

ATLAS MARINE SYSTEMS

Classic III Series

ShorPOWER® FREQUENCY CONVERTERS

Atlas engineers are always striving to bring you the latest technology available in the market today. With that in mind we are introducing a new "Dual Isolation" product line, the Classic III ShorPOWER using the latest power device technology. The advantages of the new design are lower operating losses and higher output power in a smaller package. What does this mean to you the customer? A smaller lighter inverter with a lower installed volume. In addition to the new power stage design, we have changed our control package to incorporate the latest PLC & simplified display technology. This results in a smaller control package with less interface wiring, reducing your installation time for modular systems.



APPLICATION:

The ShorPOWER® *Classic III* is the ultimate electrical power solution for worldwide yachting. The *Classic III* is a two-transformer frequency converter, providing double isolation and a sophisticated "smart system" that regulates and conditions dockside power. This high performance frequency convert protects the onboard electrical system by eliminating voltage spikes, surges, voltage drops or sags, and harmonic distortions typical of dock power. Any frequency, phase and voltage will automatically be converted to the yacht's electrical requirements. The ShorPOWER® *Classic III* frequency converter system is offered in sizes from 20 to 600 kVA. To assure full capacity output, limited often by some marina power plugs, systems rated 40kVA and greater should be purchased with a "Dual Cord" option.

STANDARD FEATURES:

- Power ratings from 20 kVA to 600 kVA
- Input auto-ranging from 190 to 250 volts and 340 to 500 volts, single or three-phase, 50 or 60 Hz
- Extended voltage transient and lightning protection (dual transformer isolation)
- Single and three-phase outputs in all standard bus configurations
- LCD Display control
- Event history log (non-volatile memory)
- Precise output voltage and frequency regulation
- Pure sine wave output
- Fully integrated input / output electronic protection package
- The latest state-of-the-art IGBT and PWM technology
- Emergency power off (EPO)
- Automatic restart
- Built-in self-diagnostics system
- No periodic calibration required
- Stud type power connections
- User selectable remote alarm alert system



ATLAS MARINE SYSTEMS - ShorPOWER® Classic III

OPTIONS AVAILABLE:

- Remote communication data link: RS 232
- Non-integrated, dual shore cord system – GFCI compatible (SmartBOX® option)
- Parallelable for increased capacity and redundancy (includes output safety disconnect)
- Fully integrated ShorPOWER® to generator, seamless power transfer system controls
- Fully integrated generator to generator, seamless power transfer system controls
- Non-integrated generator to generator, seamless power transfer module (contactors or circuit breakers)
- Generator auto start for input overload protection (requires seamless power transfer option)
- Modular configuration (4 modules for increased flexibility)
- Output load disconnect
- Local touch-screen display and control panel
- Remote touch-screen display and control panel
- Remote start / stop/ reset switch control box
- TecPOWER® switchboard data link interface
- Input safety disconnect
- Remote control and monitoring interface

GENERAL SPECIFICATIONS

INPUT:

Voltage Range:	190 to 250 volts and 340 to 500 volts
Phase:	Single and three-phase
Phase Rotation:	Any
Frequency:	40 to 70 Hz
Power Factor:	≥ 0.95
Inrush Current:	< 50% of full load current
Protection:	Over/ under voltage, loss of phase & over current

ENVIRONMENTAL:

Temperature Range:	-25°C to +45°C
Humidity:	0% to 95%, non- condensing

MECHANICAL:

Mechanical specifications vary depending on configuration selected. Contact Atlas Marine Systems to obtain more information.

OUTPUT:

Power Ratings (specify):

- At single-phase: 20, 25, 30, 35, 40, 50, 60, kVA
- At three-phases: 20, 25, 30, 35, 40, 50, 60, 75, 100, 125, 150, 200, 250, 300, 400, 450, 600 kVA at 0.85 power factor

Overload:

600% peak (motor starting), 200% for 20 seconds, 150% for 60 seconds, 110% for 2 hours, or 100% continuous

Voltage (specify):

- Single-phase, 2-wire: 110, 115, 120, 200, 220, 230, 240 volts
- Single-phase, 3-wire: 110/220, 115/230, 120/240 volts
- Three-phase, 3-wire: 220, 230, 240, 380, 400, 415, 440, 460, 480 volts
- Three-phase, 4-wire: 115/200, 120/208, 220/380, 230/400, 240/415, 265/460, 277/480 volts

Voltage Regulation: ± 1%

Phase Imbalance: No Restriction

Frequency (specify): 50 Hz or 60 Hz ± 0.1 Hz

Harmonic Distortion: 2% maximum, 1% typical (linear loads)

Efficiency: 94% typical at rated load

Protection: Over/under voltage, over load, short circuit, & over temperature