



SPECIFICATION

Product Name: Dimmable LED driver

Model No.: Linear series KL30C-PDiiV1
KL38C-PDiiV1 KL50C-PDiiV3 V4
KL60C-PDiiV1 KL70C-PDiiV1

Issue Date: November 08, 2019

CUSTOMER APPROVED

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Specification for DALI 2 Dimmable LED Driver Linear series C.C.



- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 1-10V dimmer and potentiometer
- Built-in DALI interface DT6
- 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. Parameter

Input	Operating Voltage	198-264Vac 50Hz /60Hz					
	Rated Input Voltage	220-240Vac 50Hz /60Hz					
	DC Input Voltage range	200-240Vdc					
	Input Current	0.23A Max.					
	Input Inrush Current	<15A (Half current pulse width100µs) @230Vac					
	Power factor	≥ 0.95 (@230Vac,100% load)					
	Total harmonic distortion	30C-1	38C-1	50C-3	50C-4	60C-1	70C-1
	Typical: (@230Vac, 100% load)	15%	13%	13%	13%	13%	13%
	Stand-by power	≤0.5W (@230Vac when PUSH or DALI turn off)					
	Efficiency						
	Max (@230Vac,100% load)	86%	87%	87%	87%	87%	87%
Wiring Method	Push terminal, wire cross section:0.5-1.0mm ²						
Output	Operating mode	Constant Current					
	Load type	LED					
	Ripple requirement (Flickering or llickering-Free)	Flicker value: less than 2% for whole dimming range					
	Start up time	<1s (@230Vac.)					
	No-load output voltage:DC Max.	100V	70V	70V	80V	70V	75V
	Load output voltage range	18-90	9-60	9-58	12-73	9-58	9-66
	Full load output power	30W	40W	50W	50W	60W	70W
	Load output current	Query dial setting table					
	Constant current/voltage Precision	Constant Current Precision ±5%					
	Wiring method	Push terminal, wire cross section:0.5-1.0mm ²					
Control Method	Primary PUSH Dimming	Primary PUSH dimming (Max.lead length: 20M)					
	1-10V (0-10V) Dimming	1-10V dimming (Port current<1MA) no turn off function (Max.lead length: 20M)					
	Dimming Range	Primary PUSH & DALI dimming: 0%-100%					

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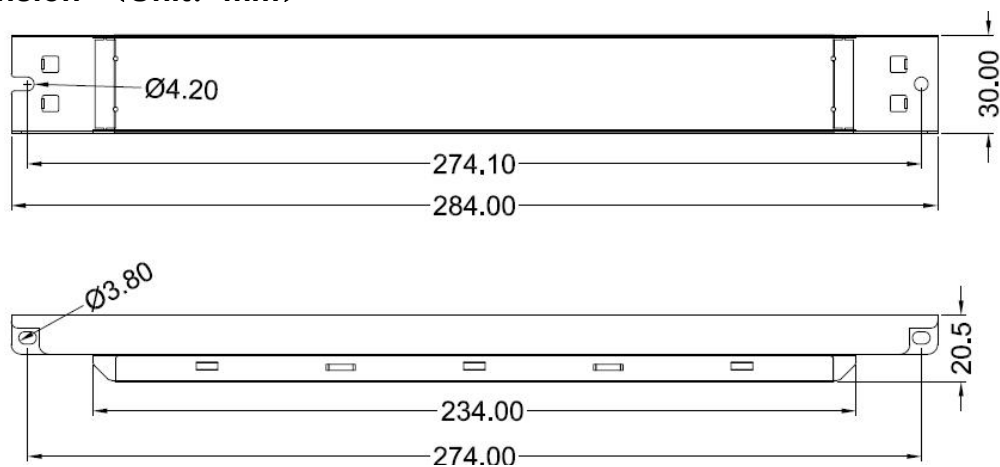
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Dimmable LED Driver

		1-10V dimming: 2%-100%					
	Primary PWM Dimming	1-10V port PWM dimming (3KHZ-8KHZ)					
	Potentiometer	Yes, 100kΩ					
	DALI Dimming	DALI dimming (Max.lead length: 300M)					
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					
	DALI protocol standard	IEC62386-102, IEC62386-207 DT6					
	Safety standard	EN61347-1 EN61347-2-13					
	Certification	CE RoHS					
	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC")					
Others	Degrees of protection	IP20					
	Type of protection	Class I					
	Installation type	Independent installation					
	Installation dimension	284*30*20.5mm					
	Blackout memory function	Yes, PUSH blackout memory					
	PUSH dimming synchronization	20 units Max.					
	Packaging requirement	Instruction+clapboard+outer carton (K=A)					
	Weight	200g	210g	225g	225g	225g	225g
	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)



