LiquaCore
5.5kW Water-Cooled Power Supply

Providing high-operating efficiency along with excellent reliability, compact size, and easy maintainability, LiquaCore™ 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 stand-alone.
- 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%)

Alcom electronics

Astrodyne TDI
Now you have power.

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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*

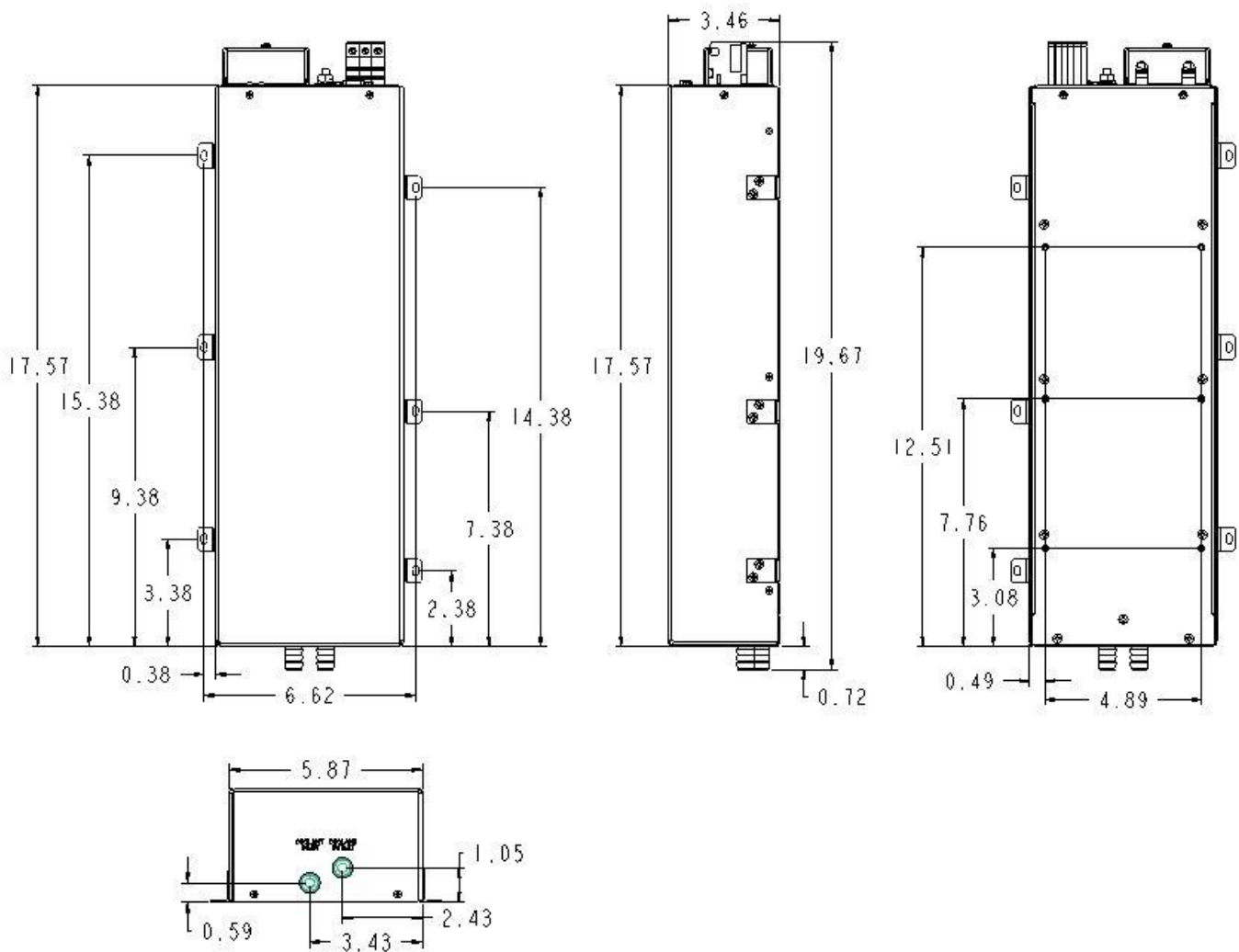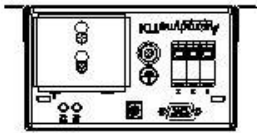*For additional options please contact the factory

