



# SPECIFICATION

**Product Name:** Dimmable LED driver

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**Model No.:** KL50C-PV5

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**Issue Date:** November 02, 2021

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CUSTOMER APPROVED

Version	Product Name / Product Model	Reason / content for change	Stage	Date
Draft	KL50C-PV5 LED driver		Design verification	2021-11-01

## Specification for Dimmable LED Driver KL50C-PV5 C.C.



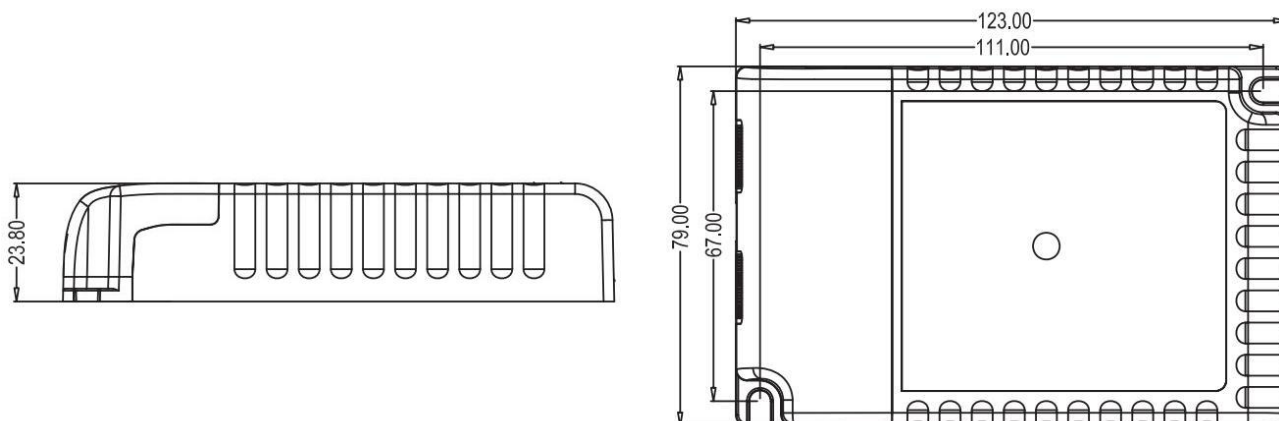
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 0-10V dimmer
- 12V/100mA auxiliary power supply; basically insulated from LED
- Supports 10V PWM dimming (3KHz-8KHz)
- Can choose 1-10V port PUSH dimming
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function
- Push dim port with corridor function
- 5 year warranty

### 1. Parameters

Input	Operating Voltage	198-264VAC 50Hz /60Hz
	Rated Input Voltage	220-240VAC 50Hz /60Hz
	DC Input Voltage range	200-240VDC
	Input Current	0.28A Max.
	Input Inrush Current	<15A (Half current pulse width 100US) @230VAC
	Power Factor	≥0.95 (@230VAC Full load)
	Total harmonic distortion	Typical: 13% (@230Vac Full load)
	Stand-by Power	≤0.5W
	Efficiency	89%Max. @230VAC (Full load)
	Wiring Method	Push terminal, wire cross section:0.75-1.5mm <sup>2</sup>
Output	Operating mode	Constant Current
	Load type	LED
	Ripple requirement (Flickering or flickering-Free)	Flicker value: less than 2% for whole dimming range
	Start up time	<0.5s (@230Vac;Auxiliary has no output)
	No-load output voltage	68VDC Max.
	Load output voltage range	6-60VDC
	Full load output power	50W Max.
	Load output current	CC:500mA;600mA;650mA;700mA;750mA;800mA;850mA; 900mA;1000mA;1050mA;1100mA;1200mA; CV:12V(0-1200MA); 24V(0-1200MA);
	Constant current/voltage Precision	Constant Current Precision ±5%
	Auxiliary power	12V/100mA; basically insulated to LED output
Wiring method	Push terminal, wire cross section:0.5-1.5mm <sup>2</sup>	