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3. Wiring Diagram

Fig. A DALI Dimming

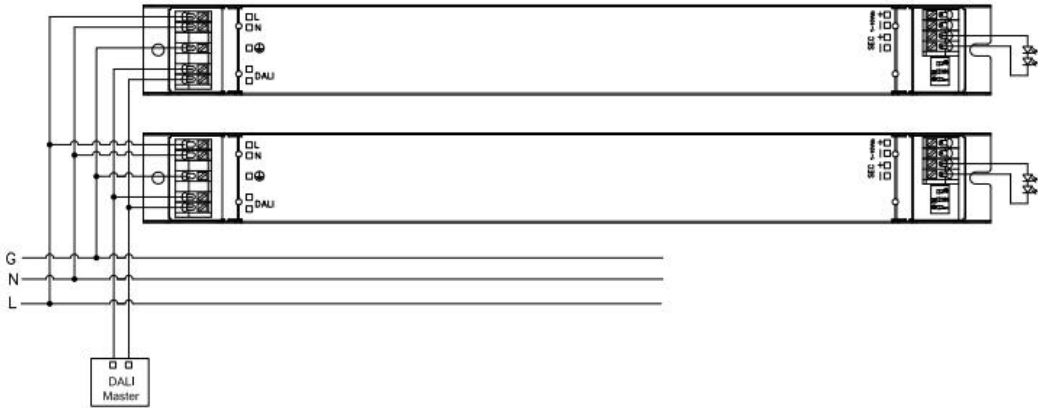


Fig. B Push Dimming

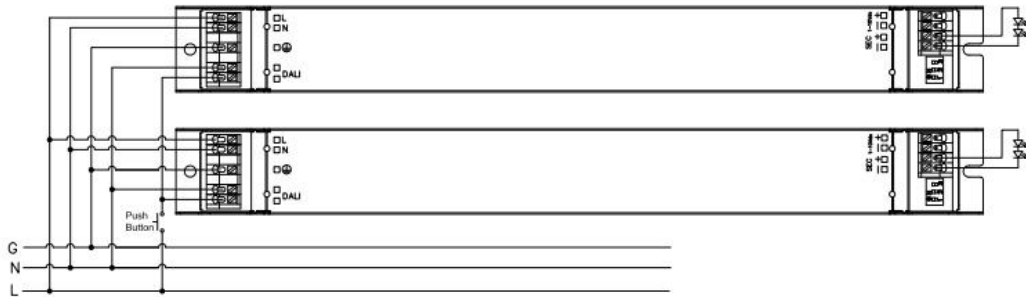
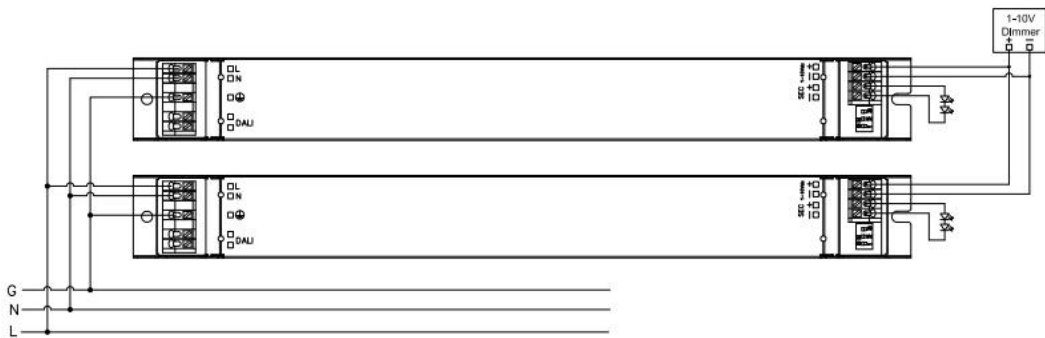
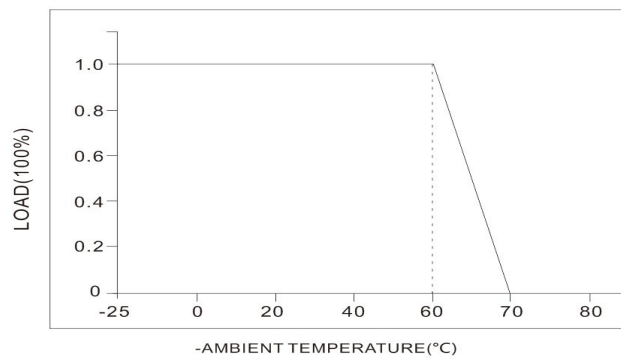


