



## Power Conversion for the Marine Market



### *Comprehensive Product Line*

ASEA Power Systems designs and manufactures power conversion equipment – phase, voltage and frequency – for **Marine, Military and Commercial Applications**. Our comprehensive product line ranges in power from 8kVA to 1000+kVA and provides both “Air Cooled” and “Liquid Cooled” Converters. With over 1900 installations, ASEA Power Systems is truly the **World Leader in Shore Power Converters!**

### *Quality Power for your most Sophisticated On-Board Electrical Equipment*

ASEA Power Systems' shore power converters provide precision regulation (<1%) and low harmonic distortion (<1%) to the yacht's power distribution grid. No longer will power spikes, sags and surges present on most docks affect the yacht.

### *Modular Design and Construction*

ASEA Power Systems has utilized over 35 years of customer feedback into designing a modular shore power converter. This modular construction allows for ease of maintenance and affords us the ability to customize each converter to the most demanding customer requirements. If our standard products don't meet the yacht's specific need – we'll custom design the right converter for every application.

### *Accepts any World-Wide Power Input*

Each converter accepts any input power form ranging from 170-520VAC, 40-75Hz and Single or Three Phase.

### *Compact and Lightweight*

With the smallest shore power converter footprint in today's industry – ASEA Power Systems' converters typically are 25-50% smaller than competitive products. With over 20 cabinets to choose from you'll be sure to find the best solution for your yacht.

### *Designed for the Marine Environment*

ASEA Power Systems' shore power converters are designed to withstand the most demanding marine environment. From stainless steel enclosures to conformally coated circuit boards – our shore power converters have everything you would expect to find in a product designed for the marine market.

### *Available Options for Every Application*

ASEA Power Systems provides a comprehensive list of industry standard options. Seamless Transfer, Load Management, Remote Touch Panels, Generator Management Modules and Dual Master Controller are a few of these options. In addition to these standard options – ASEA Power Systems' technical staff can design custom modifications for the yachts most demanding applications (mechanical or electrical).

### *World-Wide Service and Support*

ASEA Power Systems has developed a comprehensive World-Wide Service and Support Network which spans over 40 international locations. No matter where the yacht is cruising - ASEA Power Systems is there to support you.





# SPECIFICATIONS

## INPUT

	<i>Model AC25-1</i>	<i>Model AC30-1</i>	<i>Model AC36-1</i>
• PHASE	Single or Three Phase	Single or Three Phase	Single or Three Phase
• VOLTAGE	170VAC - 520VAC	170VAC - 520VAC	170VAC - 520VAC
• FREQUENCY	40Hz - 70Hz	40Hz - 70Hz	40Hz - 70Hz
• POWER FACTOR	>0.99 @ Rate Load	>0.99 @ Rate Load	>0.99 @ Rate Load
• AUTO-RESTART	Standard	Standard	Standard
• SHORE CORD	Single Dual; Model AC50-1/2	Single Dual; Model AC60-1/2	Single Dual; Model AC75-1/2

## OUTPUT

• PHASE	1 Phase	1 Phase	1 Phase
• POWER RATING	25kVA	30kVA	30kVA
• FIELD UPGRADEABLE	30kVA, 36kVA or Parallelable	36kVA or Parallelable	Parallelable
• POWER FORM	110/220V, 115/230V, 120/240V, 220V, 230V, 240V	110/220V, 115/230V, 120/240V, 220V, 230V, 240V	110/220V, 115/230V, 120/240V, 220V, 230V, 240V
• FREQUENCY	50Hz or 60 Hz	50Hz or 60 Hz	50Hz or 60 Hz
• CURRENT	105A @ 240VAC	125A @ 240VAC	150A @ 240VAC
• EFFICIENCY	91% (Input to Output kW)	91% (Input to Output kW)	91% (Input to Output kW)
• DISTORTION	<1% THD, Linear Load	<1% THD, Linear Load	<1% THD, Linear Load
• POWER FACTOR	No Restrictions, Unity To $\pm 0.0$	No Restrictions, Unity To $\pm 0.0$	No Restrictions, Unity To $\pm 0.0$
• LOAD REGULATION	<1%	<1%	<1%
• PARALLELABLE	Yes	Yes	Yes

