



SPECIFICATION

Product Name: **DALI 2 Dimmable LED driver**

Model No.: **KL30C-PDiiV2**

Issue Date: **January 6, 2025**

CUSTOMER APPROVED	



Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL30C-PDiV2 LED driver		Design verification	2024-07-29
A1	KL30C-PDiV2 LED driver	Update Automatic circuit breaker		2025-01-06

Specification for DALI 2 Dimmable LED Driver KL30C-PDiV2 C.C.



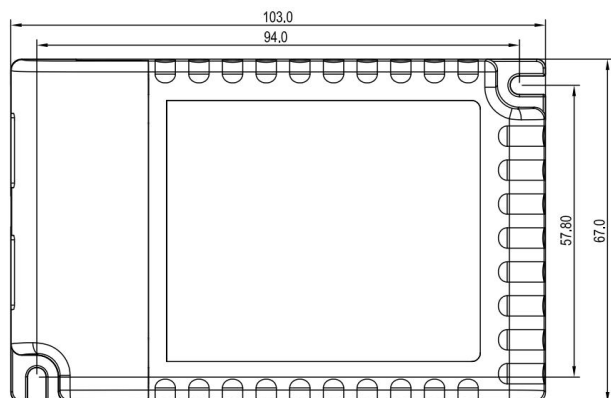
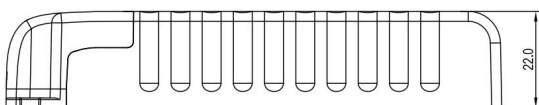
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 1-10V dimmer and potentiometer
- Built-in DALI interface DT6
- Supports 10V PWM dimming (3KHz-8KHz)
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function
- 5 year warranty

1. Parameters

Input	Operating Voltage	198-264Vac 50Hz/60Hz						
	Rated Input Voltage	220-240Vac 50Hz/60Hz						
	DC Input Voltage range	200-240Vdc						
	Input Current	0.16A Max.						
	Input Inrush Current	<8A (Half current pulse twidth 50μs) @230Vac						
	Power factor	≥ 0.95 (@230Vac,100% load)						
	Total harmonic distortion	Typical: 13% (@230Vac, 100% load)						
	Stand-by power	≤0.5W (@230Vac when PUSH or DALI turn off)						
	Efficiency	86%Max (@230Vac,100% 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		25	30	40	50	60	/	
type		C10	C13	C16	C20	C25	C32	
Number		45	60	70	95	120	150	
Output	Operating mode	Constant Current						
	Load type	LED						
	Flickering / Flickering-Free	Flicker value: less than 2% for whole dimming range						
	Start up time	<1s (@230Vac,)						
	No-load output voltage	95V DC Max.						
	Load output voltage range	12-83V DC						
	Full load output power	30W Max						
	Load output current	110~275mA: For details<Current gear setting>						
	Constant current/voltage Precision	Constant Current Precision ±5%						
	Wiring method	Push terminal, wire cross section: 0.75-1.5mm 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% 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 circuitprotection	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	ENEC, SEMKO. CB. 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	103*67*22mm
	Blackout memory function	Yes, PUSH blackout memory
	PUSH dimming synchronization	Parallel: 15 units Max. Series: 25 units Max.
	Packaging requirement	Instruction+clapboard+outer carton (K=A)
	Weight	139g
	Life	5 year @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

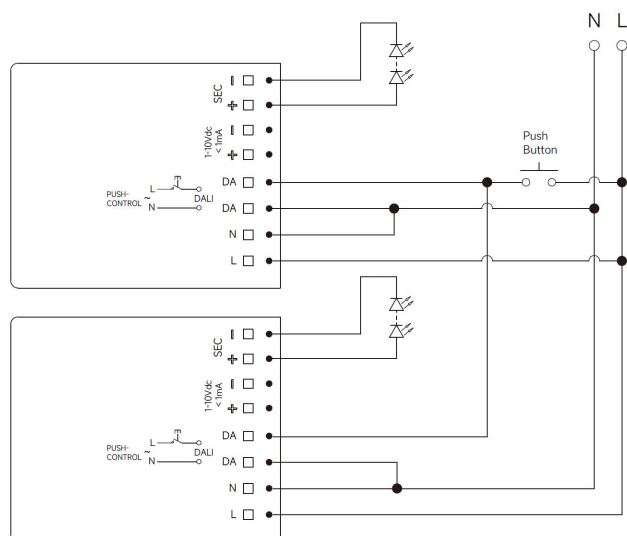


Fig. A: Push Dimming (Parallel)

