

Rofan

The long distance-expert



BB4 Electric tow tractor with BatteryBooster technology

Rofan **BB4** – the long distance-expert

An electric tow tractor with extra power for unlimited range



The Rofan BatteryBooster is an electric transport vehicle with nearly unlimited range. This drive system particularly comes into its own where long distances have to be covered also in indoor use (low speeds, low power consumption).

An additional powerful diesel generator provides the power for long-distance outdoor driving and at the same time charges the on-board battery. This saves having to buy a reserve battery and prevents expensive down times since the batteries don't have to be changed or recharged.

The BatteryBooster concept overcomes the capacity problems of conventional electric vehicles and opens up new areas of application. Equipped with a 19 kW drive motor and a drawbar pull of approx. 20 kN, this drive concept is only outperformed by the performance of a genuine hybrid drive system, as exclusively featured on Rofan vehicles.



long-distance ability

The Rofan BatteryBooster provides extra power. It runs many times longer than conventional electric vehicles and can therefore be used for nearly all requirements.

economical

The way to reduce costs and work time: The BatteryBooster does away with the need to buy, store and frequently change a reserve battery. Your staff gain time for other tasks.

environmentally friendly

With Rofan you have a clean machine. Our electric tractors with BatteryBooster technology featuring an economical diesel engine conserve natural resources and protect the environment.

maintenance-friendly

Always ready for service! To ensure on-the-spot maintenance is as easy as possible, we make sure all components are quickly and easily accessible.

comfortable

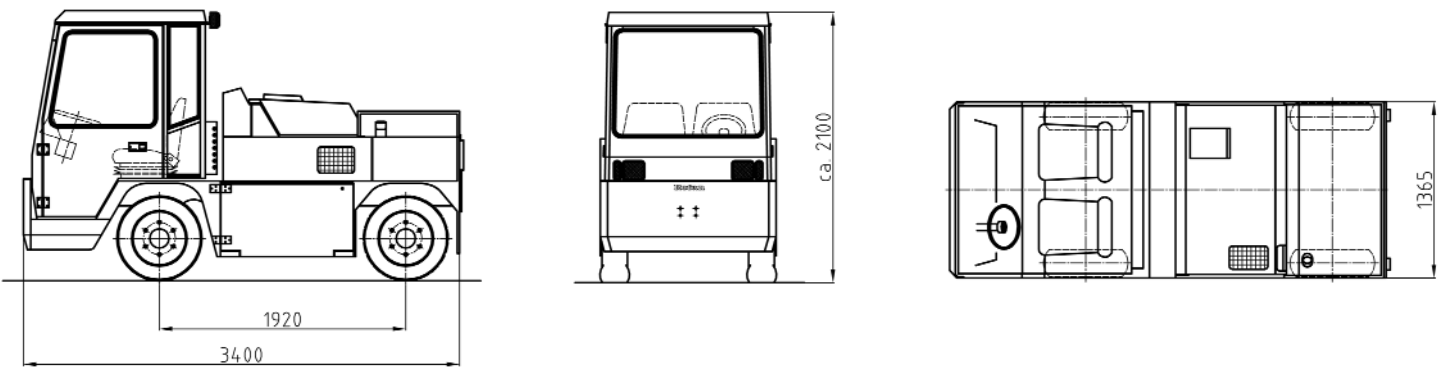
We guarantee optimal working conditions. With a custom-designed cabin and the largely sound-proofed BatteryBooster power unit.

reliable

The BatteryBooster will serve you well. We have supplemented the tried-and-tested components of an almost maintenance-free electric tractor with a powerful and robust diesel power unit. The result is a reliable vehicle with low running costs.

Technical data

| Model | BB4 | Dimensions | mm |
|------------------|-----------------------------------|-------------------------------|--------------------|
| Weight | 4.000 to 5.000 kg | Length | approx. 3.400 |
| Motor | AC 19 kW | Width | approx. 1.365 |
| Diesel engine | Perkins 404, 37 kW / 50 hp | Height | approx. 2.100 |
| Generator | 30 kW, AC | Wheelbase | approx. 1.920 |
| Traction battery | 80 V 320 Ah | Ground clearance | approx. 150 |
| Drawbar pull | 18.000 to 20.000 N | Turning radius, between walls | approx. 4.150 |
| Towing capacity | 20t on flat surface | Turning radius, between kerbs | approx. 1.590 |
| Speed | 8 to 30 km / h | Loading platform | approx. 800 × 1365 |
| Front axle | with suspension and disc brakes | Loading capacity | approx. 750 kg |
| Rear axle | with suspension and disc brakes | Fuel tank capacity | approx. 65 liter |
| Steering | Hydrostatic power steering system | | |



