

**DALI2 & PUSH 2 in 1 dimmable LED Constant Voltage driver KV-2C-DP2A series 150W**

**■ Features:**

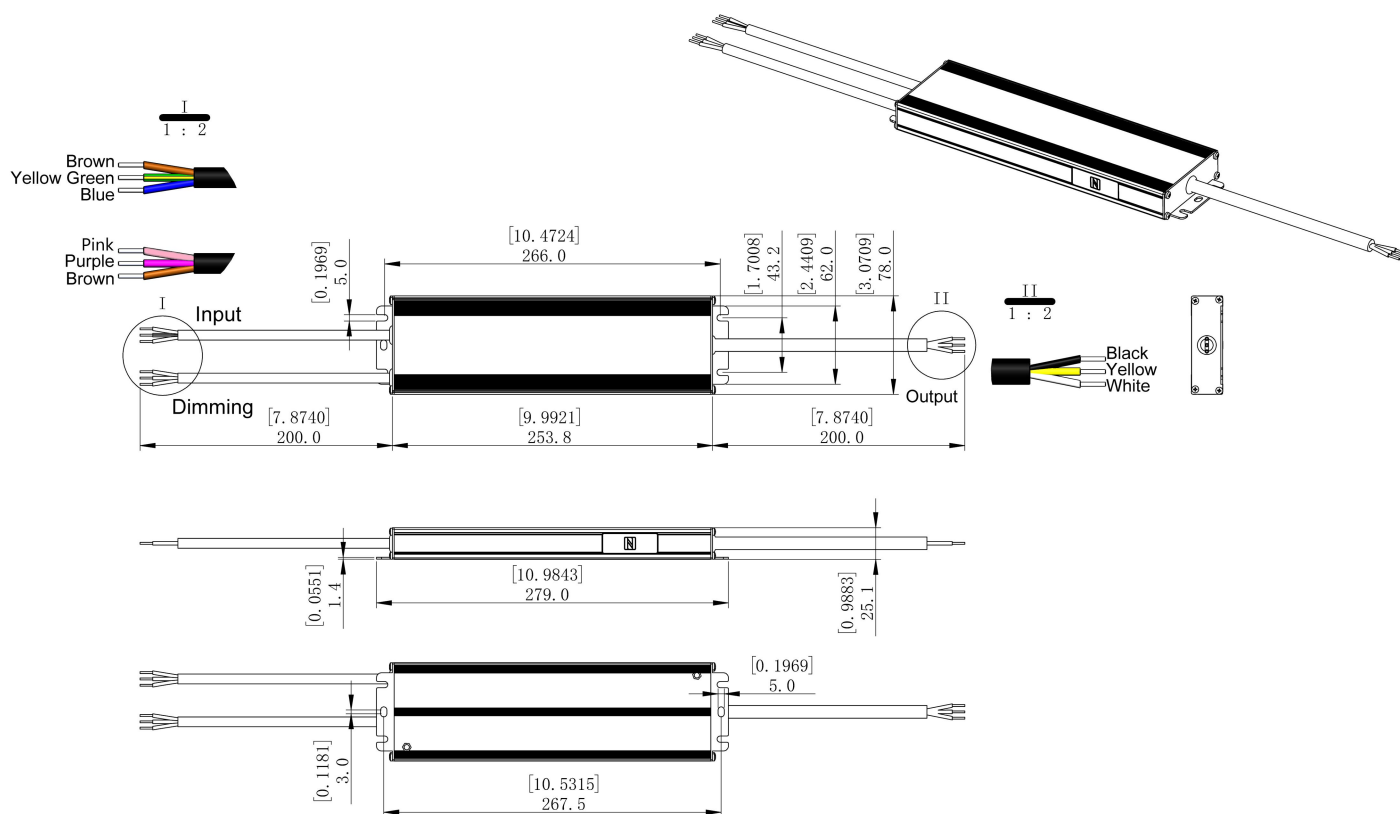
- Output constant Voltage (NFC regulation)
- Range: 110-277VAC
- Built-in active PFC function
- Efficiency up to 91%
- Standby power consumption  $\leq 0.5$  W
- Protections: short circuit/ over load/ over temperature
- Cooling by free air convection; IP66 for indoor & outdoor
- Dimming curve: Logarithmic (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-12150-2C-DP2A	KV-24150-2C-DP2A	KV-36150-2C-DP2A	KV-48150-2C-DP2A
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	$\pm 0.2$ V			
	Rated current	12.5A	6.25A	4.16A	3.125A
	Rated power	150W			
	Load Regulation	2%	1%	1%	1%
	Voltage Range	110-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor(Typ.) @ full load	PF $\geq 0.98$ @120VAC PF $\geq 0.96$ @230VAC PF $\geq 0.95$ @277VAC (Full loading)			
	THD(Typ.)@ full load	$\leq 10\%$ @120VAC ; $\leq 10\%$ @230VAC; $\leq 15\%$ @277VAC			
	Efficiency(Typ.)@ full load	89%@120VAC 91%@230VAC/277VAC			
	AC Current(Max.)	1.6A	1.6A	1.6A	1.6A
	Standby power consumption	0.28W (@120V) 0.43W (@230V) 0.48W (@277V)	0.25W (@120V) 0.42W (@230V) 0.48W (@277V)	0.28W (@120V) 0.43W (@230V) 0.49W (@277V)	0.29W (@120V) 0.44W (@230V) 0.49W (@277V)
	Inrush Current (Typ.)	38.4A, 50%, 510us @120VAC; 88A, 50%, 120us @230VAC; 48A, 50%, 560us @277VAC			
	Leakage current	$< 0.5$ mA			
Protection	Short Circuit	Hiccup mode, recover automatically after fault condition is removed			
	Over Load	$\leq 120\%$ ,hiccup mode, recover automatically after fault condition is removed			
	Over temperature	Ambient temp. over $55^{\circ}\text{C} \pm 10^{\circ}\text{C}$ , output will be off; recovers automatically after temp. drops.			
Environ- ment	Working TEMP.	$-40 \sim +70^{\circ}\text{C}$ (see below derating curve)			
	Working Humidity	20 ~ 95%RH,non-condensing			
	Storage TEM.,Humidity	$-40 \sim +80^{\circ}\text{C}$ , 10 ~ 95%RH			
	TEMP.coefficient	$\pm 0.03\%/^{\circ}\text{C}$ (0 ~ $50^{\circ}\text{C}$ )			
	Vibration	10 ~ 500Hz, 2G 10min./1 cycle,period for 60min. each along X,Y,Z axes			

