

FFDCV LED Drivers - 60 Watt Flicker-Free Dimmable Fanless LED Drivers

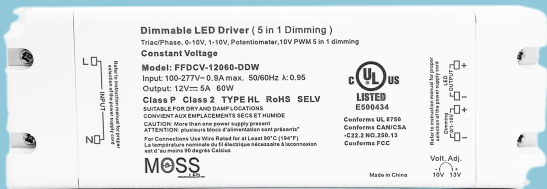
Flicker Free Constant Voltage Family of Power Supplies. Dimmable from 0 - 100% means smooth dimming and 20khz PWM means flicker-free operation to the eye and on camera. Fully listed cULus LED drivers for compliance anywhere in North America.. Extremely reliable and robust LED drivers designed for use with all Constant Voltage LED products. Perfect for on-camera and constant-on use with our FlexLED Tape or any constant voltage LED product. Available in 24VDC and 12VDC. Class 2 (Under 100VA), Class P, and Type HL safety including short-circuit, overload, over-voltage, over-current, and over-temperature protection. Rated for Dry, Damp, and Wet locations. Safe, powerful, flicker-free, and reliable are the cornerstones of our FFDCV line of power supplies from MossLED. Includes an amazing 5 year warranty.

Compatible with the following dimming methods:

- TRIAC
- 0-10V
- 1-10V
- 10V PWM (External load resistor required for PWM dimming)
- Potentiometer

Key Family Product Features:

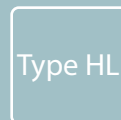
- Output 30 - 300W
- 12V and 24V Constant Voltage Operation
- Class 2 (96 Watt @ 24V and 60 Watt @ 12V and below)
- Class P
- Type HL
- SELV
- 0 - 100% Dimming
- 20khz output ensures flicker-free operation
- 5-year Warranty
- Rated for dry, damp and wet locations



12V VERSION



24V VERSION



TECHNICAL SPECIFICATIONS

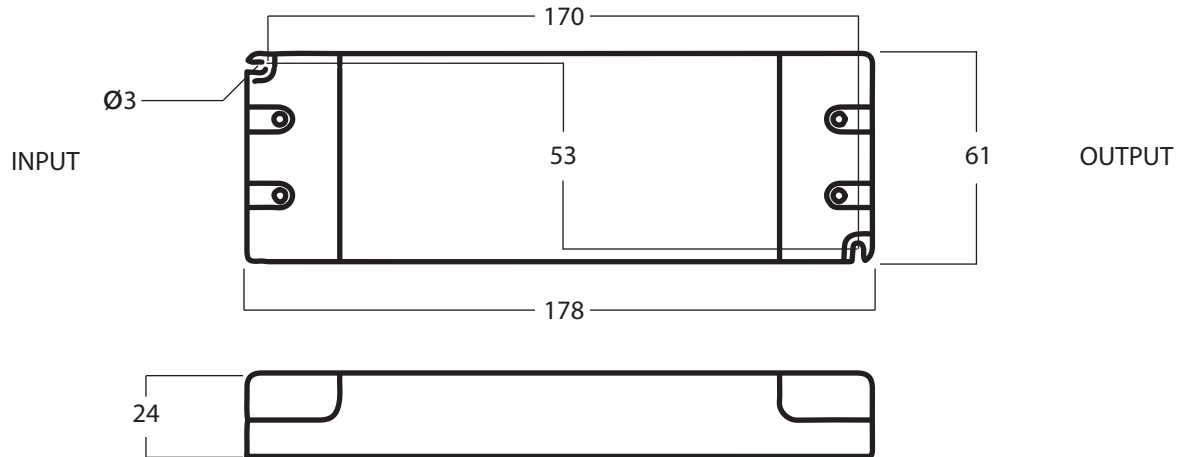
NO: DIMMABLE FANLESS LED DRIVERS - 60WATT SPECIFICATION

