

| Project |      |  |
|---------|------|--|
| Date    | Type |  |











# Available Models<sup>1</sup>

- ☐ DVEE-100W-S3648
- ☐ DVEE-200W-S3648
- ☐ DVEE-320W-S3648

### **Part Number Breakdown**

Example: DVEE-200W-S3648

| Series   | Output Power       | Output Voltage                       |  |
|--|--------------------|--------------------------------------|--|
| DVEE   | <b>100W</b> [100W] |                                      |  |
| [DiodeDrive, Constant Voltage, Extruded<br>Aluminum, IP65] | <b>200W</b> [200W] | \$3648<br>[Selectable, 36 or 48 VDC] |  |
|  | <b>300W</b> [300W] | [Sciectable, 30 of 40 VDC]           |  |

### Overview

This Selectable Output Voltage Power Supply provides 36 VDC or 48 VDC output. It works with 36V and 48V flexible strips for longer runs with less drop-off in output. Select from 100W, 200W, and 320W models to meet your power needs. The durable extruded aluminum housing is IP65 waterproof, enabling flexible placement indoors or outdoors. Additional waterproofing measures, such as waterproof silicone-filled twist-on wire connectors (sold separately), are necessary for outdoor installation. Use the DIP switch to select 36 VDC or 48 VDC output. Mounting tabs allow for easy installation.

**Note:** Ensure the voltage DIP switch on the power supply is set correctly *before* connecting power.

# **Features**

- Selectable 36 or 48 VDC constant output voltage
- Universal AC input, single output
- IP65 waterproof for indoor or outdoor locations

### **Product Details**

- Class 2 output: 100 W; Class P output: 200 W, 320 W
- Universal AC input 100-277 VAC
- Protected against short-circuit, overload, overtemperature, and surge

# **Certifications and Compliances**

• UL Listed - UL 8750 (FKSZ)



# **Applications**

- Home Interiors
- Industrial Automation
- Light Bars
- Sign Lighting

- Stage & Theaters
- Strip Lights
- Trade Shows
- Under-Cabinets

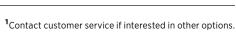
## **Optional Accessories**

6ft., 5-15P Power Cord (\_POWERCORD)

### Warranty

• 5-year warranty







# **Key Specifications**

| MODEL           | Output Power (max) | Output Voltage<br>(± 5%) | Output Current<br>(max) | Efficiency <sup>1</sup> (TYP) |         | Power Factor (TYP) |         |
|-----------------|--------------------|--------------------------|-------------------------|-------------------------------|---------|--------------------|---------|
|                 |                    |                          |                         | 120 VAC                       | 230 VAC | 120 VAC            | 230 VAC |
| DVEE 100W 67640 | 96W                | 36 VDC                   | 2.7A                    | 87%                           | 89%     | 0.98               | 0.96    |
| DVEE-100W-S3648 | 100W               | 48 VDC                   | 2.1A                    |                               |         |                    |         |
| DVEE-200W-S3648 | 200W               | 36 VDC                   | 5.6A                    | 91%                           | 92%     |                    |         |
|                 |                    | 48 VDC                   | 4.2A                    |                               |         |                    |         |
| DVEE-320W-S3648 | 320W               | 36 VDC                   | 8.9A                    | 91%                           | 92%     |                    |         |
|                 |                    | 48 VDC                   | 6.7A                    | 92%                           | 93%     |                    |         |

