

SPECIFICATION

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

Model No.: **KL60C-PDiiv2**

Issue Date: **July 30, 2025**

CUSTOMER APPROVED



Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL60C-PDiIV2 DALI LED driver		Design verification	2025-07-30

Specification for DALI 2 Dimmable LED Driver KL60C-PDiiV2 C.C.



- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Primary dimming with push button
- Secondary dimming with 0-10V dimmer
- Built-in DALI interface DT6
- Centrally-supplied DC emergency operation DT19
- Protection: short circuit / over temperature/ over voltage
- CLO compensation
- Derating current for over high ambient temperature
- Push dim with memory function
- Quick-wiring, Convenient and time-saving
- 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	0.3A Max.						
	Input Inrush Current	< 15A (Half current pulse width100μs) @230Vac						
	Power factor	≥ 0.95 (@230Vac, 100% load)						
	Total harmonic distortion	Typical: 15% (@230Vac, 100% load)						
	Stand-by power	≤ 0.5W (@230Vac when PUSH or DALI turn off)						
	Efficiency	88% Max. (@230Vac,100% load)						
	Wiring Method	Wire cross section:0.75-2.5mm ²						
	Automatic circuit breaker (Calculate current in the wire)	type	B10	B13	B16	B20	B25	/
Number		15	20	25	28	30	/	
type		C10	C13	C16	C20	C25	C32	
Number		23	32	38	48	60	75	

Output	Operating mode	Constant Current						
	Load type	LED						
	Ripple requirement (Flickering or Flickering-Free)	Flicker value: less than 5% for whole dimming range						
	Start up time	<1s (@230Vac); <0.5s (@200Vdc)						
	No-load output voltage	60V DC Max.						
	Load output voltage range	9-53V DC						
	Full load output power	60W Max.						
	Load output current	700-1400mA For details<Current gear setting>						
	Constant current/voltage Precision	Constant Current Precision ±5%						
	Wiring method	Wire cross section:0.75-1.5mm ²						

Control Method	Primary PUSH Dimming	Primary PUSH dimming (Max.lead length: 20M)
	0-10V Dimming	0-10V dimming (Port current<1MA) (Max.lead length: 20M)
	DALI Dimming	DALI dimming (Max. lead length: 300m)
	Dimming range	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℃~45℃ Humidity: 85% (Non-condensing)
	Storage temperature/ humidity	-40℃~80℃, Humidity: 85% (Non-condensing)
	Max. case temp (Tc)	85℃
Safety & EMC	EMC standard	EN55015 EN61547 EN61000-3-2 EN61000-3-3
	DALI protocol standard	IEC62386-101 / 102 / 207 DT6 / 220 DT19 / 251 / 252 / 253
	Safety standard	EN61347-1 EN61347-2-13
	Certification	CE, ENEC, UKCA
	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC")
Others	Degrees of protection	IP20
	Type of protection	Class I
	Installation type	Independent installation or Built-in installation
	Dimension (Independent installation)	160*79*26mm
	Dimension (Built-in installation)	130*79*26mm
	Blackout memory function	Yes, PUSH blackout memory
	PUSH dimming synchronization	Parallel: 15 units Max. Series: 25 units Max.
	Packaging requirement	PE bag + white box + manual + partition + outer box (K=A)
	Weight (Independent installation)	209±5g
	Weight (Built-in installation)	185±5g
	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)

