

Kodiak

6kW Liquid-Cooled Power Supply



Providing high-operating efficiency along with excellent reliability, compact size, and easy maintainability, Kodiak power supplies are the ideal solution for embedded DC systems in demanding semiconductor, industrial, and military applications. A fully adjustable, wide-range DC output is configurable via digital interface with real-time feedback. This AC-DC liquid-cooled power supply will deliver up to 6kW from a 380-480VAC, three-phase power input.

Agency/Compliance:

- EN61000-4-4 1995 Electrical Fast Transient/Burst - Severity Level 3
- EN61000-4-5 1995 Surge - Severity Level 4
- SEMI F47-0706 - Criteria A
- EMI: CISPR 11 Class A Group 1 2004
- EN/IEC/UL62368-1/A11:2017
- CE Marked

BENEFITS

Reduced System Complexity and Time to Market
Wide range of models with fully adjustable outputs. Multiple control modes provide ultimate application flexibility.

High Reliability for Critical Applications
Astrodyne TDI's comprehensive reliability assurance processes, including design to the rigorous requirements of NAVSO P3641A and IPC9592B HALT, DFMEA and our unique Highly Accelerated Stress Screening (HASS) on 100% of production units, assure the ultimate in unit reliability and performance.

FEATURES

- High Density 40W/in³
- 3-Phase AC Input
- Active Power Factor Correction
- DC Output:
 - Voltage: 0-60V
 - Current: 0A – 105A
 - Power: 0W – 6000W
- High Efficiency: >94% power conversion efficiency
- Liquid Cooled – Water, DI Water, WEG compatible
- High Reliability: 100% HASS Tested
- Parallel Compatible
- Designed to NAVSO P-3641A
- CAN Bus Communication

Astrodyne TDI
Now you have power.

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MODEL NUMBER	PART NUMBER	DESCRIPTION
SPS6082-LF	T100113314-LF T100108634	RECTIFIER,AC/DC,480VAC IN,60VDC OUT,6KW,LC CANbus to USB Connection Kit

PARAMETER	MODULE
Input AC	380-480 Volts AC, +/-10%, 3 Phase Delta
AC Frequency	47-63Hz
Input Current	12 Amps RMS maximum at low line
Power Factor	>0.98 at Full Power
Output Voltage	Adjustable from 5-60V (can also be set to 0V)
Output Current	Adjustable from 0Adc – 105Adc
Efficiency	>94% at 48VDC/100A DC Output
Ripple/Noise	Less than 250mVpk-pk with 20Mhz bandwidth
Line Regulation	Less than 0.25%
Protection Features	Output protected with over-voltage shutdown circuitry Output Over Current Protection: Automatic electronic current limit circuitry. Over Temperature Protection: Internal thermal monitoring circuits shut down unit if temperatures exceed safe limits. Unit will automatically power back on after cool down.
Visual Indicators	LED indicators -AC Good Indicator: Multi-colored LED -DC Good/Fault Indicator: Multi-colored LED
Coolant Operating Temperature	+5°C to +55°C
Storage Temperature	-40 to +85°C (coolant lines purged)
Humidity	0 to 95% non-condensing, operating and storage
Altitude	Operating: -200 to +10,000 ft Transport/Storage: 30,000 ft
Connections	AC Input: Phoenix Contact 1719202 DC Output: #10-32 Studs Coolant Connection: 1/4" Female NPT Signals: CAN BUS: DB9 Receptacle
Harmonics Distortion	EN61000-3-2 Class A
Dimensions (Module)	11.8" x 3.93" x 3.35" (300mm x 100mm x 85mm)
Cooling	Water cooled – full power for water temperature range from 5°C to 50°C (Consult factory for other temperatures or coolant types) Flow Rate: 0.5– 3.5 gallons per minute Pressure drop: pressure at 1GPM <4.5psi Maximum pressure: 115psi continuous



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Module Outline:

