



## 480V High Output Charger

The **AC/DC Switching Power Converter** features large power in a small size with advanced resonant frequency modulation technology, high efficiency and reliable operation. The unit has constant-current-constant-voltage (CC-CV) charging, active power factor correction (PFC), wide input and output voltage range, uses CAN2.0B communication protocol, and has intelligent charging and fault alarm monitoring. It also features a built-in 12V independent auxiliary power supply. This power supply is specially designed for the charging of high-voltage batteries for new energy vehicles.

### SPECIFICATION/UNIT

MAIN INPUT	Rated Voltage	Vac	380 Min
	Frequency Range	HZ	47~63
	Efficiency	%	≥ 92
	Max Current	A	≤ 50
	Peak Power	KW	20
MAIN OUTPUT	Rated Voltage	Vdc	70~132
	Max Current	A	180
	Peak Power	KW	20
AUX SUPPLY	Rated Voltage	Vdc	12
	Rated Power	W	2 (BMS Activation)
OPERATING ENVIRONMENT	Operating Temp.	°C	-40~+85
	Operating Humidity	%RH	20-90
	Cooling Mode		Liquid Cooling
SAFEGUARD	Isolation Voltage		Input → Output: 2KVdc Input → Shell: 500Vac Main Output → Shell: 2.8KVdc Safety Standard: GB4943.1-2011
	Insulation Resistance	MΩ	Input-Output-Shell > 10 (25°C, 70%RH)
	IP Grade		IP65
	Weight	KG	40
STRUCTURE	Size	mm	Height: 374, Width: 486, Depth: 198

\* Charger Shell must be grounded through the FG terminal when used.

### Charging Performance

- Charge time from 0% to 80% ~ 60 minutes
- Charge time from 0% to 100% ~ 90 minutes
- The traction battery should be charged to 100% once a month to protect the battery service life. A 100% charge is longer since it includes a balancing stage between all cells in the pack.

### Product Features

- Constant power and constant voltage state automatic conversion, effective saving time
- Active power factor correction ≥ 0.99
- Input over/under-voltage protection
- Output over/under-voltage protection
- Output over-current protection
- Output reverse connection protection
- Over temperature protection
- CAN communication intelligent fault alarm and protection function
- Built-in 12V independent auxiliary power supply for car BMS power supply.

### Battery & Housing is Rigorously Tested

The battery is securely housed in an insulated, steel enclosure and has undergone rigorous testing that includes:

- **MECHANICAL:** Crush, drop, penetration, vibration, sea water immersion
- **THERMAL:** Thermal runaway and stability
- **ELECTRICAL:** Overcharge, over discharge, short circuit

**None of the tests resulted in a "Level 5 Failure - Fire or flame."**

The highest failure mode was "Level 4 - Physical damage resulting in venting through the cell's safety vent or cell enclosure."