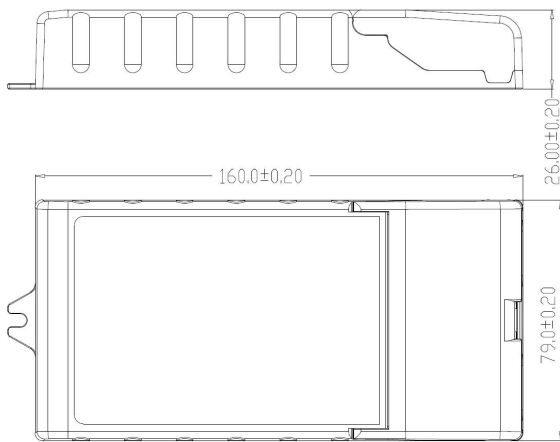


Fig.A: Independent installation

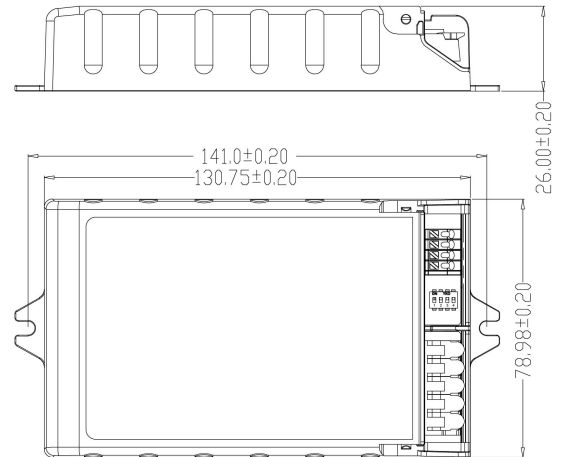


Fig.B: Built-in installation

3. Wiring Diagram

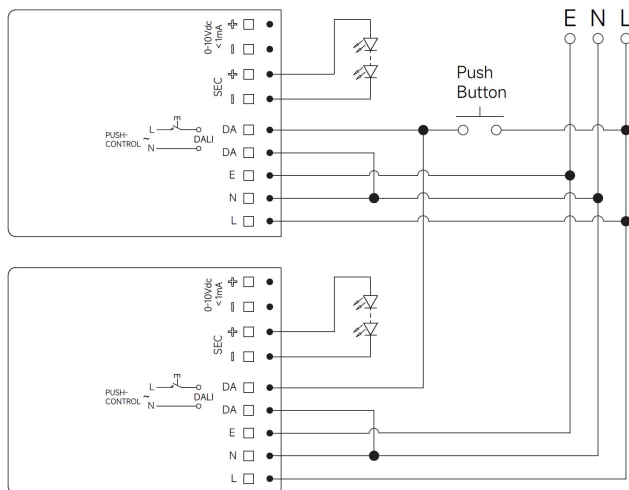


Fig. A: Push Dimming (Parallel)

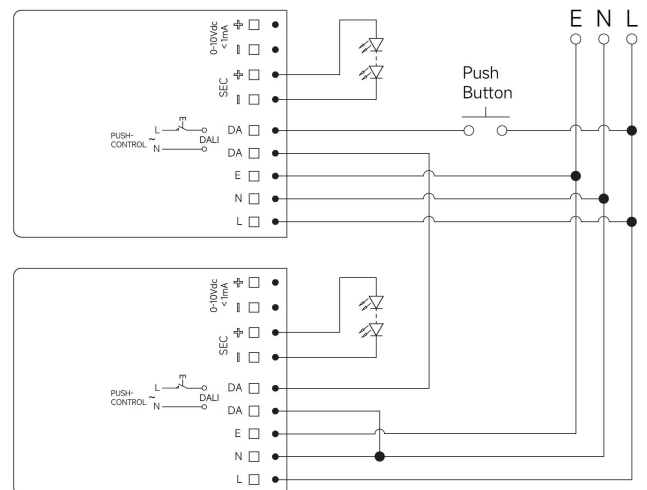


Fig. B: Push Dimming (series)

