

KV-DP2L Series 100W

Whole Family: KV-xy-DP2L 12V/ 24V/ 36V/ 48V DC - [30W 36W 60W 100W 150W]



Features

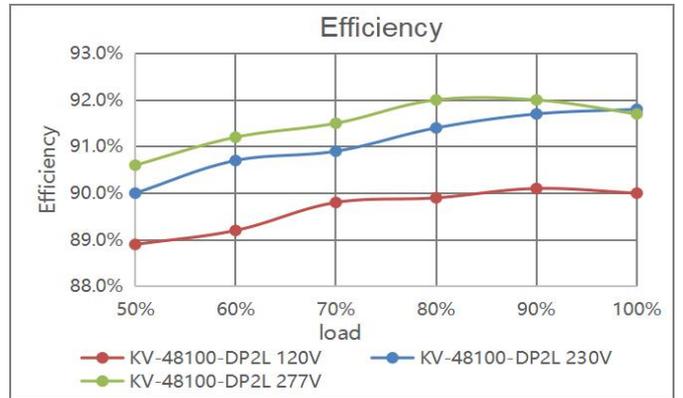
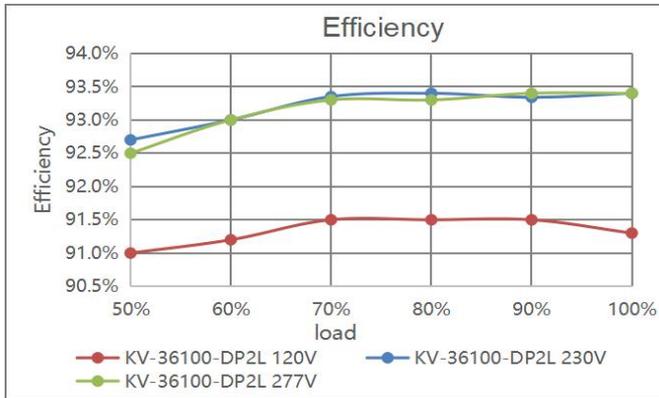
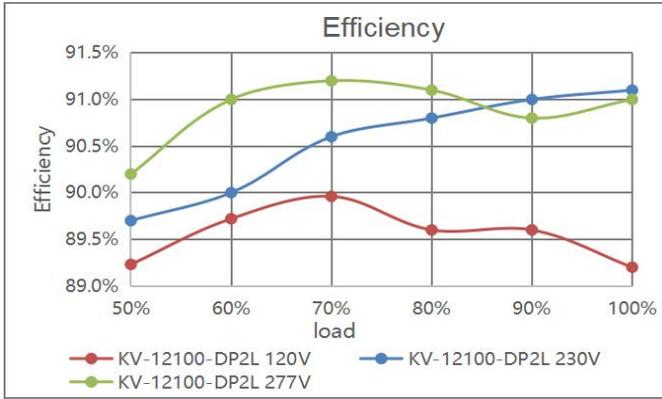
Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 91.5%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP66 for indoor and outdoor
Dimming function:	DALI Protocol IEC62386; 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

