR/RLE Electric will help you keep your promises to your customers.

Outstanding versatility

The Volvo BZR/RLE Electric is a platform with a lot of built-in options. It comes in two- or three-axle versions, medium-floor or low-entry, with single or dual motors and a modular energy storage. The chassis is designed for efficient high-quality bodybuilding and swift maintenance. The Volvo BZR/RLE Electric will be just the bus you need.

Charging flexibility - unlimited range

Every route is unique, and tight schedules call for efficient charging strategies. The Volvo BZR/RLE Electric features dual charging options; up to 250 kW via cable or up to 450 kW with OppCharge. With on-route charging, the number of batteries onboard can be reduced, and still deliver a daily range that is literally unlimited. And, as a bonus, the reduced vehicle weight increases passenger capacity.

Driver and passenger comfort

Comfort starts with structural balance and stability. The Volvo BZR/RLE Electric is a highly robust and well-tuned chassis range. Light-weight and sturdy wheel suspension together with a smooth, silent driveline ensure that the prerequisites for premium ride comfort are in place.

Designed for life-long sustainability

At Volvo Buses, sustainability is more than zero tailpipe emissions. The Volvo BZR/RLE Electric is made in Sweden to the highest quality and sustainability standards. We focus on the details that help us reach our ambitious climate targets – in development and manufacturing, when handed over to our customers, and at the end of the vehicles' life. This is how we deliver sustainable transport solutions.





A rewarding driver experience

First-class driving environment

The Volvo BZR/RLE Electric comes with several features that boost comfort and safety for the driver. A multifunction steering wheel and a dynamic instrument cluster that provides a superior overview of important driver information, enhancing driver focus and control.

Stability and control

Stability in all driving situations and a short turning radius give outstanding manoeuvrability — in the city and on the urban highways. Add to that the powerful high-torque motors, the automated gearbox and over-dimensioned braking capabilities. A Volvo puts the driver in control.

Active safety systems

The Volvo BZR/RLE Electric offers an array of intelligent functions that help the driver to drive safely and avoid incidents, and that protect from injuries and damage. Smart sensors and advanced software detect events that could lead to dangerous situations. The features focus on early warnings to the driver about upcoming risks and protection of vulnerable road users, such as pedestrians and cyclists.

Volvo Dynamic Steering

This technology improves steering responsiveness and precision. It reduces the strain on the driver's shoulders, neck and arms, and adds stability and ride comfort for your passengers.

Customized performance

The Volvo electric driveline

The Volvo electric driveline can be specified with single or dual motors, providing 200 or 400 kW in total output power. High torque, low weight and service-friendly installation are other characteristics that will enhance your operations.

For any climate

Dedicated cooling and heating of the entire traction system optimises the performance of the motor and the energy storage system, without wasting any energy. This is why the Volvo BZR/RLE Electric has a specified operating range from -40 to +50°C.

Long service intervals

The Volvo BZR/RLE Electric is built to cope with long working shifts and tight schedules. To optimise availability, we offer individual maintenance plans based on the vehicle's actual operational history. Simply put, more hours on the road and fewer, shorter service visits.

State-of-the-art battery management system

The lifetime of a bus battery will be increased substantially if it is managed correctly, both in operation and in charging and maintenance. All Volvo electric buses feature a smart battery management system, which controls all charging and discharging processes, and monitors battery health and performance.

Our usable energy commitment

The maximum range of an electric bus varies with temperature, driving style and battery condition. Based on a joint analysis, Volvo offers a guaranteed onboard energy capacity that covers the need for the route, from day one and throughout the contract period.

The energy saving I-Shift transmission

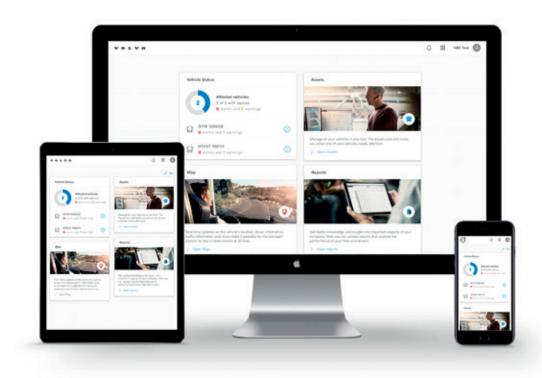
Electric motors can deliver massive torque also at low speed. To optimise acceleration performance and save energy, Volvo BZR/RLE Electric features a two-speed version of the renowned Volvo I-Shift gearbox.



