

ANG POWER SYSTEMS

MARINE POWER SYSTEMS CATALOG



Introduction

As a leading manufacturer of electrical solutions for the marine industry, ANG Power Systems specializes in the production of shore power converters, isolation boost transformers, automatic voltage regulators and stabilizers, high quality marine adapters, marine power cables, connectors, plugs, receptacles, and inlets.

With a dedication to delivering the most advanced, reliable, and accurate marine power systems, ANG's products use state-of-the-art components resulting in a smaller and lighter footprint than competing products. Located in the heart of Ft. Lauderdale, "The Yachting Capital of the World", our expert technical staff is always available to offer innovative and reliable solutions to meet your yacht's power needs.

HEADQUARTERS

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TABLE OF CONTENT

4	SHORE POWER CONVERTERS
8	OUTLET POWER CONVERTERS
10	OUTDOOR SHORE POWER CONVERTERS
12	ISO-BOOST TRANSFORMERS
16	TRANSFORMERS
16	VOLTAGE REGULATOR & STABILIZERS
16	DOCK VOLTAGE REGULATOR & STABILIZER
16	SMART-Y
16	SPLITTER
17	PIGTAIL ADAPTERS
22	MARINE SHORE CORD
24	CONNECTORS & PLUGS
26	SERVICE & SUPPORT

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Shore Power Converters

PLUG-IN AT ANY DOCK IN THE WORLD

ANG SHORE POWER CONVERTERS™ carry over 30 years of experience in marine electrical conversion and are able to supply the correct shore power when connected to the most common dockside voltages. All our converters are universal. They accept any input power and are able to convert frequency, voltage and phase into what is needed for your yacht's electrical system.

All ANG Three-Phase Converters allow the yacht to be connected to Single-Phase or Three-Phase through the same shore power cord. The power can be supplied even if the Form (Phase) requested for the boat is not available. This is a unique feature that only ANG Converters are able to provide.

The output power of ANG SHORE POWER CONVERTERS™ has a superior quality than the shore voltage supply since they ensure a pure sinusoidal wave. All models operate at a nominal voltage with +/-10% tolerance.



Upon request, we offer custom cabinet construction, to fit your available space.

AVAILABLE FROM 6KVA TO 500KVA

Ensuring reliable, worry free power supply regardless of where you cruise

UNIVERSAL INPUT

ANG Shore Power Converters accept any frequency from 40 Hz to 440 Hz, any voltage from 110V to 520V, any input form Single and/or Three Phase (European and American standards) and they convert to the voltage, phase and frequency needed for your boat

FEATURE RICH

All ANG Shore Power Converter models are fitted with isolation transformers, data displays, input & output metering, auto-restart, tropicalization circuits, over-temperature, overload, & over-voltage protections

BUILT TO LAST

ANG Shore Power Converters are provided with single or dual input, forced cooling, weather sealed electronic system, and aluminum construction (anti-rust) to ensure reliable long-term operation

SIZE & CUSTOMIZABILITY

Our converters are some of the smallest and lightest available on the market today. Upon request, we offer custom cabinets construction to fit your yacht's available space as well as enhanced weather sealing and remote operation.

MAIN FEATURES

- SMALLEST & LIGHTEST ON THE MARKET
- AUTO-RANGING / MULTI-VOLTAGE INPUT
- INTEGRATED ISOLATION TRANSFORMER
- SINGLE OR DUAL CORD
- DATA DISPLAY
- INPUT AND OUTPUT METERING
- LOW OPERATIONAL TEMPERATURE
- NO ADDITIONAL COOLING REQUIRED
- EASY AND LOW COST INSTALLATION
- REUSABLE & RE-INSTALLABLE
- AUTO-RESTART
- NOISELESS
- OVERLOAD, OVER-TEMPERATURE AND OVER-VOLTAGE
- WEATHER SEALED ELECTRONICS
- ALUMINUM CONSTRUCTION | ANTI RUST
- IP21 PROTECTION

OPTIONAL

- CUSTOM CABINET DIMENSIONS
- RS-232 OR ETHERNET REMOTE TOUCH PANEL
- IP54 OUTDOOR PROTECTION



SPC Single Phase	SPC 6	SPC 10	SPC 12.5	SPC 15	SPC 18	SPC 20	SPC 25	SPC 27
Power (KVA)	6 kVA	10 kVA	12.5 kVA	15 kVA	18 kVA	20 KVA	25 kVA	27 kVA
Input Voltage (Vac)	190V - 260V	190V - 260V	190V - 260V	190V - 260V	190V - 260V	190V - 260V	190V - 260V	190V - 260V
Auto Ranging	YES	YES	YES	YES	YES	YES	YES	YES
Input Connection	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord
Output Connection	Single Cord	Single Cord	Single Cord	Single or Dual Cord	Single or Dual Cord	Single or Dual Cord	Single or Dual Cord	Single or Dual Cord
Input Frequency (Hz)	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz
Output Voltage EU	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)	230V (+/- 5%)
Output Voltage US	120/240V+N+G	120/240V+N+G	120/240V+N+G	120/240V+N+G	120/240V+N+G	120/240V+N+G	120/240V+N+G	120/240V+N+G
Output Current (Amp)	26/52 Amp	43 Amp	54 Amp	63 Amp	78 Amp	86 Amp	104 Amp	114 Amp
Output Frequency (Hz)	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz
Efficiency at Full Load	92%	92%	92%	92%	92%	92%	92%	92%
Wave Form Sinusoidal (THD in linear load)	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%
Operation Temperature	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C
Humidity Not Condensed	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%
Noise Level (Dba)	40	40	45	45	45	45	45	50
Display Data and Alarms	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40
Isolation Transformer	YES	YES	YES	YES	YES	YES	YES	YES
Electronics Protection	YES	YES	YES	YES	YES	YES	YES	YES
Auto Restart	YES	YES	YES	YES	YES	YES	YES	YES
Weather Sealed Electronics	YES	YES	YES	YES	YES	YES	YES	YES
Aluminum Construction	YES	YES	YES	YES	YES	YES	YES	YES
Cooling	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED
Communication	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet
Degree of Protection	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Cabinet	Single	Single	Single	Single	Single	Single	Dual	Dual
Approx. Weight (lbs/kg)	140 lbs/65 kg	154 lbs/70 kg	187 lbs/85kg	211 lbs/96 kg	287 lbs/130 kg	320 lbs/145 kg	407 lbs/185 kg	430 lbs/196 kg
Dimensions (cm) L x W x H	53 x 42 x 45	53 x 42 x 45	46 x 42 x 60	46 x 42 x 60	53 x 42 x 60	53 x 42 x 60	46 x 42 x 60 46 x 42 x 45	46 x 42 x 60 46 x 42 x 45
Dimensions (Inch) L x W x H	21 x 16.5 x 18	21 x 16.5 x 18	18.1 x 16.5 x 23.6	18.1 x 16.5 x 23.6	21 x 16.5 x 23.6	21 x 16.5 x 23.6	18.1 x 16.5 x 23.6 18.1 x 16.5 x 18	18.1 x 16.5 x 23.6 18.1 x 16.5 x 18



