

SERIES: SWI25-E | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- up to 25.2 W continuous power
- DoE Level VI and CoC Tier 2 compliant
- no load power consumption < 0.075 W
- ultra-compact case
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE and GS safety approvals
- Class II construction
- IEC 62368 certified



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)
SWI25-5-E	90 ~ 264	47 ~ 63	5	4.0	20.0	50	85.4	75.9	0.10
SWI25-12-E	90 ~ 264	47 ~ 63	12	2.1	25.2	120	86.3	77.0	0.10
SWI25-15-E	90 ~ 264	47 ~ 63	15	1.67	25.1	150	86.3	77.0	0.10
SWI25-18-E	90 ~ 264	47 ~ 63	18	1.4	25.2	180	86.3	77.0	0.10
SWI25-24-E	90 ~ 264	47 ~ 63	24	1.05	25.2	240	86.3	77.0	0.10

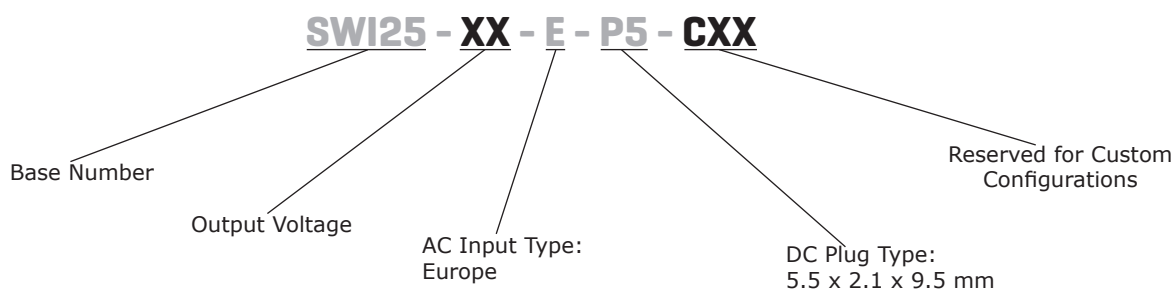
Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF and 10 µF capacitors to ground.

2. CoC Tier 2 compliant.

3. Average efficiency is measured at 25%, 50%, 75%, and 100% load.

4. All specifications are measured at Ta=25°C, nominal input voltage, and 75% rated output load unless otherwise specified.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.7	A
inrush current	at 240 Vac, 25°C, cold start			60	A
leakage current				0.25	mA
no load power consumption				0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
voltage set point accuracy	at 60% load		±2		%
line regulation	measured from 100~240 Vac, full load		±1		%
load regulation	measured from 60~100% load and 60~20% load				
	5 Vdc output model		±6		%
	12 Vdc output model		±5		%
	15 Vdc output model		±3		%
	all other models		±2		%
hold-up time	at 115 Vac		10		ms
switching frequency			65		kHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	hiccup mode, auto recovery				
	5 Vdc output model			7.44	Vdc
	12 Vdc output model			16.2	Vdc
	15 Vdc output model			18.9	Vdc
	18 Vdc output model			23.5	Vdc
	24 Vdc output model			28.8	Vdc
over current protection	hiccup mode, auto recovery	140		170	%
short circuit protection	continuous, hiccup mode, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output for 1 minute		3,000		Vac
			4,242		Vdc
isolation resistance	input to output	100			MΩ
safety marks	TUV-GS (Germany), CE (EU)				
safety approvals	certified to 62368: EN GS TUV				
safety class	Class II				
EMI/EMC	EN 55032 EN 55024				
MTBF	as per MIL-HDBK-217F at 115 Vac, full load, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

