



## SERIES: VSUU-120 | DESCRIPTION: AC-DC POWER SUPPLY

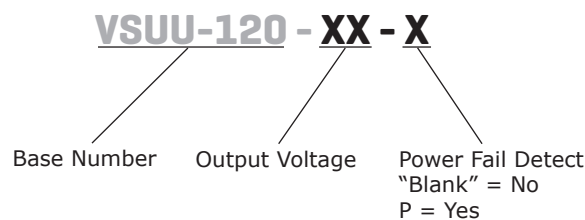
### FEATURES

- 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

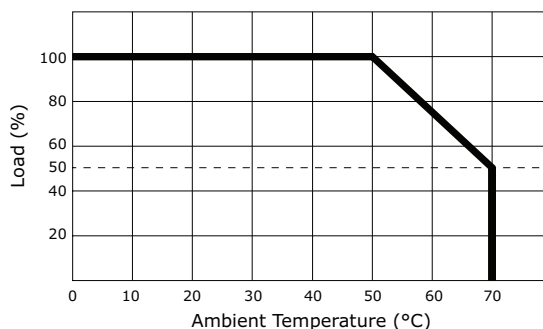
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary	4,242			Vdc
	primary to earth ground	2,121			Vdc
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL/cUL, TUV-Baurart, CE, CISPR-22 class B, FCC part 15 class B, CB				
EMI/EMC	CISPR 22 class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

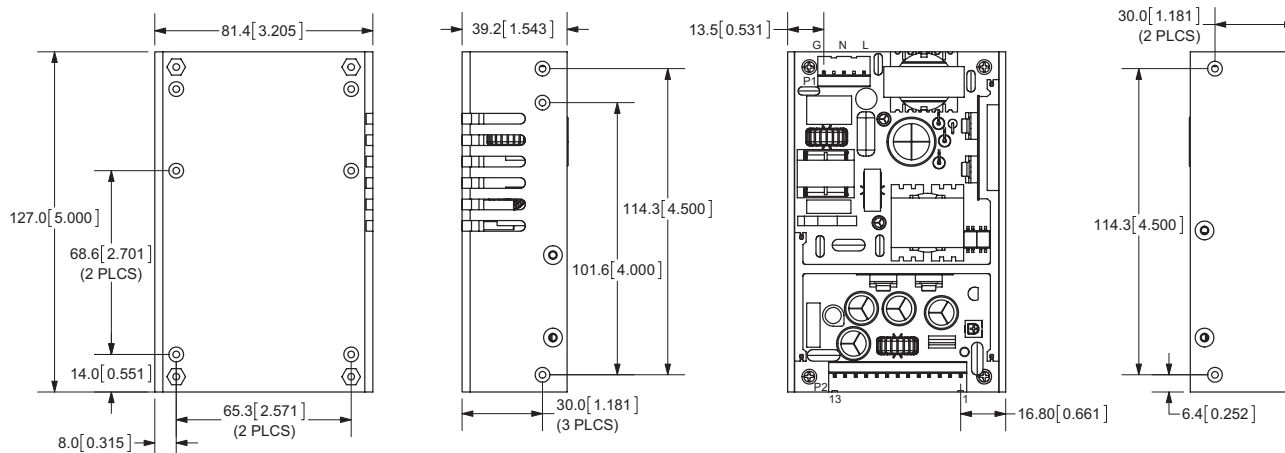
## DERATING CURVES

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.



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