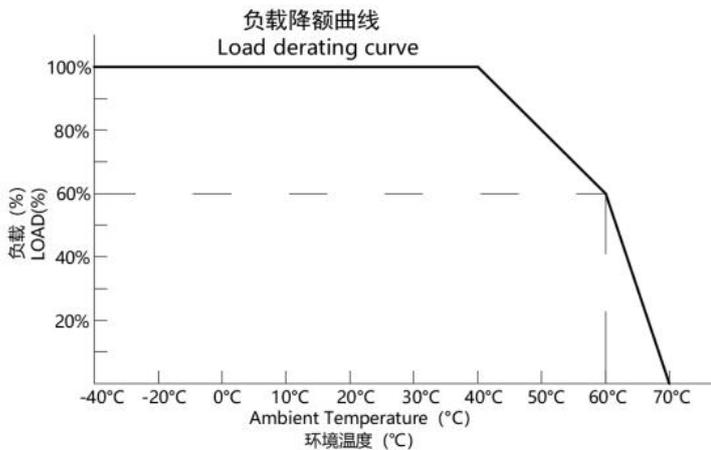
Model		KV-12100-DP2L	KV-24100-DP2L	KV-36100-DP2L	KV-48100-DP2L
Certificate		CE、RoHS、Reach			
Output	DC Voltage	12V (12-13.5V adjust by NFC)	24V (24-26V adjust by NFC)	36V (36-38V adjust by NFC)	48V (48-50V adjust by NFC)
	Voltage Tolerance	±0.2V			
	Voltage Regulation	±0.5%			
	Rated current	8.33A	4.17A	2.78A	2.08A
	Rated power	100W			
	Load Regulation	2%	1%	1%	1%
	Standby power	≤ 0.5W			
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	90.5%@120VAC	90%@120VAC	90%@120VAC
		91%@230VAC 91%@277VAC	91.7%@230VAC 91.7%@277VAC	91.8%@230VAC 91.7%@277VAC	91.7%@230VAC 91.7%@277VAC
	AC Current (Max.)	1.2A			
	Inrush Current (Typ.)	17A, 266us @50% 120VAC		60A, 128us @50% 230VAC	
	42.4A, 286us @50% 277VAC				
Protection	Leakage current	<0.5mA			
	Short Circuit	Hiccup mode, recover automatically after fault condition is removed			
	Over Load	≤120% ,hiccup mode, recover automatically after fault condition is removed			
Environment	Over temperature	Ambient temp. over 65°C±10°C, output will be off; recovers automatically after temp. drops.			
	Working TEMP.	-40~+70°C (see below derating curve)			
	Working Humidity	20 - 90%RH non-condensing			
	Storage TEM.,Humidity	-40 - +80°C, 10 - 95% RH non-condensing			
	TEMP.coefficient	±0.03%/°C(0 - 50°C)			
Safety & EMC	Vibration	10~500Hz, 5G 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)	
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25°C / 70%RH			
	EMC immunity	EN61000-4-2,3,4,5,6,11		EN61547	
Others	EMC Emission	EN55015 EN61000-3-2,3 (≥50%) FCC Part 15 Subpart B			
	Net Weight	0.49Kg			
	Dimension	338*38.5*23.6mm (L*W*H)			
Notes	Packing	360*270*175mm 30pcs /CTN			
		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 .			

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Efficiency Curve (efficiency vs output load)



