BRES SERIES

BRES-520-250

The BRES immersion-cooled energy storage system integrates PCS, immersion-cooled batteries, PV, generators, and grid power into a single energy storage platform. It supports seamless source transfer and intelligent energy management for peak shaving, microgrid, and hybrid energy applications. The immersion-cooled battery architecture enhances safety, reliability, and thermal performance.

MADE IN AUSTRIA

ALL-IN-ONE ENERGY STORAGE SYSTEM (IMMERSION-COOLED)

www.sks-elektro.at

Illustration only

Illustration only

BRES SERIES

BRES-520-250

KEY FEATURES

- Scalable Design: 650–950V DC range. Available in 125 kW / 250 kW and 260 kWh / 520 kWh configurations.
- High Reliability: 100% unbalanced load support with dual AC redundancy and IP67 battery protection.
- Low Lifecycle Cost: Active balancing BMS extends battery life and reduces maintenance.
- Enhanced Safety: Immersion cooling and multi-layer protection enhance system safety.
- Harsh-Environment Ready: Suitable for hot, cold, coastal, and high-altitude environments.

BATTERY PARAMETERS

Mode	BRES-520-250
Rated power	250 kW
Rated voltage	400 V
Rated current	378 A
Energy capacity	522 kWh
Weight	5,200 kg
Dimensions (W x D x H) (m)	1.600 x 1.330 x 2.250

TECHNICAL SPECIFICATIONS

Voltage range	-15% to +10%
Rated frequency	50/60 Hz
Frequency Range	±2 Hz
Output configuration	3W + N + PE
Power factor	-1 to +1
AC current THD	<3% (at rated power)
Rated battery voltage	832 V
Battery voltage range	728-949 V DC (2.8-3.65 V)
Battery chemistry	LFP
Cycle life	≥10,000 cycles (0.5 P, 25 ± 2°C, 100% DOD, 80% SOH)
Operating temperature	-20°C to 55°C (derating above 45°C)
Storage temperature	-20°C to 60°C
Relative humidity	0-95% RH (non-condensing)
Operating altitude	4,000 m (derating above 2,000 m)
Noise level	<75 dB
Communication interface	RS485, LAN
Isolation Method	Isolation transformer
Protection Rating	IP54
Cooling Method	Immersion Cooling
Fire Suppression	Aerosol

Note: Actual dimensions and weight may vary slightly. Please refer to the delivered product.

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