

SERIES: VSCP-800 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

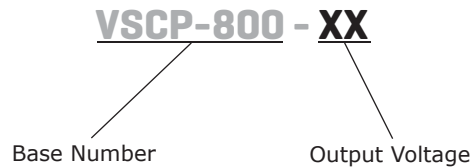
- up to 800 W continuous power
- universal input (90~260 Vac / 130~370 Vdc)
- single output from 9~60 V
- programmable output voltage
- active power correction (98%)
- current sharing capable
- power good, remote sense, remote on/off control
- built-in DC fan
- over load, over voltage, over temperature, and short circuit protections
- UL and TUV safety approvals
- efficiency up to 90%



MODEL	output voltage ¹	output current ²	output power	ripple and noise ³	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VSCP-800-09	9	44 / 88	800	90	83
VSCP-800-12	12	33 / 66	800	120	84
VSCP-800-15	15	26 / 53	800	150	85
VSCP-800-18	18	22 / 44.4	800	180	85
VSCP-800-24	24	16 / 33	800	240	88
VSCP-800-36	36	11 / 22.2	800	360	88
VSCP-800-48	48	8 / 16	800	480	89
VSCP-800-60	60	6 / 13	800	600	90

Notes: 1. output voltage is measured at output power connector
 2. maximum current is measured at 100~120 V input / 200~240 V input
 3. ripple and noise is measured from 10 KHz to 20 MHz at output terminals with 0.1 μF ceramic capacitor and a 22 μF electrolytic capacitor in parallel

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage	100 ~ 120 / 200 ~ 240 Vac (see derating curve)	100		240	Vac
	130 ~ 185 / 260 ~ 370 Vdc (see derating curve)	130		370	Vdc
frequency		47		63	Hz
current	at 90-264 Vac, full load			4.5	A
inrush current	peak measured at 230 Vac, cold start			60	A
power factor correction	at 230 Vac, full load			0.98	

OUTPUT

parameter	conditions/description	min	typ	max	units
temperature coefficient	0 ~ 50°C		±0.04		%/°C
hold-up time	230 Vac at full load			12	ms
adjustability	adjustable with built-in trim pot, 25 ~ 100% adjustment by 1 ~ 5 Vdc external control		±7.5		%
programming	output voltage programmable through external 0 ~ 5 V control voltage on VCI. Control voltage can also be obtained from VCO via a 470 KΩ pot. see application diagrams	25		100	%
remote sense	Designated as (VS+) and (VS-). Total voltage compensation from cable losses with respect to the main output.				
remote inhibit	Designated as (INH), requires a low signal to inhibit the output.				
current sharing	Designated as (PAR), use in parallel for forced current sharing function.				

PROTECTION

parameter	conditions/description	min	typ	max	units
over voltage protection		110		135	%
over current protection ⁴	current limiting 3 times with auto recovery before shutdown				

Notes: 4. Protection mode sends a pulse, waits 1.5 seconds, sends second pulse, waits 3 seconds, sends third pulse, waits 5 seconds. If overload is still present, the unit will shutdown.

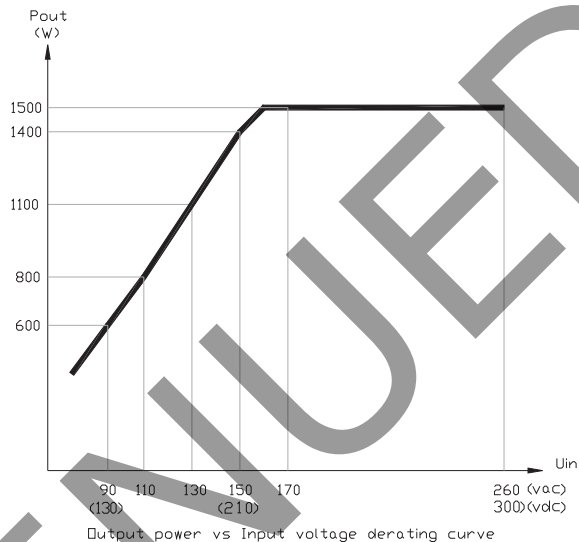
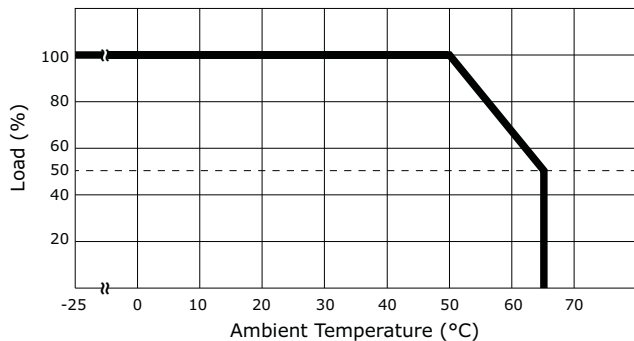
SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
safety approvals	TUV EN60950, UL/cUL 1950				
EMI/EMC	EN 55022, EN 61000-4-(2,3,4,5,6,8,11), EN 61000-3-(2,3), ENV50204				
leakage current	at 240 Vac			3.5	mA
RoHS compliant	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-20		85	°C
operating humidity		20		90	%
storage humidity		10		95	%
vibration	for 60 minutes, each axis	10		200	Hz

