

DALI-2/PUSH 2 in 1 Linear Dimmable LED driver 30W

## **KV-DP2S Series 30W**

Whole Family: KV-xy-DP2S 12V/ 24V/ 36V/ 48V DC - [ 30W 36W 60W 100W 150W]

















## **Features**

Constant Voltage Output: 100-277VAC Range:

Built-in active PFC function PFC design:

Efficiency: up to 84%

Protections: short circuit/ over load/ over temperature

Heat dissipation: Cooling by free air convection

Waterproof performance: IP20 for indoor

Dimming function: DALI Protocol IEC62386; PUSH-DIM

Dimming range: 0-100% dimming depth: 0.1%

PWM output: Frequency 4K Hz, reaching the exemption level

NFC function Adjust slightly,read & write output voltage, and set address Application: Suitable for LED lighting and moving sign applications

Warranty: 5 years warranty



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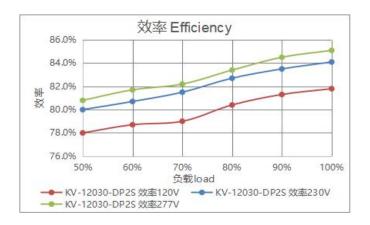
# Specification

Model		KV-12030-DP2S	KV-24030-DP2S	KV-36030-DP2S	KV-48030-DP2S			
Certificate		(ENEC pending)、SAA、CE、CB、RoHS						
Output	DC Voltage	12V	24V	36V	48V			
	DC Vollage	(12-13.5V adjust by NFC)	(24-26V adjust by NFC)	(36-38V adjust by NFC)	(48-50V adjust by NFC)			
	Voltage Tolerance	±0.2V						
	Voltage Regulation	±0.5%						
	Rated current	2.5A	1.25A	0.83A	0.625A			
	Rated power	30W						
	Load Regulation	2%	1%	1%	1%			
	Standby power	≤ 0.5W @120VAC & @230VAC						
	Voltage Range	100-277VAC						
	Frequency Range	47 - 63Hz						
	Power Factor (Typ.) @ full load	PF≥0.98@120VAC PF≥0.98@230VAC PF≥0.95@277VAC						
	THD(Typ.) @ full load	≤10%@120VAC ≤10%@230VAC ≤15%@277VAC						
Input		81%@120VAC	82%@120VAC	82%@120VAC	82%@120VAC			
mpat	Efficiency(Typ.) @ full load	83%@230VAC	84%@230VAC	84%@230VAC	84%@230VAC			
		83%@277VAC	84%@277VAC	84%@277VAC	84%@277VAC			
	AC Current (Max.)	0.42A						
	Inrush Current (Typ.)	10.4A 204us@50%lpeak@120VAC 32A 132us@50%lpeak@230VAC 28A 212us@50%lpeak@277VAC						
	Leakage current	current <0.5mA						
	Short Circuit	Hiccup mode, recover automatically after fault condition is removed						
Protection	Over Load	≤120% ,hiccup mode, recover automatically after fault condition is removed						
Protection	Over temperature	Ambient temp. over 55℃±10℃, output will be off; recovers automatically after temp. drops.						
Environment	Working TEMP.	-40~+70 °C (see below derating curve)						
	Working Humidity	20 - 90%RH non-condensing						
	Storage TEM.,Humidity	-40 - +70°C,10 - 95% RH non-condensing						
	TEMP.coefficient	±0.03%/°C(0 - 50°C)						
	Vibration	10∼500Hz, 2G 10min./1 cycle, period for 60min. each along X,Y,Z axes						
	Safety standards EN61347-1 EN61347-2-13 & UL8750 UL1310							
	Withstand voltage	I/P-O/P:3.75KVAC (EU) I/P-O/P:1.8KVAC (US)						
Safety & EMC	Isolation resistance	I/P-O/P: 100M Ω /500VDC/25 ℃/70%RH						
	EMC immunity	EN61000-4-2,3,4,5,6,11 EN61547						
	EMC Emission	EN55015 EN61000	-3-2,3 (≥50%) FC	C Part 15 Subpart B				
Others	Net Weight	0.21kg	0.21kg	0.21kg	0.21kg			
	Dimension	260*30*18.5mm (L*V	V*H)					
	Packing 330*275*130mm 50pcs /CTN							
Notes	<ol> <li>All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature.</li> <li>Tolerance: includes set up tolerance and load regulation .</li> </ol>							

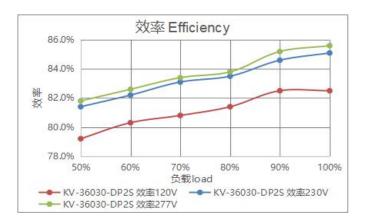


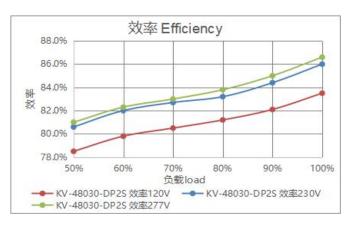
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## **Efficiency Curve (efficiency vs output load)**