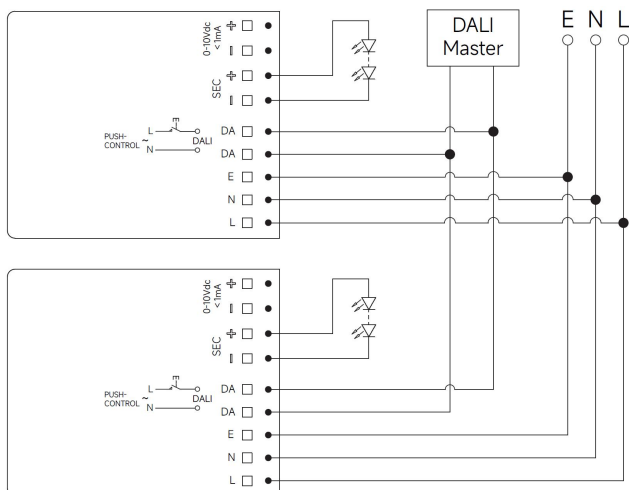


Fig. C: DALI Dimming

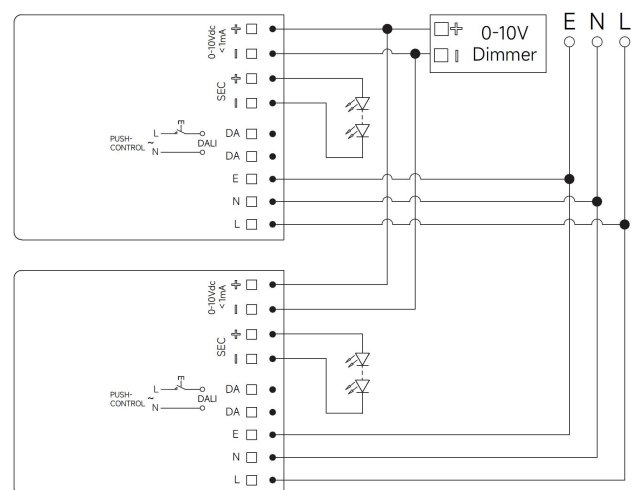
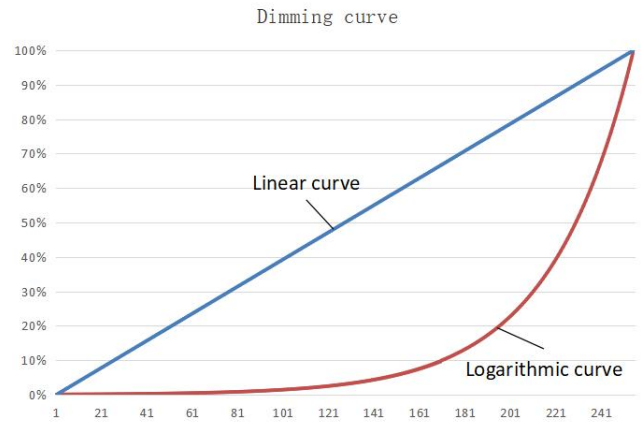
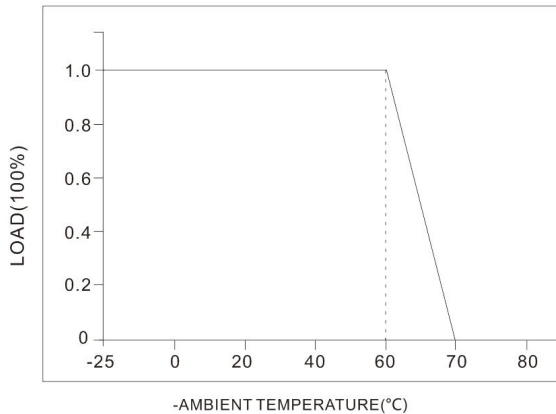


Fig. D: 0-10V Dimming

4. Derating & Dimming curve



5. Current setting:

Current(mA)	DIP				Pomax (W)	Uout (V)
	1	2	3	4		
700	—	—	—	—	37.1	9~ 53
750	—	ON	—	—	39.8	9~ 53
800	—	—	ON	—	42.4	9~ 53
900	—	ON	ON	—	47.7	9~ 53
1000	ON	ON	ON	—	53.0	9~ 53
1050	—	—	—	ON	55.7	9~ 53
1100	ON	—	—	ON	58.3	9~ 53
1150	—	ON	—	ON	59.8	9~ 52
1200	ON	ON	—	ON	60.0	9~ 50
1250	—	—	ON	ON	60.0	9~ 48
1300	ON	—	ON	ON	59.8	9~ 46
1350	—	ON	ON	ON	59.4	9~ 44
1400	ON	ON	ON	ON	60.2	9~ 43

6. ON/OFF & Description of Dimming Operation

- Short press the PUSH switch (short press time 0.1s-1s), the LED driver will turn on or off.
- Dimming: Press and hold the PUSH switch (1s-8s), the LED driver can achieve dimming, brightening or dimming, the dimming range is 2-100%.
- Memory: PUSH dimming has dimming memory function.
- Dimming synchronization: The power connected to the same PUSH switch can be synchronized by pressing and holding the PUSH switch for longer than 15s
- 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%.

7. 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.