SERIES: SDI120B-U | **DESCRIPTION:** AC-DC POWER SUPPLY

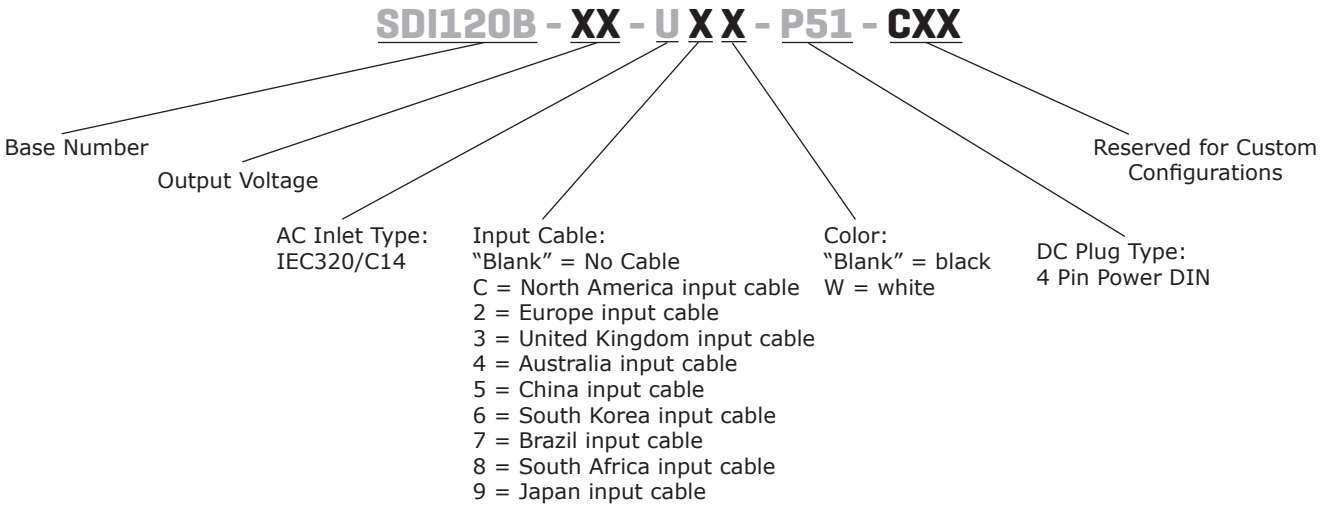
FEATURES

- level VI efficiency
- 120 W power
- universal input (90~264 Vac)
- over voltage, over current, short circuit, and over temperature protections
- UL/cUL, PSE, UKCA safety approvals
- certified to 62368-1 standards
- power factor correction
- -20 ~ 60 °C operation with derating
- 140.5 x 60 x 35 mm case size
- IEC320/C14 ac inlet
- custom designs available

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SDI120B-12-U	12	9	108	120	VI
SDI120B-15-U	15	8	120	150	VI
SDI120B-16-U	16	7.5	120	160	VI
SDI120B-19-U	19	6.3	120	190	VI
SDI120B-24-U	24	5	120	240	VI
SDI120B-48-U	48	2.5	120	480	VI
SDI120B-56-U	56	2.14	120	560	VI

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 47 µF low ESR electrolytic capacitors.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				1.6	A
inrush current	at 230 Vac, full load, 25°C, cold start			100	A
leakage current				3.5	mA
power factor correction	at 115 & 230 Vac, full load	0.9			
no load power consumption	at 115 & 230 Vac, no load			0.21	W

OUTPUT

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

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	latch off (50% load)			150	%
over current protection	auto recovery			180	%
short circuit protection	auto recovery				
over temperature protection	auto recovery				

SAFETY & COMPLIANCE

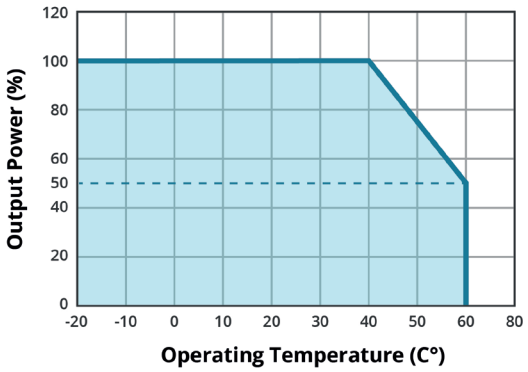
parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at for 1 minute, 10 mA max input to frame ground for 1 minute, 10 mA max		3,000 1,770		Vac
safety approvals	UL / CUL / PSE / UKCA				
EMI/EMC	CE / FCC (conduction & radiation Class B)				
MTBF	as per Telcordia SR-332, 25°C	300,000			hrs
RoHS	yes				