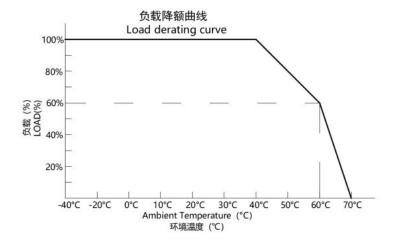








# **Derating Curve** (output load vs TEMP.)

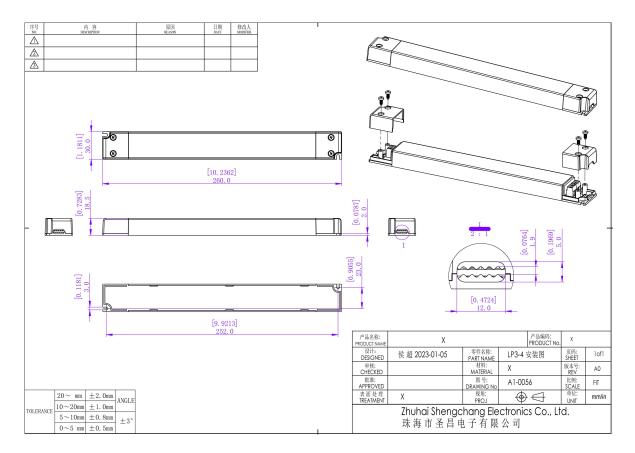


To extend their life, please refer to the Derating Curve and derate according to the temperature.



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## **Mechanical Specification**



- 1. Input with DG126 terminals 2P: Live Wire AC (L), Neutral Wire AC(N).
- 2. Output LED SEC with DG126 terminals 2P: output Positive (LED+), output negative (LED-). Connected to LED Lamps.
- DALI or PUSH Dim. terminals with DG126 terminals 2P.
   when DALI dimming, signal dimming DA1, DA2 (No polar) connected to the BUS of the DALI Master;
   when PUSH dimming, (N) is connected to AC (N) while (L) is connected to Push dim switch dimmer(L).
- 4. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

#### Warm tips:

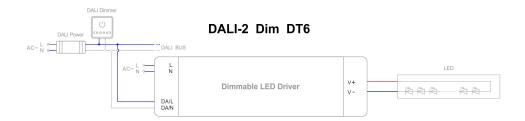
- 1. Suggested wire diameter: Input 0.75mm<sup>2</sup> 2mm<sup>2</sup>; Output: 0.5mm<sup>2</sup> 2mm<sup>2</sup>.
- 2. Any other requests for cable, we can customized.



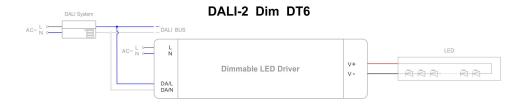
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# **Dimming Operation and Connecting Diagram**

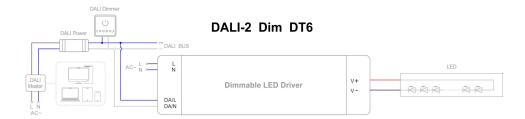
• Using DALI-2 dimming with DALI power and dimmer



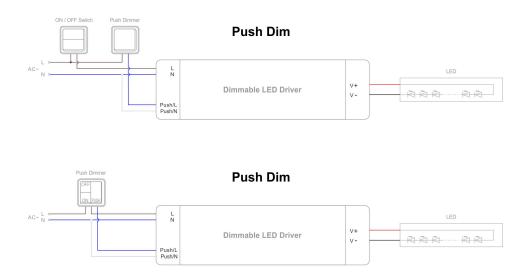
• Using DALI-2 dimming with DALI system and DALI bus



Using DALI-2 dimming with intelligent device, DALI master and dimmer



Using PUSH dimming with dimmer (on & off function)





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### **NFC Function**







**NFC Handheld devices** 

### Address settings:

NFC setting address:

The address can be read and written by a mobile with Easy NFC APP or NFC handheld device (NFC read & write device: NFC-RW) by close to the NFC signal area of the driver.

NFC voltage regulation level													
	level 1	level 2	level 3	level 4	level 5	level 6	level 7	level 8	level 9	level 10			
12V	12V	12.16V	12.32V	12.48V	12.64V	12.8V	12.96V	13.12V	13.28V	13.5V			
24V	24V	24.22V	24.22V	24.66V	24.88V	25.1V	25.32V	25.54V	25.66V	26.0V			
36V	36V	36.22V	36.44V	36.66V	36.88V	37.1V	37.32V	37.54V	37.66V	38.0V			
48V	48V	48.22V	48.44V	48.66V	4888V	49.1V	49.32V	49.54V	49.66V	50.0V			

### 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 questions, please contact Zhuhai Shengchang.

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