

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

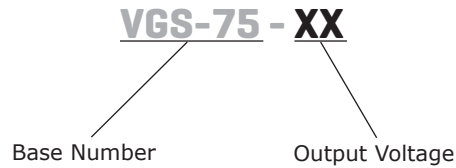
**FEATURES**

- up to 76.8 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
- operation high temperature up to 70°C
- long life electrolytic capacitors
- no load power consumption <0.5 W
- efficiency up to 90%



MODEL	output voltage	output current	output power	ripple and noise	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	(%)
VGS-75-3.3	3.3	15	49.5	150	79
VGS-75-5	5	15	75	150	83
VGS-75-12	12	6	72	150	87
VGS-75-15	15	5	75	150	87
VGS-75-24	24	3.2	76.8	150	88
VGS-75-48	48	1.6	76.8	200	90

**PART NUMBER KEY**



**INPUT**

parameter	conditions/description	min	typ	max	units
voltage range	withstand 300 Vac surge for 5 seconds without damage	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
leakage current	at 230 Vac			2	mA

**OUTPUT**

parameter	conditions/description	min	typ	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	from 0% to full load 3.3 V models 5 V models all other models		±3.0 ±2.0 ±0.5		% % %
rise time	at 115/230 Vac, full load		80		ms
hold-up time	at 115 Vac, cold start at 230 Vac, cold start	10 32			ms ms

**PROTECTIONS**

parameter	conditions/description	min	typ	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	typ	max	units
isolation voltage	input to output: input to frame ground: output to frame ground:	4,242 2,121 707			Vdc Vdc Vdc
insulation resistance	input to output, input to frame ground, output to frame ground at 500 Vdc	100			MΩ
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				
RoHS compliant	2011/65/EU				
MTBF	as per MIL-HDBK-217F, 25°C	351,000			hrs

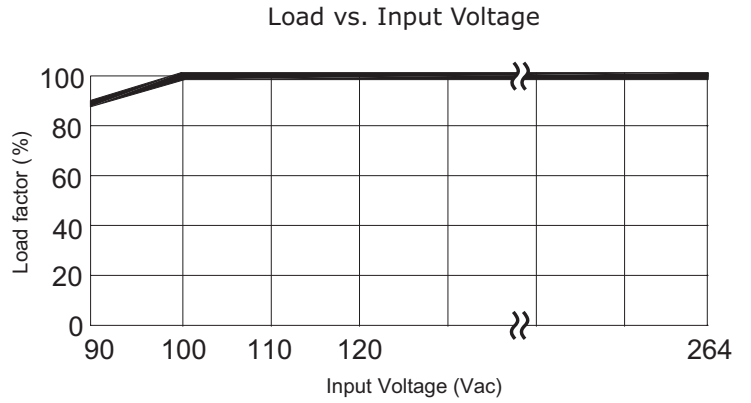
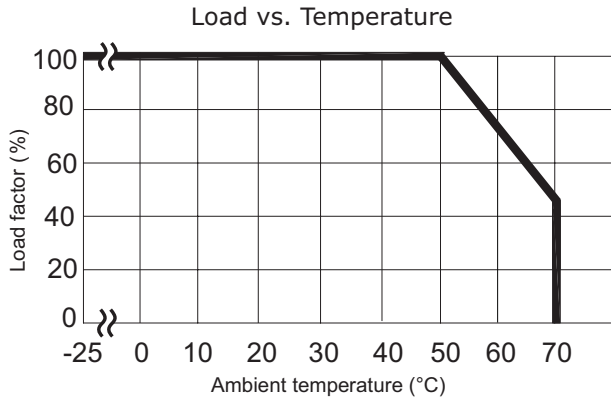
**ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-25		70	°C
storage temperature	see derating curve	-40		85	°C
operating humidity	non-condensing	20		90	%