<b>Control Method</b>	Primary PUSH Dimming	Primary PUSH dimming (Max.lead length: 100M)
	1-10V Dimming	0-10V dimming (Port current<1MA) (Max.lead length: 20M)
	Dimming Range	1%-100%
	Primary PWM Dimming	0-10V port PWM dimming (3KHZ-8KHZ)
	Potentiometer	Yes, 100kΩ
	Secondary PUSH dimming	Yes, Change factory settings
<b>Exception Protection Requirements</b>	Output over temperature protection	Yes, without self recovery function (Can be inquired)
	Output short circuit protection	Yes, without self recovery function (Can be inquired)
<b>Operating Environment</b>	Operating temperature/ humidity	-25℃~50℃ Humidity:85% (Non-condensing)
	Storage temperature/ humidity	-40℃~80℃, Humidity:10% - 95%
	Max. case temp (Tc)	85℃
<b>Safety &amp; EMC</b>	EMC standard	EN55015 EN61547 EN61000-3-2 EN61000-3-3
	Safety standard	EN61347-1 EN61347-2-13
	Certification	CE
	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC")
<b>Others</b>	Degrees of protection	IP20
	Type of protection	Class II
	Installation type	Independent installation
	Installation dimension	123*79*24mm
	Blackout memory function	Yes, PUSH blackout memory
	PUSH dimming synchronization	30 units .
	Packaging requirement	white box+ Instructions Clapboard Outer Carton (K=A)
	Weight	210g
	Life	50000h @Ta full load
Note: All parameters are tested at the input voltage of 230Vac and 25 degree environment unless specified.		

