

0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

KVD-DIM Series 500W

Whole Family: KVD-XX500-DIM (XX=12/24/36/48VDC) [30W 60W 80W 96W 100W 120W 150W 200W 300W 500W 600W]



ICES-005 Class P TYPE HL SELV RoHS



Features

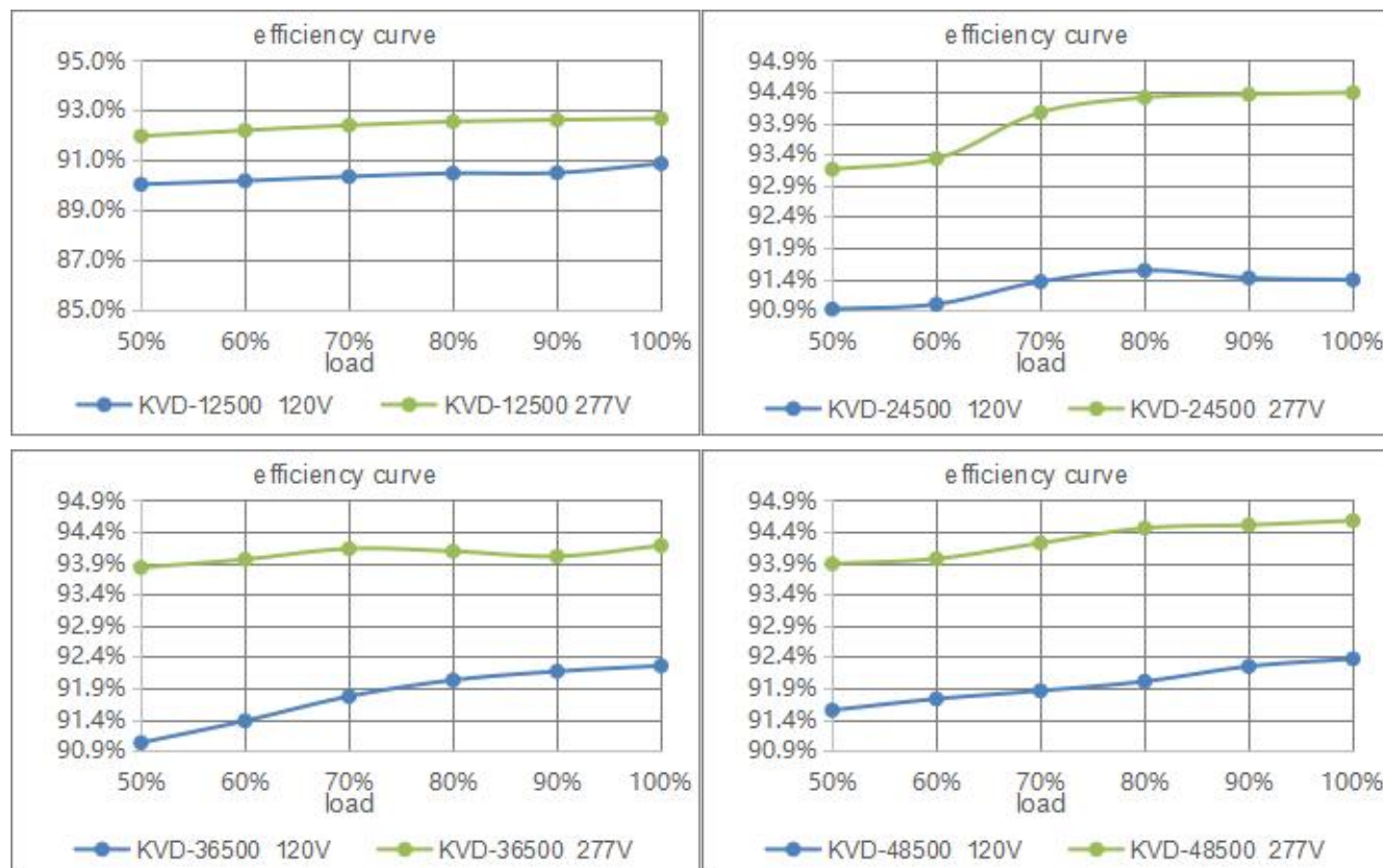
Output:	Constant Voltage
Range:	110-277VAC
PFC design:	Built-in active PFC function, PF ≥ 0.95
Efficiency:	Up to 93%
Protections:	Short circuit / Over load / Over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Full aluminum protection housing, for dry, damp & wet locations.
Dimming function:	0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
Dimming range:	0.1-100%
Application:	Suitable for the application of LED lighting
Warranty:	5 years warranty

