SERIES: VGS-75 | **DESCRIPTION:** AC-DC POWER SUPPLY

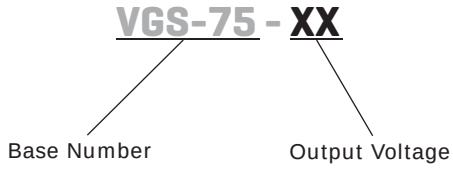
FEATURES

- up to 77 W continuous power
- compact footprint
- universal input (88~264 Vac / 125~373 Vdc)
- single output from 3.3 to 48 V
- over voltage, over load, and short circuit protections
- UL/cUL and TUV safety approvals
- long life electrolytic capacitors
- no load power consumption < 0.5 W
- efficiency 90%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency (%)
VGS-75-3.3	3.3	15	49.5	100	73
VGS-75-5	5	15	75	100	81
VGS-75-12	12	6	75	120	87
VGS-75-15	15	5	75	120	87
VGS-75-24	24	3.2	76.8	120	88
VGS-75-48	48	1.6	76.8	200	90

PART NUMBER KEY



INPUT

parameter	conditions/description	min	nom	max	units
voltage range		88 125		264 373	Vac Vdc
frequency range		50		60	Hz
current	at 115 Vac, cold start at 230 Vac, cold start			2 1	A A
inrush current	at 230 Vac, full load, cold start			40	A

OUTPUT

parameter	conditions/description	min	nom	max	units
voltage adjust			±10		
voltage tolerance	3.3 V models 5 V models all other models		±3 ±2 ±1		% % %
line regulation	low line to high line		±0.5		%
load regulation	3.3 V models 5 V models all other models		±2.0 ±1.0 ±0.5		% % %
start-up time	at 115 Vac, cold start at 230 Vac, cold start		1.0 0.8		s s
rise time	at 115 Vac, cold start at 230 Vac, cold start		65 50		ms ms
hold-up time	at 115 Vac, cold start at 230 Vac, cold start	10 32			ms ms

PROTECTIONS

parameter	conditions/description	min	nom	max	units
over load	Hiccup mode, auto recovery			110	%
over voltage	latch off mode	115		150	%
short circuit	continuous				

SAFETY & COMPLIANCE

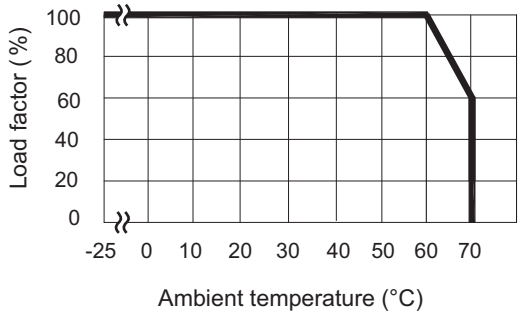
parameter	conditions/description	min	nom	max	units
isolation voltage	input to output: input to case: output to case:	4,242 2,121 707			Vdc Vdc Vdc
safety approvals	UL 60950-1 / TUV EN 60950-1				
EMI/EMC	EN 55022 : 1998+A1 : 2000+A2 : 2003 Class B, EN 61000-3-2 : 2000+A2 : 2005 Class A, EN 61000-3-3 : 1995+A1 : 2001, EN 61204-3 : 2000 EN 50204 1998+A1 : 2001+A2 : 2003 light industry level, criteria A				
leakage current	measured per IEC 60950-1, paragraph 5.1, test voltage of 240 Vac/60 Hz			2	mA
RoHS compliant	yes				
MTBF	at 230 Vac, MIL-HDBK-217F 25 °C ambient	620,300			hrs

ENVIRONMENTAL

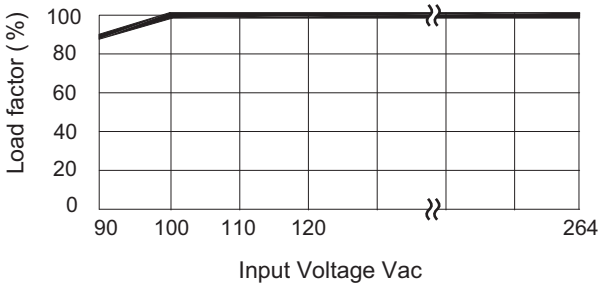
parameter	conditions/description	min	nom	max	units
operating temperature	see derating curve	-20		70	°C
storage temperature	see derating curve	-40		85	°C
relative humidity	non-condensing operating	20		90	%
temperature coefficient	(0 ~ 50°C)		0.3		%/°C
vibration	(10 ~ 500 Hz, 1 hour per axis, 3 hours total)		5		Grms

