

SPECIFICATION

Product Name:	DALI2 Dimmable LED driver
Model No.:	KL10C-PDiiV
Issue Date:	November 08, 2019
С	JSTOMER APPROVED



Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	DALI2 LED Driver KL10C-PDiiV		Design verification	2019-11-08



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 ≤ 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	14W Max		
	Input Current	0.07 MAX (230Vac, under full load)		
Innut	Inrush current	8A (tested at 50% Ipeak with a width of 50us @ 230Vac under		
Input	illiusii cuitelii	cold load and start)		
	Total harmonic distortion	full load @ 230Vac total harmonic distortion is less than 16%		
		0.80C (@ 230Vac, 100mA / 40V, under full load)		
	Power Factor	0.90C (@ 230Vac, 180mA / 40V, under full load)		
		0.95 (@ 230Vac, 270mA / 40V, 350mA / 36V, 440mA / 27V,		
		under full load)		
	Standby power	<0.5W		
	consumption	~0.5VV		
	No-load power consumption	≤1W		
	Leak current	<0.5mA/240V		
	Work efficiency	79% max		
	Operating mode	CC		
	Load type	LED		
	Start Time	≤1S (@230Vac Under full load)		
Output	Ripple current	±5% (@230Vac, 100% load,LED load)		
Output	Strobe requirements	Full range without strobe (stroboscope test less than 2%)		
	No-load output voltage	55V Max		
	Load output voltage	9-40V		
	Full load output power	12.6W		

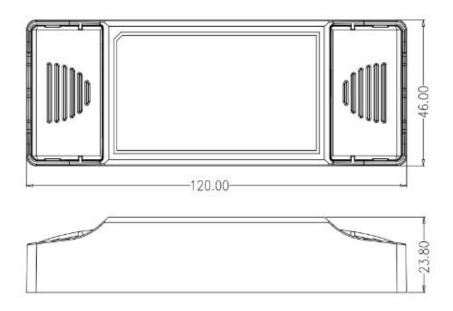


	Load current	Typical	100mA(9-40V) 180mA(9-40V) 270mA(9-40V)		
	Load carront	value	350mA(9-36V) 440mA(9-27V)		
	Constant voltage accuracy / constant current accuracy	±5% Yes, Primary PUSH dimming			
	Primary PUSH dimming				
Control	1-10V (0-10V) dimming	Yes, secondary 0-10V dimming, the darkest below 1V does not 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)			
Exception Protection Requirements	Output over temperature protection	Yes, without self recovery function (Can be inquired)			
Requirements	Output short circuit protection	it Yes, without self recovery function (Can be inquired)			
Operating Environment	Working environment temperature / humidity	Typical value	-25°C+50°C Humidity: 85% (non-condensing)		
	Storage temperature/ humidity	-40 °C + 80 °C 10 ∼ 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 5mA 60S (Input to output)			
others .	Input / output (terminal / lead) specifications	Push-type terminal block Wire diameter: 0.75-1.0mm2			
	Degrees of protection	IP20			
	Product Category	Class I appliances			
	Packaging requirement	Independent installation			
	Installation dimension	120*46*23.8mm			
	Packaging requirements	PE bag + white box + manual + partition + outer box (K = A)			
	Net Weight	90g			
	Warranty	5 years warranty @ Ta 230V full load			
Remarks: 1. All	1		voltage of 230Vac and the ambient temperature o		

Remarks: 1. All parameters are measured under the input voltage of 230Vac and the ambient temperature of 25 °C, unless otherwise specified.