Three Phase Technical Specifications

SPCT Three Phase	SPCT 30	SPCT 37.5	SPCT 40	SPCT 45	SPCT 50	SPCT 60	SPCT 75	SPCT 80	SPCT 90	SPCT 100
Power (KVA)	30 kVA	37.5 kVA	40 kVA	45 kVA	50 kVA	60 kVA	75 kVA	80 kVA	90 kVA	100 kVA
Input Voltage (Vac)	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V	190V - 520V
Auto Ranging	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Input Connection	Single Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord	Single & Dual Cord
Output Connection	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single or Dual Cord	Single or Dual Cord
Input Frequency (Hz)	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz	45-440 Hz
Output Voltage EU	Single or Three Phase	Single or Three Phase	Single or Three Phase	Single or Three Phase	Three Phase	Three Phase	Three Phase	Three Phase	Three Phase	Three Phase
Output Voltage US	Single or Three Phase	Single or Three Phase	Single or Three Phase	Single or Three Phase	Three Phase	Three Phase	Three Phase	Three Phase	Three Phase	Three Phase
Output Current (Amp)	1x123 Amp (1P) 3x41 Amp @ 400V 3x82 Amp @ 208V	1x 150 Amp (1P) 3x50 Amp @ 400V 3x100 Amp @ 208V	1x160 Amp (1P) 3x55 Amp @ 400V 3x110 Amp @ 208V	1x180 Amp (1P) 3x64 Amp @ 400V 3x128 Amp @ 208V	3x72 Amp @ 400V 3x144 Amp @ 208V	3x 86 Amp @ 400V 3x172 Amp @ 208V	3x100 Amp @400V 3x200 Amp @208V	3x110 Amp @ 400V 3x220 Amp @ 208V	3x128 Amp @ 400V 3x256 Amp @ 208V	3x144 Amp @ 400V 3x288 Amp @ 208V
Output Frequency (Hz)	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz
Efficiency at Full Load	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%
Wave Form Sinusoidal (THD in linear load)	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%
Operation Temperature	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C
Humidity Not Condensed	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%
Noise Level (Dba)	40	40	45	45	45	45	45	50	50	50
Display Data and Alarms	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40	LED and LCD 4x40
Isolation Transformer	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Electronics Protection	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Auto Restart	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Weather Sealed Electronics	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Aluminum Construction	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cooling	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED
Communication	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet	RS-232 / Ethernet
Degree of Protection	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Cabinet	Dual	Dual	Dual	Dual	Dual	Quadruple	Quadruple	Quadruple	Quadruple	Quadruple
Approx. Weight (lbs/kg)	551 lbs/250 kg	601 lbs/273 kg	656 lbs/298kg	705 lbs/320 kg	837 lbs/380 kg	1191 lbs/495 kg	1203 lbs/546 kg	1313 lbs/596 kg	1410 lbs/640 kg	1675 lbs/760 kg
Dimensions Transformer L x W x H (cm)	53 x 42 x 60	53 x 42 x 60	53 x 42 x 60	53 x 42 x 60	60 x 42 x 66	53 x 42 x 60 (M) 53 x 42 x 60 (S)	53 x 42 x 60 (M) 53 x 42 x 60 (S)	53 x 42 x 60 (M) 53 x 42 x 60 (S)	60 x 42 x 60 (M) 60 x 42 x 60 (S)	60 x 42 x 66 (M) 60 x 42 x 66 (S)
Dimensions Transformer L x W x H (Inch)	21 x 16.5 x 23.6	21 x 16.5 x 23.6	21 x 16.5 x 23.6	21 x 16.5 x 23.6	21 x 16.5 x 26	21 x 16.5 x 23.6 (M) 21 x 16.5 x 23.6 (S)	21 x 16.5 x 23.6 (M) 21 x 16.5 x 23.6 (S)	21 x 16.5 x 23.6 (M) 21 x 16.5 x 23.6 (S)	23.6 x 16.5 x 23.6 (M) 23.6 x 16.5 x 23.6 (S)	23.6 x 16.5 x 26 (M) 23.6 x 16.5 x 26 (S)
Dimensions Electronic Module L x W x H (cm)	53 x 42 x 84	53 x 42 x 84	53 x 42 x 84	53 x 42 x 105	53 x 42 x 105	53 x 42 x 84 (M) 53 x 42 x 84 (S)	53 x 42 x 84 (M) 53 x 42 x 84 (S)	53 x 42 x 84 (M) 53 x 42 x 84 (S)	53 x 42 x 105 (M) 53 x 42 x 105 (S)	53 x 42 x 105 (M) 53 x 42 x 105 (S)
Dimensions Electronic Module L x W x H (Inch)	21 x 16.5 x 33	21 x 16.5 x 33	21 x 16.5 x 33	21 x 16.5 x 41.3	21 x 16.5 x 41.3	21 x 16.5 x 33 (M) 21 x 16.5 x 33 (S)	21 x 16.5 x 33 (M) 21 x 16.5 x 33 (S)	21 x 16.5 x 33 (M) 21 x 16.5 x 33 (S)	21 x 16.5 x 41.3 (M) 21 x 16.5 x 41.3 (S)	21 x 16.5 x 41.3 (M) 21 x 16.5 x 41.3 (S)



Outlet Shore Power Converters

SECONDARY CONVERTERS FOR ONBOARD WALL OUTLETS

ANG OUTLET SHORE POWER (CONVENIENCE) CONVERTERS are specifically designed for power conversion needs of your yacht's interior wall outlets. They are available in a wide range of power and in single and three phase versions. These secondary frequency converters are installed on board and used to power equipment that has different voltage and frequency requirements than what your yacht's electrical system can provide.

