

**SERIES:** VSBU-150 | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

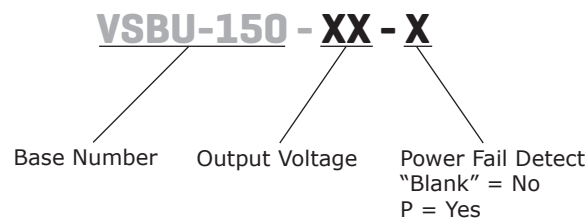
- up to 150 W combined power
- open frame
- active power factor correction
- class I insulation
- output voltage available from 9 to 48 V dc
- over voltage protection, input surge current protection, over load protection
- 88% efficiency



MODEL	output voltage	output current	output power	ripple and noise	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VSBU-150-9	9	16	144	90	88
VSBU-150-12*	12	12.5	150	120	88
VSBU-150-15	15	10	150	150	88
VSBU-150-18	18	8.33	150	180	88
VSBU-150-24	24	6.25	150	240	88
VSBU-150-30	30	5	150	300	88
VSBU-150-36	36	4.17	150	360	88
VSBU-150-48	48	3.13	150	480	88

Note: 1. \* Discontinued model with power fail detect (-P)

**PART NUMBER KEY**



**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 115 Vac, full load			2.0	A
	at 230 Vac, full load			0.8	A
inrush current	at 115 Vac, 25°C, full load, cold start			40	A
	at 230 Vac, 25°C, full load, cold start			100	A
power factor correction	at 240 Vac, full load	0.95		1.0	

**OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	full load		0.5	1	%
load regulation	at 230 Vac			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			3	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**

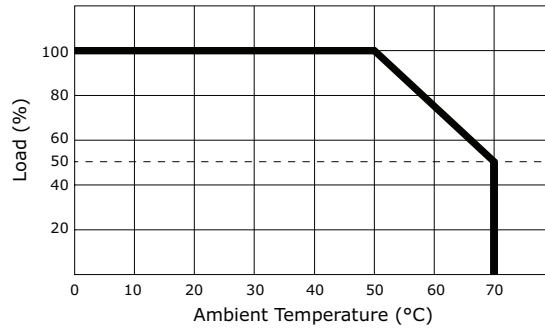
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary	4,242			Vdc
	primary to earth ground	2,837			Vdc
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL/cUL, CISPR-22 class B, FCC part 15 class B, CB				
EMI/EMC	CISPR 22 class B, FCC part-15 class B				
leakage current	full load at 240 Vac			0.75	mA
MTBF	MIL-HDBK-217F, 25°C ambient	100,000			hrs
RoHS	2011/65/EU				

**ENVIRONMENTAL**

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

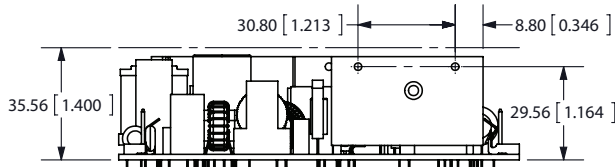
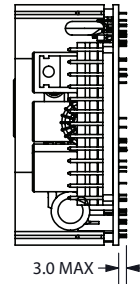
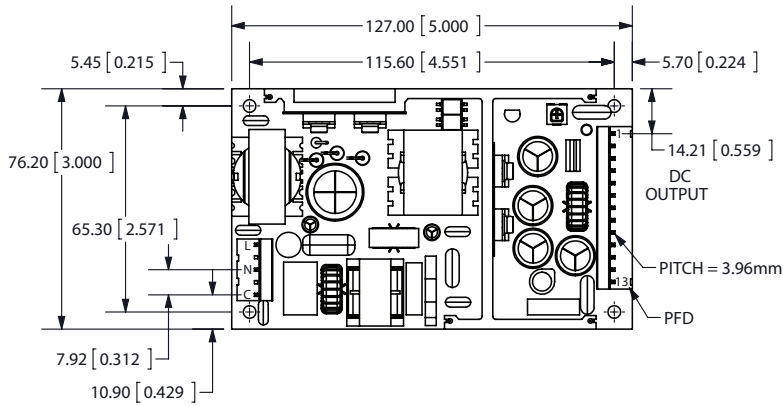
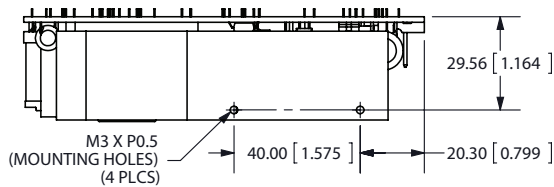
## DERATING CURVES

output power vs. ambient temperature



## MECHANICAL DRAWING

units: mm[inches]  
tolerance: ±0.5mm



CN1	
1	ac line
2	ac neutral
3	ground

note:

- Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal.
- Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal.

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	08/12/2011
1.02	V-Infinity branding removed	08/16/2012
1.03	updated drawing pinouts	01/15/2013
1.04	updated derating curve	02/12/2013
1.05	updated efficiencies	07/01/2013
1.06	updated recommended mating connectors, updated spec	05/22/2014
1.07	company logo updated	11/02/2020
1.08	updated safety marks and safety approvals	04/27/2021
1.09	discontinued model VSBU-150-12-P	01/04/2026

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



# CUI INC

a bel group

15575 SW Sequoia Pkwy #100  
Portland, OR 97224  
800.275.4899

Fax 503.612.2383  
Belfuse.com  
powersupport@belf.com

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