SERIES: VSBU-120C-T | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

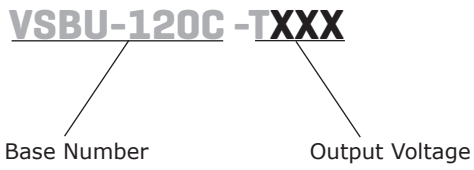
- universal input (90 ~ 264 Vac)
- up to 120 W continuous power
- industry standard 3" x 5" footprint
- active power factor correction
- IEC/EN/UL 62368 certified
- over voltage, over current, short circuit protection

MODEL

		output voltage[1] (Vdc)	output current min/max (A)		output power max (W)	ripple and noise[2] max (mVp-p)	efficiency typ (%)
VSBU-120C-T512A	Vo1	5.0	1.5	15.0	120	50	80
	Vo2	12.0	0.8	6.0		120	
	Vo3	-12.0	0.0	0.8		120	
VSBU-120C-T515A	Vo1	5.0	1.5	15.0	120	50	80
	Vo2	15.0	1.0	6.0		150	
	Vo3	-15.0	0.0	0.8		150	

Notes: 1. factory adjustable
2. Ripple is measured from peak to peak with a bandwidth limit of 20MHz measured with 0.1µF ceramic and 47µF electrolytic capacitors applied to the output.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 100 Vac, full load at 240 Vac, full load			1.75 0.72	A A
inrush current	at 100 Vac, 25°C, full load, cold start at 240 Vac, 25°C, full load, cold start			37 88	A 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, Vin = 100 ~ 120 Vac			1	%
load regulation	at 230 Vac, 10 ~ 90% load			5	%
temperature coefficient	full load 100 ~ 240 Vac			0.04	%/°C
transient response	full load to half load at 110 Vac			4	ms
start-up	full load at 100~240 Vac			3	s
hold-up	full load at 100 Vac	16			ms

PROTECTIONS

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

SAFETY & COMPLIANCE

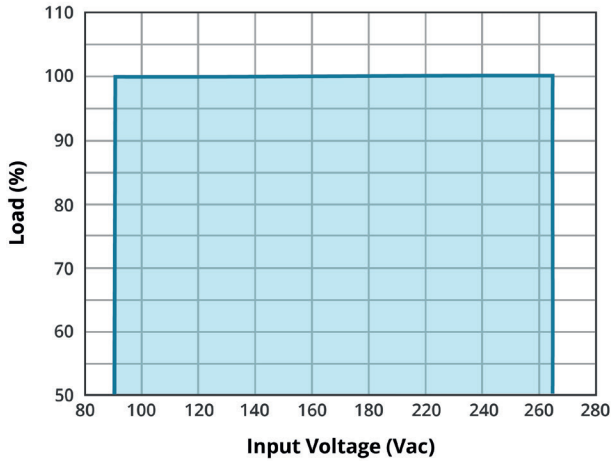
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary primary to earth ground	4,242 2,121			Vdc Vdc
safety class	class I				
safety approvals	certified to 62368: IEC/EN/UL UKCA				
EMI/EMC	CISPR-32/EN 55032:2012/AC:2013 Class B EN 61000-3-2:2014 EN 61000-3-3:2013				
leakage current	full load at 240 Vac			0.75	mA
RoHS compliant	yes				
MTBF	as per MIL-HDSK-217F, 25°C	100,000			hrs

ENVIRONMENTAL

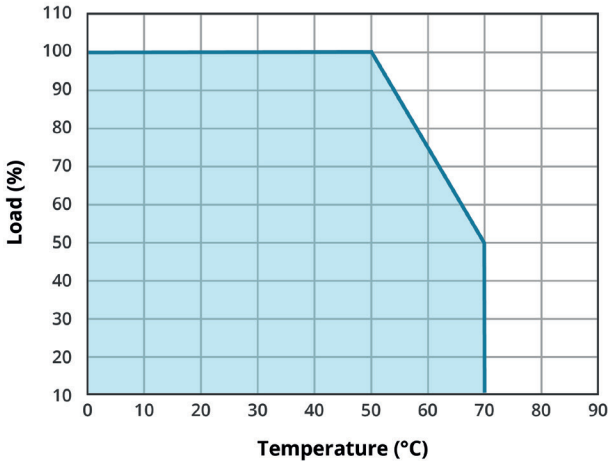
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	0		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing	0		95	%
storage humidity	non-condensing	0		95	%

