Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 100W

Whole Family

KVG-XXXXX-DW 12V/ 24VDC
30W 60W 80W 96W 100W
120W 150W 200W 300W

c UL us LISTED E495946 FC Class 2 Class P

■ Features:

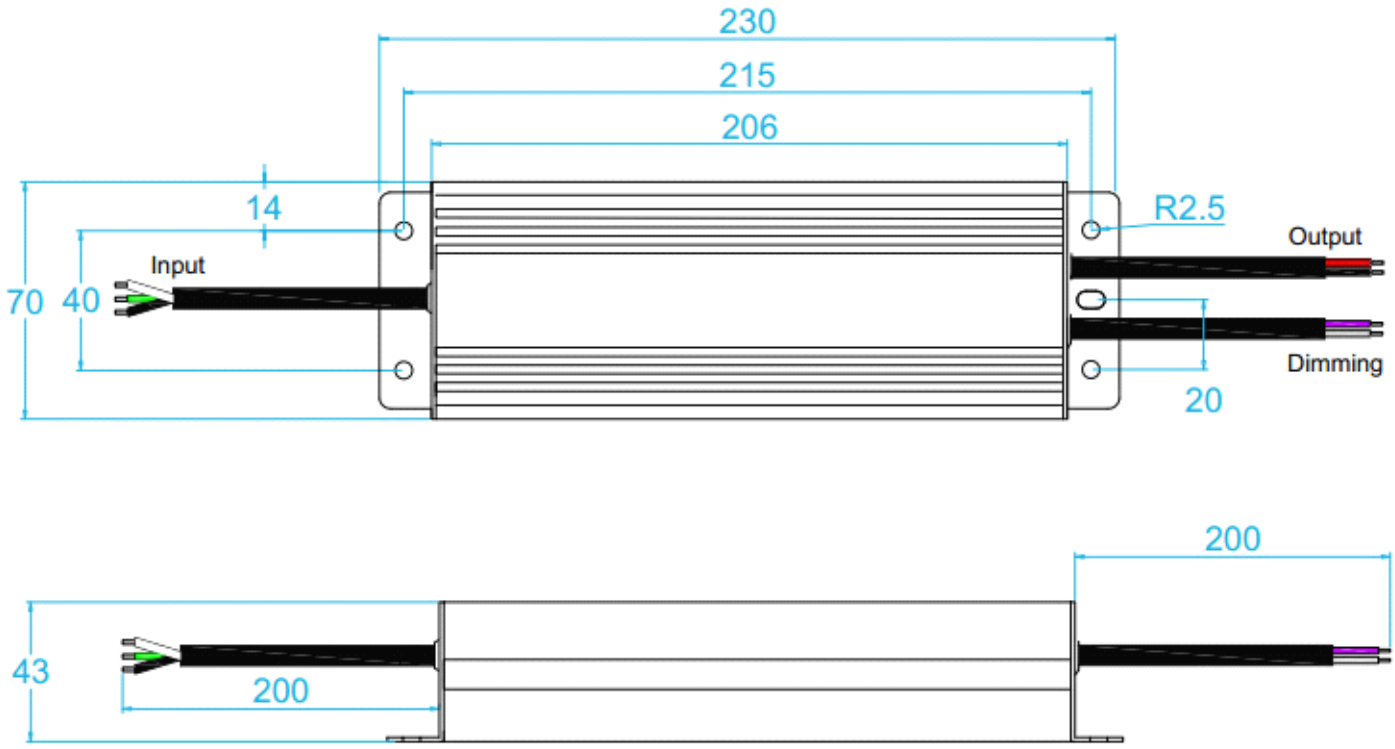
·Output constant Voltage
·Range: 100-277VAC
·Built-in active PFC function
·Efficiency up to 86%
·Protections: short circuit/over load/ over temperature
·Cooling by free air convection
·Full protection aluminum housing, for dry, damp, wet locations
·Dimming function:
·Phase dimming: work with forward phase /leading edge ,MLV and Reverse phase /trailing edge ,ELV,TRIAC dimmers
·0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
· Dimming range: 0-100%
· Suitable for LED lighting and moving sign applications
· IP66

