



ION LIGHTING™
architectural lighting & design

ION-KVG-24300-DWJ

Triac/0-10V/1-10V/Potentiometer/10V
PWM 5 in 1 Dimmable led driver

Whole Family

12V/ 24VDC
30W 60W 80W 96W 100W
120W 150W 200W 300W



TYPE HL



Features

- Output constant voltage
- UL, cUL listed, Type HL rated, FCC
- Universal AC input: 110-277VAC
- Power Factor: up to 0.99
- High efficiency : up to 92%
- Load: 10-100%
- Protection:short circuit/over loading/ Over temperature
- PWM output, does not change the color index
- Full protection metal case, for dry, damp, wet location
- Flicker-free
- 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

Model		KVG-12300-DWJ	KVG-24300-DWJ
Certificates		UL, cUL listed, Type HL rated, FCC	
Output	DC Voltage	12V	24V
	Rated Current	25A	12.5A
	Rated Power	300W	300W
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Load Regulation	±2%	±1%
Input	Voltage Range	110-277VAC	
	Frequency Range	47-63Hz	
	Power Factor (Typ.) @ full load	0.99@120VAC 0.97@277VAC	0.99@120VAC 0.95@277VAC
	THD (Typ.) @ full load	<20%	
	Efficiency (Typ.) @ full load	86% @120Vac 88%@277Vac	88% @120Vac 92%@277Vac
	AC Current (Max.)	3.4A@100Vac	
	Inrush Current (Typ.)	20A, 50%, 1.9ms @120Vac	35A, 50%, 1.9m,s @277Vac
	Leakage current	<0.50mA	
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition is removed	
	Over Loading	≤120% Hiccup mode,recovers automatically after fault condition is removed	
	Over temperature	100°C±10°C shut down o/p voltage, automatically recover after cooling.	
Environment	Working TEMP.	-40~+60°C (see below derating curve)	
	Working Humidity	20~90%RH, non-condensing	
	Storage TEMP. Humidity	-40~+80°C, 10~95%RH	
	TEMP .coefficient	±0.03%/°C (0~50°C)	
	Vibration	10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes	
Safety& EMC	Safety standards	UL8750+UL1310	
	Withstand voltage	I/P-O/P:1.88KVAC	
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH	





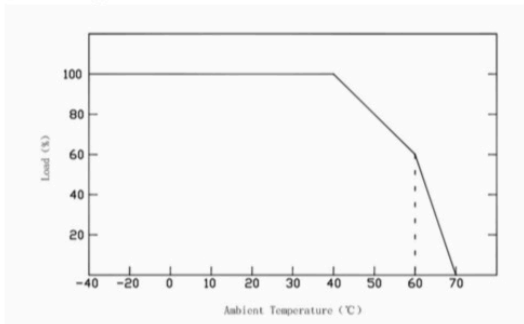
ION LIGHTING™
architectural lighting & design

ION-KVG-24300-DWJ

Triac/0-10V/1-10V/Potentiometer/10V
PWM 5 in 1 Dimmable led driver

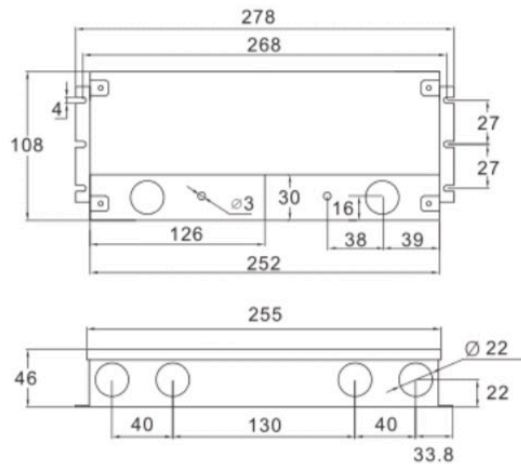
	EMC EMISSION	FCC Part 15 B
others	Net. Weight	2.0Kg
	Size	278*108*46mm (L*W*H)
	packing	10PCS/CTN
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25°C of ambient temperature. 2. To extend the driver's using life ,please reduce the loading at lower input voltage.	

Derating Curve



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

Mechanical Specification



Unite: mm
Tolerance: 0.5-2mm

- ※ Input wire Black and White to be connected to AC L and N ,Green wire go ground.
- ※ Output wire Red to LED Positive side (+) , Black to LED Negative side (-).
- ※ Dimming cable DIM (+) Purple to 0/1-10V dimmer signal(+), DIM (-) Grey to 0/1-10V dimmer signal (-).
- ※ Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.
- ※ Note: Any other requests we can customized.





