LiquaCore 5.5kW Water-Cooled Power Supply



Providing high-operating efficiency along with excellent reliability, compact size, and easy maintainability, LiquaCoreTM power supplies are the ideal solution for embedded DC systems in demanding industrial and military applications. A fully adjustable, wide-range DC output is configurable via digital interface with real-time feedback. Packaged in a 2U chassis, this AC-DC liquid-cooled power supply will deliver up to 5.5kW from a 380-480VAC, three-phase power input. LiquaCore modules can be connected in parallel to deliver increased power for ultimate scalability in industrial process applications.

Agency/Compliance:

- EN61000-4-4 1995 Electrical Fast Transient/Burst Severity Level 3
- EN61000-4-5 1995 Surge Severity Level 3
- EN61000-4-2, 1995 Electrostatic Discharge, Level 3 standalone.
- EN61000-4-3, 1996 Electromagnetic Immunity, Level 2 stand-alone
- EMI: Designed to meet CISPR 11 Class A Group 2 2004
- IEC/EN/UL 62368-1

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

- DC Output Range: 0-60V (Adjustable)
- CANbus Control Interface
- Constant Voltage / Constant Current / Constant Power Control Modes
- High Efficiency: 93% power conversion efficiency
- Liquid Cooled Water, DI Water, WEG compatible
- High Reliability: 100% HASS Tested
- Designed to NAVSO P-3641A
- 380V-480V (+/-10%)



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MODEL NUMBER PART NUMBER DESCRIPTION

SPS6136-LF T100116107-LF RECTIFIER, 0-60V, 0-120A, 5.5kW, L-Droop CS T100116612-LF

KIT, MOUNTING BRACKETS FOR SINGLE UNIT*

*For additional options please contact the factory

PARAMETER MODULE

380V-480V (+/-10%), three phase Input AC

47-63Hz **AC Frequency** 13A **Max Input Current**

>.90 at full power **Power Factor**

Outputs, DC 0-60V

(For additional options contact factory)

5.5kW Maximum **Output Power**

Efficiency >93%

Less than 300mVpk-pk with 20Mhz bandwidth Ripple/Noise

Line Regulation +/-1% of output voltage

Output Over Voltage Protection: Automatic electronic OVP set to 15% higher than maximum voltage **Protection Features**

range.

Output Over Current Protection: Automatic electronic current limit circuitry. Over Temperature Protection: Unit shuts down if temperatures exceed safe limits.

Visual Indicators Front panel LED indicators

> -AC Good Indicator: Multi-colored LED -DC Good/Fault Indicator: Multi-colored LED

Operating Water: +5 to +50°C Temperature 50/50 WEG: -40 - 55°C

Storage Temperature -40 to +85°C

Humidity 0% to 95% non-condensing Isolation Input to Output: 6000VDC Input to Ground: 4000VDC

Output to Ground: 1000VDC

Connections AC Input: Terminal Block (No Lug / Compression Type)

> DC Output: Heavy Duty Bus Bars Signals: CAN BUS: DB9 Receptacle

Harmonics Meets IEC61000-3-4 1998 Emissions of Harmonic Currents

Module: 19.7" long X 5.87" wide X 3.46" high Dimensions (inches)

Module with optional mounting: 19.7" long X 7.00" wide X 3.46" high

Cooling Liquid Cooling

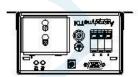
Nominal: 2 GPM

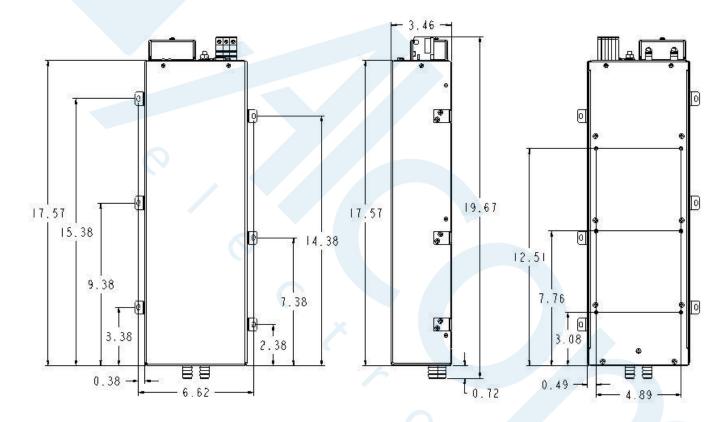
1 Year Warranty

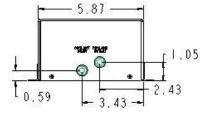




Module Outline:



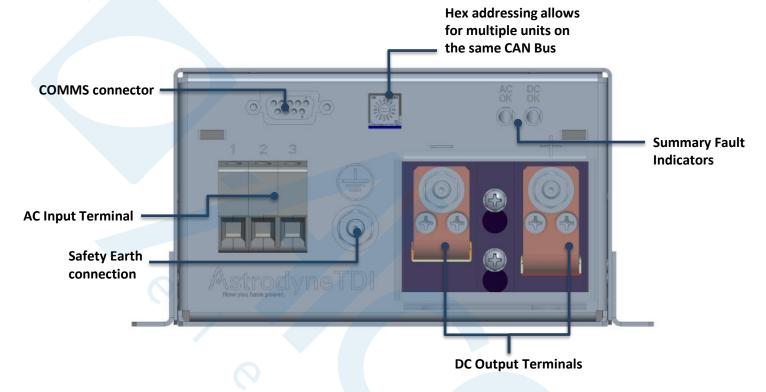




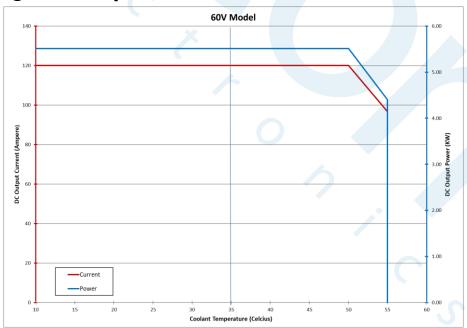


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Module Connections:



Output De-Rating with Temperature:





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