This could include a European 230V/50Hz power supply for US yacht cabins or a US 120V/60Hz power supply for European yachts. Additionally, they offer added flexibility to utilize locally sourced appliances, as well as power specialized gear like tenders and other pieces of equipment that need an alternate supply source.



Outlet Frequency Conversion Made Easy

- ⚡ Continuous and Automatic Operation
- ⚡ Output Power Guaranteed
- ⚡ Virtually Silent (20DbA Operation)
- ⚡ Clean Sinusoidal Output (<1%)
- ⚡ No Interference with Sensitive Equipment
- ⚡ Auto Restart
- ⚡ Tropicalization Circuits
- ⚡ Forced Cooling

OSPC Single Phase OSCPT Three Phase	OSPC 3	OSPC 5	OSPC 6	OSPC 7.5	OSPC 8.5	OSPC 10	OSPCT 6	OSPCT 10	OSPCT 12.5	OSPCT 15
Power (KVA)	3 kVA	5 kVA	6 kVA	7.5 kVA	8.5 kVA	10 KVA	6 kVA	10 KVA	12.5 KVA	15 KVA
Input Voltage (Vac)	210V - 250V	210V - 250V	210V - 250V	210V - 250V	210V - 250V	210V - 250V	230V - 400V	230V - 400V	230V - 400V	230V - 400V
Auto Ranging	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Input Connection	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord
Output Connection	Single Cord	Single Cord	Single Cord	Single Cord	Single Cord	Single or Dual Cord	Single Cord	Single Cord	Single Cord	Single Cord
Input Frequency (Hz)	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz
Output Voltage EU	230V	230V	230V	230V	230V	230V	-	-	-	-
Output Voltage US	120 or 240V	120 or 240V	120 or 240V	120 or 240V	120 or 240V	120 or 240V	120V	120V	120V	120V
Output Current (Amp)	13 / 26 Amp	22 / 44 Amp	27 / 54 Amp	34 / 68 Amp	35.5 / 75 Amp	44 / 88 Amp	50 Amp	88 Amp	100 Amp	125 Amp
Output Frequency (Hz)	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	50 or 60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Efficiency at Full Load	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%
Wave Form Sinusoidal (THD in linear load)	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%
Operation Temperature	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C	-5°C/+50°C
Humidity Not Condensed	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%
Noise Level (Dba)	20	20	20	20	20	20	20	20	25	25
Display Data and Alarms	LED	LED	LED	LED	LED	LED	LED	LED	LED	LED
Auto Transformer	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Electronics Protection	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Auto Restart	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Weather Sealed Electronics	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Aluminum Construction	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cooling	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED
Degree of Protection	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Cabinet	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
Approx. Weight (lbs/kg)	42 lbs/19 kg	52 lbs/24 kg	58 lbs/27 kg	79 lbs/36 kg	90 lbs/41 kg	108 lbs/49 kg	90 lbs/41kg	101 lbs/46 kg	114 lbs/52 kg	132 lbs/60 kg
Dimensions (cm) L x W x H	53 x 44 x 18	53 x 44 x 22	53 x 44 x 26	53 x 44 x 26	53 x 44 x 26	53 x 42 x 45	53 x 42 x 45	53 x 42 x 45	53 x 42 x 45	53 x 42 x 45
Dimensions (Inch) L x W x H	21 x 17.3 x 7	21 x 17.3 x 8.6	21 x 17.3 x 10.2	21 x 17.3 x 10.2	21 x 17.3 x 10.2	21 x 16.5 x 18	21 x 16.5 x 18	21 x 16.5 x 18	21 x 16.5 x 18	21 x 16.5 x 18



Outdoor Shore Power Converters

THE IDEAL DOCKSIDE SHORE POWER CONVERSION SOLUTION

Silent, compact, and lightweight, ANG OUTDOOR SHORE POWER CONVERTERS™ are suitable for various installations by yacht owners, marinas, yacht builders and shipyards looking for convenient dockside shore power conversion.

Our converters deliver dependable dockside marine power to yachts that are not compatible with local shore power without the need for installation of additional systems in the engine room. Offering all the same benefits as our yacht shore power converters, they are available in single phase and three phase configurations.

ANG OUTDOOR SHORE POWER CONVERTERS™ provide protection from short-circuits, undervoltage, overvoltage, overcurrent, over temperature, and come with an auto restart feature guaranteeing comfort, convenience and safety for your yacht's electrical systems. All our outdoor shore power converters are equipped with wheels to be easily moved from dock to dock and can be loaded with a forklift or a crane.



Ease and safety for your yacht's electrical system

- ⚡ Fully Automatic
- ⚡ Plug-in Ready
- ⚡ Display Panel
- ⚡ IP56 Fiberglass Enclosure
- ⚡ IP67 (UL CE) Outlets with Protection
- ⚡ Breakers

DSPC Single Phase	DSPC 25
Power (KVA)	25 kVA
Input Voltage (Vac)	190V - 260V
Auto Ranging	YES
Input Connection	Single Cord
Output Connection	Single Cord
Input Frequency (Hz)	45 - 440 Hz
Output Voltage EU	230V (+/- 5%)
Output Voltage US	120/240V+N+G
Output Current (Amp)	100 Amp
Output Frequency (Hz)	50 or 60 Hz
Efficiency at Full Load	92%
Wave Form Sinusoidal (THD in linear load)	< 2%
Operation Temperature	-5°C/+50°C
Humidity Not Condensed	0-95%
Noise Level (Dba)	45
Display Data and Alarms	LED and LCD 4x40
Auto Transformer	YES
Electronics Protection	YES
Auto Restart	YES
Weather Sealed Electronics	YES
Enclosure	Fiberglass
Color	White
Cooling	FORCED
Degree of Protection	IP 56
Cooling Fans Cover	YES
Wheels	YES
Cabinet	Single
Dimensions (cm) L x W x H	80 x 45 x 80
Dimensions (Inch) L x W x H	18.1 x 16.5 x 18