	MODEL	FFDCV-12060-DDW	FFDCV-24060-DDW
	CERTIFICATES	UL cULus Class 2 Class P SELV Type HL, RoHS UL8750+UL1310, CAN/CSA-C22.2 No.250.13 FCC 47 CFR Part 15, Subpart B	
	DC VOLTAGE	12V	24V
	VOLTAGE (TOLERANCE, REGULATION)	±0.5V ±0.5%	
OUTPUT	RATED CURRENT	5A	2.5A
	RATED POWER	60W	
	LOAD REGULATION	±1 %	
	VOLTAGE RANGE	100-277VAC	
	FREQUENCY RANGE	47 - 63Hz	
	POWER FACTOR(TYP.)@ FULL LOAD	0.98@120VAC 0.95@277VAC	0.98@120VAC 0.95@277VAC
INPUT	THD(TYP.) @ FULL LOAD	<20%@120VAC &277VAC	
	EFFICIENCY(TYP.)@ FULL LOAD	83%@120VAC 85%@277VAC	83%@120VAC 84%@277VAC
	AC CURRENT(MAX.),	0.9A	
	INRUSH CURRENT (TYP.)	14A, 50%, 780us @120VAC; 15A, 50%, 660us @277VAC	
	SHORT CIRCUIT	SHUT DOWN O/P VOLTAGE, RE-POWER ON TO RECOVER AFTER FAULT CONDITION REMOVED	
PROTECTION	OVER LOAD	≤120% SHUT DOWN O/P VOLTAGE, RE-POWER ON TO RECOVER AFTER FAULT CONDITION REMOVED	
	OVER TEMPERATURE	100°C±10°C SHUT DOWN O/P VOLTAGE, AUTOMATICALLY RECOVER AFTER COOLING.	
	WORKING TEMP.	-40 ~ +60°C (SEE BELOW DERATING CURVE)	
ENVIRONMENT	WORKING HUMIDITY	20 - 95% RELATIVE HUMIDITY, NON-CONDENSING	
	STORAGE TEM., HUMIDITY	-40 ~ +80°C, 10 - 95%RH	
	VIBRATION	-10~500Hz, 2G 10min. / 1 CYCLE, PERIOD FOR 60MIN. EACH ALONG X, Y, Z AXES	
ENVIRONMENT	NET WEIGHT	0.35Kg	
	DIMENSION	178 X 61 X 24 mm	

NOTES

1. All parameters NOT specially mentioned are measured at 120VAC input , rated load and 25° C of ambient temperature.
2. Tolerance: includes set up tolerance, line regulation and load regulation .
3. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment installers must re-qualify EMC Directive in the completed installation.

