


CUI INC

a bel group

date 12/02/2024

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SERIES: SWI6-E | **DESCRIPTION:** AC-DC POWER SUPPLY

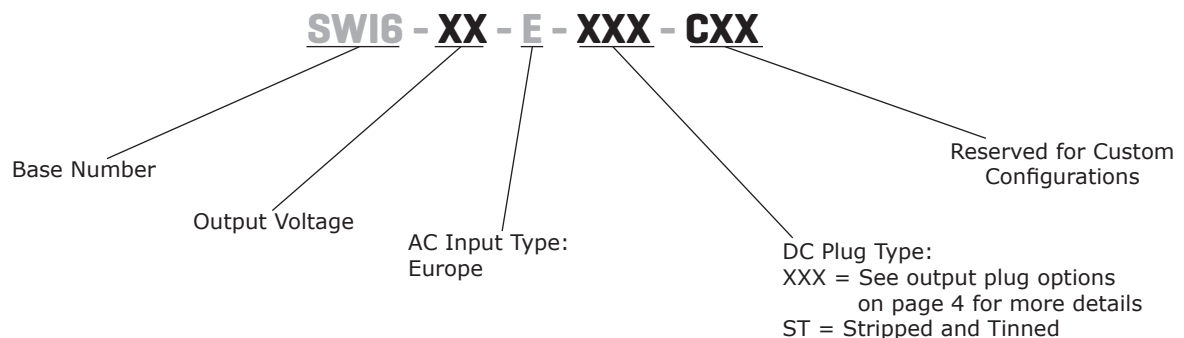
FEATURES

- up to 6 W continuous power
- DOE Level VI, CEC, ErP Stage 2
- no load power consumption < 0.1 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE safety approvals
- certified to EN 62368



MODEL	input voltage	input frequency	output voltage	output current	output power	ripple and noise ¹	efficiency level		no load power consumption
	range (Vac)	range (Hz)	nom (Vdc)	max (A)	max (W)	max (mVp-p)	average ² (%)	10% (%)	typ (W)
SWI6-3.3-E	90 ~ 264	47 ~ 63	3.3	1.5	4.95	100	74.0	63.3	0.03
SWI6-5-E	90 ~ 264	47 ~ 63	5.0	1.5	7.5	100	77.5	66.7	0.05
SWI6-5.9-E	90 ~ 264	47 ~ 63	5.9	1.2	7.08	100	78.7	65.0	0.05
SWI6-7.5-E	90 ~ 264	47 ~ 63	7.5	1.0	7.5	100	80.3	70.1	0.04
SWI6-9-E	90 ~ 264	47 ~ 63	9.0	0.67	6.03	100	79.9	66.6	0.04
SWI6-12-E	90 ~ 264	47 ~ 63	12.0	0.6	7.2	120	80.9	65.1	0.05
SWI6-15-E	90 ~ 264	47 ~ 63	15.0	0.5	7.5	150	80.9	63.3	0.06

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 μ F multilayer ceramic and 47 μ F low ESR electrolytic capacitors.
2. 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				0.19	A
inrush current	at 240 Vac, full load, 25°C, cold start			60	A
leakage current				0.25	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation	3.3 Vdc output voltage	2.97		3.63	V
	5 Vdc output voltage	4.75		5.25	V
	5.9 Vdc output voltage	5.70		6.30	V
	7.5 Vdc output voltage	7.125		7.875	V
	9 Vdc output voltage	8.55		9.45	V
	12 Vdc output voltage	11.4		12.60	V
	15 Vdc output voltage	14.25		15.75	V
hold-up time	at full load	10			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down				
over current protection	output shut down, auto recovery				
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

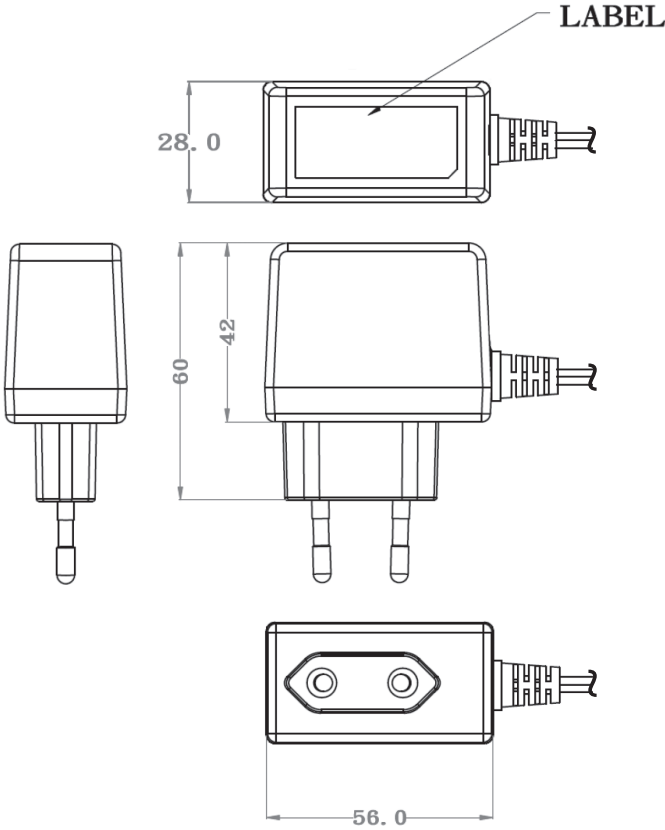
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	56 x 28 x 60				mm
inlet plug	Europe				
weight			96		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