0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W
Specification

Model		KVD-12500-DIM	KVD-24500-DIM	KVD-36500-DIM	KVD-48500-DIM
Certificate		UL / cUL / FCC / ICES-005 / Class P / Type HL / SELV / ROHS / REACH			
Output	DC Voltage	12V	24V	36V	48V
	Voltage Tolerance	±0.5V			±1V
	Voltage Regulation	≤0.5%			
	Rated current	41.67A	20.84A	13.89A	10.42A
	Rated power	500W			
	Load Regulation	≤1%			
Input	Voltage Range	110-277VAC			
	Frequency Range	50 / 60Hz			
	Power Factor @ full load	>0.95			
	THD(Typ.) @ full load	≤10%@120VAC			
	Efficiency @ full load	90%@120VAC 92.5%@277VAC	90.2%@120VAC 93%@277VAC	90.2%@120VAC 93%@277VAC	90.5%@120VAC 93%@277VAC
	AC Current (Max.)	5.03A			
	Inrush Current (Typ.)	52A, 810us@50%110VAC 76A, 148us@50%277VAC			
	Leakage current	<0.5mA			
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.			
	Over Load	105%~120% Hiccup mode, recovers automatically after fault condition is removed.			
	Over temperature	Shell surface temp.100°C±10°C shut down o/p voltage, automatically recover after drops.			
Environment	Working TEMP.	-40~+40°C (see below derating curve)			
	Working Humidity	20 - 95%RH non-condensing			
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing			
	TEMP.coefficient	±0.03%/°C(0 - 50°C)			
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. 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 I/P-FG:1.88KVAC O/P-FG:0.5KVAC			
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25°C / 70% RH			
	EMC Immunity	FCC/ICES do not request this test.			
	EMC Emission	FCC Part 15 Subpart B; ICES-005 Issue 5; ANSI C63.4a-2017			
Others	Net Weight	2.58KG			
	Dimension	284*109*48.5mm(L*W*H)			
	Packing	380*305*160mm 5pcs/CTN			
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 and load regulation.				

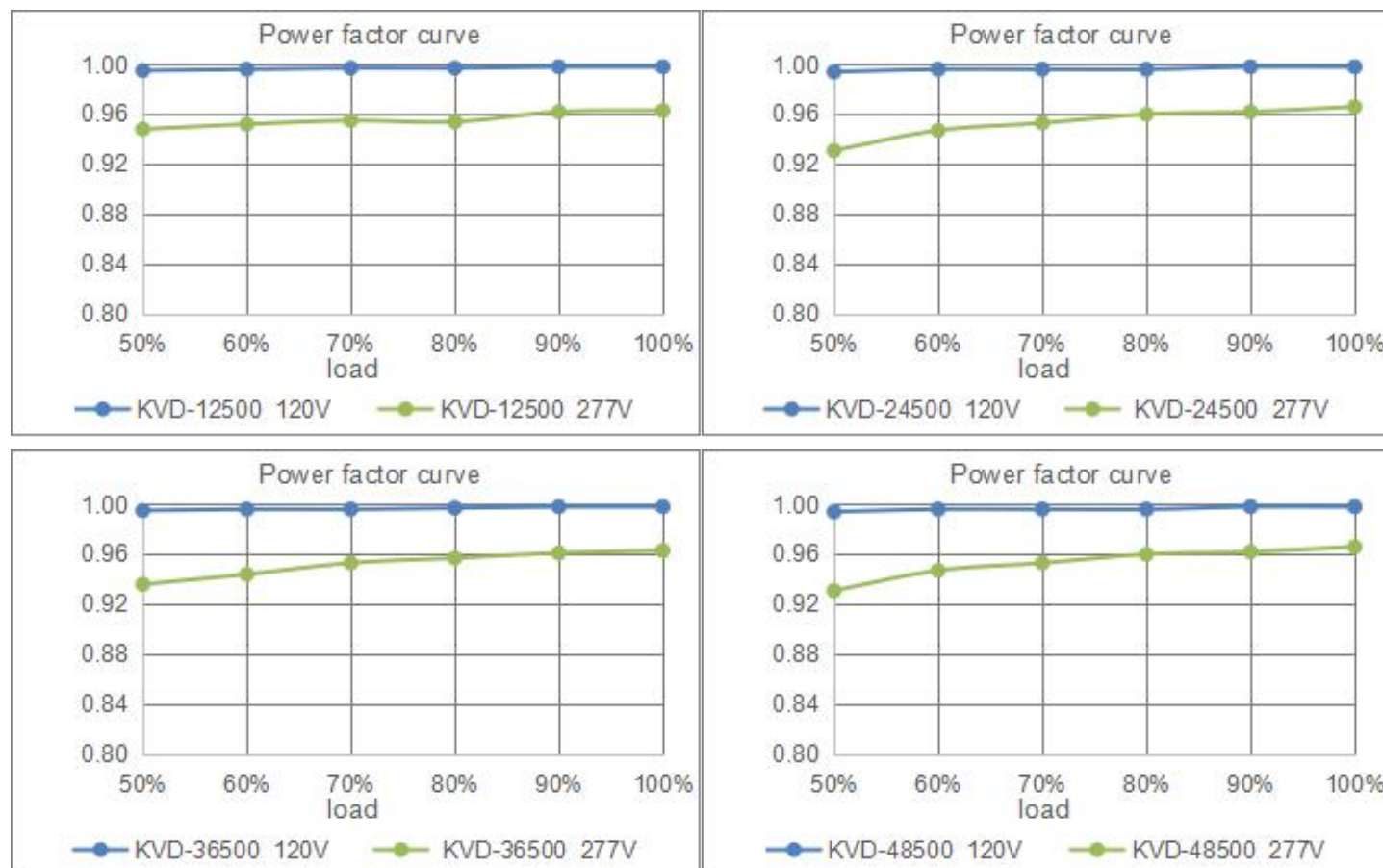
0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