ENVIRONMENTAL

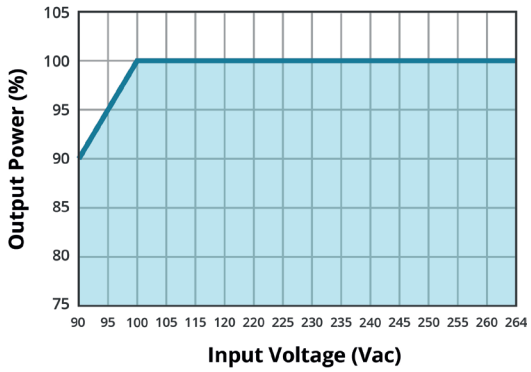
parameter	conditions/description	min	typ	max	units
operating temperature		-20		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

DERATING CURVES

TEMPERATURE DERATING CURVE



INPUT VOLTAGE DERATING CURVE

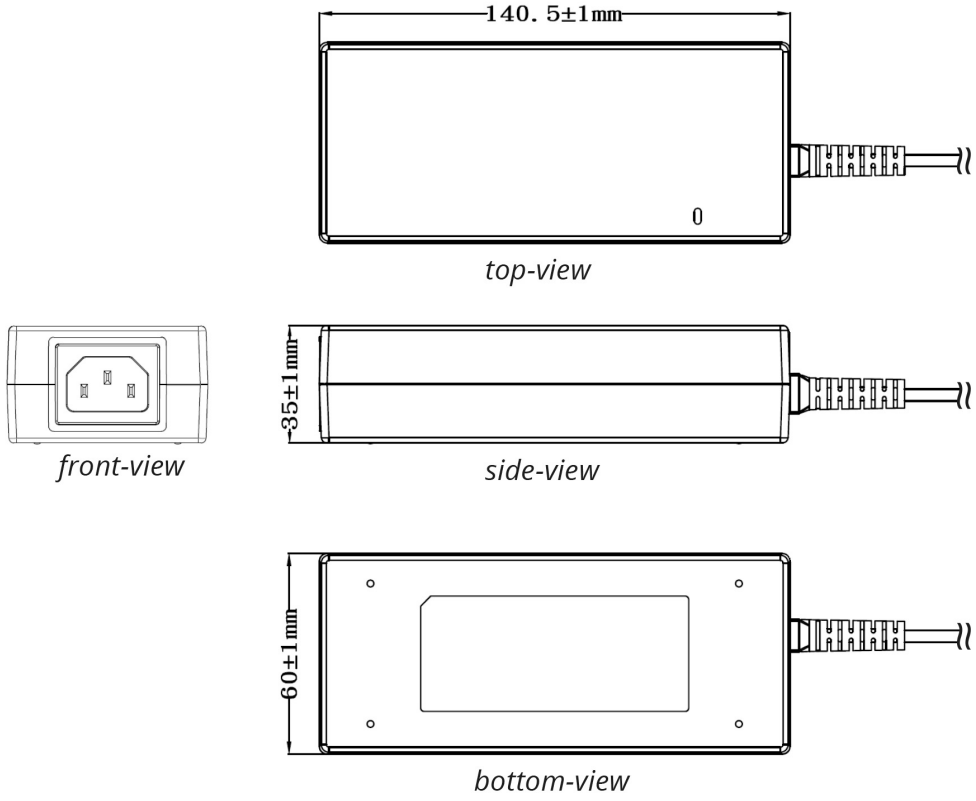


MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	140.5 x 60.0 x 35.0				mm
inlet plug	IEC320/C14				
weight			390		g

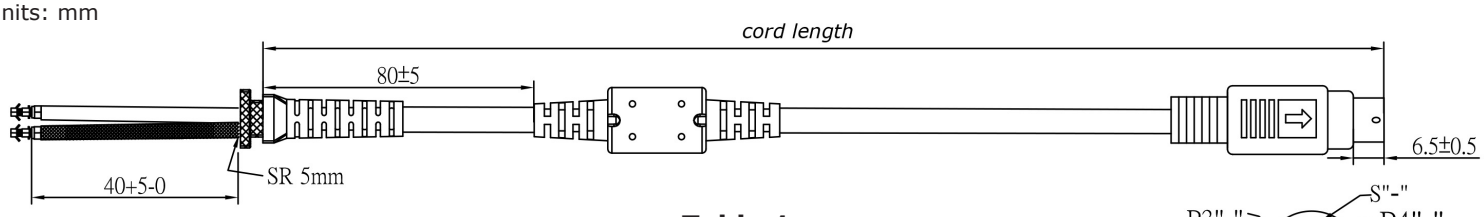
MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm



