

PWS1-500KTL-EX Power Conversion System



Features

Flexible Configuration

- 62.5kW to 500kW by 1 to 8 power modules.
- 3P3W AC output for 400/480/208/690Vac interconnection w/ external transformer

High Efficiency & Stability

- Maximum efficiency up to 98.2%
- Multi-string technology for better battery safety and performance.

Extensive Use

- Multiple battery strings working in parallel or independently to allow easy power and energy expansion.

Compliance & Compatibility

- Compatible with various types of battery system.
- Global grid certified & listed

Specification

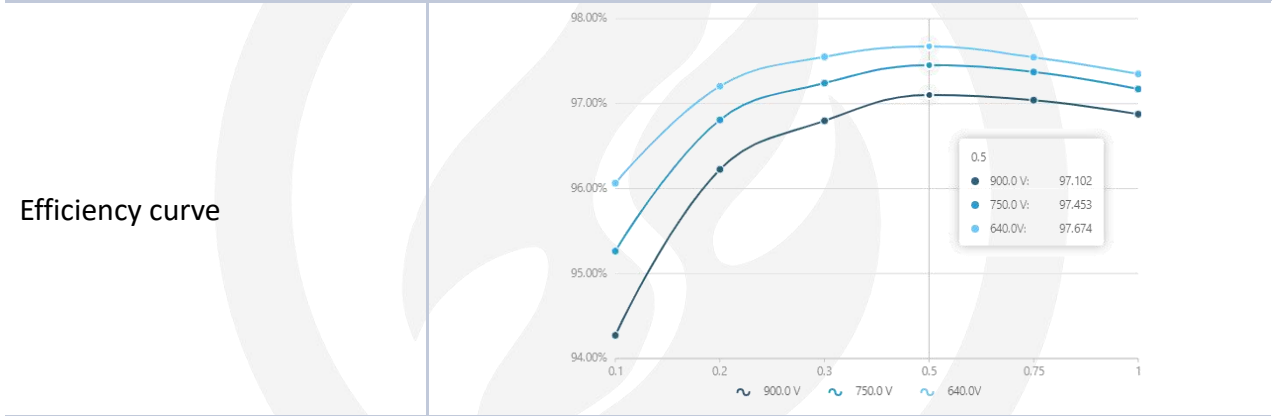
	PWS1-500KTL-EX-8M1	PWS1-500KTL-EX-8M4	PWS1-500KTL-EX-8M8
Utility-interactive Mode			
Nominal power	500kVA ¹		
AC max power	550kVA ¹		
AC frequency	50/60(-2.5~2.5) Hz		
AC voltage	400(-15%~15%) Vac		
Battery voltage range	600~900Vdc		
Quantity of battery strings	1	4	8
DC max current in each branch	880A	220A	110A
THDi	≤3%		
AC PF	Listed: 0.8~1 leading or lagging (Controllable)		
	Actual: 0.1~1 leading or lagging (Controllable)		
Stand-alone Mode			
Nominal AC output power	500kVA ¹		
AC max power	550kVA ¹		
AC frequency	50/60(-2.5~2.5) Hz		
AC output voltage	380/400(±10% configurable) Vac		
Battery voltage range	600~900Vdc		
Quantity of battery strings	1	4	8
DC max current in each branch	880A	220A	110A
Output THDu	≤2% (Linear load)		
AC PF	Listed: 0.8~1 leading or lagging (Load-depend)		
	Actual: 0.1~1 leading or lagging (Load-depend)		
Overload Capability	110%~115% 10min		
	115%~125% 1min		
	125%~150% 200ms		

1. Power could be 62.5Kw to 500Kw by equipping different numbers of power modules.

Specification

Physical	
Cooling	Forced air cooling
Noise	< 75dB
Enclosure	NEMA1 IP20 and optional IP54 with outdoor cabinet
Max elevation	3000m/10000feet (> 3000m/10000feet derating)
Operating ambient temperature	-20°C to 50°C (De-rating over 45°C)
Humidity	0~95% (No condensing)
Size (W×H×D)	1100×2160×800 mm
Weight	Cabinet 280kg + Module 40kg*n (n=1,2,...,8)
Installation	Floor standing

Other

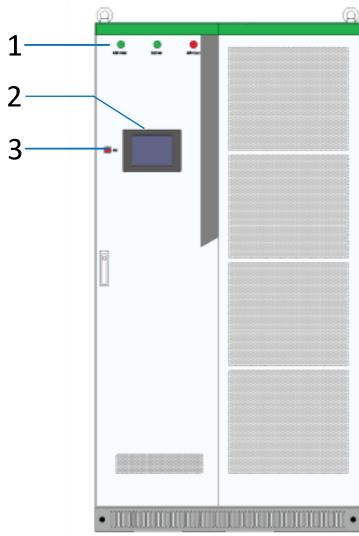


CEC efficiency	-
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.
AC connection	3-Phase 3-Wire
Display	Touch Screen
Communication	RS485, CAN, Ethernet
Isolation	Non-isolation
Certification	CE LVD IEC 62477, CE EMC IEC 61000, EN 50549-1:2019 G99, AS4777

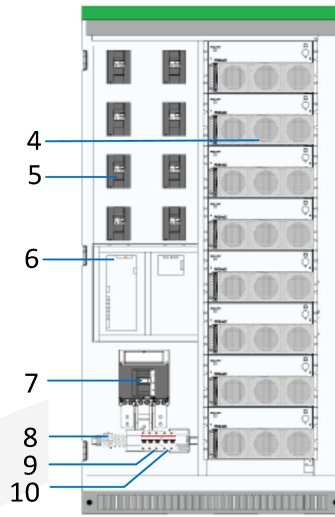
Short circuit

Fault current	2000A
Fault duration	100ms

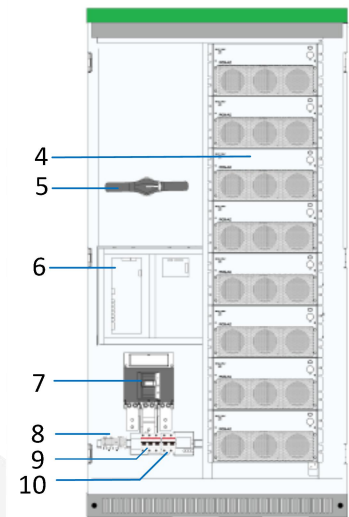
Appearance



Visible Components of the



4/8 Strings Version



1 String version

Position	Designation	Description
1	Indicator lights	
2	Touch Screen	
3	EPO (Emergency Power Off)	
4	PCS-AC (1~8 module(s))	62.5KW per unit
5	DC disconnectors	1 or 8
6	Main control board	
7	AC Switch	
8	Wiring terminal	
9	SPD switch	
10	AUX Power supply switch	