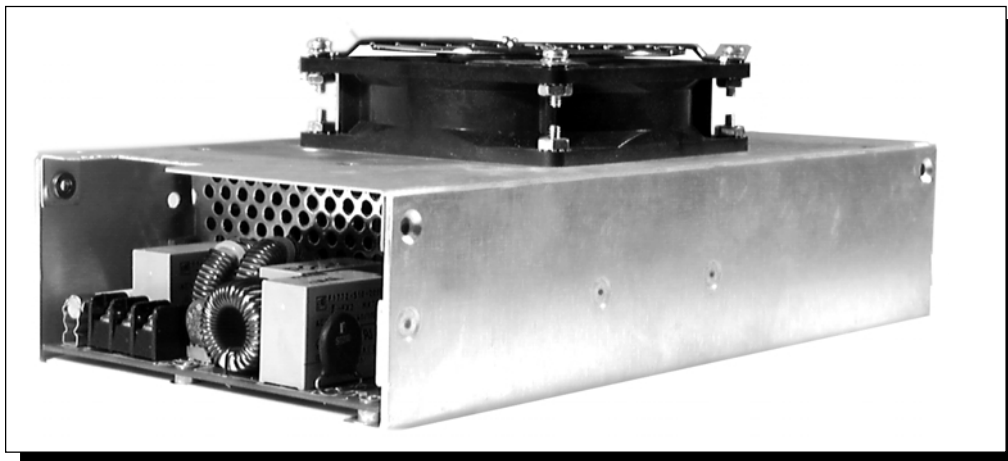


## 500 WATT AC/DC POWER SUPPLY

### SX500



#### FEATURES

- Active Power Factor Correction
- Active Current Sharing With ORing Diodes
- FCC/VDE Class B EMI Filter
- Optional Active Inrush Current Limit
- Compact Size: 10" x 4.85" x 2.19"
- Optional SCR Crowbar
- Optional Cover With Fan

#### DESCRIPTION

The SX500 is a compact 500 watt Power Factor Corrected, single output power supply. Active current sharing circuitry with ORing diodes, together with control functions and alarm options, simplifies N+1 redundant applications.

#### AGENCY APPROVALS



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# Input Specifications

Parameter	Conditions	Min	Typ	Max	Units
Operating Range	47-63 Hz	90		264	V <sub>AC</sub>
Inrush Current Limiting Thermistor	120 V <sub>AC</sub> , cold start			30	APK
	240 V <sub>AC</sub> , cold start			60	APK
Active Current Limit	264 V <sub>AC</sub>		19		APK
Efficiency	Nominal line and full load		75		%
Power Factor Correction (PFC)			0.99		
Meets EN61000-3-2 (formerly IEC 555-2)					

## Remote Sense

Remote Sense is provided and will compensate for 1.0V of line drop. Remote Sense leads are protected against open, short and reversal.

## Remote On/Off (Optional)

The power supply is turned on with a TTL logic '1' (or open) signal and turned off by a switch closure or TTL logic '0' referenced to (-) sense terminal. Consult the factory for other options.

## Over Voltage Protection

Output #1: 115% of nominal voltage is typical.  
The power supply will latch off until AC power is cycled.

## Over Current Protection

Automatic recovery upon fault removal.

## Transient Response

The peak output voltage excursion will not exceed 2% and will recover within 1% in 200  $\mu$ sec for a 25% step load.

## Reverse Voltage Protection

The output is protected to rated load.

## Power Fail Signal

Upon AC input voltage removal, the power fail signal drops to logic zero at least 10msec before loss of DC output. Upon AC input turn-on, signal remains low until output is in regulation. Consult the factory for other options.

## N+1 Load Share

Output has active load sharing circuitry. Units will load share within 1% of the Maximum Rated Load.

## Over Temperature Protection

Thermal switch turns off power supply if overheating occurs and automatically restarts.

## Safety

UL/CUL Recognized: UL File Number E13164 (1950)  
TUV License Number: R9773309 (EN60950) (IEC950)

## Cooling

The unit is designed to operate with 30 CFM of airflow.

## DC Power Good Signal

The signal is activated by a  $\pm 10\%$  loss of regulation Active low or high; TTL Level; common with (-) sense. Consult the factory for other options.