DERATING CURVES

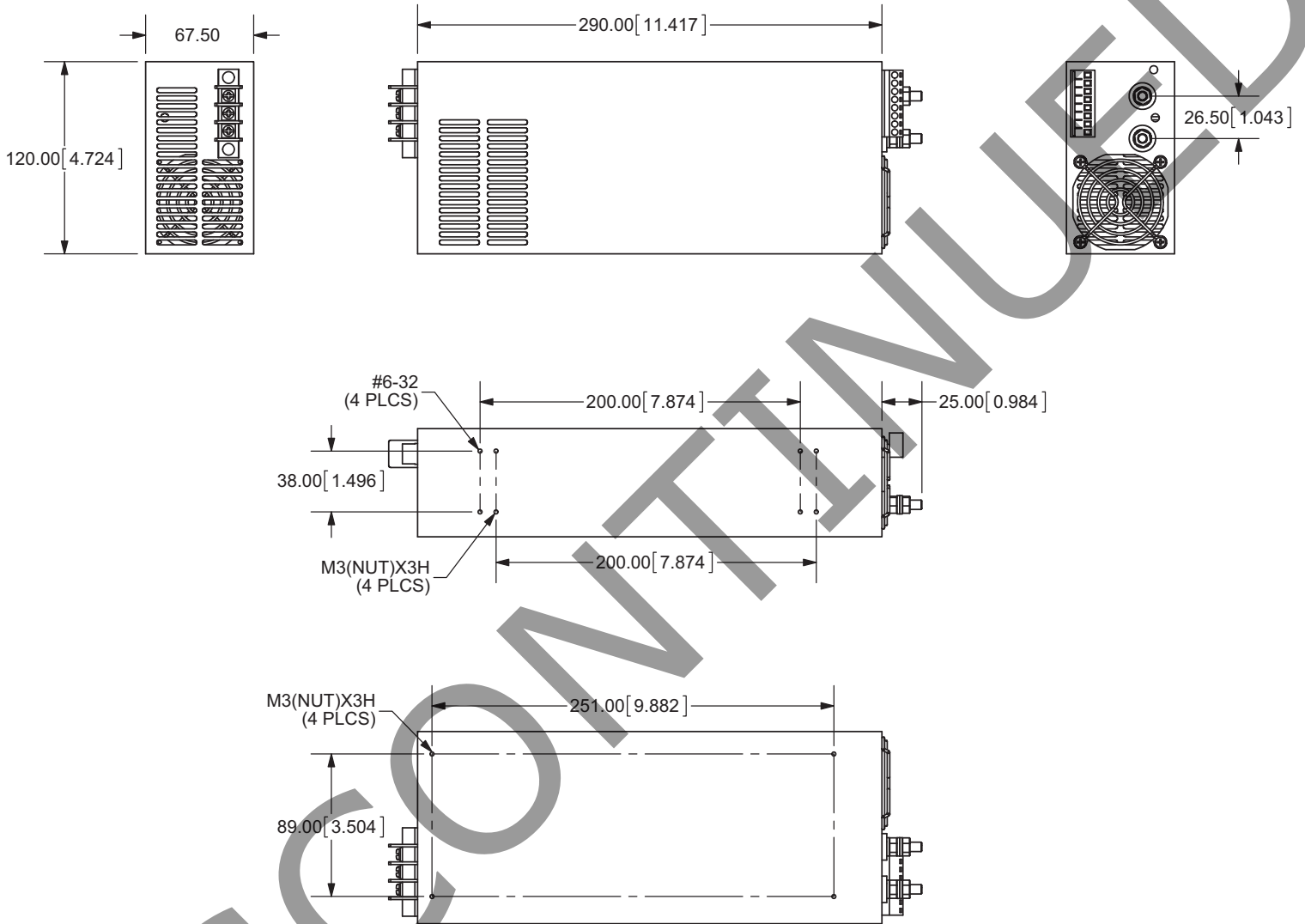


MECHANICAL

parameter	conditions/description	min	typ	max	units
weight			4.5		Kg
enclosure	11.42 x 4.72 x 2.66 inches (290 x 120 x 67.5mm)				mm

