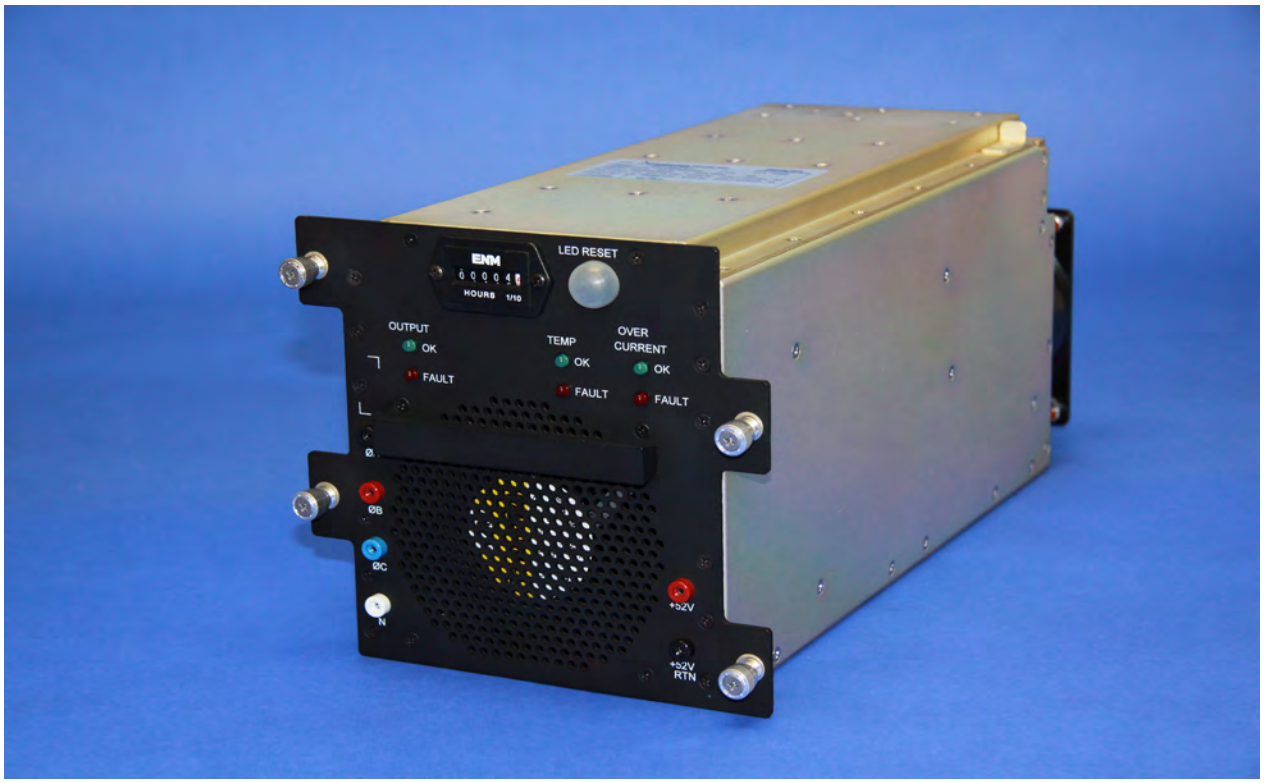
SRC-5000S-52V

5000 Watts
Three Phase Wide Range Input with Active Power Factor Correction



KEY FEATURES:

- 5000 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 Configured as +52VDC/96A
- 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 ELCON Top-Drawer Connector
- Elapsed Time Meter on Front Panel with I/O Test Points
- LED Display for Output, Temp. and Over Current
- Ruggedized Mechanical Design Meeting MIL-STD-810F, Method 514.5, Category 24, Procedure 1
- One Year Warranty
- Proudly Made in U.S.A.

