

480kW Power Unit

EVD-480SF



≥ 96.5%
peak efficiency

40+
protection functions

Power optimization
maximize revenue

480kW/960kW
dual-cabinet expansion

More Efficient

- ≥ 96.5% peak system efficiency using SiC high-efficiency modules
- Unique airflow design and sound-absorbing materials to reduce noise
- Compatible with fast and ultra-fast dispensers to suit various EVs
- Supports dual-cabinet expansion to 960kW, meeting various power requirements

More Reliable

- Automotive-grade manufacturing ensures durability in harsh environments
- 40+ protection and alarm functions for better overall safety
- Module in-position detection enhances reliability
- Advanced three-phase imbalance control for complex grid conditions

More Intelligent

- Smart efficiency optimization reduces system energy loss
- Smart power optimization maximizes operational benefits
- Smart switching with up to 8 output circuits
- Balanced charging module runtime extends overall system lifespan

Easy O&M

- Smart O&M management with online OTA upgrade
- Supports interactive data upload platform and fault logging
- Slide-out G3 dust filter reduces maintenance time to under 5 minutes

Technical Specification

Technical parameters		EVD-480SF
AC INPUT	Rated voltage	400 / 480VAC (option)
	Input voltage range	323-530Vac
	AC input connection	3P + N + PE
	Frequency range	45~66Hz
	PF	≥ 0.99
	THDi	≤ 5% (More than half load)
DC OUTPUT	DC output voltage range	200~1000V DC
	Output power	480kW
	Max. output total current	0-1600A
	Max. inumber of output	8
	Min. power allocation step	40/80kW
	Power distribution	Intelligent distribution, When dual-cabinet expansion, the power is shared between the two cabinets.
	Voltage regulation accuracy	≤ ± 0.5%
	Current regulation accuracy	≤ ± 1%
WARNING & PROTECTION	Output voltage ripple	Ripple voltage peak coefficient < 1%, Effective value coefficient <0.5%
	Over-temperature protection	Yes
	Input over/under voltage protection	Yes
	Maintenance door open for protection	Yes
	Output short circuit protection	Yes
	Parallel contactor fault protection	Yes
	Emergency stop protection	Yes
	SPD failure protection	Yes
OTHERS	Filter dust warning	Yes
	Peak efficiency	≥ 96.5%
	Noise level	<65dB (Rated conditions, 25°C, 1m distance)
	Indicator light	Power on/off, Charging, Fault
	Network connection	Ethernet / 4G
	Ventilation	Air-cooling
	Type of communication	CAN, 250 kbit/s
	EMC	Class A
	Reference standard	IEC 61851-1, IEC 61851-23, IEC 61851-21-2, UL 2202
	Certification	Complies with CE or UL certification standards
ENVIRONMENT	Operating altitude	≤ 2000m
	Operating temperature	-30 ~ 60°C, derating output for temperature over 50°C
	Storage temperature	-40 ~ 70°C
	Relative humidity	5% ~ 95% (non-condensable)
MECHANICAL SPECIFICATIONS	IP level	IP54
	IK level	IK10
	Size (W x D x H)	805×1100×1800mm
	Option	· Smoke sensor · Dehumidifer · Immersion detection · RCD breaker
	Flexible dispenser configuration	Air-cooling dispenser, Liquid-cooling dispenser