SERIES: SWH24-N | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

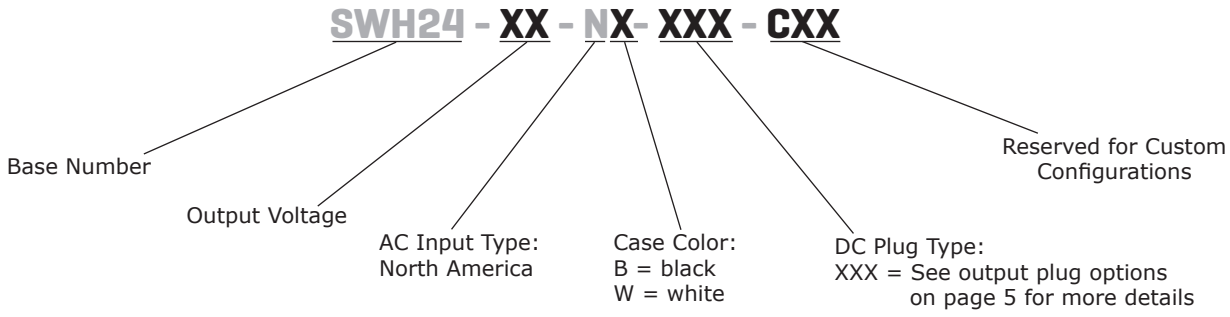
- universal input voltage range
- over current and short circuit protections
- certified to UL 1310
- for household appliances
- custom designs available
- North American fixed blade



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% (%)	max (W)
SWH24-5-N	90 ~ 264	47 ~ 63	5	3.0	15.0	240	81.9	70.0	0.1
SWH24-8-N	90 ~ 264	47 ~ 63	8	2.5	20.0	240	85.47	70.0	0.1
SWH24-9-N	90 ~ 264	47 ~ 63	9	2.0	18.0	240	85.0	70.0	0.1
SWH24-11-N	90 ~ 264	47 ~ 63	11	2.2	24.2	240	86.24	70.0	0.1
SWH24-12-N	90 ~ 264	47 ~ 63	12	2.0	24.0	240	86.2	70.0	0.1
SWH24-15-N	90 ~ 264	47 ~ 63	15	1.5	22.5	240	85.96	70.0	0.1
SWH24-18-N	90 ~ 264	47 ~ 63	18	1.25	22.5	240	85.96	70.0	0.1
SWH24-19-N	90 ~ 264	47 ~ 63	19	1.25	23.75	240	86.17	70.0	0.1
SWH24-24-N	90 ~ 264	47 ~ 63	24	1.0	24.0	240	86.2	70.0	0.1
SWH24-28-N	90 ~ 264	47 ~ 63	28	0.85	23.8	240	86.17	70.0	0.1
SWH24-36-N	90 ~ 264	47 ~ 63	36	0.65	23.4	240	86.11	70.0	0.1

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. Average efficiency is measured at 25%, 50%, 75%, and 100% load at 115 Vac & 230 Vac input.

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at full load			0.8	A
inrush current	at 240 Vac			60	A
leakage current	at 240 Vac, 50 Hz			0.25	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation			±5		%
start-up time	at 100 and 240 Vac, full load			3	s
hold-up time	at 115 Vac/60 Hz at 230 Vac/50 Hz	1 3			ms ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over current protection	auto recovery, hiccup				
short circuit protection	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
safety approvals	certified to 1310: UL				
EMI/EMC	FCC Part 15B (Class B)				
MTBF	at full load, 25°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		70	°C
operating humidity		10		95	%
storage humidity		5		95	%

