SERIES: VSBU-120-D | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 120 W continuous power
- industry standard 3" x 5" footprint
- universal input 90~260 Vac
- dual output
- active power correction
- internal EMI filter
- no minimum load required
- input surge current, over voltage, over load, and over current protections
- efficiency 80%



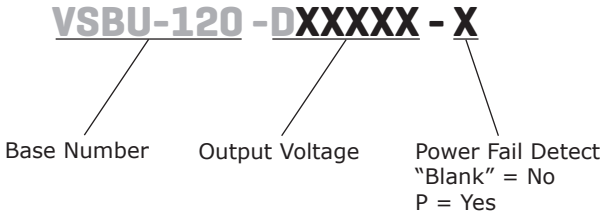
RoHS c UL us

MODEL

MODEL		output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency typ (%)
VSBU-120-D305	Vo1 Vo2	3.3 5	15 6	79.5 79.5	66 50	80 80
VSBU-120-D312	Vo1 Vo2	3.3 12	15 6	120 120	66 120	80 80
VSBU-120-D512	Vo1 Vo2	5 12	15 6	120 120	50 120	80 80
VSBU-120-D515	Vo1 Vo2	5 15	15 6	120 120	50 150	80 80
VSBU-120-D524A	Vo1 Vo2	5 24	15 3.5	120 120	50 240	80 80
VSBU-120-D524B	Vo1 Vo3	5 -24	15 2	120 120	50 -240	80 80
VSBU-120-D285	Vo1 Vo3	28 5	3.92 2	120 120	280 50	80 80

Notes: 1. * Discontinued model

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		260	Vac
frequency		47		63	Hz
current	at 115 Vac, full load at 230 Vac, full load			1.7 1.0	A A
inrush current	at 115 Vac, 25°C, full load, cold start at 230 Vac, 25°C, full load, cold start		30 65	37 75	A A
power factor correction	full load at 90 ~ 260 Vac	0.95	0.97	1.0	

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	full load		0.5	1	%
load regulation	at 230 Vac		3	5	%
temperature coefficient	all output	-0.04		0.04	%/°C
transient response	full load to half load at 100 Vac			4	ms
start-up	full load at 100 Vac	0.3	1	2	s
hold-up	full load at 110 Vac	16			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection		112		132	%
over current protection		110		150	%

SAFETY & COMPLIANCE

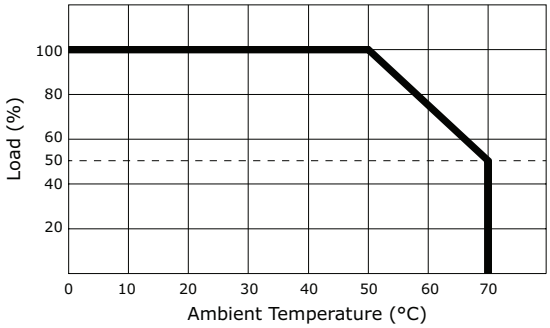
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary primary to earth ground	4,242 2,121			Vdc Vdc
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL 60950-1 2nd edition, EN 60950-1 2nd edition				
EMI/EMC	CISPR 22 class B, FCC part-15 class B				
leakage current	full load at 240 Vac		0.4	0.75	mA
RoHS compliant	yes				
MTBF	MIL-HDSK-217F, 25°C ambient	100,000			hrs

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing	5		95	%
storage humidity		0		75	%

