

KV-DP2S Series 30W

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



Features

Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
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

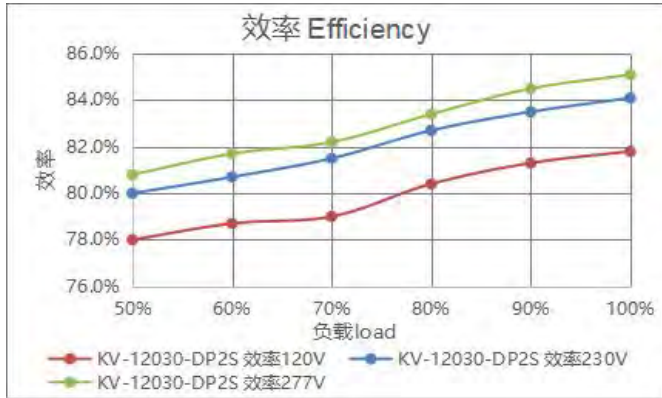
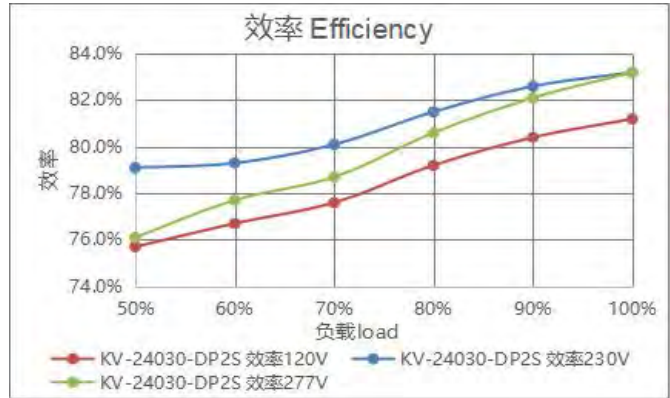
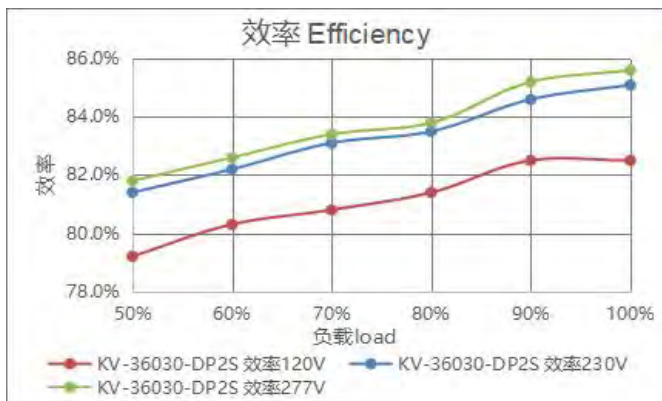
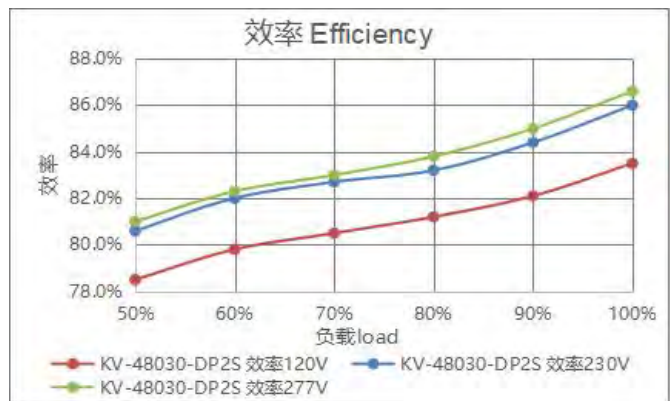
Specification