Efficiency Curve (efficiency vs output load)

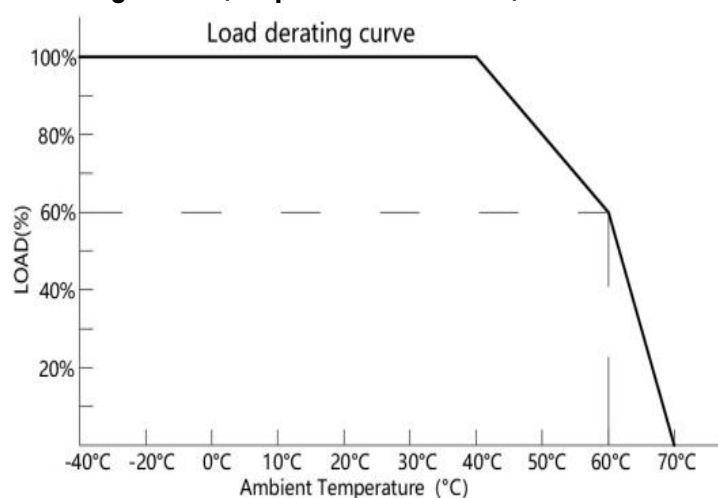


0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

Power Factor Curve (power factor vs output load)



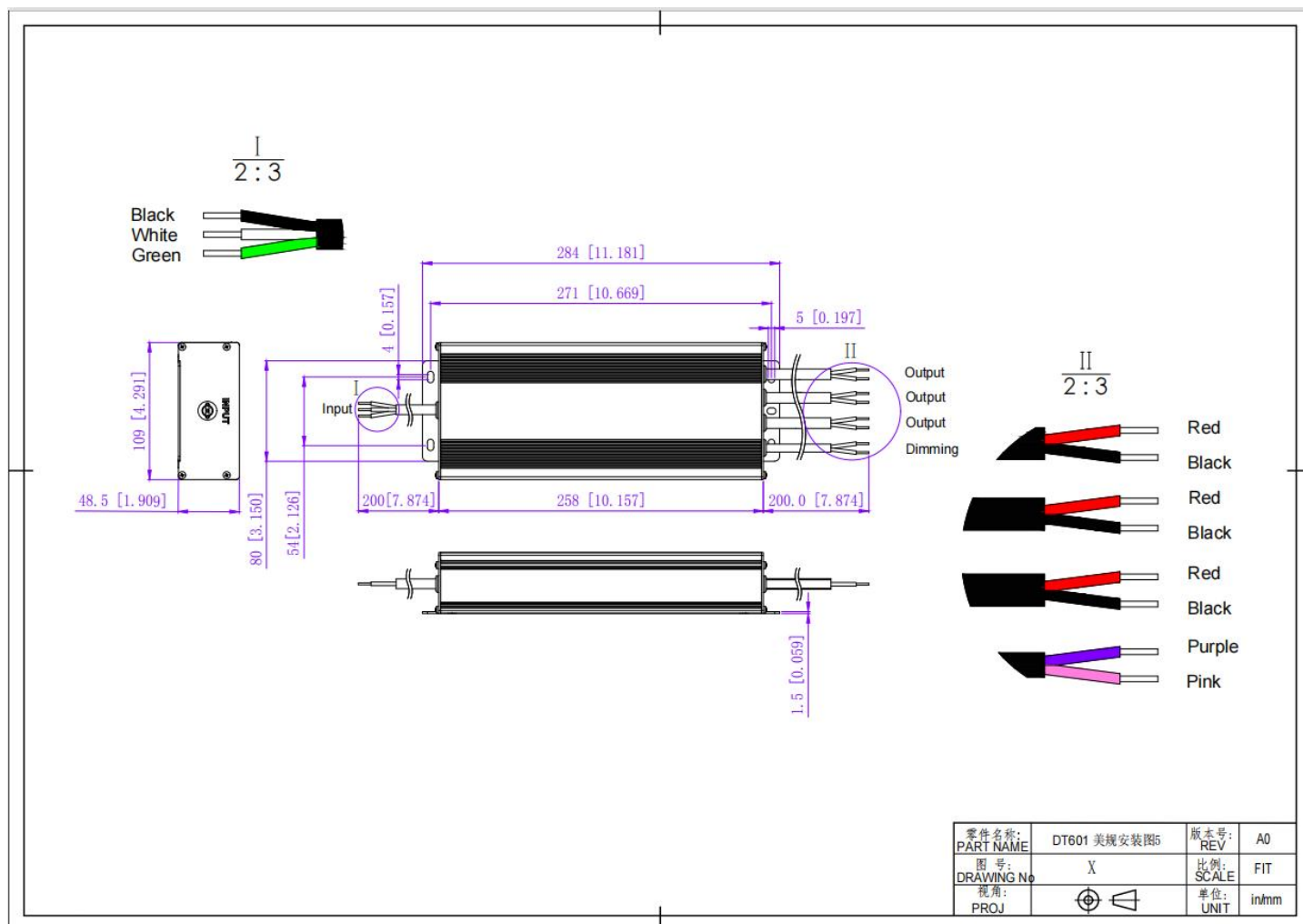
Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

Mechanical Specification



Take 12V Version for example

American wire gauge

DT601

Input wire	Black(L) White(N) Green(G) (3*18 AWG)
Output wire	12V: Red(V+) Black(V-) (2*14 AWG)*3 24/36V: Red(V+) Black(V-) (2*14 AWG)*2 48V: Red(V+) Black(V-) (2*14 AWG)
Dimming wire	Purple(DIM+) Pink(DIM-) (2*18 AWG)