DSPCT Three Phase	DSPCT 25, 30, 37, 45, 50
Power (KVA)	25kVA, 30kVA, 37kVA, 45kVA and 50kVA
Auto Ranging	YES
Input Voltage (Vac)	190V - 520V
Input Frequency (Hz)	45 - 440 Hz
Input Form	Single and Three Phase
Input Connection	Inlet IP67 (UL CE)
Output Voltage	190V - 520V
Output Frequency (Hz)	50 or 60 Hz
Output Form	Single or Three Phase
Output Connection	Outlet IP67 (UL CE)
Input Breaker	YES
Output Breaker	YES
Wave Form Sinusoidal (THD in linear load)	< 2%
Efficiency at Full Load	92%
Output Power Guarantee	100%
Operation Temperature	-5°C/+50°C
Humidity Not Condensed	0-95%
Noise Level (Dba)	50
Display Data and Alarms	LED and LCD 4x40
Isolation Transformer	YES
Electronics Protection	YES
SLP Surge Protection	YES
Auto Restart	YES
Weather Sealed Electronics	YES
Enclosure	Fiberglass
Color	Off White or Custom
Cooling	FORCED
Degree of Protection	IP 56
Cooling Fans Cover	YES
Wheels	YES



Iso-Boost Transformers



As an added benefit, ANG ISO-BOOST™ Transformers offer three steps of boost (1st step at 15%, 2nd step at 7.5%, and 3rd step at +6Vac non boost mode) while Charles Iso-Boost systems only had two steps. The ANG ISO-BOOST™ steps are adjustable, a feature not available on Charles Iso-Boost transformers.

Our ISO-BOOST™ static system with seamless technology includes soft start, auto-restart and by-pass systems as standard features ensuring the protection of all your marine electrical equipment.

If you're looking for a way to keep your yacht's onboard equipment running smoothly, the ANG Isolation Boost Transformer (ISO-BOOST™) is perfect for you. Featuring an isolation transformer with a boost voltage increase circuit, it is designed to provide the correct line voltage automatically to your yacht's electrical system, offering complete safety and protection from damage due to excessive voltage increases and unexpected shutdowns because of voltage drops.

The perfect replacement for Charles Iso-Boost Transformers, ANG ISO-BOOST™ Transformers are lighter, include more features as standard, are available in seven (7) models, and come equipped with toroidal transformers. Compared to traditional laminated transformers, a toroidal transformer offers many benefits including higher efficiency, a more compact size, lower operating temperatures and near silent operation (no vibration or hum).

COMPETITOR COMPARISON CHART

FEATURES	ANG ISO-BOOST™	CHARLES ISO-BOOST	COMPETITORS
Frequency Range	50Hz and 60Hz	60Hz	60Hz
Boosting Steps	Three (3) Steps	Two (2) Steps	Two (2) Steps
Transformer	TOROIDAL	TRADITIONAL	TRADITIONAL
Transformer Efficiency	100% at any step	100% only at 240V	100% Only at 240V
Soft Start	YES (Integrated)	Optional	Optional
Auto restart	YES (Integrated)	Optional	No After High voltage
By-Pass	YES (Integrated)	Optional	No
Electronic Switching	Seamless System (no blackout during switching)	Mechanical Contactors	Mechanical Contactors (15 sec blackout during switching)
High Voltage Protection	Protection Engages at 258V	-	Protection Engages at 270V
Weight	Lighter	Heavier	Lighter
Models Available	7	2	2



NEW EVOLUTION VERSION

Same exceptional features in a lighter version, smaller dimensions, and updated display panel

SEAMLESS SYSTEM

ANG ISO-BOOST™ offers a SEAMLESS Transfer System to avoid power interruption during switching. The system automatically chooses the optimal point of switching without loss of power

SOFT START

Our Soft Start System assures minimal current in-rush during system power-up

OVERLOAD ENDURANCE

ANG ISO-BOOST™ is designed to withstand 30% overload for at least one hour

ELECTRICAL PROTECTION

ANG ISO-BOOST™ comes with a protective shield. The shore grounding conductor is connected to a shield between primary (shore) and secondary (boat) transformer windings. This shield assures isolation on the boat for electrical protection

FULL OUTPUT POWER GUARANTEED

ANG ISO-BOOST™ ensures full output power even in boost mode. The output voltage is always stable

AUTOMATIC THERMAL PROTECTION

ANG ISO-BOOST™ is provided with thermal protection that automatically shuts down the system. The unit will automatically restart when temperatures return to safe operating levels

MANUAL BY-PASS

ANG ISO-BOOST™ is provided with a manual by-pass system that allows you to disconnect the Boost increase circuit in case of breakdown. This ensures you don't experience any power loss while maintaining isolation protection of your yacht's electrical system.

ANG ISO-BOOST™ EUROPEAN VERSION

Available in 9 kVA and 18 kVA these ANG ISO-BOOST™ Transformers have the same features of the US version, but suitable for European boats

AUTO RESTART

ANG ISO-BOOST™ automatically restart after high voltage, low voltage, blackout, and overload. ANG ISO-BOOST™ is equipped with very low peak transformers

COOLING

The ANG ISO-BOOST™ is provided with a forced cooling fan system ensuring optimal performance and longevity of electrical components

STATIC SYSTEM

The static switch system is extremely low-maintenance requiring only filter cleaning



ANG ISO-BOOST™ 2x25kVA Installation on Sanlorenzo Yachts SX88



ANG ISO-BOOST™ covers a wide voltage range gradually increasing the output voltage.

