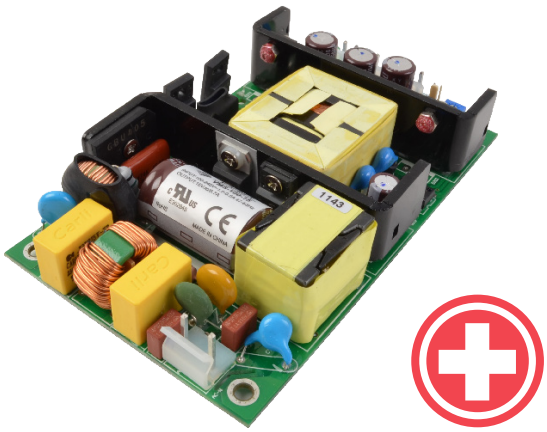
CUI INC
a bel group

SERIES: VMS-100 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

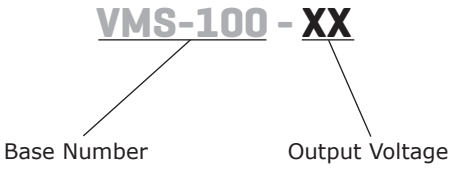
- up to 100 W continuous power
- industry standard 3" x 5" footprint
- universal input (90~264 Vac)
- single output from 5 to 48V
- no load power consumption < 0.5W
- over voltage and short circuit protections
- full medical approvals
- built-in active PFC function
- built-in remote sense function
- no minimum load required
- efficiency up to 91%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1,2] max (mVp-p)	efficiency typ (%)
VMS-100-5	5	20	100	100	85
VMS-100-9	9	11.2	100	90	88
VMS-100-12	12	8.4	100	120	89
VMS-100-15	15	6.7	100	150	89
VMS-100-18	18	5.6	100	180	90
VMS-100-24	24	4.2	100	240	91
VMS-100-28	28	3.6	100	280	91
VMS-100-36	36	2.8	100	360	91
VMS-100-48	48	2.1	100	480	91

Notes: 1. VMS-100-5: Measured at 20MHz, with 0.1µF ceramic and 220µF electrolytic capacitors
2. All other models: Measured at 20MHz, with 0.1µF ceramic and 10µF electrolytic capacitors

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
inrush current	at 240 Vac			80	A

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	low line to high line, full load		±0.5		%
load regulation	10% to 100% full load		±1		%
temperature coefficient			±0.05		%/°C
hold-up time			16		ms
adjustability				±5	%
switching frequency		80		100	kHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	recycle ac input to restart				
short circuit protection	hiccup mode, recovers automatically				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	5,656			Vdc
safety approvals	IEC 60601-1, EN 60601-1, UL 60601-1				
EMI/EMC	EN 55024, EN 61000-6-1, EN 61204-3, EN 60601-1-2, EN 61000-3-2 Class (A, B, C, D), EN 61000-3-3, EN 55011 Class B, EN 55022 Class B, FCC Part 15 Class B				
leakage current				0.3	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217F, GB, at 25°C, 115 Vac	200,000			hrs

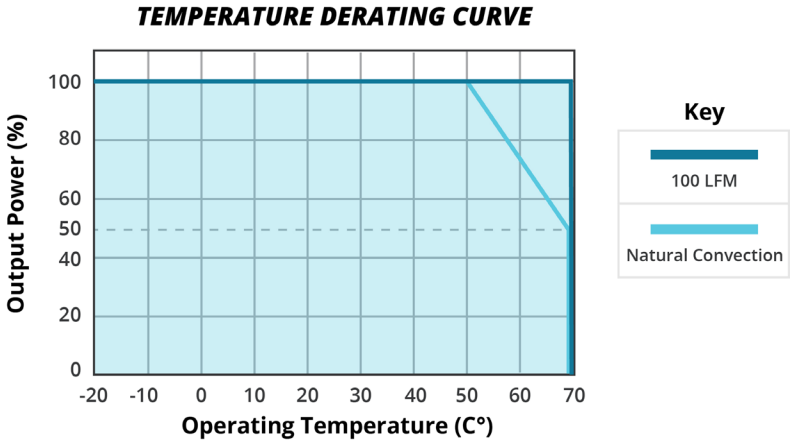
ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-20		70	°C
storage temperature		-20		85	°C
operating humidity	non-condensing			93	%

