

LC-2000S

2000 WATTS

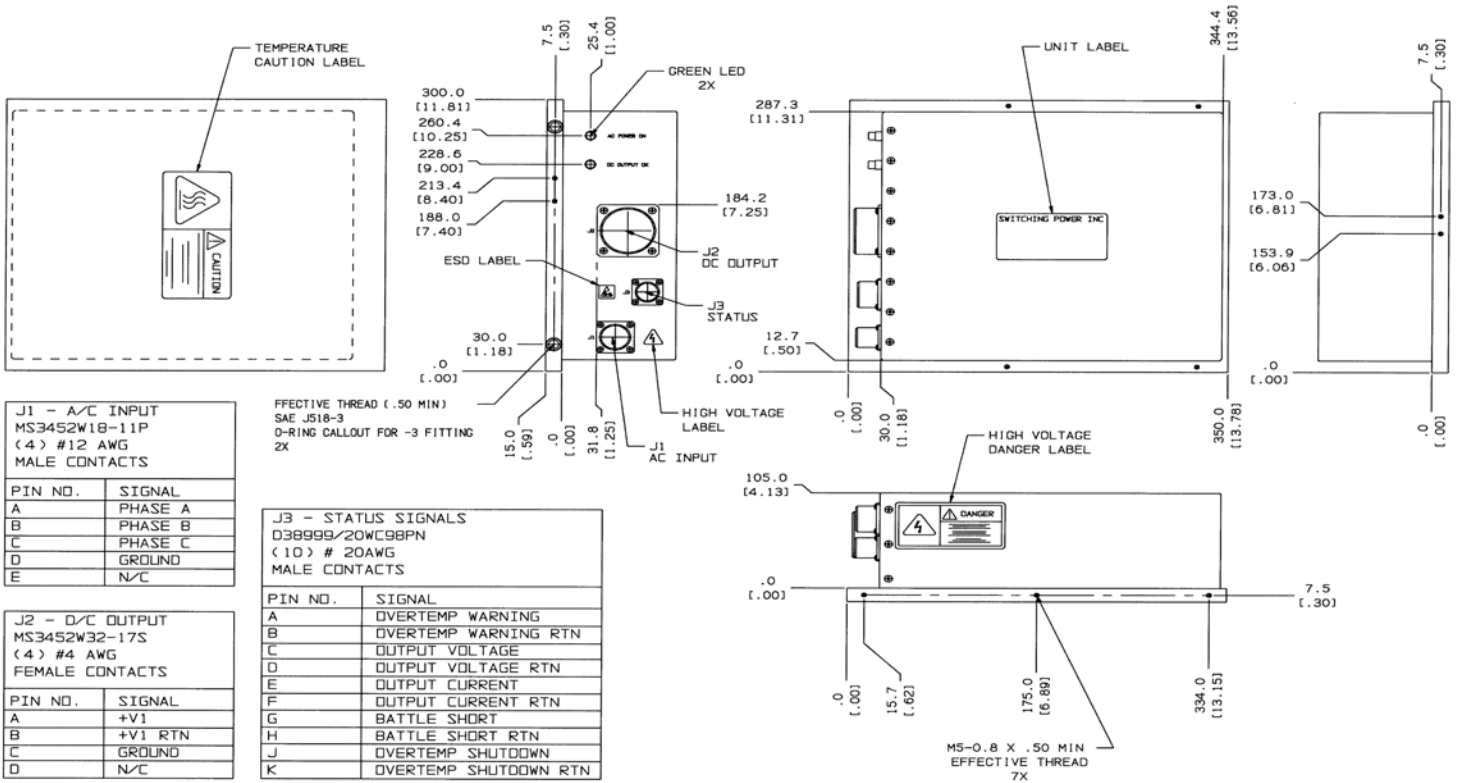
THREE PHASE 480VAC INPUT
LIQUID COOLED



KEY FEATURES:

- Liquid Cooled 60/40 Ethylene Glycol – Water Mix Coolant with Attached Cold Plate.
- Operating Temperature From -40°C to +85°C.
- 2000 Watts in 11.81" x 12.40" x 4.72" Size!
- 3 Phase Input 480VAC.
- Output Configurable From 24VDC to 55VDC.
- LED Display for Visual Input/Output Status.
- Ruggedized Mechanical Design Meeting MIL-STD-810F Method 514.5 Category 6 Procedure 1.
- Operational Salt Fog per MIL-STD-810F, Method 509.4
- Available Active Zero Wire Current Share Feature Allows Paralleling of Multiple Units.
- Battle Short Override Feature
- One Year Warranty

LC-2000S



Nominal Input Voltage	480VAC 3-phase, four wire.
Frequency	47Hz to 63Hz, 400Hz.
Operational Input Voltage Range	480VAC $\pm 10\%$.
Transient Voltage	480VAC +15/-25% for up to 2 msec repeated twice every 90msec.
Transient Voltage	480VAC +25/-18% for up to 2 sec.
Voltage Spike	1500V for a duration of 50 μ sec or less.
Input Load Balance	Current loading for any phase does not exceed the average of the currents in all 3 phases by more than 5%
Inrush Current	Less than 5msec. 50Apk at 480 VAC.
Fusing	(3 X 10 Ampere)/600VAC, very fast acting.
Efficiency	88-92% (input line/output dependent)
Turn on time	1 sec max. from power up.
Line & Load Regulation	$\pm 1\%$ over AC input range and 0 to 100% load change.
Minimum Load	No minimum load required.
Ripple & Noise	Through 20MHz less than 0.5% pk-pk.
Transient Response	Output excursion of less than 5% for full load step, recovery less than 500 μ sec.
Overshoot/Undershoot	No turn-on or turn-off overshoot.
Input Isolation	2450VDC from input to both chassis/output.
Output Isolation	Greater than 10 Meg ohms minimum when a DC potential of 50V is applied between output (incl. returns) and chassis.
Reverse Voltage	Protected against reverse voltage to supply current rating.
Overvoltage Protection	Shutdown at 110-115% of nominal Vout. Recycle input power to reset.
Overtemperature Protection	Unit shuts down if overheated. Auto reset.
Input Leakage Current	Less than 4mA max at 480Vac.
Current Limiting	Current limit trip point less than 120% of rating.
Paralleling	Two or more supplies can be operated in parallel and will share load current within 10% of each other.

Signals	Over temp warning, over temp shut down, output voltage & current monitoring and battle short override
Indicators	GRN LEDs on front panel indicating: - Output short circuit or overload - Output over voltage/under voltage - Over temperature - Input OK
Cooling	Liquid cooled with attached cold plate. With a flow rate of 1.8LPM; max inlet temp 65°C, pressure drop of cold plate does not exceed 0.36 BAR.
Operating Temp.	-40° C to +85° C
Non-Operating Temp.	-55° C to +100° C
Temperature Stability	Less than .02%/deg C over the operating temperature range.
I/O Connectors	See above drawing.
Size/Weight	11.81" x 12.40" x 4.72" at 36 lbs max.
Environmental Meets:	<ul style="list-style-type: none"> High Temperature per MIL-STD-810F, Method 501.4 Procedure I & II Low Temperature per MIL-STD-810F, Method 502.4 Procedure I & II Humidity per MIL-STD-810F, Method 507.4 Pressure Altitude per MIL-STD-810F, Method 500.4 Procedure I up to 40,000ft Non-operational Pressure Altitude per MIL-STD-810F, Method 500.4 Procedure I up to 10,000ft operational Fungus per MIL-STD-810F, Method 508.4 Sand & Dust per MIL-STD-810F, Method 510.4 Procedures I, II & III Operational Salt Fog per MIL-STD-810F, Method 509.4 Vibration per MIL-STD-810F, Method 514.5 Category 6, Procedure I composite wheeled and US highway truck Shock; $\pm 15g$ for 11ms, half sine, each direction, all 3 axes Bench Handling: MIL-STD-810F, Method 516.5, Procedure VI
EMI Meets:	<ul style="list-style-type: none"> RS103 (Army Ground) RE102 (Navy Limits) CE102 CS101 (Army Ground) CS114 (Army Ground) CS115 (Army Ground) CS116 (Army Ground)