Model		KV-12030-DP2S	KV-24030-DP2S	KV-36030-DP2S	KV-48030-DP2S
Certificate		UL / cUL / FCC / ENEC / SAA / CE / CB / RoHS			
Output	DC Voltage	12V (12-13.5V adjust by NFC)	24V (24-26V adjust by NFC)	36V (36-38V adjust by NFC)	48V (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			
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor@ full load	PF≥0.98@120VAC	PF≥0.98@230VAC	PF≥0.95@277VAC	
	THD(Typ.) @ full load	≤10%@120VAC	≤10%@230VAC	≤15%@277VAC	
	Efficiency @ full load	81%@120VAC 83%@230VAC 83%@277VAC	82%@120VAC 84%@230VAC 84%@277VAC	82%@120VAC 84%@230VAC 84%@277VAC	82%@120VAC 84%@230VAC 84%@277VAC
	AC Current (Max.)	0.42A			
	Inrush Current (Typ.)	10.4A, 204us@50%Ipeak@120VAC 28A, 212us@50%Ipeak@277VAC		32A, 132us@50%Ipeak@230VAC	
	Leakage current	<0.5mA			
Protection	Short Circuit	Hiccup mode, recover automatically after fault condition is removed			
	Over Load	≤120%, Hiccup mode, recover automatically after fault condition is removed			
	Over temperature	Shell surface temp.100℃±10℃, output will be off; recovers automatically after temp. drops			
Environment	Working TEMP.	-40~+60℃ (see below derating curve)			
	Working Humidity	20 - 90%RH non-condensing			
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing			
	TEMP.coefficient	±0.03%/℃(0 - 50℃)			
	Vibration	10~500Hz, 2G 10min./1 cycle, period for 60min. each along X,Y,Z axes			
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13(EU) & UL8750 UL1310(US)			
	Withstand voltage	I/P-O/P:3.75KVAC (EU) & I/P-O/P:1.8KVAC (US)			
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH			
	EMC immunity	EN61000-4-2,3,4,5,6,11 EN61547			
	EMC Emission	EN55015 EN61000-3-2,3 (≥50%) (EU) & FCC Part 15 Subpart B(US)			
Others	Net Weight	0.21KG			
	Dimension	260*30*18.5mm (L*W*H)			
	Packing	330*275*130mm 50pcs /CTN			

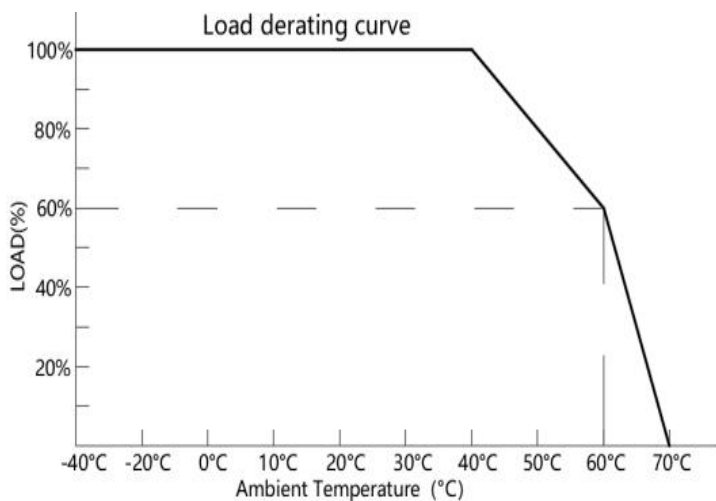
Notes

1. All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature.
2. Tolerance: includes set up tolerance and load regulation .

Efficiency Curve (efficiency vs output load)

