

SPECIFICATION

Product Name: Dimmable LED driver

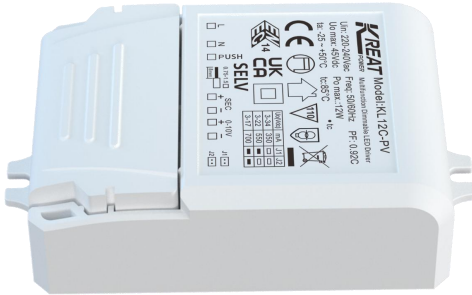
Model No.: KL12C-PV

Issue Date: January 6, 2025

CUSTOMER APPROVED

Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL12C-PV LED driver	ERP upgrade	Design verification	2021-12-27
A1	KL12C-PV LED driver	Change the logo	Mass production	2024-11-15
A2	KL12C-PV LED driver	Update Automatic circuit breaker		2025-01-06

Specification for Dimmable LED Driver KL12C-PV C.C.



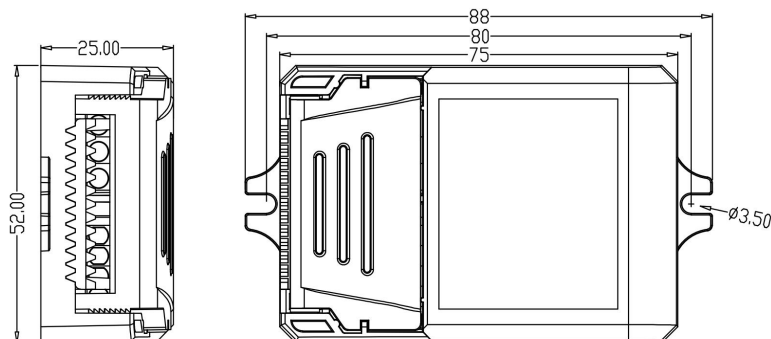
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 0-10V dimmer
- Supports 10V PWM dimming (3KHz-8KHz)
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function
- 5 year warranty

1. Parameters

	Model	KL12C-PV						
Input	Operating Voltage	198-264VAC 50Hz /60Hz						
	Rated Input Voltage	220-240VAC 50Hz /60Hz						
	DC Input Voltage range	200-240VDC						
	Input Current	0.07A Max.						
	Input Inrush Current	<15A (Half current pulse width 100US) @230VAC						
	Power Factor	≥0.92C (@230VAC Full load)						
	Total harmonic distortion	Typical: 20% (@230Vac Full load)						
	Stand-by Power	≤0.5W						
	Efficiency	83%Max. @230VAC (Full load)						
	Wiring Method	Push terminal, wire cross section:0.75-1.5mm ²						
	Automatic circuit breaker (Calculate current in the wire)	type	B10	B13	B16	B20	B25	/
Number		35	40	55	70	80	/	
type		C10	C13	C16	C20	C25	C32	
Number		65	80	95	125	150	190	
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	45VDC Max.						
	Load output voltage range	9-34VDC						
	Full load output power	12W Max.						
	Load output current	350mA(9-34V) 500mA(9-24V) 700mA(9-17V)						
	Constant current/voltage Precision	Constant Current Precision ±5%						
	Wiring method	Push terminal, wire cross section:0.5-1.5mm ²						

Control Method	Primary PUSH Dimming	Primary PUSH dimming (Max.lead length: 100M)
	1-10V Dimming	0-10V dimming (Port current<1MA) (Max.lead length: 20M)
Control Method	Dimming Range	0%-100%
	Primary PWM Dimming	0-10V port PWM dimming (3KHZ-8KHZ)
	Potentiometer	Yes, 100kΩ
Exception Protection Requirements	Output over temperature protection	Yes, without self recovery function (Can be inquired)
	Output short circuit protection	Yes, without self recovery function (Can be inquired)
Operating Environment	Operating temperature/ humidity	-25℃~50℃ Humidity:85% (Non-condensing)
	Storage temperature/ humidity	-40℃~80℃, Humidity:10% - 95%
	Max. case temp (Tc)	85℃
Safety & EMC	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")
Others	Degrees of protection	IP20
	Type of protection	Class II
	Installation type	Independent installation
	Installation dimension	88*52*25mm
	Blackout memory function	Yes, PUSH blackout memory
	PUSH dimming synchronization	30 units .
	Packaging requirement	white box+ Instructions Clapboard Outer Carton (K=A)
	Weight	80g
	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