¹Measured at 25°C, full load

# **Specifications**

| INPUT                          |   |            |            |
|--------------------------------|---|------------|------------|
| Model: DVEE-                   | 100W-S3648  | 200W-S3648 | 320W-S3648 |
| Input Current (TYP, full load) | 1.2A  | 2.3A       | 3.5A       |
| Input Voltage                  | 100-277 VAC   |            |            |
| Input Frequency                | 50/60Hz   |            |            |
| Standby Power                  | ≤1.0W @ 120 VAC   |            |            |
| Inrush Current                 | ≤ 75A @ 230 VAC, 25°C, cold start   |            |            |
| Total Harmonic Distortion      | ≤ 15% @ 100-240 VAC, 100% load  |            |            |
| OUTPUT                         |   |            |            |
| Output Voltage and Efficiency  | Refer to "KEY SPECIFICATIONS"   |            |            |
| Ripple and Noise               | ≤10% voltage output @ 120/230 VAC and full load (Terminal connected in parallel with 0.1uF and 47uF capacitors, measurement performed at 20MHz bandwidth) |            |            |
| Line and Load Regulation       | 3%  |            |            |
| Turn-On Delay Time             | 0.5S Max. @ 230 VAC / 1.0S Max. @ 120 VAC   |            |            |
| DIMMING                        |   |            |            |
| Dimming Control                | None  |            |            |

# **Specifications Cont.**

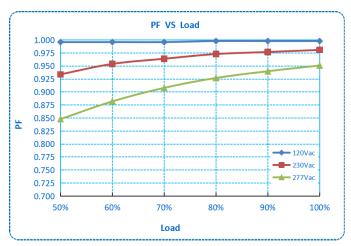
| PROTECTIONS                   |  |  |          |  |
|-------------------------------|--|--|----------|--|
| Output Over Voltage           | When the product exceeds the limit range, it enters the protected state.  After the fault is removed, the product will resume working state. |  |          |  |
| Output Over Current           | Hiccup mode. When the fault is removed and the power is restarted, the power supply will return to normal operation.                         |  |          |  |
| Short Circuit                 | Hiccup mode. When output short circuit is removed and the power is restarted, the power supply will return to normal operation.              |  |          |  |
| Surge                         |  | 6 kV (Differential), 10 kV (Common)    |          |  |
| ENVIRONMENTAL                 |  |  |          |  |
| IP Rating                     | IP65   |  |          |  |
| Environmental Rating          |  | Suitable for Wet Locations, Waterproof |          |  |
| Ambient Operating Temperature | -40 to 50°C (-40 to 122°F)   |  |          |  |
| Operating Case Temperature    | TCase Max 90°C (194°F)   |  |          |  |
| Operating Humidity            | 10-90% relative humidity (non condensing)  |  |          |  |
| Storage Temp. Humidity        | -40 to 75°C (-40 to 167°F); 10-90% relative humidity, non condensing (sea level to 2000m)  |  |          |  |
| Vibration                     | 10 - 500Hz X, Y, Z vertical axes vibrate at a constant acceleration of 1G (depth 3.5mm) for 1 hour   |  |          |  |
| MECHANICAL HOUSING            |  |  |          |  |
| Model: DVEE-                  | 100W-S3648 200W-S3648 320W-S3648   |  |          |  |
| Wire Gauge (I/O)              | 18/16AWG   | 18/14AWG                               | 18/14AWG |  |
| Housing Color                 | Gray   |  |          |  |
| Material                      | Aluminum Housing   |  |          |  |
| RELIABILITY                   |  |  |          |  |
| Lifetime                      | $\geq$ 5 years @ 230 VAC, Tc: 75°C (See Life Cycle and Tc Curves for details)  |  |          |  |
| MTBF                          | 200,000H @ 25°C, 230 VAC, 80% load (MIL-HDBK-217F)   |  |          |  |
| Warranty                      | 5 years (Tc: 75°C)   |  |          |  |
| SAFETY                        |  |  |          |  |
| Safety Standards              | UL 8750, UL 1310, UL 1012  |  |          |  |
| Withstand Voltage             | I/P-O/P: 3000 VAC (Max. 10mA 60s)  |  |          |  |
| Isolation Resistance          | I/P-O/P: ≥10MΩ/500VDC  |  |          |  |
| Ground Resistance             | ≤0.1Ω/ 25A/1min  |  |          |  |

