

# DVF Series

Metal Enclosed Constant Voltage Driver Specifications

Project \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_



DVF-350W-24V-MB



### Available Models<sup>1</sup>

- DVF-350W-24V-MB
- DVF-350W-24V-MB(POWERCORD)
- DVF-450W-24V-MB
- DVF-450W-24V-MB(POWERCORD)

### Part Number Breakdown

Example: DVF-350W-24V-MB(POWERCORD)

Series	Output Wattage	Output Voltage	Hardware	Optional Accessory
<b>DVF</b> [DiodeDrive, Constant Voltage, Metal Enclosed]	<b>350W</b> [350W] or <b>450W</b> [450W]	<b>24V</b> [24 VDC]	<b>MB</b> [Mounting Brackets]	<b>blank</b> [none] or <b>(POWERCORD)</b> [Grounded Power Cord]

### Overview

The DiodeDrive 24V constant voltage power supply is an enclosed, single-output power supply with a low-profile design. It features EMI filtration and integrated short-circuit, overload, overtemperature, and overvoltage protection. The 350W and 450W models use an internal cooling fan to prevent overheating. Easily connect LED lighting systems with the multi-tap screw terminals. The versatile power supplies have a switch to set either 115 or 230 VAC input before installation. The included mounting kit has 4x steel L-brackets and 4x steel M4 screws for easy installation. The input can be hardwired or connected using the optional power cord with a 5-15P plug.

### Features

- Short-circuit, overload, and overvoltage protection
- Switch for 115V or 230V input
- Built-in EMI filtration
- Forced air cooling

### Product Details

- Screw terminal block connections
- Durable metal housing
- Power ON LED indicator
- Non-dimmable
- 120-240 VAC input

### Certifications and Compliances

- UL Recognized - UL 8750 (FKSZ)
- CE and FCC compliant

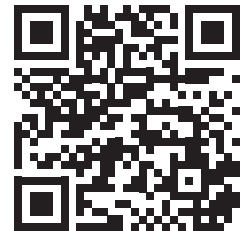


### Applications

- Electronic Instruments
- Home Interiors
- Industrial Control Systems
- Mechanical Equipment
- Security Systems
- Sign Lighting
- Stage & Theaters
- Trade Shows
- Video Wall Displays

### Warranty

- 5-year warranty



<sup>1</sup>Contact customer service if interested in other options.



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Model		DVF-350W-24V	DVF-450W-24V
<b>OUTPUT</b>			
Output Power		350W	450W
Output Voltage ( $\pm 1V$ )		24 VDC	24 VDC
Output Current (max.)		14.6A	18.8A
Efficiency (25°C, 230 VAC)		$\geq 85\%$	$\geq 86\%$
Line Regulation		$\pm 0.5\%$	$\pm 0.5\%$
Load Regulation		$\pm 0.5\%$	$\pm 0.5\%$
Voltage Regulation Accuracy		$\pm 1\%$	$\pm 1\%$
Output Ripple and Noise (p-p)		$\leq 150mV$	$\leq 150mV$
Dynamic Response	Overshoot	5	5
	25-50% and 50-75% load dynamics, half-wave period of 4mS, current change slope of 0.1A/ $\mu$ S		
Recovery Time ( $\mu$ S)		400	400
Power-on/off Overshoot Amplitude		$\leq \pm 10\%$	$\leq \pm 10\%$
Power-on Output Delay (ss)		$\leq 3$	$\leq 3$
<b>INPUT</b>			
Input Voltage		100-240 VAC	
		Models above 100W output are 100-120VAC/200-240VAC switch selectable	
Input Frequency		50/60Hz	
Input Current (max)	100 VAC @ full load	7.5A	12A
Inrush Current	230 VAC, (25°C cold start)	70A	80A
Standby Power Consumption		$\leq 5W$	$\leq 5W$
<b>PROTECTIONS</b>			
Overload		17-23A	22-25A
	Hiccup mode, automatically resets after fault condition is eliminated		
Overvoltage		27-30V	27-30V
	Voltage limiting, automatically resumes after restart		
Output Short Circuit		Power supply protection after output terminal short circuit, automatically resumes after short circuit removed	





