



V-INFINITY

VSCP-1K5 Series Switching Power Supply

Rev. 7-2007

Features

- Current Sharing capability
- 0.98 Typical Power Factor
- Programmable Output Voltage
- Universal AC Input
- Short Circuit, overload, over voltage, over temperature protected
- Forced air cooling by built-in DC fan
- Power Failure Signal
- Built-in Remote Sense
- Built-in Remote Inhibit
- 2 year warranty



Model	Output ¹	Output Current		Max. Power	Ripple & Noise ³		
		Minimum	Maximum ²		Regulation	(Vpp)	Efficiency
VSCP-1K5-09	9 V	0 A	88/166 A	1500 W	<1%	1%	83%
VSCP-1K5-12	12 V	0 A	66/125 A	1500 W	<1%	1%	84%
VSCP-1K5-15	15 V	0 A	53/100 A	1500 W	<1%	1%	85%
VSCP-1K5-18	18 V	0 A	44/83.3 A	1500 W	<1%	1%	85%
VSCP-1K5-24	24 V	0 A	33/62 A	1500 W	<1%	1%	88%
VSCP-1K5-36	36 V	0 A	22/41.6 A	1500 W	<1%	1%	88%
VSCP-1K5-48	48 V	0 A	16/31 A	1500 W	<1%	1%	89%
VSCP-1K5-60	60 V	0 A	13/25 A	1500 W	<1%	1%	90%

Notes:

1 Output voltage is measured at output power connector.

2 Maximum current is measured at 100-120V input / 200-240V input

3 Ripple and noise is measured from 10 KHz to 20 MHz at output terminals with 0.1 μ F ceramic capacitor and a 22 μ F electrolytic capacitor in parallel.

Input

Parameter	Conditions/Description	Min	Nom	Max	Units
Input frequency		47		63	Hz
Input voltage	100~120 / 200-240 VAC (see derating curve)	100		240	VAC
	(130~185 / 260~370 VDC) (see derating curve)	130		370	VDC
Input Current		9.0		230	A
Inrush Current	Peak measured at 230 VAC at full load, cold start			120	A

Output

Parameter	Conditions/Description	Min	Nom	Max	Units
Hold-up time	Full load at 230 VAC			12	mS
Programming	Output voltage programmable through external 0~5V control voltage on VCI. Control voltage can also be obtained from VCO via a 470 KOhm pot. See application diagrams.	25		100	%
Voltage adjustability	Typical adjustment by potentiometer 25%-100% Adjustment by 1-5Vdc external control	-7.5		+7.5	%
Temp. coefficient			±0.04		%/°C

Protection Circuit

Parameter	Conditions/Description	Min	Nom	Max	Units
Overload	Current limiting 3 times (1.5", 3.0", 5.0"), then intelligent auto recovery before shutdown				
Over-voltage		110		135	%

General and Safety

Parameter	Conditions/Description	Min	Nom	Max	Units
Operating temp.		0		50	°C
Operating humid.		20%		90%	RH
Storage temp.		-20		85	°C
Storage humid		10		95	%
Vibration	Period of 60 min. for each axis	10		200	Hz
EMC	EN55022, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2-3 ENV50204				
Safety regulation	UL/cUL 1950, TUV EN60950				
Leakage current	at 240 VAC			<7.0	mA
Cooling	Power rating and temperature controlled fan				