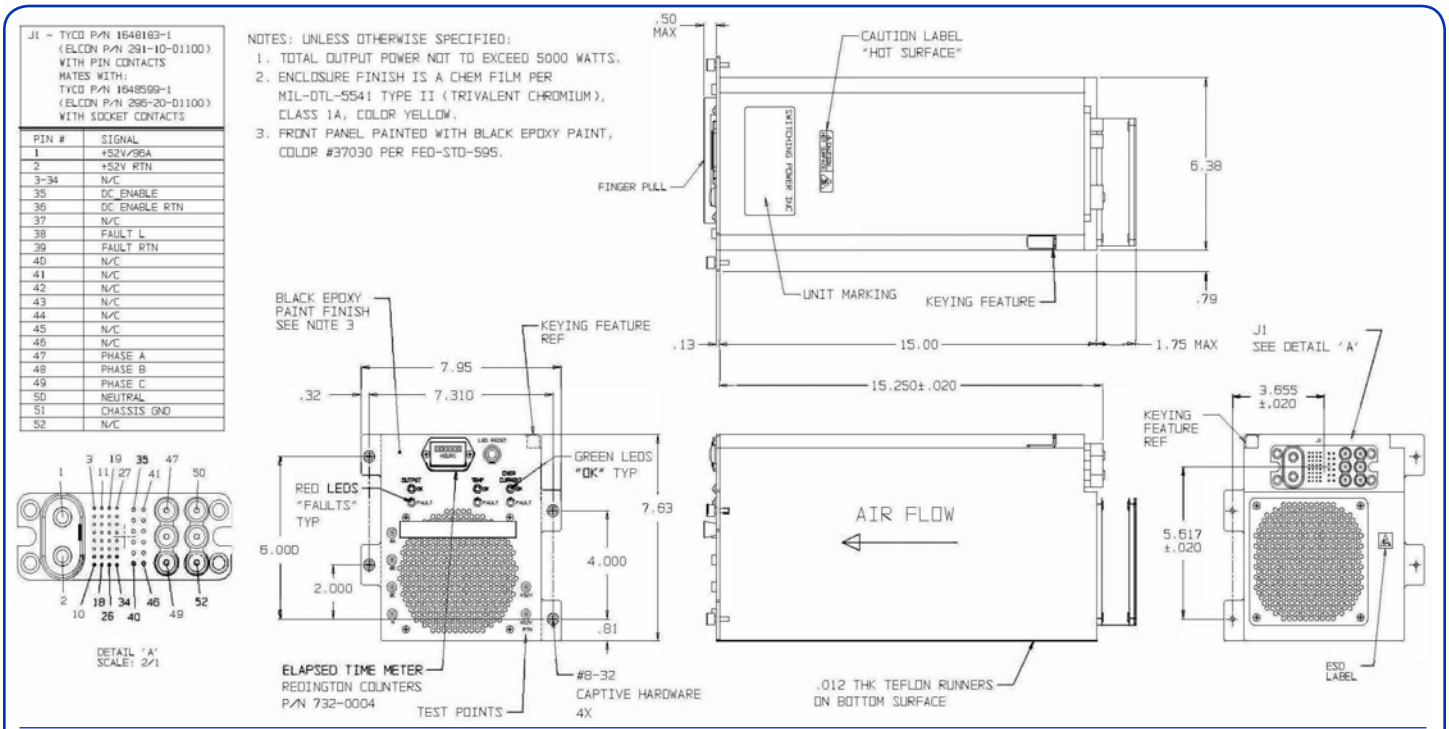
Switching Power, Inc.
Regulated Power

3601 Veterans Highway
Ronkonkoma, New York 11779
Tel: 631-981-7231 Fax: 631-981-7266

visit us at:
switchpwr.com

AS9100 ISO 9001 REGISTERED

SRC-5000S-52V



Nominal Input Voltage	120/208VAC 3-phase, five wire 60Hz; 220/380VAC 3-phase, five wire 50Hz.
Frequency	60Hz ±5%; 50Hz ±5%.
Operational Input Voltage Range	120/208 ±10% 115/200 ±10% 220/380 ±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. 150Apk at 418VAC. Less than 5msec. 75Apk at 208VAC.
Fusing	(3 X 30 Ampere)/600VAC, Very fast acting.
Efficiency	80-85% (input line dependent)
Turn on time	1 sec max. from power up.
Line & Load Regulation	±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 500µsec.
Overshoot/Undershoot	Less than 5% at Turn-ON.
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 shall be between 115% - 130% of maximum load, and maintain an output current from 100% - 130% under all overload conditions up to and including the short circuit condition.
Instlation	True "Hot-Swap" design allows for low MTTR.
Enable	Floating signal with respect to output return. Closed contacts (< 0.5 ohms) enables output voltage. Open contacts (> 100Kohms) disables output voltage.
Paralleling	Two or more supplies can be operated in parallel and will share load current within ±10% of each other (when installed in SPI's rack enclosure).

Output Setting	52V ±0.01V at half load.
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
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):

- 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, Method510.4 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):

- RS103 (Army Ground, 30MHz - 18GHz)
- RE102 & CE102
- CS101
- CS114 (Army Ground)
- CS115
- CS116 (10 Amps)