



ENERGY STORAGE PCS MODULE

380V Normal Voltage:
PCS-75/100/110KG/125KG1 (EN)

480V High Voltage:
PCS-75/100/110/125/135/150KMG1 (UL)

The PCS 75-125K series is a three-phase energy storage converter launched by Livoltek, with a maximum efficiency of up to 99%. This product features an intelligent air-cooling design and supports both rack-mounted and wall-mounted installation methods, making it suitable for a variety of installation environments. It is compatible with various mainstream battery cells such as 280Ah, 314Ah, and 320Ah, and has a charge and discharge conversion time of less than 20ms. With an IP65 protection rating and a comprehensive protection mechanism, it ensures the safe and stable operation of the energy storage system.

Flexible Configuration

- Flexible Installation: Supports both rack-mount and wall-mount installations, accommodating various installation settings with ease.
- Modularized design: supports up to 10 units in parallel operation, and can be adapted to different power ranges of energy storage systems, such as 250kW, 500kW and 1M.

High Compatibility

- Voltage Adaptability Range: Offers a voltage adaptability range up to 1000V, compatible with 52 battery packs, meeting diverse battery pack requirements.
- Three-Phase Four-Wire Compatibility: Compatible with three-phase four-wire systems, suitable for off-grid, grid-tied, and hybrid applications.

Efficient & Cost-effective

- High Efficiency: Achieves a maximum inverter efficiency of up to 99%, significantly improving energy utilization.
- Cost-effectiveness: High efficiency helps reduce operating costs, enhancing economic benefits.

Safe & Reliable

- Multiple protection functions: it has multiple protection functions to ensure safe and stable operation of the system.
- IP65 Protection Rating: Ensures stable operation of the device in harsh environments.

ENERGY STORAGE PCS MODULE

PCS-75/100/110KG/125KG1 (EN)

Model	PCS-75KG1	PCS-100KG1	PCS-110KG1	PCS-125KG1
DC Input				
Max. DC Voltage	1000 V			
Battery Voltage Range	580 ~ 950 V			
Max. DC Current	126.9A	169.2A	186.2A	211.5A
AC Output@On-grid				
Rated AC Power	75kW	100kW	110kW	125kW
Max. Apparent Power	82.5kVA	110kVA	121kVA	137.5kVA
Rated Output Current	108.3A	144.3A	158.8A	180.4A
Max. Output Current	119.1A	158.8A	174.7A	198.5A
Rated AC Voltage	3L/N/PE, 3L/PE, 220/380, 230/400 V			
Voltage Range	340 ~ 460V			
Rated Output Frequency	50±5 / 60±5 Hz			
Power Factor	-1 ~ 1			
Total Harmonic Distortion/THDI	<3% (Rated Power)			
AC Output@Off-grid				
Rated AC Power	75kW	100kW	110kW	125kW
Max. Output Power	82.5kW	110kW	121kW	137.5kW
Unbalanced Load Capacity	100%			
Rated AC Voltage	3L/N/PE, 230/400 V			
Output Voltage Harmonics	≤2% (Resistive Full Load)			
Efficiency				
Max. Efficiency/%	99.00%	99.00%	99.00%	99.00%
Euro Efficiency/%	98.50%	98.50%	98.50%	98.50%
Protection				
Anti-islanding Protection	Integrated			
DC Short Circuit/Over Current Protection	Integrated			
AC Short Circuit/Over Current Protection	Integrated			
Residual Current Detection	Integrated			
Over/Under Frequency Protection	Integrated			
Over/Under Voltage Protection	Integrated			
Insulation Resistance Monitoring	Integrated			
Overtemperature Protection	Integrated			
DC Reverse-polarity Protection	Integrated			
General Data				
Operating Temperature	-30 ~ +60°C (>45 Derating)			
Ingress Protection	IP66			
Operating Altitude	4000m (>2000 Power Derating)			
Installation	Rack-mounted (Horizontal, Side-mounted)			
Noise	≤75 dB			
Cooling	Intelligent Air-cooled			
Dimension(W*H*D)	600*270*800 mm			
Weight	≤75 kg			
Interfaces	Ethernet / RS485 / CAN			
Communication	Ethernet / Modbus TCP / RS485 / CAN			

ENERGY STORAGE PCS MODULE

PCS-75/100/110/125/135/150KMG1 (UL)

BESS

Model	PCS-75KMG1	PCS-100KMG1	PCS-110KMG1	PCS-125KMG1	PCS-135KMG1	PCS-150KMG1
DC Input						
Max. DC Voltage	1000 V					
Battery Voltage Range	700 ~ 950 V					
Max. DC Current	113.3A	151.1A	166.2A	188.9A	204A	206A
AC Output@On-grid						
Rated AC Power	75kW	100kW	110kW	125kW	135kW	150kW
Max. Apparent Power	82.5kVA	110kVA	121kVA	137.5kVA	148.5kVA	165kVA
Rated Output Current	90.2A	120.3A	132.3A	150.4A	162.4A	180.4A
Max. Output Current	99.2A	132.3A	145.5A	165.4A	178.6A	198.5A
Rated AC Voltage	3L/N/PE, 3L/PE, 277/480					
Voltage Range	408 ~ 528V					
Rated Output Frequency	50±5 / 60±5 Hz					
Power Factor	-1 ~ 1					
Total Harmonic Distortion/THDI	<3% (Rated Power)					
AC Output@Off-grid						
Rated AC Power	75kW	100kW	110kW	125kW	135kW	150kW
Max. Output Power	82.5kW	110kW	121kW	137.5kW	148.5kW	165kW
Unbalanced Load Capacity	100%					
Rated AC Voltage	3L/N/PE, 230/400 V					
Output Voltage Harmonics	≤2% (Resistive Full Load)					
Efficiency						
Max. Efficiency/%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
Euro Efficiency/%	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%
Protection						
Anti-islanding Protection	Integrated					
DC Short Circuit/Over Current Protection	Integrated					
AC Short Circuit/Over Current Protection	Integrated					
Residual Current Detection	Integrated					
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