

ATLAS MARINE SYSTEMS



Docker 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 and shore-based frequency converters available to the yachting community.



APPLICATION:

The ShorPOWER® *Docker* is a shore-based electric frequency and voltage converter that supplies power to yachts that are not compatible with the locally available dockside power. The *Docker* is equipped with a low noise and weather protected enclosure. It can operate alongside a yacht without disturbing occupants or adjacent vessels. The *Docker* is suitable for various installations and provides an excellent return on investment for the owner, given its surprisingly short payback interval.

- **Manufacturers and refit yards** now have full access to frequency and voltage conversion.
- **Marina operators** can easily provide world class yachts the service of any frequency and any voltage dockside power.
- **Yacht owners** can avoid costly and unnecessary generator operation while in port.

STANDARD FEATURES:

- Low profile/ small footprint
- Rainproof design prevents water intrusion
- Metering, controls and output circuit breaker located behind a hinged watertight door
- Low noise enclosure
- Skid mounted for ease of transportation
- Fault indicator
- Automatic restart
- Total protection from:
 - Brown-outs
 - Hi line, Sags and Surges
 - Spikes to 10,000 volts
 - Common mode noise
 - Transients to 10,000 volts
 - Transverse mode noise
- Phase loss/ phase rotation protection
- Over temperature protection
- Over/ under voltage protection
- Over/ under frequency protection
- Output overload protection
- Phase selector switch
- Illuminated start/ stop pushbutton
- Weatherproof and insulated emergency off pushbutton
- Instrument package with:
 - Input and output voltmeter
 - Input and output frequency meter
 - Input and output ammeter

GENERAL SPECIFICATIONS

INPUT:

Voltage Range: 190 to 250 volts or
340 to 500 volts

Phase (specify): Single or 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 +55°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: 35 or 50 kVA
- At three-phases: 35, 50, 75, 100, 125, 150, 250, or 300 kVA at 0.85 power factor

Overload:

- At 50 to 125 kVA: 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: At 35 to 125 kVA: $\pm 1\%$

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

OPTIONS AVAILABLE:

- Remote controls
- Input circuit breaker
- Input power cord
- Output connector(s)
- Weatherproof, marine grade output receptacle
- Access to power components restricted by keyed latches
- Alternate input and output voltages available - contact factory