

SPECIFICATION

Product Name: DALI 2 Dimmable LED driver

Model No.: KL40VC-PDiiV; KL40VC-PDiiV1

Issue Date: January 16, 2026

CUSTOMER APPROVED

Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL40VC-PDiV&1 LED driver	The newly edited version	Mass production	2026-01-16

Specification for DALI 2 Dimmable LED Driver KL40VC-PDiV&1 C.V.



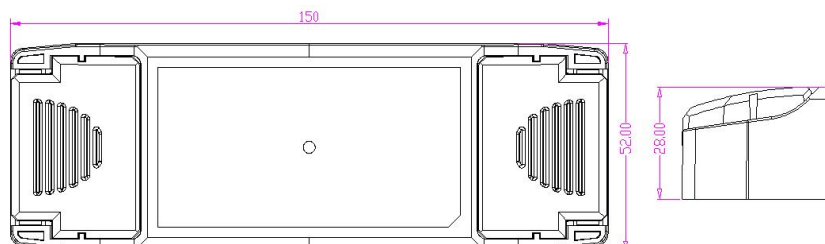
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 0-10V dimmer and potentiometer
- Built-in DALI interface DT8
- Supports 10V PWM dimming (3KHz-8KHz)
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function
- 5 year warranty

1. Parameters

Series	Name	KL40VC-PDiiv				KL40VC-PDiiv1			
Input	Voltage range	198~264Vac 50Hz /60Hz							
	Rated supply voltage	220~240Vac 50Hz /60Hz							
	DC voltage range	200~240Vdc							
	Input current	0.21A Max.@230Vac							
	Inrush Current	15A (Half current pulse width 100US) @230VAC							
	Power factor	> 0.95 (@230Vac,100% load)							
	Total harmonic distortion	Typical: 16% (@230Vac, 100% load)							
	Stand-by power	≤ 0.5W							
	Efficiency(@230Vac,100% load)	87%Max.				89%Max.			
	Wiring method	Push terminal, wire cross section: 0.75-1.5mm ²							
	Loop-in&Loop-out quantity	30PCS (@230Vac)							
	Automatic circuit breaker (Calculate current in the wire)	type	B10	B13	B16	B20	B25	/	
		Number	20	25	30	42	50	/	
type		C10	C13	C16	C20	C25	C32		
Number		25	40	50	70	80	100		
Output	Operating mode	Constant voltage							
	Load type	LED							
	Flickering / Flickering-Free	Flickering-Free							
	Start up time	<1s (@230Vac)							
	Load output voltage range	12V CV				24V CV			
	Load output current	3.33A Max.				1.67A Max.			
	Full load output power	40W Max.				40W Max.			
	Minimum load	3W				3W			

Output	Output current/voltage tolerance	±5%
	Wiring method	Push terminal, wirecross section: 0.75-1.5mm ²
Control Method	Primary PUSH Dimming	Primary PUSH dimming (Max. lead wire length: 20m)
	DALI Dimming	DALI dimming (Max. lead wire length: 300m)
	1-10V (0-10V) Dimming	0-10V dimming (Port current<1mA), (Max. lead wire length: 20m)
	Secondary PWM dimming	0-10V port PWM dimming (3KHz-8KHz)
	Potentiometer	Yes, 100kΩ
	Dimming Range	Primary PUSH & DALI dimming: 2%-100% 0-10V dimming: 0%-100%
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 standard	IEC62386-101 / 102 / 207 DT6 / 209 DT8
	Safety standard	EN61347-1, EN61347-2-13
	Certification	CE
	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC")
Others	IP Rating	IP20
	Type of protection	Class II
	Installation type	Independent installation
	Installation dimension	150*52*28mm
	Memory function	Yes, PUSH with memory function
	PUSH dimming synchronization	Parallel: 15 units Max. Series: 25 units Max.
	Packaging requirements	Instruction+clapboard+outer carton(K=A)
	Weight	300g
	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)



