

ATLAS MARINE SYSTEMS



Ultra LP Series **ShorPOWER®** FREQUENCY CONVERTERS

Atlas Marine Systems is the world leader in the design of marine electrical power systems. Atlas provides electrical engineering services to define the vessel electrical distribution system and the appropriate application of its TecPOWER® series switchboards, load management and power management systems. Additionally, the Atlas ShorPOWER® product line, using either a single or dual transformer isolation approach, provides the widest selection of onboard frequency converters available to the yachting community.



APPLICATION:

The ShorPOWER® *ULTRA LP* is a single transformer isolation system utilizing state-of-the-art IGBT technology and a pulse width modulated (PWM) control system. This system eliminates concerns over compliance to ever increasing marina regulations and compliance statements regarding the use of onboard generators while docked. Noise and air pollution caused by these generators, coupled by increased operational and maintenance costs, make the use of an *ULTRA* frequency converter a must. Additionally, the ShorPOWER® *ULTRA LP* can isolate, regulate and condition dockside power, and protect the onboard electrical system by eliminating voltage spikes, surges, voltage drops or sags, and harmonic distortions typical of dock power. The *ULTRA LP* is available in a low voltage configuration for yachts under 150 feet. The *ULTRA* converts any frequency and phase to the yacht's exact electrical requirements. For increased capacity, where marina power pedestals are limited, the dual cord option is available except for locations, such as Europe, where ground fault circuit interrupters (GFCI) are common. The *ULTRA* is surprisingly lightweight, and packaged with the space limitations of the yacht in mind. This system will convert single-phase voltage or three-phase voltage to the specific electrical configuration onboard the yacht. The *ULTRA LP* is available in sizes from 12 to 18 kVA.



STANDARD FEATURES:

- Power ratings from 12 kVA to 18 kVA
- Input auto-ranging from 208 to 240 volts, 1Ø or 380 to 480 volts, 3Ø, +5%, -8%, 50 or 60 Hz
- Voltage transient and lightning protection (single transformer isolation)
- Single and three-phase outputs in all standard bus configurations
- Light weight design
- Minimum installed volume
- Digital display and control panel
- Precise output voltage and frequency regulation
- Fully integrated input / output electronic protection package
- State-of-the-art IGBT and PWM technology
- Input emergency power off (EPO)
- Automatic restart
- Built-in self-diagnostics system
- Input safety disconnect
- No periodic calibration required
- Remote control and monitoring interface
- Pure sine wave output
- Bulkhead Mount (Floor Mount Optional)



ATLAS MARINE SYSTEMS - ShorPOWER® Ultra LP

OPTIONS AVAILABLE:

- Modular configuration
- Output load disconnect
- Remote Control Panel
- Floor Mount
- Communications Data Link

GENERAL SPECIFICATIONS

INPUT:

Voltage Range:	208 - 240V, +5%, -8% or 380 to 480V, +5%, -8% (specify)
Phase (specify):	1Ø or 3Ø
Phase Rotation:	Any
Frequency:	50 - 60 Hz ± 10%
Power Factor:	≥ 0.95
Inrush Current:	< 50% of full load current
Protection:	Over/ under voltage, loss of phase & over current

ENVIRONMENTAL:

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

OUTPUT:

Power Ratings (specify):

- At single-phase: 12 or 18 kVA
- At three-phases: 12 or 18 kVA at 0.85 power factor

Overload:

- At 12 kVA: 150% for 60 seconds, 100% continuous
- At 15 to 18 kVA: 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: 3% maximum, 2% typical
(linear loads)

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