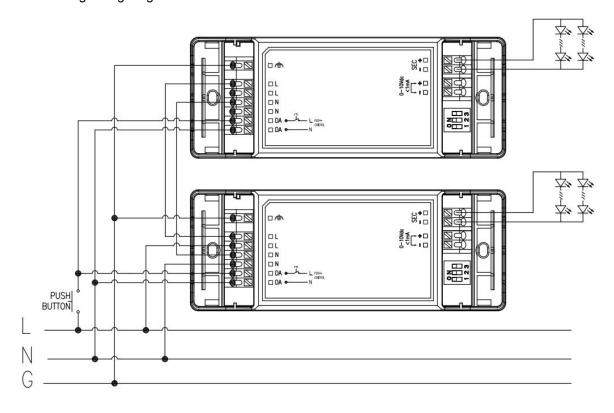


3. Dimension (Unit: mm)



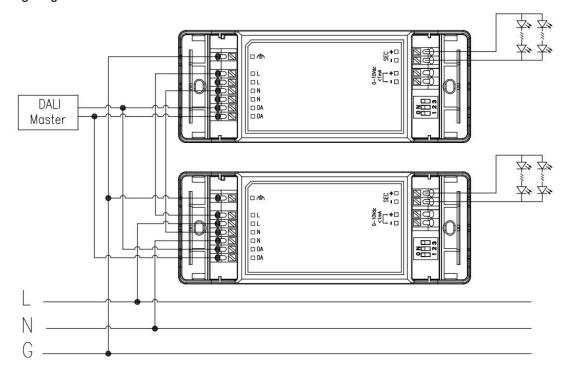
4. Wiring Diagram

1) PUSH Dimming wiring diagram

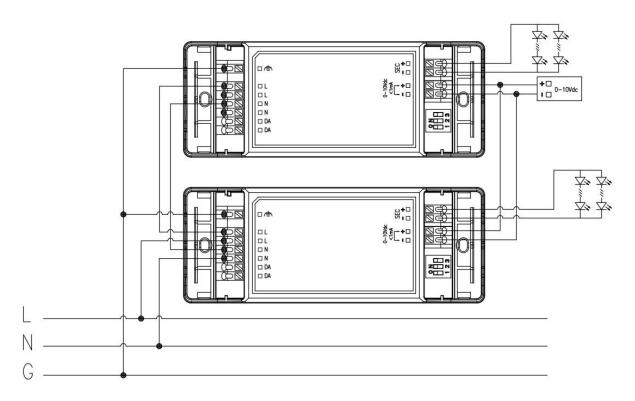




2) DALI wiring diagram

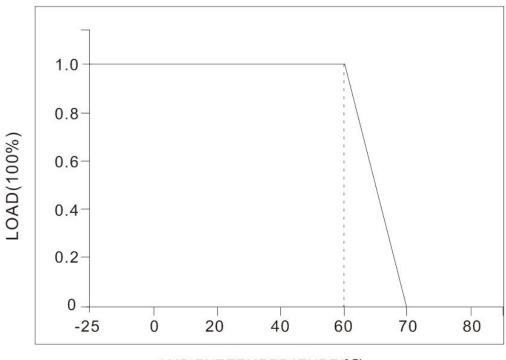


3) 0-10V dimming wiring diagram



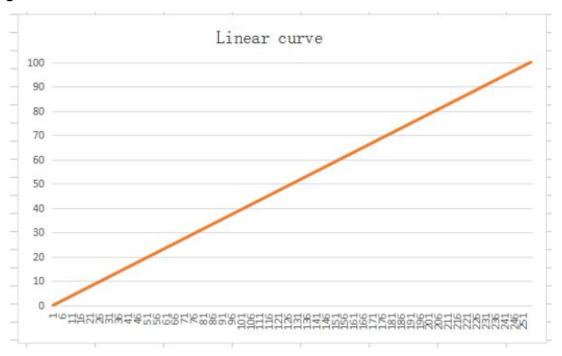


5. Derating

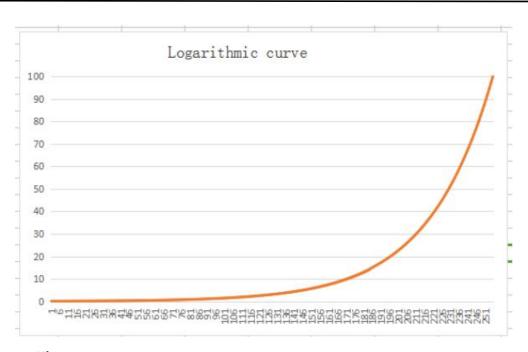


-AMBIENT TEMPERATURE(°C)

6. Dimming curve







7. Current gear setting

Current / voltage gear setting	1	2	3
100MA	-	-	-
180MA	ON	-	-
270MA	ON	ON	-
350MA	ON	-	ON
440MA	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.