

FFDCV LFD Drivers - 30 Watt Flicker-Free Dimmable Fanless LED Drivers

Constant Voltage LED products. Perfect for on-camera and 100VA), Class P, and Type HL safety including short-circuit, flicker-free, and reliable are the cornerstones of our FFDCV line of

Compatible with the following dimming methods:

TRIAC

10V PWM (External load resistor required for PWM dimming) Potentiometer

Key Family Product Features:

Class 2 (96 Watt @ 24V and 60 Watt @ 12V and below)

Class P

20khz output ensures flicker-fee operation

Rated for dry, damp and wet locations



12V VERSION



24V VERSION

















Type HL



30













Flexible LED Tape





TECHNICAL SPECIFICATIONS

110.			
	MODEL	FFDCV-12030-DDW	FFDCV-24030-DDW
	CERTIFICATES	FCC UL cULus Class 2 UL8750+UL1310, CAN/CSA-C22.2 No.250.13	
OUTPUT	DC VOLTAGE	12V	
	VOLTAGE (TOLERANCE, REGULATION)	±0.5V ±0.5%	
	RATED CURRENT	2.5A	1.25A
	RATED POWER	30W	
	LOAD REGULATION	±1 %	
INPUT	VOLTAGE RANGE	100-277 VAC	
	FREQUENCE RANGE	47 - 63Hz	
	POWER FACTOR(TYP.)@ FULL LOAD	0.99@120 VAC	0.99@120 VAC 0.95@277 VAC
	THD(TYP.) @ FULL LOAD	<20%@120 VAC & 277 VAC	
	EFFICIENCY(TYP.)@ FULL LOAD	79%@120 VAC 80%@277 VAC	
	AC CURRENT(MAX.).	0.5A	
	INRUSH CURRENT (TYP.)	7A, 50%, 420us @120 VAC;	12A, 50%, 480us @277 VAC
PROTECTION	SHORT CIRCUIT	SHUT DOWN O/P VOLTAGE, RE-POWER ON TO RECOVER AFTER FAULT CONDITION REMOVED	
	OVER LOAD	\leq 120% SHUT DOWN O/P VOLTAGE, RE-POWER ON TO RECOVER AFTER FAULT CONDITION REMOVED	
	OVER TEMPERATURE	100°C \pm 10°C SHUT DOWN O/P VOLTAGE, AUTOMATICALLY RECOVER AFTER COOLING.	
ENVIRONMENT	WORKING TEMP.	-40° C \sim + 60° C (SEE DERATING CURVE)	
	WORKING HUMIDITY	20 - 95% RH, NON-CONDENSING	
	STORAGE TEM., HUMIDITY	-40 - +80°C,10 - 95%RH	
	VIBRATION	10 \sim 500Hz, 2G 10min. / 1 CYCLE, PERIOD FOR 60MIN. EACH ALONG X, Y, Z AXES	
HOUSING	NET WEIGHT	0.21Kg	
	DIMENSION	155 X 54 X 20 mm	
SAFETY & EMC	SAFETY STANDARDS	UL8750+UL1310 , CAN/CSA-C22.2 No.250.13	
	WITHSTAND VOLTAGE	I/P-O/P:1.88KVac	
	ISOLATION RESISTANCE	I/P-O/P:100MΩ/500VDC/25 /70%RH	
	EMC EMISSION	FCC 47 CFR Part 15 ,Subpart B	

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.

