

SPECIFICATION

Product Name: DALI2 Dimmable LED driver

Model No.: KL60C2-PDiiV

Issue Date: November 25, 2019

CUSTOMER	APPROVED



Version	Product Name / Product Model	Reason / content for change	Stage	Date	
A0	DALI2 LED Driver KL60C2-PDiiV	Initial version		2019-11-25	



1.Features



1) Built-in DALI2 protocol, no flicker in full dimming range; 2) Primary Push dimming function; Push dimming has state memory function;

3) Short circuit / over temperature / over voltage protection; reduce output current after over temperature;

- 4) Standby power consumption $\leq 0.5W$;
- 5) 5 years warranty.

2. Parameters

		Minimum value	198V AC			
	voltage range	Typical value	230V AC			
		Max	264V AC			
		Minimum value	47Hz			
	Frequency Range	Typical value	50/60Hz			
		Max	63Hz			
	DC voltage range	200-240V DC				
	Rated voltage	220-240V AC 50Hz /60Hz				
• •	input power	65W Max				
Input	Input Current	0.32A MAX				
	Inrush current	<15A (100us half current) @ 230V AC				
	Total harmonic distortion	full load output, @ 230Vac total harmonic distortion is less than 13%				
	Power Factor	0.95 (@ 230Vac, under full load)				
	Standby power consumption	<0.5W				
	No-load power consumption	≤1W				
	Leak current	<0.5mA/240V				
	Work efficiency	86% max				
	Operating mode	CC				
	Load type	LED				
	Start Time	≤1S (@230Vac Under full load)				
	Ripple current	±5% (@230Vac, 100% load,LED load)				
	Strobe requirements	Full range without strobe (stroboscope test less than 2%)				
Output	No-load output voltage	68V Max				
Output	Load output voltage	9-58V				
	Full load output power	60W				
	Load current	Typical value	350mA(9-58V) 500mA(9-58V) 700mA(9-45V) 900mA(9-33V)			
	Constant voltage accuracy / constant current accuracy	/ ±5%				

Shenzhen Merrytek Technology Co.,Ltd

Add: No.17th Building, Dianda Guyuan Industrial Park, Mashantou, Matian, Guangming District, Shenzhen, China, 518106Tel: +86 (0)755-2305 7253Fax: +86 (0)755-2786 3012Website: www.merrytek.com

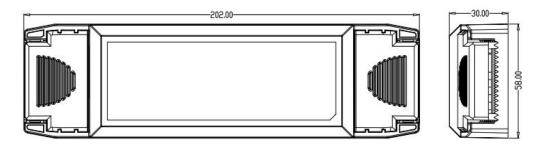


	Primary PUSH dimming	Yes, Primary PUSH dimming (Maximum lead length: 20M)			
	1-10V (0-10V) dimming	Yes, secondary 0-10V dimming, the darkest below 1V does not			
Control		turn off			
Method	Dimming range	2%-100%			
	Potentiometer dimming	100K Potentiometer			
	DALI dimming	Yes (max lead length: 300m)			
	Output over load protection	Yes			
	Output no load protection	Yes, self-recovery (with query function)			
	Output over temperature protection	Yes, without self recovery function (Can be inquired)			
Exception Protection	Output short circuit protection	Yes, without self recovery function (Can be inquired)			
Requirements	Working environment temperature / humidity	Typical value	-25℃…+50℃ Humidity: 85% (non-condensing)		
	Storage temperature/ humidity	-40 $^\circ \!\!\! C$ + 80 $^\circ \!\!\! C$ 10 \sim 95% RH (non-condensing)			
	Max. Case Temp (Tc)	85 ℃			
	Safety standards	EN61347-1, EN61347-2-13, EN62493, EN60598-1			
Certification standards	Electromagnetic compatibility (EMC) standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3			
	Environmental requirements	Compliant with EU RoHS requirements			
	Certified	CE ENEC			
	Withstand voltage	3750Vac 51	mA 60S (Input to output)		
	Input / output (terminal / lead) specifications	Push-type terminal block Wire diameter: 0.75-1.5mm2			
	Degrees of protection	IP20			
others	Product Category	Class II appliances			
	Packaging requirement	Independent installation			
	Installation dimension	202* 58* 30mm			
	Packaging requirements	PE bag + white box + manual + partition + outer box (K = A)			
	Net Weight	245 g			
	Warranty	5 years warranty @Ta 230V full load			
Remarks: 1. All	parameters are measured und	ler the input	voltage of 230Vac and the ambient temperature of		

25 $^{\circ}$ C, unless otherwise specified.