MECHANICAL

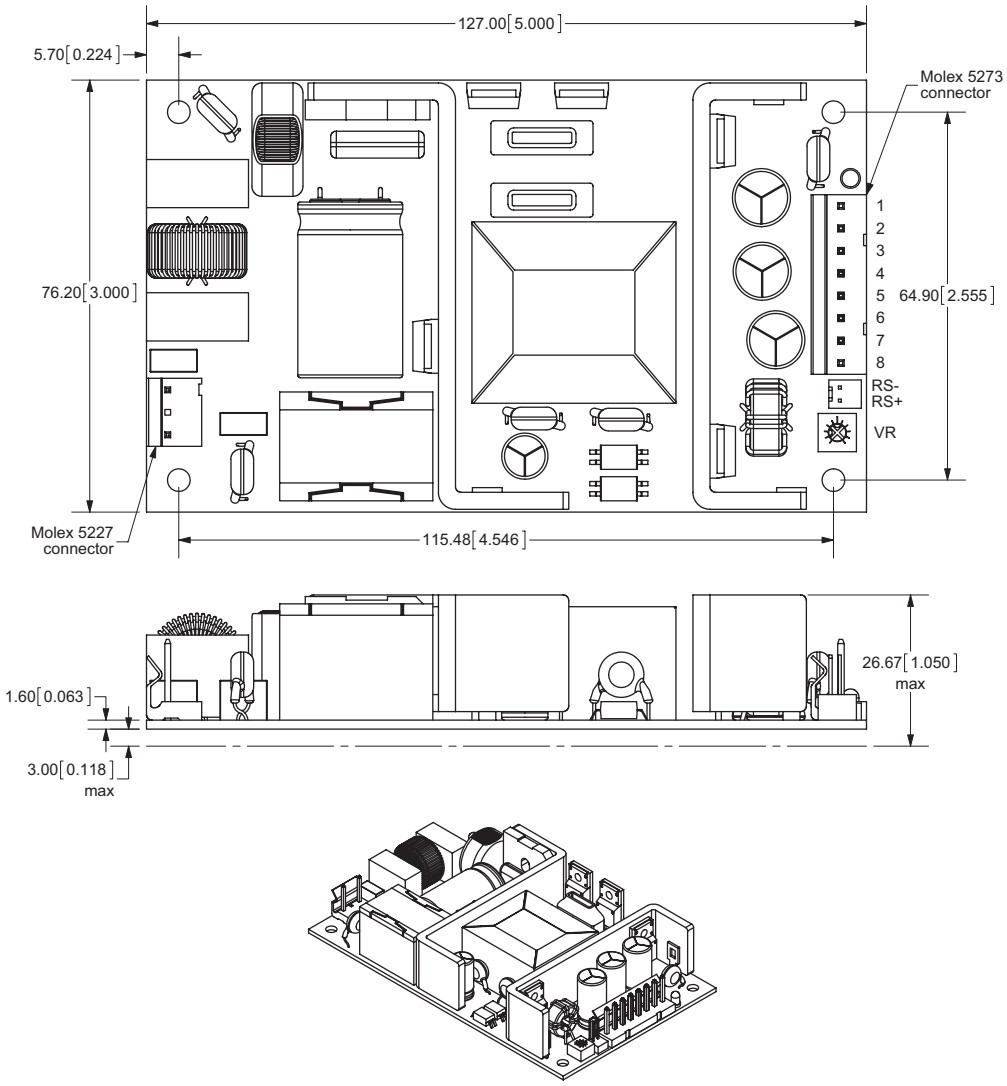
parameter	conditions/description	min	typ	max	units
dimensions	127.00 x 76.20 x 26.67 (5.00 x 3.00 x 1.05 inch)				mm
weight				270	g
cooling method	free air convection (see derating curves below)				

DERATING CURVES



MECHANICAL DRAWING

units: mm [inch]
tolerance: mm: ±0.5
inch: ±0.02



CN1	
1	AC Line
2	No pin
3	AC Neutral

CN2	
1	-Vo
2	-Vo
3	-Vo
4	-Vo
5	+Vo
6	+Vo
7	+Vo
8	+Vo

CN3	
RS-	Remote Voltage Sense -
RS+	Remote Voltage Sense +

Note: 1. All specifications measured at 25°C, 115/230Vac input voltage, and 75% load unless otherwise noted.

REVISION HISTORY

rev.	description	date
1.0	initial release	11/03/2011
1.01	V-Infinity branding removed	08/22/2012
1.02	updated spec	07/22/2013
1.03	company logo updated	12/21/2020
1.04	derating curve updated	05/06/2021

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

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