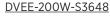


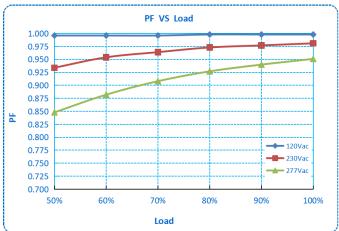
# **DVEE Series**

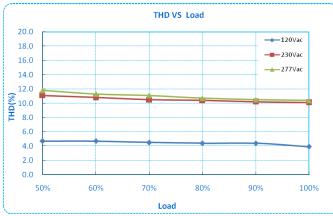
Selectable Voltage LED Driver Specifications

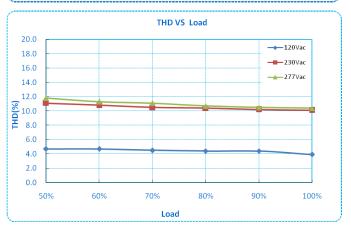
### DVEE-100W-S3648

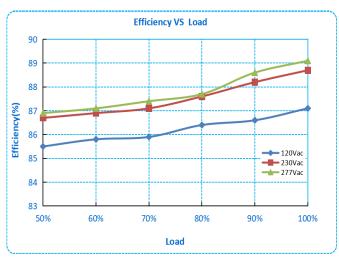












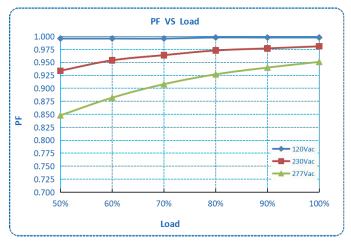


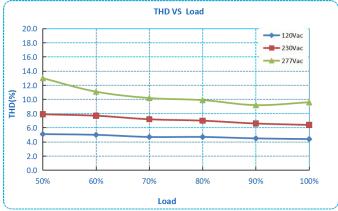


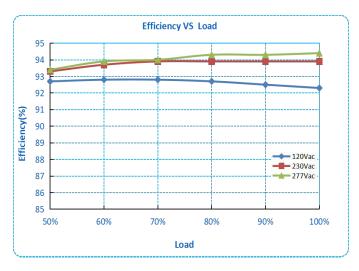
# **DVEE Series**

Selectable Voltage LED Driver Specifications

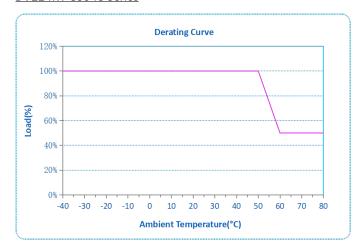
### DVEE-320W-S3648

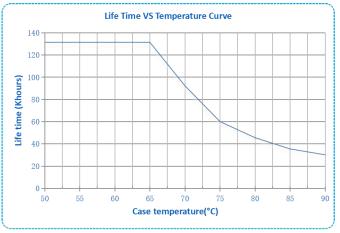






### **DVEE-xW-S3648 Series**



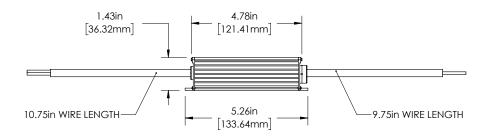


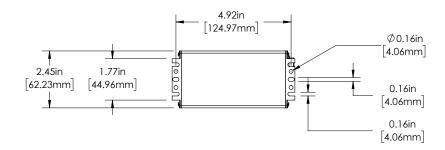
# **DVEE Series**

Selectable Voltage LED Driver Specifications

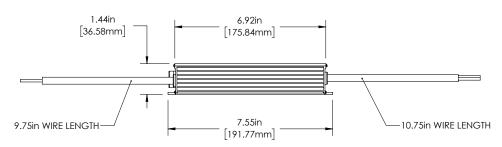
# **Dimensional Drawings**

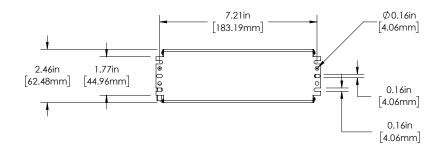
## DVEE-100W-S3648





## DVEE-200W-S3648







# **Dimensional Drawings**

DVEE-320W-S3648

