







■ Features:

- ·Output constant Voltage (NFC regulation)
- ·Range: 100-277VAC
- ·Built-in active PFC function
- ·Efficiency up to 89%
- ·Standby power consumption ≤ 0.5 W
- ·Protections: short circuit/ over load/ over temperature
- ·Cooling by free air convection; IP66 for indoor & outdoor
- ·Dimming curve: Logarithmic (default) and Linear
- ·Dimming protocol: DALI Protocol IEC62386; PUSH-DIM (CCT dimming)
- ·Flicker-free, PWM output frequency, 4K Hz Stroboscopic exemption
- ·NFC function to adjust output voltage and set address
- ·Dimming range: 0-100%, LED start at 0.1% possible
- ·Suitable for intelligent LED lighting

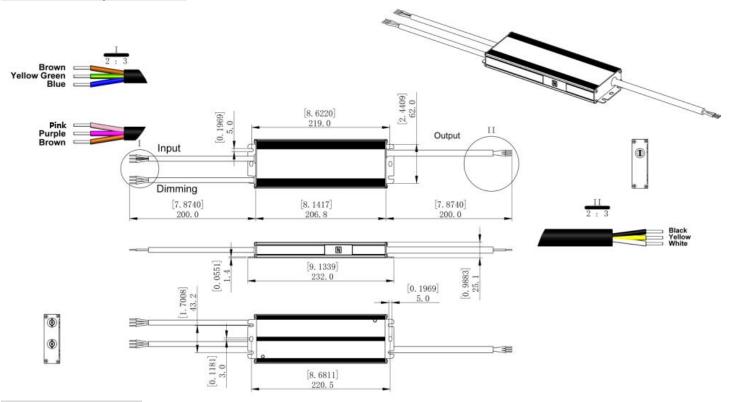
■ Specification

Model		KV-12120-2C-DP2A	KV-24120-2C-DP2A	KV-36120-2C-DP2A	KV-48120-2C-DP2A	
Output	DC Voltage	12V	24V	36V	48V	
		(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				
	Rated current	10A	5A	3.33A	2.5A	
	Rated power	120W				
	Load Regulation	2%	1%	1%	1%	
	Voltage Range	100-277VAC				
	Frequency Range	47 - 63Hz				
	Power Factor(Typ.)	PF≥0.98@120VAC PF≥0.96@230VAC PF≥0.95@277VAC (Full loading)				
	@ full load					
	THD(Typ.)@ full load	≤10%@120VAC; ≤10%@230VAC; ≤15%@277VAC				
	Efficiency(Typ.)@ full load	86%@120VAC 89%@230VAC/277VAC				
	AC Current(Max.)	1.5A	1.5A	1.5A	1.3A	
	Standby power consumption	0.20W (@120V)	0.25W (@120V)	0.20W (@120V)	0.20W (@120V)	
		0.39W (@230V)	0.42W (@230V)	0.43W (@230V)	0.43W (@230V)	
		0.47W (@277V)	0.47W (@277V)	0.48W (@277V)	0.48W (@277V)	
	Inrush Current (Typ.)	23.2A, 50%, 360us @120VAC;				
		80A, 50% , 104us @230VAC				
		54A, 50% , 280us @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.				
Environ- ment	Working TEMP.	-40 ~ +70 °C (see below derating curve)				
	Working Humidity	20 ~ 95%RH,non-condensing				
	Storage TEM.,Humidity	-40 ~ +80℃,10 ~ 95%RH				
	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	EN 61347-1 EN 61347-2-13(EU) & UL 8750(US)			
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (EU)			
		I/P-O/P:1.80KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (US)			
	Isolation resistance	I/P-O/P:100MΩ/ 500VDC/ 25°C/ 70%RH			
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 (EU)≥50% Load & FCC Part 15 B (US)			
	EMC Immunity	EN61000-4-2,3,4,5,6,11 EN61547			
Others	Weight				
	Dimension	232*78*25.1mm (L*W*H)			
	packing				
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input , rated load and 25℃ of ambient				
	temperature.				
	2. Tolerance: includes set up tolerance, line regulation and load regulation .				

