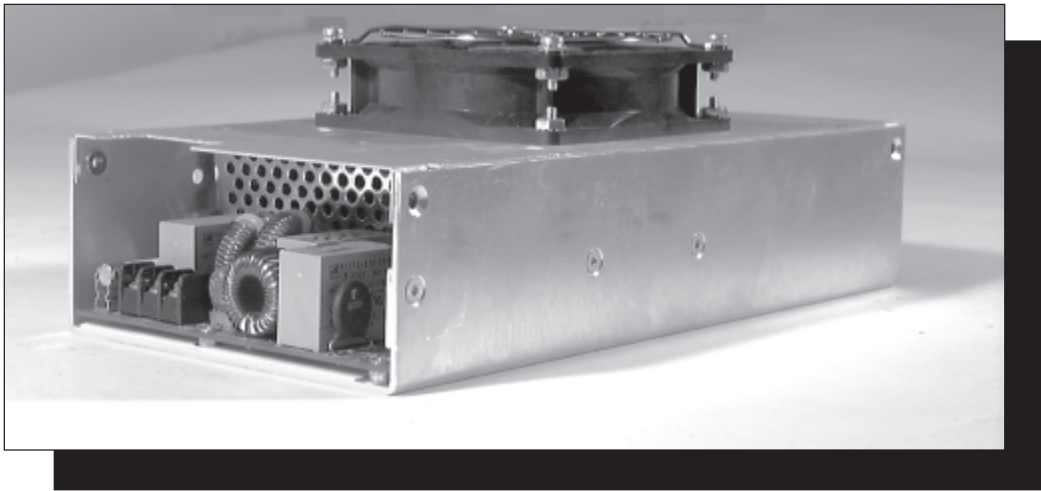


## 400 WATT AC/DC POWER SUPPLY



### SX400



#### 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 SX400 is a compact 400 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 and redundant applications.

#### AGENCY APPROVALS



See "Safety" section on page 2 for more information

# Input Specifications

Parameter	Conditions	Min	Typ	Max	Units
Operating Range	47-63 Hz	90		264	VAC
Inrush Current Limiting Thermistor	120 VAC, cold start			30	APK
	240 VAC, cold start			60	APK
Active Current Limit	264 VAC		19		APK
Efficiency	Nominal line and full load		75		%
Power Factor Correction (PFC)			0.99		
Meets IEC 1000-4-7/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: 15% 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 Recognized: UL File Number E13164 (1950)  
CSA Certified: CSA File Number LR 9070C  
(C22.2 No950, Level 6)  
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

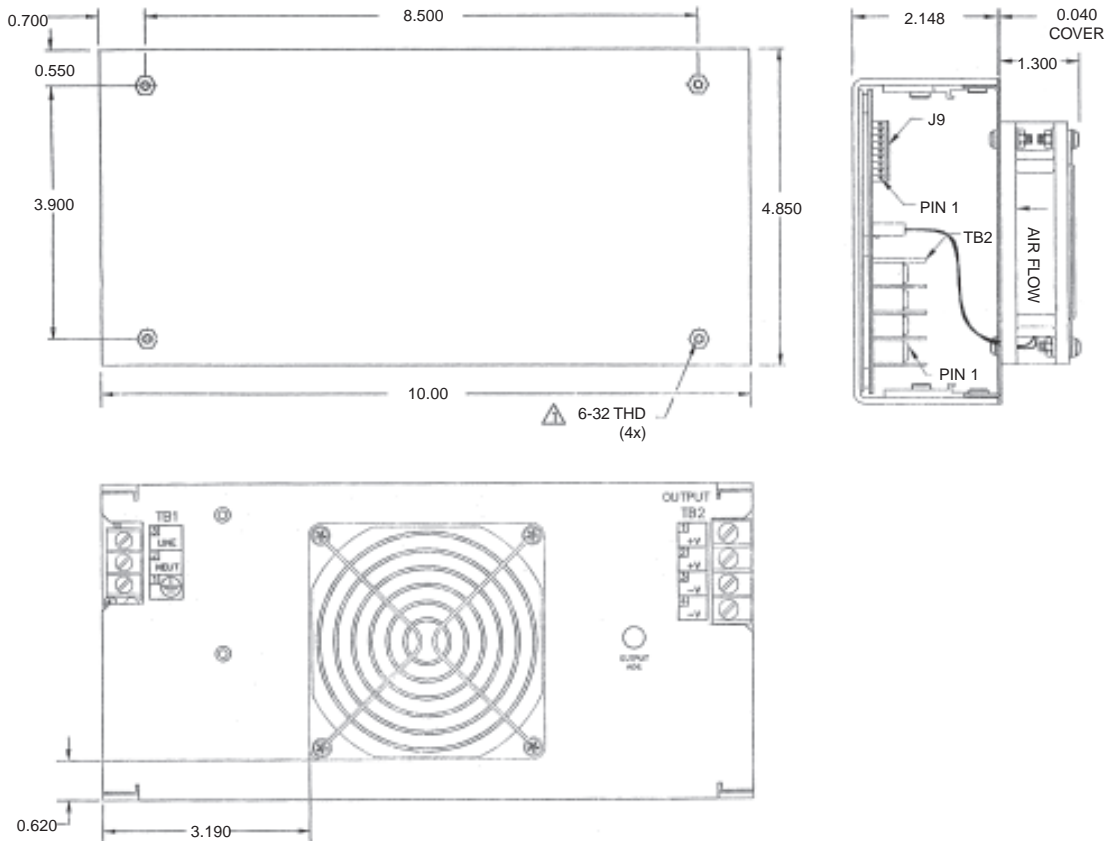
MODEL NUMBER	OUTPUT		
	V <sub>OUT</sub>	I <sub>MAX</sub>	I <sub>PK</sub>
SX400-U1A	±24V	17A	21A
SX400-U1B	±28V	14A	17.5A
SX400-U1C	±36V	11A	13.5A
SX400-U1D	±48V	8.5A	10.5A

## 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 SX400 is designed to operate with 30 CFM airflow.

**SHOCK AND VIBRATION:** The SX400 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.

The information provided herein is believed to be reliable; however, C&D Technologies assumes no responsibility for inaccuracies or omissions. C&D Technologies assumes no responsibility for the use of this information, and all use of such information shall be entirely at the user's own risk. Prices and specifications are subject to change without notice. No patent rights or licenses to any of the circuits described herein are implied or granted to any third party. C&D Technologies does not authorize or warrant any C&D Technologies product for use in life support devices/systems or in aircraft control applications.