

The ShorPOWER Ultra HP frequency converter utilizes state-of-the-art technology including the latest generation of power semiconductors and transformers controlled by an ultra-high speed digital system to create precisely regulated output power. This technology allows the converter

to be very compact and lightweight while being electrically powerful and highly efficient.

The Ultra HP will automatically connect to any marina power source worldwide and provide clean, stable and reliable power for the yacht. This is especially important due to ever increasing regulations regarding the use of onboard diesel engine generators while docked at a marina. Noise and air pollution caused by these generators, coupled by increased operational and maintenance costs, make the use of the ShorPOWER Ultra HP frequency converter a must.

Additionally, the ShorPOWER Ultra HP produces a highly regulated output regardless of fluctuations in the dockside power or changes in load onboard. This regulation protects the onboard electrical system by eliminating voltage spikes, surges, voltage drops or sags, and harmonic distortions typical of dock power.

The Ultra HP is designed to be the most reliable converter on the market by manufacturing the converter using only the highest quality components and by engineering the converter for actual marine use, such as operating continually at 100% load in high ambient temperatures.

The Ultra HP is available in output power ratings of 150 to 200kVA. (Consult factory for details.)

STANDARD FEATURES

Input to Output Isolation via Internal Transformer Low Input Current Distortion

ETHERNET INTERFACE (MODBUS TCP / IP)

HIGH EFFICIENCY

INPUT HIGH VOLTAGE TRANSIENT PROTECTION

MULTI-LANGUAGE DISPLAY

PRECISE OUTPUT VOLTAGE AND FREQUENCY REGULATION

External Service Access Port Generous Overload Capability

SOPHISTICATED DIAGNOSTIC AND PROTECTION SYSTEM

ALARM INDICATION WHEN INPUT CURRENT EXCEEDS PROGRAMMED DOCK BREAKER RATING

Unbalanced Loads on Board are not Reflected on the Input

OPTIONS AVAILABLE

OUTPUT LOAD DISCONNECT

REMOTE TOUCHSCREEN OR CONTROL PANEL

REMOTE ACCESS - WIRED ETHERNET CONNECTION

TECPOWER® SWITCHBOARD DATA LINK INTERFACE

SWITCHBOARD CONTROLLED SOFT TRANSFER

RS485 INTERFACE (MODBUS)

TOP EXHAUST

SEAMLESS POWER TRANSFER BETWEEN SHORPOWER AND GENERATOR, AND BETWEEN GENERATORS

PARALLELABLE FOR INCREASED CAPACITY OR REDUNDANCY

INPUT

VOLTAGE 323 to 528 Volts, 3Ø, 3 WIRE PLUS GROUND **FREQUENCY** 50/60 Hz ±10% INPUT CURRENT DISTORTION POWER FACTOR PHASE ROTATION Any **INRUSH CURRENT** NO GREATER THAN 50% OF FULL LOAD CURRENT **PROTECTION**

ENVIRONMENTAL

ACOUSTICAL NOISE <65 dBA at 5 FEET (1.5M) -40°C to +55°C TEMPERATURE RANGE RELATIVE HUMIDITY O - 95%, Non-Condensing INGRESS PROTECTION IP23 (OPTIONAL IP55) **ENCLOSURE** NEMA 250, Type 3RX CORROSION RESISTANT

ENERGY FACTORS

EFFICIENCY

 $\leq 5\%$

≥ 0.99

OVER/UNDER VOLTAGE, LOSS OF

PHASE, OVER CURRENT, SHORT CIRCUIT, VOLTAGE TRANSIENT PROTECTION IAW IEEE C62.41.1

LOCATION CAT. B/C

92% TYPICAL AT FULL LOAD; 91% TYPICAL AT HALF LOAD; VARIES DEPENDING ON CONFIG. OUTPUT

POWER RATING 150 or 200 kVA (Specify) SYSTEM POWER RATINGS 300 to 1000 kVA (Specify) POWER FACTOR **UP TO 1.0**

100% Continuous OVERLOAD 110% FOR 60 MIN

> 125% FOR 10 MIN 150% FOR 2 MIN 200% FOR 20 SEC

VOLTAGE (SPECIFY)

· THREE-PHASE, 3-WIRE 380, 400, 415, 440,

460, 480 Volts

220/380, 230/400, 240/415, · Three-Phase, 4-Wire 265/460, 277/480 Volts

CREST FACTOR $1.414 \pm 3\%$

VOLTAGE REGULATION ±1.0% UNDER ALL CONDITIONS OF LINE, BALANCED LOADS

AND TEMPERATURE

50 or 60 Hz FREQUENCY (SPECIFY)

FREQUENCY REGULATION ±0.01% UNDER ALLCONDITIONS OF LINE, LOAD AND TEMPERATURE

FREQUENCY TRANSIENTS None

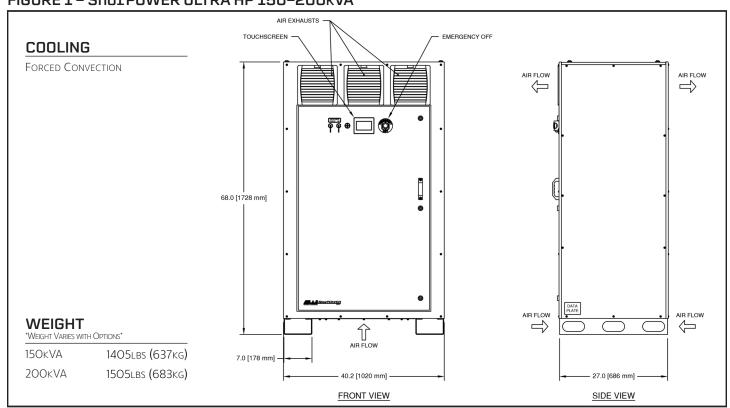
PHASE ANGLE REGULATION ±2° FOR BALANCED LOADS;

±4° FOR UNBALANCED LOADS

HARMONIC DISTORTION 3% MAXIMUM (LINEAR LOADS) **PROTECTION**

ALL STANDARD ELECTRICAL AND ENVIRONMENTAL MONITORING FOR **EQUIPMENT AND LOAD PROTECTION**

FIGURE 1 - ShorPOWER ULTRA HP 150-200kVA



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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