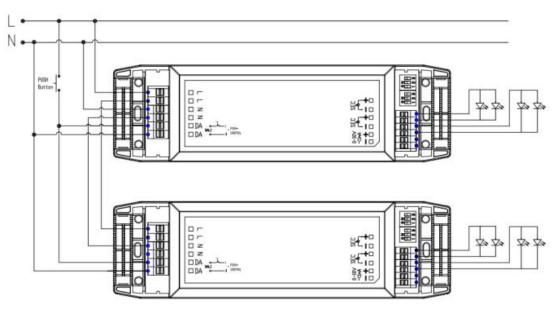


3. Dimension (Unit: mm)

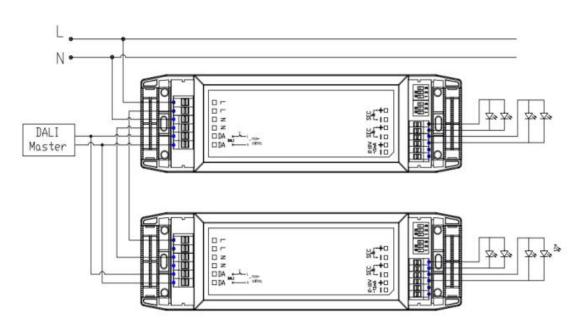


4. Wiring Diagram

1) PUSH Dimming wiring diagram



2) DALI wiring diagram

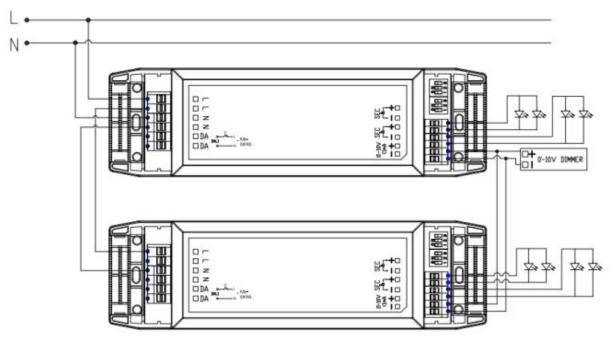


Shenzhen Merrytek Technology Co.,Ltd

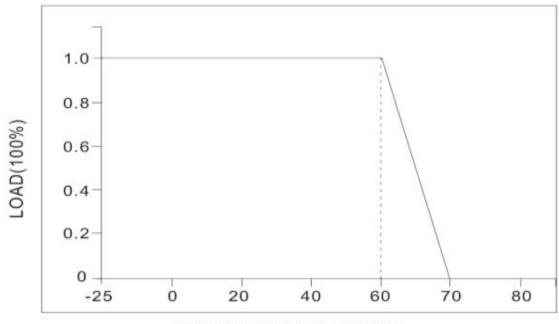
Add: No.17th Building, Dianda Guyuan Industrial Park, Mashantou, Matian, Guangming District, Shenzhen, China, 518106Tel: +86 (0)755-2305 7253Fax: +86 (0)755-2786 3012Website: www.merrytek.com



3) 0-10V dimming wiring diagram



5.Derating

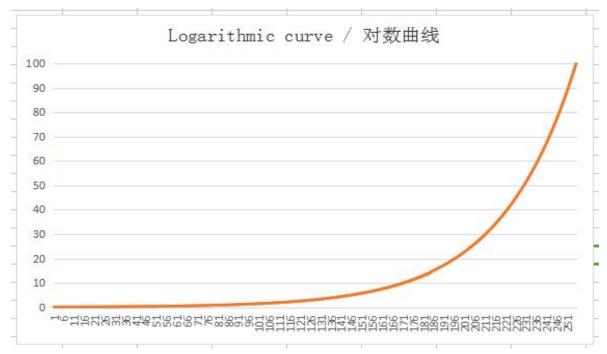


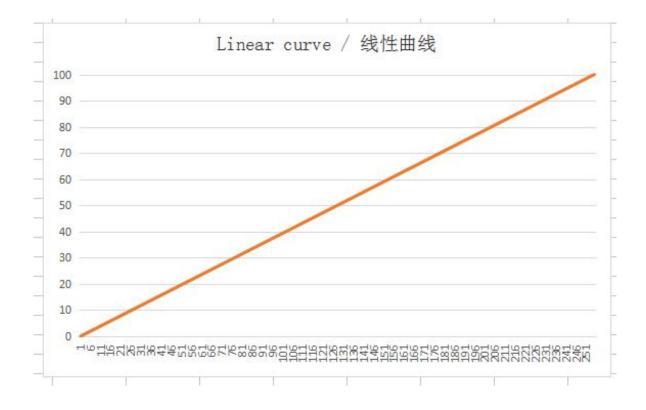
-AMBIENT TEMPERATURE(°C)

Shenzhen Merrytek Technology Co.,Ltd Add: No.17th Building, Dianda Guyuan Industrial Park, Mashantou, Matian, Guangming District, Shenzhen, China, 518106 Tel: +86 (0)755-2305 7253 Fax: +86 (0)755-2786 3012 Website: www.merrytek.com Page 6 of 8

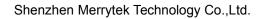


6.Dimming curve





Shenzhen Merrytek Technology Co.,Ltd Add: No.17th Building, Dianda Guyuan Industrial Park, Mashantou, Matian, Guangming District, Shenzhen, China, 518106 Tel: +86 (0)755-2305 7253 Fax: +86 (0)755-2786 3012 Website: www.merrytek.com Page 7 of 8





7.Current gear setting

Output Current Setting							
SW1			SW2				
	1	2	3		1	2	3
350mA	-	-	-	350mA	-	-	-
500mA	ON	-	-	500mA	ON	-	-
700mA	ON	ON	-	700mA	ON	ON	_
900mA	ON	ON	ON	900mA	ON	ON	ON

8. ON/OFF & Description of Dimming Operation

A. Short press the PUSH switch (short press time 0.1S-1S), the LED driver will turn on or off.

B. Dimming:

Press and hold the PUSH switch (1S-8S), the LED driver can achieve dimming, brightening or dimming, the dimming range is 2-100%.

C. Memory:

PUSH dimming has dimming memory function.

D. Dimming synchronization:

The power connected to the same PUSH switch can be synchronized by pressing and holding the PUSH switch for longer than 15S.

E. DALI dimming mode:

Connect the power supply to the DALI system, and it can be dimmed by the DALI host. The dimming range is 0-100%.

9. 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.

2) After the LED driver input is powered off, there will be a residual voltage at the output, which can be maintained for about 3 minutes.