

CHES

OSN-P120B274-U

OSN-P60B274-U

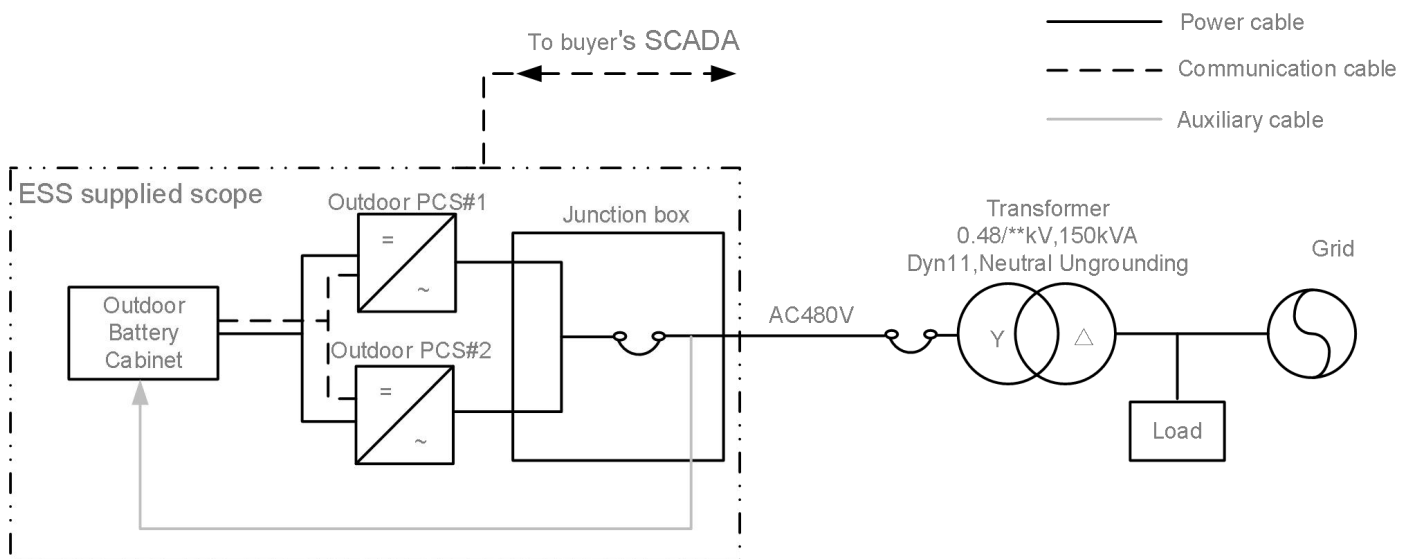


System Features

- Lithium iron phosphate battery (LFP) with intelligent battery management system, which guarantee battery with safety, high efficiency and long lifetime;
- Within intelligent temperature control and high protection structure design, to satisfy outdoor application;
- Modular design, convenient for maintenance and installation
- The hierarchical linkage ensures the safety of the system in an all-round way

Circuit Diagram

- OSN-P120B274-U is equipped with 2 PCS and OSN-P60B274-U is equipped with 1 PCS.



System Parameter

System Type	OSN-P120B274-U	OSN-P60B274-U
DC Input Data		
Cell Type	LFP C15	LFP C15
Module Type	1P9S	1P9S
Battery String Type	1P252S (28 Modules)	1P252S (28 Modules)
System Configuration	1 × 1P252S	1 × 1P252S
Battery capacity (BOL)@FAT	258kWh	258kWh
DC Usable Energy (BOL)@FAT	247kWh	247kWh
Battery Voltage Range	705.6~907.2V	705.6~907.2V
AC Output Data		
Nominal Power	120kVA	60kVA
AC usable energy (BOL)@FAT	240kWh	240kWh
AC full power energy (BOL)@FAT	240kWh	240kWh
Nominal Voltage	480V	480V
Voltage Range	422V~528V	422V~528V
Nominal Grid Frequency	60Hz	60Hz
Grid Frequency Range	57Hz~60.5Hz	57Hz~60.5Hz
Power Factor	1 leading~1 lagging	1 leading ~1 lagging
Max. THD of Current	<3% (@Nominal Power)	<3% (@Nominal Power)
Isolation Method	Transformer less	Transformer less
General Data		
Dimensions of ESS Unit (W×D×H)	1600×1900×2300mm	1600×1900×2300mm
Weight of ESS Unit	3110kg	2970kg
IP Rating of PCS Cabinet	IP65	IP65
IP Rating of Battery Cabinet	IP55	IP55
Operating Temperature Range	-20℃~+55℃ 【1】	-20℃~+55℃ 【1】
Relative Humidity	5%~100%	5%~100%
Max. Working Altitude	<3000m 【2】	<3000m 【2】
Cooling Concept (PCS Cabinet)	Forced Air Cooling	Forced Air Cooling
Cooling Concept (Battery Cabinet)	HVAC	HVAC
Noise	≤75dB(A)	≤75dB(A)
Fire detection system	With fire detection system	With fire detection system
Auxiliary power interface	AC480V/60Hz, 3 phase(L1/L2, 2 wires)	AC480V/60Hz, 3 phase(L1/L2, 2 wires)
Auxiliary system peak power requirement	3.5kW	3.5kW
Communication Interfaces	Ethernet	Ethernet
Communication Protocols	Modbus TCP/IP	Modbus TCP/IP
Compliance	UL9540/UL1741 SB/UL9540A	UL9540/UL1741 SB/UL9540A

Annotation:

©BYD AUTO Industry Company Limited. All rights reserved. Subject to change without notice.
V1.0 2023-04-28

【1】 Power derating when environment temperature exceeding 40°C.

【2】 When the altitude is between 2000-3000m, the output of the system will be derated.