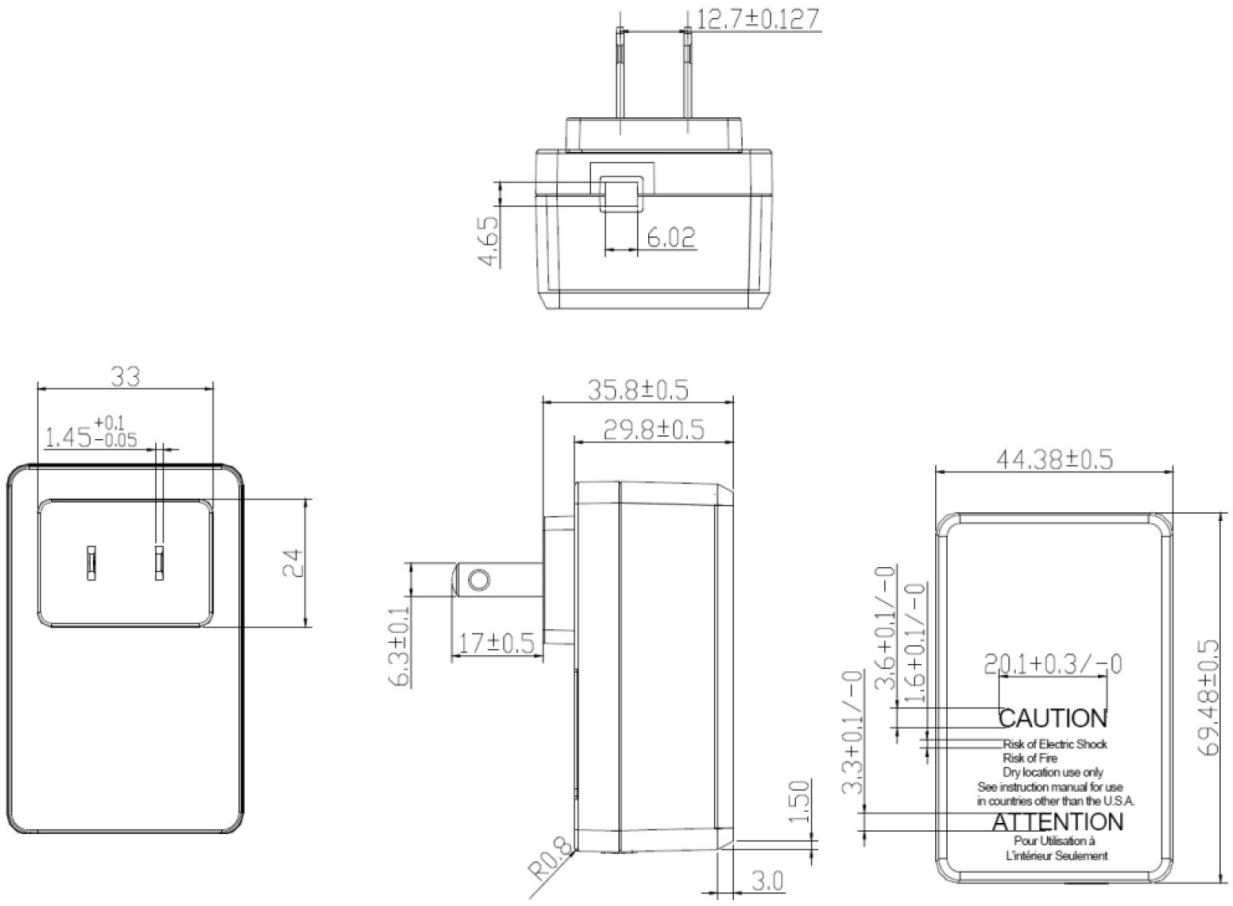
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MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	69.48 x 44.38 x 35.8				mm
inlet plug	North America, 2 pin				
weight			80		g

