SERIES: EMSA 40W | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 40 W power
- interchangeable AC blades
- universal input (90~264 Vac)
- single regulated output from 12~24 V
- over voltage and short circuit protection
- UL/cUL, GS, RCM, CCC, PSE safety approvals
- level V efficiency
- custom designs available

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
EMSA120300	12	3.0	36	300	V
EMSA200200	20	2.0	40	300	V
EMSA240167	24	1.67	40	300	V

Notes: 1. At full load, 100 ~ 240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 10 µF aluminum electrolytic and 0.1 µF ceramic capacitors.

PART NUMBER KEY

EMSA120300 X - XX - SZ - CXX

- Base Number (example of 12 Vdc, 3 A)
- DC Plug Type
- Factory Designation
- Reserved for Custom Configurations

Blades:
"blank" = North American, European, United Kingdom, Australian, and China blades included
N = North American blade included
E = European blade included
B = United Kingdom blade included
A = Australian blade included
C = China blade included
K = No blades included

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				1.0	A RMS
no load power consumption				0.3	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation			±5		%

PROTECTIONS

parameter	conditions/description
over voltage protection	output voltage clamped by internal protection zener
short circuit protection	output shut down and auto restart

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute			3,000 4,242	Vac Vdc
isolation resistance	input to output at 500 V dc	100			MΩ
safety approvals	UL 60950-1, EN 60950-1/IEC 60950-1, RCM, CCC, PSE				
EMI/EMC	FCC part 15B, CISPR 22 Class B, EN 61204-3, EN 55022 Class B, EN 55024, EN 61000-3-(2, 3), IEC 6100-3-(2, 3), IEC 6100-4-(2, 3, 4, 5, 6, 11), CE				
leakage current				0.25	mA
RoHS compliant	yes				

ENVIRONMENTAL

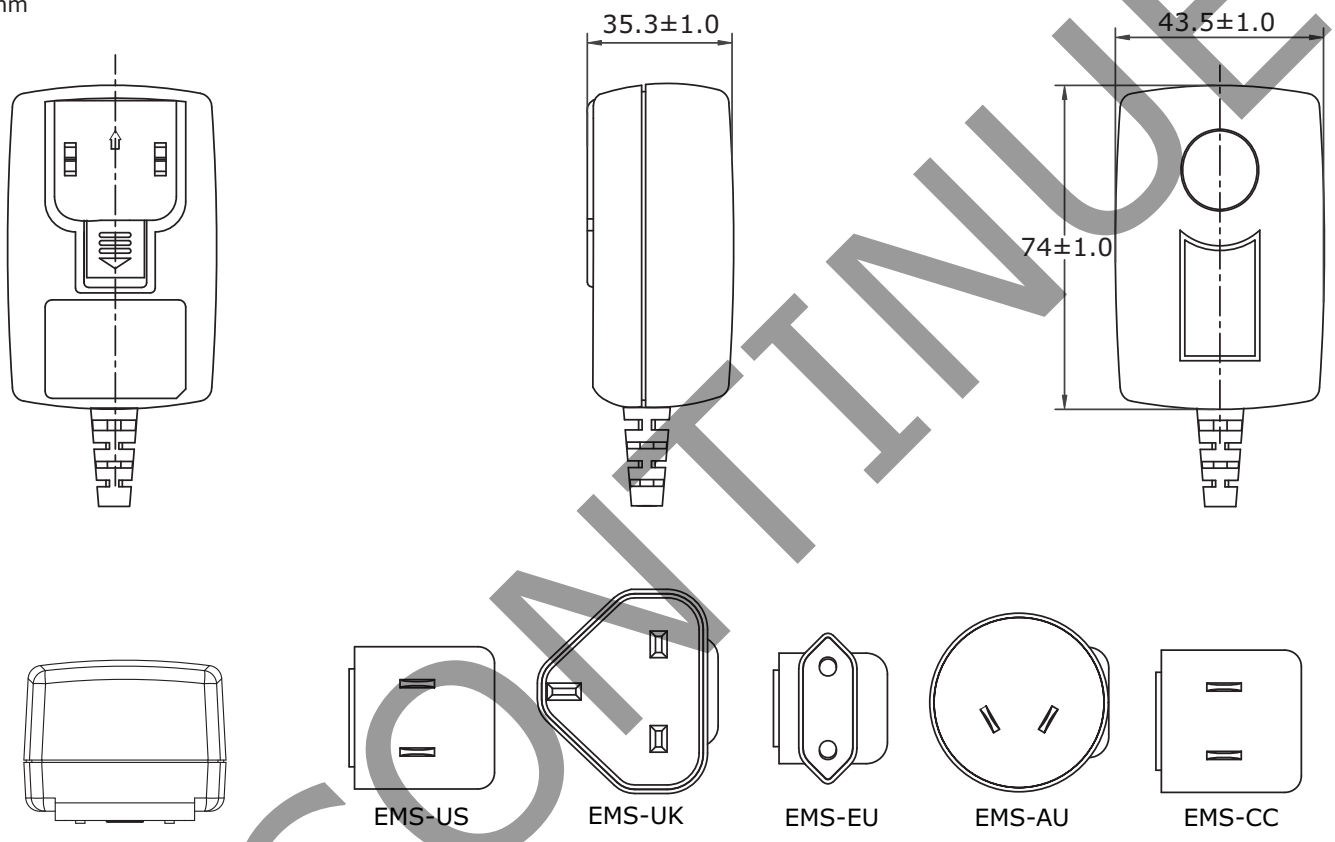
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-10		70	°C
operating humidity		20		80	%
storage humidity		10		90	%

