



Volfang | Battery Block

Product information
Q1 2023

Volfang Battery Block

Capacity: **1 MWh - 20 MWh**
Power: **736 kW - 14.7 MW**



Delivery time:
approx. **18 weeks**

The Volfang **Battery Block** is an extension of the Volfang **Industrial** and offers a further increase in performance data. This enables the implementation of sophisticated **industrial projects**, innovative neighborhood storage, as well as diverse grid services, thus driving the expansion and **decentralization of** renewable energy supply. Only **2nd-use batteries** are used with the Volfang Battery Block. This means that the batteries have never been used in a vehicle. The batteries used are surplus production, which are recycled by many companies. The high-voltage technology used enables a further increase in the **energy efficiency** and cost-efficient scaling up to several MWh.

Technology

- Complete **reuse of** Electric Vehicle (EV) batteries
- Longer **life** like new batteries due to the use of **2nd-use** batteries, as well as a gentle operating window and intelligent charging algorithms
- **Remote monitoring of** battery condition at cell level
- High-efficiency high-voltage technology increases **cost-effectiveness** and maximizes energy efficiency
- **Flexible**, modular system

Advantages

- **Cost optimization** by maximizing the self-consumption of photovoltaic systems
- Capping of peak loads to reduce energy costs in trade and industry
- Use in microgrids, in EV charging parks and as neighborhood storage.
- **Grid efficiency** through control power
- Economical alternative to grid expansion
- **Intermediate storage** for solar and Wind farms

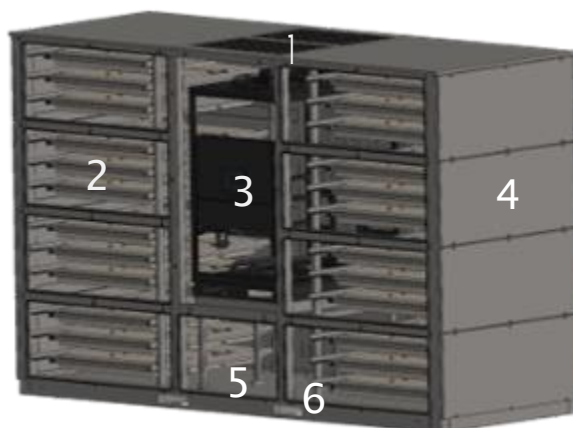
Volfang Battery Block Technical Data

System	Usable battery capacity [MWh]	1 (max. parallel operation: 20)
	Rated power [kW]	736 (max. parallel operation: 14,700)
	Cooling	Water-cooled (water-glycol)
	Link	3-phase, AC coupling
	Weight [t]	up to 11.5
	Dimensions (L/W/H) [mm]	4.598 / 1.668 / 2.896
	Area [m²]	approx. 15
Battery	Rated voltage [V]	400
	Cell manufacturer	CATL
	Cell technology	Lithium-ion (NMC)
	Battery efficiency [%]	97.5 (discharge/charge)
	Area [m²]	7,6
Inverter	Inverter	KACO blueplanet gridsave 92.0 TL3-S
	Dimensions (L/W/H) [mm] (in optional mounting racks)	5.508 / 1.312 / 2.023
Product	Ambient temperature [°C]	-20 to +45
	Protection class	IP 56
	Warranty [years]	System & Capacity: 5 With Batteryflat: 10
	Guidelines and certificates	CE, VDE-AR-N 4105/4110/4120 UN38.3
	Delivery time [weeks]	approx. 18

The above data is subject to change without notice.
Please contact Volfang for the latest information. www.volfang.de

System structure

Battery Block:



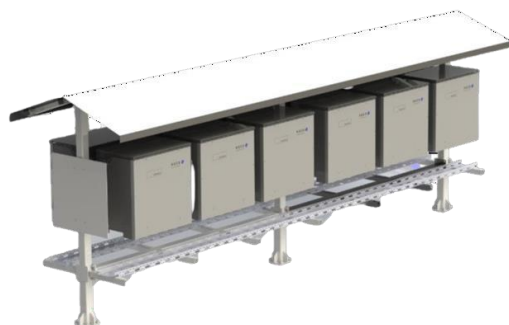
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|---|---|
| 1 | Air outlet for the cooling system |
| 2 | Battery slots, 3 modules per slot |
| 3 | Liquid system based on water-glycol |
| 4 | Flexible removable mounting plates |
| 5 | Low-profile connection area for power cabling, cable entry from below |
| 6 | Mounting lugs for holding forklift forks |

Inverter:



- Smaller, electronically separated power unit to avoid failures due to redundancy
- In the event of a fault, complete failure is avoided and efficiency in the partial load range is increased.
- The inverter is designed for the Outdoor suitable

Inverter rack (optional):



- Suitable for up to 8 inverters
- Suitable for outdoor use
- Load bearing foundation must be provided

Scope of delivery

As standard, the system is supplied as a kit with the following parts:

- 24 battery packs including BMS
- 1 Battery block with integrated cooling system
- 1 control cabinet with integrated EMS
- Detailed documentation and planning documents
- 8 Inverter
- 1 mounting rack (optional)

Structure and installation

The construction of the system is usually included in the price and will be carried out by our

Partner network carried out in cooperation with their electrician.

The procedure is as follows:

The battery packs are inserted into the designated drawers of the battery block and connected. The prepared cooling hoses of the water cooling system are then connected to the batteries, the inverters are attached and the control cabinet is connected to all components at the communication level.

After that, the system must be grounded and lightning protection must be provided.

Once the physical setup is complete, the commissioning of the system can be carried out and the system can go directly into regular operation.

Have we aroused your interest or do you have any questions,
then please feel free to contact us!



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