

SERIES: SWI12-SC

DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

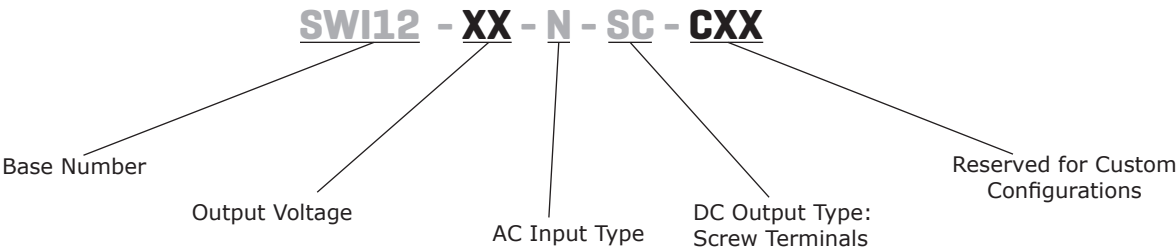
- 12 W power
- universal input (90~264 Vac)
- single regulated 12~24 Vdc output
- short circuit, over current, and over voltage protections
- UL 60950 & UL 1310 certified
- level VI efficiency



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
SWI12-12-N-SC	12	1	12	120	VI
SWI12-15-N-SC	15	0.8	12	150	VI
SWI12-24-N-SC	24	0.5	12	240	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



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at full load			0.4	A
inrush current	at 115 Vac, full load, 25°C, cold start			30	A
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			2	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	certified to 60950: UL certified to 1310: UL LPS				
EMI/EMC	FCC Part 15B Class B				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

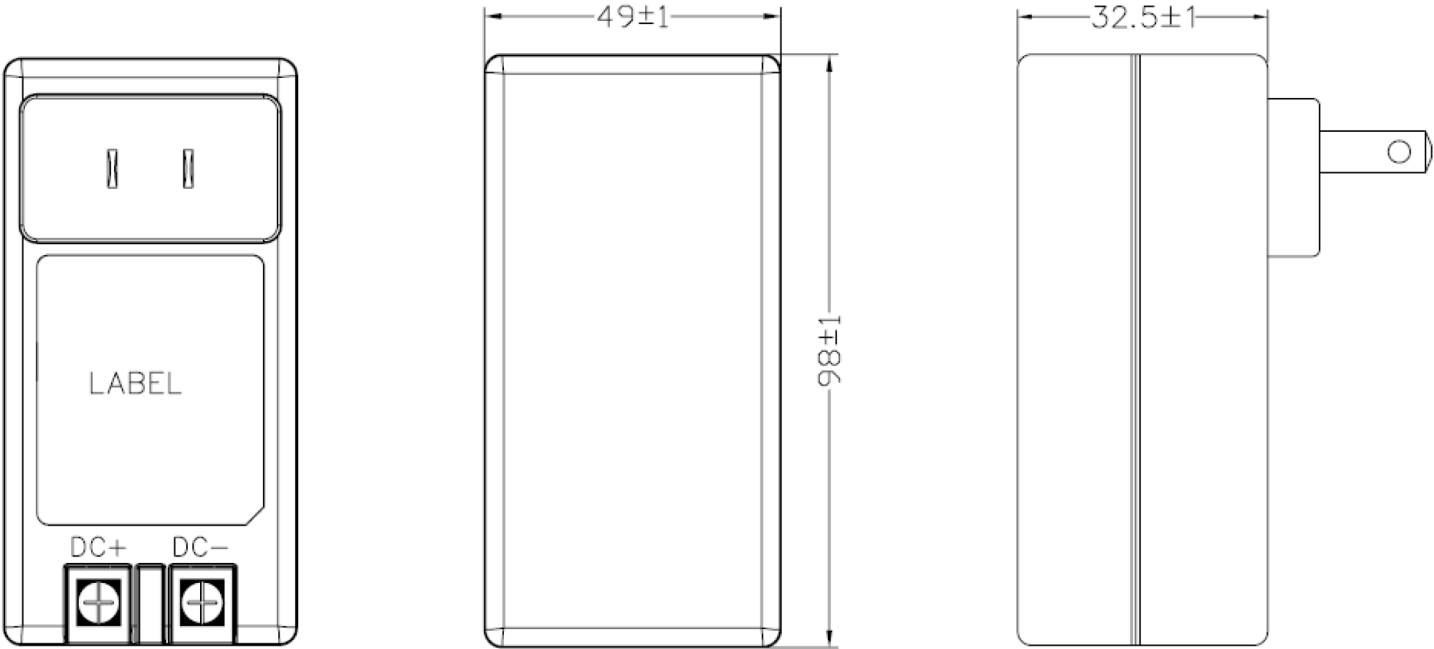
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-25		85	°C
operating humidity	non-condensing	10		95	%
storage humidity	non-condensing	10		95	%

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



MAXIMUM RECOMMENDED CABLE LENGTH TO MAINTAIN ±5% OUTPUT VOLTAGE TOLERANCE		
MODEL NO.	CABLE GAUGE	MAX CABLE LENGTH
SWI12-12-N-SC	18 AWG	7.5 m
SWI12-12-N-SC	20 AWG	5.0 m
SWI12-12-N-SC	22 AWG	3.0 m
SWI12-12-N-SC	24 AWG	2.0 m
SWI12-15-N-SC	18 AWG	8.5 m
SWI12-15-N-SC	20 AWG	6.0 m
SWI12-15-N-SC	22 AWG	5.0 m
SWI12-15-N-SC	24 AWG	2.5 m
SWI12-24-N-SC	18 AWG	15.5 m
SWI12-24-N-SC	20 AWG	12 m
SWI12-24-N-SC	22 AWG	9.5 m
SWI12-24-N-SC	24 AWG	6.5 m

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	datasheet updated	12/09/2024

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