MECHANICAL SPECIFICATIONS

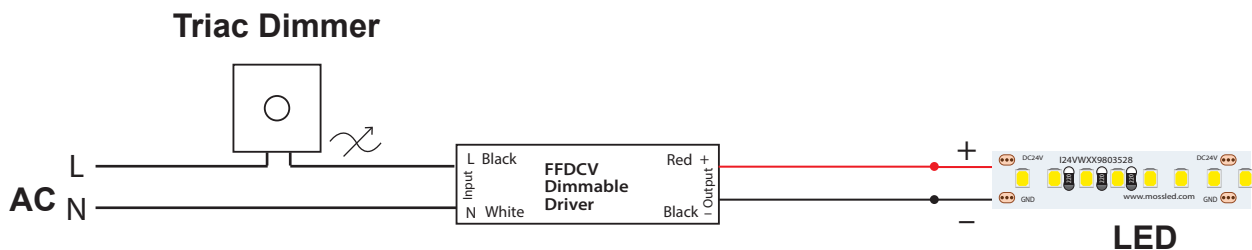


DIMMING OPERATION AND CONNECTING DIAGRAM

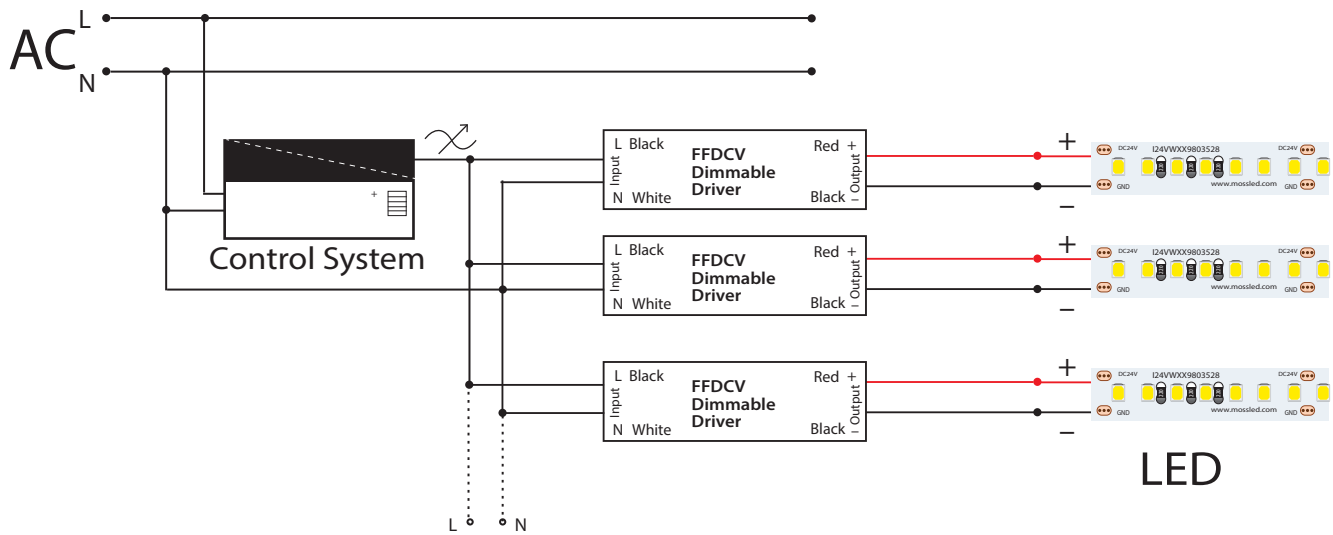
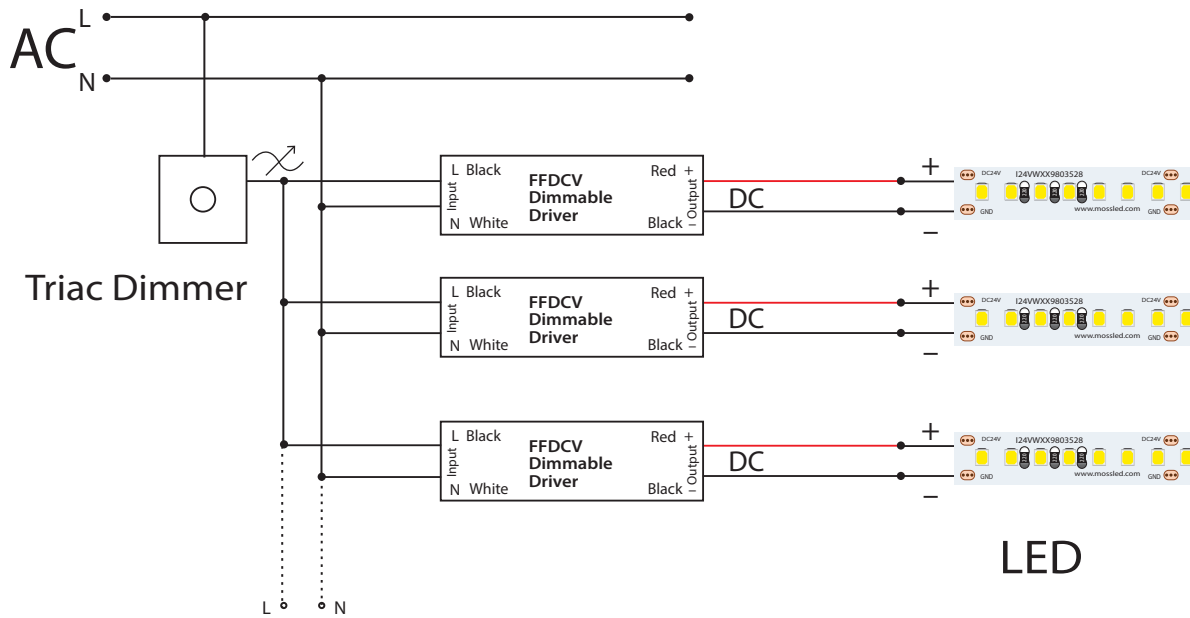
1. Input terminals Live(L) and Neutral(N) wires to be connected AC
2. LED Output Positive (LED+) and Negative(LED-) connect to LED luminaire
3. Dimming Positive (+) to 0/1-10V dimmer signal(+) and Negative (-) connect to 0/1-10V dimmer signal (-)
4. DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please ensure sure to connect as per the wiring instructions otherwise your product may not function correctly and could be damaged not covered under warranty.
6. Custom requests can be accomodated. Please contact us. info@mossled.com
7. When using two types of dimming at the same time, you must ensure that the LED lighting is set to full brightness. Only then can you operate utilizing the secondary dimming.

