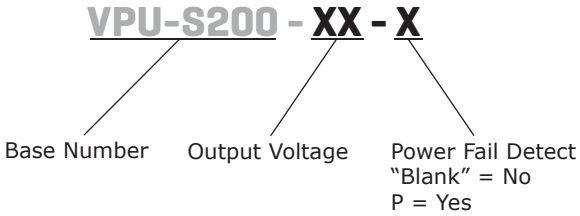
SERIES: VPU-S200 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 200 W continuous power
- U-Frame
- universal input (85-264 Vac / 120-340 Vdc)
- 12V fan drive
- single output from 3.3 to 48 V
- active power correction
- remote on/off
- power good signal
- remote sense
- short circuit, over voltage, over load, and over current protections
- UL/cUL and TUV safety approvals
- efficiency up to 81%

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency typ (%)
VPU-S200-3.3	3.3	30	73	60	75
VPU-S200-5	5	30	150	60	75
VPU-S200-12	12	16.7	200	120	75
VPU-S200-15	15	13.3	200	150	78
VPU-S200-24	24	8.3	200	240	81
VPU-S200-36	36	5.5	200	360	81
VPU-S200-48	48	4.2	200	480	81

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		85 120		264 340	Vac Vdc
frequency		47		63	Hz
current	at 115 Vac, full load at 230 Vac, full load			1.4 0.7	A A
inrush current	at 115 Vac, 25°C, full load, cold start at 230 Vac, 25°C, full load, cold start			20 40	A A
power factor	at 100 Vac, full load at 200 Vac, full load		.99 .95		

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	full load		0.5	1	%
load regulation	at 230 Vac		3	5	%
temperature coefficient	all output		±0.05		%/°C
transient response	full load to half load at 100 Vac			4	ms
adjustability	Adjustable with built-in trim pot			±10	%
switching frequency			100		KHz
start-up time	full load at 100 Vac			0.5	s
hold-up time	full load at 110 Vac	20			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
overload protection	recovers automaticly	105			%
over voltage protection		115		140	%
short circuit protection	Protected, long term short circuit may reduce reliability				
over current protection	recovers automaticly	105			%

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	Primary to secondary: Primary to transformer core: Primary to earth ground:	3000 2000 2000			Vac Vac Vac
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL/cUL 60950, TUV EN60950, CE, CB				
EMI/EMC	FCC class B, EN55022 class B				
leakage current	full load at 240 Vac			1.5	mA
RoHS compliant	yes				
MTBF	MIL-HDSK-217F, 25°C ambient	450,000			hrs

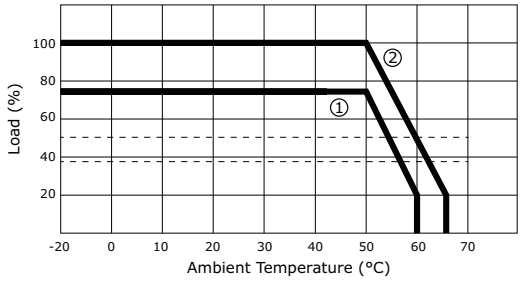
ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
vibration	(10 ~ 55 Hz, 1 hour per axis, 3 hours total)		2		G
operating temperature		-10		65	°C
storage temperature		-20		75	°C
operating humidity	non-condensing	20		90	%
storage humidity	non-condensing	0		75	%

