2700W Electric Vehicle Charger Data Sheet

Description:

Green Watt Power's 83V multifunction Li-ion battery charger is designed with built-in intelligent control and extraordinary circuit designs, providing performances of high power density, high reliability, and high efficiency. The module is designed with thermal management, anti-shock techniques, and long life time. This charger offers solid and safe power conversion for multiple fields such as e-vehicles, e-bikes, e-motorcycles, e-boat, e-tool and other Li-ion battery applications.

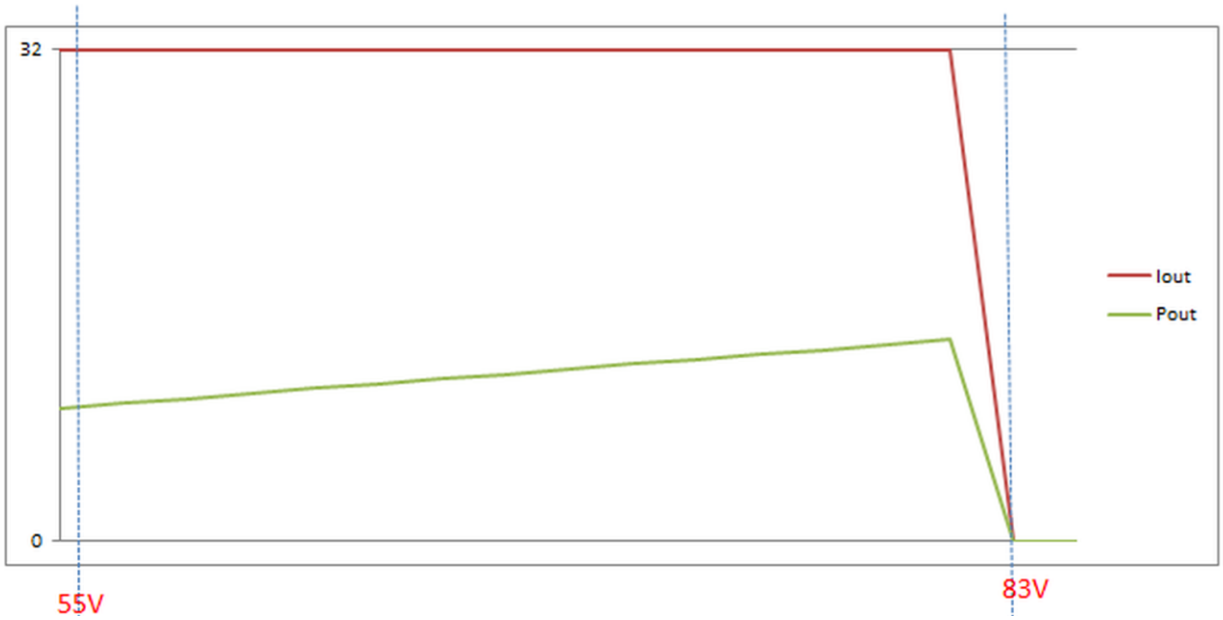
Features:

- Input Voltage: 185~265Vac
- Output Power: 2700W
- Output Voltage: 56~83V
- Ultra-High Reliability
- High Efficiency: Up to 94%
- All-Around Protections: OVP, OCP, SCP, OTP
- Case Temperature 80ºC @ Full Load
- Adaptive Power Derating
- IP65/IP67 Ingress Grade
- 12V/25W Isolated Auxiliary Output
- CAN Communication

Model Number	Output Power	Output Voltage	Output Current	AUX Voltage	AUX Current
EVC-83-2700 (PLD2700-ECVN08-83)	2700W	56-83V	32A	N/A	N/A

General Specifications	
Model Number	**EVC-83-2700 (PLD2700-ECVN08-83)**
Input Voltage	185-265V
Input Frequency	47-63Hz
Max Input Current	14A@230Vac
Output Current	32A max
Max.Output Voltage	83V
Output Voltage @ Open Circuit	83V
Current Accuracy	±5%
Voltage Accuracy	±3%
Output Power	2700w
Efficiency	93%@230Vac
Operating Temperature and Relative Humidity	20 °C to +40°C 10% RH to 100% RH
Storage Temperature and Relative Humidity	-40 °C to +85 °C 10% RH to 100% RH
Waterproof Grade	IP65
MTBF(25°C, 230Vac input, and full load output.)	TBD
Life Time （25°C, 230Vac input, and full load output）	50,000 hours

Charging Curve:



Protections	
Short Circuit Protection	When output shorted, no components will be damaged. The charger shall enter into latch mode during short circuit protection and return to normal operation after the fault condition is removed and power supply is turned on again.
Over Voltage Protection	The output voltage that triggers over voltage protection is less than 92V. 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

Electromagnetic Compatibility EMI/EMC	
EMI, RFI	Comply with EN55022 Class B
Immunity:	
EN61000-3-2	Harmonic Current Emission
EN61000-3-3	Voltage Fluctuations and Flicker
EN61000-4-2	ESD 8kV Air Discharge, 4kV Contact Discharge， Criteria A
EN61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-Rs Level 3, Criteria A
EN61000-4-4	Electrical Fast Transient/Burst-EFT 4KV, Criteria A
EN61000-4-5	Surge Immunity Test, AC Power Line: Line to Line 2kV; Line to Earth 4kV, Criteria B
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