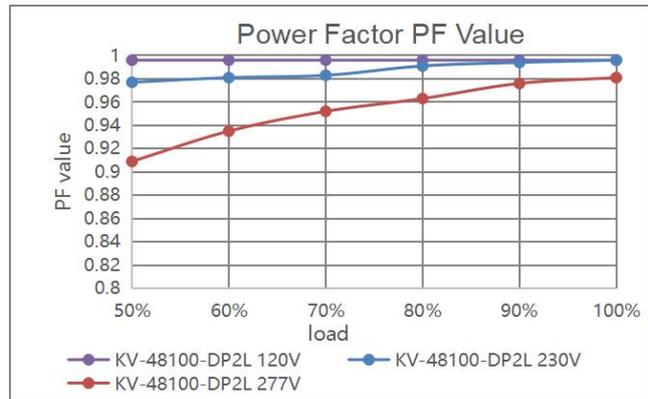
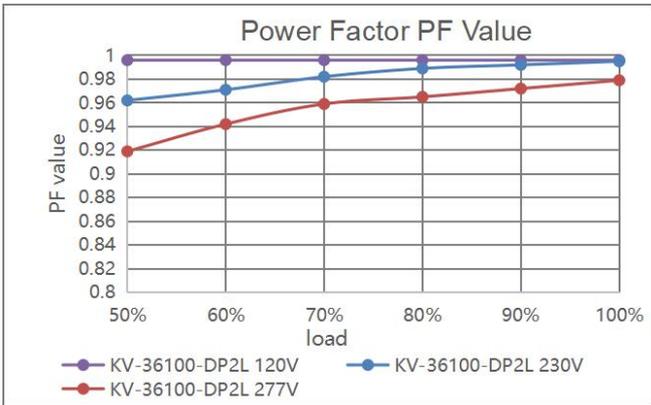
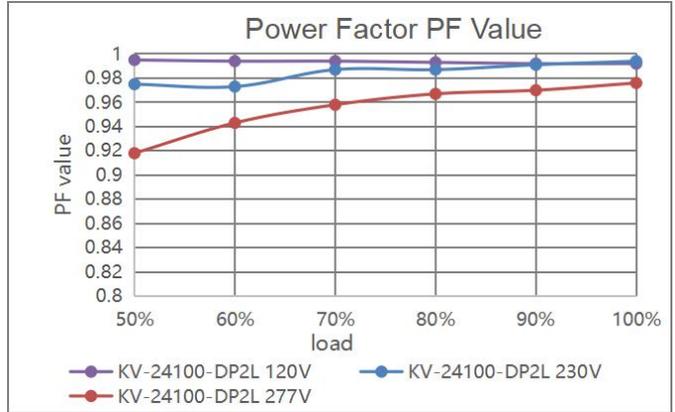
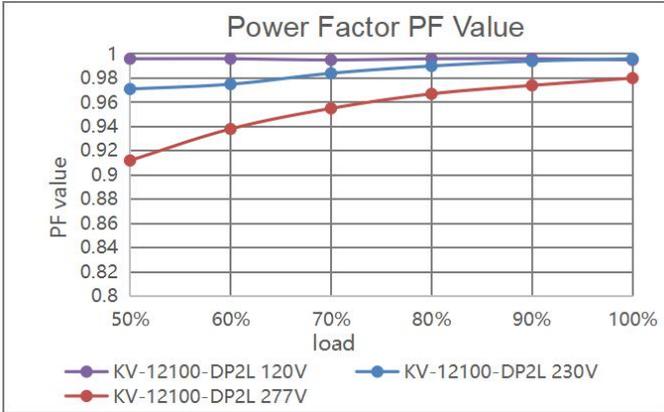
Derating Curve (output load vs TEMP.)