### SYSTEM ENVIRONMENTAL • MECHANICAL

- 0-50°C Full Load
- 0-95% RH, Non-Condensing
- Stainless Steel and Aluminum Structures
- External Surfaces Powder Coated - Snow White
- All Printed Circuit Boards – Conformal Coated
- Fork Lift Bases

### SYSTEM OPTIONS (Partial List)

- SEAMLESS TRANSFER (1-4 GENS)
- DUAL SHORE CORDS
- PARALLELING
- DUAL MASTER CONTROLLERS
- PLC – STO INTERFACE
- REMOTE TOUCH PANELS
- RS-232 or MOD BUS
- CUSTOM CABINETS/MODIFICATIONS

### SYSTEM CABINET STYLES

**Models AC25-1/-3, AC30-1/-3, AC36-1/-3**

*Style "F":* 41'H x 18"W x 30.25"D  
(104.2cm x 45.7cm x 76.8cm)

*Style "O":* 14.6"H x 17"W x 25.5"D  
(37.1cm x 43.2cm x 64.8cm)  
Input Power Cabinet  
24"H x 24"W x 24"D  
(61cm x 61cm x 61cm)  
Control Cabinet

*Style "L":* 57.675"H x 18"W x 21"D  
(146.5cm x 45.7cm x 53.3cm)

### SYSTEM CONTROL, METERING & STATUS

- SHORE POWER CONTROLS: Input Service Disconnect, Input On/Off Control
- SHORE POWER METERING: Voltage, Current, Frequency, kVA, kW, % Load
- SHIPS POWER CONROLS: Output On/Off
- SHIPS POWER METERING: Voltage, Current, Frequency, kVA, kW, % Load
- GENERATOR CONTROLS: Transfers
- GENERATOR METERING: Voltage, Frequency
- SYSTEM STATUS: Operational, Diagnostics, Software
- EVENT LOGS & POWER MONITORING CABILITY STANDARD ON EVERY SYSTEM

## INPUT

- PHASE
- VOLTAGE
- FREQUENCY
- POWER FACTOR
- AUTO-RESTART
- SHORE CORD

### Model AC25-3

Single or Three Phase  
170VAC - 520VAC  
40Hz - 70Hz  
>0.99 @ Rate Load  
Standard  
Single  
Dual; Model AC50-3/2

### Model AC30-3

Single or Three Phase  
170VAC - 520VAC  
40Hz - 70Hz  
>0.99 @ Rate Load  
Standard  
Single  
Dual; Model AC60-3/2

### Model AC36-3

Single or Three Phase  
170VAC - 520VAC  
40Hz - 70Hz  
>0.99 @ Rate Load  
Standard  
Single  
Dual; Model AC75-3/2

