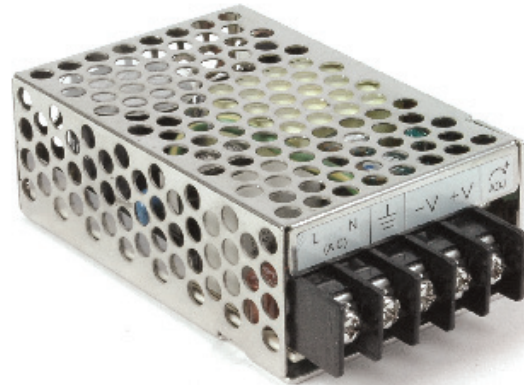


SERIES: VGS-25 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

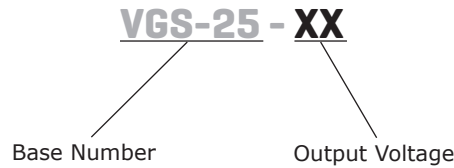
- up to 27 W continuous power
- compact footprint
- universal input (88~264 Vac / 125~373 Vdc)
- single output from 3.3~48 V
- over voltage, over load, and short circuit protections
- UL/cUL and TUV safety approvals
- long life electrolytic capacitors
- no load power consumption < 0.5 W
- efficiency 88%



| MODEL | output voltage | output current | output power | ripple and noise | efficiency |
|------------|----------------|----------------|--------------|------------------|------------|
| | (Vdc) | max (A) | max (W) | max (mVp-p) | (%) |
| VGS-25-3.3 | 3.3 | 6 | 19.8 | 100 | 74 |
| VGS-25-5* | 5 | 5 | 25 | 100 | 83 |
| VGS-25-12 | 12 | 2.1 | 25.2 | 120 | 85 |
| VGS-25-15 | 15 | 1.7 | 25.5 | 120 | 86 |
| VGS-25-24 | 24 | 1.1 | 26.4 | 120 | 87 |
| VGS-25-48 | 48 | 0.57 | 27.36 | 120 | 88 |

Notes: * Discontinued model.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | nom | max | units |
|-----------------|--|-----------|-----|-------------|------------|
| voltage range | | 88 125 | | 264 373 | Vac Vdc |
| frequency range | | 50 | | 60 | Hz |
| current | at 115 Vac, cold start at 230 Vac, cold start | | | 0.7 0.35 | A A |
| inrush current | at 230 Vac, full load, cold start | | | 30 | A |

OUTPUT

| parameter | conditions/description | min | nom | max | units |
|-------------------|--|----------|----------------------|-----|-------------|
| voltage adjust | | | ±10 | | |
| voltage tolerance | 3.3 V models 5 V models all other models | | ±3 ±2 ±1 | | % % % |
| line regulation | low line to high line | | ±0.5 | | % |
| load regulation | 3.3 V models 5 V models all other models | | ±2.0 ±1.0 ±0.5 | | % % % |
| start-up time | at 115 Vac, cold start at 230 Vac, cold start | | 1.0 0.8 | | s s |
| rise time | at 115 Vac, cold start at 230 Vac, cold start | | 65 50 | | ms ms |
| hold-up time | at 115 Vac, cold start at 230 Vac, cold start | 10 32 | | | ms ms |

PROTECTIONS

| parameter | conditions/description | min | nom | max | units |
|------------------|----------------------------|-----|-----|-----|-------|
| over load | Hiccup mode, auto recovery | | | 110 | % |
| over voltage | latch off mode | 115 | | 150 | % |
| over-temperature | | 52 | | | °C |
| short circuit | continuous | | | | |

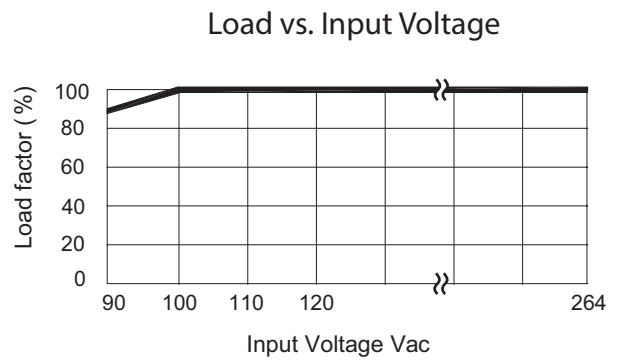
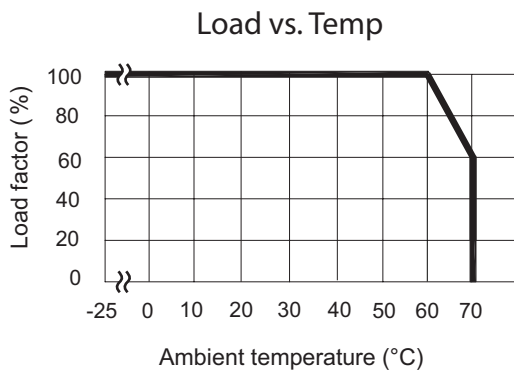
SAFETY & COMPLIANCE

| parameter | conditions/description | min | nom | max | units |
|----------------------|---|-----------------------|-----|-----|-------------------|
| isolation voltage | input to output: input to case: output to case: | 4,242 2,121 707 | | | Vdc Vdc Vdc |
| isolation resistance | input to output at 500 V dc | 100 | | | MΩ |
| safety approvals | UL 60950-1 / TUV EN 60950-1 | | | | |
| EMI/EMC | EN 55022 : 1998+A1 : 2000+A2 : 2003 Class B, EN 61000-3-2 : 2000+A2 : 2005 Class A, EN 61000-3-3 : 1995+A1 : 2001, EN 61204-3 : 2000 EN 50204 1998+A1 : 2001+A2 : 2003 light industry level, criteria A | | | | |
| leakage current | measured per IEC 60950-1, paragraph 5.1, test voltage of 240 Vac/60 Hz | | | 2 | mA |
| RoHS compliant | yes | | | | |
| MTBF | at 230 Vac, MIL-HDBK-217F 25 °C ambient | 620,300 | | | hrs |