MECHANICAL

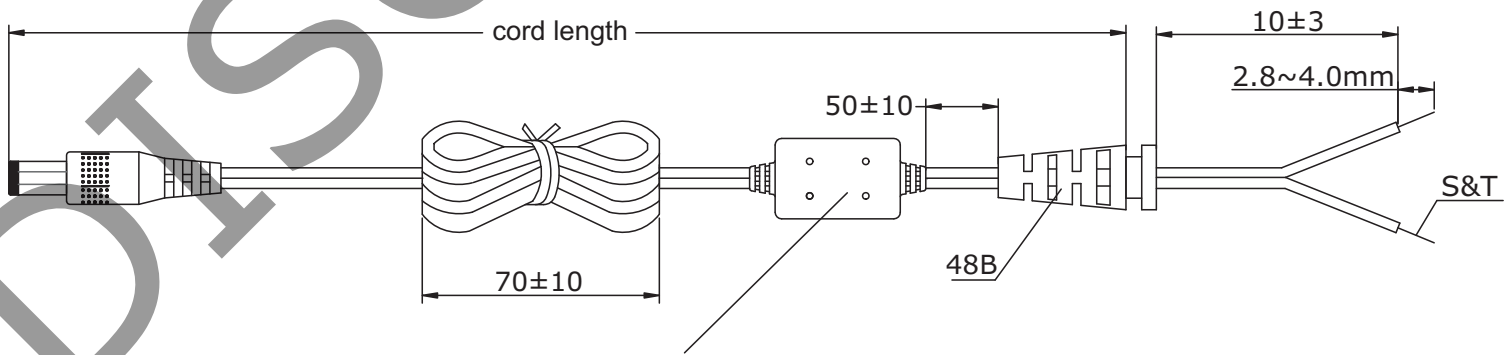
parameter	conditions/description	min	typ	max	units
dimensions	2.913 x 1.713 x 1.390 (74 x 43.5 x 35.3 mm)				inch
input plug	multi-blade (US, UK, Europe, Australia, China)				

MECHANICAL DRAWING

units: mm



DC CORD



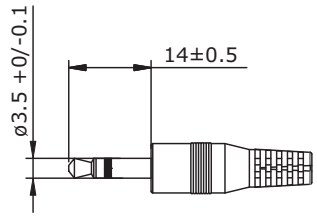
Black wire, white stripe: Positive

Ferrite core with one turns wire
12x20x7.3(018)

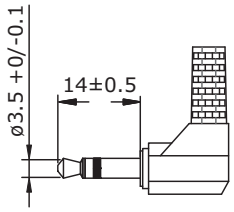
MODEL NO.	CABLE GAUGE	CORD LENGTH
EMSA120300	18 AWG	1530 ± 100
EMSA200200	20 AWG	1530 ± 100
EMSA240167	20 AWG	1530 ± 100

OUTPUT PLUG OPTIONS

3.5 mm Phono Plug



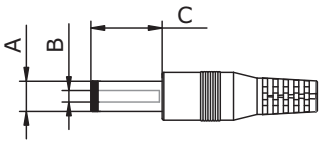
P1



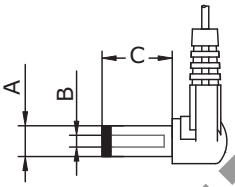
P1R

*Tip positive

Standard DC Plug



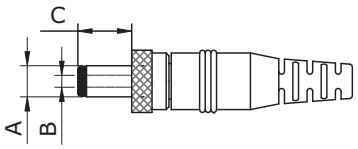
Standard PX



Right Angle PXR

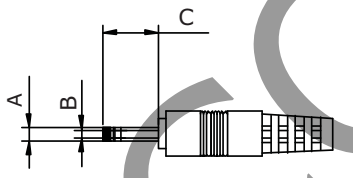
	A	B	C	Unit
P5/P5R	5.5	2.1	9.5	mm
P6/P6R	5.5	2.5	9.5	mm
P7/P7R	3.5	1.35	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

Locking DC Plug

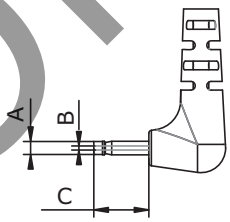


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

EIAJ Plugs

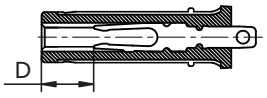


Standard PXX

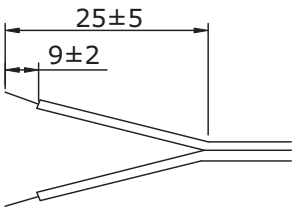


Right Angle PXXR

	EIAJ	A	B	C	D	Unit
P12/P12R	EIAJ-1	2.35	0.7	9.5	NA	mm
P13/P13R	EIAJ-2	4.0	1.7	9.5	5.0	mm
P14/P14R	EIAJ-3	4.75	1.7	9.5	5.0	mm



Stripped and Tinned



DC PLUG TYPE

ST

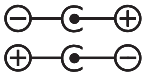
Stripped and Tinned

PXX X X

Plug Type

Plug Angle:
"Blank" = Standard
R = Right Angle

Plug Polarity:
"Blank" = N/A
P = Center Positive
N = Center Negative



*Contact CUI for additional output plug options.

REVISION HISTORY

rev.	description	date
1.0	initial release	06/21/2010
1.01	new template applied	08/08/2011
1.02	PSE safety approval added	09/07/2011
1.03	updated P7/P7R B dimension	03/23/2012
1.04	V-Infinity branding removed, safety and EMI/EMC data updated	08/21/2012

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

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