

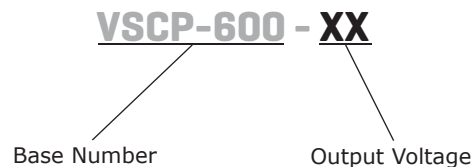
SERIES: VSCP-600 | DESCRIPTION: AC-DC POWER SUPPLY
FEATURES

- up to 600 W continuous power
- universal input (90~260 Vac / 130~370 Vdc)
- single output from 5~60 V
- programmable output voltage
- active power correction (98%)
- current sharing capable
- remote sense, remote on/off control
- built-in DC fan
- over load and over voltage 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-600-05	5	80/100	500	50	78
VSCP-600-09	9	44 / 66	600	90	83
VSCP-600-12	12	33 / 50	600	120	84
VSCP-600-15	15	26 / 40	600	150	85
VSCP-600-18	18	22 / 33.3	600	150	85
VSCP-600-24	24	16 / 25	600	150	88
VSCP-600-36	36	11 / 16.6	600	150	88
VSCP-600-48	48	8 / 12	600	150	89
VSCP-600-60	60	6 / 10	600	150	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 μ F ceramic capacitor and a 22 μ F electrolytic capacitor in parallel

PART NUMBER KEY


INPUT

parameter	conditions/description	min	typ	max	units
voltage		90 130		260 370	Vac Vdc
frequency		47		63	Hz
current	at 230 Vac		3.5		A
inrush current	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	-12		+3	%
programming	output voltage programmable through external 1 ~ 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 ¹	current limiting 3 times with auto recovery before shutdown				

Notes: 1. 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.

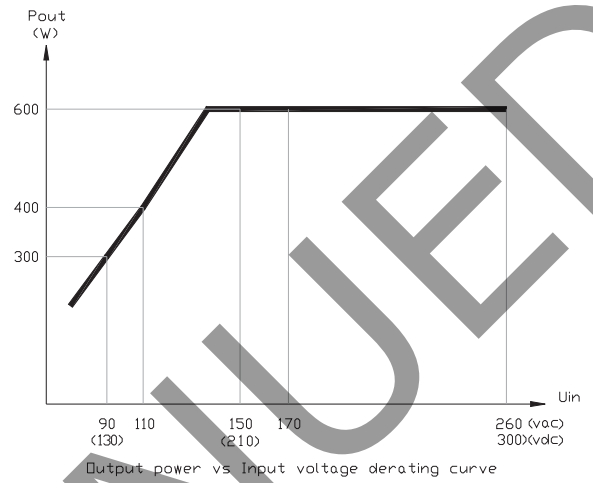
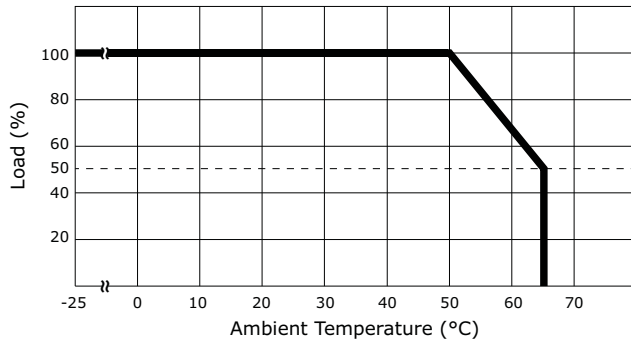
SAFETY & COMPLIANCE

