

SEA DEFENCE



1KW DC Rectifier 133-117-001

A DC rectifier that provides precise output power for critical naval shipboard applications.

Pivotal Power's DC rectifier power supply (RPS) produces precise 28 VDC output power to comply with the stringent system requirements of MIL-P-15736 specification for critical naval applications.

The power conversion of the RPS is based on switch mode technology using high-frequency pulse-width modulation (PWM) which provides excellent DC output voltage regulation with low transients. The use of power MOSFETs as switching elements ensures high conversion efficiency.

The construction of the RPS is modular with draw-out type subassemblies for ease of maintenance. The system's reliability is an order of magnitude greater than other static conversion equipment due to the use of high reliability components and stringent quality screening standards.

The RPS was developed and fully qualified for military applications.

FEATURES

- Control switch for operation and shutdown
- Draw-out sub-assemblies and printed wiring boards
- Built-in test (BIT) capability
- LED status indication for input, output, over current, and unit shutdown
- Circular coupling connectors for input and output

SPECIFICATIONS

INPUT

APPLICABLE STANDARDS MIL-STD-1399, Section 300 A, Type 1

VOLTAGE 440 VAC nominal, 3 phase

FREQUENCY 60 Hz nominal

OUTPUT

APPLICABLE STANDARD MIL-P-15736D, MIL-P-15736/5

VOLTAGE 28 VDC

RATING 1KW

EFFICIENCY 82% at rated load

ENVIRONMENTAL

OPERATING TEMPERATURE 0°C to 50°C

HUMIDITY up to 100% RH non-condensing

EMI/EMC MIL-STD-461D, Part 5, Surface Ships

VIBRATION MIL-STD-167-1, Type 1, 4 Hz to 33 Hz

SHOCK RESISTANCE MIL-S-901C, Grade A, Class 1, Type A

AIRBORNE NOISE MIL-STD-740-1, Grade B

COOLING METHOD Forced air convection

PHYSICAL

DIMENSIONS

(LxWxH inches) 16.0 x 22.0 x 20.0
(LxWxH cms) 40.6 x 55.9 x 50.8

WEIGHT (max) 225lbs. / 101 kgs.

Pivotal Power has been delivering innovative power conversion solutions for over 20 years. We are a leader in the design, development and manufacture of defence qualified electronic power conversion equipment in the 100W to 30KW power range ideally suited for distributed power applications.

Our expertise is in supplying systems to convert, regulate, monitor and distribute power for mission critical systems. This, coupled with our ability to ensure our equipment exceeds the requirements onboard air, land and sea-based defence vehicles, has allowed us to expand into related industrial and alternative energy applications.

Our internal manufacturing operation allows us to develop, fabricate, assemble and fully test on-site.

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