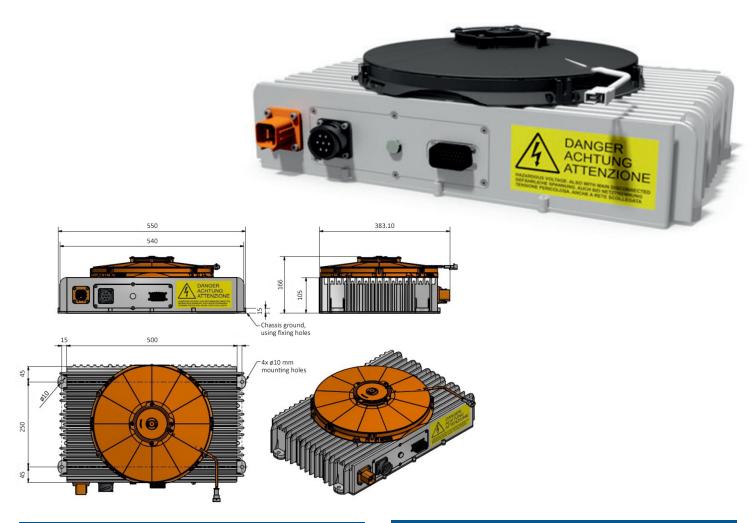


EVO11KA

11 kW EV/HEV on-board charger for heavy duty and rugged applications



APPLICATIONS

EVO11KA charger series is a very versatile, safe, high power density charger for on-board electric vehicle applications.

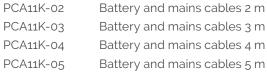
With its flexible AC input port and constant power charging feature, it is a very effective charging system, compatible with all international power grids.

The EVO11KA has been successfully tested to meet CE and ECE R10.5, safety and environmental standards.

FEATURES

- US and EU single-phase and three-phase AC input voltage range (120/208/230/240/380/400/420 Vac).
- SAE J1772 and EN 61851 compliance.
- HVDC interlock monitoring.
- · Typical efficiency >90%.
- · High AC input power factor (low reactive power).
- AC/DC galvanic isolation assures a definitive safety separation between the vehicle and grid.
- High IP protection rating (EN60529).
- Outputs are short-circuit and reverse polarity protected.
- Fully CAN controlled (v2.0B).
- · SAE J1939 available.
- · Super-capacitors charging from zero voltage.

ACCESSORIES











AC input data		Units
AC input voltage (reduced power)	90 ÷ 185 (1-phase) 90 ÷ 185 (3-phase Δ) 155 ÷ 340 (3-phase Y)	Vac
AC input voltage (full power)	185 ÷ 265 (1-phase) 185 ÷ 265 (3-phase Δ) 340 ÷ 460 (3-phase Y)	Vac
Line frequency (50/60 Hz)	47 ÷ 63	Hz
AC input current (each-phase) (max)	48 (1-phase) 28 (3-phase Δ) 16 (3-phase Y)	Aac
Absorbed apparent power (max)	11	kVA
Power factor	>0.98	-
DC ouputs data		
V01 HV output voltage (max)	420 (EVO11KAR1) 500 (EVO11KAR2) 670 (EVO11KAR3) 840 (EVO11KAR4)	Vdc
V01 HV voltage accuracy	±1	%
V01 HV output current	40 (EVO11KAR1) 33 (EVO11KAR2) 25 (EVO11KAR3) 20 (EVO11KAR4)	Adc
V01 HV rated output power (max)	10	kW
V01 HV parameters control	CAN v2.0B	-
General data		•••••
Ambient temperature (operating)	-40 ÷ +85	degC
Ambient temperature (full performance)	-25 ÷ +50	degC
Power de-rating (from +50 to +85 degC)	-5	%/deg
Heat dissipation	Air cooling (thermally controlled IP68 fan)	-
Protection degree	IP67/IP6K9K	-
Efficiency	>90 at from 25% to max load	%
Control interface	CAN V2.0B (125/250/500 Kbit/s, EXT/STD frame, ID's adaptable)	-
Standard applied		
General requirements	EN 61851-1; SAE J1455	-
EMC – Emission and immunity	ECE regulation 10 rev.5	-
Safety	ECE regulation 100; SAE J2344	-
Insulation resistance	HVDC output/ PE: >10 MΩ at 1000 Vdc	-
Touch current	<3.5	mA
Chassis ground stud	M8	-
Mechanical data		
Dimensions (width x depth x height)	550 x 347 x 166	mm
Weight	24	kg
	Aluminum	