ANG ISO-BOOST™ is designed to power the boat from a nominal voltage of 120/240 V with three operating thresholds:

STEP 1 | 15%

Shore Voltage from 178 to 209 V (+/- 3V)
Output voltage from 210 to 240 V (+/- 3V)

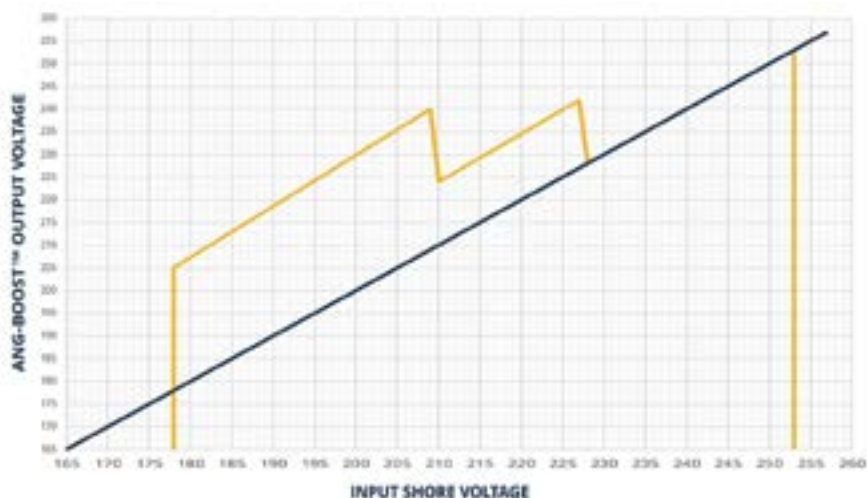
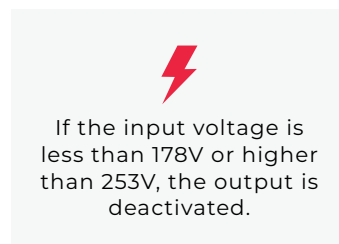
STEP 2 | 7.5%

Shore Voltage from 210 to 227 V (+/- 3V)
Output voltage from 224 to 242 V (+/- 3V)

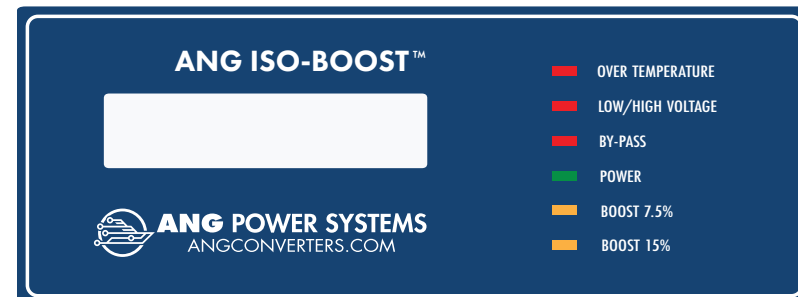
STEP 3 | +6VAC

Shore Voltage from 228 to 253 V (+/- 3V)
Output voltage from 228 to 253 V (+/- 3V)

ANG ISO-BOOST™ guarantees the maximum output current even in boost mode.



Output voltage curve secured by ANG-BOOST™ compared to the Shore Voltage.



ANG ISO-BOOST™ provides the LED/Display Control Panel that indicates the operating status of the equipment.

The LED lights indicate the operating status of the ISO-BOOST™

OVER TEMPERATURE - RED LED LIGHT

Thermal protection automatically shuts down the system until temperature returns to safe operating level.

LOW VOLTAGE - SOLID RED LED LIGHT

Shore input Voltage below 178VAC, the system shuts down to protect the boat's electrical system.

HIGH VOLTAGE - FLASHING RED LED LIGHT

Shore Input Voltage over 253VAC, the system shuts down to protect the boat's electrical system.

BY-PASS - RED LED LIGHT

Manual By-Pass ON, NON-Boost Mode, Boat Voltage equals Shore Voltage, Isolation Transformer ON.

POWER - GREEN LED LIGHT

Non-Boost mode, Boat Voltage equals Shore Voltage.

BOOST 7.5% - YELLOW LED LIGHT

BOOST 15% - YELLOW LED LIGHT

The display panel shows a rotation of a series of information every 5 seconds:

1st Screen - V Line (Input Voltage) & Power (kVA)

2nd Screen - Current (Input AMP) & Frequency (Input/output)

3rd Screen - OUTPUT (RMS Voltage)



AB Iso-Boost	AB 12.5	AB 15	AB 18	AB 20	AB 25	AB 30
Power kVA	12.5 kVA	15 kVA	18 kVA	20 kVA	25 kVA	30 kVA
Input Voltage (Vac)	178V - 255V	178V - 255V	178V - 255V	178V - 255V	178V - 255V	178V - 255V
Input Current (Amp)	52	62.5	74.8	83.2	104	125
Boost Voltage Correction	15% - 7% - 1/1	15% - 7% - 1/1	15% - 7% - 1/1	15% - 7% - 1/1	15% - 7% - 1/1	15% - 7% - 1/1
Operating Frequency (Hz)	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output Voltage EU	230V	230V	230V	230V	230V	230V
Output Voltage US	120 / 240 + N + G	120 / 240 + N + G	120 / 240 + N + G	120 / 240 + N + G	120 / 240 + N + G	120 / 240 + N + G
Output Current Boost Mode (15%)	44 Amp	53 Amp	64 Amp	71 Amp	89 Amp	106 Amp
Output Current No-Boost Mode (Amp)	50	60	73	82	100	121
Input Connection (Terminal block)	L1A+L2A+SH (GND)	L1A+L2A+SH (GND)	L1A+L2A+SH (GND)	L1A+L2A+SH (GND)	L1A+L2A+SH (GND)	L1A+L2A+SH (GND)
Output Connection (Terminal block)	L1B+L2B+N+GND	L1B+L2B+N+GND	L1B+L2B+N+GND	L1B+L2B+N+GND	L1B+L2B+N+GND	L1B+L2B+N+GND
kVA Continuous	12.1	14.5	17.5	19.3	24	29
Automatic Thermal Protection	110°C	110°C	110°C	110°C	110°C	110°C
Operating Temperature (°C)	-5°C / + 50°C	-5°C / + 50°C	-5°C / + 50°C	-5°C / + 50°C	-5°C / + 50°C	-5°C / + 50°C
Noise Level (Dba)	40	40	40	40	40	40
Degree of Protection	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Seamless Technology	YES	YES	YES	YES	YES	YES
Fully Automatic	YES	YES	YES	YES	YES	YES
Soft Start	YES	YES	YES	YES	YES	YES
Manual Bypass	YES	YES	YES	YES	YES	YES
Over Temperature Alarm	YES	YES	YES	YES	YES	YES
Over Voltage Low Voltage	YES	YES	YES	YES	YES	YES
Display Data and Alarm (6x16)	YES	YES	YES	YES	YES	YES
Aluminum Enclosure / Anti-rust	YES	YES	YES	YES	YES	YES
Cooling	FORCED	FORCED	FORCED	FORCED	FORCED	FORCED
Approximate Weight	160lbs / 72kg	187lbs / 85kg	209lbs / 95kg	242lbs / 110kg	322lbs / 146kg	353lbs / 160kg
L x W x H (cm)	46 x 36 x 36	46 x 42 x 45	46 x 42 x 45	46 x 42 x 45	46 x 42 x 60	46 x 42 x 60
L x W x H (inch)	18 x 14 x 14	18 x 16.5 x 17.5	18 x 16.5 x 17.5	18 x 16.5 x 17.5	18 x 16.5 x 23.6	18 x 16.5 x 23.6
Auto Restart	YES	YES	YES	YES	YES	YES
Isolation Transformer	YES	YES	YES	YES	YES	YES
Low Peak Transformer	YES	YES	YES	YES	YES	YES
Isolation Transformer Class	H	H	H	H	H	H
Paralleling	Optional	Optional	Optional	Optional	Optional	Optional



