

ATLAS MARINE SYSTEMS



Ultra PC Series **ShorPOWER®** POWER CONDITIONER

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 PC* is an advanced frequency converter using state-of-the-art IGBT semiconductor technology and a pulse width modulated (PWM) control system. The system is specifically designed to provide highly regulated isolated electrical power from the yacht's main electrical distribution system.

The power produced can be the same frequency as the main generators in which case the *Ultra PC* provides clean regulated electrical power to sensitive loads such as audio visual equipment regardless of fluctuations commonly found on the main electrical bus.

Alternatively, the *Ultra PC* can produce power at a different frequency to that of the generators. This power is often used to provide alternate stateroom convenience outlets to eliminate the need for guests to use adapters when connecting any personal equipment brought on board. The *Ultra PC* can also provide power for equipment that is only available in certain voltages and frequencies such as specialist audio visual equipment or music equipment. The *Ultra PC* is available in sizes from 12 to 40 kVA.

STANDARD FEATURES:

- Power ratings from 12 to 40 kVA
- Input auto-ranging from 208 to 240V, +8%, -10% (187 to 260V), 1Ø or 380 to 480V 3Ø, +10%, -8% (350 to 528V)
- 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 PC

OPTIONS AVAILABLE

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

GENERAL SPECIFICATIONS

INPUT:

Voltage Range: 208 to 240 volts, +8%, -10%
(187 to 260V), 1Ø or
380 to 480 volts 3Ø, +10%, -8%;
(350 to 528V) (specify)

Phase (specify): 1Ø or 3Ø

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: 0°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: 12, 15, 18, 25, 30 or 40 kVA
- At three-phases: 12, 15, 18, 25, 30 or 40 kVA
at 0.85 power factor

Overload:

- At 12 kVA: 150% for 60 seconds, 100% continuous
- At 15 to 40 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: $\pm 1\%$

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