CUI INC®

SERIES: VSUU-120-T | **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
- triple output
- 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 (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency typ (%)
VSUU-120-T312A	Vo1	3.3	15	120	66	80
	Vo2	12	6	120	120	80
	Vo3	-12	0.8	120	-120	80
VSUU-120-T312A	Vo1	3.3	15	120	66	80
	Vo2	12	6	120	120	80
	Vo3	12	0.8	120	120	80
VSUU-120-T125A	Vo1	5	15	120	50	80
	Vo2	12	6	120	120	80
	Vo3	-5	0.8	120	-50	80
VSUU-120-T125B	Vo1	5	15	120	50	80
	Vo2	12	6	120	150	80
	Vo3	5	0.8	120	50	80
VSUU-120-T512A	Vo1	5	15	120	50	80
	Vo2	12	6	120	120	80
	Vo3	-12	0.8	120	-120	80
VSUU-120-T512B	Vo1	5	15	120	50	80
	Vo2	12	6	120	120	80
	Vo3	12	0.8	120	120	80
VSUU-120-T515A	Vo1	5	15	120	50	80
	Vo2	15	6	120	150	80
	Vo3	-15	0.8	120	-150	80
VSUU-120-T515B	Vo1	5	15	120	50	80
	Vo2	15	6	120	150	80
	Vo3	15	0.8	120	150	80
VSUU-120-T524A	Vo1	5	15	120	50	80
	Vo2	24	3.5	120	240	80
	Vo3	-24	0.8	120	-240	80
VSUU-120-T524B	Vo1	5	15	120	50	80
	Vo2	24	3.5	120	240	80
	Vo3	24	0.8	120	240	80

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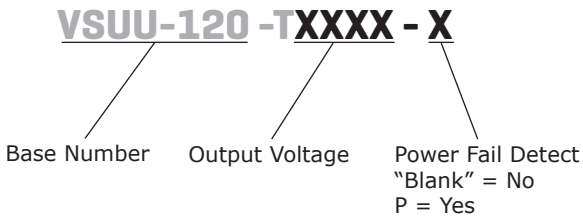
MODEL

		output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency typ (%)
VSBU-120-T305A	Vo1	5	15	120	50	80
	Vo2	24	3.5	120	240	80
	Vo3	-12	0.8	120	-120	80
VSBU-120-T305B	Vo1	5	15	120	50	80
	Vo2	24	3.5	120	240	80
	Vo3	12	0.8	120	120	80
VSBU-120-T3125A	Vo1	3.3	15	120	66	80
	Vo2	12	6	120	120	80
	Vo3	-5	0.8	120	-50	80
VSBU-120-T3125B	Vo1	3.3	15	120	66	80
	Vo2	12	6	120	120	80
	Vo3	5	0.8	120	50	80
VSBU-120-T510A	Vo1	5	15	120	50	80
	Vo2	10	6	120	100	80
	Vo3	-10	1	120	-100	80
VSBU-120-T510B	Vo1	5	15	120	50	80
	Vo2	10	6	120	100	80
	Vo3	10	1	120	100	80
VSBU-120-T3512A	Vo1	3.3	15	91.5	66	80
	Vo2	5	6	91.5	50	80
	Vo3	-12	1	91.5	-120	80
VSBU-120-T3512B	Vo1	3.3	15	91.5	66	80
	Vo2	5	6	91.5	50	80
	Vo3	12	1	91.5	120	80

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90 130		260 370	Vac Vdc
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		12 26	15 30	A 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

PROTECTION CIRCUITS

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

SAFETY & COMPLIANCE

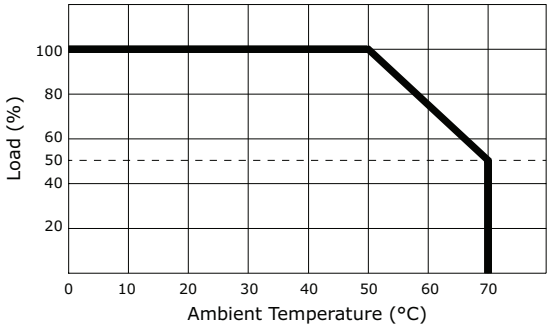
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary primary to earth ground	4,242 2,121			Vdc Vdc
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL 60950-1 2nd edition, TUV/GS (EN 60950-1 2nd edition)				
EMI/EMC	CISPR 22 class B, FCC part-15 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		5		95	%
storage humidity		5		95	%

DERATING CURVES

output power vs. ambient temperature

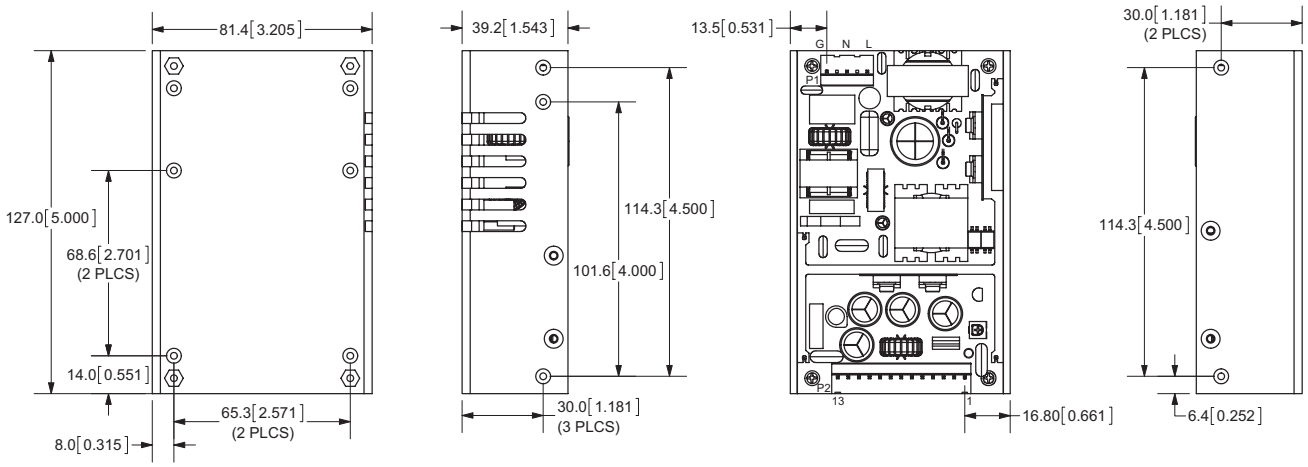


MECHANICAL DRAWING

units: mm[inches]
tolerance: ±0.5mm

CN2	
1	Vo2
2	Vo2
3	Vo1
4	Vo1
5	Vo1
6	Vo1
7	com
8	com
9	com
10	Vo3
11	com
12	com
13	n/c

*pin 13 for optional power fail detect



note:
1. Weight: 476~582 g (approx.)
2. Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal.

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	08/16/2012
1.03	updated derating curve	02/12/2013
1.04	updated spec	12/02/2014

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.

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.