■ Specification

Model		**KVG-12100-DW**	**KVG-24100-DW**
Certificates		FCC UL cUL	
Output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	8.33A	4.17A
	Rated power	100W	
	Load Regulation	±1 %	
Input	Voltage Range	100-277VAC	
	Frequency Range	47 - 63Hz	
	Power Factor(Typ.)@ full load	0.99@120VAC 0.96@277VAC	0.98@120VAC 0.95@277VAC
	THD(Typ.) @ full load	<20%@120VAC &277VAC	
	Efficiency(Typ.)@ full load	80%@120VAC 83%@277VAC	83%@120VAC 86%@277VAC
	AC Current(Max.)	1.4A	
	Inrush Current (Typ.)	20A, 50%, 1.6ms @120VAC; 25A, 50% 1.2ms @277VAC	
	Leakage current	<0.5mA	
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition removed	
	Over Load	≤120% constant current limiting, auto-recovery	
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.	
Environment	Working TEMP.	-40~+60℃ (see below derating curve)	
	Working Humidity	20 - 95%RH,non-condensing	
	Storage TEM.,Humidity	-40 - +80℃,10 - 95%RH	
	TEMP.coefficient	±0.03%/℃(0 - 50℃)	
	Vibration	10～500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes	
Safety & EMC	Safety standards	UL8750 , 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	

Others	Net Weight	1.1Kg
	Dimension	230*70*43mm(L*W*H)
	packing	340*275*170mm 10pcs /CTN
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input , rated load and 25℃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 manufactures must be-qualify EMC Directive on the complete installation again.	

■ Mechanical Specification



※ Input cable 3*18AWG,the green cable to (FG) "Black" to L ,and "White" to N of Mains AC

※Output cable 2*16AWG,Red" (+) to LED Positive side (+) , "Black"(-) to LED Negative side (-).

※Dimming cable 2*18AWG,DIM (+) Purple to 0/1-10V dimmer signal(+),DIM (-) Grey to 0/1-10V dimmer signal (-)

※Please DO NOT connect “DIM-“ to “LED-“, “DIM+” to “ LED+” ,or other incorrect connection.

※Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.

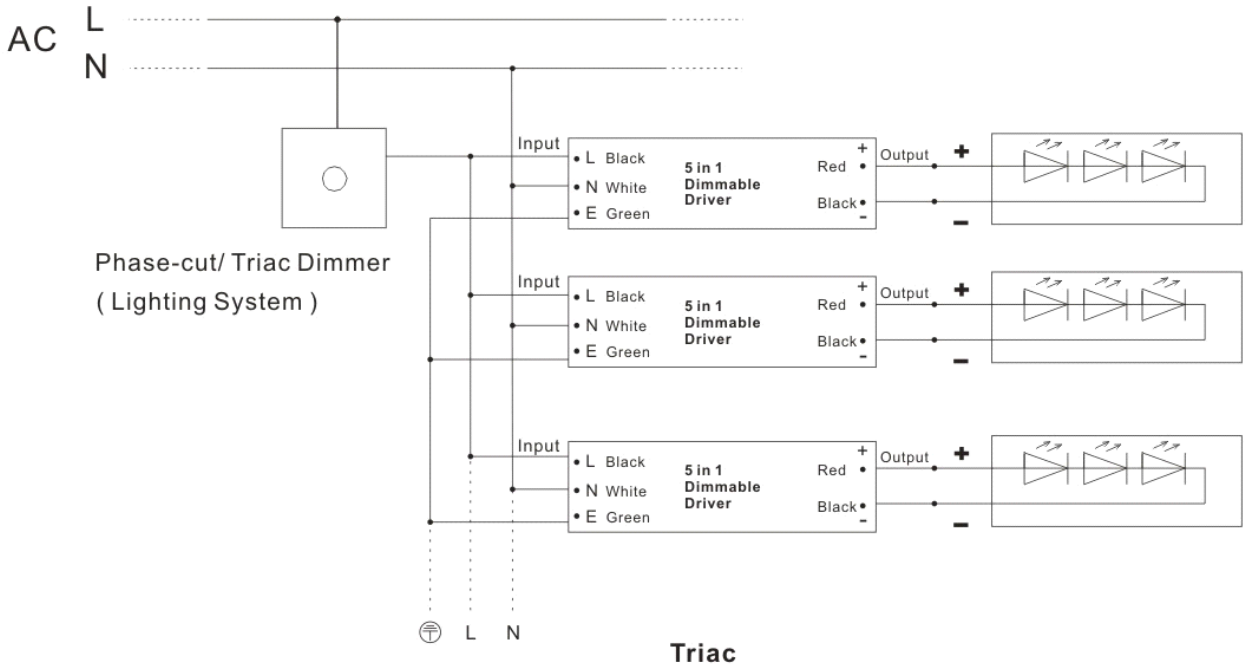
※Note: Any other requests we can customized.

