### **SRW-45 SERIES AC-DC**

### **FEATURES:**

- RoHS Compliant
- Universal 85-264 VAC Input
- Compact 3" x 5" x 1.12" Size
- 2 year Warranty
- Fits 1U Applications
- One to Four Outputs
- EN 60950-1 ITE Certification
- Class B Emissions per EN 55022
- Optional Chassis and Cover





**OPEN FRAME** 

CHASSIS/COVER

SAFETY SPECIFICATIONS			
General			     2
c <b>711</b> us	Underwriters Laboratories File E137708	UL 60950-1 2 <sup>nd</sup> Edition, 2 CAN/CSA-C22.2 No. 6099 2nd Edition	
IECEE SCHEME	CB Reports/Certificates (including all National and Group Deviations)	IEC 62368-1:2014 2 <sup>ND</sup> Ed	ition
TUV	TUV SUD America	EN 62368-1:2014 2 <sup>ND</sup> Edi	tion
CE	Low Voltage Directive RoHS Directive (Recast)	(2014/35/EU of February (2015/863/EU of March 20	
LIK	Electrical Equipment (Safety) Regula	tions 2016 SI No. 1101	

Restriction of the Use of Certain Hazardous Substances in EEE Regulations

	2012 SI No. 3032 +		ardous oubstarroes	ill LLL Negulations
MODEL LISTING				
MODEL NO.	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4
SRW-45-4001	+5V/5A	-5V/2A	+12V/.70A	-12V/.70A
SRW-45-4002	+5V/5A	-5V/2A	+15V/.70A	-15V/.70A
SRW-45-4003	+5V/5A	+24V/1A	+12V/.70A	-12V/.70A
SRW-45-4004	+5V/5A	+24V/1A	+15V/.70A	-15V/.70A
SRW-45-4005	+5V/5A	+24V/1A	-12V/.70A	-5V/.70A
SRW-45-4006	+5V/5A	+15V/2A	+15V/.70A	-15V/.70A
SRW-45-4007	8V/2A	8V/.50A	18V/.70A	18V/.70A
SRW-45-4008	+3.3V/5A	+3.3V/3A	5V/3A	12V/.70A
SRW-45-4009	+5V/5A	+27V/1A	+15V/.70A	-15V/.70A
SRW-45-4011	+5V/5A	+24V/1A	+15V/.70A	-15V/.70A
SRW-45-4012	+5V/5A	+12V/3A	9V/1A	-12V/.70A
SRW-45-3001	+5V/5A	+12V/3A		-12V/.70A
SRW-45-3002	+5V/5A	+15V/2A		-15V/.70A
SRW-45-3003	+5V/5A	+24V/1.5A		-12V/.70A
SRW-45-3004	+5V/5A	+9V/3A		12V/.70A
SRW-45-3005	+5V/5A	18V/2A		18V/.70A
SRW-45-3006	+5V/5A	+15V/2.5A	-15V/2.5A	
SRW-45-2001	+5V/5A	+12V/3A		
SRW-45-2002	+5V/5A	-5V/4A		
SRW-45-2003	+5V/5A	+24V/1.5A		
SRW-45-2004	+12V/3A	-12V/2A		
SRW-45-2005	+15V/2.5A	-15V/2A		
SRW-45-2006	5V/5A	15V/3A		
SRW-45-2007	+18V/1.5A	-18V/1A		
SRW-45-2008	+5V/5A	+13V/3A		
SRW-45-2009	+5V/2.5A	+21V/1A		
SRW-45-2010	+5V/5A	-5V/4A		
SRW-45-1001	5V/9A			
SRW-45-1002	12V/4A			
SRW-45-1003	15V/3A			
SRW-45-1004	24V/2A			
SRW-45-1004	13.8V/3.3A			
51.11 TO 1000	10.0 170.0			

Total Output Power	45W		
Output Voltage Centering	Output 1:	± 0.25%	(All outputs
	Output 2:	$\pm5.0\%$	at 50% load)
	Output 3:	$\pm$ 3.0%	
	Output 4:	$\pm$ 3.0%	
Output Voltage Adjust Range	Output 1:	95 - 105%	6
Load Regulation	Output 1:	0.5%	(20-100% load change)
_	Output 2:	5.0%	(10-70% load change)
	Output 3:	2.0%	(10-100% load change)
	Output 4:	2.0%	(10-100% load change)
Source Regulation	Outputs 1 – 4:	0.5%	
Cross Regulation	Output 2:	5.0%	(Output 1 load
-	Output 3:	2.0%	varied 50-100%)
	Output 4:	2.0%	
Output Noise	Outputs 1 – 4:	1.0%	
Turn on Overshoot	None		
Transient Response	Outputs 1 – 4		
Voltage Deviation	5.0%		
Recovery Time	2 mS		
Load Change	50% to 100%		
Output Overvoltage Protection (optional)	Output 1:	110% to	150%
Output Overpower Protection	Outputs 1-4:	110% Mi	n.
	Outputs cycle	on/off, auto	recovery
Hold Up Time	16 mS min., 45	W Output, 1	120V Input
Start Up Time	1 Second		
INPUT SPECIFICATI	ONS		
Source Voltage	85 – 264 Volts	AC	
Frequency Range	47 – 63 Hz		
Source Current	•		
True RMS	1A at 85V Input		
Peak Inrush	40 A		
Efficiency	.6872 (Varies	by model)	