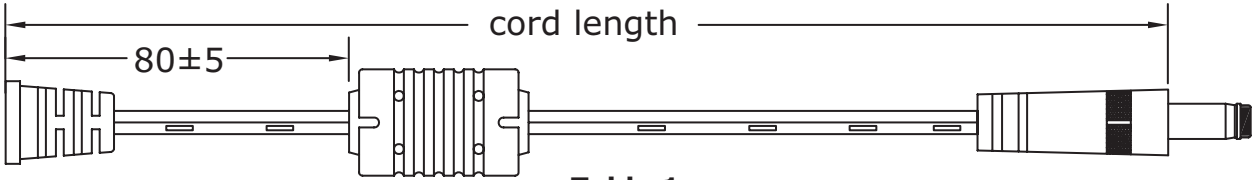
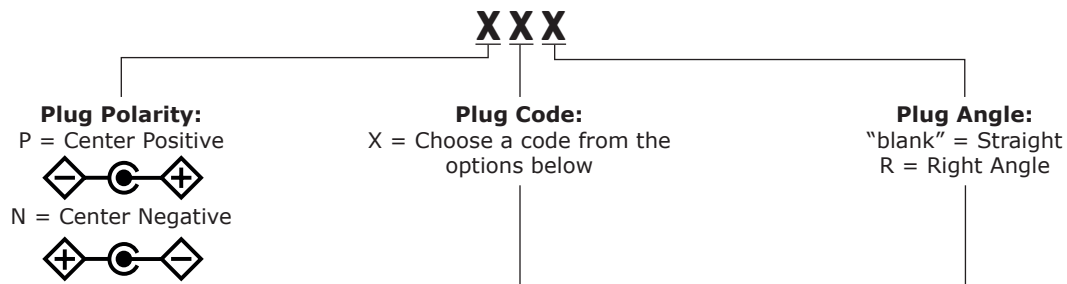


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI6-3.3-E	UL2468	1,500 mm ±30
SWI6-5-E	UL2468	1,500 mm ±30
SWI6-5.9-E	UL2468	1,500 mm ±30
SWI6-7.5-E	UL2468	1,500 mm ±30
SWI6-9-E	UL2468	1,500 mm ±30
SWI6-12-E	UL2468	1,500 mm ±30
SWI6-15-E	UL2468	1,500 mm ±30

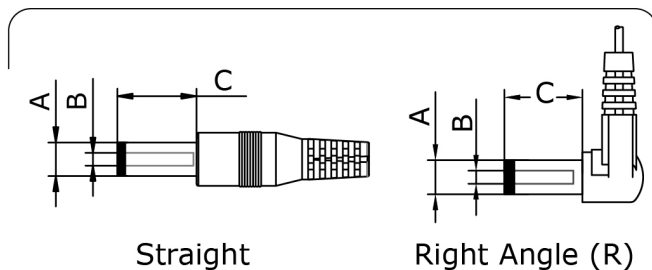
DC PLUG TYPE PART NUMBER KEY



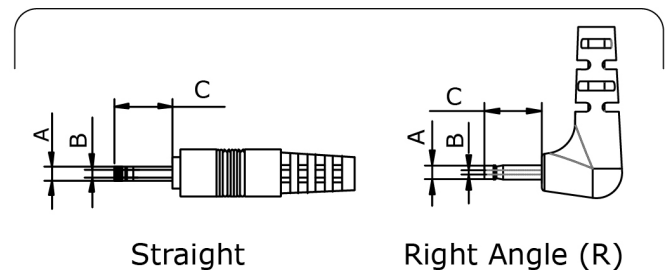
Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	8	Standard	3.8	1.35	9.5	•	•
•	•	9	Standard	3.8	1.05	9.5	•	•
•	•	10	Locking ²	5.5	2.1	9.5	•	N/A
•	•	11	Locking ²	5.5	2.5	9.5	•	N/A
•	•	12	EIAJ-1	2.35	0.7	9.5	•	•
•	•	13	EIAJ-2	4.0	1.7	9.5	•	•
•	•	14	EIAJ-3	4.75	1.7	9.5	•	•
N/A	N/A	ST	Stripped & Tinned				N/A	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A
N/A	N/A	CUB	USB	USB Type C			•	N/A

Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

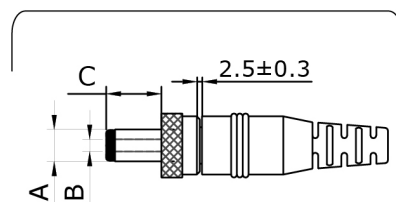
Standard



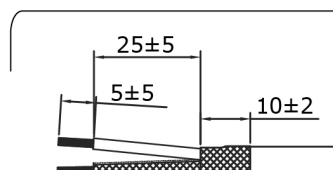
EIAJ



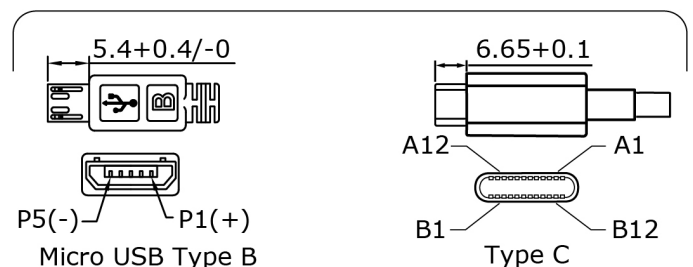
Locking



Stripped & Tinned



USB



REVISION HISTORY

rev.	description	date
1.0	initial release	08/07/2015
1.01	added models	08/12/2015
1.02	updated drawing	12/16/2015
1.03	company logo updated	09/21/2020
1.04	updated dc plug options & model table	12/04/2020
1.05	safeties updated	12/09/2020
1.06	plug polarity symbols updated	09/16/2021
1.07	dc plugs updated	06/15/2022
1.08	output voltage updated	06/21/2023
1.09	datasheet updated	12/02/2024

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.