■ Dimming Operation and Connecting Diagram

※Using two ways of dimming at the same time, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming;

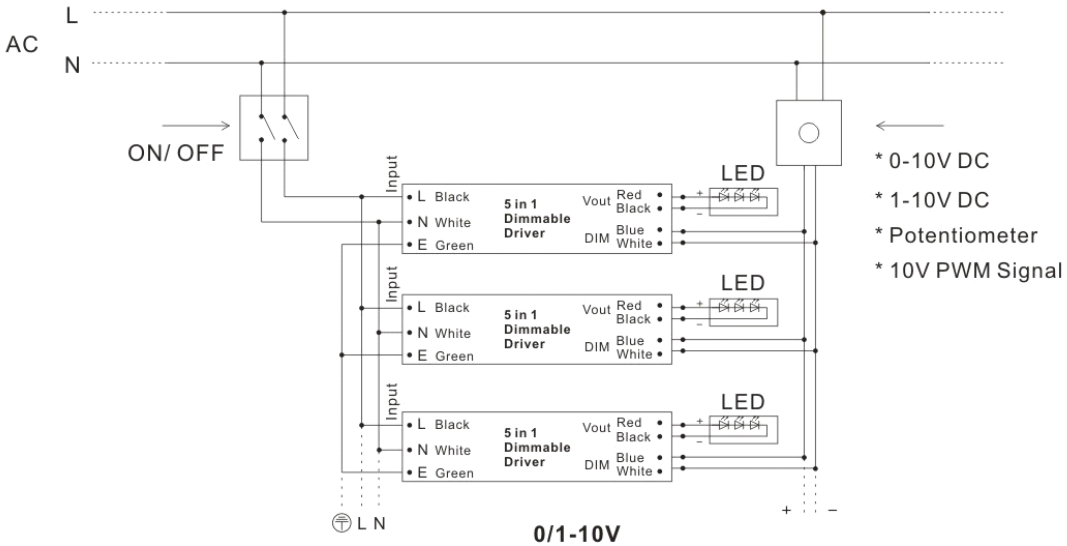
※Using one dimming ---TRIAC/Phase cut dimming

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 dimmer of lighting system.
2.Working with forward phase /leading edge ,MLV and Reverse phase /trailing edge ,ELV,TRIAC dimmers
3.Min loading is about 10%
4.Please try to use dimmers with power at least 1.5 times as the output power of the driver.

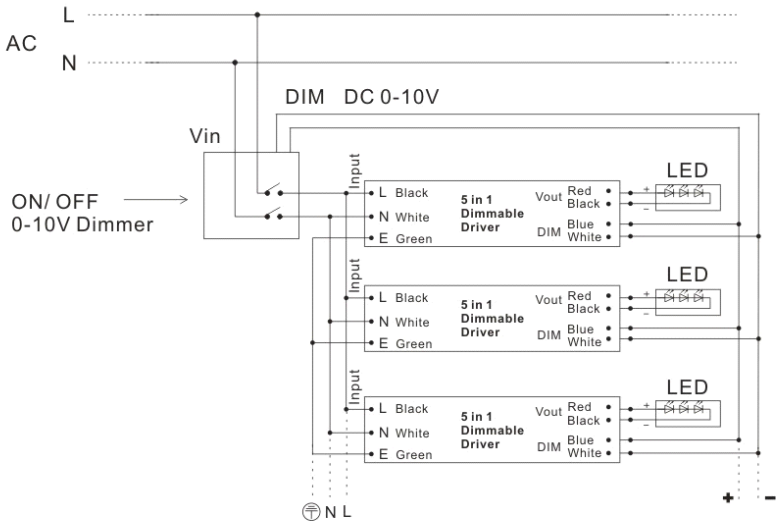


Triac

※Using one dimming ---0-10/1-10V dimming

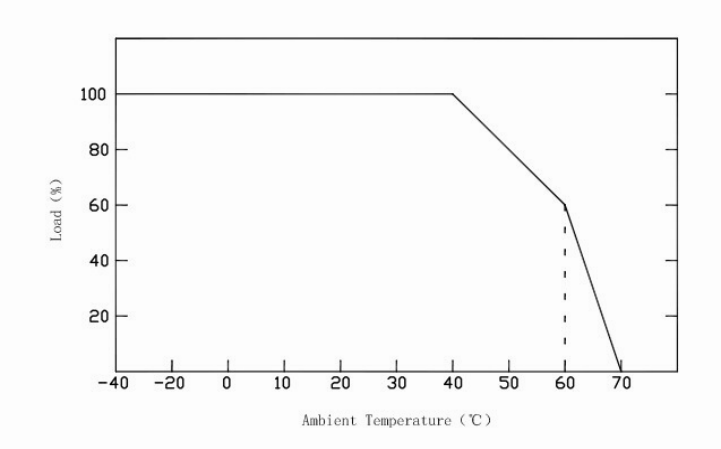


0/1-10V



0/1-10V

■ Derating Curve



※To extend their life, please refer to the Derating Curve and derate according to the temperature.

■ Instruction:

1) This driver should be installed by qualified and professional person;
2) Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3) Ensure that wiring is correct before test in order to avoid light and power supply damage;
4) If driver Cannot work normally, don't maintain privately; Have any question, please contact Zhuhai Shengchang.

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