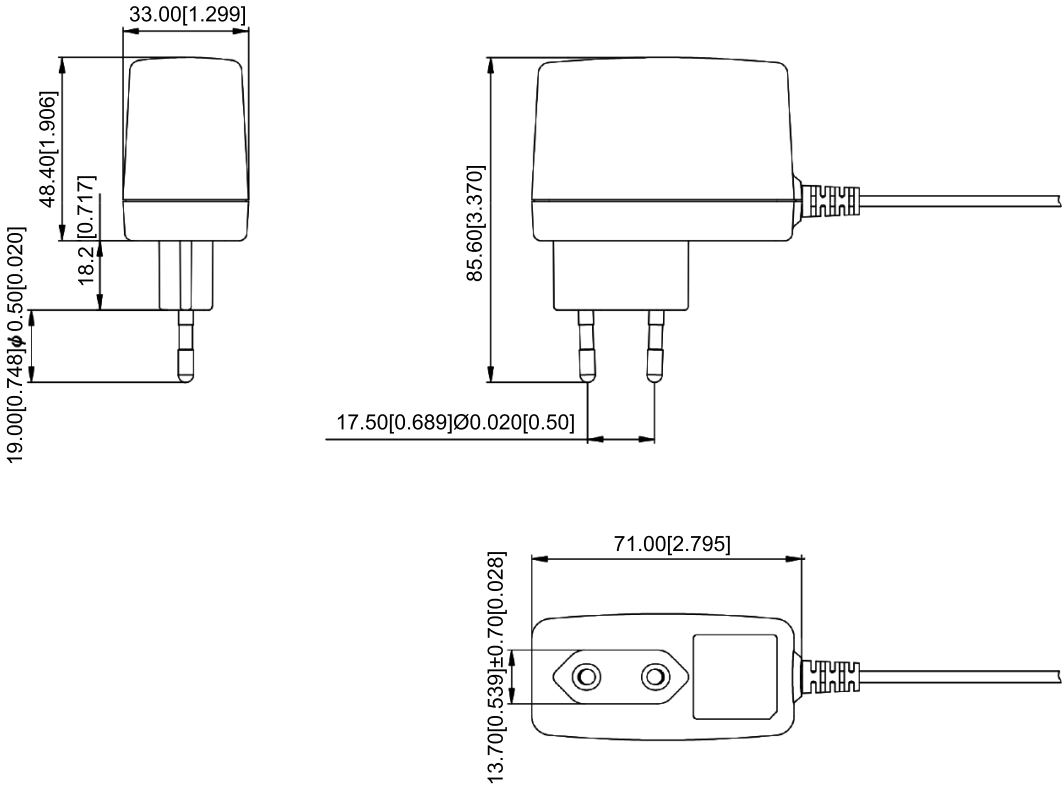
parameter	conditions/description	min	typ	max	units
operating temperature		-20		40	°C
storage temperature		-20		85	°C

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	71.00 x 33.00 x 48.40 (2.795 x 1.299 x 1.906 inches)				mm
inlet plug	Europe				
weight			140		g

MECHANICAL DRAWING

units: mm [inch]
tolerance: X.XX: ±0.50 [±0.020]



DC CORD

units: mm

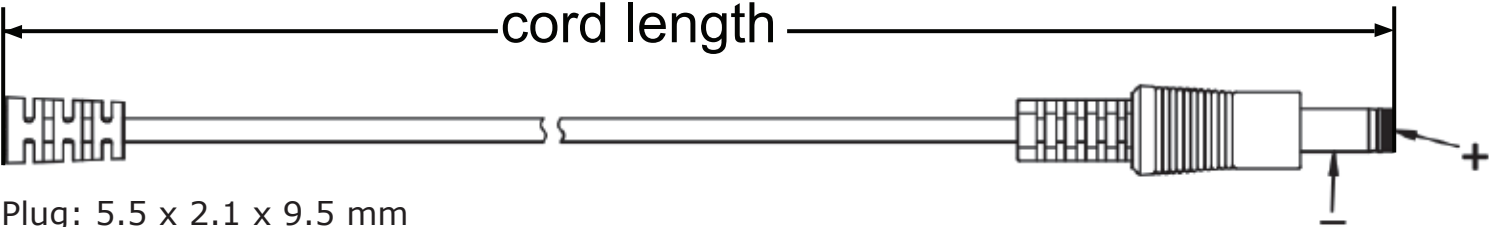


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI25-5-E	16 AWG	1,220 mm ±50
SWI25-12-E	20 AWG	1,800 mm ±50
SWI25-15-E	20 AWG	1,800 mm ±50
SWI25-18-E	20 AWG	1,800 mm ±50
SWI25-24-E	20 AWG	1,800 mm ±50

REVISION HISTORY

rev.	description	date
1.0	initial release	04/19/2017
1.01	company logo updated	08/24/2020
1.02	updated safeties	10/02/2020
1.03	model table updated	11/27/2020
1.04	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.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.