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



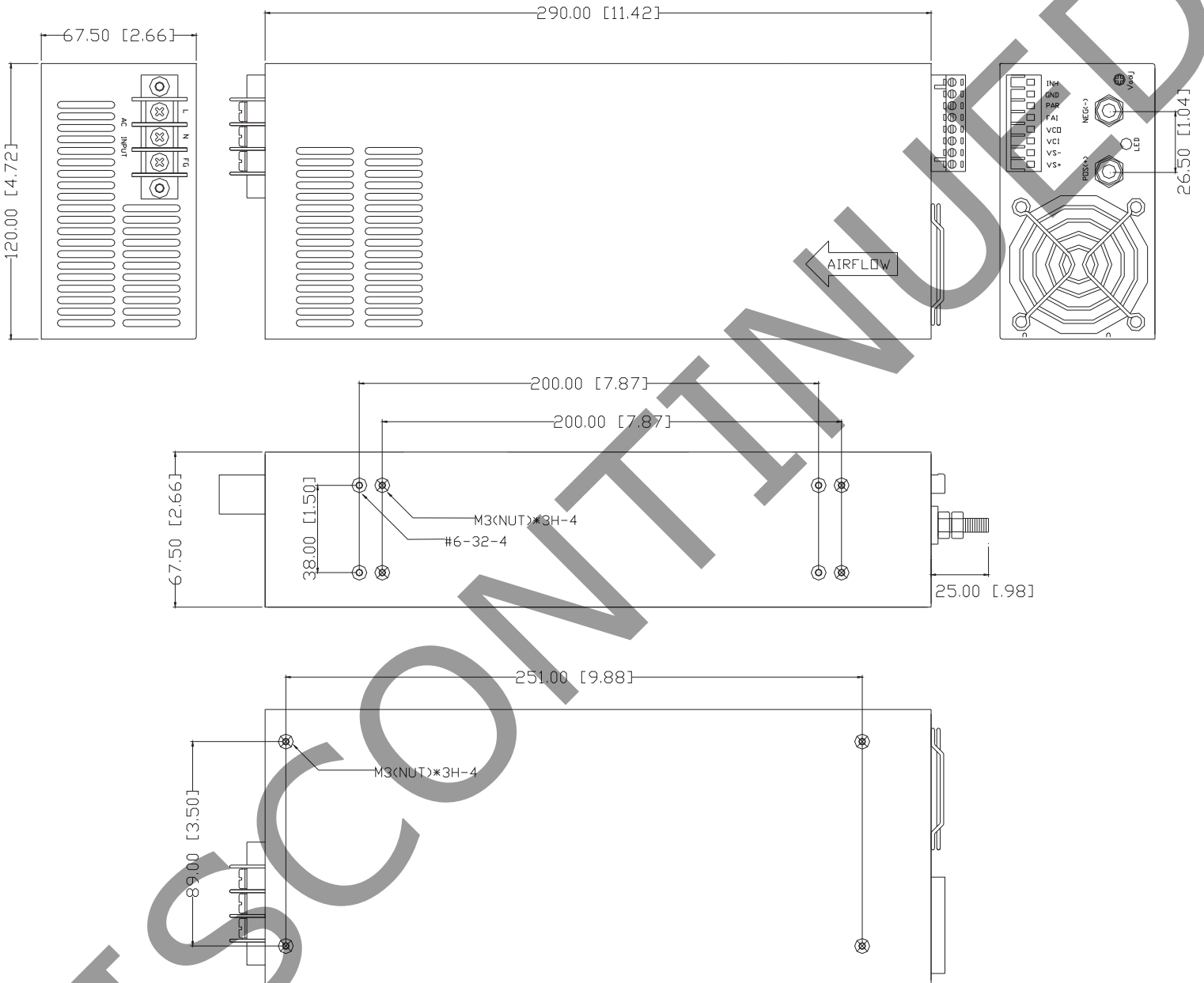
MECHANICAL

parameter	conditions/description	min	typ	max	units
weight			2.3		Kg
dimensions	11.42 x 4.72 x 2.66 (290 x 120 x 67.5 mm)				inch

MECHANICAL DRAWING

units: mm[inch]

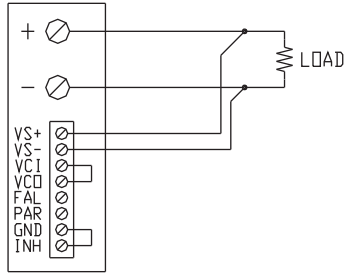
tolerance: ±1.0mm unless otherwise specified