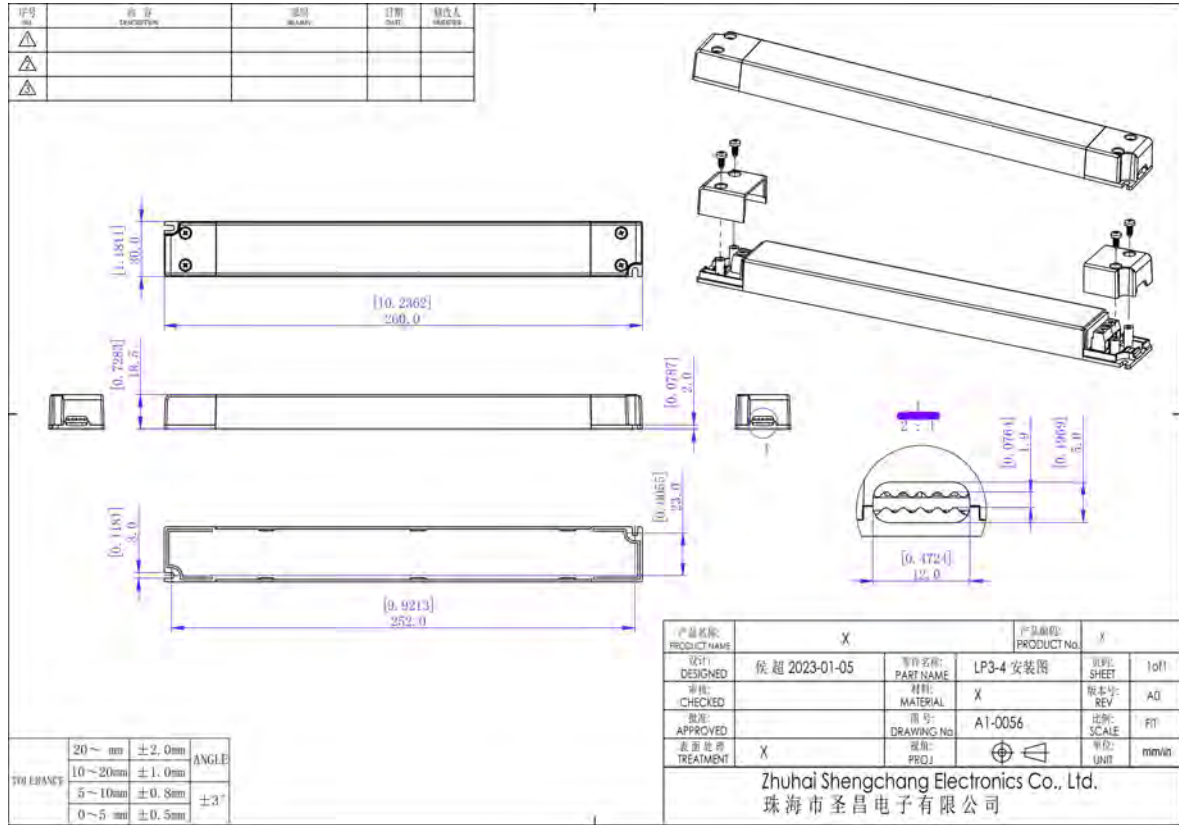


Derating Curve (output load vs TEMP.)



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.

Mechanical Specification



12V&24V&36V&48V Version

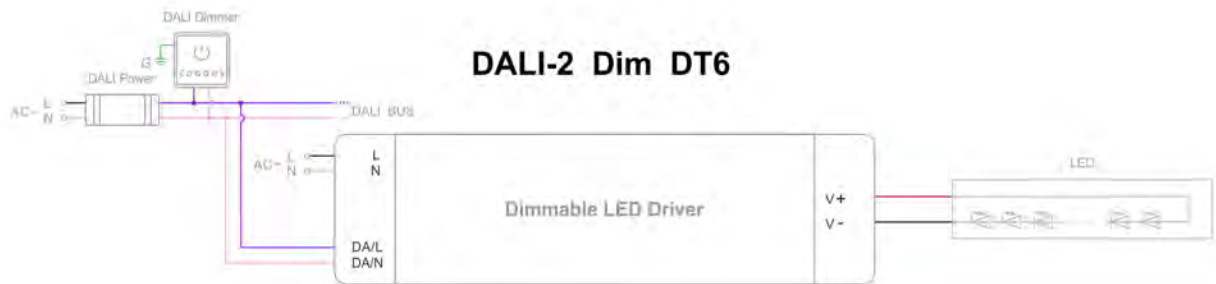
- Input with DG126 terminals 2P: Live Wire AC (L), Neutral Wire AC(N) .
- Output LED SEC with DG126 terminals 2P: output Positive (LED+), output negative (LED-). Connected to LED Lamps.
- DALI or PUSH Dim. terminals with DG126 terminals 2P:
when DALI dimming, signal dimming DA1, DA2 (No polar) connected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

