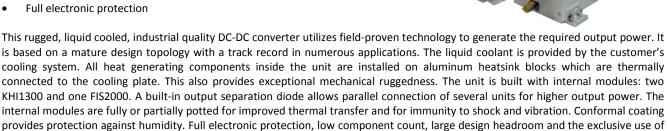
2000W Rugged Liquid Cooled, Industrial Quality DC-DC Converter LQC 2K-3U2LC

- Liquid cooled
- Rugged industrial quality
- High input voltage
- Wide DC-input voltage range



components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control. **SPECIFICATIONS**

Input Voltage (nominal/range)

600Vdc nominal 400-800Vdc range Other inputs upon request

Input Protection

Inrush current limiting. Reverse polarity protection Varistor Internal safety fuse Lower voltage than specified minimum input will not damage unit

Input Isolation

3000Vdc input to chassis 4300Vdc input to output 5600Vdc type test 500Vdc output to chassis

Standards

Designed to meet EN60950-1, IEC61010, and corresponding standards

EN55032 Class A with margins

Switching Frequency

55kHz ±5kHz

Output Voltage 24V/80A

Output is floating; either terminal can be grounded Other outputs upon request

Output Separation Diode

Installed internally

Line/Load Regulation

±1.5% combined from zero load to full load including separation diodes

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple/Noise

Better than 60mVrms and 300mVpp (@ 20MHz BW)

Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown with automatic reset in case of insufficient cooling (self-resetting) Current limit: 85VA ±4A

Output Overvoltage Protection

Second regulator loop completely stable and independent of main regulator loop OVP limit: 28V ± 2V

Efficiency

85% at full load

Operating Temperature

-25°C to +50°C coolant temperature for full specification

Temperature Drift

0.03% per °C over operating temperature range

By liquid coolant provided by customer.

Max coolant temperature 50°C, at 4 liter/min flow rate. Inside diameter of the cooling pipe 8mm at pipe length of 1.5m

Environmental Protection

Conformal coating Partial potting

Shock/Vibration

IEC61371 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

110,000 hours @ 45 °C Demonstrated MTBF is significantly higher.

Indicators

None

Control Input

None

Available as option

Alarm Outputs

Output Fail alarm Form C contacts available on request

Package/Dimensions (H x W x D)

3U2LC: 132 x 147 x 379 mm (5.2" x 5.8" x 15") excluding mounting flanges, water inlets, connectors and terminals Mounting holes are clear.

Weight

Approx. 9.6 kg (21 lb)

Connections

Input: 2-pole Phoenix FRONT 2.5-V/SA10

Output: M6 screws with stud boots Alarm/Enable: 5-pole Phoenix FRONT 2.5-V/SA10 (option)

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice. Contamination related failures and shipping costs excluded

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications are subject to change.

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, and complete rack mount systems in 19" or 23" racks. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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