Fig.C 1-10V Dimming



3. Derating



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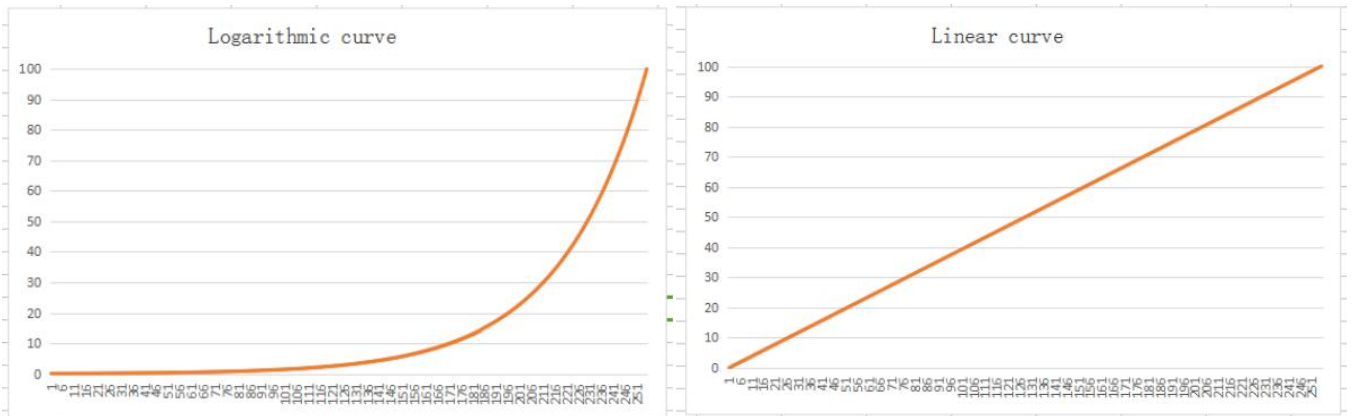
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5. Dimming curve



6. Current gear setting ON: ON - : OFF (SEC1 SEC2)

KL30C-PDiV1 Current gear setting	1	2	3
200mA (18-90V)	-	-	-
250mA (18-90V)	ON	-	-
300mA (18-90V)	-	ON	-
350mA (18-85V)	ON	ON	
400mA (18-75V)	-	-	ON
450mA (18-67V)	ON	-	ON
500mA (18-60V)	-	ON	ON
550mA (18-55V)	ON	ON	ON

KL38C-PDiV1 Current gear setting	1	2	3	4
300mA (9-60V)	-	-	-	-
350mA (9-60V)	ON	-	-	-
400mA (9-60V)	-	ON	-	-
450mA (9-60V)	ON	ON		-
500mA (9-60V)	-	-	ON	-
550mA (9-60V)	ON	-	ON	-
600mA (9-60V)	-	ON	ON	-
650mA (9-60V)	ON	ON	ON	-
700mA (9-57V)	ON	ON	-	ON
750mA (9-53V)	-	-	ON	ON
800mA (9-50V)	ON	-	ON	ON
850mA (9-47V)	-	ON	ON	ON
900mA (9-44V)	ON	ON	ON	ON

KL50C-PDiiV3 Current gear setting	1	2	3	4
700mA (9-58V)	-	-	-	-
800mA (9-58V)	ON	-	-	-
850mA (9-58V)	-	ON	-	-
900mA (9-55V)	-	-	ON	-
950mA (9-52V)	ON	ON	-	-
1000mA (9-50V)	ON	-	ON	-
1050mA (9-48V)	-	ON	ON	-
1100mA (9-45V)	-	ON	-	ON
1150mA (9-44V)	ON	ON	ON	-
1200mA (9-42V)	ON	ON	-	ON
1250mA (9-40V)	ON	-	ON	ON
1300mA (9-39V)	-	ON	ON	ON
1400mA (9-36V)	ON	ON	ON	ON

KL50C-PDiiV4 Current gear setting	1	2	3	4
600 (12-73V)	-	-	-	-
650 (12-73V)	ON	-	-	-
700 (12-72V)	-	ON	-	-
750 (12-66V)	ON	ON	-	-
800 (12-62V)	-	-	ON	-
850 (12-59V)	ON	-	ON	-
900 (12-56V)	-	ON	ON	-
950 (12-53V)	ON	ON	ON	-
1000 (12-50V)	ON	ON	-	ON
1050 (12-48V)	-	-	ON	ON
1100 (12-45V)	ON	-	ON	ON
1150 (12-43V)	-	ON	ON	ON
1200 (12-41V)	ON	ON	ON	ON

KL60C-PDiiV1 Current gear setting	1	2	3	4
700 (9-58V)	-	-	-	-
800 (9-58V)	ON	-	-	-
850 (9-58V)	-	ON	-	-
900 (9-58V)	-	-	ON	-
950 (9-58V)	ON	ON	-	-
1000 (9-58V)	ON	-	ON	-
1050 (9-57V)	ON	-	-	ON
1100 (9-55V)	-	ON	-	ON
1150 (9-52V)	-	-	ON	ON
1200 (9-50V)	ON	ON	-	ON
1250 (9-48V)	ON	-	ON	ON
1300 (9-46V)	-	ON	ON	ON
1400 (9-43V)	ON	ON	ON	ON

KL70C-PDiiV1 Current gear setting	1	2	3	4
700 (9-66V)	-	-	-	-
800 (9-66V)	ON	-	-	-
850 (9-66V)	-	ON	-	-
950 (9-66V)	ON	ON	-	-
900 (9-66V)	-	-	ON	-
1000 (9-66V)	ON	-	ON	-
1050 (9-66V)	-	ON	ON	-
1100 (9-63V)	-	ON	-	ON
1150 (9-61V)	ON	ON	ON	-
1200 (9-58V)	ON	ON	-	ON
1250 (9-56V)	ON	-	ON	ON
1300 (9-54V)	-	ON	ON	ON
1400 (9-50V)	ON	ON	ON	ON

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7. 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%.

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

9. Corridor function

- 1) The corridor function is an optional item, the default version has no corridor function.