MECHANICAL DRAWING

units: mm



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DC CORD

units: mm

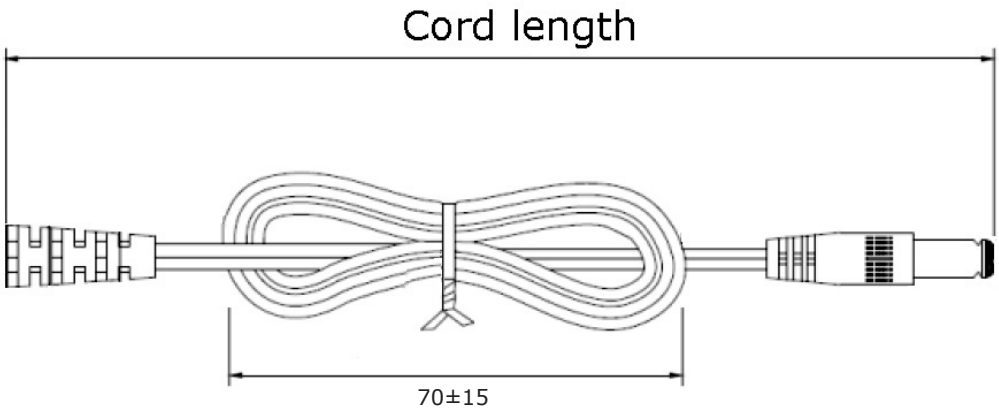


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWH24-5-N	UL2468, 18 AWG	1,830 mm ±100
SWH24-8-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-9-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-11-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-12-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-15-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-18-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-19-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-24-N	UL2468, 20 AWG	1,830 mm ±100
SWH24-28-N	UL2468, 22 AWG	1,830 mm ±100
SWH24-36-N	UL2468, 22 AWG	1,830 mm ±100

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DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive



N = Center Negative



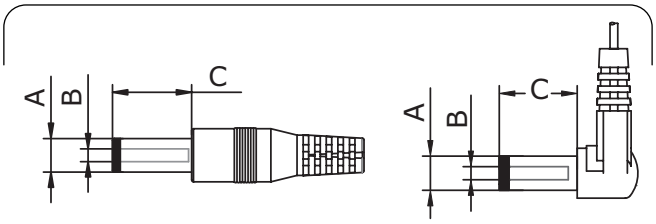
Plug Code:
X = Choose a code from the options below

Plug Angle:
"blank" = Straight
R = Right Angle

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	•	•
•	•	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 and Tinned				•	N/A
N/A	N/A	CUB	USB	USB Type C			•	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

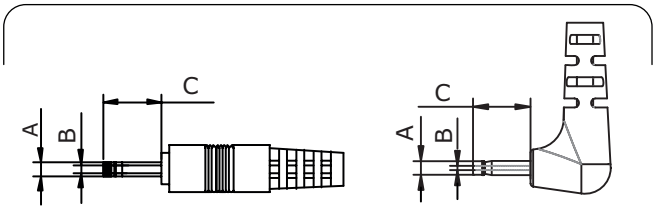
Note: 1. Contact CUI for additional plug options.
2. Maximum insertion depth is 10mm.

Standard



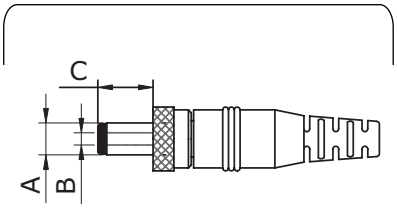
Straight Right Angle (R)

EIAJ

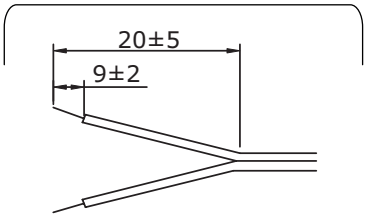


Straight Right Angle (R)

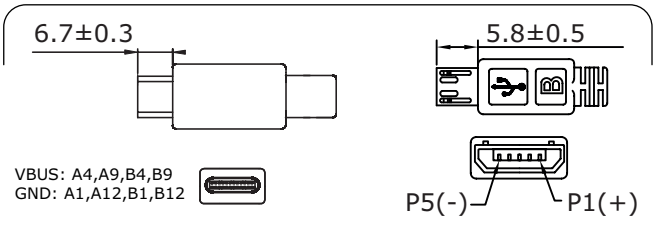
Locking



Stripped & Tinned



USB



USB Type C Micro USB Type B

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REVISION HISTORY

rev.	description	date
1.0	initial release	12/19/2022
1.01	dc cord updated for 5V model	01/09/2023
1.02	stripped and tinned option added to dc plug types	01/18/2023
1.03	dc cord & mechanical drawing updated, UL/CUL mark added	02/01/2023
1.04	datasheet updated, dc cord updated for 28 V & 36 V models	01/07/2025

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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