



## SERIES: VSUU-150 | DESCRIPTION: AC-DC POWER SUPPLY

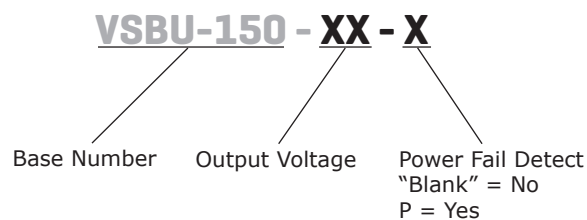
### FEATURES

- wide input voltage range: 90~264 V ac, 47~63 Hz
- internal EMI filter
- single output
- input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- output connector mates with Molex housing 09-50-3061 (or 09-50-3081) and Molex 2478 series crimp terminal
- output voltage available from 9 to 48 V dc
- input surge current and over load protection
- over voltage protection (crowbar design)
- size: 3 x 5 x 1.09 inches
- class I insulation
- 2 year warranty



| MODEL       | output<br>voltage<br>(Vdc) | output<br>current<br>max<br>(A) | output<br>power<br>max<br>(W) | ripple and<br>noise<br>max<br>(mVp-p) | efficiency<br>typ<br>(%) |
|-------------|----------------------------|---------------------------------|-------------------------------|---------------------------------------|--------------------------|
| VSUU-150-9  | 9                          | 16                              | 144                           | 90                                    | 80                       |
| VSUU-150-12 | 12                         | 12.5                            | 150                           | 120                                   | 80                       |
| VSUU-150-15 | 15                         | 10                              | 150                           | 150                                   | 80                       |
| VSUU-150-18 | 18                         | 8.33                            | 150                           | 180                                   | 80                       |
| VSUU-150-24 | 24                         | 6.25                            | 150                           | 240                                   | 80                       |
| VSUU-150-30 | 30                         | 5                               | 150                           | 300                                   | 80                       |
| VSUU-150-36 | 36                         | 4.17                            | 150                           | 360                                   | 80                       |
| VSUU-150-48 | 48                         | 3.13                            | 150                           | 480                                   | 80                       |

### PART NUMBER KEY



## INPUT

| parameter               | conditions/description                  | min  | typ  | max | units |
|-------------------------|-----------------------------------------|------|------|-----|-------|
| voltage                 |                                         | 90   |      | 264 | Vac   |
| frequency               |                                         | 47   |      | 63  | Hz    |
| current                 | at 115 Vac, full load                   |      |      | 2.0 | A     |
|                         | at 230 Vac, full load                   |      |      | 0.8 | A     |
| inrush current          | at 115 Vac, 25°C, full load, cold start |      | 16   | 20  | A     |
|                         | at 230 Vac, 25°C, full load, cold start |      | 56   | 63  | A     |
| power factor correction | full load at 90 ~ 240 Vac               | 0.95 | 0.97 | 1.0 |       |

## 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                        | -0.04 |     | 0.04 | %/°C  |
| transient response      | full load to half load at 100 Vac |       |     | 4    | ms    |
| start-up                | full load at 100 Vac              | 0.3   | 1   | 2    | s     |
| hold-up                 | full load at 110 Vac              | 16    |     |      | ms    |

## PROTECTIONS

| parameter               | conditions/description | min | typ | max | units |
|-------------------------|------------------------|-----|-----|-----|-------|
| over voltage protection |                        | 112 |     | 132 | %     |
| over current protection |                        | 110 |     | 150 | %     |

## SAFETY & COMPLIANCE

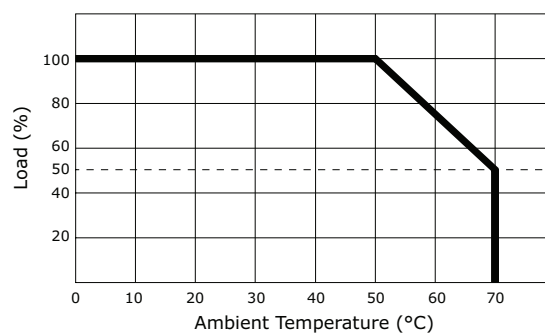
| parameter            | conditions/description                                             | min     | typ | max  | units |
|----------------------|--------------------------------------------------------------------|---------|-----|------|-------|
| isolation voltage    | primary to secondary                                               | 4,242   |     |      | Vdc   |
|                      | primary to earth ground                                            | 2,121   |     |      | Vdc   |
| isolation resistance | test voltage of 500 Vdc                                            | 50      |     |      | MΩ    |
| safety approvals     | UL/cUL, TUV-Baurart, CE, CISPR-22 class B, FCC part 15 class B, CB |         |     |      |       |
| EMI/EMC              | CISPR 22 class B, FCC part-15 class B                              |         |     |      |       |
| leakage current      | full load at 240 Vac                                               |         | 0.4 | 0.75 | mA    |
| RoHS compliant       | yes                                                                |         |     |      |       |
| MTBF                 |                                                                    | 100,000 |     |      | hrs   |

## ENVIRONMENTAL

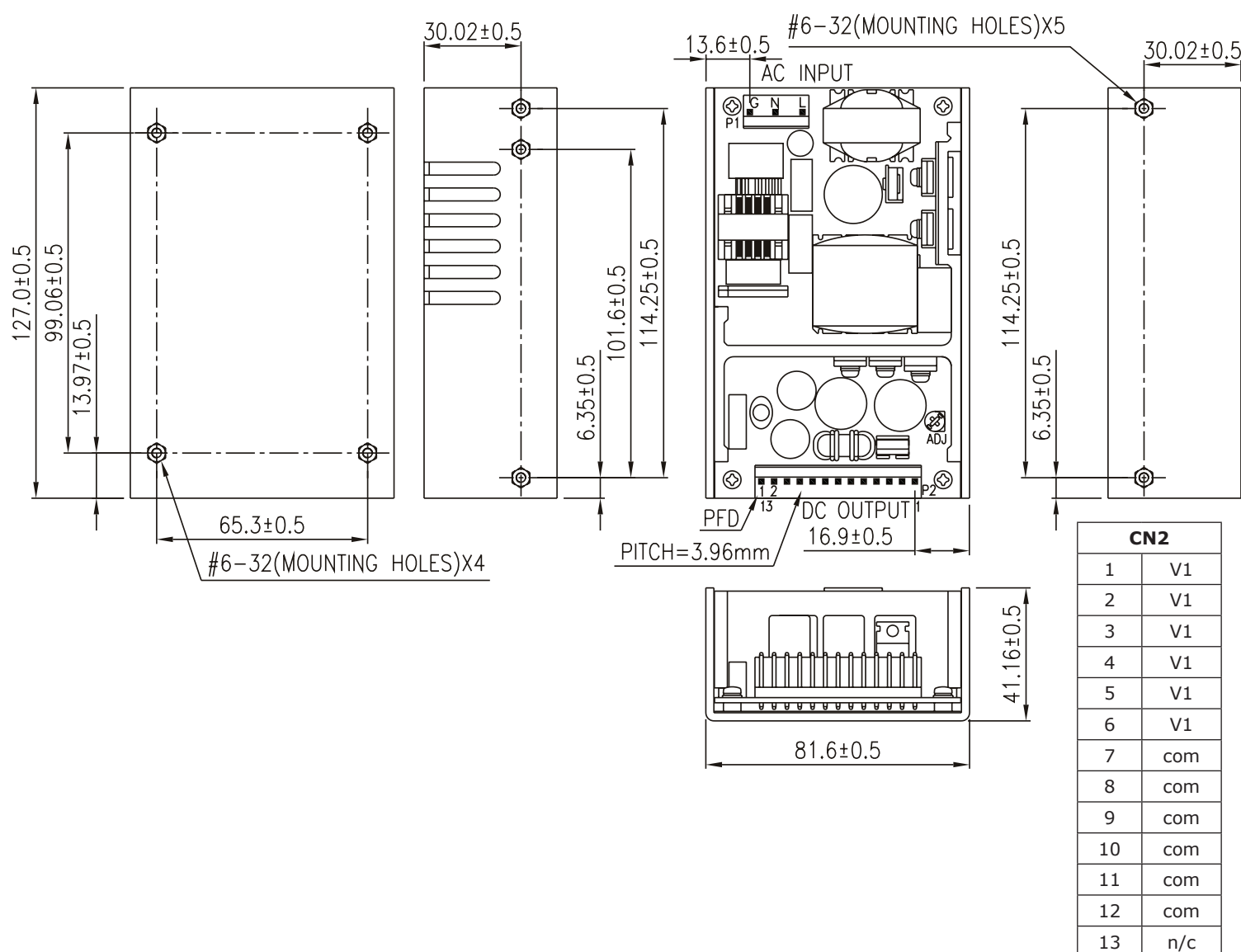
| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | 0   |     | 70  | °C    |
| storage temperature   |                        | -40 |     | 85  | °C    |
| operating humidity    |                        | 5   |     | 95  | %     |
| storage humidity      |                        | 5   |     | 95  | %     |

## DERATING CURVES

output power vs. ambient temperature



## MECHANICAL DRAWING



\*pin 13 for optional power fail detect

## REVISION HISTORY

| rev. | description                 | date       |
|------|-----------------------------|------------|
| 1.0  | initial release             | 11/19/2010 |
| 1.01 | new template applied        | 07/13/2011 |
| 1.02 | V-Infinity branding removed | 08/22/2012 |
| 1.03 | updated derating curve      | 02/12/2013 |

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.

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9