Voltage Regulators & Stabilizers

PROTECTED & STABLE SHORE POWER SUPPLY

The ANG Voltage Regulators & Stabilizers are designed to ensure a stable onboard power supply while protecting the boat from any fluctuating voltage coming from the dock pedestal.

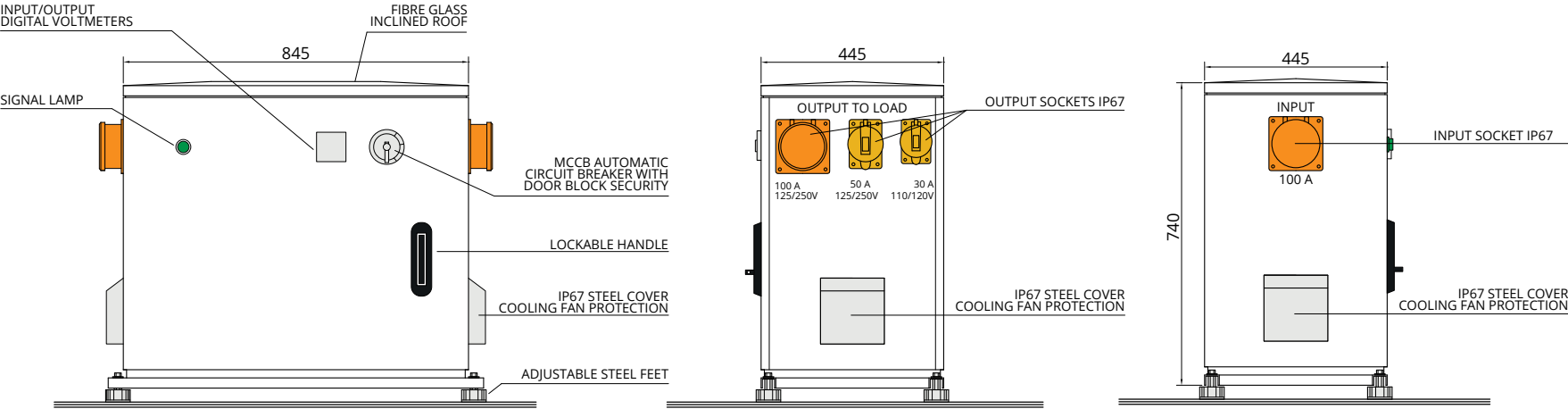
Available in onboard and outdoor versions, ANG Voltage Regulators & Stabilizers provide protection from high voltage, low voltage, overload, overcurrent, and short circuit events by monitoring the incoming dock power and automatically regulating the output voltage to the yacht's electrical system.

As a result, onboard voltage is always stable and consistent ($\pm 2V$). Offering added protection, the system automatically shuts down in case of a large voltage drop or surge and restarts when shore power is back in range preventing damage to sensitive onboard electrical equipment.

ANG Voltage Regulators & Stabilizers are available in single and three phase variations, offer customizable power output, come equipped with isolation transformers, input and output voltage meters, plugs, connectors and output breakers.



Servo-Mechanical Voltage Stabilizer with Static Control	
Power	up to 50kVA (single phase) up to 3500kVA (three phase)
Admitted Load Variation	300% for 2 min 150% for 10 min
Correction Speed	70 V/Sec
Effect of Load Power Factor	None
Waveform Distortion	None Added
Full Load Efficiency	Approx. 98%
Ambient Temperature	-5°C / +50°C
Storage Temperature	-5°C / +50°C
Relative Humidity	95% Non-Condensing
Enclosure	Fiberglass
Degree of Protection	IP56





Onboard safety for your yacht's electrical system

- ⚡ Fully Automatic
- ⚡ Isolation Transformer
- ⚡ Input & Output Voltage Meters
- ⚡ Switchable 120V/240V Output
- ⚡ Output Breakers
- ⚡ IP21 Enclosure

Single Phase VRS	VRS 15	VRS 30
Power (KVA)	15 kVA	30 kVA
Input Form	Single Phase	Single Phase
Aluminum Enclosure	YES	YES
Frequency	50-60 Hz	50-60 Hz
Input Voltage (US)	120/240V +/- 20% (192-288V)	120/240V +/- 20% (192-288V)
Input Voltage (EU)	230V +/- 20% (184-276V)	230V +/- 20% (184-276V)
Output Voltage (US)	120/240V + N +/- 1%	120/240V + N +/- 1%
Output Voltage (EU)	230V +/- 1%	230V +/- 1%
Input Connection	Terminal Block: 50 Amp (2 Wires+GND)	Terminal Block: 50 Amp (2 Wires+GND)
Output Connection	Terminal Block 50 Amp & 100 Amp (3 Wires+GND)	Terminal Block 50 Amp & 100 Amp (3 Wires+GND)
Output Current (Amp)	50	100 (US) / 125 (EU)
Input Automatic Circuit Breaker	YES	YES
SLP Surge Protection	YES	YES
Fully Protected	YES	YES
Isolation Transformer	YES	YES
Output Breakers	YES	YES
Monitoring Relay (under/over voltage)	YES	YES
Overcurrent Protection	YES	YES
Overload Protection	YES	YES
Input Sectionalizing Switch	YES	YES
Digital Multimeter IP67 E	YES	YES
Signal Lamp	IP56	IP56
Cooling	FORCED	FORCED
Tropicalized System	YES	YES
Auto Restart	YES	YES
Stainless Steel Adjustable Feet	YES	YES
Steel Cover for Cooling Fans	YES	YES
Degree of Protection	IP21	IP21
Approximate Weight	209lbs/95 kg	319lbs/145 kg
L x W x H (cm)	60 x 40 x 60	60 x 40 x 60
L x W x H (inch)	23.6 x 15.7 x 23.6	23.6 x 15.7 x 23.6

