



MARPOWER SPC-II

EEKELS MarPower Shore Power Converters convert worldwide available shore voltages and frequencies into a reliable power source. This product series is designed to meet the most stringent requirements of demanding installers and professional users.

- World's smallest and lightest Shore Power Converter
- Small size: up to 25% reduction compared to a transformer
- Low weight: up to 45% reduction compared to a transformer
- Easy installation and maintenance
- The solution for new built and refit
- Redundancy
- Optimal logistics
- Worldwide service and support

SPC-II Shore Power Converter

The MarPower SPC-II shore power converter is the ultimate alternative for isolation transformers due to its small size and extremely low weight and added functionality. This flexible and ultra-compact system converts worldwide available voltages into a reliable power source to safeguard quality of power on board of yachts and mega yachts.



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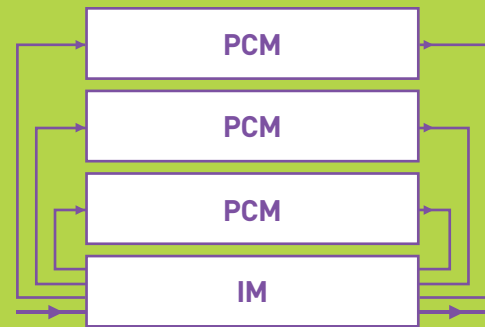
Due to its plug-and-play design the MarPower SPC-II facilitates easy and flexible installation, operation and maintenance of shore power converter solutions. The modular concept makes it easy to upgrade or expand the system for future demands. In addition, this advanced solution provides the following benefits:

- Supports a wide variety of input voltages and frequencies
- Provides galvanic isolation for optimal safety
- Provides power conditioning of input power
- Supports from 30-300 kVA from a single system
- Supports up to 550 kVA from multiple system configuration
- Supports multiple shore cords from different dockside supplies, without feedback risks.
- Support a variety of applications, including: Frequency Converter and Power Conditioner
- Low heat dissipation
- Contributes to overall system reliability and availability
- Seamless Power Transfer is a standard feature

System configuration

MarPower Shore Power Converter is a flexible and modular solution. The figure below shows a basic conversion system with a single shore cord input and a single connection towards the vessel.

- The PCM is the power converter module and available in a 25kVA, 31kVA and 37kVA configuration. These PCMs can be paralleled with a maximum of 15 units (5 per system).
- The IM is the interface module and provides a safe and reliable way to distribute incoming and delivered power over individual PCMs with a maximum of 5 modules.
- Single and Dual shore cord can be provided with optionally a switch to make the selection between the input cords. It also provides every powerblock on the input and output with a circuit breaker for safety and ability to disconnect a PCM to run on reduced power.



Specifications SPC-II

Input		Interface/diagnostics		
input line voltages	3 x 170 - 520V	LCD display		
frequency range	40-70Hz	MOD bus	RTU	
input power factor	> 0,99 at full load	USB		
input current	95A per power module	hard wired IO	potential free contacts	
inrush current	< 100% at rated current			
earth leakage current	< 2 mA per power module			
		Mechanical	Weight	Size [HxWxD] in mm**
		37kVA*	130 kg	830 x 290 x 660**
		75kVA*	280 kg	860 x 800 x 660
Output		112kVA*	405 kg	1115 x 800 x 660
output voltage	3 x 400V rms + neutral [50 Hz] [other voltages on request]	150kVA*	535 kg	1465 x 800 x 660
output frequency	50 Hz [other voltages on request]	187kVA*	660 kg	1720 x 800 x 660
nom. system power	25 kVA-560kVA	*Uout = 400V		* excl. mounting profiles and EMI filter
nom. module power	25kVA / 31kVA / 37kVA at Uout = 400VA			
power derating	at input voltage 170 - 190V current limit till 100A			
units in parallel	up to 15 modules	Cooling	forced air, fan speed controlled	
overload	120% 15 min	Protection degree	IP22 [higher IP value on request]	
	150% 1 min	Temperature	0-45 degrees Celcius, above reduced power	
	200% 5 sec	Humidity	0-95% non condensing	
voltage distortion	< 3%	Colour	Ral 9010 [other colours on request]	
voltage variation	± 1% [at min max load]	Noise	< 60dBA at 1 mtr	
frequency accuracy	± 0,05% [at fixed load]			
efficiency	> 91%			