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

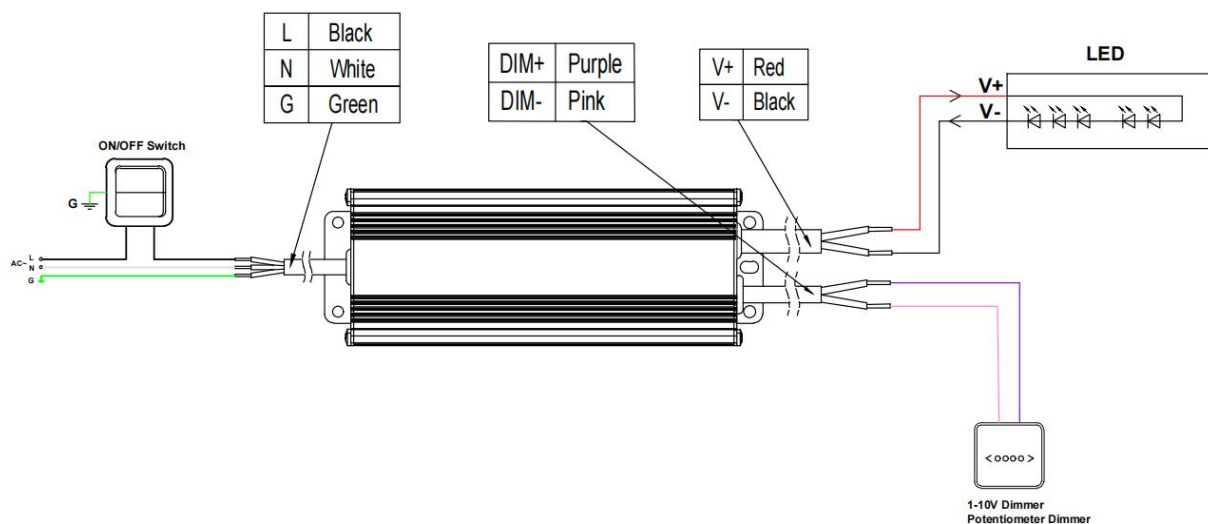
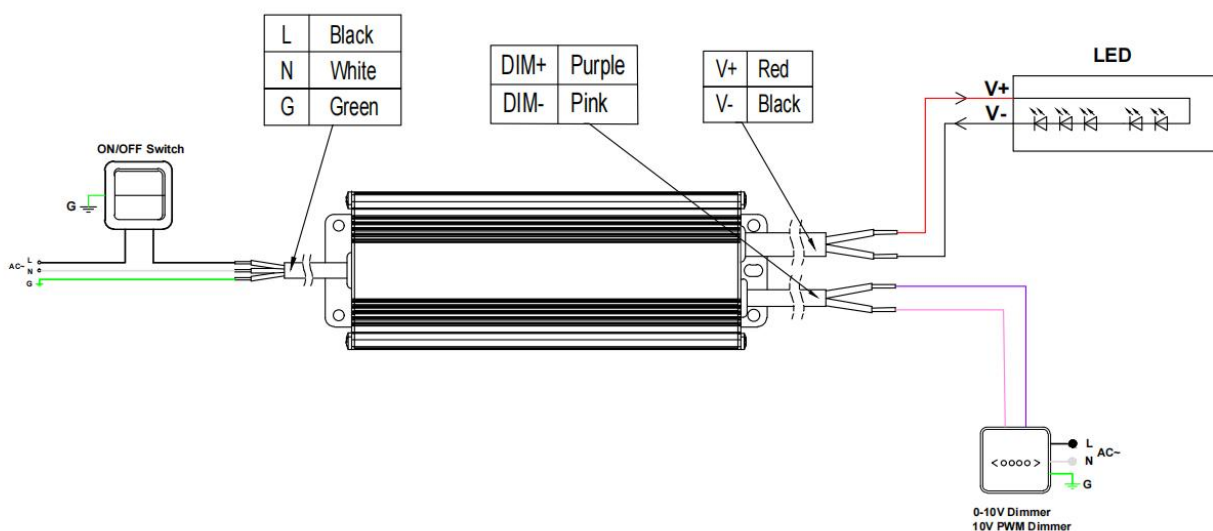
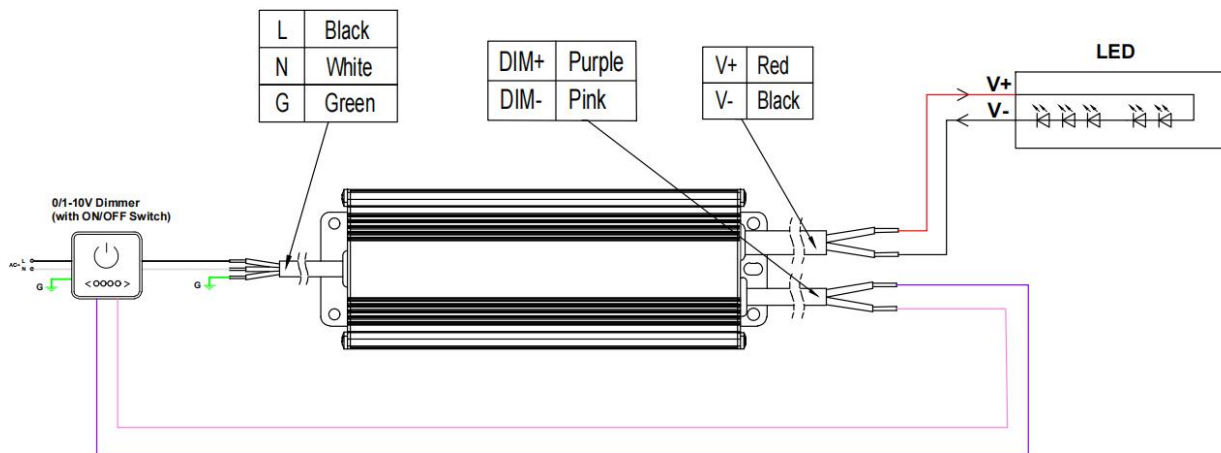
Warm tip:

Any other requests for, we can customize.

0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

Dimming Operation and Connecting Diagram

Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming



0-10V Dimmable LED Driver - Constant Voltage Output - KVD-DIM Series 500W

Instructions

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 questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en