## Output Voltages and Maximum Rated Loads

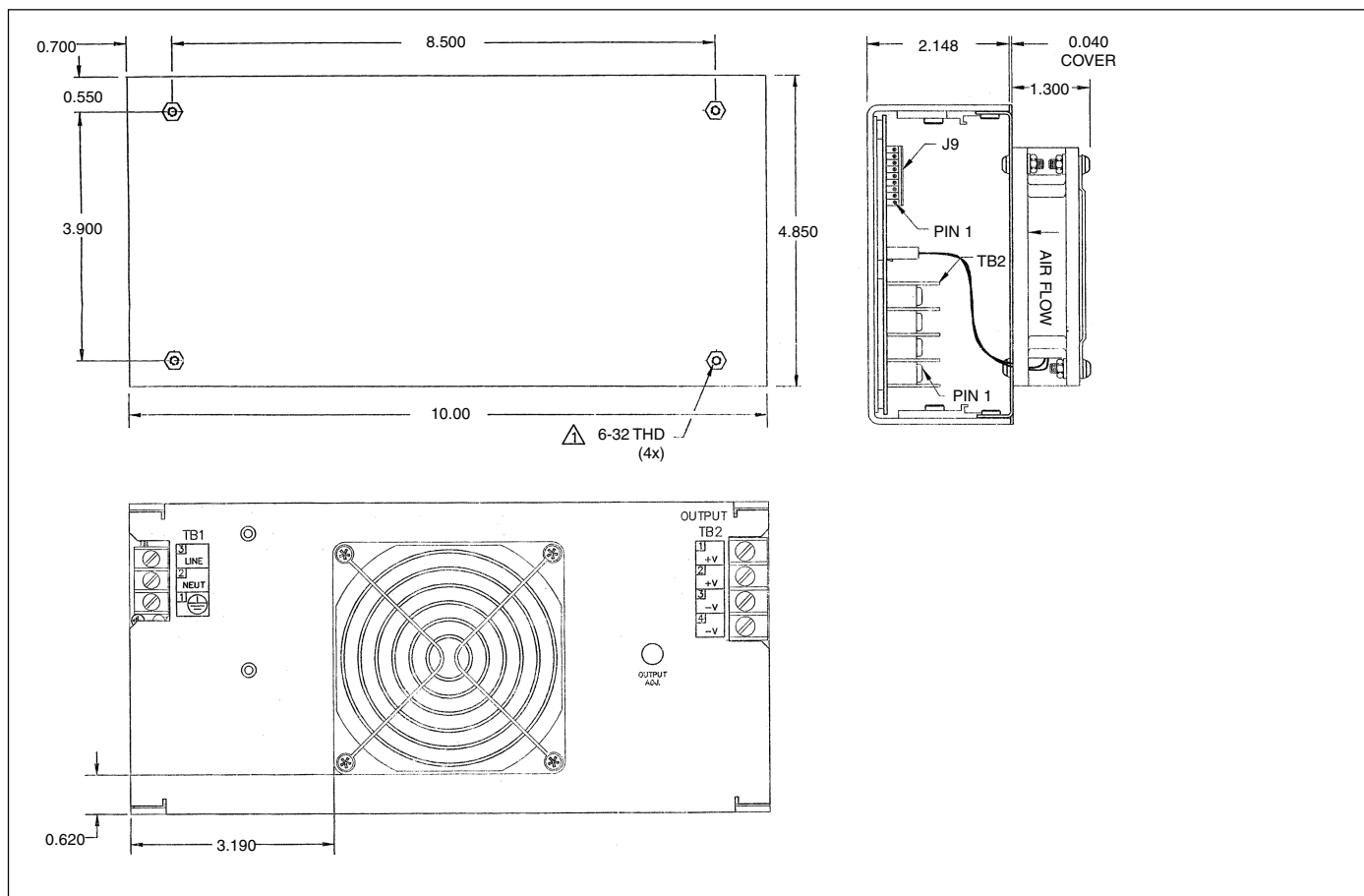
MODEL NUMBER	OUTPUT		
	V <sub>OUT</sub>	I <sub>MAX</sub>	I <sub>PK</sub>
SX500-U1A	±24V	21A	26A
SX500-U1B	±28V	18A	22A
SX500-U1C	±36V	14A	17A
SX500-U1D	±48V	10.5A	12.5A

## Output Specifications

Parameter	Limits
Regulation	
Line	± 0.2%
Load	±0.5%
Minimum Load	0.1A
Hold-Up Time	20mSec at Full Load

Parameter	Conditions	Min	Typ	Max	Units
Voltage Adjustment Range			±5		%
PARD	20 MHz bandwidth		0.5		% P-P
Temperature					
Operating		0		50	°C
Storage		-20		+85	°C
Temperature Coefficient (Tc)	After half hour warm-up		± 0.02		% /°C

# Mechanical



**NOTES:**  
 All measurements are in inches  
**FAN MOUNTED ON COVER ADDS 1.30"**  
**COOLING:** The SX500 is designed to operate with 30 CFM airflow.  
**SHOCK AND VIBRATION:** The SX500 family meets the requirements of MIL STD-810D. (Vibration-Method 514.3 Procedure 1. Shock-Method 516.3 Procedure 1.)  
**WEIGHT:** Approximately 4 lbs.

## Pin Specifications

Terminal Block 1		Terminal Block 2	
POS	FUNCTION	POS	FUNCTION
1	Ground	1	+V
2	AC Neutral	2	+V
3	AC Line	3	-V
		4	-V

## Connector Specifications

J9 Connector	
Molex No. 22-28-1093	
PIN	FUNCTION
1	- Sense
2	+ Sense
3	Current Share
4	Remote Inhibit
5	Power Fail
6	DC OK
7	Sync
8	Signal Ground
9	N/C

Standard Options are shown, consult factory for other available options.

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