TRIAC & FORWARD PHASE/LEADING EDGE & MLV & REVERSE PHASE/TRAILING EDGE, ELV DIMMING

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimming system.
2. Minimum loading is ~10%
3. Ensure to use dimmers with power at least 1.5 times as the output power of the driver. eg. for 30 Watt LED Driver please use a dimmer rated for at least 45 watts

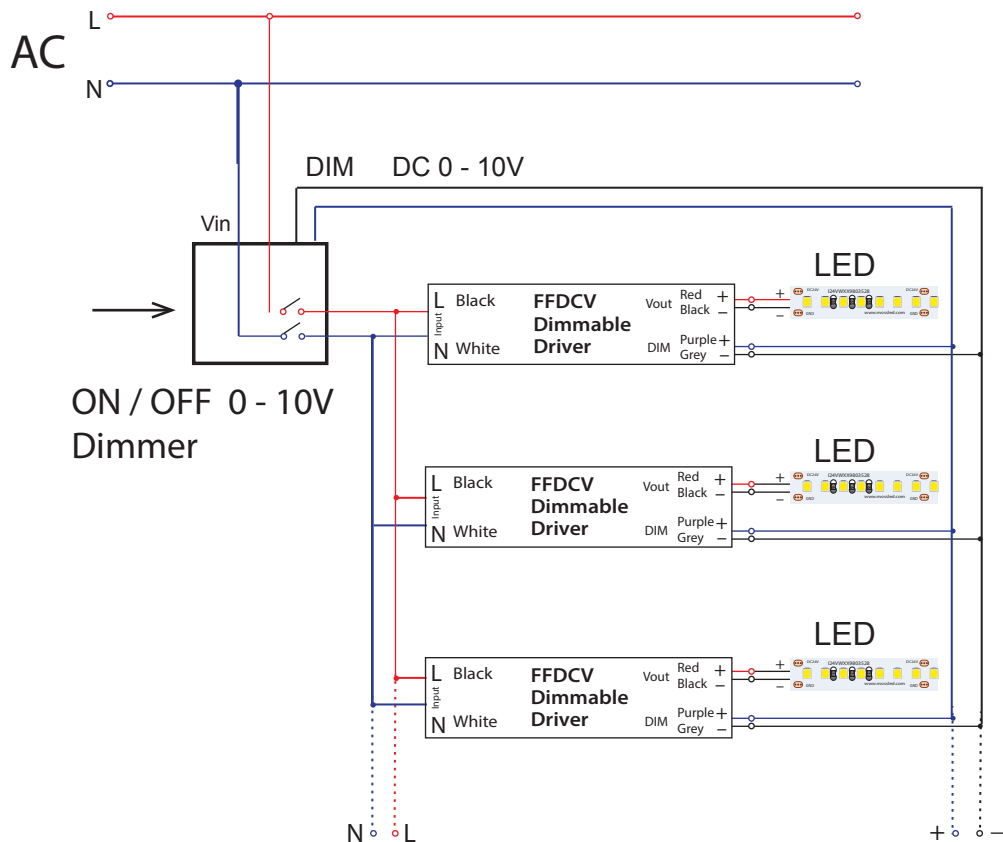
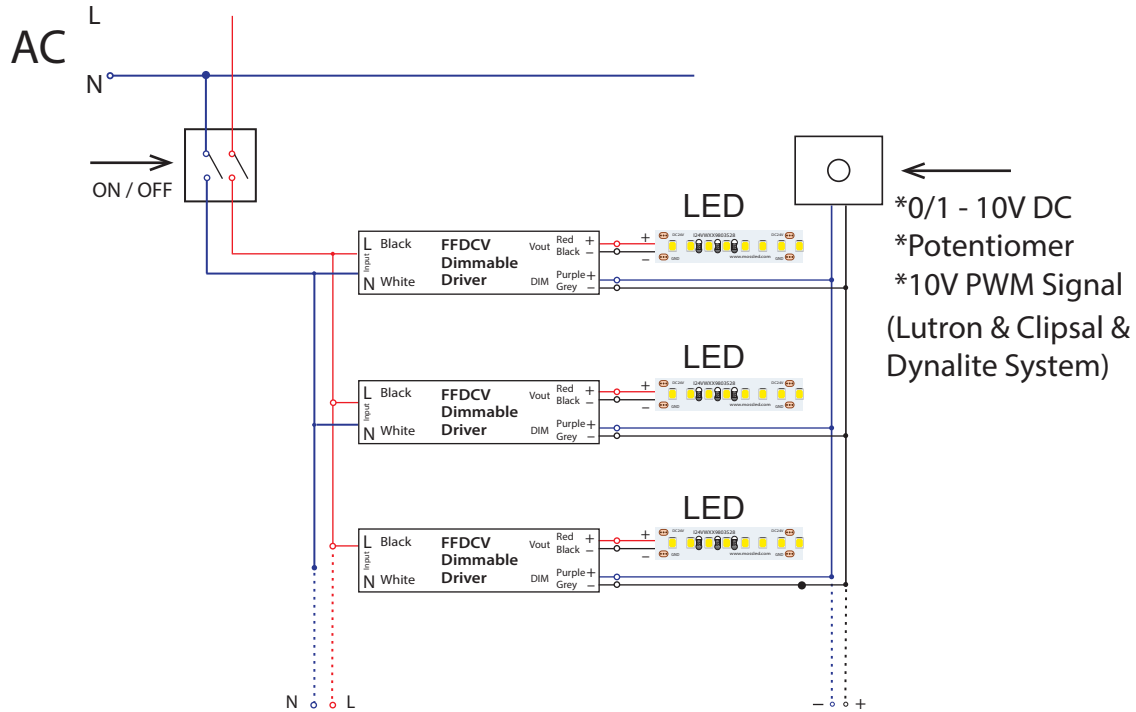


