



SPECIFICATION

Product Name: DALI 2 Dimmable LED driver

Model No.: KL25C-PDiiv

Issue Date: January 6, 2025

CUSTOMER APPROVED



Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL25C-PDiIV LED driver		Design verification	2024-06-05
A1	KL25C-PDiIV LED driver	Update Automatic circuit breaker		2025-01-06

Specification for DALI 2 Dimmable LED Driver KL25C-PDiV C.C.



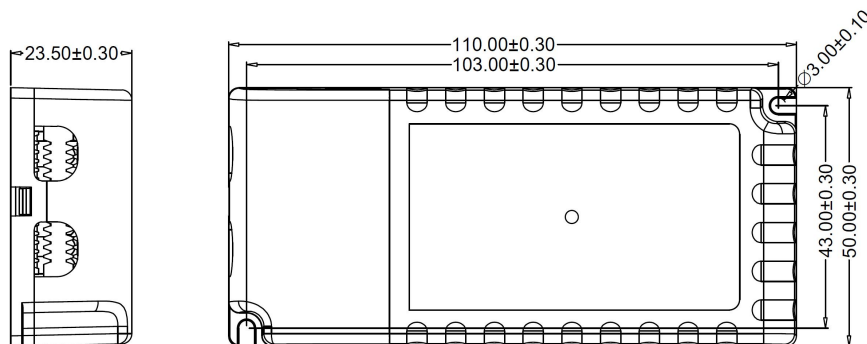
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- 1-10V dimming function
- Built-in DALI interface DT6
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function

1. Parameters

Input	Voltage range	198~264Vac 50Hz/60Hz						
	Rated supply voltage	220~240Vac 50Hz/60Hz						
	DC voltage range	200~240Vdc						
	Input current	0.14A Max.@230Vac						
	Inrush Current	8A (Half current pulse width 50us) @230VAC						
	Power factor	≥0.95 (@230Vac, 500mA/45Vdc, 100% load)						
	Total harmonic distortion	Typical: 20% (@230Vac, 100% load)						
	Stand-by power	≤0.5W						
	Efficienc（@230Vac,100% load）	86%Max						
	Wiring method	Push terminal, wire cross section:0.75-1.0mm ²						
	Loop-in&Loop-out quantity	30PCS（@230Vac）						
	Automatic circuit breaker (Calculate current in the wire)	type	B10	B13	B16	B20	B25	/
Number		25	35	45	50	65	/	
type		C10	C13	C16	C20	C25	C32	
Number		55	65	75	110	130	160	
Output	Operating mode	Constant current						
	Load type	LED						
	Flickering / Flickering-Free	Flickering-Free						
	Start up time	<1s (@230Vac)						
	Load output voltage range	9-58Vdc						
	Load output current	150mA(9-58Vdc) ,350mA(9-58Vdc), 550mA(9-45Vdc)						
	Full load output power	25W Max.						
	No load output voltage	72Vdc Max.						
Output	Output current/voltage tolerance	±5%						
	Wiring method	Push terminal, wire cross section:0.75-1.0mm ²						
Control Method	Primary PUSH Dimming	Primary PUSH dimming (Max. lead wire length: 20m)						
	Dimming Range	Primary PUSH & DALI dimming: 0%-100% 1-10V dimming: 2%-100%						

Control Method	DALI function	DALI dimming (Max. lead wire length: 300m)
	1-10V Dimming	1-10V
	Output auxiliary power port	12Vdc, 0.1A Max.
	Sensor Dimming port	1-10V
Exception Protection Requirements	Output over temperature protection	Yes, reset power on to recover
	Output short circuit protection	Yes, reset power on to recover
Operating Environment	Operating temperature/ humidity	-25℃~50℃ Humidity:85% (Non-condensing)
	Storage temperature/ humidity	-40℃~80℃, Humidity:10% - 85% (Non-condensing)
	Max. case temp (Tc)	85℃
Safety & EMC	EMC standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	DALI standard	IEC62386-102, IEC62386-207
	Safety standard	EN61347-1, EN61347-2-13
	Certification	CE
	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC") 1500Vac, 5mA, 60s (Input "L N"- "PE") 500Vac, 5mA, 60s (Input "PE"- Output "SEC")
Others	Degrees of protection	IP20
	Type of protection	Class I
	Installation type	Independent installation
	Installation dimension	110*50*23.5mm
	Memory function	Yes, (PUSH with memory function)
	PUSH dimming synchronization	15 units Max.
	Packaging requirements	PE bag + white-box + Instruction+clapboard+outer carton (K=A)
	Weight	140±5g
	Life	5 years @Ta 100% 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

