

LMCO-4400

4400 WATTS

Three Phase Wide Range Input with
Active Power Factor Correction

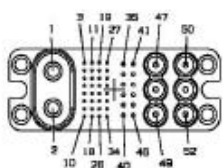


KEY FEATURES:

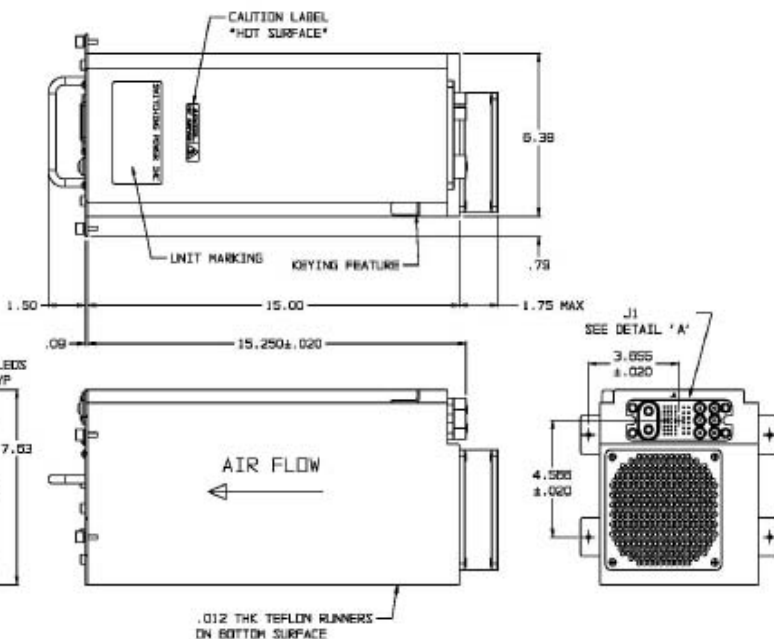
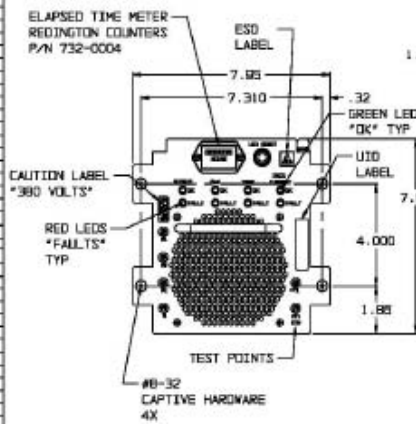
- 4400 Watts in 6.38" x 7.63" x 15.00" Size!
- 3 Phase 220V/60Hz and 380V/50Hz Input with Active power Factor Correction (Greater Than 0.99)
- Meets MIL-STD-1399, Section 300A (Type I) for the Voltage Ranges Specified
- Input Current THD not Exceeding 4%
- Output Can be Configured as +28VDC/140A or +48VDC/92A
- Patented Topological Approach Resulting in Cancellation of all Harmonic Power Line Frequency on the Output Ripple Without the Need for Additional Large Output LC Filter
- True Hot Swap Using ELCON's Top-Drawer Connector
- Elapsed Time Meter on Front Panel with I/O Test Points
- LED Display for Output, Temp., Over Current and Fan Status
- Ruggedized Mechanical Design Meeting MIL-STD-810F, Method 514.5, Category 24, Procedure 1
- One Year Warranty
- Proudly Made in U.S.A.

LMCO-4400

J1 - ELCON P/N 251-10-01100	
P2N CONTACTS	
1	STORN
2	+VI
3	+VI RTN
4	N/C
5	N/C
6	N/C
7	N/C
8	N/C
9	N/C
10	N/C
11	N/C
12	N/C
13	N/C
14	N/C
15	N/C
16	N/C
17	N/C
18	N/C
19	N/C
20	N/C
21	N/C
22	N/C
23	N/C
24	N/C
25	N/C
26	N/C
27	N/C
28	N/C
29	N/C
30	N/C
31	N/C
32	N/C
33	N/C
34	N/C
35	N/C
36	DC ENABLE
37	DC ENABLE RTN
38	N/C
39	FAULT L
40	FAULT RTN
41	N/C
42	N/C
43	N/C
44	N/C
45	N/C
46	N/C
47	PHASE A
48	PHASE B
49	PHASE C
50	NEUTRAL
51	CHASSIS GND
52	N/C



DETAIL 'A'
SCALE: 2/1



Nominal Input Voltage	120/208VAC 3-phase, five wire 60Hz; 220/380VAC 3-phase, five wire 50Hz.
Frequency	60Hz $\pm 5\%$; 50Hz $\pm 5\%$.
Operational Input Voltage Range	120/208 $\pm 10\%$ 115/200 $\pm 10\%$ 220/380 $\pm 10\%$ Input Power Factor exceeding 0.99 at full load.
Input Current THD	<4% at full load.
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 418 VAC.
Fusing	(3 X 25 Ampere)/600VAC, Very fast acting.
Circuit Breaker	Located on front panel, 25A/480VAC Ultra Short delay.
Efficiency	80-85% (input line 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 1% 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	2200VDC from input to both chassis/output.
Output Isolation	Isolated from chassis ground, 50VDC.
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 3.5mA max at 208Vac.
Current Limiting	Current limit trip point less than 120% of rating.
Instlation	True "Hot-Swap" design allows for low MTTR.
Enable	Floating OPTO input. Energize to turn on.
Output Setting	28V $\pm 0.1V$ or 48V $\pm 0.1V$ at full load. Consult factory for other available output configurations.

FAULT Signal	Floating OPTO output which goes high whenever the output fails, output short circuit or overload, over temperature condition, Fan RPM less than 1/2 of normal.
Indicators	GRN and RED LEDs on front panel indicating; - Output short circuit or overload - Output over voltage/under voltage - Over temperature - Fan RPM (threshold less than 1/2 of nominal)
Manual Reset	Button located on front panel to reset and test LEDs.
Time Elapsed Meter	Located on front panel, indicating total time of power applied.
Test Points	I/O test points located on front panel.
Cooling	Forced air cooled, back to front design; fans capable of overcoming a pressure differential of 0.5 inches of water between the air inlet and exhaust.
Operating Temp.	-32° C to +52° C.
Non-Operating Temp.	-51° C to +75° C.
Temperature Stability	Less than .02%/deg C over the operating temperature range.
I/O Connectors	Elcon Top-Drawer Series.
Size/Weight	6.38" x 7.63" x 15.00" at 30 lbs max.
Environmental Meets (when installed in SPI's rack enclosure):	<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, modified as; 0.1 g/m³ dust; 0.03 g/m³ sand • Salt Fog per MIL-STD-810F, Method 509.4 • Vibration per Mil-STD-810F, Method 514.5 Category 24, Procedure I • Shock; 15g for 40ms, half sine, each direction, all 3 axes
EMI Meets (when installed in SPI's rack enclosure):	<ul style="list-style-type: none"> • RS103 (Army Ground, 30MHz - 18GHz) • RE102 & CE102 • CS101 • CS114 (Army Ground) • CS115 • CS116 (10 Amps)