

**SERIES:** VSUU-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 / 130-370 Vdc)
- dual output
- active power correction
- internal EMI filter
- no minimum load required
- class I
- efficiency 80%
- input surge current, over voltage, over load, and over current protections



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

**PART NUMBER KEY**
**VSUU-120 - DXXX - X**

Base Number

Output Voltage

Power Fail Detect  
"Blank" = No  
P = Yes

## INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		260	Vac
		130		370	Vdc
frequency		47		63	Hz
current	at 115 Vac, full load			1.7	A
	at 230 Vac, full load			1.0	A
inrush current	at 115 Vac, 25°C, full load, cold start		12	15	A
	at 230 Vac, 25°C, full load, cold start		26	30	A
power factor	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		%/°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	4,242			Vdc
	primary to earth ground	2,121			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				

## 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		5		95	%

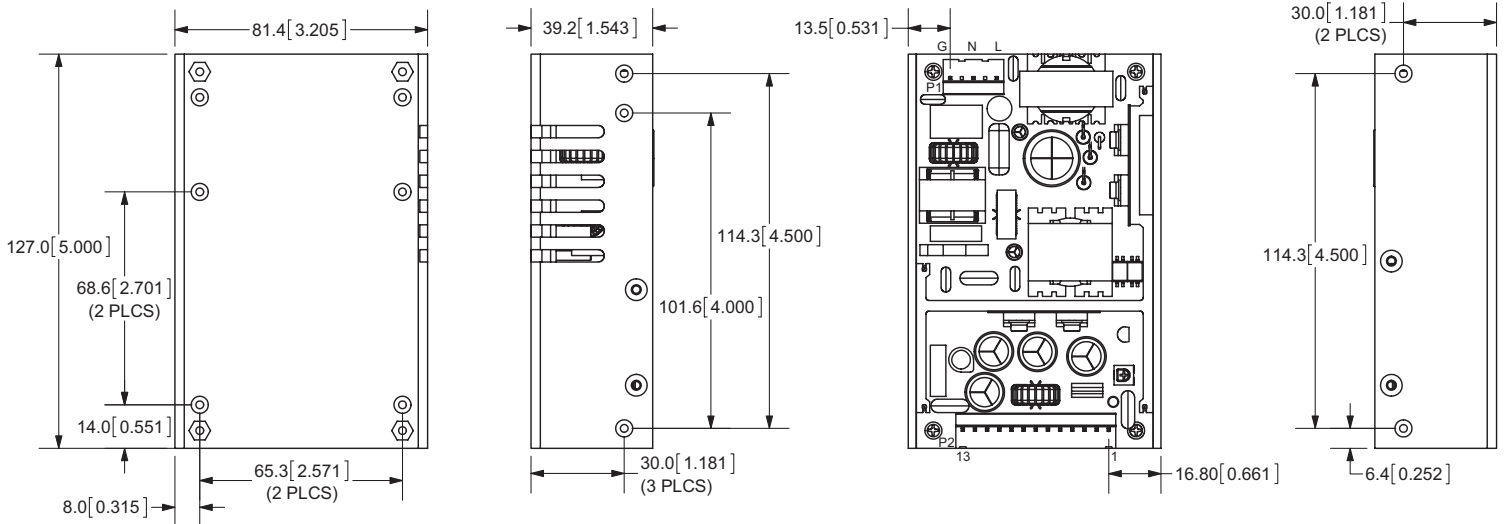
## DERATING CURVES

output power vs. ambient temperature



## MECHANICAL DRAWING

units: mm[inches]  
tolerance: ±0.5mm



- note:
1. Weight: 330~380 g (approx.)
  2. Input connector mates with Molex housing 09-50-3051 and Molex 2478 or 2578 series crimp terminal.
  3. Output connector mates with Molex housing 09-50-3131 and Molex 2478 or 2578 series crimp terminal.

CN2													
Model No.	1	2	3	4	5	6	7	8	9	10	11	12	13
VSUU-120-D524B	n/c	n/c	V1	V1	V1	V1	com	com	com	V2	com	com	n/c
VSUU-120-D285	n/c	n/c	V1	V1	V1	V1	com	com	com	V2	com	com	n/c
VSUU-120-DXXX	V2	V2	V1	V1	V1	V1	com	com	com	n/c	com	com	n/c

\*pin 13 for optional power fail detect

## REVISION HISTORY

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rev.	description	date
1.0	initial release	11/19/2010
1.01	new template applied	12/19/2011
1.02	V-Infinity branding removed	08/16/2012
1.03	updated derating curve	07/10/2018
1.04	company logo updated	10/02/2020
1.05	updated safety marks and features	04/27/2021

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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