ENVIRONMENTAL

| parameter | conditions/description | min | nom | max | units |
|-------------------------|---|-----|-----|-----|-------|
| operating temperature | see derating curve | -20 | | 70 | °C |
| storage temperature | see derating curve | -40 | | 85 | °C |
| temperature derating | linearly from 100% load at 50°C to 50% load at 70°C | | | | |
| relative humidity | non-condensing operating | 20 | | 90 | % |
| temperature coefficient | (0 ~ 50°C) | | 0.3 | | %/°C |
| vibration | (10 ~ 500 Hz, 1 hour per axis, 3 hours total) | | 5 | | Grms |

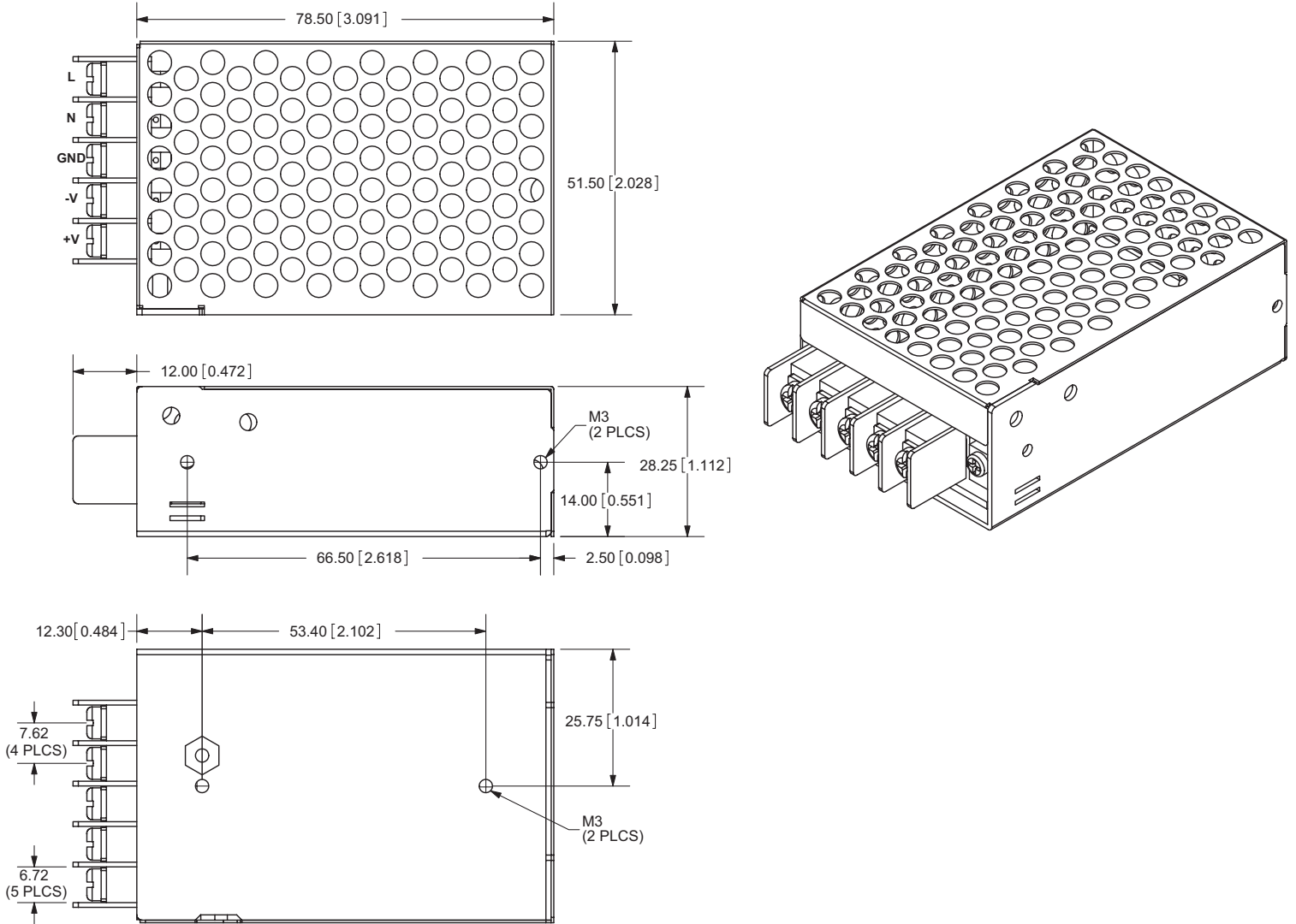
DERATING CURVES



MECHANICAL DRAWING

Note:
tolerance: $\pm 0.3\text{mm}$ unless otherwise specified

terminal block screws #6-32 (5 PLCS)



REVISION HISTORY

| rev. | description | date |
|------|---------------------------------|------------|
| 1.0 | initial release | 07/21/2008 |
| 1.01 | V-Infinity branding removed | 08/21/2012 |
| 1.02 | corrected output current values | 02/14/2013 |
| 1.03 | discontinued VGS-25-5 model | 04/11/2017 |

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



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