

KV-DP2S Series 100W

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 91.8%
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

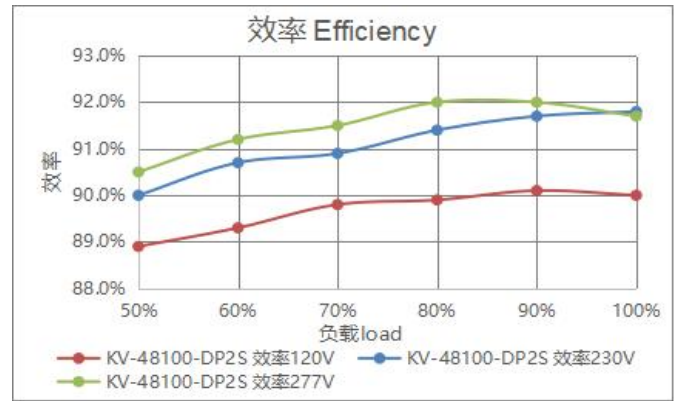
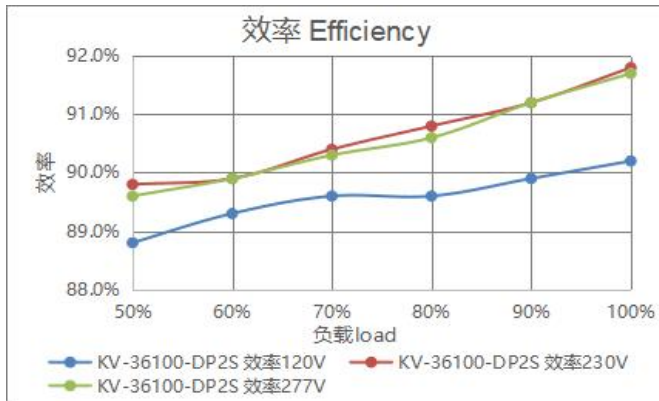
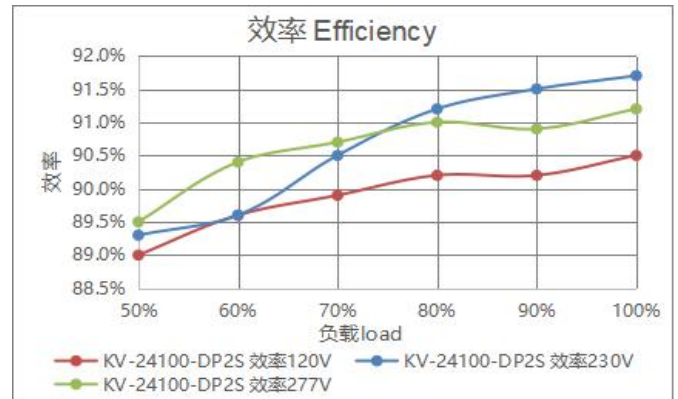
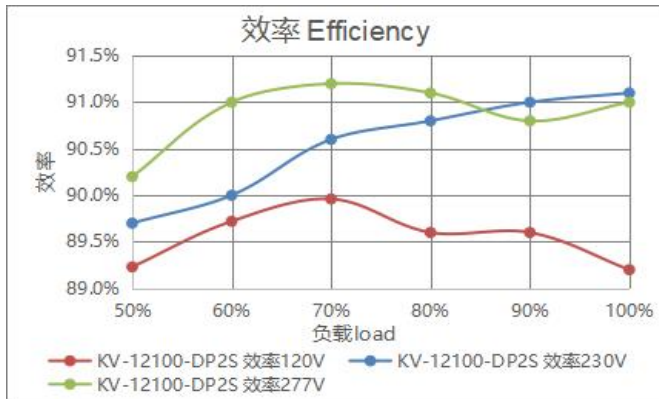
DALI-2/PUSH 2 in 1 Linear Dimmable LED driver 100W

