SPECIFICATION

Product Name: **Casambi Dimmable LED driver**

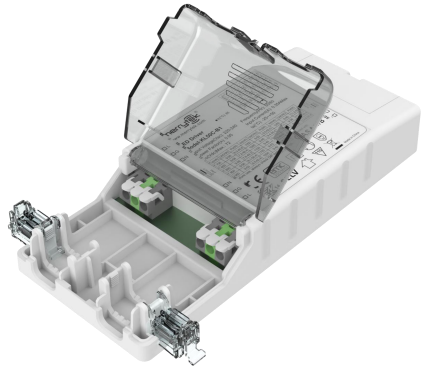
Model No.: **KL50C-B1**

Issue Date: **June 17, 2025**

CUSTOMER APPROVED

Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	KL50C-B1 Casambi LED driver		Design verification	2025-03-24
A1	KL50C-B1 Casambi LED driver	Fix Bug		2025-06-17

Specification for Casambi Dimmable LED Driver KL50C-B1 C.C.



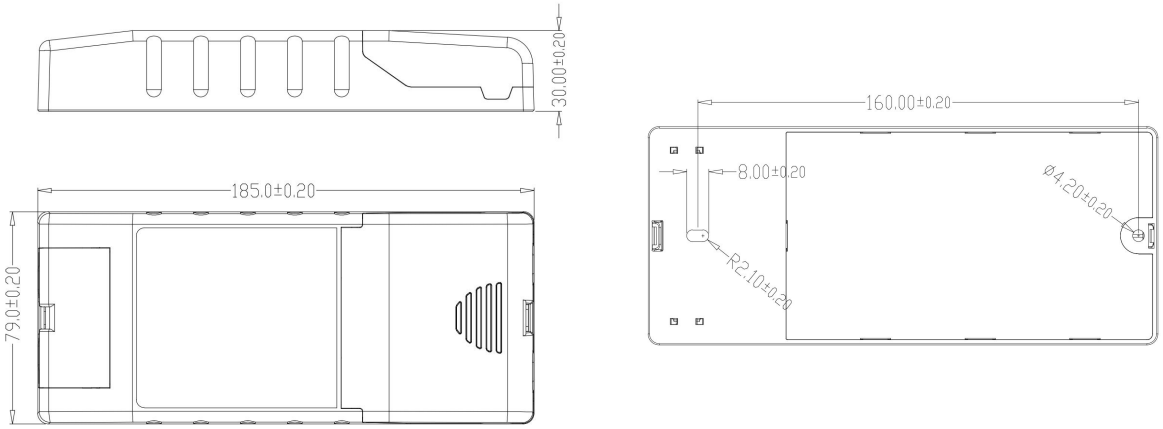
- Comply with Casambi smart lighting system
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Looping design, Quick-wiring, Convenient and time-saving
- 5 year warranty

1. Parameters

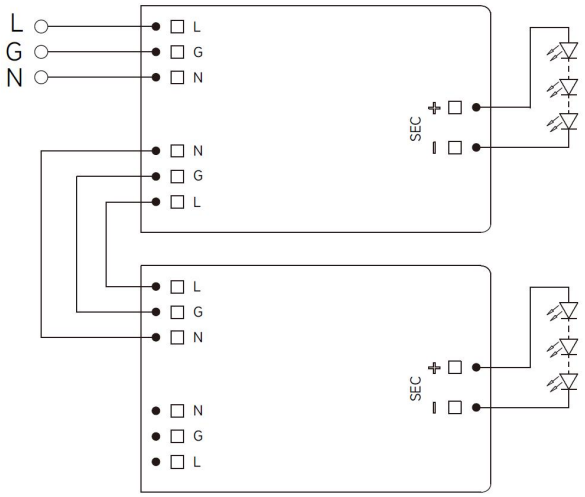
Input	Operating Voltage	198-264Vac 50Hz/60Hz					
	Rated Input Voltage	220-240Vac 50Hz/60Hz					
	DC Input Voltage range	200-240Vdc					
	Input Current	0.35A Max.					
	Input Inrush Current	<25A (Half current pulse width100μs) @230Vac					
	Power factor(@230V100% load)	≥ 0.95					
	Total harmonic distortion	Typical:15% (@230Vac, 100% load)					
	Stand-by power	⩽0.5W (@230Vac)					
	Efficiency(@230Vac,100% load)	88%					
	Wiring Method	Wire cross section:0.75-2.5mm^2					
	Loop-in&Loop-out quantity	22PCS（@230Vac）					
	Automatic circuit breaker (Calculate current in the wire)	type	B10	B13	B16	B20	B25	/
		Number	20	25	30	40	50	/
		type	C10	C13	C16	C20	C25	C32
		Number	28	40	45	55	70	90
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)						
	No-load output voltage	72V DC Max.						
	Load output voltage range	9-58Vdc						
	Full load output power	50W Max.						
	Load output current	700mA(9-58Vdc) 800mA(9-58Vdc) 850mA(9-58Vdc) 900mA(9-56Vdc) 950mA(9-53Vdc) 1000mA(9-50Vdc) 1050mA(9-48Vdc) 1100mA(9-45Vdc) 1150mA(9-43Vdc) 1200mA(9-42Vdc) 1250mA(9-40Vdc) 1300mA(9-38Vdc) 1400mA(9-36Vdc)						