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<b>Safety &amp; EMC</b>	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℃/ 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
<b>Others</b>	Weight	/
	Dimension	279*78*25.1mm (L*W*H)
	packing	/
<b>Notes</b>	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**

**※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) (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\*14AWG, to be connected to LED Light (12V output voltage);  
Output electronic cable 3\*16AWG, to be connected to LED Light (24~48V output voltage)

**※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.

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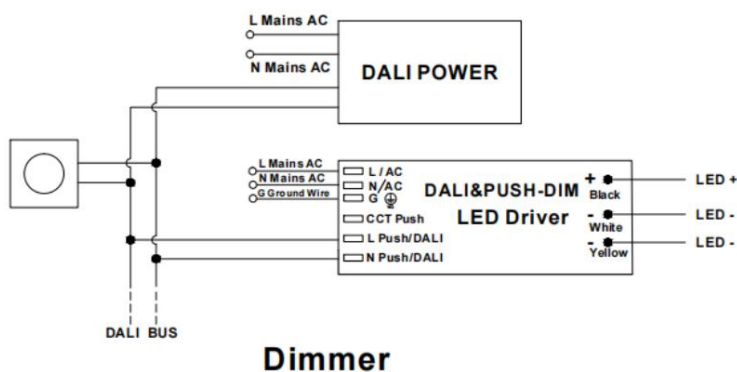
※Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

※Note: Any other requests we can customize.

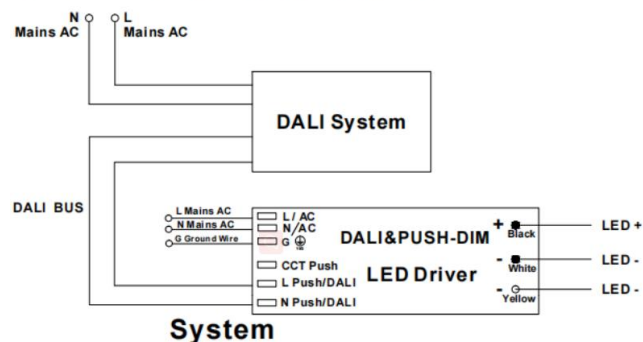
**CCT (TW) dimming:** electronic cable, Black is output (V+) Positive, While (CW-) and Yellow (WW-) are output (V-) negative