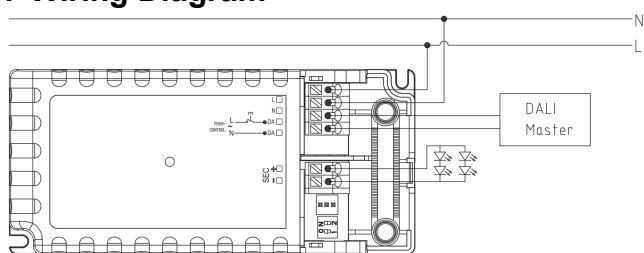


Fig. A DALI Dimming

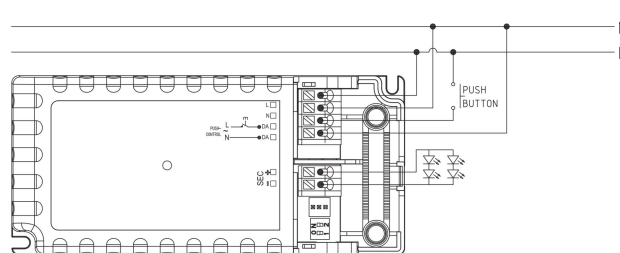


Fig. B Push Dimming

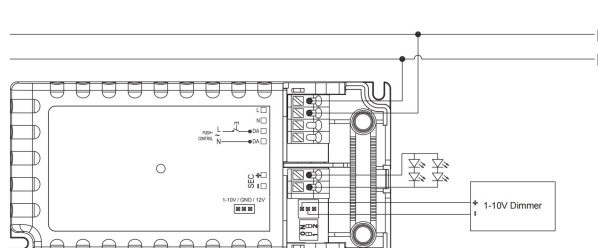
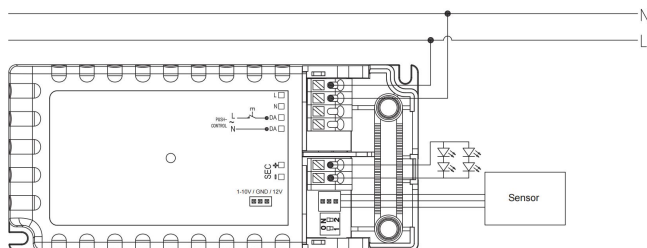
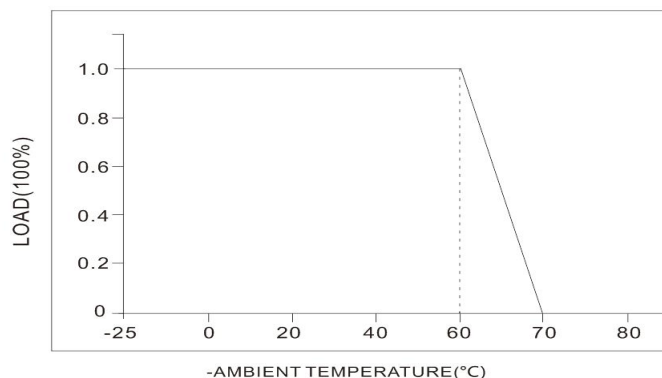
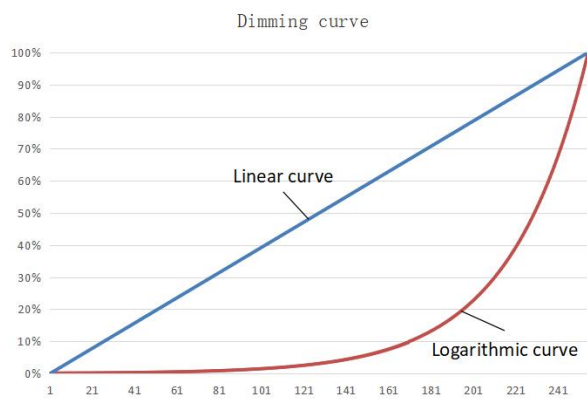


Fig. C Sensor or 1-10V Dimming

4. Derating



5. Dimming curve



6. Current gear setting: ●: ON ○: OFF

Current gear setting	1	2
550mA (9-45Vdc)	●	●
350mA (9-48Vdc)	●	○
150mA (9-48Vdc)	○	○

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.