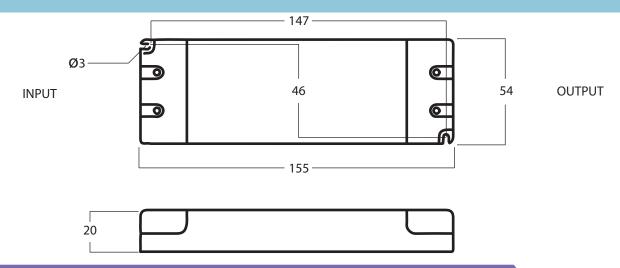








MECHNICAL SPECIFICATIONS

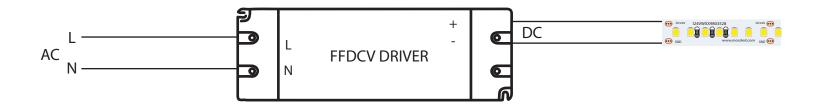


DIMMING OPERATION AND CONNECTING DIAGRAM NOTES

- 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



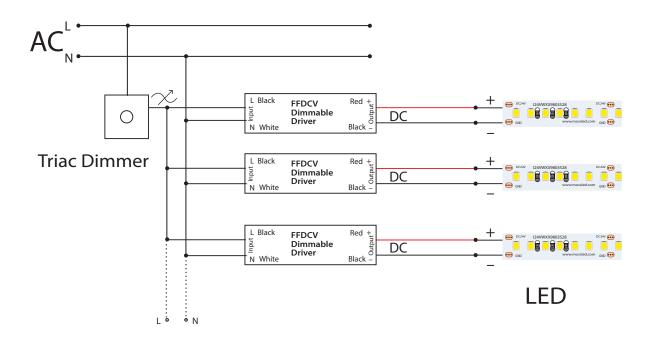


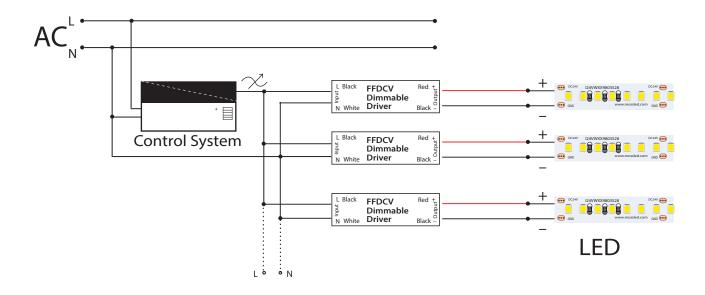






WIRING DIAGRAM







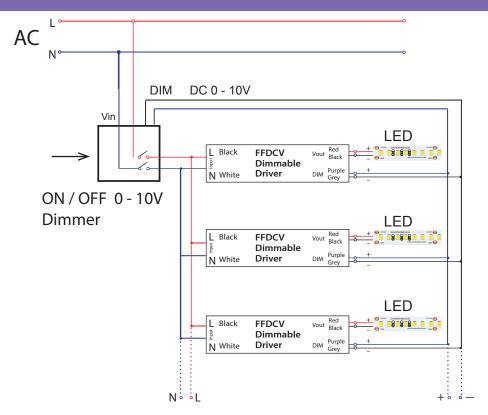


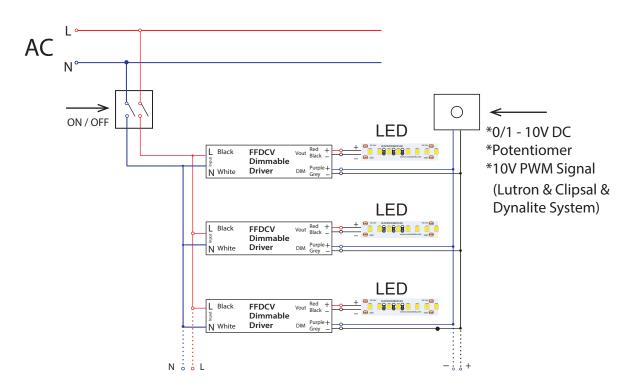




WIRING DIAGRAM

DIMMING -- 0-10/1-10V DIMMING





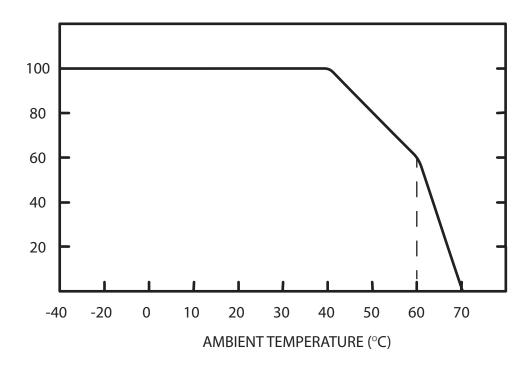






DERATING CURVE & INSTALLATION NOTES

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.