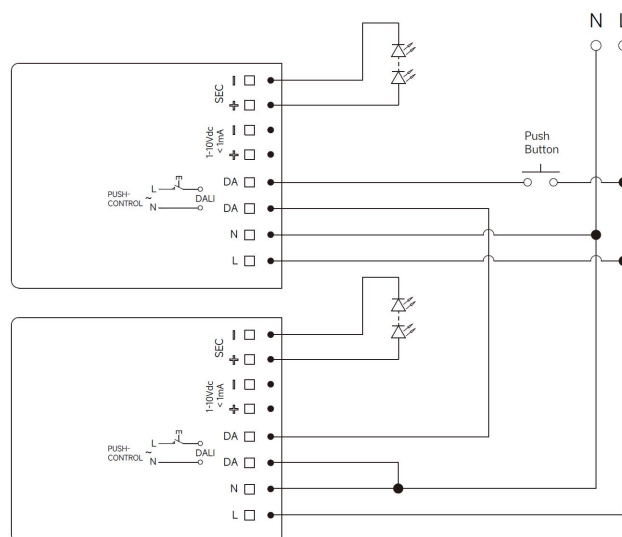


Fig. B: Push Dimming (series)

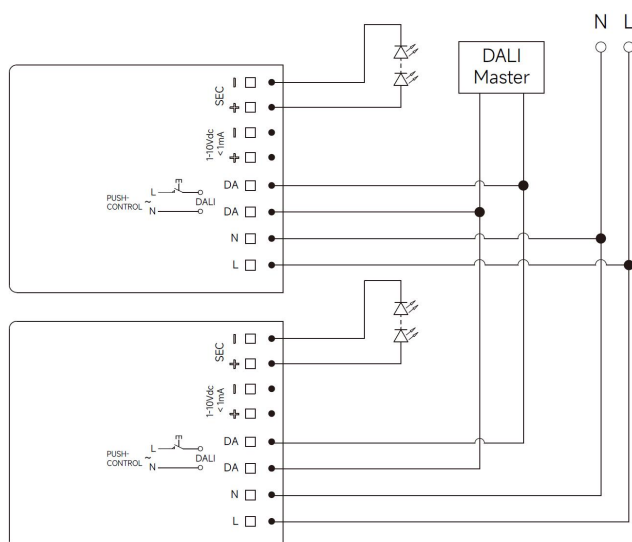


Fig. C: DALI Dimming

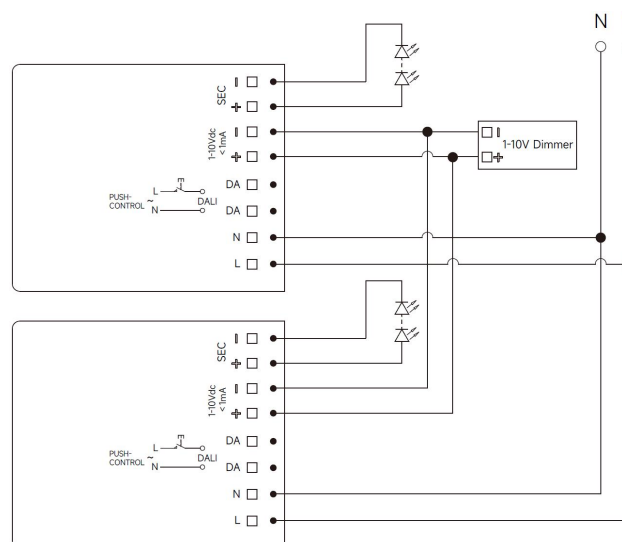
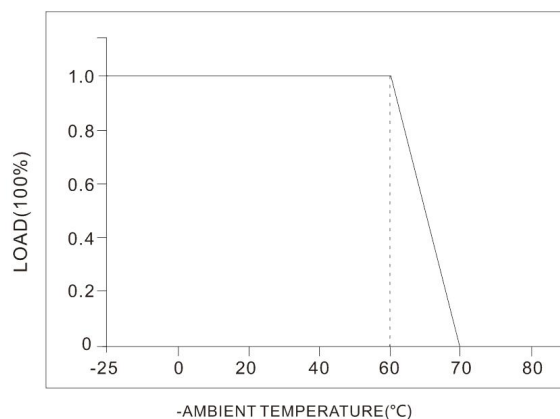
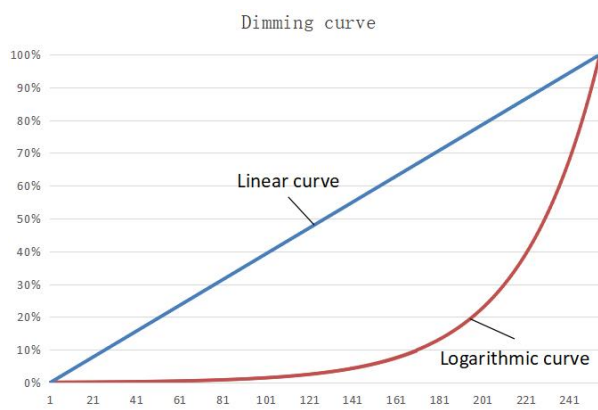


Fig. D: 1-10V Dimming

4. Derating



5. Dimming curve



6. Current gear setting:

Current(mA)	DIP				Pomax (W)	Uout (V)
	1	2	3	4		
110mA	—	—	—	—	9.1	12~ 83
230mA	ON	—	—	—	19.1	12~ 83
240mA	—	ON	—	—	19.9	12~ 83
260mA	—	—	ON	—	21.6	12~ 83
275mA	—	—	—	ON	22.8	12~ 83

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.