

LMCO-4000S-40

4000 WATTS

THREE PHASE WIDE RANGE INPUT WITH
ACTIVE POWER FACTOR CORRECTION

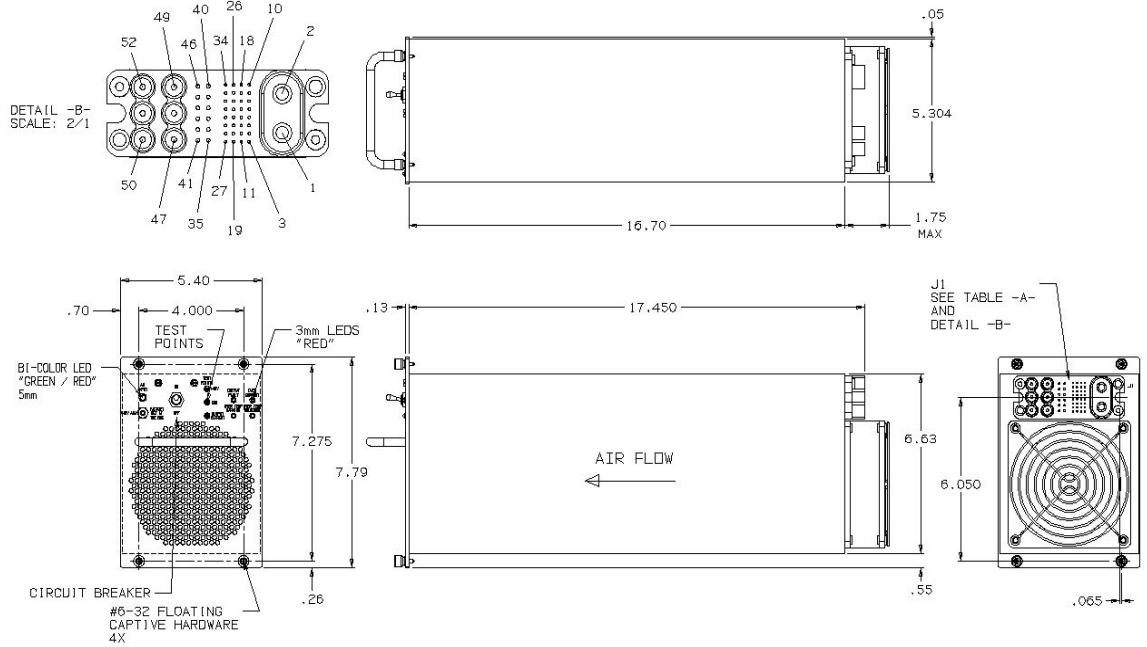


- 4000 Watts in 5.30" x 6.63" x 18.40" Size!
- 3 Phase DELTA 208V, 50Hz/60Hz Input with Active Power Factor Correction (> 0.99)
- Meets MIL-STD-1399, Section 300A (Type I) for the Voltage Ranges Specified
- Input Current THD not Exceeding 4%
- Output Adjustable From 37.5VDC to 43.5VDC at 100A (Consult Factory for Other Available Output Configurations)
- 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 with Floating ELCON Top-Drawer Connector
- Front Panel with Output Voltage & Current Test Points
- LED Display for Output, Temp., Over Current and AC Input Status
- Ruggedized Mechanical Design Meeting MIL-STD-810F, Method 514.5, Category 24, Procedure 1
- N+1 Redundant with Internal OR'Diodes
- Electrical Components Derated in Accordance with NAVSO P-3641A
- One Year Warranty
- Proudly Made in U.S.A.

LMCO-4000S-40

TABLE -A-
JI - ELCON P/N 291-10-0110

PIN #	SIGNAL	PIN #	SIGNAL
1	+40V RTN	27	N/C
2	+40V/100A	28	N/C
3	N/C	29	N/C
4	N/C	30	N/C
5	N/C	31	N/C
6	N/C	32	N/C
7	N/C	33	N/C
8	N/C	34	N/C
9	N/C	35	N/C
10	N/C	36	N/C
11	N/C	37	N/C
12	N/C	38	N/C
13	N/C	39	N/C
14	N/C	40	N/C
15	N/C	41	N/C
16	N/C	42	N/C
17	N/C	43	N/C
18	N/C	44	N/C
19	N/C	45	N/C
20	FAULT	46	N/C
21	FAULT RTN	47	N/C
22	N/C	48	PHASE A
23	N/C	49	PHASE B
24	N/C	50	N/C
25	+40V REMOTE SENSE	51	CASE
26	+40V RTN REMOTE SENSE	52	N/C



Nominal Input Voltage	208VAC 3-phase, four wire 50Hz or 60Hz.
Frequency	60Hz $\pm 5\%$; 50Hz $\pm 5\%$.
Operational Input Voltage Range	208 $\pm 13\%$, -15% and transients $\pm 25\%$ 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. 60Apk at 235VAC.
Fusing	(3 X 25 Ampere)/250VAC, Very fast acting.
Circuit Breaker	Located on front panel, 20A/280VAC Ultra Short delay.
Efficiency	85% minimum from 40% to full load.
Turn on time	1 sec max. from power up.
Line & Load Regulation	$\pm 5\%$ 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	2200VDC from input to both chassis/output.
Output Isolation	Greater than 10 Meg ohms minimum when a DC potential of 100V 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. Recycle AC input to reset.
Input Leakage Current	Less than 1.0mA max at 220Vac.
Current Limiting	Current limit trip point less than 120% of rating.
Instlation	True "Hot-Swap" design allows for low MTTR.
Output Setting	40V $\pm 0.1V$ 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.
Indicators	GRN and RED LEDs on front panel indicating; - Output short circuit or overload - Output over voltage/under voltage - Over temperature warning - Over temperature shutdown
Test Points	Output voltage & current test points located on front panel.
Cooling	Forced air cooled, back to front design.
Operating Temp.	0° C to +40° C
Non-Operating Temp.	-40° 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	5.30" x 6.63" x 18.40" at 25 lbs max.

Environmental Meets:

- 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 Non-Condensing
- 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 15,000ft operational
- Fungus per MIL-STD-810F, Method 508.5
- 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
- Spike Voltage 1KVpk 1.2 x 50micro second waveform

EMI Meets:

- RS103 (Army Ground, 2MHz - 18GHz)
- RE102 & CE102
- CS101
- CS114 (Army Ground)
- CS116