The all-Volvo driveline is available with single or dual motors. The propeller shaft concept makes for swift maintenance and improved comfort.

Connect to productivity

Uptime is number one. With Volvo's range of connected services and extensive network for service and parts logistics, your vehicles will spend more time on the road. And with our service contracts, your maintenance can be optimised for each individual vehicle.



Volvo Connect

With Volvo Connect you can save fuel, increase efficiency, secure uptime, boost safety and grow profitability. Volvo Connect is a web-based portal, and your entrance to the world of Volvo Bus Services, including fleet management services. Reports, vehicle management, positioning and driving profile will help you improve productivity. Volvo Connect also includes our unique geofencing service Zone Management, and a line-up of workshop services.

Service contracts

A service contract has one purpose only: to keep your vehicles available, safe and productive. A well-maintained bus or coach will simply do a better job. The risk of unplanned stops, or even breakdowns, is significantly reduced. There is a service contract for every need. In addition to our principal contracts, Blue, Silver and Gold, there are several options for tailoring the coverage to suit your operation.

Make sure it's Volvo inside

Volvo is a world-leading company in heavy commercial vehicles. All the chassis and driveline components in our vehicles are developed, designed and manufactured by Volvo, which means we take full responsibility for function and quality.

Dimensions and weights				
Model	4×2	6×2	4×2 Low entry	6×2 Low entry
Overall chassis length, depending on body, up to (m)	9.5-13.2	12.4-14.9	9.8-13.1	12.8-14.8
Transport wheelbase (m)	4.0	4.0	4.0	4.0
Frame height at rear structure (m)	1.5	1.5	1.5	1.5
Overall width (m)	2.5	2.5	2.5	2.5
Permitted GVW (kg)	20,800	27,200	20,600	27,000

Driveline				
Electric motor, output max (kWh), one or two motors	200 (one motor) 400 (two motors)	400 (two motors)	200 (one motor) 400 (two motors)	400 (two motors)
Max wheel torque up to (Nm)	20,900 (one motor) 33,500 (two motors)	33,500	20,900 (one motor) 33,500 (two motors)	33,500
Gearbox	Volvo 2-speed automated manual transmission			

Charging *				
OppCharge max charge power (kW)	450	450	450	450
CCS max charge power (kW)	250	250	250	250

^{*} Max charge power depending on configuration of the energy storage system.

Energy storage system				
Capacity (kWh)	Up to 450	Up to 540	Up to 450	Up to 540
Traction battery	Lithium-ion battery (NCA). Automatically temperature-controlled.			

Chassis including energy storage system module for roof mounting.

Axles, suspension and steering				
Front axle	Volvo RFS	Volvo RFS		
Rear axle	Volvo RS1228C	Volvo RS1228C		
Suspension	Air bellows, front and rear	Air bellows, front and rear		
Kneeling	Optional	Optional		
Power steering	Electric driven hydraulic steering	Electric driven hydraulic steering		
Tyres	275/70 R22.5", 295/80 R22.5", 305/70 R22.5" 315/70 R22.5", 315/80 R22.5"	275/70 R22.5", 295/80 R22.5" 305/70 R22.5", 315/70 R22.5"		
Rims	Steel or aluminium rims available	Steel or aluminium rims available		

Brakes

Volvo disc brakes. Electronic Braking System (EBS 5). Anti-lock Braking System (ABS). Acceleration Slip Regulator (ASR). Brake blending. Electronic Stability Control (ESC).

Driver's environment

Volvo dashboard or limited dashboard, supplemented by bodybuilder. Dashboard moves with the steering column for height and tilt (Volvo dashboard). Instrument cluster, tachograph, data logging, alcolock.

Safety features

- Forward Collision Warning
- Acoustic Vehicle Alerting System, AVAS
- Volvo Safety Zones, part of Volvo Zone Management
- Volvo Dynamic Steering, VDS
- Front Short Range Assist
- Side Collision Avoidance Support, SCAS
- Lane Change Support, LCS
- Lane Keeping Support, LKS
- Driver Alert Support, DAS
- Intelligent Speed Assist
- Tire Pressure Monitoring System, TPMS
- Hill Start Aid
- Emergency Stop Signal

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