Specification

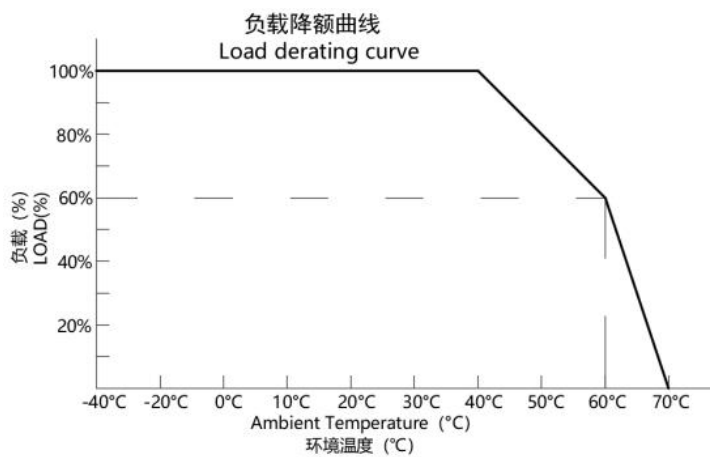
Model		KV-12100-DP2S	KV-24100-DP2S	KV-36100-DP2S	KV-48100-DP2S
Certificate		(ENEC pending)、SAA、CE、CB、RoHS			
Output	DC Voltage	12V (12-13.5V adjust by NFC)	24V (24-26V adjust by NFC)	36V (36-38V adjust by NFC)	48V (48-50V adjust by NFC)
	Voltage Tolerance	±0.2V			
	Voltage Regulation	±0.5%			
	Rated current	8.33A	4.17A	2.78A	2.08A
	Rated power	100W			
	Load Regulation	2%	1%	1%	1%
	Standby power	≤ 0.5W @120VAC & @230VAC			
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor (Typ.) @ full load	PF≥0.98@120VAC PF≥0.97@230VAC PF≥0.95@277VAC			
	THD(Typ.) @ full load	≤10%@120VAC ≤10%@230VAC ≤15%@277VAC			
	Efficiency(Typ.) @ full load	89.2%@120VAC 91%@230VAC 91%@277VAC	90.5%@120VAC 91.7%@230VAC 91.7%@277VAC	90%@120VAC 91.8%@230VAC 91.7%@277VAC	90%@120VAC 91.7%@230VAC 91.7%@277VAC
	AC Current (Max.)	1.2A			
	Inrush Current (Typ.)	17A, 50%, 266us @120VAC 60A, 50% , 128us @230VAC 42.4A, 50% , 286us @277VAC			
	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	Ambient temp. over 55℃±10℃, output will be off; recovers automatically after temp. drops			
Environment	Working TEMP.	-40~+70℃ (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 UL8750 UL1310			
	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%) FCC Part 15 Subpart B			
Others	Net Weight	0.3kg	0.3kg	0.3kg	0.3kg
	Dimension	330*30*22mm (L*W*H)			
	Packing	350*330*145mm 50pcs /CTN			
Notes	1. All parameters NOT specially mentioned are measured at rated load and 25℃of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .				

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Efficiency Curve (efficiency vs output load)



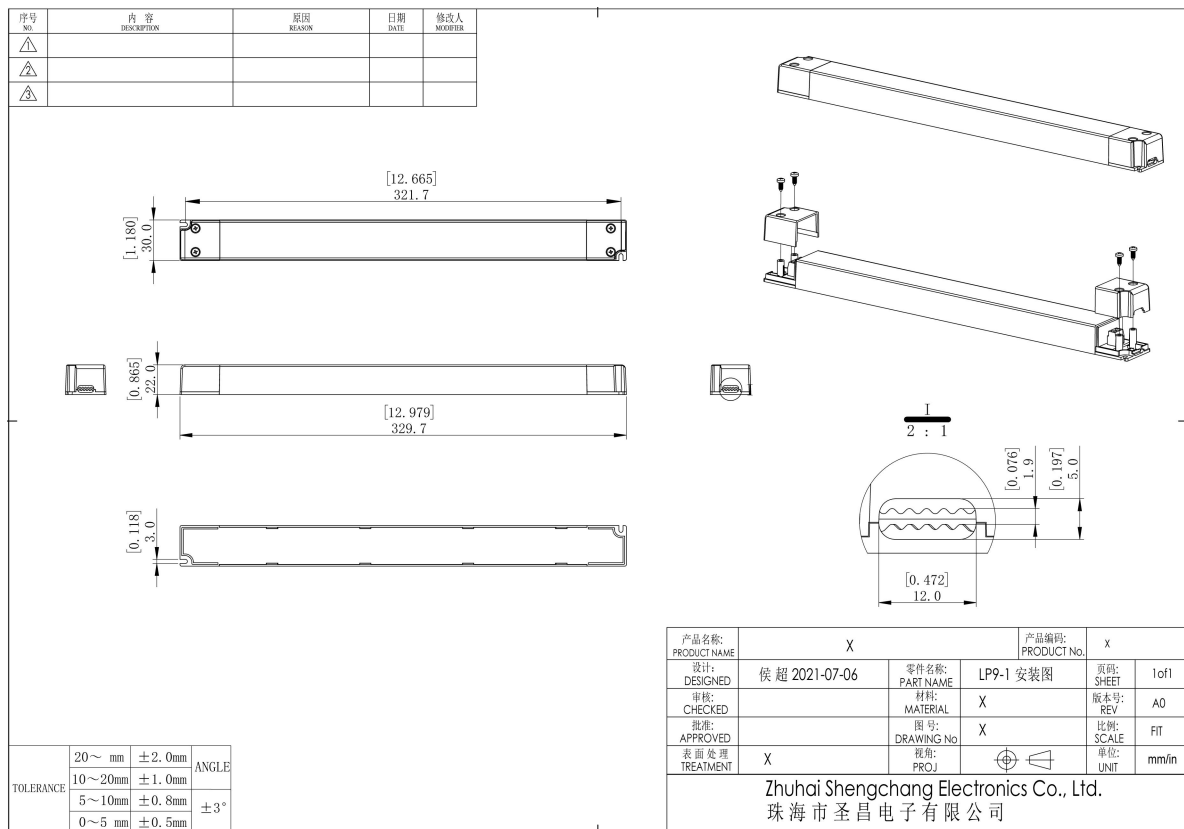
Derating Curve (output load vs TEMP.)