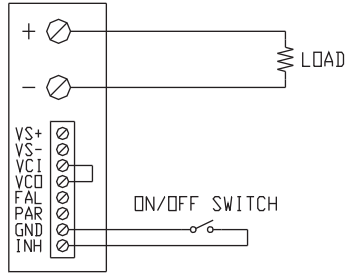
LOGIC CONNECTOR

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

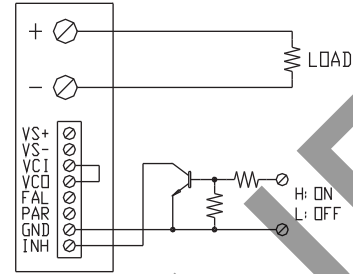
LOGIC CONNECTIONS



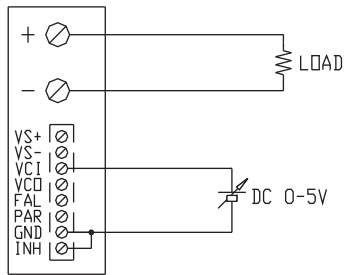
REMOTE SENSING



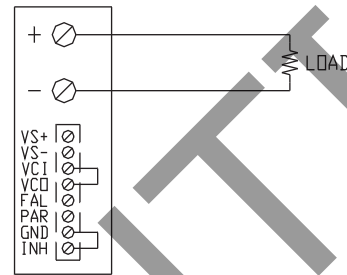
ON/OFF CONTROL BY SWITCH



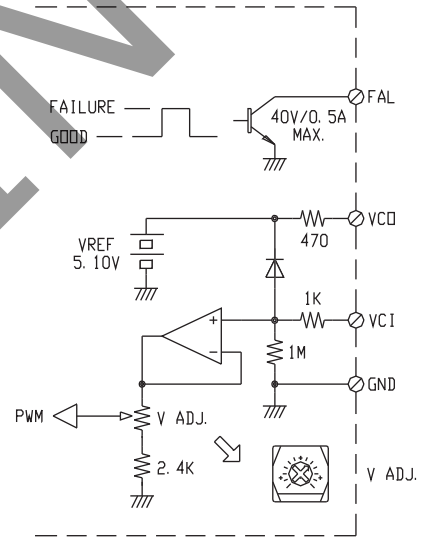
ON/OFF CONTROL BY TRANSISTOR



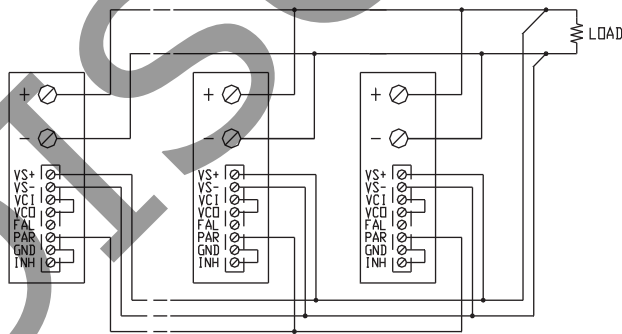
OUTPUT VOLTAGE ADJUST WITH DC 0-5V



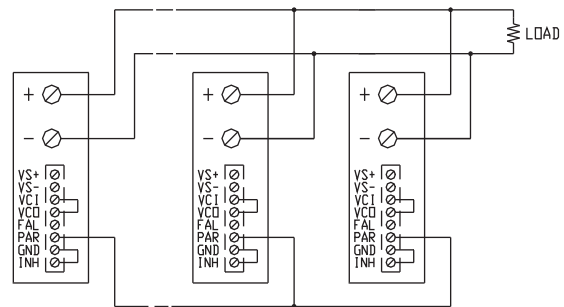
USING INTERNAL VOLTAGE CONTROL



VCI AND VCO SIGNAL



PARALLEL OPERATION WITH REMOTE SENSING



PARALLEL OPERATION WITHOUT REMOTE SENSING

REVISION HISTORY

rev.	description	date
1.0	initial release	07/24/2006
1.01	new template applied, V-Infinity branding removed	08/28/2012

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



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