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

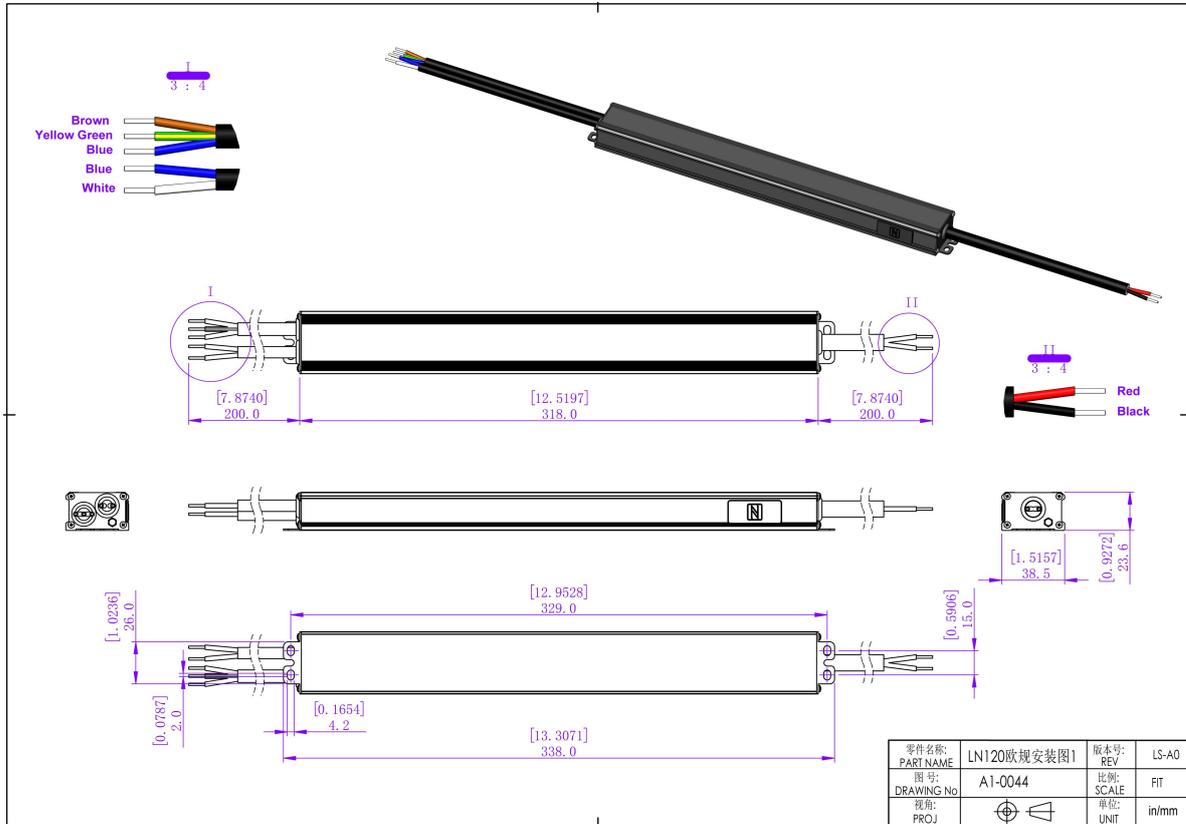
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Power Factor PF Value



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Mechanical Specification (For European Market)



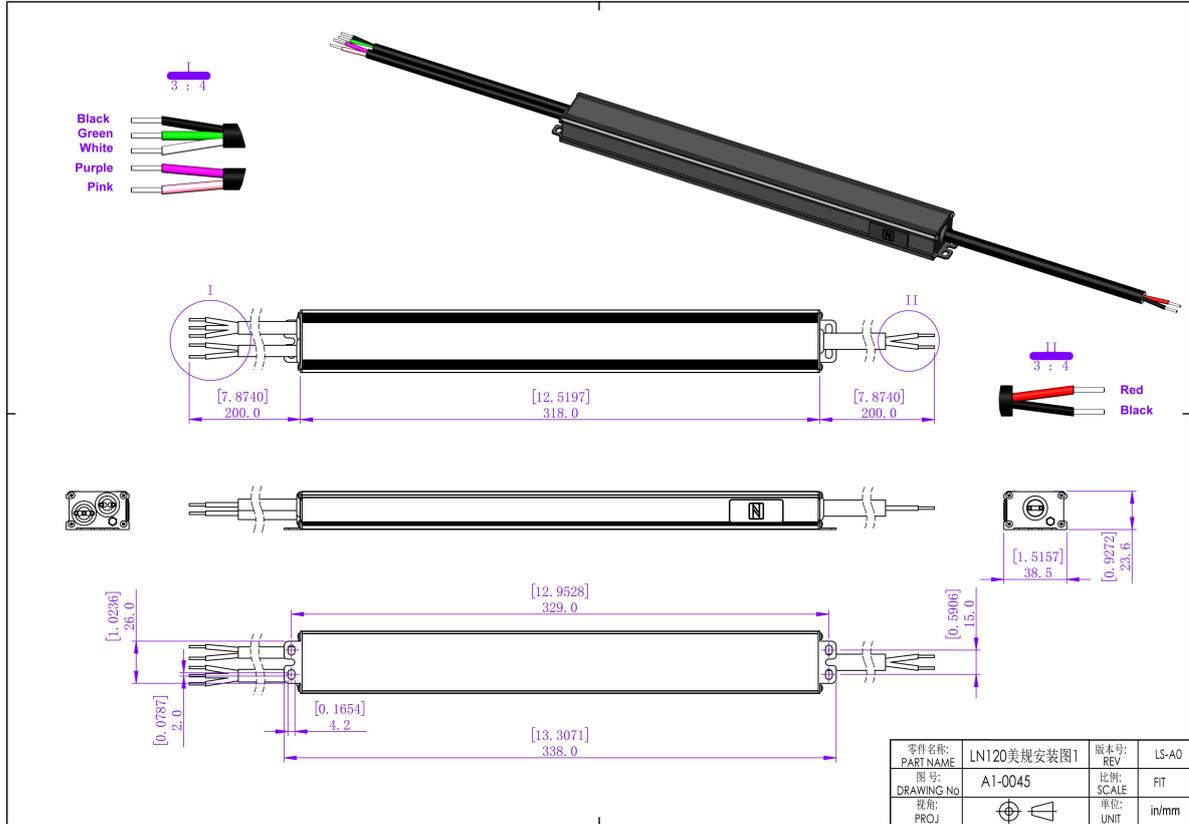
1. Input cable 3*1.0mm², the Brown cable to (L), the Blue cable to (N), and the Yellow & Green cable to (FG).
2. Output cable 12V is 2*1.5mm², 24V 36V 48V are 2*1.0 mm² Red cable (+) to Positive side(+), Black cable(-) to Negative side (-).
3. Dimming cable 2*1.0mm², White DA/N and Blue DA/L (No polar) connected to the DALI BUS.

