

# SERIES: SWI24-SC | DESCRIPTION: AC-DC POWER SUPPLY

#### FEATURES

- 24 W power
- universal input (90~264 Vac)
- single regulated 12~24 Vdc output
- short circuit, over current, and over voltage protections
- UL 60950 & UL 1310 safety approvals
- level VI efficiency



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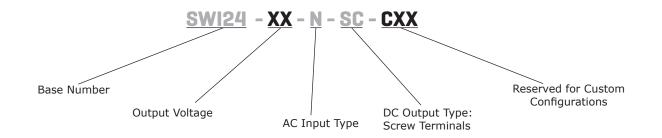
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MODEL	output voltage	output current	output power	ripple and noise <sup>1</sup>	efficiency level
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
SWI24-12-N-SC	12	2	24	100	VI
SWI24-15-N-SC	15	1.6	24	100	VI
SWI24-24-N-SC	24	1	24	100	VI

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 10 µF low ESR electrolytic capacitors.

# PART NUMBER KEY

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#### INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at full load			0.6	А
inrush current	at 115 Vac, full load, 25°C, cold start			30	А
leakage current				0.25	mA
no load power consumption	at 230 Vac			0.1	W
OUTPUT					
parameter	conditions/description	min	typ	max	units
regulation			±5		%
start-up time	at 110 Vac/50 Hz, 80% load			3	S
hold-up time	at 110 Vac/50 Hz, 80% load	10			ms

#### **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	output shutdown			200	%
over current protection	output shut down, auto recovery			200	%
short circuit protection	output shut down, auto recovery				

## **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000		Vac
isolation resistance	input to output at 500 Vdc	10			MΩ
safety approvals	UL/cUL (UL 60950, UL 1310), LPS				·
EMI/EMC	FCC Part 15B Class B				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	2011/65/EU				

#### **ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature		0		55	°C
storage temperature		-25		85	°C
operating humidity	non-condensing	10		95	%
storage humidity	non-condensing	10		95	%

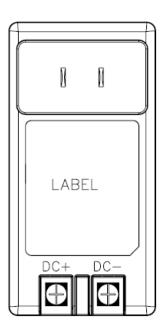
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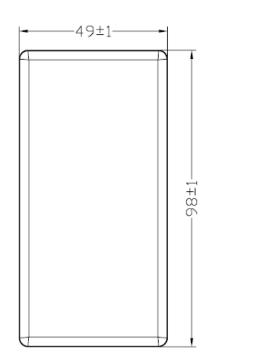
### **MECHANICAL**

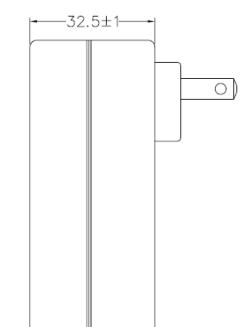
parameter	conditions/description	min	typ	max	units
dimensions	98 x 49 x 32.5				mm
input plug	US 2-pin				

### **MECHANICAL DRAWING**

units: mm tolerance: ±1 mm







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MAXIMUM RECOMMENDED CABLE LENGTH TO MAINTAIN ±5% OUTPUT VOLTAGE TOLERANCE						
MODEL NO.	CABLE GAUGE	MAX CABLE LENGTH				
SWI24-12-N-SC	18 AWG	6.5 m				
SWI24-12-N-SC	20 AWG	4.5 m				
SWI24-12-N-SC	22 AWG	3.0 m				
SWI24-12-N-SC	24 AWG	2.0 m				
SWI24-15-N-SC	18 AWG	8.0 m				
SWI24-15-N-SC	20 AWG	5.5 m				
SWI24-15-N-SC	22 AWG	4.0 m				
SWI24-15-N-SC	24 AWG	2.5 m				
SWI24-24-N-SC	18 AWG	13.0 m				
SWI24-24-N-SC	20 AWG	9.0 m				
SWI24-24-N-SC	22 AWG	6.5 m				
SWI24-24-N-SC	24 AWG	3.5 m				

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#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	12/04/2014
1.01	added max cable length information	02/10/2015
1.02	updated datasheet	10/12/2015
1.03	company logo updated	09/18/2020
1.04	safety marks updated	04/26/2021
1.05	ripple and noise & operating temp. max updated	08/07/2023

The revision history provided is for informational purposes only and is believed to be accurate.



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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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# **Mouser Electronics**

Authorized Distributor

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