Warm tips:

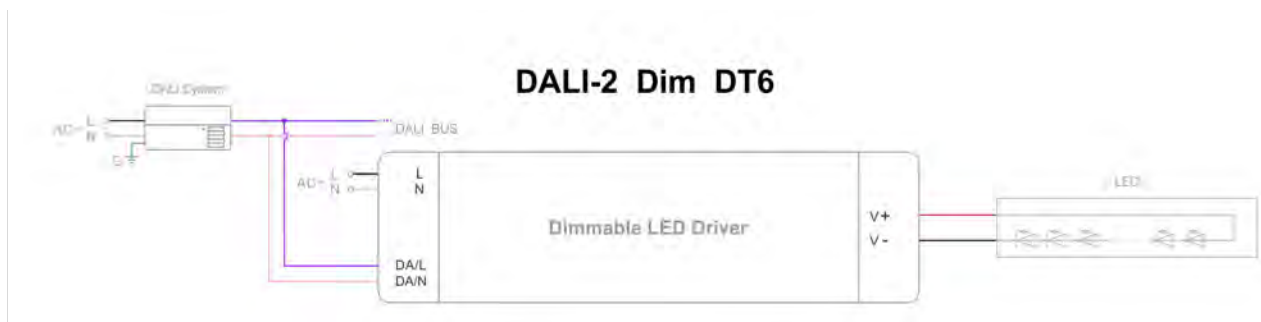
- Suggested wire diameter: Input 0.75mm²- 2mm²; Output: 0.5mm² - 2mm².
- Any other requests for, we can customized.

Dimming Operation and Connecting Diagram (For North American Market)

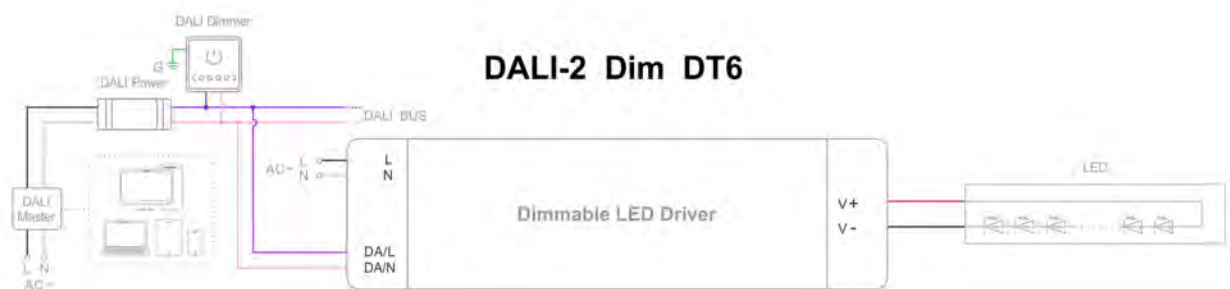
- Using DALI-2 dimming with DALI power and dimmer



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



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

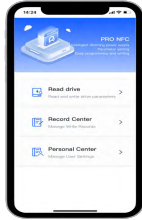


- Using PUSH dimming with dimmer (on & off function)



Please note push dimming will only work with **one power supply per dimmer or switch**

NFC Function



ProNFC APP



NFC Handheld devices

- Address settings:

NFC setting address:

The address can be read and written by a mobile with ProNFC APP or NFC handheld device (NFC read & write device: NFC-RW) by close to the NFC signal area of the DALI 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	12.2V	12.3V	12.5V	12.6V	12.8V	13V	13.1V	13.3V	13.5V
24V	24V	24.2V	24.4V	24.7V	24.9V	25.1V	25.3V	25.6V	25.8V	26.0V
36V	36V	36.2V	36.4V	36.7V	36.9V	37.1V	37.3V	37.6V	37.8V	38.0V
48V	48V	48.2V	48.4V	48.7V	48.9V	49.1V	49.3V	49.6V	49.8V	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.