## 2. Dimension (Unit: mm)



### 3. Wiring Diagram

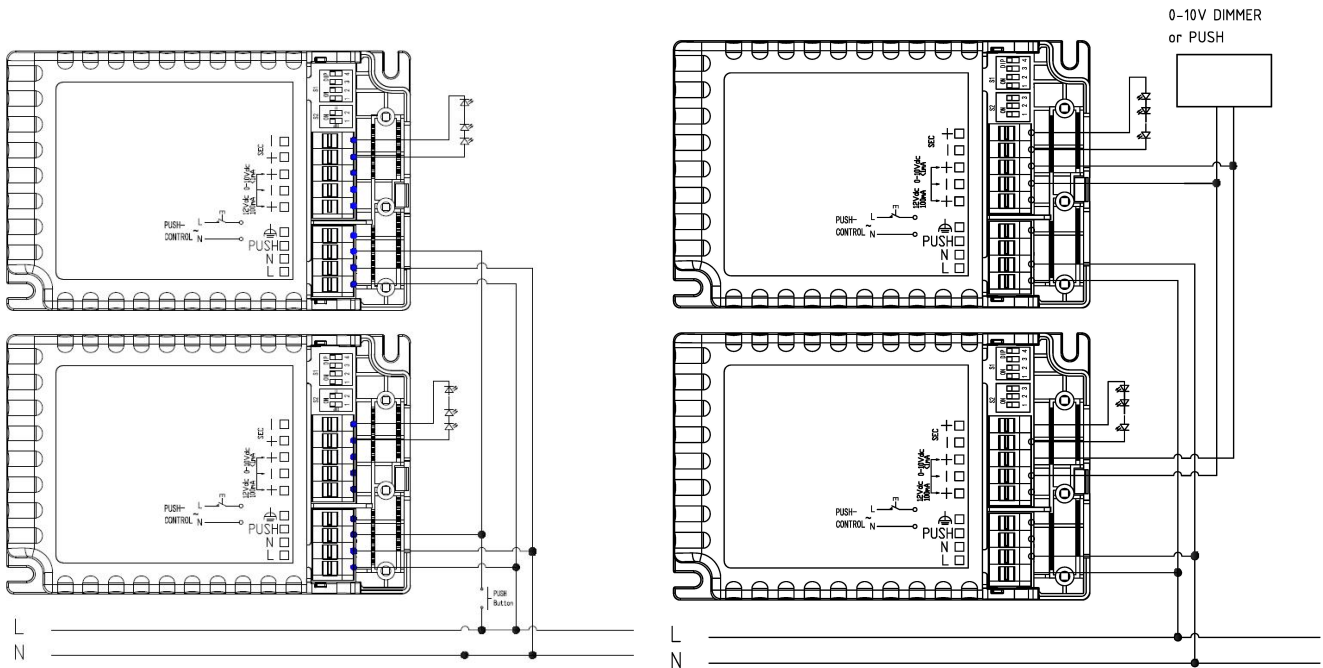


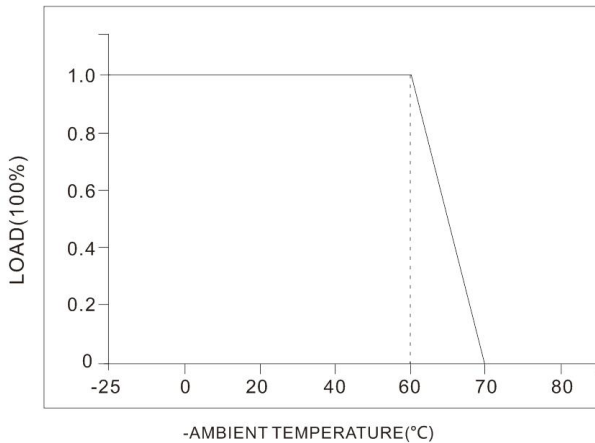
Fig. A Push Dimming or Corridor function

Fig. B 0-10V or Secondary PUSH

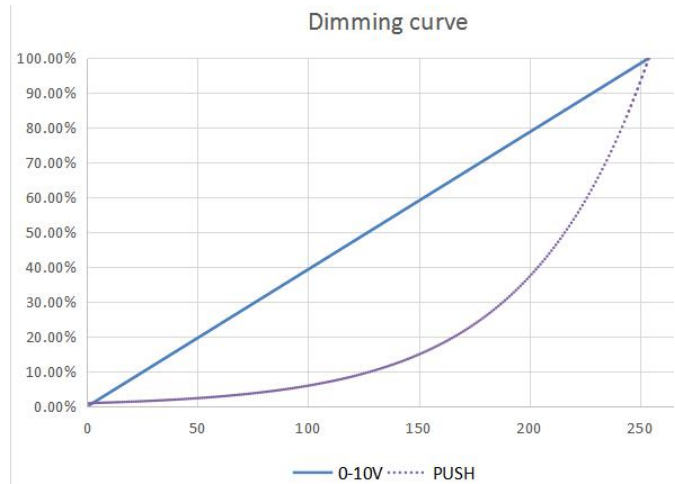
### 4. Current gear setting

Current	voltage	Red DIP			Black DIP			
		1	2	3	1	2	3	4
500mA	6~60V	-	-	-	-	-	-	-
600mA	6~60V	-	-	-	ON	-	-	-
650mA	6~60V	-	-	-	-	ON	-	-
700mA	6~60V	-	-	-	-	-	ON	-
750mA	6~60V	-	-	-	ON	ON	-	-
800mA	6~60V	-	-	-	ON	-	ON	-
850mA	6~58V	-	-	-	-	ON	ON	-
900mA	6~55V	-	-	-	-	ON	-	ON
950mA	6~52V	-	-	-	ON	ON	ON	-
1000mA	6~50V	-	-	-	ON	ON	-	ON
1050mA	6~47V	-	-	-	ON	-	ON	ON
1100mA	6~45V	-	-	-	-	ON	ON	ON
1200mA	6~41V	-	-	-	ON	ON	ON	ON
1200mA	12V	-	ON	ON	ON	ON	ON	ON
1200mA	24V	-	-	ON	ON	ON	ON	ON

## 5. Derating



## 6. Dimming curve



## 7. ON/OFF & Description of Dimming Operation

- A. Brief push switches (< 1 s), LED driver ON or OFF. The brightness returns to the last dimming value.
- B. Press and hold the PUSH switch (1S~8S), the LED driver can achieve dimming; After pressing it again, the light changes in the opposite dimming directions.
- C. Push dimming has power-down memory and brightness memory.
- D. Dimming synchronization:  
LED driver can synchronize to a 50% dimming level with a 15-second hold the push.
- E. Set fade times: Press push button to turn off lights, Then long press button, lights will turn on and dim. the time of long press will be saved to fade times.  
Turn of fade times function: Quickly press the PUSH switch 5 times within 3 seconds;  
Turn on fade times function: long press PUSH 15S.
- F. Corridor function: PUSH has an L signal greater than 60S, enter the corridor function, 100% brightness, 20% brightness, wait for 60S, and then turn off the lights. Brief push switches 5 times to exit the corridor function.
- G. Push button with indicator lights are not allowed.
- H. Secondary PUSH: The red DIP switch “1” is closed; 0-10V: The red DIP switch “1” is open;

## 8. matters needing Attention

- 1) The LED string must be connected to the load before turning on the input power, otherwise the LED string may be damaged.