ION LIGHTING™
architectural lighting & design

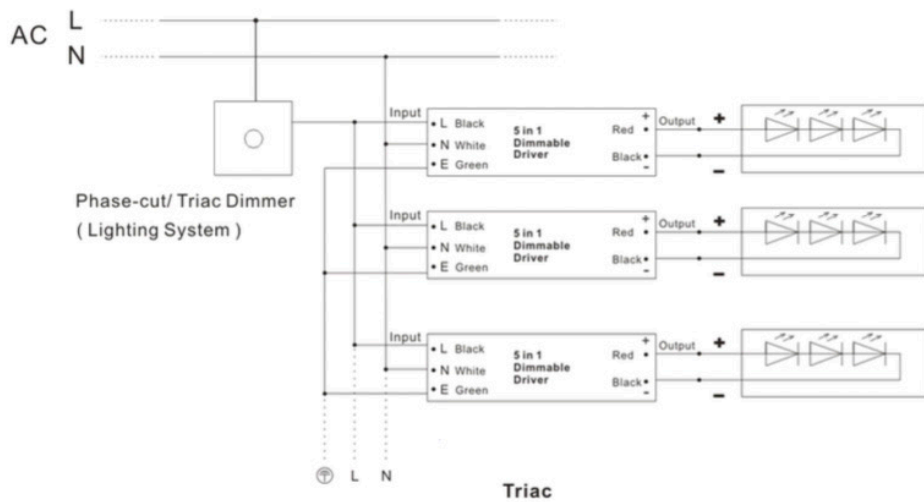
ION-KVG-24300-DWJ

Triac/0-10V/1-10V/Potentiometer/10V
PWM 5 in 1 Dimmable led driver

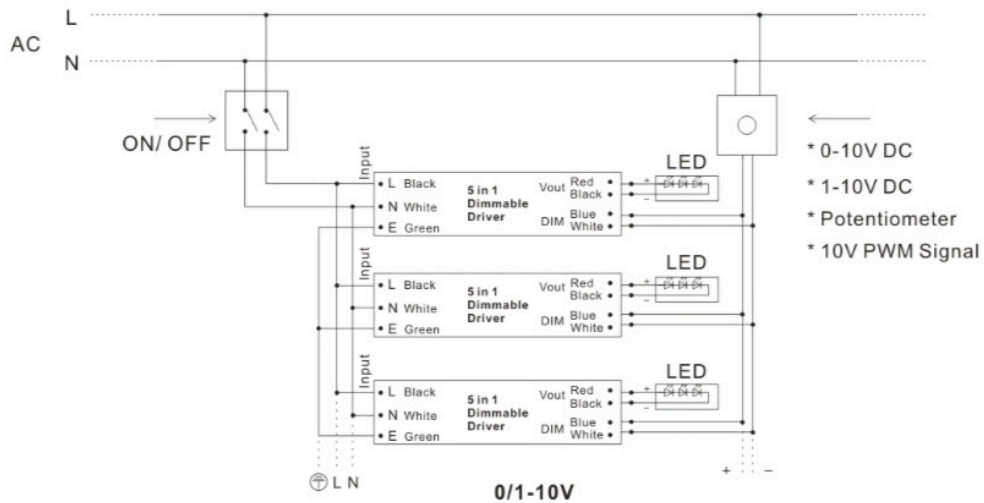
■ Connecting Diagram

※Using 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.Work with forward phase /leading edge ,MLV and reverse phase /trailing edge ,ELV,TRIAC dimmers.
- 3.Please try to use dimmers with power at least 1.5 times as the output power of the driver.



※Using 0-10V/1-10V dimming

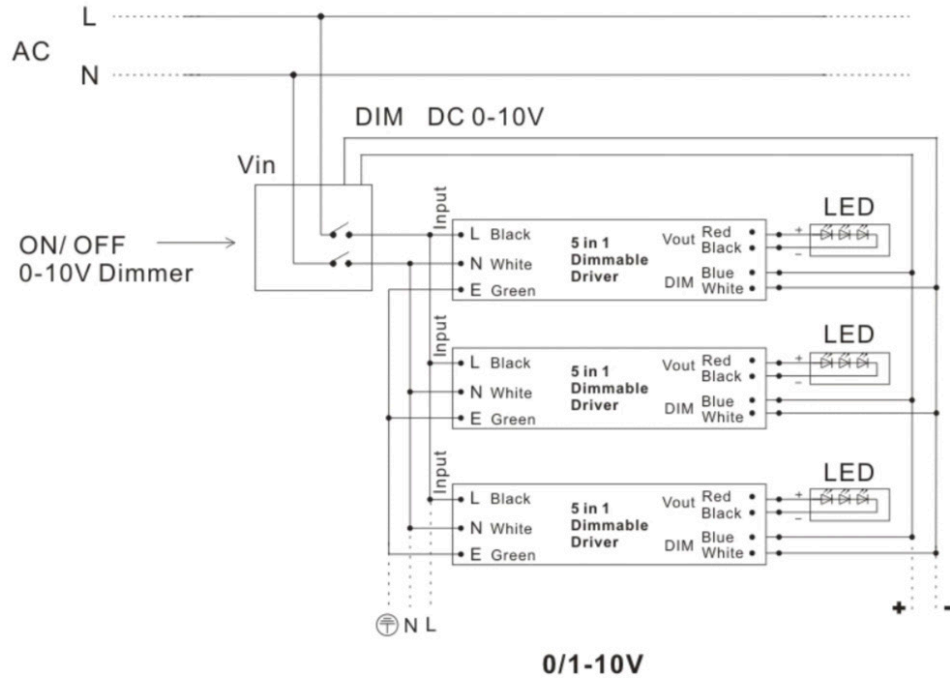




ION LIGHTING™
architectural lighting & design

ION-KVG-24300-DWJ

Triac/0-10V/1-10V/Potentiometer/10V
PWM 5 in 1 Dimmable led driver



■ 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.