Mechanical

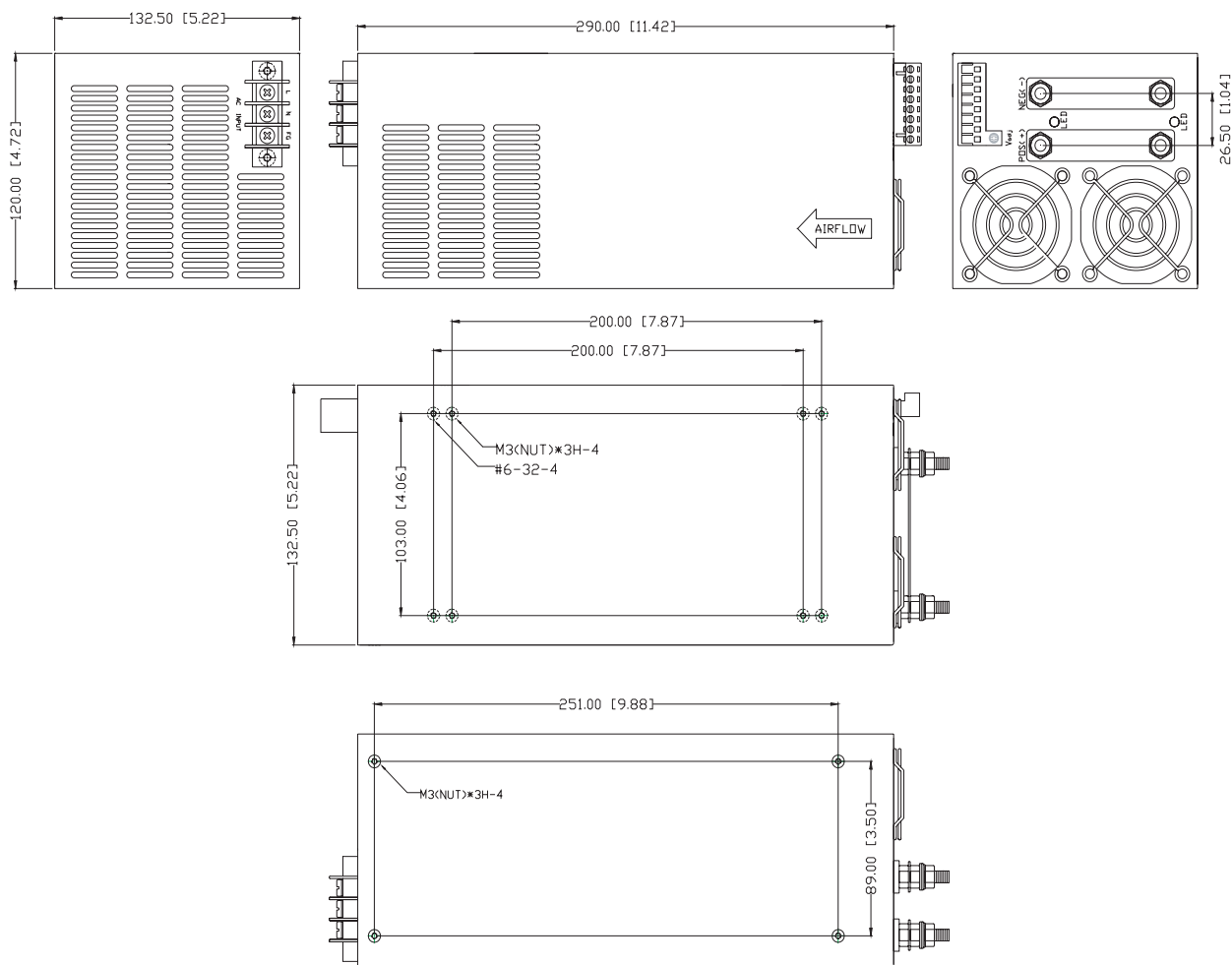
Parameter	Conditions/Description	Min	Nom	Max	Units
Weight			4.5		kg
Enclosure	290(L) x 120(W) x 132.5(H)				mm

Logic Connector

Parameter	Conditions/Description
Pin Assignments:	1. INH - Remote On-Off / Remote Inhibit 2. GND - Return / Output Ground 3. PAR - Current Sharing / Parallel function 4. FAL - Failure 5. VCO - Reference output voltage (5-10 VDC) to be used for output programming 6. VCI - Command input voltage for output programming 7. VS(-) - Remote Sense (-) 8. VS(+) - Remote Sense (+)

Derating curve

Mechanical Drawing



CONTROL PIN ASSIGNMENT

VS+	Output Voltage Remote Sense+
VS -	Output Voltage Remote Sense -
VCI	Command input voltage for output programming
VCO	5-10 VDC reference for output programming
FAL	Power Failure detect
PG	Power Good Signal
PAR	Current Sharing / Parallel function
GND	Return / Output Ground
INH	Inhibit / Remote On-Off