

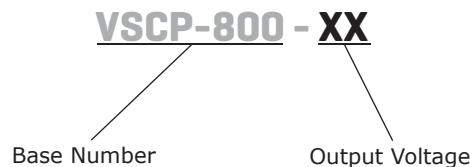
SERIES: VSCP-800 | DESCRIPTION: AC-DC POWER SUPPLY
FEATURES

- 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 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 | 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.

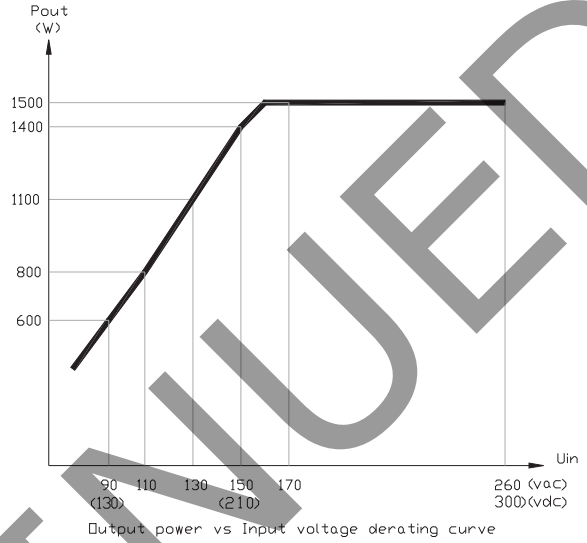
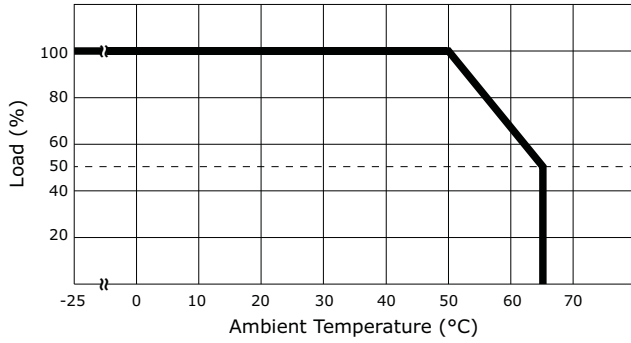
SAFETY & COMPLIANCE