### ■ Dimming Operation

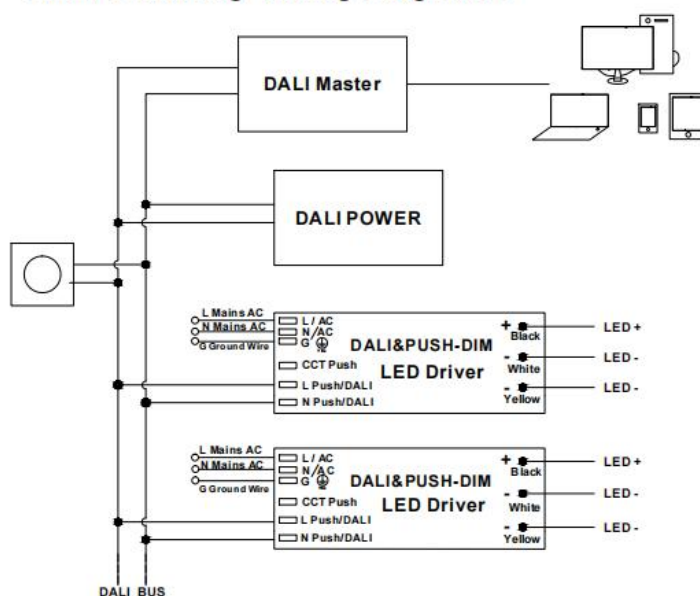
#### DALI Dimming Wiring Diagram 1



#### DALI Dimming Wiring Diagram 2

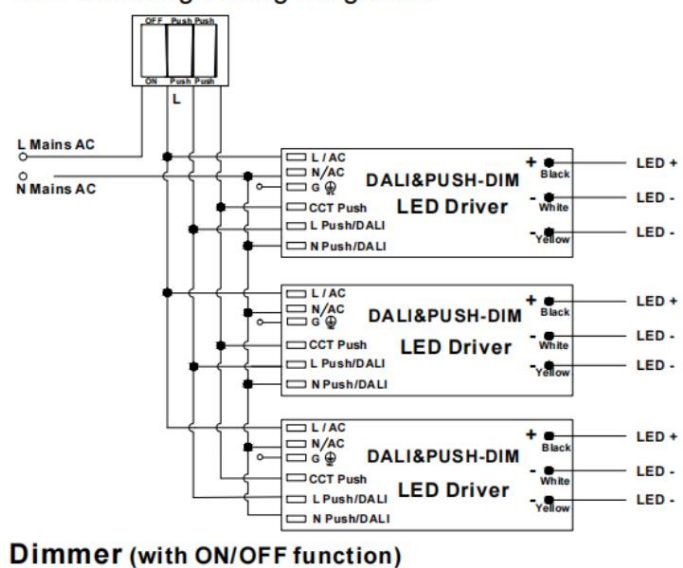


#### DALI Dimming Wiring Diagram 3



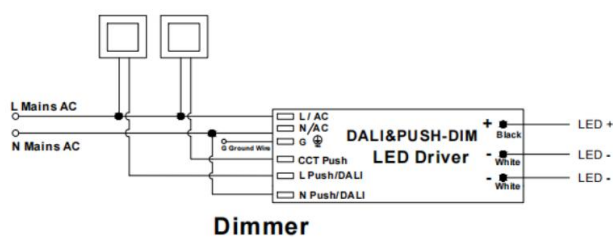
#### PC+DALI Master+DIMMER

#### Push-Dimming Wiring Diagram 1



#### Dimmer (with ON/OFF function)

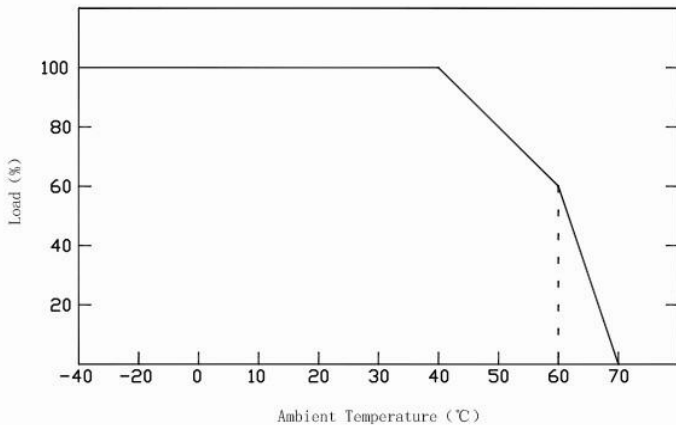
#### Push-Dimming Wiring Diagram 2



#### Dimmer

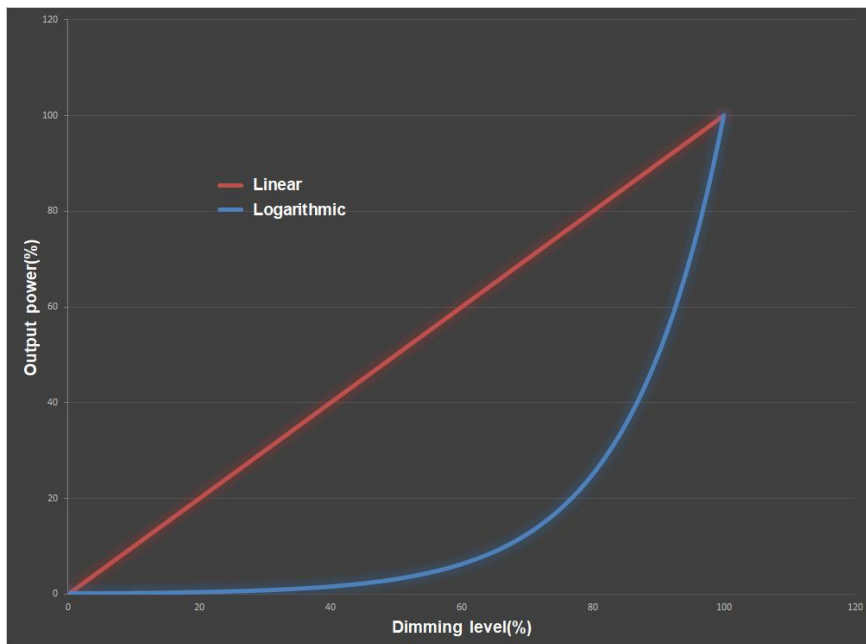
### ■ Derating Curve

※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.



※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.

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