



SPECIFICATION

Product Name: DALI2 Dimmable LED driver

Model No.: KL60C-DiiP

Issue Date: November 06, 2019

CUSTOMER APPROVED

Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	DALI2 LED driver KL60C-DiiP		Design verification	2019-11-06

1. Features



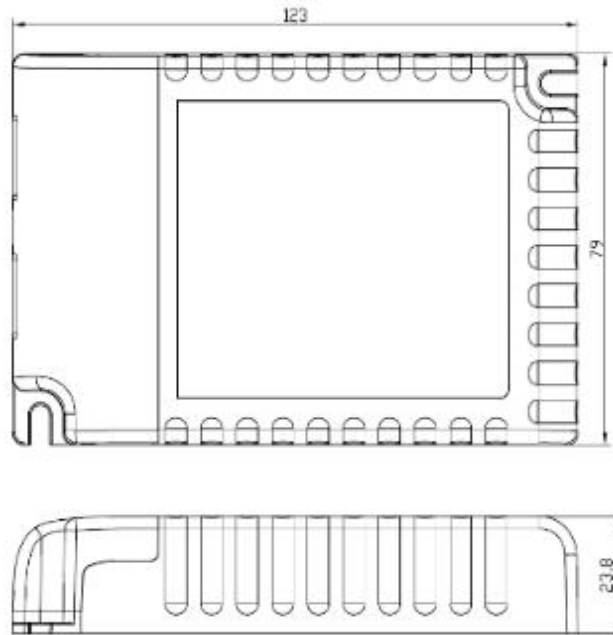
- 1) With DALI dimming function; primary Push dimming function, and state memory;
- 2) No flicker in the full dimming range;
- 3) Reduce output current after over temperature;
- 3) With output short-circuit / over-voltage protection, over-temperature protection of the whole machine, Reduce output current after over temperature;
- 4) Standby power consumption $\leq 0.5W$;
- 5) 5 years warranty.

2. Parameters

Input	Voltage range	198-264V AC 50Hz /60Hz
	DC input current range	200-240V DC
	Rated supply voltage	220-240V AC 50Hz /60Hz
	input power	65W Max
	Input current	0.32A Max
	Input Inrush Current	16A ($t_{width}=100\mu s$ measured at 50% I_{peak} @230Vac) (Cold start, 100% load)
	Total harmonic distortion	$\leq 13\%$ (@ 230Vac, 100% load)
	Power Factor	0.95 (@ 230Vac, under full load)
	Leak current	$< 0.5mA/240V$
	Stand-by Power	$\leq 0.5W$
	No-load power consumption	1W
	Leak current	$< 0.5mA/240V$
	Working efficiency	86% Max. @ 230V AC (1050mA full load)
Output	Operating mode	Constant current
	Load type	LED
	Start up time	$< 1S$ (AC power-on to output current reaches 90% of rated)
	Current Ripple	$\pm 7\%$ (LED load test)
	Ripple requirement (Flickering or Flickering-Free)	Flicker-free, less than 2%
	No load output voltage	80VDC Max
	Load output voltage	9-71V DC
	Full load output power	60W Max

	Load output current	350mA(9-71V) 500mA(9-71V) 550mA(9-71V) 650mA(9-71V) 700mA(9-71V) 750mA(9-71V) 850mA(9-70V) 900mA(9-66V) 1000mA(9-60V) 1050mA(9-57V)
	Constant current/voltage accuracy	Constant current $\pm 5\%$
	Wiring Method	Push Terminal, wire diameter: 0.75-1.5mm ²
Control Method	Primary PUSH dimming	Primary PUSH dimming (maximum lead length: 20M)
	DALI Dimming	Yes
Exception Protection Requirements	Input overvoltage protection	300V AC 50Hz / 60Hz 2h
	Output no-load protection	Yes, self-recovery (with query function)
	Output over-temperature protection	Yes, non-recoverable (with query function)
	Output short circuit protection	Yes, non-recoverable (with query function)
Operating Environment	Operating temperature/humidity	-25°C~50°C
	Storage temperature/humidity	-40 °C... + 80 °C 10 ~ 95% RH (non-condensing)
	Max. case temp (Tc)	85°C
Certification standards	Safety standards	EN61347-1, EN61347-2-13
	Electromagnetic compatibility (EMC) standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	Environmental requirements	Comply with EU RoHS requirements
	Certification	CE ENEC
Others	Insulation withstand voltage	3750V AC 5mA 60S (input "L N" to output "SEC + SEC-1-10V")
	Input / output (terminal / lead) specifications: Push-type terminal block Wire diameter	0.75-1.5mm ²
	Protection class	IP20
	Overvoltage category	Class II
	Installation requirements	stand-alone installation
	Installation size	123 * 79 * 24mm
	Packaging requirement	bubble bag + partition + outer box (K = A)
	Weight	200.6 g
	Warranty	5 years warranty @Ta 230V full load