| 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

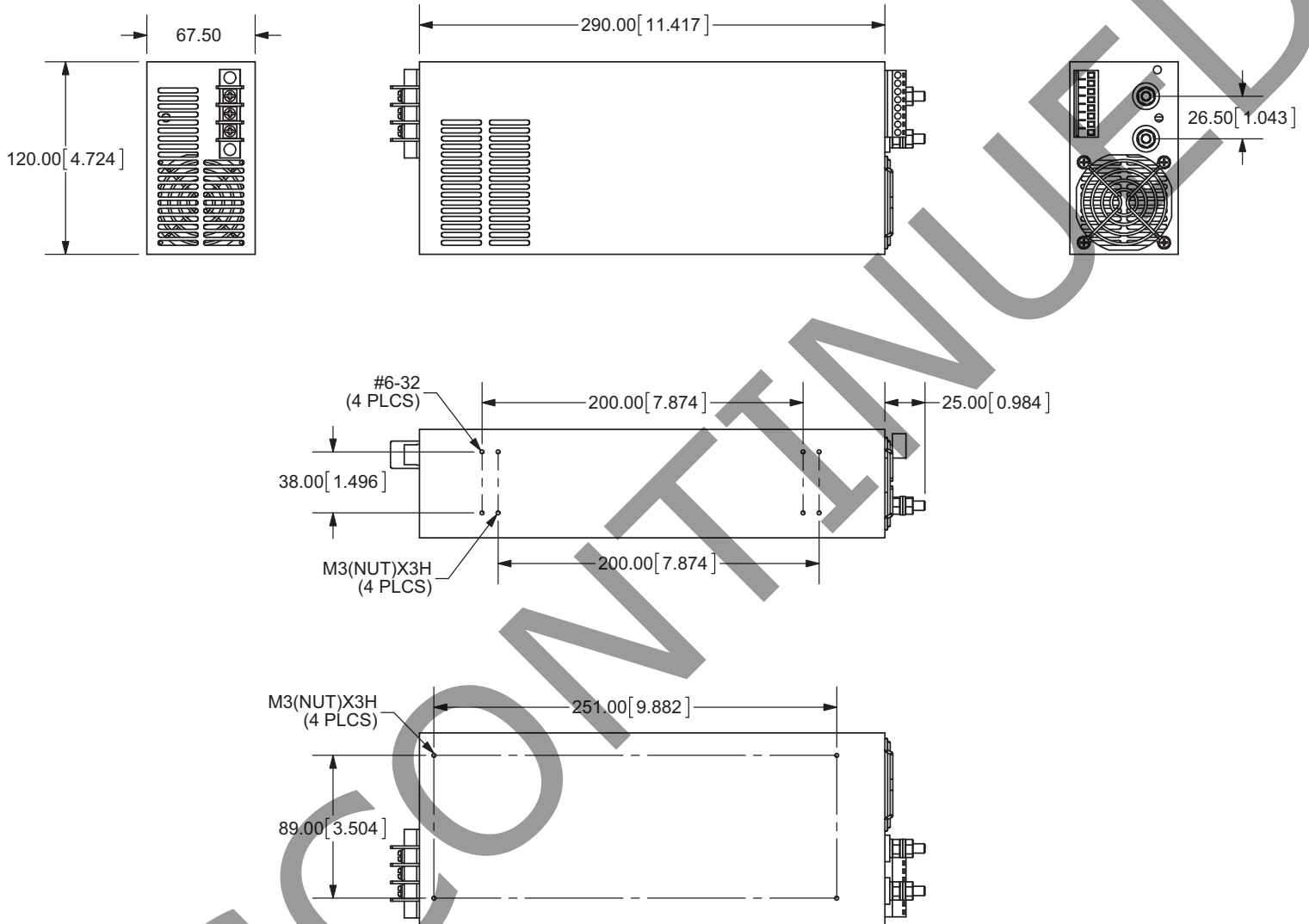


MECHANICAL

| 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 |

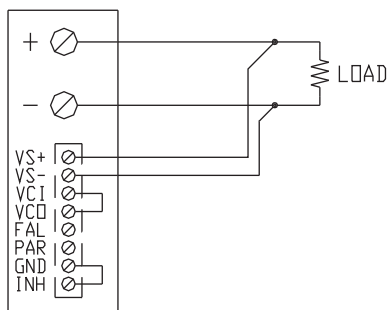
MECHANICAL DRAWING

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

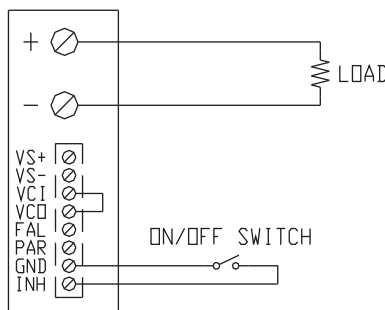


| LOGIC CONNECTOR | | |
|-----------------|-----|--|
| 1 | VS+ | output voltage remote sense+ |
| 2 | VS- | output voltage remote sense- |
| 3 | VCI | command input voltage for output programming |
| 4 | VCO | 5~10 Vdc reference for output programming |
| 5 | FAL | power failure detected |
| 6 | PG |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

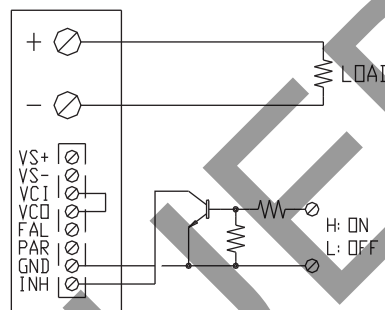
LOGIC CONNECTIONS



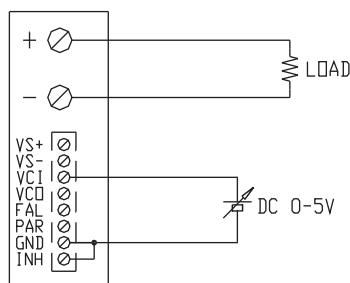
REMOTE SENSING



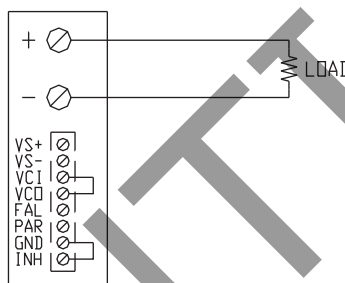
ON/OFF CONTROL BY SWITCH



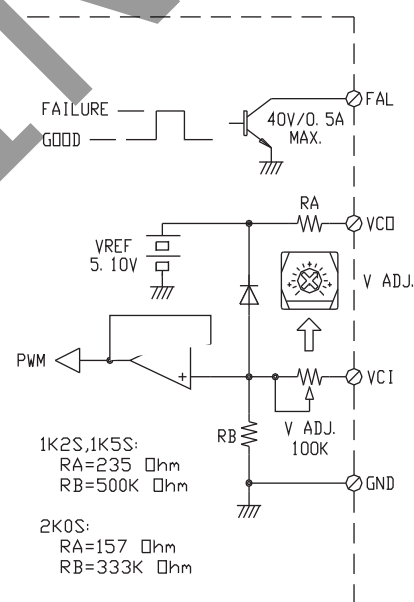
ON/OFF CONTROL BY TRANSISTOR



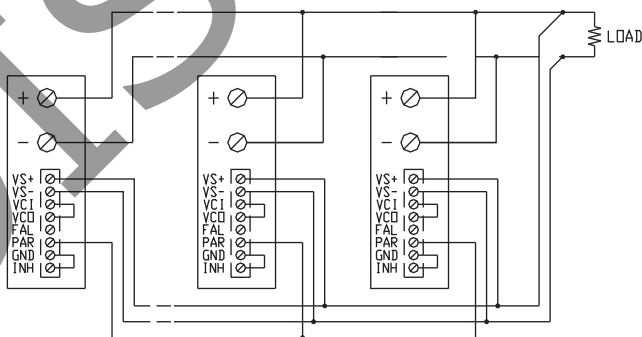
OUTPUT VOLTAGE ADJUST WITH DC 0-5V



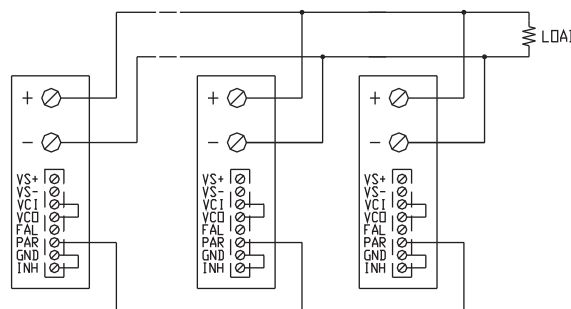
USING INTERNAL VOLTAGE CONTROL



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.



Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.