PARAMETER	MODULE
Input AC	380V-480V (+/-10%) , three phase
AC Frequency	47-63Hz
Max Input Current	13A
Power Factor	>.90 at full power
Outputs, DC	0-60V (For additional options contact factory)
Output Power	5.5kW Maximum
Efficiency	>93%
Ripple/Noise	Less than 300mVpk-pk with 20Mhz bandwidth
Line Regulation	+/-1% of output voltage
Protection Features	Output Over Voltage Protection: Automatic electronic OVP set to 15% higher than maximum voltage 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 Temperature	Water: +5 to +50°C 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
Dimensions (inches)	Module: 19.7" long X 5.87" wide X 3.46" high Module with optional mounting: 19.7" long X 7.00" wide X 3.46" high
Cooling	Liquid Cooling Nominal: 2 GPM
Warranty	1 Year

Module Outline:

Module Connections:

Hex addressing allows for multiple units on the same CAN Bus

COMMS connector

AC Input Terminal

Safety Earth connection

Summary Fault Indicators

DC Output Terminals
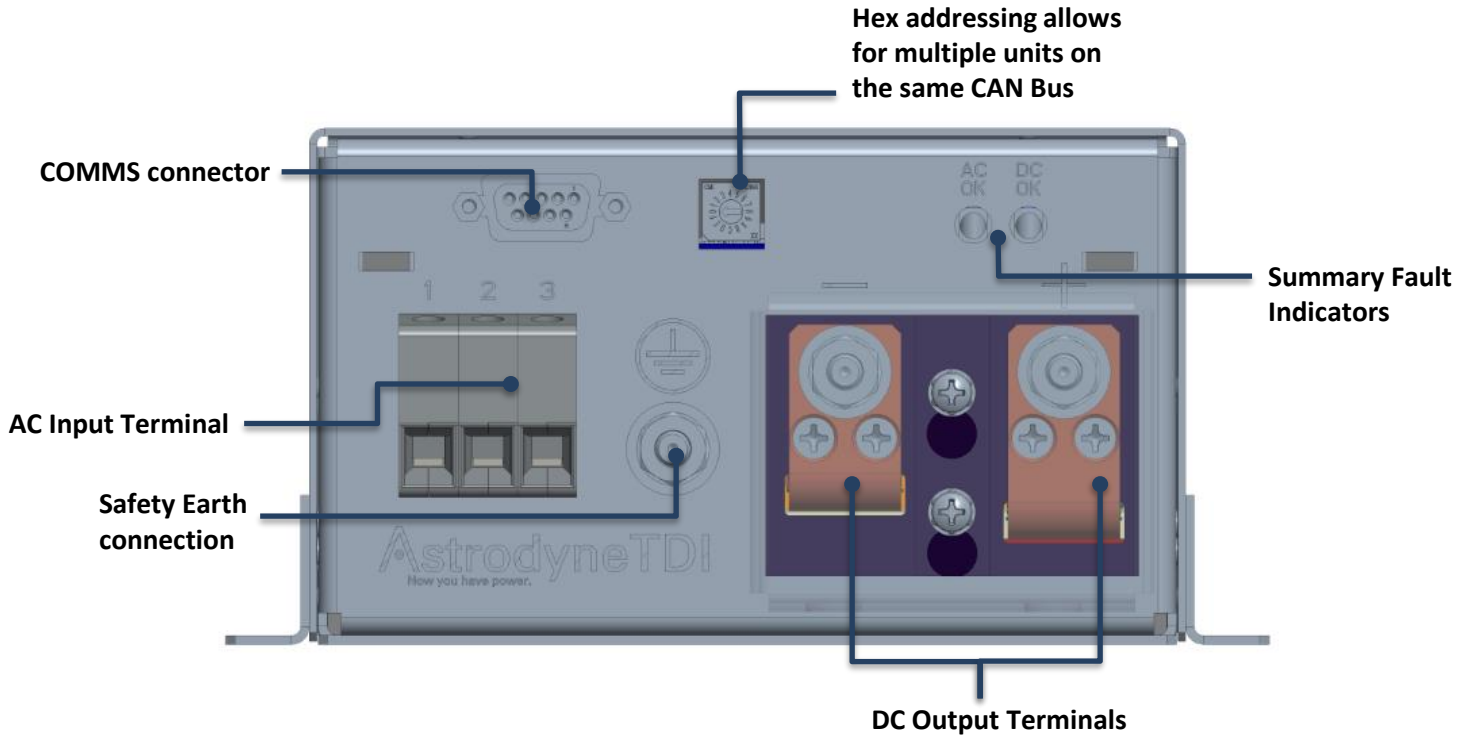
Output De-Rating with Temperature:

60V Model

www.AstrodyneTDI.com | +1 908-850-5088