DERATING CURVES

Load vs. Temp



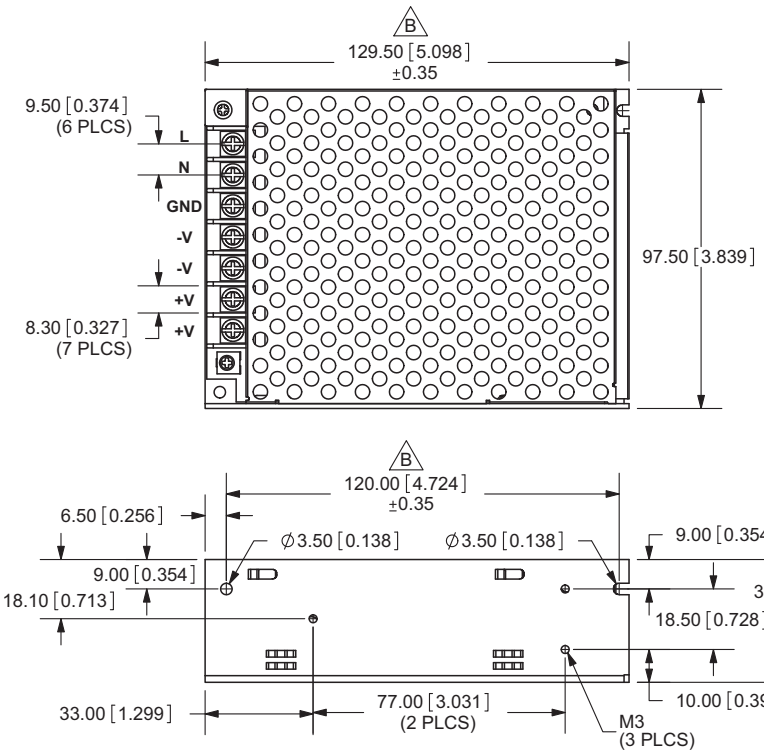
Load vs. Input Voltage

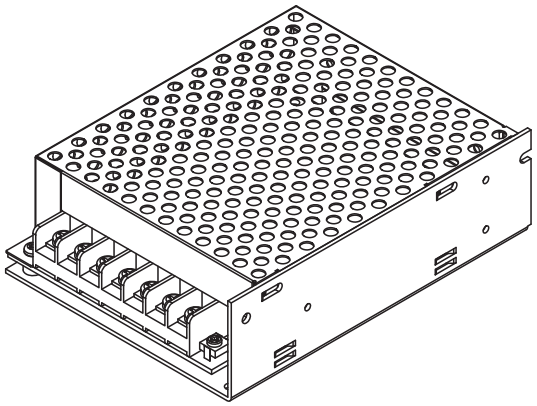


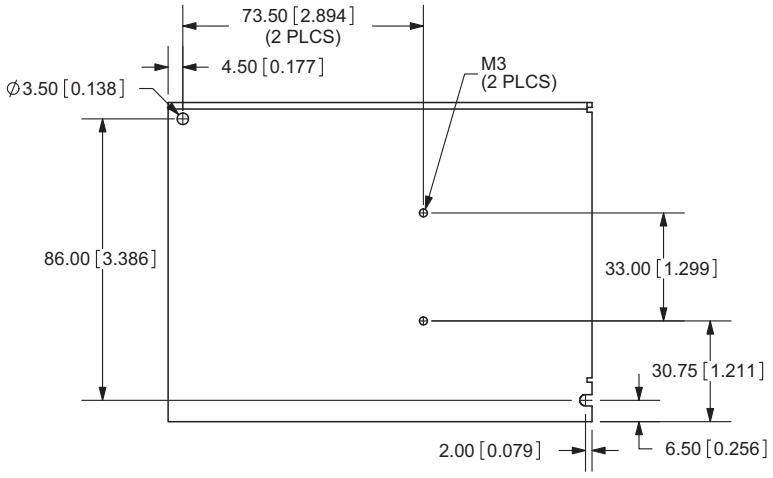
MECHANICAL DRAWING

Note:
terminal block screws #6-32 (7 PLCS)

Tolerance: ±0.3mm unless otherwise specified







REVISION HISTORY

rev.	description	date
1.0	initial release	08/12/2011
1.01	V-Infinity branding removed	08/17/2012

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

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