

SERIES: SWI24-E

DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- up to 24 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE safety approvals
- EN 62368 certified

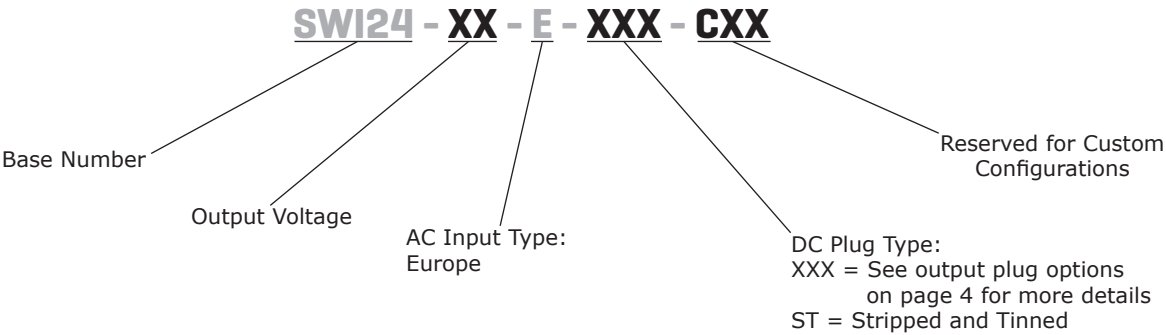


MODEL

MODEL	input voltage	input frequency	output voltage	output current	output power	ripple and noise ¹	efficiency level ²		no load power consumption
	range (Vac)	range (Hz)	nom (Vdc)	max (A)	max (W)	max (mVp-p)	average ³ (%)	10% (%)	typ (W)
SWI24-12-E	90 ~ 264	47 ~ 63	12	2.0	24	120	87.5	83.4	0.07
SWI24-15-E	90 ~ 264	47 ~ 63	15	1.6	24	150	88.1	84.4	0.06
SWI24-24-E	90 ~ 264	47 ~ 63	24	1.0	24	240	88.8	82.9	0.07

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF and 10 µF capacitors to ground.
2. CoC Tier 2 compliant.
3. Average efficiency is measured at 25%, 50%, 75%, and 100% load.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.58	A
inrush current	at 100 Vac, full load, 25°C, cold start			50	A
	at 230 Vac, full load, 25°C, cold start			60	A
leakage current				0.25	mA
no load power consumption	at 230 Vac			0.1	W
	Level VI CoC Tier 2			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%
hold-up time	at full load	10			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down				
	12 Vdc output model			22	Vdc
	15 Vdc output model			32	Vdc
	24 Vdc output model			45	Vdc
over current protection	output shut down, auto recovery				
	12 Vdc output model			5.0	A
	15 Vdc output model			4.0	A
	24 Vdc output model			2.5	A
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 62368: EN				
EMI/EMC	CE				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

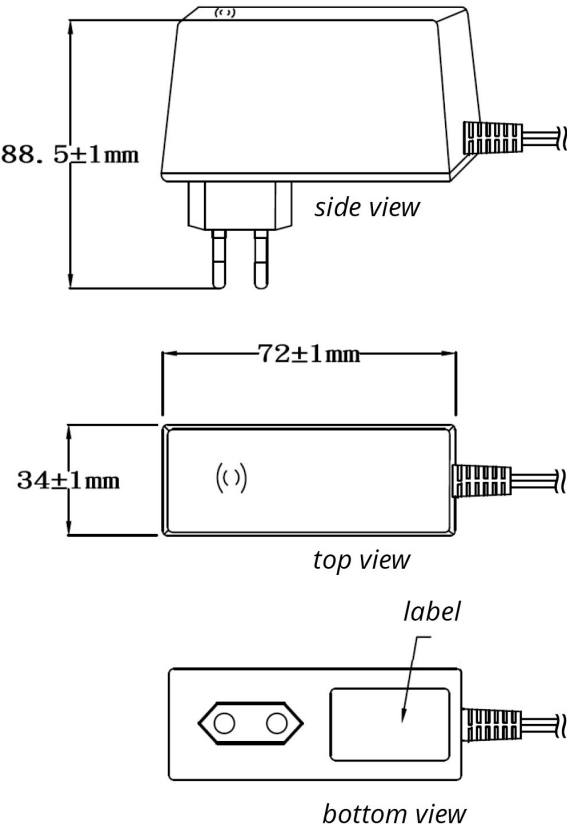
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 88.5				mm
inlet plug	Europe				
weight			170		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