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3. Wiring Diagram

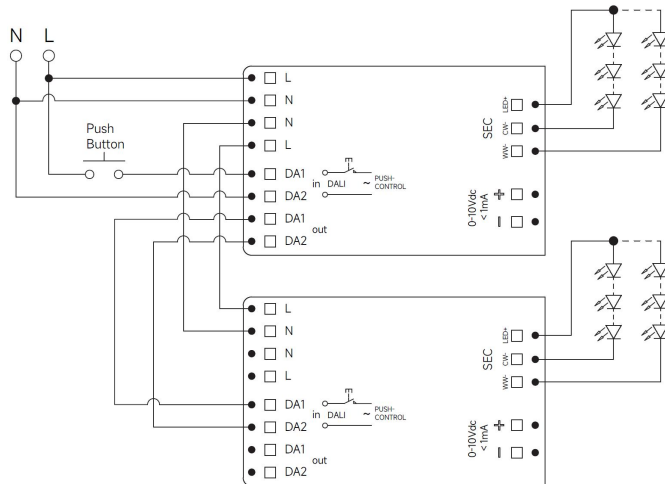


Fig. A: Push Dimming (Parallel)

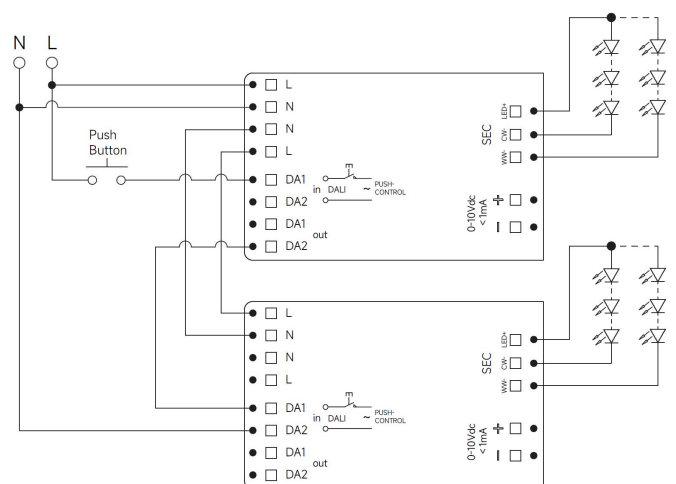


Fig. B: Push Dimming (series)