## OUTPUT

- PHASE
- POWER RATING
- FIELD UPGRADEABLE
- POWER FORM

3 Phase  
25kVA  
30kVA, 36kVA or Parallelable  
120/208VAC, 127/220VAC  
220/380VAC, 230/400VAC  
240/415VAC, etc.

- FREQUENCY
- CURRENT

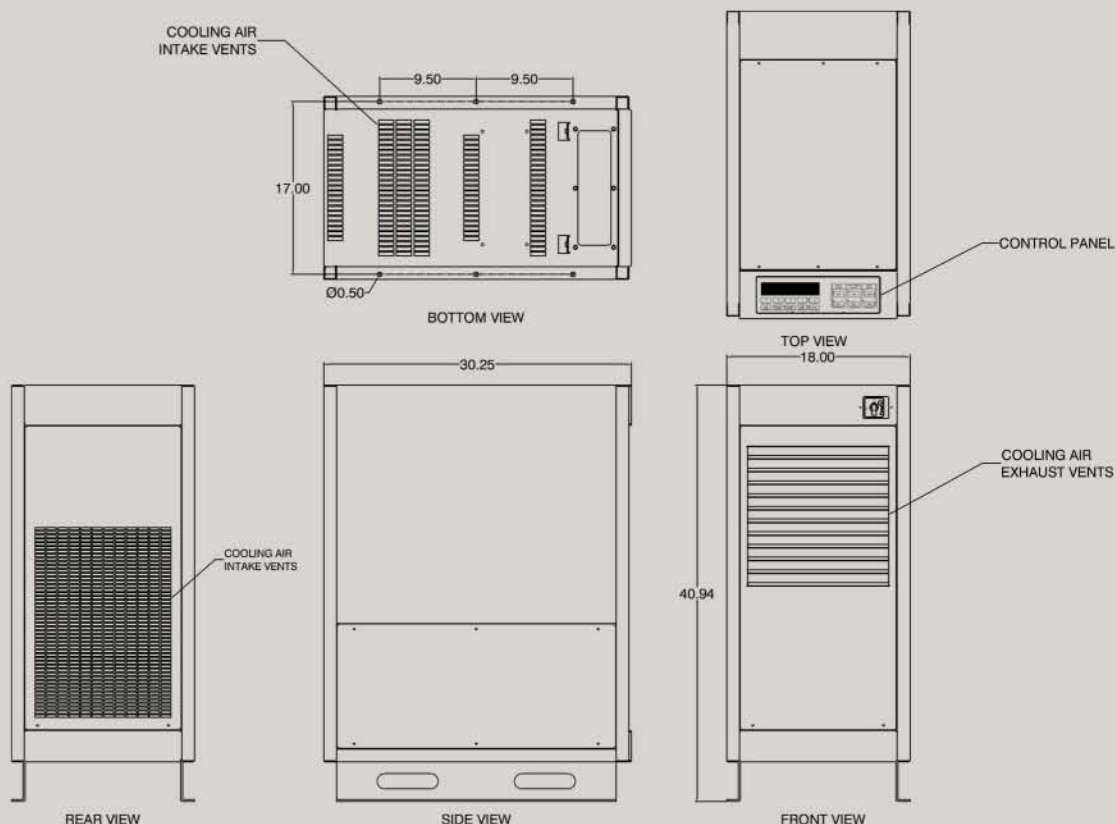
50Hz or 60 Hz  
36A @ 230/400VAC  
70A @ 120/208VAC  
91% (Input to Output kW)  
<1% THD, Linear Load  
No Restrictions, Unity To  $\pm 0.0$   
<1%  
Yes

3 Phase  
30kVA  
36kVA or Parallelable  
120/208VAC, 127/220VAC  
220/380VAC, 230/400VAC  
240/415VAC, etc.

50Hz or 60 Hz  
43A @ 230/400VAC  
83A @ 120/208VAC  
91% (Input to Output kW)  
<1% THD, Linear Load  
No Restrictions, Unity To  $\pm 0.0$   
<1%  
Yes

3 Phase  
36kVA  
Parallelable  
120/208VAC, 127/220VAC  
220/380VAC, 230/400VAC  
240/415VAC, etc.

50Hz or 60 Hz  
52A @ 230/400VAC  
100A @ 120/208VAC  
91% (Input to Output kW)  
<1% THD, Linear Load  
No Restrictions, Unity To  $\pm 0.0$   
<1%  
Yes





Technical drawing of the SLA 1000 power supply unit, showing five views: TOP VIEW, FRONT VIEW, LEFT SIDE VIEW, RIGHT SIDE VIEW, and BOTTOM VIEW. The drawing includes dimensions and labels for various components.

**TOP VIEW:** Shows the top of the unit with a width of 18.00. Labels include "EXHAUST AIR ALL 4 SIDES" and "4X 10-32 TIE POINTS (STAINLESS STEEL PEM NUTS INSTALLED INTERNALLY)".

