

36 Watt

- Energy Efficiency Level VI
- European CoC Tier 2
- Universal Input
- Output Voltages from 12 V to 24 V
- Class II Construction
- Low Cost



Dimensions:

VET36:
4.53 x 1.89 x 1.28" (115.0 x 48.0 x 32.5 mm)

The VET36 series of desk-top power supplies comply with the very latest energy efficiency level VI standards with high active mode efficiency and extremely low no load power consumption. Available with a standard jack plug connector these adaptors suit a wide variety of cost sensitive applications while maintaining industry leading performance.

Models & Ratings

| Output Power | Output Voltage | Output Current | Total Regulation ⁽²⁾ | Output Connector | Model Number |
|--------------|----------------|----------------|---------------------------------|---------------------------|--------------------------------|
| 36 W | 12.0V | 3000 mA | 5% | 5.5 x 2.1 x 12 mm DC Jack | VET36US120C2-JA ⁽³⁾ |
| | 15.0V | 2400 mA | 5% | 5.5 x 2.1 x 12 mm DC Jack | VET36US150C2-JA ⁽⁴⁾ |
| | 18.0V | 2000 mA | 5% | 5.5 x 2.1 x 12 mm DC Jack | VET36US180C2-JA ⁽⁴⁾ |
| | 24.0V | 1500 mA | 5% | 5.5 x 2.1 x 12 mm DC Jack | VET36US240C2-JA ⁽⁴⁾ |

Notes

1. Other output voltages available, contact sales for details.
2. Total regulation includes initial set accuracy, line and load regulation.
3. Meets DOE efficiency level VI and CoC tier 1.
4. Meets DOE efficiency level VI and CoC tier 2.

Input

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|---------------------|-----------------------------|---------|---------|-------|------------------------------|
| Input Voltage | 90 | | 264 | VAC | |
| Input Frequency | 47 | | 63 | Hz | |
| Input Current | | | 0.8 | A | 100 VAC |
| Inrush Current | | | 120 | A | 240 VAC, cold start at 25 °C |
| Power Factor | | | | | EN61000-3-2, class A |
| No Load Input Power | | | 75 | mW | |
| Input Protection | Internal T1.0A/250 VAC fuse | | | | |

Output

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|--------------------------|---------|---------|---------|-------------|---|
| Output Voltage | 12 | | 24 | V | See Models and Ratings table |
| Minimum Load | 0 | | | A | No minimum load required |
| Start Up Delay | | | 4 | s | |
| Start Up Rise Time | | 30 | | ms | |
| Hold Up Time | 8 | | | ms | Full load and 100 VAC |
| Total Regulation | | | 5 | % | See Models and Ratings table |
| Transient Response | | | 5 | % deviation | Recovery within <1% within 500 µs for a 50% step load change at 0.15 A/µs |
| Ripple & Noise | | | 180 | mV pk-pk | Measured with 20 MHz bandwidth and 47 µF electrolytic in parallel with 0.1 µF ceramic capacitor |
| Short Circuit Protection | | | | | Continuous, trip and restart (hiccup mode) with auto recovery |
| Temperature Coefficient | | | 0.05 | %/°C | |

General

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|---------------------------|---------|--------------|---------|--------|---|
| Efficiency | | 87 | | % | Typical average of efficiencies measured at 25%, 50%, 75% and 100% load and 115 VAC input |
| Energy Efficiency | | | | | Level VI |
| Isolation | 3000 | | | VAC | Input to Output |
| Switching Frequency | 24 | | 70 | kHz | Variable |
| Mean Time Between Failure | 250 | | | kHrs | MIL-HDBK-217F at 25 °C GB |
| Weight | | 0.36 (165.0) | | lb (g) | |

Environmental

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|-----------------------|---------|---------|---------|-------|---|
| Operating Temperature | 0 | | +60 | °C | Derate from 100% load at 45 °C to 50% load at 60 °C |
| Storage Temperature | -40 | | +85 | °C | |
| Operating Humidity | 5 | | 95 | % | RH, non-condensing |
| Cooling | | | | | Natural convection |
| Shock | | | | | 1 m drop onto concrete on each of 6 axes |
| Vibration | 10 | | 300 | Hz | 2 g 15 mins/sweep, 60 mins for each of 3 axes |

EMC: Emissions

| Phenomenon | Standard | Test Level | Notes & Conditions |
|------------------|-------------|------------|--------------------|
| Conducted | EN55032 | Level B | |
| Radiated | EN55032 | Level B | |
| Harmonic Current | EN61000-3-2 | Class A | |
| Voltage Flicker | EN61000-3-3 | | |

