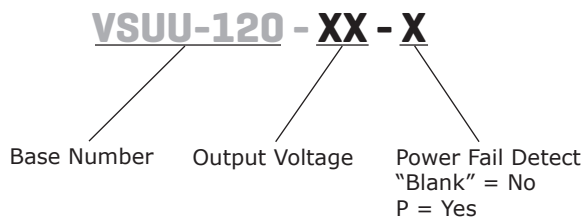



**SERIES: VSUU-120 | DESCRIPTION: AC-DC POWER SUPPLY**
**FEATURES**

- up to 120 W continuous power
- industry standard 3" x 5" footprint
- U-Frame
- universal input (90-260 Vac / 130-370 Vdc)
- single output from 3.3 to 48 V
- active power correction
- internal EMI filter
- no minimum load required
- UL/cUL and TUV safety approvals
- 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
	range (Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VSUU-120-3.3	3~5	22	100	66	80
VSUU-120-5	5~6	22	110	50	80
VSUU-120-7.5	6~9	19.16	115	75	80
VSUU-120-9	9~11	13.33	120	90	80
VSUU-120-12	11~13	10.9	120	120	80
VSUU-120-15	13~16	9.23	120	150	80
VSUU-120-18	16~21	7.5	120	180	80
VSUU-120-24	21~27	5.71	120	240	80
VSUU-120-30	27~33	4.44	120	300	80
VSUU-120-36	33~40	3.63	120	360	80
VSUU-120-48	40~50	3	120	480	80

**PART NUMBER KEY**


## 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 ~ 264 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

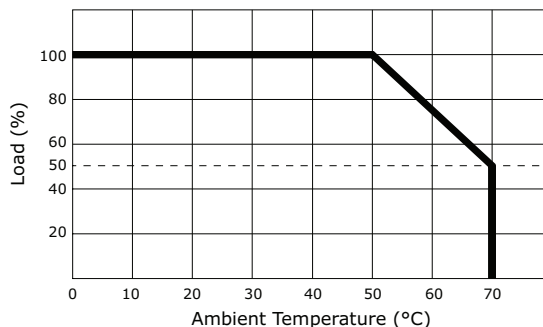
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary	4,242			Vdc
	primary to earth ground	2,121			Vdc
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL/cUL, TUV-Baurart, CE, CISPR-22 class B, FCC part 15 class B, CB				
EMI/EMC	CISPR 22 class 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	%

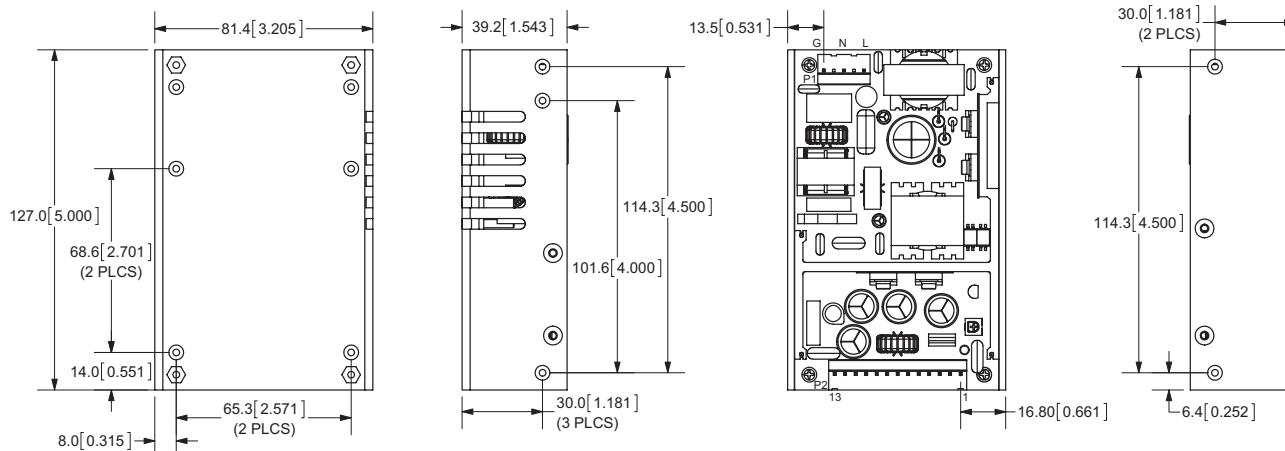
## DERATING CURVES

output power vs. ambient temperature



## MECHANICAL DRAWING

units: mm[inches]  
tolerance: ±0.5mm



CN2	
1	V1
2	V1
3	V1
4	V1
5	V1
6	V1
7	com
8	com
9	com
10	com
11	com
12	com
13	n/c

\*pin 13 for optional power fail detect

## REVISION HISTORY

rev.	description	date
1.0	initial release	11/19/2010
1.01	new template applied	12/19/2011
1.02	V-Infinity branding removed	08/22/2012
1.03	updated derating curve	02/07/2013

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



**CUI INC**<sup>®</sup>

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

CUI offers a two (2) 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.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.