

10kW Electric Vehicle Li-Ion Charger Data Sheet



Description:

Green Watt Power's 3-phase 10kW AC/DC chargers offer a high-efficiency, high-power density solution for varieties of applications. The module has current sharing function and supports up to 10 modules operating in parallel. CAN communication is implemented to realize real-time monitoring. The 10kW module has battery charger manager with touch screen. This series of chargers offer solid and safe power conversion for applications such as e-vehicles, e-motorcycle and battery packs.

Features:

- 3-Phase AC/DC Charger
- Adjustable Output 30V~58V for Different Applications
- High Efficiency
- CAN Communication
- Supports Parallel and N+M Redundant Operation
- Long Life Time Fan Cooling
- Touch Screen User Interface
- Operation Temperature Range: -40~55°C
- Input OVP and UVP
- Output OCP, OVP, SCP, OTP
- Fully potted to ensure high reliability in rugged environments



Model Number	Maximum Output Current	Current Range	Voltage Range
EVC-58-10000 (PLD103-M03-48)	200 ADC	0 A – 200ADC	40V – 58.8V

Input Parameters				
	Min	Typ	Max	Units
Input Voltage Range	300	400	450	VAC
Input Frequency	45	50	55	Hz
Power Factor		0.85	0.9	
Input Current			20	A

Output Parameters				
	Min	Typ	Max	Units
Output Voltage	40	48	58.8	VDC
Out Current			200	A
Efficiency (400Vacinput, full load)	93			%
Voltage Accuracy			±0.1	V
Line Regulation			±0.2	%
Load Regulation			±0.5	%
Noise			200	mv
Turn-on Delay Time – Full Load		5	10	S
Rise Time – Full Load			500	ms

General Specifications	
Short Circuit Protection	Hiccup Mode Self Recovery when fault is removed
Over Voltage Protection	Enters auto recovery mode when output voltage is over 60.5. The unit will return to normal operation when powered back on.
Under Voltage Protection	Enters auto recovery mode when output voltage is under 35. The unit will return to normal operation when powered back on.
Over Temperature Protection	The unit will go into thermal protection when the case temperature exceeds 90 °C. The unit will enter hiccup mode and will self-recover when the temperature becomes normal at or below 90 °C.
Unit Weight	≤25Kg

Case Specifications:

All dimensions are mm W*H*D=370*250*570mm