**FRONT VIEW:** Shows the front of the unit with a height of 57.59. Labels include "AT REAR SIDE: 4X 10-32 TIE POINTS (STAINLESS STEEL PEM NUTS INSTALLED INTERNALLY)", "CONTROL PANEL", "EMERGENCY OFF SWITCH", "FARSIDE INTAKE AIR", and "INTAKE AIR". Dimensions include 2.00, 0.63, 1.00, 2.00, 3.31, 15.31, 17.00, and 8.75.

**LEFT SIDE VIEW:** Shows the left side of the unit with a width of 21.00 and a depth of 16.25. Labels include "INTAKE AIR ON BACKSIDE" and "INTAKE AIR (BOTH SIDES)". Dimensions include 0.63, 1.00, 2.00, and 1.00.

**RIGHT SIDE VIEW:** Shows the right side of the unit with a width of 21.00 and a depth of 16.25. Labels include "4X 10-32 TIE POINTS (STAINLESS STEEL PEM NUTS INSTALLED INTERNALLY)". Dimensions include 0.63, 1.00, 2.00, and 1.00.

**BOTTOM VIEW:** Shows the bottom of the unit with a width of 16.00 and a depth of 8.00. Labels include "INPUT/OUTPUT WIRING ACCESS", "DECK MOUNTING HOLE PATTERN", "INTAKE AIR", and "6X Ø0.50". Dimensions include 17.00, 8.75, and 16.00.



The technical drawings illustrate the dimensions and components of the Power Module and Transformer Module. The Power Module is shown in three views: front, left end, and bottom. The front view shows a square unit with a width of 24.00 and a height of 24.00. It features a control panel at the top with a master power switch, a cooling air intake on the right, a cooling air exhaust on the left, and power output distribution blocks at the bottom. The left end view shows a width of 24.00 and a height of 24.00, with a power module (left end view) at the bottom. The bottom view shows a width of 23.00 and a height of 14.00, with power output cables to the ship's bus and power input and control cables to the transformer module.

The Transformer Module is shown in three views: front, left side, and bottom. The front view shows a rectangular unit with a width of 17.00 and a height of 14.00. It features a cooling air exhaust on the left, a power input distribution block on the right, and power input and control cables to the power module. The left side view shows a width of 25.50 and a height of 14.59, with a cooling air intake on the left. The bottom view shows a width of 24.98 and a height of 16.00, with power output and control cables to the power module.

Key dimensions and components labeled include:

- Power Module (Front View):** 24.00 (width), 24.00 (height), 1.34 (bottom offset), 2.91 (bottom offset), 1.25 (top offset), 3.75 (top offset).
- Power Module (Left End View):** 24.00 (width), 24.00 (height).
- Power Module (Bottom View):** 23.00 (width), 14.00 (height), 1.25 (top offset), 3.75 (top offset), 4X Ø0.50 (power output cables), 16.00 (height), 24.98 (width), 17.50 (width), 3.74 (width), 0.26 (width).
- Transformer Module (Front View):** 17.00 (width), 14.00 (height), 1.34 (bottom offset), 1.06 (bottom offset).
- Transformer Module (Left Side View):** 25.50 (width), 14.59 (height).
- Transformer Module (Bottom View):** 24.98 (width), 16.00 (height), 17.50 (width), 3.74 (width), 0.26 (width), 4X Ø0.50 (power output cables).

Labels for components include: CONTROL PANEL, MASTER POWER SWITCH, COOLING AIR EXHAUST, COOLING AIR INTAKE, POWER OUTPUT DISTRIBUTION BLOCKS, POWER MODULE (FRONT VIEW), POWER MODULE (LEFT END VIEW), POWER MODULE (BOTTOM VIEW), TRANSFORMER MODULE (LEFT SIDE VIEW), TRANSFORMER MODULE (FRONT VIEW), TRANSFORMER MODULE (BOTTOM VIEW), CIRCULAR CONNECTOR & RS-232 MOUNTING BRACKET, POWER INPUT, POWER OUTPUT AND CONTROL CABLES TO SHIP'S BUS, POWER INPUT AND CONTROL CABLES TO TRANSFORMER MODULE, POWER OUTPUT AND CONTROL CABLES TO POWER MODULE.

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