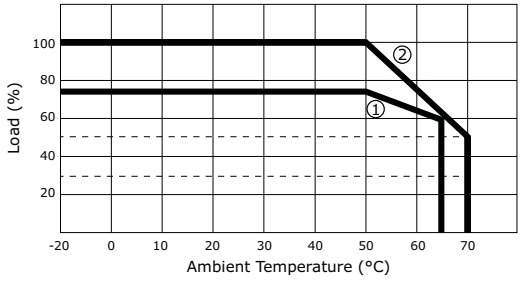
DERATING CURVES

output power vs. ambient temperature

a. 3.3 and 5 V models



b. all other models

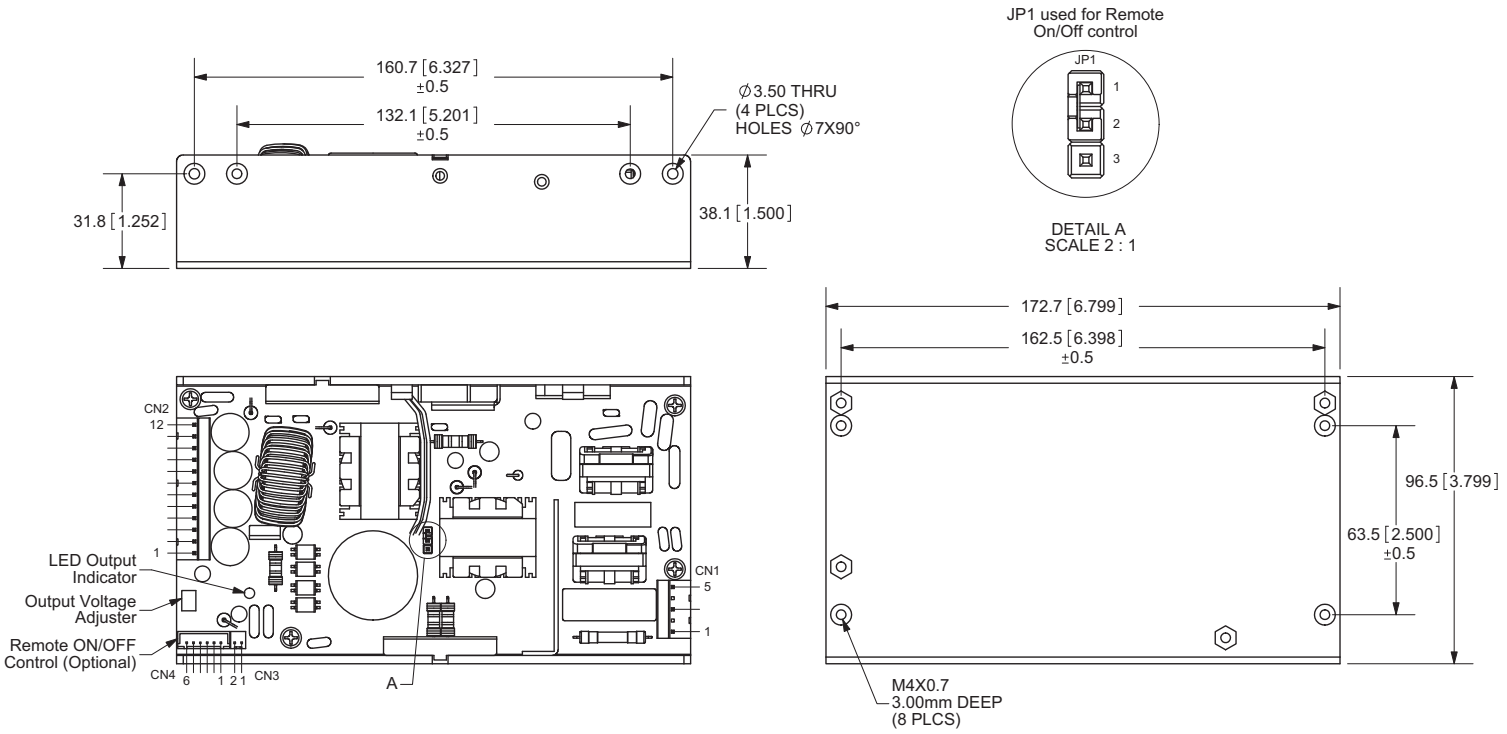


① Convection

② Forced air (0.5m3/min)
18 CFM

MECHANICAL DRAWING

units: mm[inches]
tolerance: ±0.2mm



CN1		CN2		CN3		CN4	
1	N	1	-Vo	1	FAN+	1	RTN
2	n/c	2	-Vo	2	FAN-	2	on/off
3	L	3	-Vo			3	PG
4	n/c	4	-Vo			4	RTN
5	FG	5	-Vo			5	RS+
		6	-Vo			6	RS-
		7	+Vo				
		8	+Vo				
		9	+Vo				
		10	+Vo				
		11	+Vo				
		12	+Vo				

RTN: Return terminals for logic signals. Same electrical potential as -Vo.
RS+: Remote Sense positive terminals.
RS-: Remote Sense negative terminals.
PG: Power good signal.

REVISION HISTORY

rev.	description	date
1.0	initial release	01/30/2006
1.01	new template applied	12/19/2011
1.02	V-Infinity branding removed	08/22/2012
1.03	corrected output power data	10/12/2012

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

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