Auto Ranging Three Phase Transformers

Auto Ranging Three Phase Transformers	
Power	from 25 to 500 kVA
Auto Setting	YES
Input Frequency	60HZ
Output Frequency	60Hz
Auto Ranging Input Voltage	120V/208V 127V/220V 255V/440V 277V/480V
Input Form	Three Phase
Output Voltage	120V/208V 127V/220V 255V/440V 277V/480V
Output Form	Three Phase
Input Connections	Terminal Block
Output Connections	Terminal Block
SLP Surge protection	YES
Isolation Transformer	YES
Protection	Overload, Over Voltage, Over Temperature
Auto Restart	YES
Cooling	FORCED
Display Data and Alarms	LED and LCD
Degree of Protection	IP 23
Enclosure	Aluminum
Efficiency at Full Load	99%
Output Power Guarantee	100%
Operation Temperature	0-50°C
Humidity Not Condensed	0-95%
Noise Level (dba)	45DB
Weather Sealed Electronic System	YES

Our line of Auto Ranging Transformers are expressly crafted for yacht owners who want to plug into any three-phase dock but don't need to change frequency and form (single phase). Uniquely, our Auto Ranging Transformers are able to connect to any existing three phase shore power voltage and automatically supply your yacht with the required three phase voltage.

Available in three phase, this transformer will adapt to the voltage of any dock pedestal and run your boat safely.



Custom size up to 500kVA available upon request

100 Amp Smart-Y



Unit may not work on docks with GFCI protection

DO NOT USE Smart-Y if a transformer or converter is not installed on board

ANG SMART-Y

Automatic Paralleling Controller

Our ANG Smart-Y Controller allows you to safely connect your boat's 100Amp 120/240V single phase shore power cord to two 50Amp 120/240V dock pedestal receptacles. Housed in an IP56 rated fiberglass enclosure, the Smart-Y is capable of withstanding harsh marine environments, ensuring worry-free operation.

The unit will automatically check the phase of the two 50A connections and correct them when necessary to make a safe parallel connection.

INPUT (Single Phase)

Two 50A 120/240V 60Hz
Two 50A 0/230V 50Hz

OUTPUT (Single Phase)

One 100A 120/240V 60Hz
One 100A 0/230V 50Hz

LED LIGHT STATUS	FUNCTIONS
Yellow Led Blinking	Connected Shore Cord 1 Only
All Led Off	Connected Shore Cord 2 Only
Yellow Led On	Connected Shore Cord 1 & 2
Yellow & Green Led On	Shore Cord 1 & 2 In Phase
Yellow, Green & Red Led On	Shore Cord 1 & 2 Not In Phase
Red Led Blinking	Shore Cord 1 & 2 Incompatible



100 Amp Splitter

ANG SPLITTER

Dockside Marine Power Splitter

If your boat has twin 50A shore power connections, our ANG Splitter will allow you to safely connect your boat's two 50Amp 120/240V shore power cords to a single 100Amp 120/240V dock pedestal receptacle. Same as our Smart-Y, the ANG Splitter is housed in an IP56 rated fiberglass enclosure, capable of withstanding harsh marine environments.

INPUT (Single Phase)

One 100A 120/240V 60Hz
One 100A 0/230V 50Hz

OUTPUT (Single Phase)

Two 50A 120/240V 60Hz
Two 50A 0/230V 50Hz



Both the ANG Smart-Y and the ANG Splitter are provided with all the necessary Cables, Connectors, and Plugs.



Pigtail Adapters & Cable Sets

CUSTOM MADE PIGTAIL ADAPTERS & CABLE SETS

Available Upon Request from 16A to 125A Single & 3 Phase

AMERICAN 100A IP67 UL CE	
Plug – 100A 120/208V (3 phase)	Connector – 100A 125/250V (Single phase)
Plug – 100A 120/208V (3 phase)	Connector – 100A 277/480V (3 phase)
Plug – 100A 277/480V (3 phase)	Connector – 100A 120/208V (3 phase)
Plug – 100A 277/480V (3 phase)	Connector – 100A 125/250V (Single phase)
Plug – 100A 125/250V (Single phase)	Connector – 100A 120/208V (3 phase)
Plug – 100A 125/250V (Single phase)	Connector – 100A 277/480V (3 phase)

EUROPEAN IP67 UL CE	
Plug – 125A 380/415V (3 phase)	Connector – 100A 277/480V (3 phase)
Plug – 125A 380/415V (3 phase)	Connector – 100A 120/208V (3 phase)
Plug – 125A 380/415V (3 phase)	Connector – 2x 100A 120/208V (3 phase)
Plug – 125A 380/415V (3 phase)	Connector – 2x 63A 120/208V (Single phase)
Plug – 63A 380/415V (3 phase)	Connector – 100A 120/208V (3 phase)
Plug – 63A 380/415V (3 phase)	Connector – 100A 277/480V (3 phase)