■ Mechanical Specification



XInput & Output wiring

- **Input Rubber cable 3*1.0mm², the green/yellow cable connect with (FG) ,Brown with AC (L),Blue with AC(N) (EU);
 Input SJOW Rubber cable 3*18AWG, the green cable connect with (FG) ,Black with AC (L), White with AC(N) (US);
- Output electronic cable 3*16AWG, to be connected to LED Light

***Dimming cable**

- **Dimming electronic cable 3*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) and Brown (CCT Push)connected to CCT Push dim switch dimmer(L) when use Push function.
- **Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.
- *Note: Any other requests we can customize.

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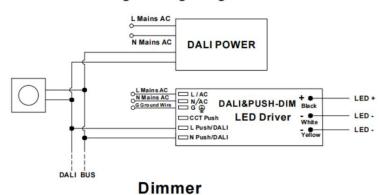
Data Sheet: Aug. 9th 2021 Subject to change without notice website: www.scpower.net.cn/en E-mail: info@scpower.net.cn



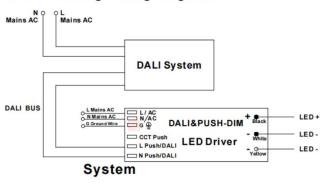
CCT (TW) dimming: electronic cable, Black is output (V+) Positive, While (CW-) and Yellow (WW-) are output (V-) negative

■ Dimming Operation

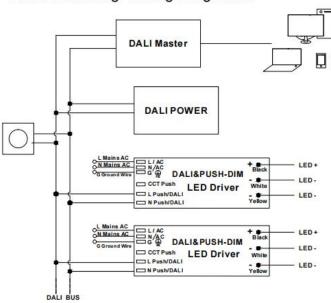
DALI Dimming Wiring Diagram 1



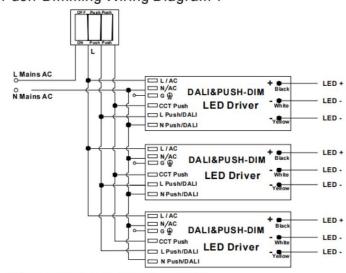
DALI Dimming Wiring Diagram 2



DALI Dimming Wiring Diagram 3



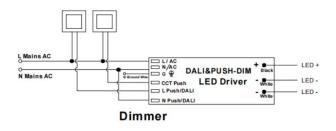
Push-Dimming Wiring Diagram 1



Dimmer (with ON/OFF function)

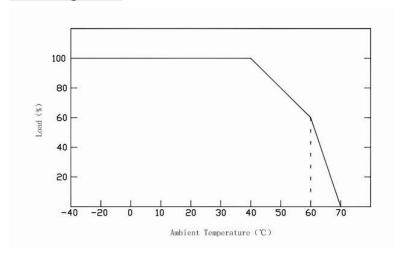
PC+DALI Master+DIMMER

Push-Dimming Wiring Diagram 2



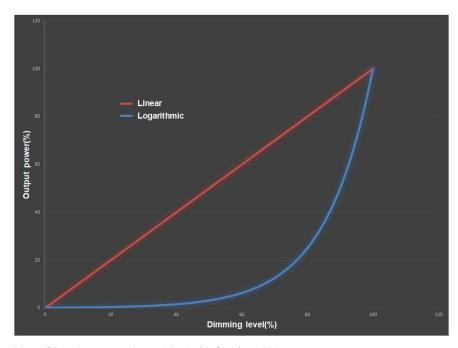
Note: For DALI Dimming Wiring Diagram 3, please noted that
only one DALI power is need in the DALI bus, so no extra DALI
power is needed if the Master or Dimmer already includes the DALI
Power.

■ Derating Curve



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

■ Dimming Curve



Note: Dimming curve: Logarithmic (default) and Linear

■ 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 question, please contact with Zhuhai Shengchang.

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

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