

Power Convertive System (1500V)

1500Vdc Containerized Energy Storage & Transformer Turnkey System

BCS2500K~3450K-B-HUD/T



Product Features

Highly integrated

- Efficient layout to improve space utilization
- Secondary circuit integration, unified measurement, protection and communication
- Integrated design of “converter” and “step-up” to realize the integrated delivery of products

Lean intelligence

- Unified external communication interface, support IEC61850
- Integrated data acquisition and optical fiber network, intelligent operation management
- H/LVRT function, high adaptation ability to the grid

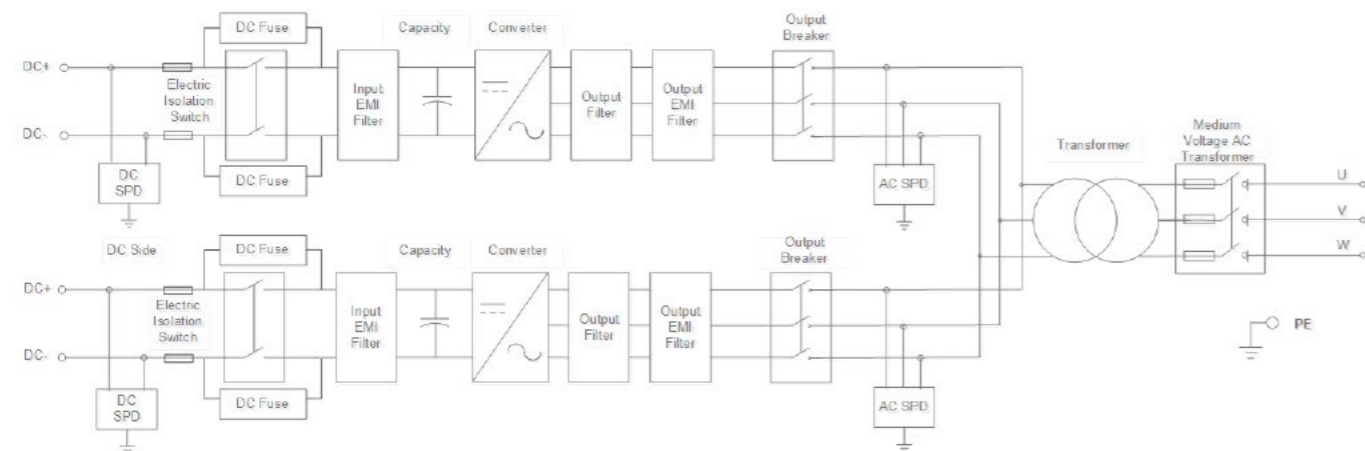
Efficient and stable

- Advanced ANPC three-level topology, max. converter efficiency 99.03%
- Adapt to high temperature, salt, and extreme cold etc. environment
- 1.1 times long-term overload, 45°C full load operation

Flexible configuration

- Support multi-machine parallel connection, VSG, PQ, VF, cold start and other functions
- Wide DC voltage range for 1500V system
- Various applications such as peak shaving, frequency modulation, auxiliary grid connection for new energy system, etc.

Function Diagram



Technical Specification

Items	BCS2500K-B-HUD/T	BCS3000K-B-HUD/T	BCS3450K-B-HUD/T
DC input			
Max. DC voltage	1500Vdc		
DC voltage range	800-1500 Vdc	900-1500 Vdc	1000-1500 Vdc
Max. DC current	3206A	3742A	3872A
Auto-buffering function	Yes		
Grid-tied AC output			
Rated AC output power	2500kW	3000kW	3450kW
Max. AC output power	2750kVA	3300kVA	3795kVA
Rated grid-tied voltage	550Vac	600Vac	690Vac
Grid voltage range	-15%~10% (settable)		
Rated grid frequency	50Hz/60Hz		
Max. output current	2886A	3176A	3176A
Power factor	>0.99 (at rated power)		
Adjustable power factor	1 (leading)~1 (lagging)		
THDi	<3% (at rated power)		
Off-grid AC output			
Rated AC output voltage	550Vac	600Vac	690Vac
Output voltage precision	1%		
Max. output current	2886A	3176A	3176A
THDu	<3% (liner load)		
Rated output frequency	50Hz/60Hz		
Overloading capability	110% overload		
PCS efficiency			
Max. efficiency	99%		
Transformer efficiency			
Rated power	2500kVA	3000kVA	3450kVA
Voltage transformation ratio	0.55/(6-35)kV	0.6/(6-35)kV	0.69/(6-35)kV
Isolation mode	oil-immersed transformer or dry type transformer		
General data			
IP grade	IP55		
Operation temperature	-35°C~60°C (>45°C derating)		
Relative humidity	0~100% (no condensation)		
Cooling type	Intelligent forced air cooling		
Dimensions (W×H×D)	6058×2896×2438mm		
Weight	13000kg		
Altitude	4000m (>2000m customized)		
Display	Touch screen		
Communication protocol	Modbus-RTU, Modbus-TCP, IEC61850, IEC104		
Communication interface	RS485, Ethernet		
Standard	IEC62477-1, EN61000, EN62116		

- Specification indexes may be subject to changes without further notice.