

DEFENDER HAZLOC ESPM

2500W Environmentally Sealed Power Module



Astrodyne TDI's ESPM provides outstanding durability along with certification for use in Class1, Div2 Hazardous Environments. Defender ESPM Power Supplies are specifically designed for Impressed Current Cathodic Protection Applications. These AC-DC Power Converters are fully sealed against the Environment, Designed in accordance with Military Guidelines for Extremely Rugged Electrical Performance, and provide Constant Current Controllability that make them the ideal choice for ICCP Applications in Refineries, Oil Platforms, or other locations that involve exposure to potentially Explosive Atmospheres

BENEFITS

HAZLOC Certified

UL Certified to UL 121201

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, HALT, DFMEA and our unique Highly Accelerated Stress Screening (HASS) on 100% of production units, assure the ultimate in unit reliability and performance.

High Power Density

Up to 2.5kW per module

FEATURES

AC Input

180VAC – 265VAC, 47-63Hz

High Power

Up to 2.5kW power

Constant voltage, current, or power operating models

Constant Current Output Control

Externally Adjustable – provides stable current independent of changes in Environmental Conditions

No Fans Required

Free Air Convection Cooled

Astrodyne TDI
Now you have power.

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MODEL NUMBER	PART NUMBER	DESCRIPTION
ESPM25H-P50C-100-LF	T100109381-1-LF	CONVERTER, AC/DC, 2500W, HL, 50V, 50A, CS, HAZLOC *For other options please contact the factory

PARAMETER	ESPM
Input AC	180-265VAC
AC Frequency	47-63Hz
Max Input Current	16A
Power Factor	>.97 above 50% maximum rated load
Outputs, DC	0-50V at I up to 50A
Output Power	2,500 W Maximum
Efficiency	>90%
Ripple/Noise	<1% of nominal output voltage
Line Regulation	+/-0.25% of nominal output voltage
Turn On Delay	<5 seconds
Protection Features	Output Over-Voltage: Shutdown at 120% maximum rated output voltage Output Over-Current: Electronic Constant Current Control Over-Temperature: Over-Temperature Shut Down with Automatic Recovery
Operating Temperature	-40 to +55°C (full rated)
Derating Temperature	1750W at 70°C
Storage/Transportation	-40 to +85°C
Humidity	0% to 95% non-condensing
Salt Fog:	MIL-STD 810C, Method 509.1
Vibration (Operating)	14g-rms, random, tri-axial for 1 hour
Connections	Umbilical Cable for AC, DC and Control Connections
Dimensions (inches)	7.76" x 8.74" x 15.51" 32.8lbs
Certifications	Electrical Safety: UL61010-1 Hazardous Locations: UL 121201 (Class 1, Division 2, Groups A, B, C, D)
Cooling	Convection Cooled
Warranty	1 Year



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Module Outline:

