## Features

- RoHS compliant
- Universal input 85~264 Vac
- Output over-current protected
- Output over-voltage protected
- Industry standard foot-print
- Efficiency up to 88\%
- Safety approved to TUV, CE; UL/cUL
- Conducted EMI meets EN55022 class B and FCC class B


| Model | Voltage <br> $($ V) | Current <br> $(\mathbf{A})$ | Total 1, 2 <br> Regulation | Ripple \& Noise ${ }^{3}$ <br> $(\mathrm{mVp-p}$ max) | Efficiency <br> $(\%)$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| VOF-65-3.3 | 3.3 | 8.0 | $\pm 5 \%$ | 50 | 74 |
| VOF-65-5 | 5 | 8.0 | $\pm 5 \%$ | 50 | 78 |
| VOF-65-7.5 | 7.5 | 6.6 | $\pm 5 \%$ | 75 | 78 |
| VOF-65-9 | 9 | 6.6 | $\pm 5 \%$ | 90 | 82 |
| VOF-65-12 | 12 | 5.4 | $\pm 5 \%$ | 120 | 84 |
| VOF-65-15 | 15 | 4.3 | $\pm 5 \%$ | 150 | 85 |
| VOF-65-24 | 24 | 2.7 | $\pm 5 \%$ | 240 | 86 |
| VOF-65-48 | 48 | 1.35 | $\pm 5 \%$ | 480 | 88 |

## Notes:

1. Measured from High Line to Low Line at Full load
2. Measured from Full load to $10 \%$ load at 110 VAC.
3. Ripple \& Noise measured at 20 MHz BW , with a $0.1 \mu \mathrm{~F}$ ceramic cap and a $10 \mu \mathrm{~F}$ electrolytic cap on the output and the two earth ground pads are connected to input earth ground.

## Derating Curves

1. Output Power vs. Ambient temperature
a. 3.3, 5, 7.5 V models


2. Output Power vs. Input Voltage

All Models


Input

| Parameter | Conditions/Description | Min | Nom | Max | Units |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Input Frequency |  | 47 | 63 | Hz |  |
| Input Voltage | Output power derated from 85-90 VAC | 85 |  | 264 | VAC |
| Input Current | AC Input of 110 VAC |  | 1400 |  | mA |
|  | AC Input of 220 VAC |  | 700 | mA |  |
| Inrush Current | Measured at 110 VAC at full load, cold start |  | 25 | A |  |
|  | Measured at 220 VAC at full load, cold start |  | 50 | A |  |
| Input fuse | Built-in, non-user serviceable. |  |  |  |  |

Output

| Parameter | Conditions/Description | Min | Nom | Max |
| :--- | :--- | :---: | :---: | :---: |
| Efficiency | See table above. Typical values measured at 115 VAC, full load. |  |  |  |
| Hold up time | At 115 VAC, full load | 8 |  |  |
| Adjustability | Adjustable with built-in trim pot. | -5 | mS |  |
| Temp. Coefficient |  | -0.05 | +5 | $\%$ |

## Protection Circuit

| Parameter | Conditions/Description |
| :--- | :--- |
| Overload | Current limiting starts at 105\% of the rated output current and <br> recovers automatically. |
| Output Over-voltage | Output voltage is limited to 115\% by TVS clamping. |
| Short Circuit | Protected. Long term short circuit may reduce reliability. |

General and Safety

| Parameter | Conditions/Description | Min | Nom | Max | Units |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Switching frequency |  |  | 60 |  | KHz |
| Operating temp. | See derating curves. | 0 |  | 50 | ${ }^{\circ} \mathrm{C}$ |
| Storage temp. |  | -20 |  | 85 | ${ }^{\circ} \mathrm{C}$ |
| Operating humid. | Non-condensing | 20\% |  | 90\% | RH |
| Storage humid. | Non-condensing | 20\% |  | 95\% | RH |
| Operating altitude |  |  |  | 3,000 | m |
|  |  |  |  | 10,000 | ft |
| Storage altitude |  |  |  | 9,000 | m |
|  |  |  |  | 30,000 | ft |
| EMI | Conducted emissions comply with FCC class B, EN55022 class B |  |  |  |  |
| Safety | Approved to TUV EN60950, CE, CB; UL/cUL 60950-1 |  |  |  |  |
| RoHS | 2002/95/EC |  |  |  |  |
| Leakage Current | Per EN60950, 264 VAC |  |  | 1.5 | mA |
| Isolation Voltage (HI-POT) | Applied for 1 minute. |  |  |  |  |
|  | Primary to secondary: | 3000 |  |  | VAC |
|  | Primary to transformer core: | 1500 |  |  | VAC |
|  | Primary to earth ground: | 1500 |  |  | VAC |
| Insulation Resistance | Measured at 500 VDC, at room temp. | 50 |  |  | $\mathrm{M} \Omega$ |
| MTBF ( @ 25º ) | MIL-HDBK-217F | 250K |  |  | hours |
| Warranty | Standard Warranty Length |  |  | 2 | years |

Mechanical

| Parameter | Conditions/Description | Min | Nom | Max | Units |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Dimensions | $4 "(102 \mathrm{~mm}) \times 2^{\prime \prime}(51 \mathrm{~mm}) \times 1.26^{\prime \prime}(32 \mathrm{~mm})$ |  |  |  |  |
| Weight |  |  |  | 0.17 | kg |
| Cooling method | free air convection (see derating curve on p. 1) |  |  |  |  |

## Mating Connectors

| Parameter | Conditions/Description |
| :--- | :--- |
| AC Input (CN1) | Mates with Molex housing 09-50-3031 with Molex 2878 series crimp contact. |
| DC Output (CN2) | Mates with Molex housing 09-50-3041 with Molex 2878 series crimp contact. |

## Outline Drawing



## Mounting Method


A. Vertical

B. Horizontal

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[^0]:    *V-Infinity reserves the right to make changes to its products or to discontinue any product or service without notice, and to advise customers to verify the most up-to-date product information before placing orders. V-Infinity assumes no liability or responsibility for customer's applications using V-Infinity products other than repair or replacing (at V-I's option) V-Infinity products not meeting V-I's published specifications. Nothing will be covered outside of standard product warranty.