Warm tips:

1. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.
2. Any other requests for cable, we can customized.

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

Mechanical Specification (For North American Market)



1. Input cable 3*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (FG)
2. Output cable 2*18AWG (12V), Red cable (+) to Positive side(+), Black cable (-) to Negative side (-).
3. Dimming cable 2*18AWG, Pink DA/N and Purple DA/L (No polar) connected to the DALI BUS when use DALI function. Pink (N) is connected to AC (N) while Purple (L) is connected to Push dim switch dimmer(L) when use Push function.

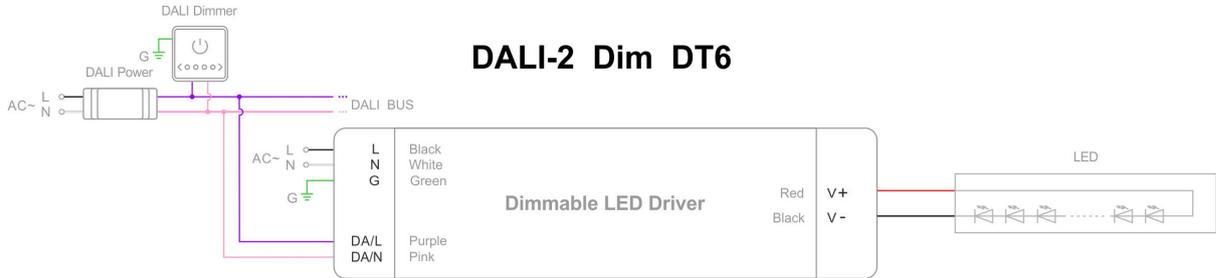
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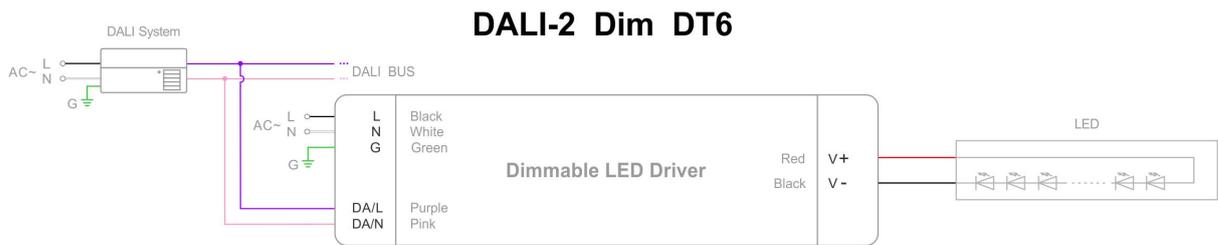
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Dimming Operation and Connecting Diagram