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ENVIRONMENTAL		
Environmental Rating	Suitable for Dry Locations, Non-weatherproof	
Ambient Operating Temperature	-30 to 70°C (-22 to 158°F)	
Storage Temperature	-30 to 80°C (-22 to 176°F)	
Working Humidity	20-95% RH, non-condensing	
Altitude	0-5000m	
	Ambient temperature range decreases by 0.6°C for every 100m above 2000m	
Atmospheric Pressure	70-106Kpa	
Cooling Method	Forced Air	
SAFETY and EMC		
Dielectric Strength	I/P-O/P	3000VAC/10mA/1min
	I/P-GND	1800VAC/10mA/1min
	O/P-GND	500VAC/10mA/1min
Insulation Resistance	I/P-O/P	≥10MΩ@ 500VDC (Under normal atmospheric pressure, relative humidity of 90%)
	I/P-GND	
	O/P-GND	
Standards	UL8750, CE	
EMC Emission	Compliance to FCC Part 15	
MECHANICAL		
MTBF	≥100000 hours (25°C, rated input, full load) [MIL-HDBK-217F]	
Connection Type	Screw Terminal	
Housing Material	Metal	

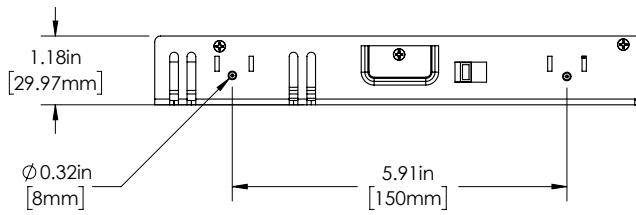
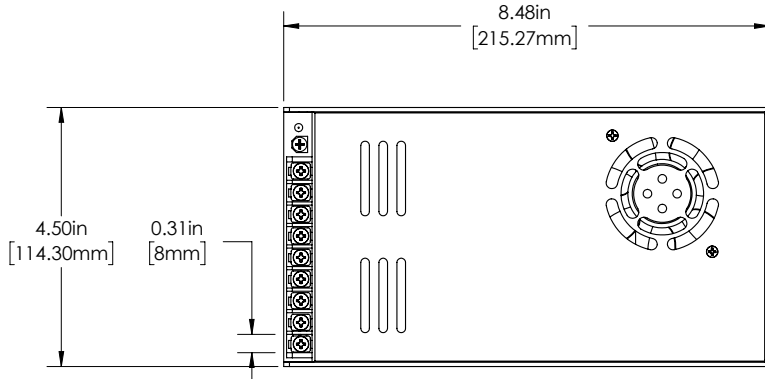


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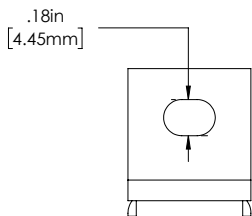
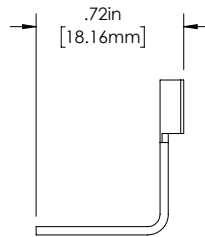
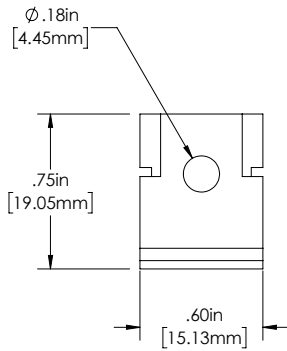
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### Dimensional Drawings

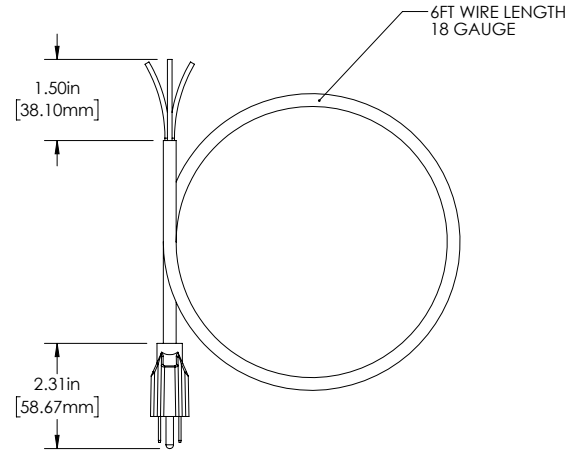
DVF-xW-24V-MB



### Mounting Brackets



### 18AWG Power Cord (350W)



### 16AWG Power Cord (450W)