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

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Mechanical Specification



- Input with DG128 terminals 2P: Live Wire AC (L), Neutral Wire AC(N) .
- Output LED SEC with DG128 terminals 2P: output Positive (LED+), output negative (LED-). Connected to LED Lamps.
- DALI or PUSH Dim. terminals with DG128 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.

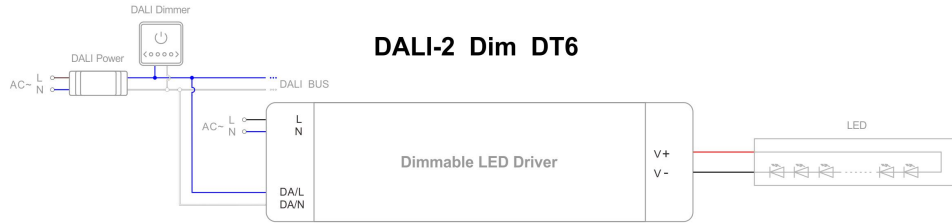
Warm tips:

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

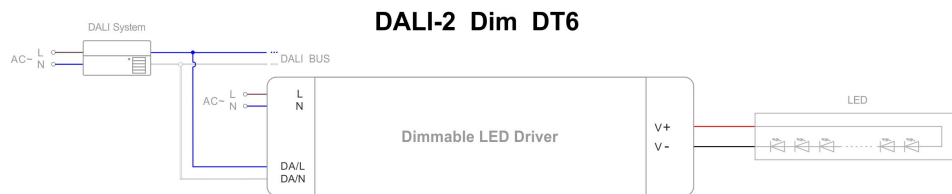
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Dimming Operation and Connecting Diagram

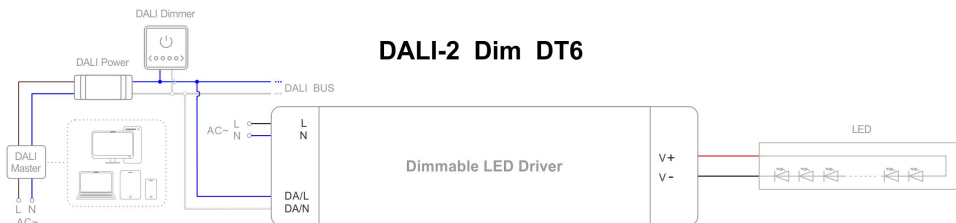
- Using DALI-2 dimming with DALI power and dimmer



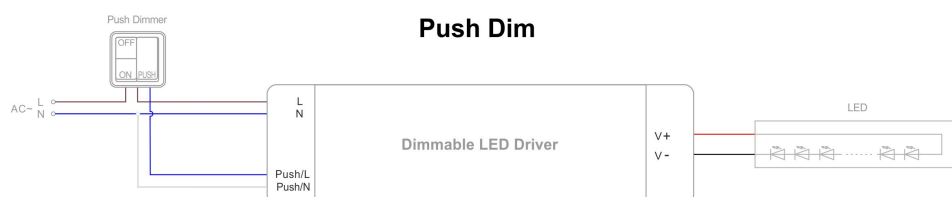
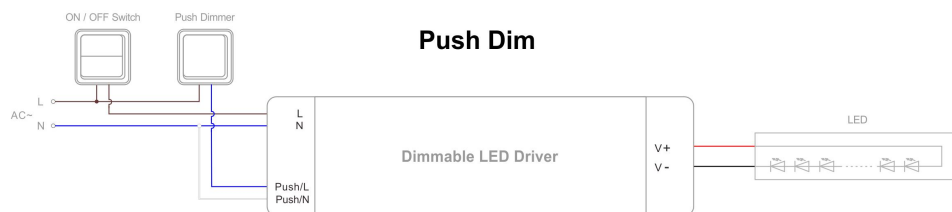
- Using DALI-2 dimming with DALI system and DALI bus



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



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

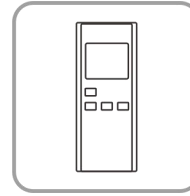


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NFC Function



SetNFC APP



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	48..88V	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.

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