## ENVIRONMENTAL (CONTINUED)

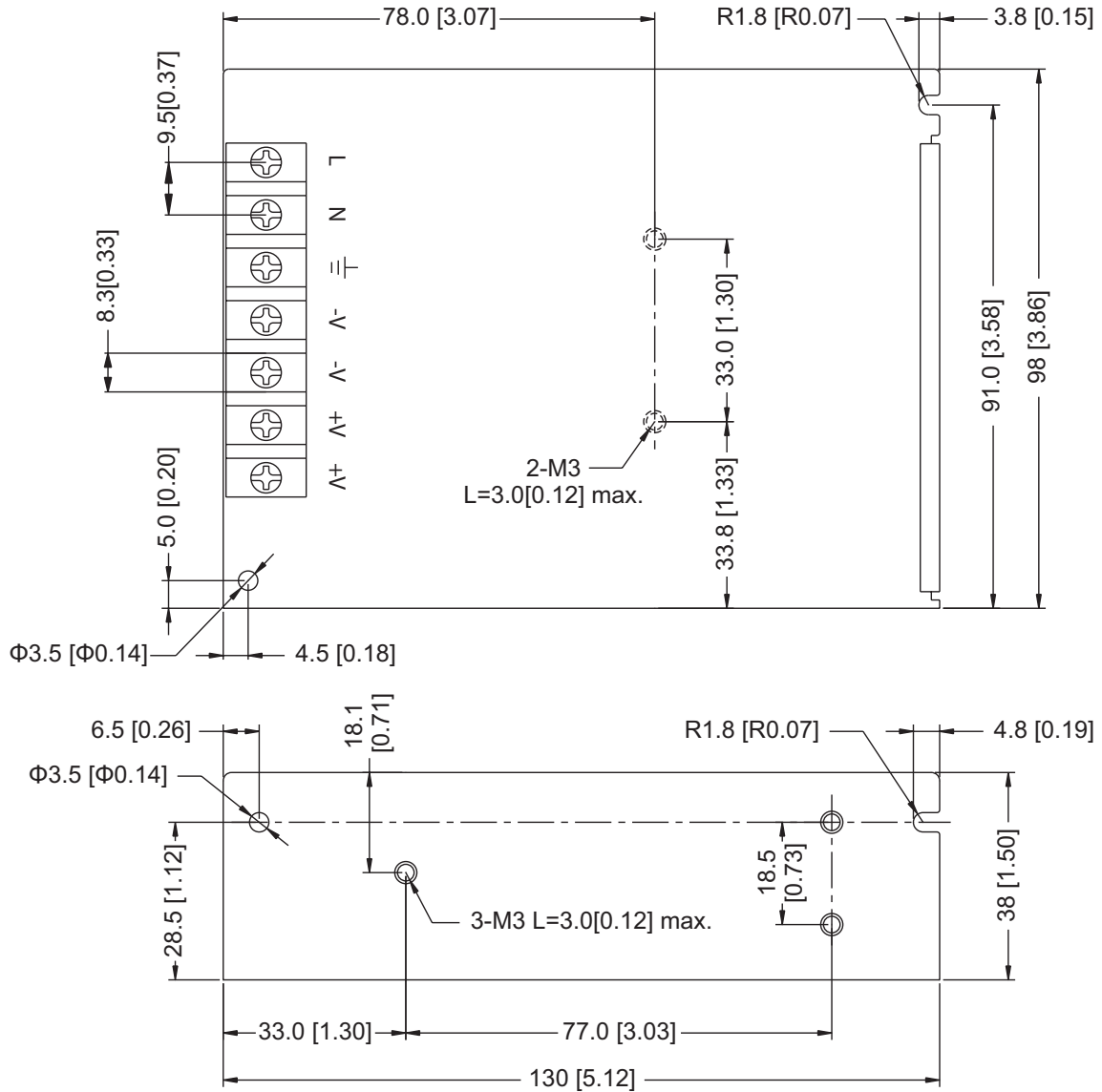
parameter	conditions/description	min	typ	max	units
storage humidity	non-condensing	10		95	%
temperature coefficient	(0 ~ 50°C)		±0.3		%/°C
vibration	(10 ~ 500 Hz, 1 hour per axis, 3 hours total)		5		Grms

## DERATING CURVES



## MECHANICAL DRAWING

units: mm [inches]



## REVISION HISTORY

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<b>rev.</b>	<b>description</b>	<b>date</b>
1.0	initial release	08/12/2011
1.01	V-Infinity branding removed	08/17/2012
1.02	updated datasheet	06/07/2016

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



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