

SERIES: VMS-120 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

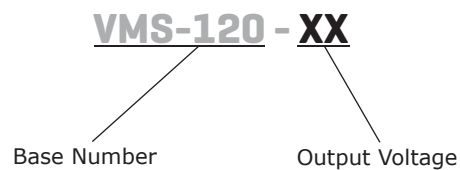
- up to 120 W continuous power
- universal input (90~260 Vac)
- single output from 5~36 V
- no minimum load required
- over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 88%



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency
	(Vdc)	(A)	(W)	(mVp-p)	typ (%)
VMS-120-5	5	20	120	50	88
VMS-120-9	9	13.33	120	90	88
VMS-120-12	12	10	120	120	88
VMS-120-15	15	8	120	150	88
VMS-120-18	18	6.66	120	180	88
VMS-120-24	24	5	120	240	88
VMS-120-30	30	4	120	300	88
VMS-120-36	36	3.33	120	360	88

Notes: 1. Measured at 20MHz, with 0.1μF ceramic and 47μF electrolytic capacitors

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		260	Vac
frequency		47		63	Hz
input current	at 115 Vac, full load at 230 Vac, full load			1.7 0.8	A
inrush current	at 115 Vac, full load, cool start at 25 °C at 230 Vac, full load, cool start at 25 °C		48 58	54 63	A

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	full load		±0.5	±1	%
load regulation	at 230 Vac		±3	±5	%
hold-up time	at 110 Vac, full load	16			ms

PROTECTIONS

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

SAFETY & COMPLIANCE

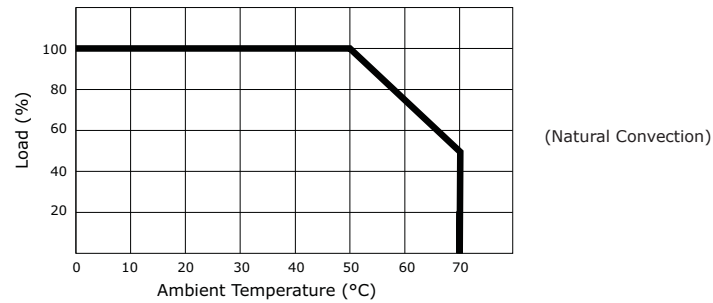
parameter	conditions/description	min	typ	max	units
isolation voltage	input to output (for 60 seconds, 10mA): input to ground (for 60 seconds, 10mA):	5,656 2,828			Vdc
insulation resistance	at 500 Vdc	50			MΩ
safety approvals	IEC 60601-1, EN 60601-1, UL 60601-1				
EMI/EMC	EN 55011 Class B, CISPR 11 Class B, FCC Part 15 Class B, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-(2, 3, 4, 5, 6, 8, 11)				
leakage current				0.1	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217-F, at 25°C, nominal load	100,000			hours

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	derating from 50~70°C	0		70	°C
storage temperature		-40		85	°C
operating humidity				95	%
storage humidity				75	%

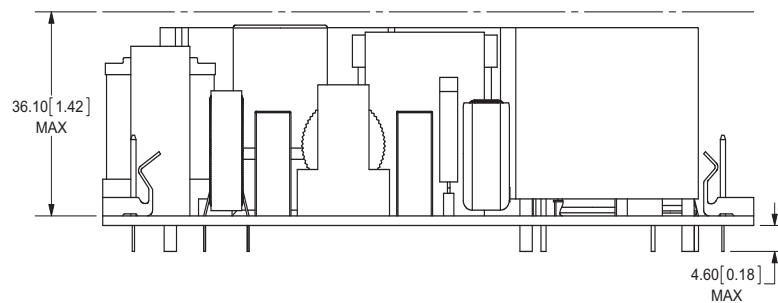
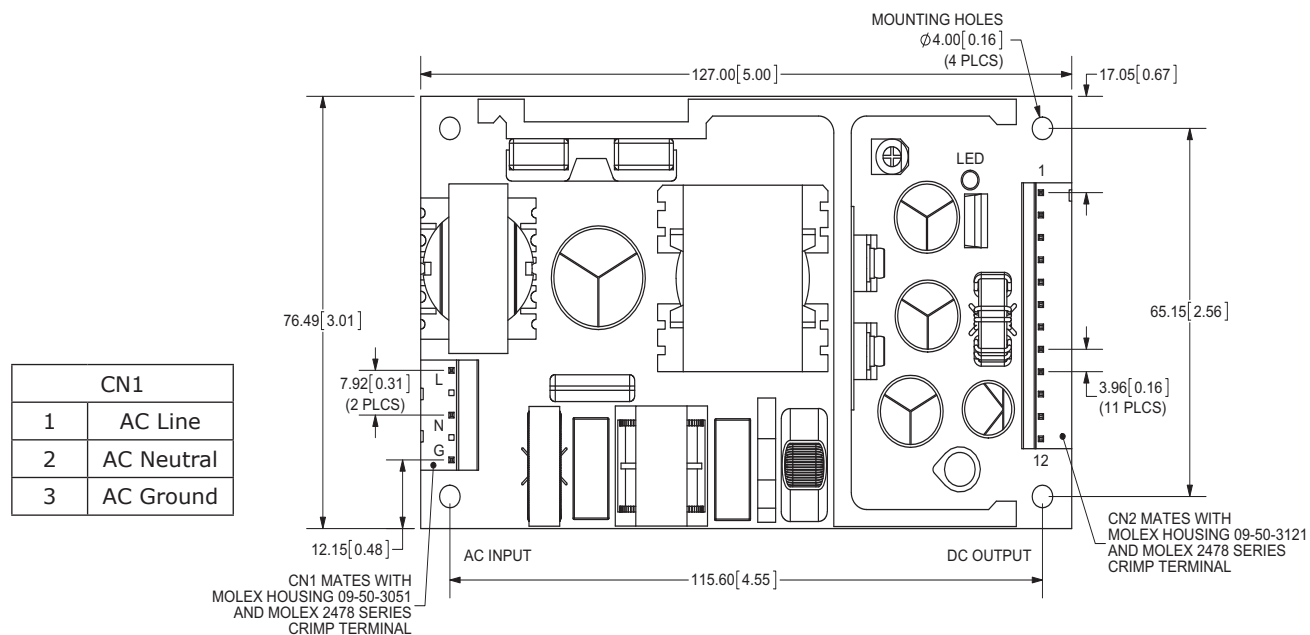
DERATING CURVES

output power vs. ambient temperature



MECHANICAL DRAWING

units: mm[in]

TOLERANCE: mm: ± 0.5 inch: ± 0.02 

REVISION HISTORY

rev.	description	date
1.0	initial release	09/22/2011
1.01	V-Infinity branding removed	08/22/2012

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



CUI INC®

Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

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.