WIRING DIAGRAMS



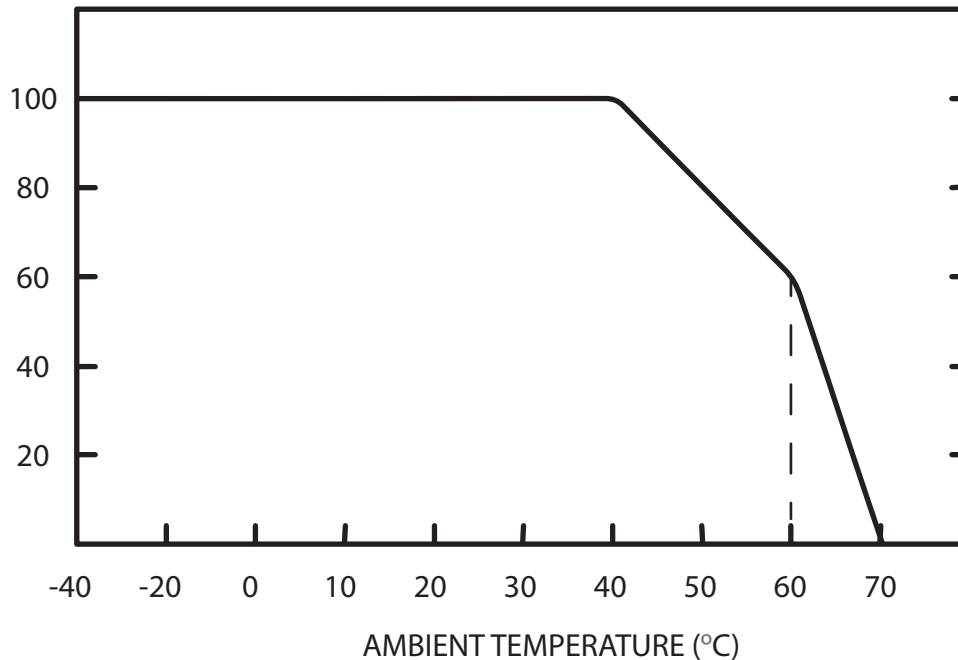
WIRING DIAGRAMS

USING ONE DIMMING -- 0-10/1-10V DIMMING



DERATING CURVE & INSTALLATION NOTES

DERATING CURVE



To extend the life of the LED Driver, please refer to the Derating Curve and derate according to the ambient temperature

INSTALLATION NOTES

1. This driver should be installed by qualified and professional person.
2. Keep proper ventilation around the unit and do not stack any objects on it. A 10-15 cm clearance must be kept when the adjacent device is a heat source.
3. Ensure that wiring is correct before testing in order to avoid LED light and/or power supply damage.
4. If you have any issues or concerns please contact Moss LED at info@mossled.com.
5. Before commencing any installation or maintenance work, please de-energize the power supply from the utility. Ensure that it cannot be re-connected inadvertently!
6. Mounting orientations other than standard orientation or operate under high ambient temperature may increase the internal component temperature and will require a de-rating in output current.
7. Current rating of an approved primary /secondary cable should be greater than or equal to that of the unit. Please refer to its specification.
8. For LED power supplies with waterproof connectors, verify that the linkage between the unit and the lighting fixture is tight so that water cannot intrude into the system.