EMC: Immunity

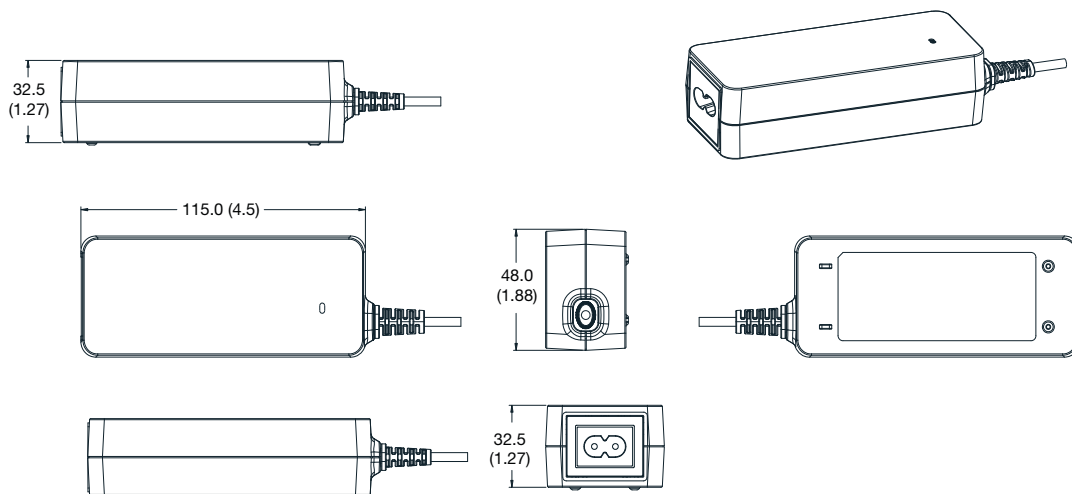
| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions |
|------------------------|------------------|--|----------|--------------------|
| ESD Immunity | EN61000-4-2 | ±4 kV contact, ±8 kV air | A | |
| Radiated Immunity | EN61000-4-3 | 3 V/m | A | |
| EFT/Burst | EN61000-4-4 | Level 2 | A | |
| Surge | EN61000-4-5 | Level 2 | A | |
| Conducted Immunity | EN61000-4-6 | 3 V | A | |
| Magnetic Fields | EN61000-4-8 | 1 A/m | A | |
| Dips and Interruptions | EN55024 (115VAC) | 100% U _T (0 VAC) for 10 ms | A | |
| | | 30% U _T (80.5 VAC) for 500 ms | A | |
| | | 100% U _T (0 VAC) for 5000 ms | B | |
| | EN55024 (230VAC) | 100% U _T (0 VAC) for 10 ms | A | |
| | | 30% U _T (161 VAC) for 500 ms | A | |
| | | 100% U _T (0 VAC) for 5000 ms | B | |

Safety Approvals

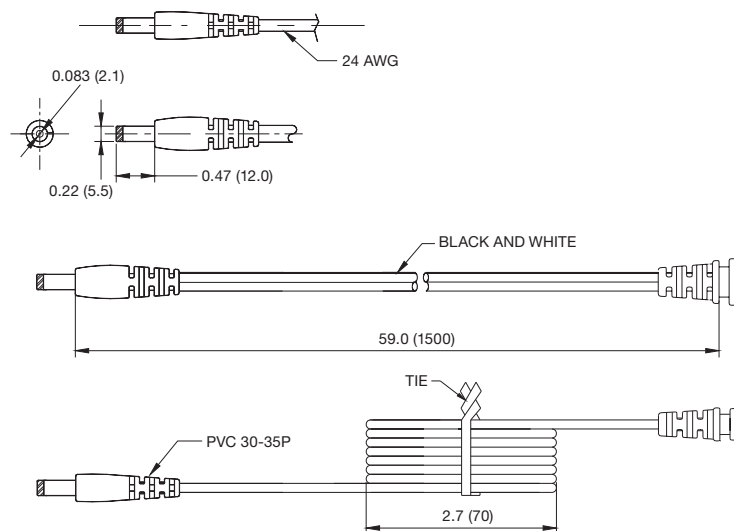
| Phenomenon | Standard |
|------------|--|
| CB Report | IEC60950-1, IEC62368-1 |
| UL | UL/cUL60950-1, approved as limited power source (LPS), UL62368-1 |
| TUV | EN60950-1, EN62368-1 |
| CCC | China Compulsory Certification GB4943 |
| AU/NZ | AU/NZS62368.1, AU/NZS3112 |

Mechanical Details

VET36USXXXC2-JA



Output Lead and Connection



Wire type: VW-1 80°C 300 V L=1500 mm 2468, 18 AWG for 12 V output, 20 AWG for 15 V output, 22 AWG for 18 and 24 V output, 2C Black and White. Black - Negative, White - Positive

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