

DC1500V /AC690V Liquid-Cooled PCS

Integrated design, fully compliant with DC cabinet installation requirements. Designed in accordance with UL/CE standards, featuring liquid cooling, wide water temperature range, and reduced losses for energy storage systems. Compatible with battery cells, one cluster management per string, and flexibly adaptable to 2H/4H energy storage solutions.

High-efficiency Liquid Cooling

Liquid cooling for extended component lifespan and enhanced product reliability. Equipped with IGBT modules, peak efficiency up to 98.8%, CEC efficiency 98.3%.

Better Performance

Stable operation at inlet water temperature of 55°C. DSP+FPGA core control for superior performance.

Diverse Intelligence

Fast active/reactive power response, supporting VSG/PQ/VF operating modes. Cluster-level management suppresses inter-cluster circulating current and improves available capacity.

Quality Assurance

High-standard quality control with full-process quality supervision. Dual AC relay redundant design, compliant with certification requirements.

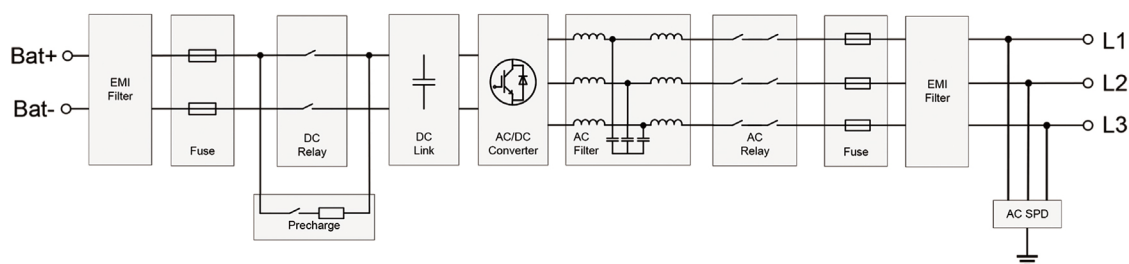
High Integration

Supports communication with BMS and EMS, with integrated multi-protection functions. Combines functions of DC pre-charging circuit, fuse and other high-voltage switchgear.

Exquisite Adaptation

Supports parallel operation of multiple units, with islanded/grid-connected modes. Compact structure and size, suitable for integrated design of DC cabinets.

Circuit Diagram



JTES-215K-W Utility-Scale String Liquid-Cooled PCS

PARAMETER LIST

Model
JTES-215K-W

DC PARAMETERS

Maximum DC Voltage	1500V
Maximum DC Current	225A
Battery Pack Voltage Range	1050-1500V

AC PARAMETERS (On-Grid)

Rated power	215kW
Maximum AC Power	236.5kW
Rated Grid Voltage	690V (-12% ~ +10%)
Grid Connection Type	3P+PE
Rated AC Current	180A
Maximum Output Current	216A(120% rated)
Rated Grid Frequency	50Hz / 60Hz
THDi At Rated Power	< 3.0%
DC Component	< 0.5%
Power Factor Range	>0.99 (Rated power) / -1 ~ +1
Continuous Overload	110% Rated long term;120% Rated operation 1min
Charge/discharge switching time	≤ 20ms

AC PARAMETERS (Off-Grid)

Rated power	215kW
Rated Grid Voltage	690V
Rated Grid Frequency	50Hz / 60Hz
THDu At Rated Power	< 3.0%(linear load)

SYSTEM CHARACTERISTICS

Maximum Efficiency	98.80%
CEC Efficiency	98.30%
Cooling	Liquid (50% Ethylene glycol+50% water)
Communication	CAN / Ethernet/ RS-485
Operating Temperature range	-30°C ~ +60°C
Relative humidity	0% ~ 95% (No condensation)
Maximum Inlet Temperature	55°C
Maximum Altitude	4000m (Derating >2000m)
Noises	< 70dB (1m away from the horizontal position of the device)
Installation	Rackmount/Vertical

MECHANICAL PARAMETERS

Dimension	H197mm x W740mm x D800mm
Weight	132kg
Enclosure	IP65

