

#### LUMEN TOOLS DALI2 & PUSH 2 in 1 dimmable LED Constant Voltage driver KV-DP2 series 120W





**EMC** Emission

■ Features:

·Output constant Voltage (NFC regulation by cellphone)

·Range: 100-277VAC

·Built-in active PFC function

·Efficiency up to 89%

·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

·NFC function to adjust output voltage and set address

·Dimming range: 0-100%, LED start at 0.1% possible

Suitable for intelligent LED lighting

	SELV	·Suitable fo	or intelligent LED lightir	ng	
Specifica	tion	ENEC & UL pending			
	Model	KV-12120-DP2	KV-24120-DP2	KV-36120-DP2	KV-48120-DP2
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			
	Rated current	10A	5A	3.33A	2.5A
	Rated power	100W			
	Load Regulation	±2%			
Input	Standby power consumption	≤0.5W	≤0.5W	≤0.5W	≤0.5W
	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor(Typ.)@ full load	PF≥0.98@120VAC PF≥0.96@230VAC PF≥0.95@277VAC (Full loading)			
	THD(Typ.)@ full load	≤10%@120VAC ; ≤10%@230VAC; ≤15%@277VAC			
	Efficiency(Typ.)@ full load	86%@120VAC; 89%@230VAC; 89%@277VAC;			
	AC Current(Max.)	1.5A	1.5A	1.5A	1.5A
	Inrush Current (Typ.)	8.4A, 50%, 940us @120VAC;			
		48.4A, 50% , 370us @230VAC			
		21.6A, 50% , 960us @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 $\sim$ +70 $^{\circ}$ C (see below derating curve)			
	Working Humidity	20 - 95%RH,non-condensing			
	Storage TEM.,Humidity	-40 - +80℃,10 - 95%RH			
	TEMP.coefficient	±0.03%/°C(0 - 50°C)			
	Vibration	$10{\sim}500\text{Hz},$ 2G 10min./1 cycle,period for 60min. each along X,Y,Z axes			
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13 (EU) & UL8750 (US)			
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (EU);			
		I/P-O/P:1.88KVAC (US)			
	Isolation resistance	I/P-O/P I/P-FG O/P-FG:100MΩ/500VDC/25℃/70%RH			

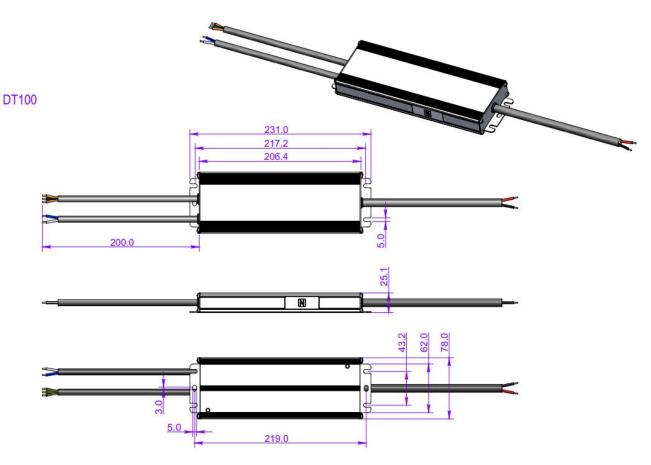
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EN55015

EN61000-3-2 EN61000-3-3 (EU)≥50% Load & FCC Part 15 B (US)

SCPOWER	Zhuhai Shengchang E	ectronics Co.,Ltd Professional manufacturer of dimmable driver in China			
SCI OWER		mable LED Constant Voltage driver KV-DP2 series 120W			
	EMC Immunity	EN61000-4-2,3,4,5,6 ,11, EN61547			
Others	Weight	0.83KG			
	Dimension	231*78*25.1mm (L*W*H)			
	packing	355*300*170mm/20PCS/CTN G.W.:18KG/CTN			
Notes	1. All parameters NOT specially mentioned are measured at 120VAC/230VAC input , rated load and 25°C of ambient				
	temperature.	temperature.			
	2. Tolerance: includes set up tolerance, line regulation and load regulation .				
	3. The power supply is considered as a component that will be operated in combination with final Equipment. Since EMC				
	performance will be affected by the complete installation, the final equipment manufactures must be-qualify EMC				
	Directive on the complete installation again.				

#### Mechanical Specification



#### Input & Output wiring

%Input Rubber cable 3\*1.0mm<sup>2</sup>, the green/yellow cable connect with (FG) ,Brown with AC (L),Blue with AC(N)
%Output rubber cable 2\*1.0mm<sup>2</sup>, Red is output (V+) Positive, Black is output (V-) negative. Connected to LED Lamps

#### Dimming wiring

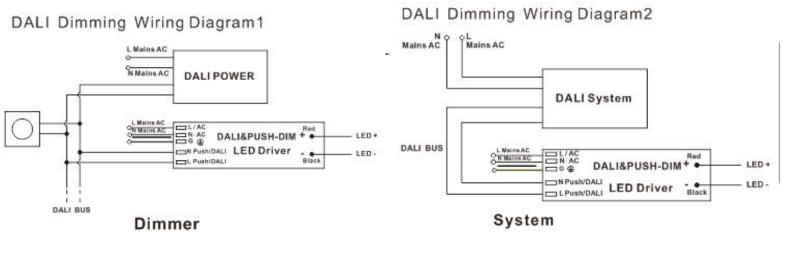
\*Dimming Rubber cable 2\*1.0mm<sup>2</sup>, Blue DA/N and White DA/L (No polar) connected to the DALI BUS when use DALI function .

Blue (N) is connected to AC (N) while white (L) is connected to 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.

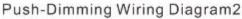


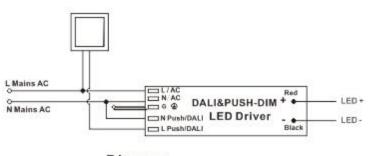
# Dimming Operation



DALI Dimming Wiring Diagram3 Push-Dimming Wiring Diagram1 **DALI** Master Ģ L Mains AC Red DALIPOWER IN AC LED + DALI&PUSH-DIM N Mains AC B PushiDALI LED Driver LED -Black L Push/DALI N Malos AC LED+ DAI ISPUSH-DIM LIAC DALI&PUSH-DIM + + LED + N Push/DALI LED -Black DI PushiDALI LED Driver LED -Black L Push/DALI N Mains AC Red + G DALI&PUSH-DIM LED+ Red + + IN Push/DALI LED Driver LED LED + Black DALI&PUSH-DIM L PushiDALI LED Driver LED -Black DALI BUS Dimmer (with ON/OFF function)

PC+DALI Master+DIMMER



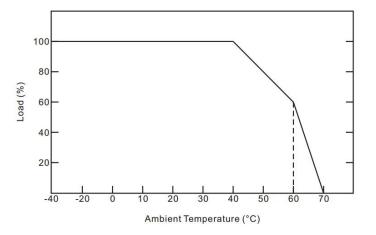


Dimmer

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.

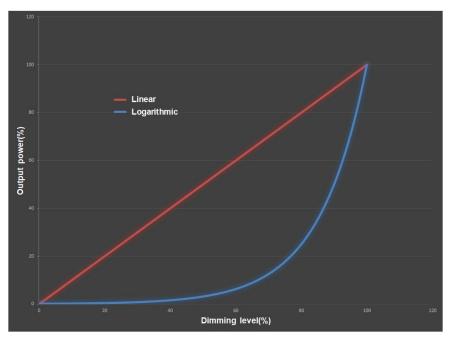


# Derating Curve



\*\*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;