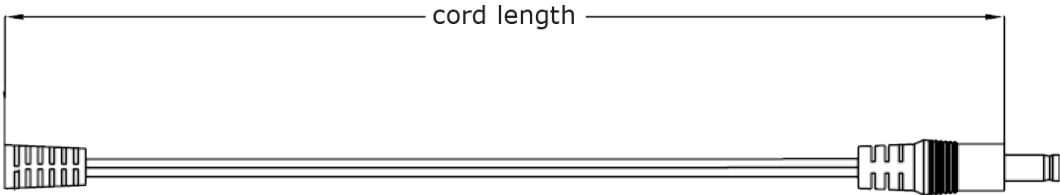
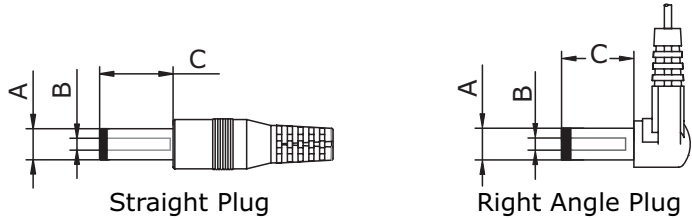


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI24-12-E	UL2468, 20 AWG	1,500 mm $\pm$ 30
SWI24-15-E	UL2468, 20 AWG	1,500 mm $\pm$ 30
SWI24-24-E	UL2468, 22 AWG	1,500 mm $\pm$ 30

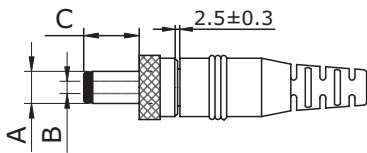
OUTPUT PLUG OPTIONS

Standard DC Plug



Size	A	B	C	Unit
5	5.5	2.1	9.5	mm
6	5.5	2.5	9.5	mm
7	3.5	1.35	9.5	mm
8	3.8	1.35	9.5	mm
9	3.8	1.05	9.5	mm

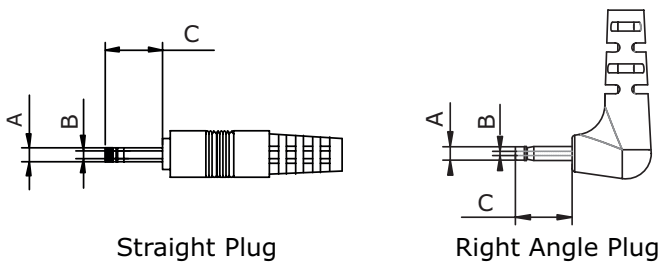
Locking DC Plug



Size	A	B	C	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

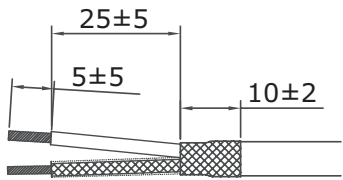
Note: Maximum insertion depth is 10mm

EIAJ DC Plug

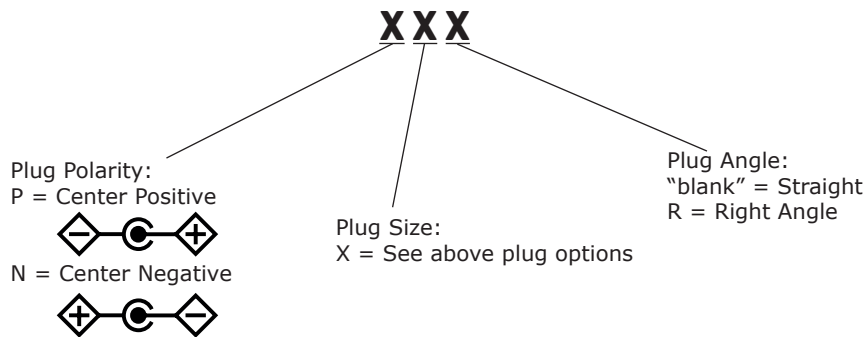


Size	EIAJ	A	B	C	Unit
12	EIAJ-1	2.35	0.7	9.5	mm
13	EIAJ-2	4.0	1.7	9.5	mm
14	EIAJ-3	4.75	1.7	9.5	mm

Stripped and Tinned



DC Plug Type



*Contact CUI for additional plug options

REVISION HISTORY

rev.	description	date
1.0	initial release	08/07/2015
1.01	updated datasheet	09/15/2016
1.02	company logo updated	09/18/2020
1.03	model table updated	11/27/2020
1.04	safety approvals updated	12/09/2020
1.05	plug polarity symbols updated	09/16/2021
1.06	dc plugs updated	04/29/2022
1.07	mechanical drawing updated	03/21/2024
1.08	datasheet updated	12/09/2024

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.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

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