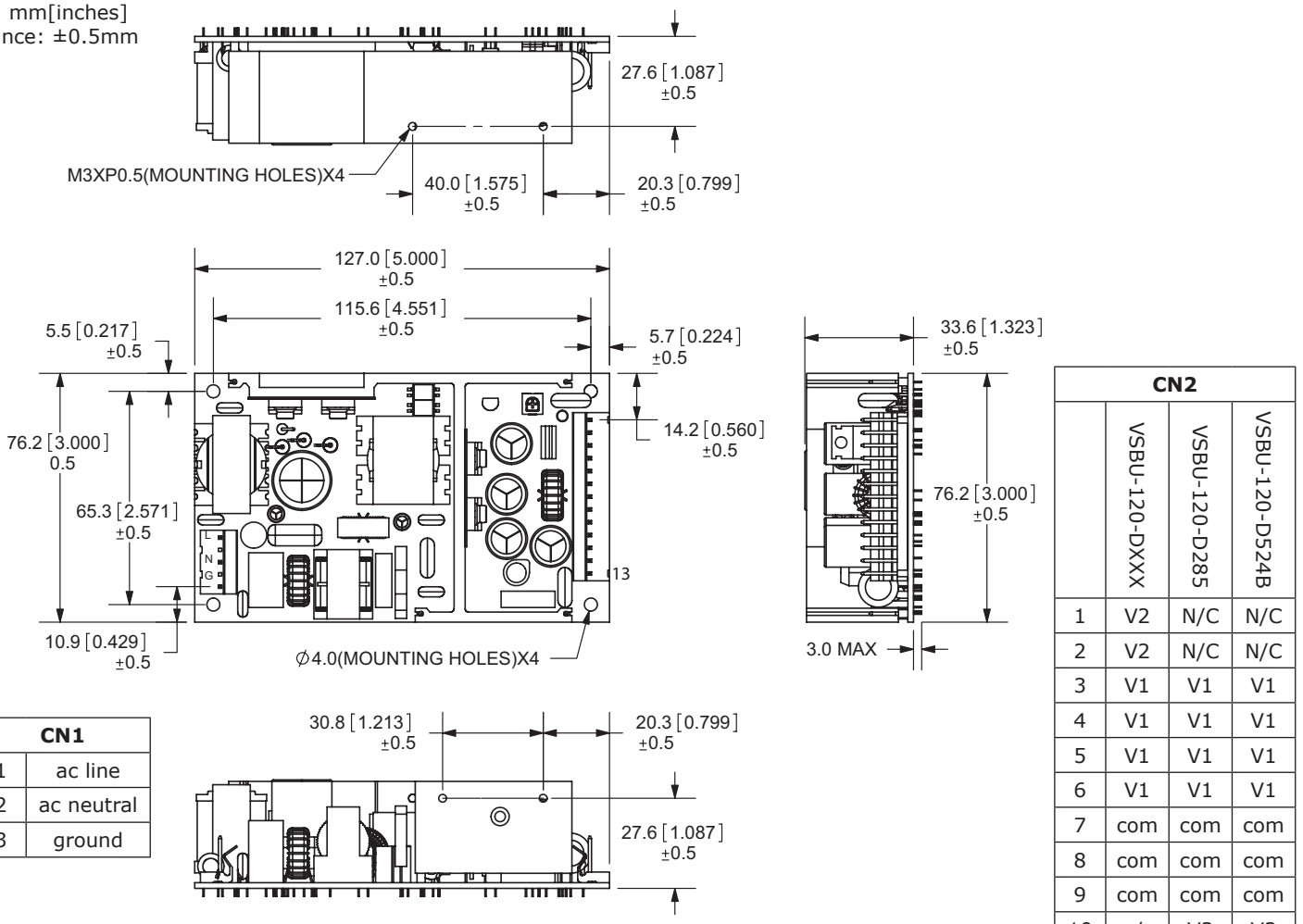
DERATING CURVES

output power vs. ambient temperature



MECHANICAL DRAWING

units: mm[inches]
tolerance: ±0.5mm



CN1	
1	ac line
2	ac neutral
3	ground

CN2			
	VSBU-120-DXXX	VSBU-120-D285	VSBU-120-D524B
1	V2	N/C	N/C
2	V2	N/C	N/C
3	V1	V1	V1
4	V1	V1	V1
5	V1	V1	V1
6	V1	V1	V1
7	com	com	com
8	com	com	com
9	com	com	com
10	n/c	V3	V3
11	com	com	com
12	com	com	com
13	n/c	n/c	n/c

*pin 13 for optional power fail detect

note:
1. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
2. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.

REVISION HISTORY

rev.	description	date
1.0	initial release	11/19/2010
1.01	applied new spec template	02/29/2012
1.02	corrected model number	04/23/2012
1.03	V-Infinity branding removed	08/14/2012
1.04	updated derating curve	02/12/2013
1.05	updated output connector part number	09/24/2020
1.06	updated safety marks and features	04/27/2021
1.07	discontinued model VSBU-120-D512-P	02/06/2023

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

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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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