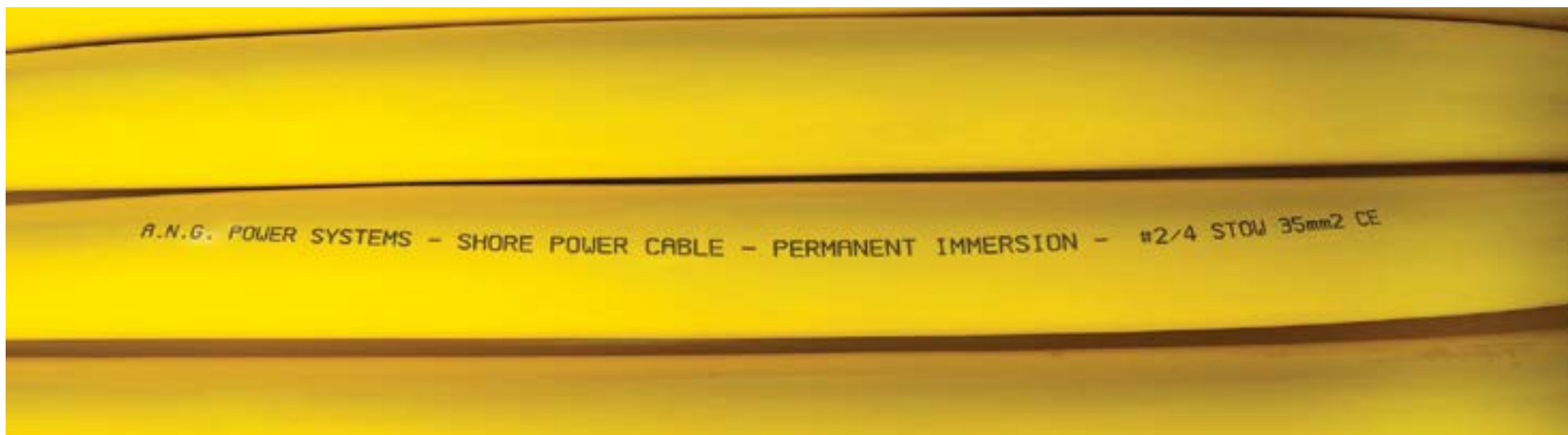
Marine Shore Cords



HIGH QUALITY 100A SHORE CORDS

Exceptionally Made In Italy




























Built to our exacting specifications, our marine shore power cables are available in 100A 4 wire, 3 wire, and 35mm² configurations



Connectors & Plugs

ANG HD SERIES North America Ratings 100A



 WATER TIGHT - IP67								
Poles & Wires	Configuration			Voltage/ Colour Coding	Plug	Connector	Receptacle	Inlet
	Receptacle/ Connector	Plug/Inlet	Clock position					
2P 3W			4h	125	SCM3100P4W	SCM3100C4W	SCM3100R4W	SCM3100B4W
2P 3W			6h	250	SCM3100P6W	SCM3100C6W	SCM3100R6W	SCM3100B6W
2P 3W			5h	277	SCM3100P5W	SCM3100C5W	SCM3100R5W	SCM3100B5W
2P 3W			7h	480	SCM3100P7W	SCM3100C7W	SCM3100R7W	SCM3100B7W
3P 4W			12h	125/250	SCM4100P12W	SCM4100C12W	SCM4100R12W	SCM4100B12W
3P 4W			9h	3ø250	SCM4100P9W	SCM4100C9W	SCM4100R9W	SCM4100B9W
3P 4W			6h	380-415	SCM4100P6W	SCM4100C6W	SCM4100R6W	SCM4100B6W
3P 4W			7h	3ø480	SCM4100P7W	SCM4100C7W	SCM4100R7W	SCM4100B7W
3P 4W			5h	3ø600	SCM4100P5W	SCM4100C5W	SCM4100R5W	SCM4100B5W
4P 5W			9h	3øY120/208	SCM5100P9W	SCM5100C9W	SCM5100R9W	SCM5100B9W
4P 5W			6h	220/380 240/415	SCM5100P6W	SCM5100C6W	SCM5100R6W	SCM5100B6W
4P 5W			7h	3øY277/480	SCM5100P7W	SCM5100C7W	SCM5100R7W	SCM5100B7W
4P 5W			5h	3øY347/600	SCM5100P5W	SCM5100C5W	SCM5100R5W	SCM5100B5W



Service & Support

SUPPORT, ASSISTANCE & CONSULTING

ANG Worldwide Marine Power Systems are manufactured to be durable, virtually maintenance free, and easily serviceable. Our products allow the replacement of any part in a simple and efficient manner. All spare parts are always available at our headquarters in the US and Europe and can be shipped express worldwide.

Our technical staff is always available for a free consultation and a free inspection in your boat in order to recommend the ideal Converter size and suggest the easiest, safest, and least expensive installation.

ANG Services

- | | |
|----------------------|-------------------------|
| ⚡ Consulting | ⚡ Maintenance & Support |
| ⚡ Project Management | ⚡ Technical Support |

PRODUCT CATALOG DISCLAIMER

The information provided has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, A.N.G. USA INC does not make any warranty or guarantee as to this information.

If you have any questions about the specifications of any products, please verify with A.N.G. USA INC technicians and or specialists before ordering.

Due to our continuous research and innovation, products design and all specifications are subject to change without notice.



Sales Terms & Conditions are available online on our website @ www.angconverters.com

Customer Support

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Declaration of Conformity:

All A.N.G. USA Inc. products are in conformity with UNI CEI EN ISO/IEC 17050-1:2005 and UNI CEI EN ISO/IEC 17050-2:2005 standards.

We, A.N.G. USA Inc. 3200 S. Andrews Ave, suite 207 Fort Lauderdale, FL 33316, hereby declare that the product below conforms to the relevant requirements of the appropriate EU directive.

All components are UL CERTIFIED.

Applicable UE Directives:

2006/95/CE (EU Directive on Electrical equipment designed for use within certain voltage limits).
2004/108/CE (EU Directive on Electromagnetic Compatibility).

Harmonized Standards:

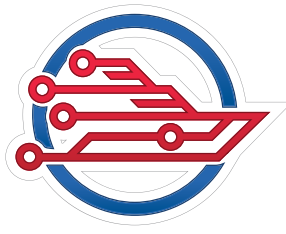
CEI EN 55022:2006 Information technology equipment. Radio disturbance characteristics. Limits and methods of measurement.

CEI EN 61000-4-2/A2:2001 Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 2: Electrostatic discharge immunity test.

CEI EN 62040-1-1:2003 Uninterruptible power systems (UPS). Part 1-1: General and safety requirements.

CEI EN 62040-1-2:2003 Uninterruptible power systems (UPS). Part 1-2: General and safety requirements.





ANG POWER SYSTEMS

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