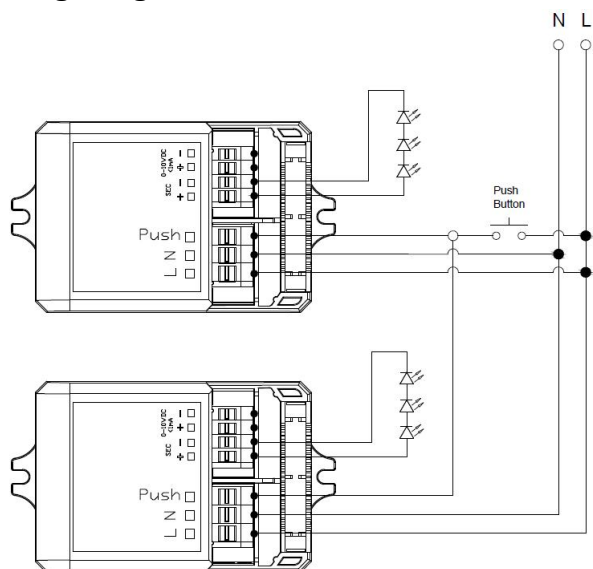


Fig. A Push Dimming OR Corridor function

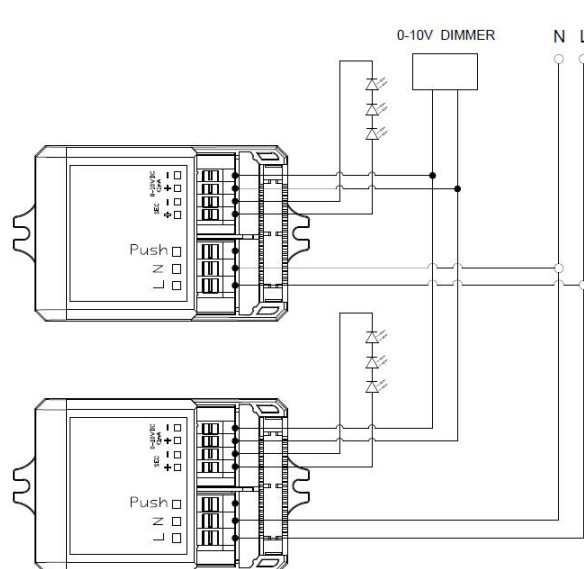
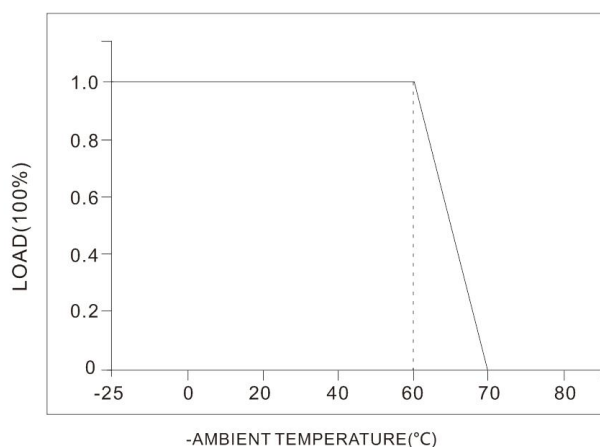
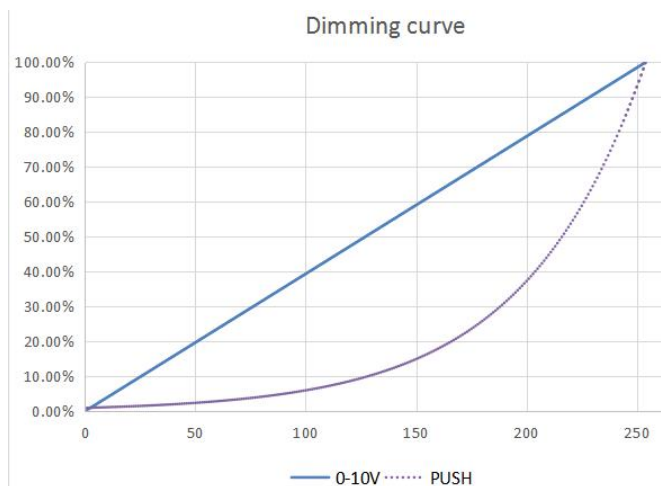


Fig. B 0-10V

4. Derating



5. Dimming curve



6. Current gear setting

Current	voltage	J1	J2
350mA	9~34V	—	—
500mA	9~24V	SHORT	—
700mA	9~17V	SHORT	SHORT

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. Turn on and off fade times: Brief push to turn off the lights, Press and hold the PUSH switch, the light will turn on and brighten. The hold time will be saved as fade times.

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.

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.