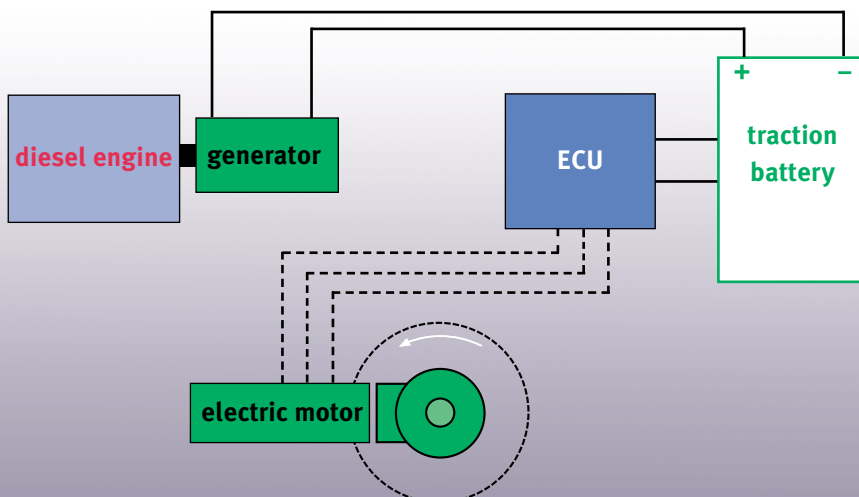
Function of a BatteryBooster tractor

Indoor drive

During indoor drive, the drive engine gets its energy exclusively from the traction battery. Indoor drive is always on a low speed level. Without BatteryBooster function, the electric tractor has only a limited range.

Outdoor drive

If the BatteryBooster function is activated (diesel engine is started), the speed will increase to the highest level. The drive engine gets the necessary energy from a 30 kW generator. The excess energy is used for charging the traction battery.



Model configurations for BB4

| | Standard | Option |
|--|-----------------------|-----------------------|
| BatteryBooster system consisting of | | |
| Modern water-cooled Perkins diesel engine type 404, with 37 kW and super-sound-insulated | <input type="radio"/> | |
| Asynchronous motor 19 kW | <input type="radio"/> | |
| Asynchronous generator 30 kW | <input type="radio"/> | |
| Driver's cab | | |
| Extremely solid, completely insulated steel profile construction. Noise- and vibration-reduced, fixed on four rubber elements with big front and rear screen | <input type="radio"/> | |
| Two lockable doors with sliding windows | <input type="radio"/> | |
| Heating and ventilation system | <input type="radio"/> | |
| Driver's seat with hydraulic suspension with two-point safety belt | <input type="radio"/> | |
| Air-suspended driver's seat with two-point safety belt | | <input type="radio"/> |
| Passenger seat with two-point safety belt | <input type="radio"/> | |
| Passenger seat with hydraulic suspension and two-point safety belt | | <input type="radio"/> |
| Adjustable steering column | <input type="radio"/> | |
| Rotating amber beacon | | <input type="radio"/> |
| Windscreen wiper with interval switch | | <input type="radio"/> |
| Screen wiper for rear screen | | <input type="radio"/> |
| Air flap or air ventilator | | <input type="radio"/> |
| Heated front screen and / or rear screen | | <input type="radio"/> |
| Comfort package (sun blend, footrest, coat hook) | | <input type="radio"/> |
| Interior mirror, interior light | | <input type="radio"/> |
| Two external mirrors | <input type="radio"/> | |
| Hour meter diesel and electric operation | <input type="radio"/> | |
| Multifunctional gauge (fuel level, warning lights) | <input type="radio"/> | |
| MDI gauge shows operating hours and battery condition | <input type="radio"/> | |
| Complete lighting system (without long-distance light) | <input type="radio"/> | |
| Working light front and / or rear | | <input type="radio"/> |
| Inching control (automatic reversing system), buzzer | | <input type="radio"/> |
| Radio | | <input type="radio"/> |
| Preparation for customer radio system | | <input type="radio"/> |
| Chassis frame | | |
| Tires, pneumatic type | <input type="radio"/> | |
| Super elastic solid tires | | <input type="radio"/> |
| Automatic coupler Rockinger 244 D, rear | <input type="radio"/> | |
| Multi position coupler front or rear | | <input type="radio"/> |
| Shunting coupler front | | <input type="radio"/> |
| Remote control for automatic coupler | | <input type="radio"/> |
| Protection grids for front and rear lights | | <input type="radio"/> |
| Polyurethane bumpers front and rear or heavy-duty rubber bumpers | | <input type="radio"/> |
| 3-coat painting white RAL 9010 | <input type="radio"/> | |
| 3-coat painting on customers demand | | <input type="radio"/> |
| Safety labels | | <input type="radio"/> |
| Automatic greasing system | | <input type="radio"/> |
| Other technical equipment on request | | |

Subject to change without notice. September 2005

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