

EEI SPC SERIES

SHORE POWER CONVERTER



EEI Power Systems shore power converters allow full operation of the vessels on board electrical system without generators. Connection to the shore can be via one or multiple cords thanks to the modular design of the SPC input stage. Thanks to the input transformers shore power is isolated to avoid tripping shore earth leakage circuit breakers. Voltage back conversion to the desired AC voltage and frequency for the vessel is fully filtered and stable, suitable for onboard loads.

Totally seamless power transfer from vessel generator to shore and vice versa is possible according to the high precision synchronization function.

COMPACT AND MODULAR

Thanks to its modular structure SPC can be located in several locations when the available space is fragmented or in the same place when it's possible. Furthermore the modular design along with compact dimensions allow to customize the system, matching customer needs.

SUITABLE FOR MARINE ENVIRONMENT

Coated print circuit boards, appropriate protection degree, stainless steel, all it needs for marine environment.

WIDE INPUT RANGE

LV /MV solutions

FUNCTIONAL FEATURES

- Multiple shore cords: thanks to modular structure it is possible the connection to several shore cords without restriction. (no pre assigned master connection).
- Seamless Transfer: power transfer from shore to vessel and vice versa.
- Remote touch panel control
- Other options can be implemented on demand thanks to our staff

COMPREHENSIVE PRODUCT LINE

EEI Marine Division designs and manufactures power conversion equipment for commercial, military and marine applications.

Our products are suitable for parallel modular systems from 100 kVA up to 1000 kVA, also for containerized solutions.



ADVANCED

Flexible software configuration allow wide functionalities



ADAPTIVE

Wide product range LV and MV solutions



RELIABLE

Equipped with latest power technology and design with more than 40 years of experience



ROBUST

Suitable for marine environment



MODEL	SPC 100	SPC 250	SPC 315
SHORE SIDE INPUT			
Type	3 Ph	3 Ph	3 Ph
Rated Power	106 kW	266 kW	355 kW
Rated Voltage	400/690 Vac $\pm 10\%$	400/690 Vac $\pm 10\%$	400/690 Vac $\pm 10\%$
Rated Current	153/88 A	384/223 A	485/280 A
Frequency	50/60 Hz $\pm 5\%$	50/60 Hz $\pm 5\%$	50/60 Hz $\pm 5\%$
Power Factor	Unitary	Unitary	Unitary
THD I	< 3%	< 3%	< 3%

LOAD SHIP SIDE OUTPUT			
Type	3 Ph	3 Ph	3 Ph
Voltage (*)	400 \div 690 Vac	400 \div 690 Vac	400 \div 690 Vac
Current	148 / 85 A	368 / 214 A	465 / 270 A
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power rating	102 kVA	255 kVA	322 kVA
Overload (**)	150%	150%	150%
THD V	< 2%	< 2%	< 2%
Efficiency	> 96%	> 96%	> 96%
Output transformer	Optional	Optional	Optional

ENVIRONMENTAL CONDITIONS			
Operating temperature	0 \div +45°C	0 \div +45°C	0 \div +45°C
Storage temperature	-10 \div +55°C	-10 \div +55°C	-10 \div +55°C
Relative Humidity	0 - 95%	0 - 95%	0 - 95%
Altitude	< 1000 m a.s.l.	< 1000 m a.s.l.	< 1000 m a.s.l.

GENERAL SYSTEM SPECIFICATION			
Dimensions (WxHxD)	1200 x 2000 x 600mm	1600 x 2000 x 600mm	1600 x 2000 x 600mm
Cooling	Forced Air	Forced Air	Forced Air
Cable entry	From bottom	From bottom	From bottom
Protection degree (***)	IP42	IP42	IP42
Weight	650 kg	970 kg	1120 kg

(*) according to transformer ratio

(**) 30 sec. every 10 min.

(***) other standard upon request