Output	Constant current/voltage Precision	Constant Current Precision ±5%
	Wiring method	Wire cross section:0.75-1.5mm^2
Control Method	Working frequency	2.4-2.48GHz
	Transmitting power	+8dBm Max.
	Transmission distance	Point-to-point transmission range 30m Max.
	Modulation mode	O-QPSK PHY
Exception Protection Requirements	Output over temperature protection	Yes, without self recovery function
	Output short circuit protection	Yes, without self recovery function
Operating Environment	Operating temperature/ humidity	-25℃~50℃ 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
	Safety standard	EN61347-1 EN61347-2-13
	Certification	CE
	Withstand voltage	3750Vac, 5mA, 60s (Input “L N”- Output “SEC”)
Others	Degrees of protection	IP20
	Type of protection	Class I
	Installation type	Independent installation
	Dimension	185*79*30mm
	Packaging requirement	PE bag + white box + manual + partition + outer box (K=A)
	Weight	262.6±5g
	Life	5 year @Ta full load
Note: All parameters are tested at the input voltage of 230Vac and 25 degree environment unless specified.		

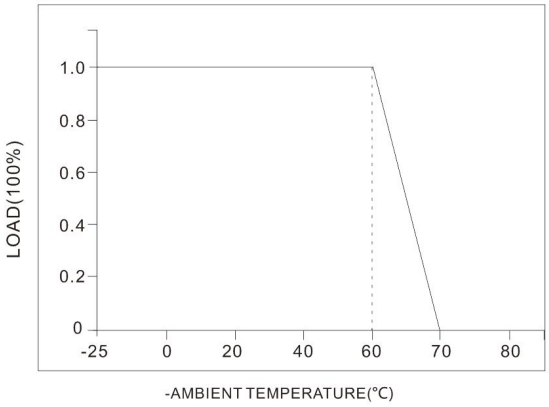
2. Dimension (Unit: mm)



3. Wiring Diagram



4. Derating



5. APP download

Scan the code to download Casambi APP

6. Current gear setting:

Current(mA)	DIP				Pomax (W)	Uout (V)
	1	2	3	4		
700	–	–	–	–	40.6	9～ 58
800	ON	–	–	–	46.4	9～ 58
850	–	ON	–	–	49.3	9～ 58
900	–	–	ON	–	50.4	9～ 56
950	ON	ON	–	–	50.4	9～ 53
1000	ON	–	ON	–	50.0	9～ 50
1050	–	ON	ON	–	50.4	9～ 48
1100	–	ON	–	ON	49.5	9～ 45
1150	ON	ON	ON	–	49.5	9～ 43
1200	ON	ON	–	ON	50.4	9～ 42
1250	ON	–	ON	ON	50.0	9～ 40
1300	–	ON	ON	ON	49.4	9～ 38
1400	ON	ON	ON	ON	50.4	9～ 36

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.