

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