DERATING CURVES

INPUT VOLTAGE DERATING CURVE



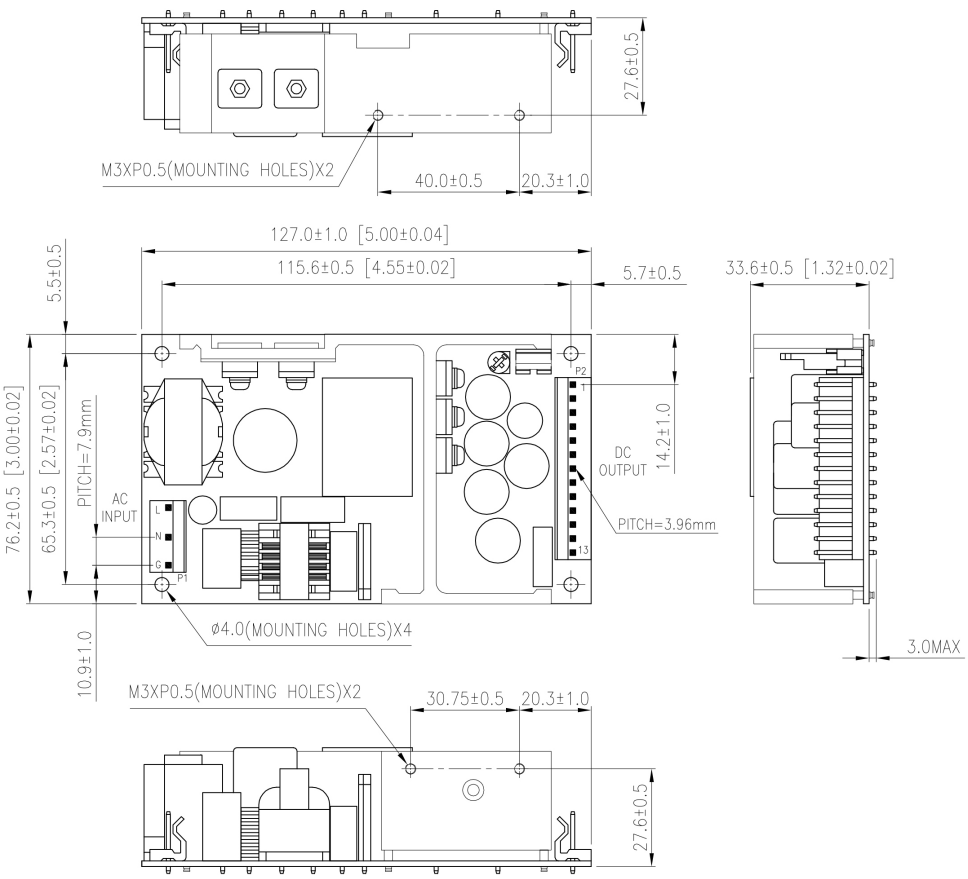
TEMPERATURE DERATING CURVE



MECHANICAL DRAWING

units: mm[inches]
tolerance: ±0.5mm

PIN	FUNCTION
1	V2
2	V2
3	V1
4	V1
5	V1
6	V1
7	com
8	com
9	com
10	V3
11	com
12	com
13	no connect



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

REVISION HISTORY

rev.	description	date
1.0	initial release	12/08/2020
1.01	mechanical drawing updated	08/16/2021
1.02	derating curves updated	02/07/2022
1.03	UKCA added to specification	02/23/2022

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

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