



# TROLLEYBUS



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- Environmentally friendly technology
- Zero carbon emissions
- Innovative and modern design
- High performance
- Maximum driving and passenger comfort
- Vibration-free and quiet electric motor



Innovative Public  
Transportation  
System of the  
Modern Age



It offers maximum efficiency  
with its superior electric and  
energy-saving technology.



**Lenght**



12-18-24m

**Speed**



80km/h

**Passenger  
Capatity**



100-140-200

**100% Bozankaya  
Engineering**



# Economic and sustainable transportation with high passenger capacity.



## Eco-Friendly Driving with Bozankaya Battery Trolleybus

Bozankaya, the manufacturer of new generation transportation systems, offers high energy savings and maximum driving comfort with its environmentally friendly trolleybus design. Trolleybuses with zero carbon emission feature are noiseless and electrically powered public transportation vehicles with advanced technology infrastructure.

Superior quality steel, high-strength chassis and epoxy primer application are used in the modern design that offers strong performance and high efficiency. Trolleybuses, which provide maximum driving comfort with their high torque engine feature, are manufactured with the principle of vibration-free operation.

In motion; while in the catenary field, energy for both the vehicle and its batteries and in the catenary-free area, it makes a difference with its ability to achieve a minimum range of 25 km with its battery. Trolleybus designs, which aim uninterrupted and economical use in transportation, are the community transportation systems of the future.



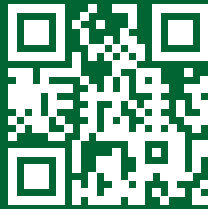
TECHNICAL SPECIFICATIONS	Bozankaya 12 M TROLLEYBUS	Bozankaya 18 M TROLLEYBUS	Bozankaya 24 M TROLLEYBUS
Catenary Voltage ( Line Voltage )	600 V / 750 V ( +/- % 30)	600 V / 750 V ( +/- % 30)	600 V / 750 V ( +/- % 30)
Operation in Reverse Polarity	Yes	Yes	Yes
<b>VEHICLE TYPE</b>			
Vehicle Category & Class	100% Low Floor, M3 Class I	100% Low Floor, M3 Class I	100% Low Floor, M3 Class I
Number of Articulations	0	1	2
<b>ELECTRIC MOTOR SYSTEM FEATURES</b>			
Nom. Engine Power (kW)	160 / 240	240	2 x 160 or 2 x 240
Max. Engine Torque (Nm)	1800 / 2800	2800	2 x 1800 / 2 x 2800
Engine Type	Central Engine	Central Engine	Central Engine
Motor Türü	Asenkron Motor	Asenkron Motor	Asenkron Motor
Engine Cooling Type	Conditioned Air Cooling	Conditioned Air Cooling	Conditioned Air Cooling
Max. Slope	%18	%18	%18
<b>PERFORMANCE &amp; VEHICLE FEATURES</b>			
Maximum Speed (Km/h)	80	80	80
High Voltage Battery Type	Standard LTO. NMC or LFP can be used depending on project demand.	Standard LTO. NMC or LFP can be used depending on project demand.	Standard LTO. NMC or LFP can be used depending on project demand.
High Voltage Battery Capacity	Up to 60 kWh ( For Standard LTO Solution )	Up to 60 kWh ( For Standard LTO Solution )	Up to 90 kWh ( For Standard LTO Solution )
Battery Range (With Operating Conditions and Single Charge)	Up to 40 km	Up to 25 km	Up to 25 km
Charging Type	Mode-4 Type-2 CCS Plug	Mode-4 Type-2 CCS Plug	Mode-4 Type-2 CCS Plug
Charging Type For Catenary	Yes , Up to 60 kW	Yes , Up to 60 kW	Yes , Up to 60 kW
Charging Power	CCS Plug : Up to 360 kW	CCS Plug : Up to 360 kW	CCS Plug : Up to 360 kW
Charging Features	Suitable Fast and Slow Charging	Suitable Fast and Slow Charging	Suitable Fast and Slow Charging
Number of Doors	2 or 3 Pieces, Double Wing - Electric or Air	3 or 4 Pieces, Double Wing - Electric or Air	4 or 5 Pieces, Double Wing - Electric or Air
Maximum Seat Capacity	38 Seats (with 2 Doors), 34 Seats (with 3 Doors)	52 Seats (with 3 Doors), 48 Seats (with 4 Doors)	65 Seats
Passenger Capacity	Up to 100	Up to 140	Up to 200
<b>Brake System-AKS Type-Wheel</b>			
Brake system	WABCO, EBS3 (ABS,ASR,Regenerative Braking) Electrical and Pneumatic	WABCO, EBS3 (ABS,ASR,Regenerative Braking) Electrical and Pneumatic	WABCO, EBS3 (ABS,ASR,Regenerative Braking) Electrical and Pneumatic
Suspension System	WABCO, ECAS (Air Suspension, Kneeling Function)	WABCO, ECAS (Air Suspension, Kneeling Function)	WABCO, ECAS (Air Suspension, Kneeling Function)
Tire Size	275 / 70 R22.5	275 / 70 R22.5	275 / 70 R22.5
Front Axle	ZF RL 82 EC (Independent)	ZF RL 82 EC (Independent)	ZF RL 82 EC (Independent)
Drive Axle	ZF AV 133 Driven Portal Axle	ZF AV 133 Driven Portal Axle	ZF AV 133 Driven Portal Axle (2. and 3. Axle)
Carrier Axle for Articulated Buses	-	AVN 132	AVN 132
Number of Axles	2	3	4
<b>Vehicle Dimensions</b>			
Vehicle Length	12150 mm ( + 200 mm )	18230 mm ( + 200 mm )	~25 M
Vehicle Width	2555 mm	2555 mm	2555 mm
Vehicle Height	3400 mm	3400 mm	3400 mm
Max. Allowed Weight	19000 Kg	29000 Kg	29000 Kg
<b>Heating and Cooling (HVAC)</b>			
HVAC system (with BTMS)	Electric Heating and Cooling + (Electric Preheater)	Electric Heating and Cooling + (Electric Preheater)	Electric Heating and Cooling + (Electric Preheater)
Cooling Capacity	38 kW	76 kW	76 kW
Battery Cooling Capacity ( small / high ) ( kW )	6 / 12,4	Up to 12 / 24,8	Up to 12 / 24,8
Operation Temperature Range	- 30 ile + 50 Degree	- 30 ile + 50 Degree	- 30 ile + 50 Degree
Auxiliary Heater (Optional)	Under seat Heater ( 4 x 2 kW )	Under seat Heater ( 5 x 2 kW )	Under seat Heater ( 7 x 2 kW )
Preheater Feature	Up to 4 X 15 ( Standard Solution : 2 x 15 kW )	Up to 4 X 15 ( Standard Solution : 2 x 15 kW )	Up to 4 X 15 ( Standard Solution : 4 x 15 kW )











[www.bozankaya.com.tr](http://www.bozankaya.com.tr)

Sincan Organize Sanayi Bölgesi  
Ahi Evran Mah. Artuklular Sok. No: 3/B  
Sincan/Ankara/Turkey