3. Dimension (Unit: mm)



4. Wiring Diagram

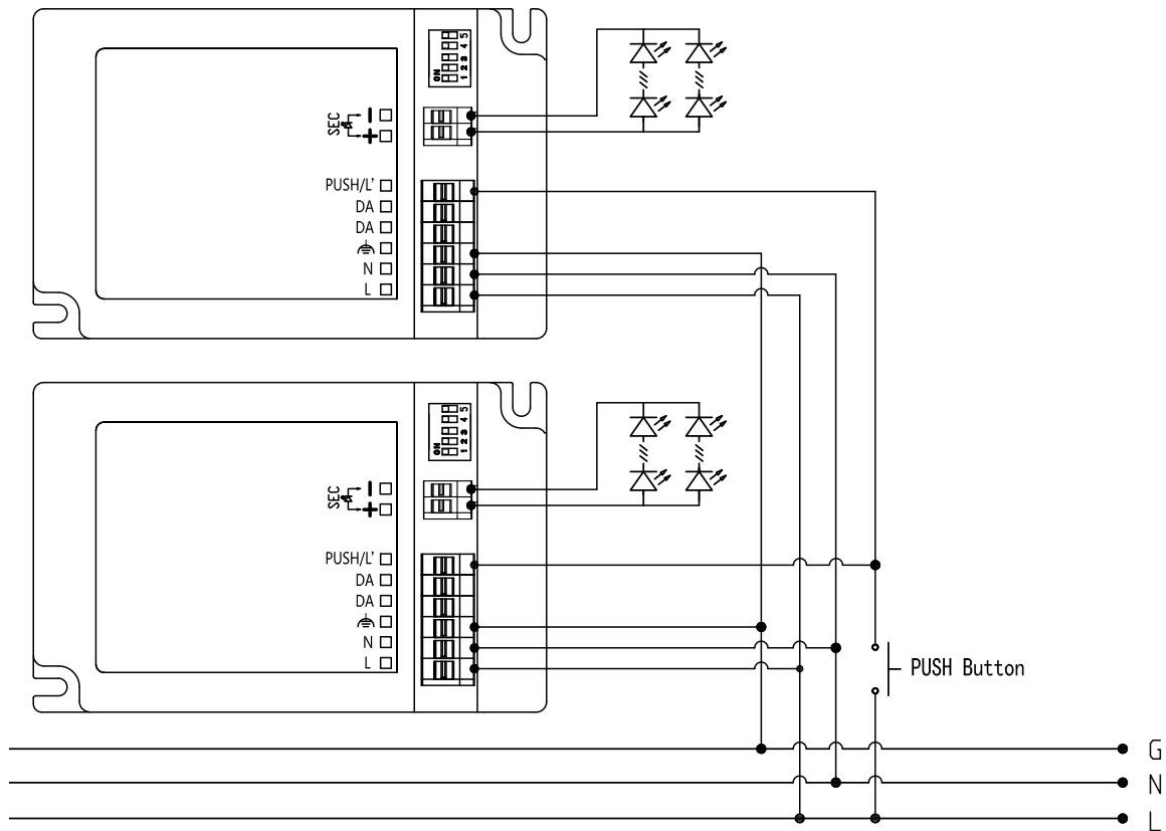


Fig.A PUSH Dimming

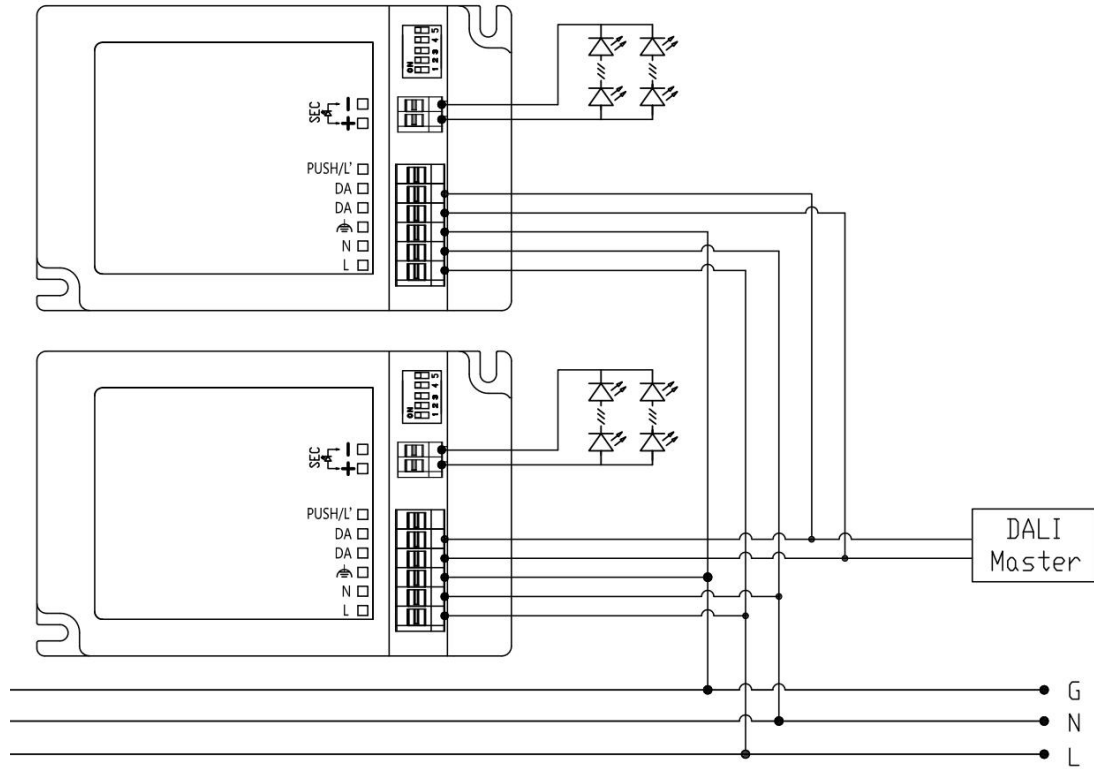
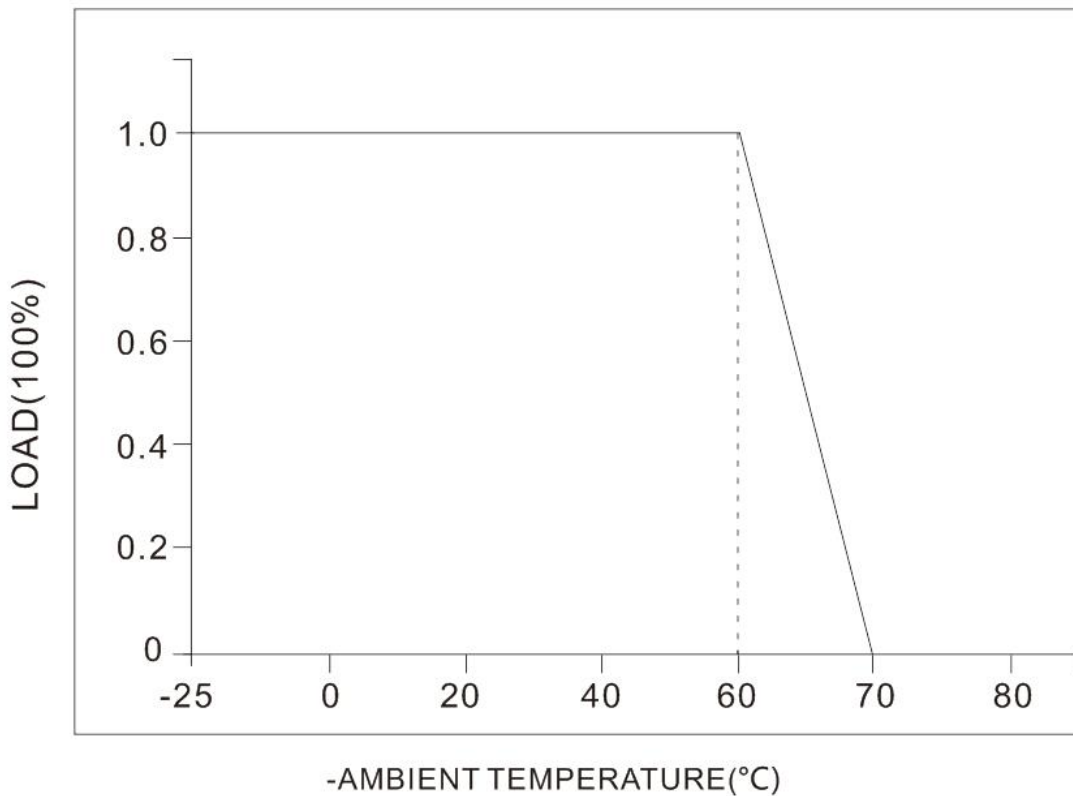
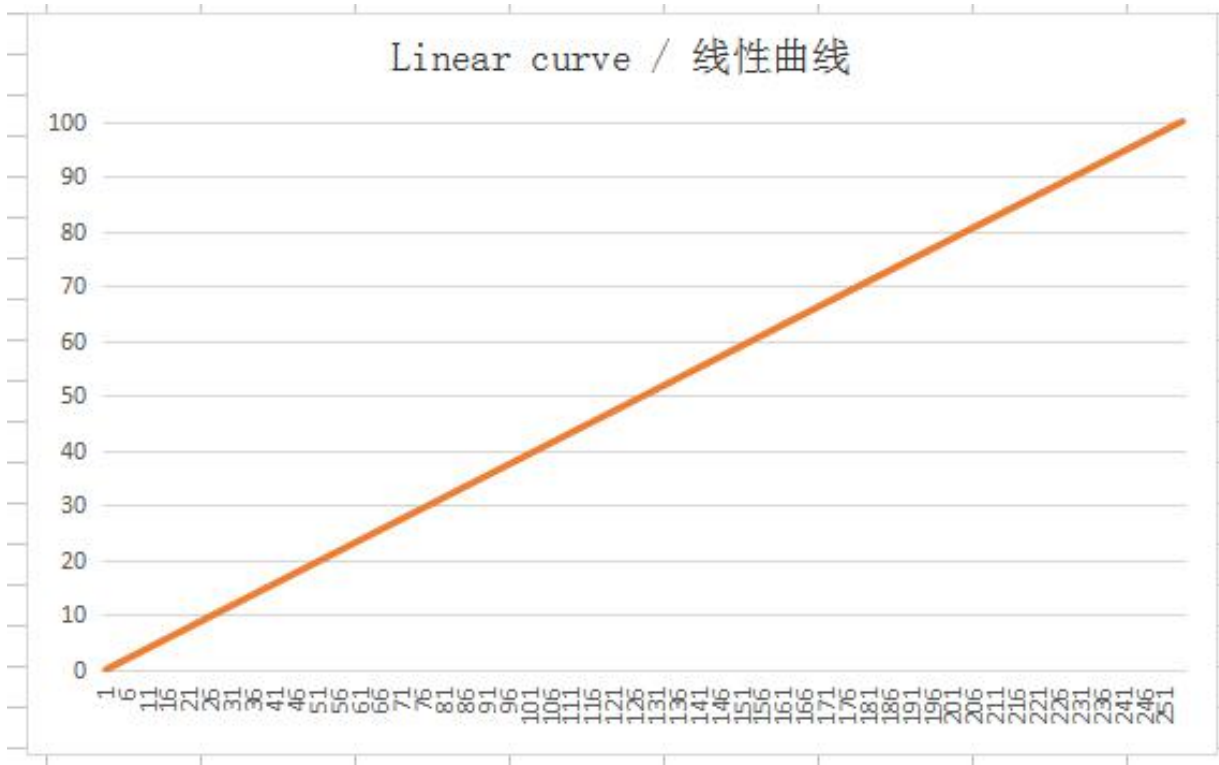
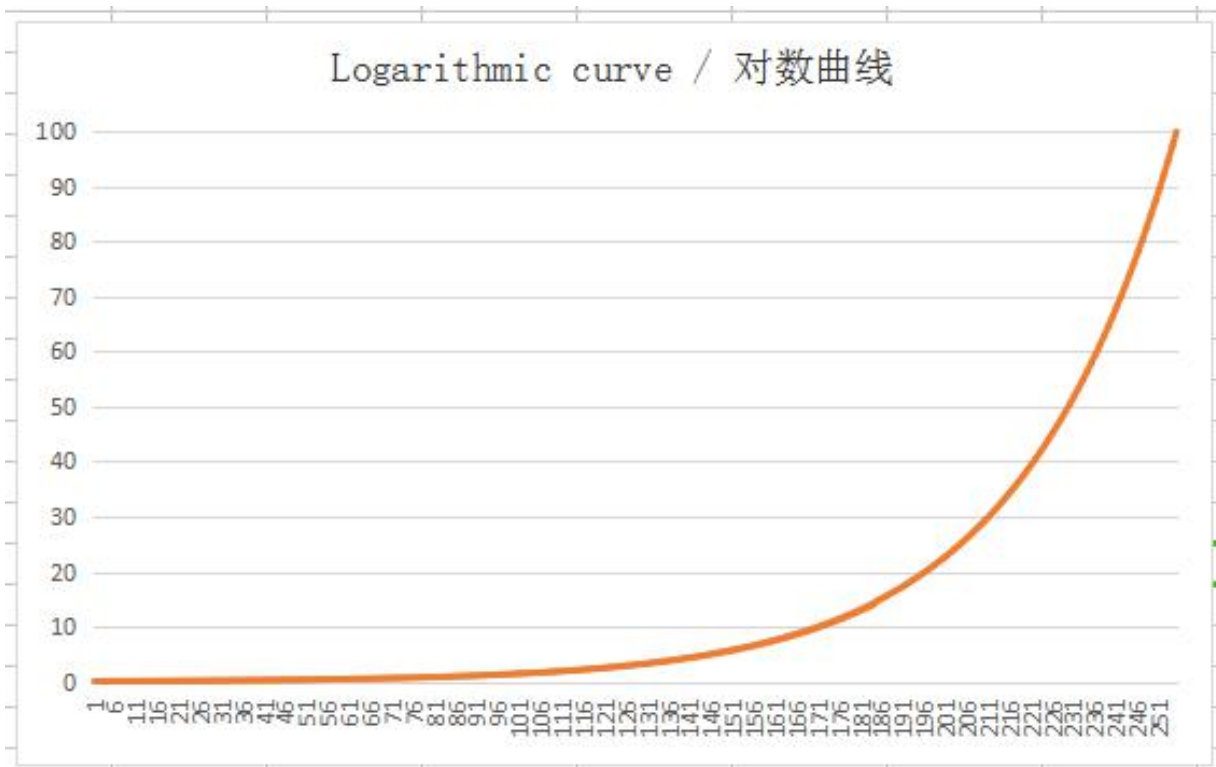


Fig. B DALI Dimming

5. Derating



6. DALI dimming curve



7. Current gear setting

Current / voltage gear setting	1	2	3	4	5
350mA	-	-	-	-	-
500mA	ON	ON	-	-	-
550mA	ON	-	ON	-	-
650mA	ON	ON	ON	-	-
700mA	ON	ON	-	ON	-
750mA	ON	-	ON	ON	-
850mA	ON	ON	ON	ON	-
900mA	ON	ON	-	ON	ON
1000mA	-	ON	ON	ON	ON
1050mA	ON	ON	ON	ON	ON

8. Power on / off and dimming operation instructions

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 realize dimming, brightening or dimming, the dimming range is 0-100%.

C. Memory:

PUSH dimming has dimming memory function.

D. Dimming synchronization.

The power connected to the same PUSH switch can be synchronized with the long press of the PUSH switch, and the long press time is 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.