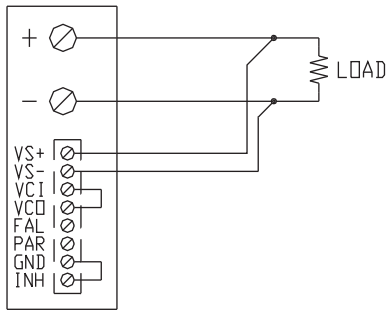
MECHANICAL DRAWING

tolerance: $\pm 1.0\text{mm}$ unless otherwise specified

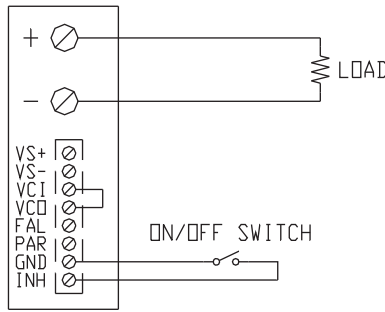


LOGIC CONNECTOR		
1	VS+	output voltage remote sense+
2	VS-	output voltage remote sense-
3	VCI	command input voltage for output programming
4	VCO	5~10 Vdc reference for output programming
5	FAL	power failure detected
6	PG	power good signal
7	PAR	current sharing / parallel function
8	GND	return / output ground
9	INH	inhibit / remote on-off

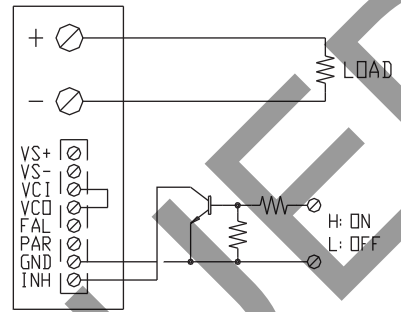
LOGIC CONNECTIONS



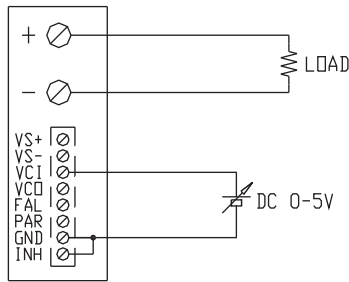
REMOTE SENSING



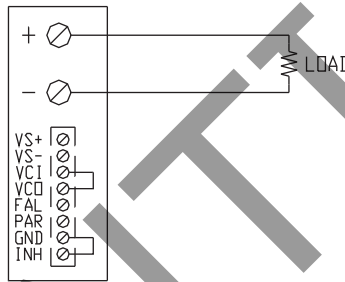
ON/OFF CONTROL BY SWITCH



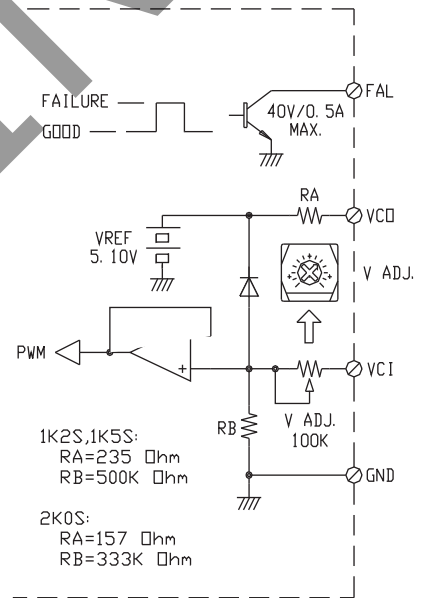
ON/OFF CONTROL BY TRANSISTOR



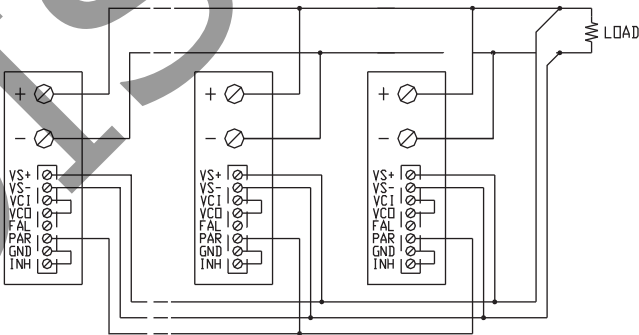
OUTPUT VOLTAGE ADJUST WITH DC 0-5V



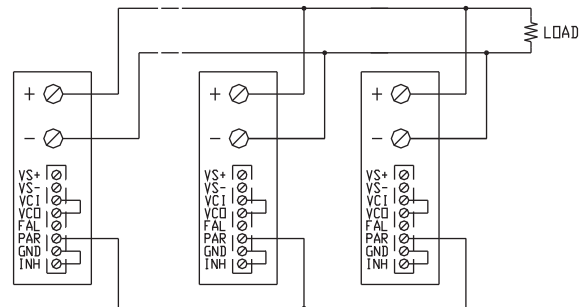
USING INTERNAL VOLTAGE CONTROL



VCI AND VCD SIGNAL



PARALLEL OPERATION WITH REMOTE SENSING



PARALLEL OPERATION WITHOUT REMOTE SENSING

REVISION HISTORY

rev.	description	date
1.0	initial release	08/20/2007
1.01	new template applied	12/22/2011
1.02	V-Infinity branding removed	08/23/2012

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



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