DC CORD

units: mm



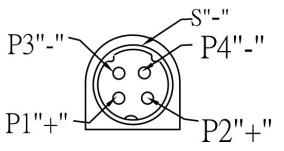
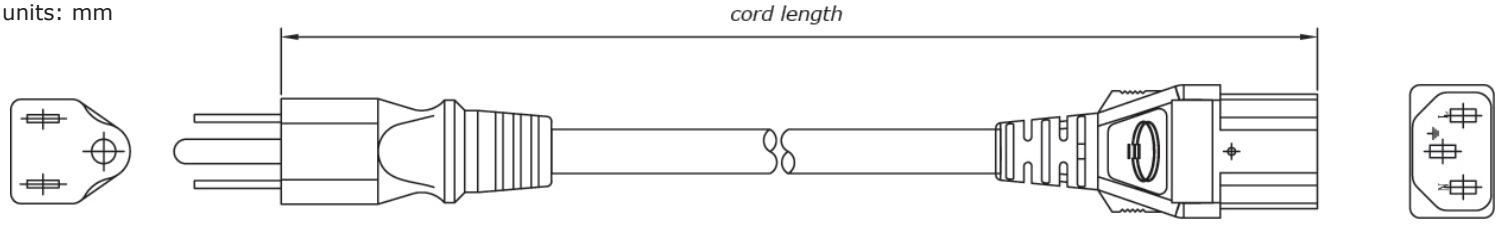


Table 1

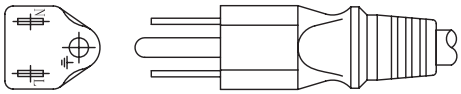
MODEL NO.	CABLE	CORD LENGTH
SDI120B-12-U	UL11352, 16 AWG	1,200 mm ±30
SDI120B-15-U	UL11352, 16 AWG	1,500 mm ±30
SDI120B-16-U	UL11352, 16 AWG	1,500 mm ±30
SDI120B-19-U	UL11352, 18 AWG	1,500 mm ±30
SDI120B-24-U	UL11352, 18 AWG	1,500 mm ±30
SDI120B-48-U	UL1185, 18 AWG	1,500 mm ±30
SDI120B-56-U	UL1185, 18 AWG	1,500 mm ±30

AC CORD

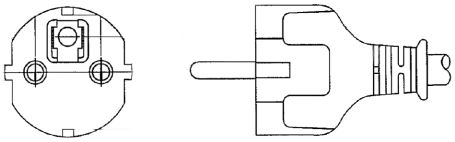
units: mm



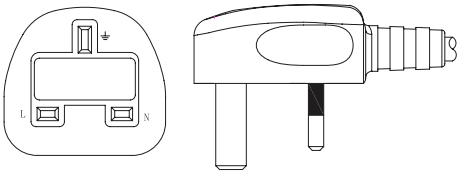
NORTH AMERICA



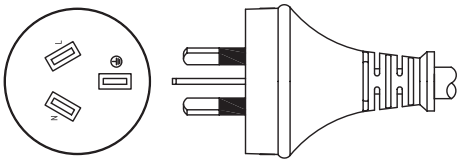
EUROPE



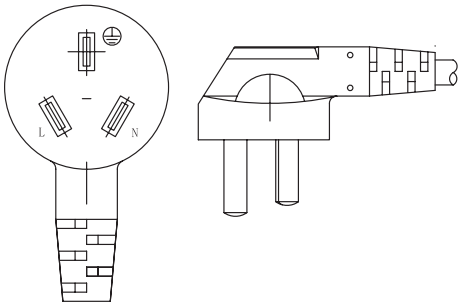
UNITED KINGDOM



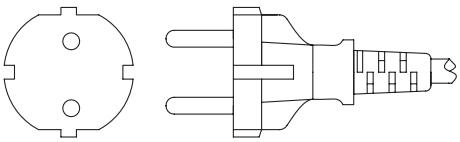
AUSTRALIA



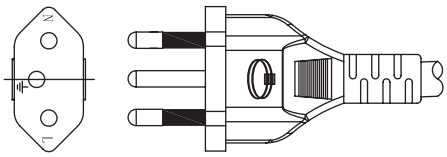
CHINA



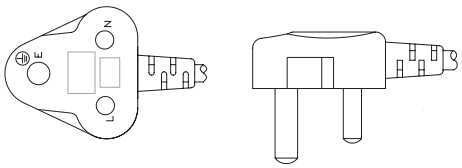
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

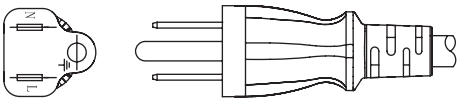


Table 2

AC INPUT	CORD LENGTH
North America	1,830 mm ±30
Europe	1,830 mm ±30
United Kingdom	1,830 mm ±30
Australia	1,830 mm ±30
China	1,830 mm ±30
South Korea	1,830 mm ±50
Brazil	1,830 mm ±30
South Africa	1,830 mm ±50
Japan	1,830 mm ±30

REVISION HISTORY

rev.	description	date
1.0	initial release	10/27/2023

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

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