84W Electric Vehicle Charger Data Sheet

Description:

Green Watt Power's "Oasis-S" series 84W intelligent Li-ion battery charger series is designed with high efficiency, high reliability and long life time. This series of chargers cover the output voltage of 17~42V, suitable for a wide range of applications with intelligent control and 7~10 Li-ion battery cells in series, such as electric tools, e-scooters, e-bikes, Li-ion battery packs, etc..

Features:

- Universal AC Input: 90~264Vac
- Output Voltage: 17~42V (7~10 Li-Ion Cells in Series)
- 40°C Full Load Operation without Derating
- Constant Voltage / Constant Current Charging
- Intelligent Output Control: Reverse Polarity Protection, Zero Leakage Current, etc.
- All-Around Protections: OVP, OCP, SCP, OTP, RCP
- Built-In LED Charging Status Indicator
- 5000m Altitude Operation
- Global Safety Certification: UL, CE, CCC, KC, PSE, CB, GS, SAA
- RoHS Compliant
- World-Wide Input/Output Connectors Available
- Fully potted to ensure high reliability in rugged environments

Model Number	Output Power	Output Voltage	Output Current	Suitable for Li-Ion Battery Cell in Series
EVC-29-59 (PLD084S-2940200)	58.8W	17.0-29.4V	2.00A	7S
EVC-42-84 (PLD084S-4200200)	84W	27-42V	2.00A	10S

Specifications:

Input Parameters		
Model	EVC-29-59 (PLD084S-2940200)	EVC-42-84 (PLD084S-4200200)
Input Voltage	90~264Vac	90~264Vac
Max. Input Voltage	320Vac, 20s	
Input Frequency	47~63Hz	
Max. Input Current	0.8A @ 230Vac	1.1A @ 230Vac
Max. Input Power	68W @ 230Vac	96W @ 230Vac

Output Parameters		
Model	EVC-29-59 (PLD084S-2940200)	EVC-42-84 (PLD084S-4200200)
Output Voltage	17~29.4V	27~42V
Full Charging Voltage	29.4V	42V
Constant Charging Current	2.0A	2.0A
Current Accuracy	±5%	
Voltage Accuracy	±1%	
Output Power	58.8W	84W

General Specifications			
Short Circuit Protection	When its output is shorted, the power supply will enter hiccup mode, and will self-recover when the fault condition is removed.		
Over Voltage Protection	The output voltage that triggers over voltage protection is less than 100Vdc. The power supply shall enter auto-recovery mode during over voltage protection, and return to normal operation after the fault condition is removed.		
Over Temperature Protection	When the power supply enters overheating protection condition, no components will be damaged. The power supply shall enter auto-recovery mode during over temperature protection, and return to normal operation after the fault condition is removed.		
Open Circuit Protection	When output is opened, no components will be damaged. The power supply shall enter auto-recovery mode during open circuit protection, and return to normal operation after the fault condition is removed		
MTBF: 25ºC, 230Vac input， Full Load	≥ 100,000 Hours		
Product Life 25ºC, 230Vac input	≥ 15,000 Hours		
Temperature - Operating	MIN MAX	-10 +40	ºC
Temperature - Storage	MIN MAX	-40 +85	ºC
Relative Humidity	Operating Humidity 10% - 90% Storage Humidity 10% - 100%		
Case Size	137x57.5x34.5mm		
Unit Weight	TBD kg		

Electromagnetic Compatibility EMI/EMC	
EMI, RFI	Comply with EN55022 Class B, EN55032 Class B
Immunity:	
EN61000-3-3	Voltage Fluctuations and Flicker
EN61000-4-2	ESD 8kV Air Discharge, 4kV Contact Discharge， Criteria A
EN61000-4-4	Electrical Fast Transient/ Burst-EFT 1KV
EN61000-4-5	Surge Immunity Test, AC Power line: Line to Line 1kV
EN61000-4-6	Conducted Radio Frequency Disturbance Test-Cs Level 3, Criteria A
EN61000-4-8	Power Frequency Magnetic Field Test 3A/m, Criteria A
EN61000-4-11	Voltage Dips Criteria B

Case Specifications: