



SPECIFICATION

Product Name: **Casambi Dimmable LED driver**

Model No.: **KL20C-B1;KL30C-B1**

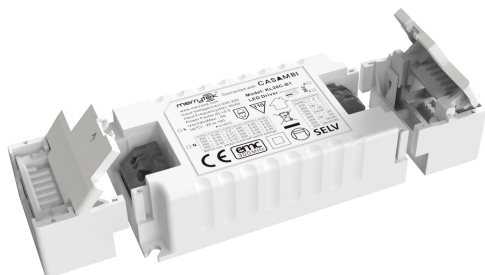
Issue Date: **December 14, 2024**

CUSTOMER APPROVED



Version	Product Name / Product Model	Reason / content for change	Stage	Date
A0	Casambi LED driver		Design verification	2024-10-23
A1	Casambi LED driver	Update parameters		2024-12-14

Specification for Casambi Dimmable LED Driver Micro series C.C.



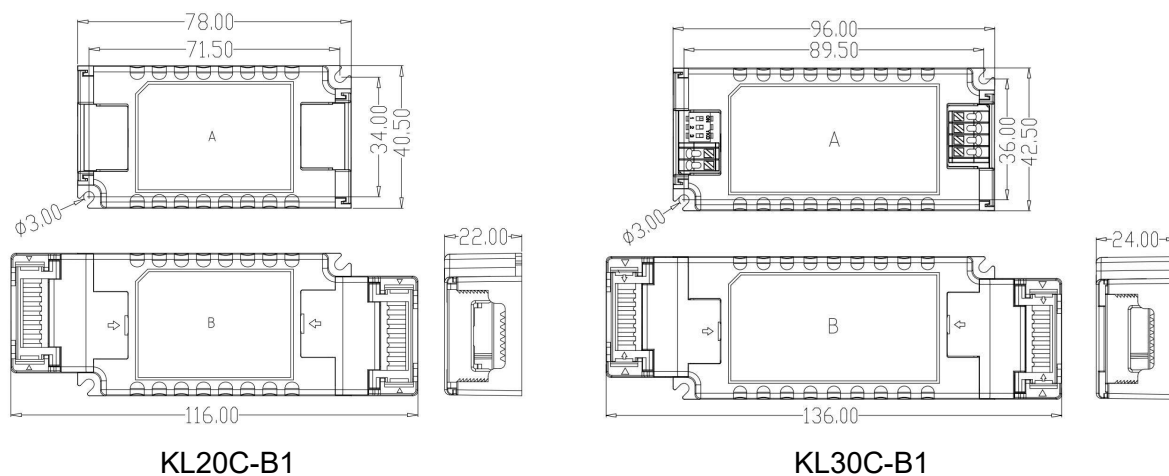
- Comply with Casambi smart lighting system
- Flicker-free for whole dimming range
- Stand-by power below 0.5W
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- 5 year warranty

1. Parameters

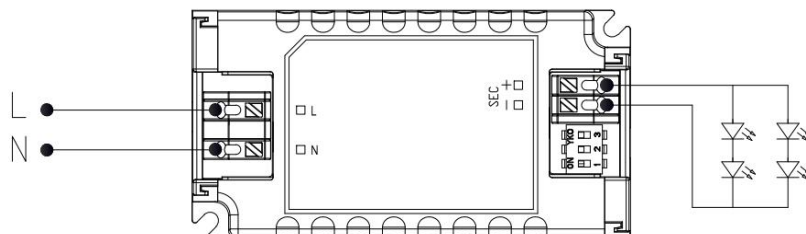
	Micro series	KL20C-B1				KL30C-B1			
Input	Operating Voltage	198-264VAC 50Hz /60Hz							
	Rated Input Voltage	220-240VAC 50Hz /60Hz							
	DC Input Voltage range	200-240VDC							
	Input Current	0.12A Max.				0.17A Max.			
	Input Inrush Current	<25A (Half current pulse width 100US) @230VAC							
	Power Factor	≥0.93 @230VAC (Full load)				≥0.95 @230VAC (Full load)			
	Total harmonic distortion (@230Vac, 100% load)	Typical: 13%				Typical: 20%			
	No-load power	≤0.5W							
	Stand-by Power	≤0.5W (@230Vac)							
	Efficiency (@230VAC Full load)	83%Max.				87%Max.			
	Wiring Method	Push terminal, wire cross section:0.75-1.5mm ²							
	Automatic circuit breaker	KL20C-B1 (Calculate current in the wire)							
		type	B10	B13	B16	B20	B25	/	
		Number	25	35	45	55	65	/	
		type	C10	C13	C16	C20	C25	C32	
Number		60	70	80	110	130	160		
KL30C-B1 (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							
	Ripple requirement (Flickering or flickering-Free)	Flicker value: less than 5% for whole dimming range							
	Start up time	<1s (@230Vac)							

Output	No-load output voltage	57VDC Max.	50V DC Max.
	Load output voltage range	9-45VDC	9-40V DC
	Full load output power	20W Max.	30W
	Load output current	200-550mA	700-1050mA
	Constant current/voltage Precision	Constant Current Precision ±5%	
	Wiring method	Push terminal, wire cross section:0.75-1.5mm ²	
Control Method	Working frequency	2.4-2.48GHz	
	Transmitting power	+8dBm (Max.)	
	Transmission distance	<50m (Visible distance)	
	Modulation mode	O-QPSK PHY	
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	
	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 II	
	Installation type	Independent installation	
	With crimping	116*40.5*22mm	136*42.5*24mm
	Without crimping	78*40.5*22mm	96*42.5*24mm
	Packaging requirement	PE bag+white box+Instructions+Clapboard+Outer Carton (K=A)	
	Weight	53.5±5g	
	Life	5 year @Ta full load	
Note: All parameters are tested at the input voltage of 230Vac and 25 degree environment unless specified.			

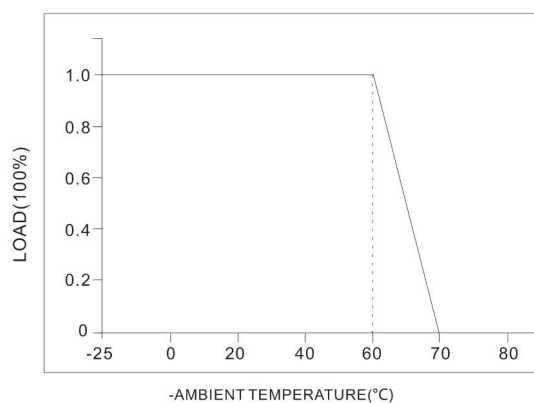
2. Dimension (Unit: mm)



3. Wiring Diagram



4. Derating



5. Current gear Setting:

KL20C-B1 Current gear setting	1	2	3	KL30C-B1 Current gear setting
200mA (9-45V)	–	–	–	700mA (9-40V)
250mA (9-45V)	ON	–	–	750mA (9-40V)
300mA (9-45V)	–	ON	–	800mA (9-37V)
450mA (9-45V)	ON	ON	–	850mA (9-35V)
400mA (9-45V)	–	–	ON	900mA (9-33V)
450mA (9-45V)	ON	–	ON	950mA (9-31V)
500mA (9-40V)	–	ON	ON	1000mA (9-30V)
550mA (9-36V)	ON	ON	ON	1050mA (9-28V)

6. 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.