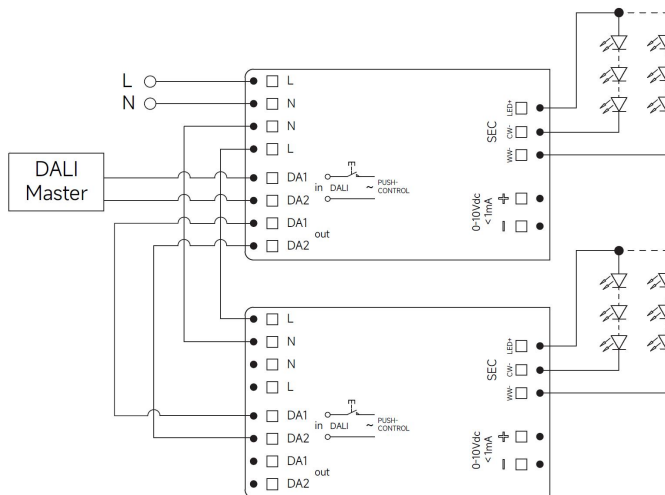


Fig. C: DALI Dimming

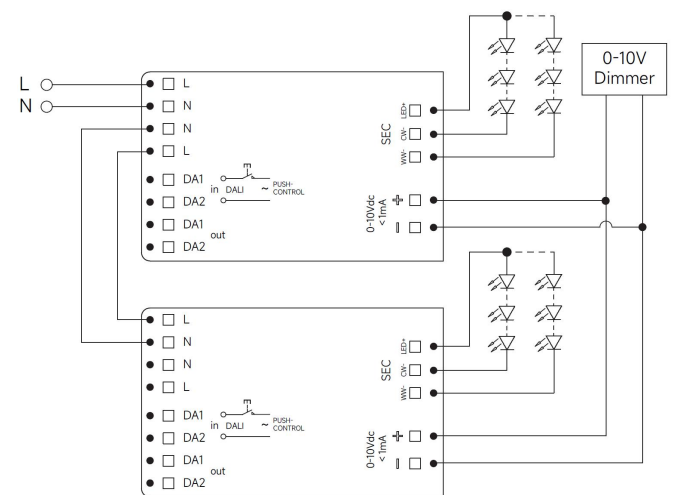
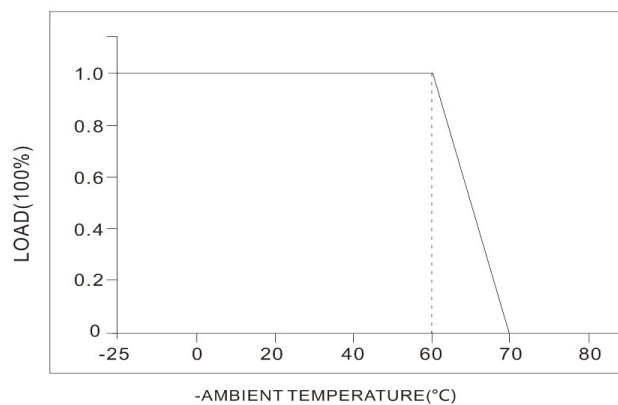
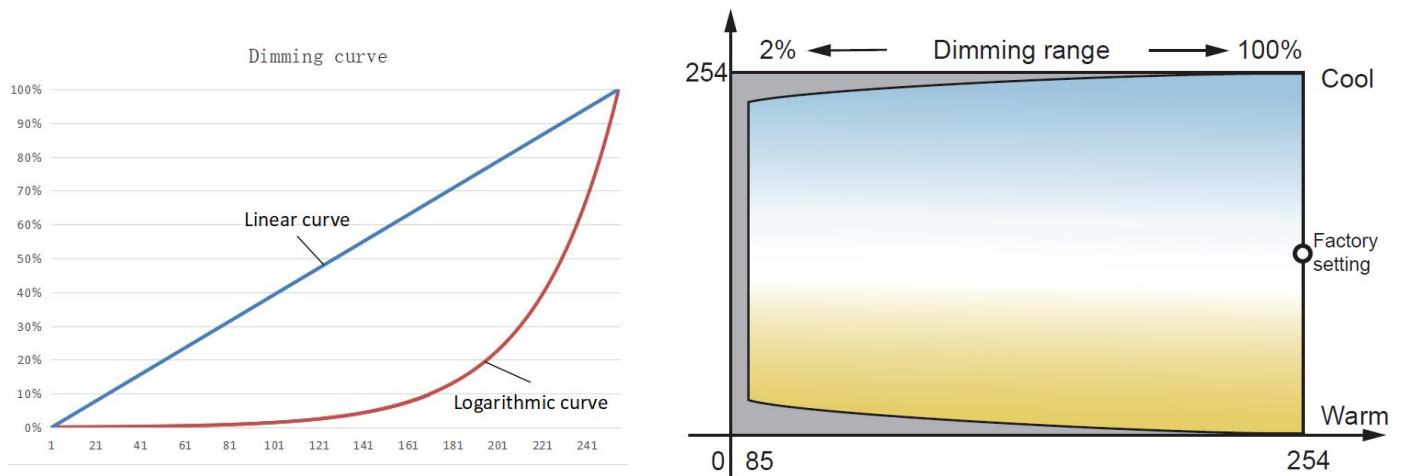


Fig. D: 0-10V Dimming

4. Derating



5. Dimming curve



6. 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. Color temperature adj:

Step 1, PUSH turns off the lights; Step 2, press and hold PUSH to adjust the color temperature starting from the current brightness; Release PUSH, press and hold PUSH again, and adjust the color temperature in the opposite direction; No operation for 5 seconds, exit color adjustment mode.

D. Memory:

PUSH dimming has dimming memory function.

E. Dimming synchronization:

The power connected to the same PUSH switch can be synchronized by pressing and holding the PUSH switch for longer than 15S

F. DALI dimming mode:

Connect the power supply to the DALI system, and it can be dimmed by the DALI host. The dimming range is 2-100%.

G. Constant voltage dimming drivers cannot be used in lamps with constant current circuits.