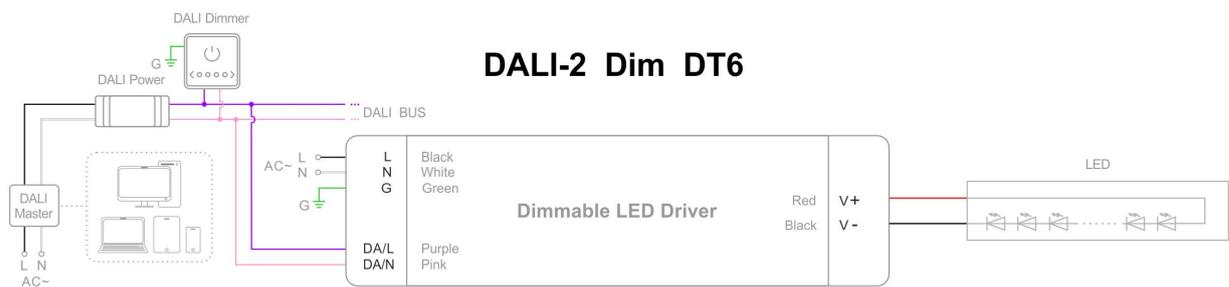
- Using DALI-2 dimming with DALI power and dimmer



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

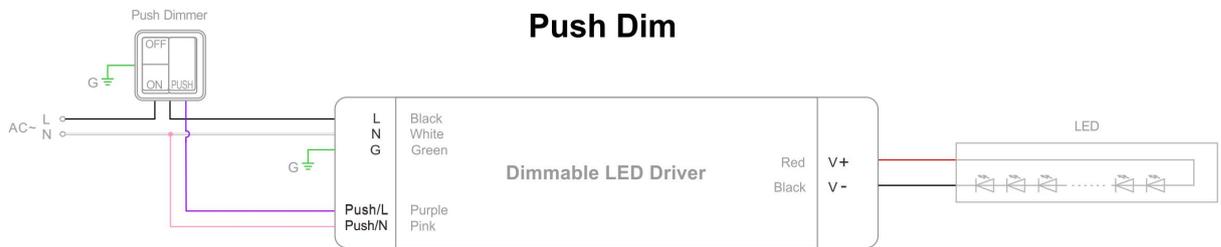
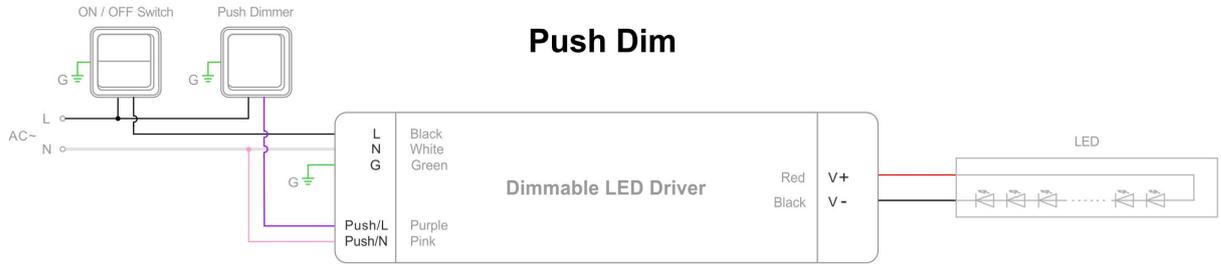


- Using DALI-2 dimming with intelligent device, DALI master and dimmer



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

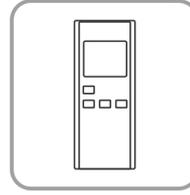


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NFC Function



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