Lilloleticy	.0072 (varies by model)	
<b>ENVIRONMENTAL S</b>	SPECIFICATIONS	
Ambient Operating	0° C to + 50° C	
Temperature Range	Derating: See Power Rating Chart	
Ambient Storage Temp. Range	- 40° C to + 85° C	
Temperature Coefficient	Outputs 1 – 4: 0.02%/°C	
Conducted Emissions	EN 55022 Class B	
Altitude	3,000m ASL – Operating	
Ailliude	12,192m ASL – Non-Operating	

GENERAL SPECIFICATIONS		
Dielectric Strength(7)		
Reinforced Insulation	4242 VDC, Primary to Secondary, 1 Sec.	
Basic Insulation	2121 VDC, Primary to Ground, 1 Sec.	
Operational Insulation	500 VDC, Secondary to Ground, 1 Sec.	
Mean-Time Between Failures	150,000 Hours min., MIL-HDBK-217F, 25° C, GB	
Weight	0.50 Lbs. Open Frame	
	1.00 Lbs. Chassis and Cover	

# NOTES

Consult factory for alternate output configurations. Consult factory for positive, negative or floating output 2.

Refer to Applications Information for complete output power ratings.

All specifications are maximum at 25° C, 45W unless otherwise stated, may vary by model and are subject to change without notice.

Centering, load regulation and cross regulation are rated at 5% on output 3 for models SRW-45-3006 and SRW-45-4008.

TUV only: SRW-45-3006, SRW-45-4010

# ORDERING INFORMATION

Other output configurations available (consult factory)

Please specify the following optional features when ordering:

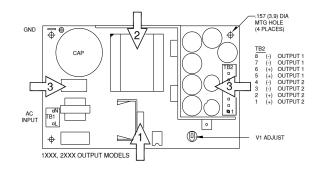
CH - Chassis TS - Terminal Strip CO - Cover I/O - Isolated outputs

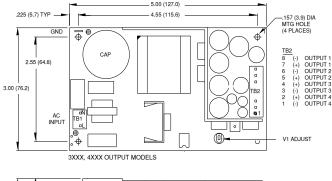
OVP - Overvoltage protection

### SRW-45 SERIES MECHANICAL SPECIFICATIONS

**OPEN FRAME** 

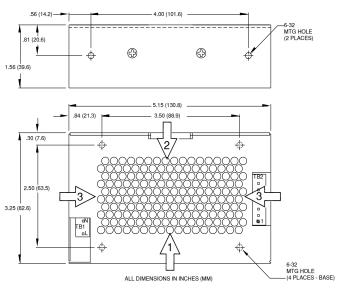
# 1.53 (38.9) 1.75 (44.5) 6-32 MTG HOLE (2 PLACES)







### OPTIONAL CHASSIS/COVER

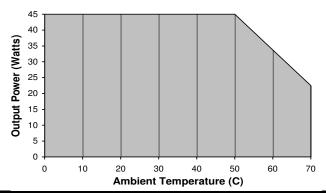


### APPLICATIONS INFORMATION

- Each output can deliver its rated load but total output power must not exceed 45 watts.
- 2. Semiconductor case temperatures must not exceed 110°C.
- Sufficient area must be provided around convection cooled power supplies to allow natural movement of air to develop.
- This product is intended for use as a professionally installed component within information technology.
- A minimum load of 20% is required on output one to insure proper regulation of remaining outputs.
- Peak to peak output ripple and noise is measured directly at the output terminals of the power supply, without the use of the probe ground lead or retractable tip, 20 MHz bandwidth.
- 7. This product was type tested and safety certified using the dielectric strength test voltages listed in Table 5B of UL 60950-1. In consideration of Clause 5.2.2, care must be taken to insure that the voltage applied to a reinforced insulation does not overstress basic insulation. Secondary to ground capacitors may need to be removed prior to performing a dielectric strength type test on the end product. It is highly recommended that the DC equivalent test voltages be used when performing a production-line dielectric strength test of the assembled end product. Please consult factory for further information.
- 8. This power supply has been safety approved and final tested using a DC dielectric test. Please consult factory before performing an AC dielectric strength test.

9. Maximum screw penetration into mounting holes is .250 inches.

# MAXIMUM OUTPUT POWER VS. AMBIENT TEMPERATURE



CONNECTOR SPECIFICATIONS		
TB1	AC Input	.156 friction lock header mates with Molex 09-50-3031 or
		equivalent crimp terminal housing with Molex 08-50-0189 or
		equivalent crimp terminal.
TB2	DC Output	.156 friction lock header mates with Molex 09-50-3081 or
		equivalent crimp terminal housing with Molex 08-50-0189 or
		equivalent crimo terminal

G Ground .187 quick disconnect terminal.

### RECOMMENDED AIR FLOW DIRECTION

1 – Optimum 2 – Good 3 – Fair