



SPECIFICATION

Product Name: **Casambi Dimmable LED driver**

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

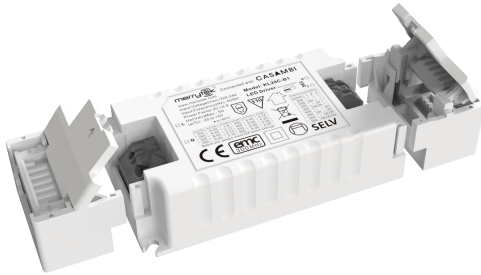
Issue Date: **June 17, 2025**

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
A2	Casambi LED driver	Update parameters		2025-02-26
A3	Casambi LED driver	Add QR code		2025-03-24
A4	Casambi LED driver	Fix Bug		2025-06-17

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

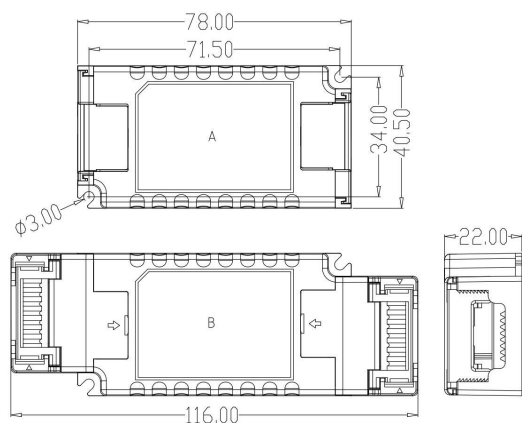
1. Parameters

	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	≥0.9 @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)							

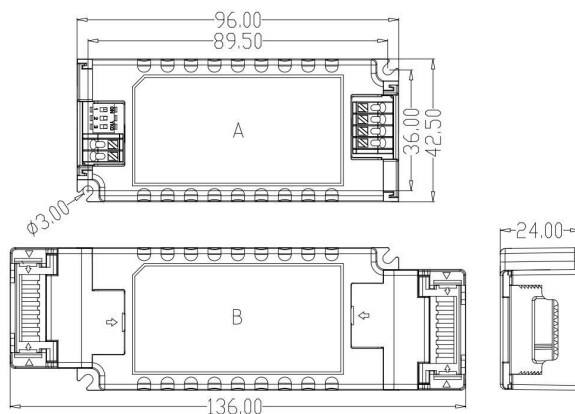
Output	No-load output voltage	55VDC Max.		50V DC Max.	
	Load output voltage range	9-45VDC		9-40V DC	
	Full load output power	20W Max.		30W Max.	
	Load output current	200-550mA		700-1050mA	
	Constant current/voltage Precision	Constant Current Precision ±5%			
	Wiring method	Push terminal, wire cross section:0.75-1.5mm ²			
Control Method	Working frequency	2.4-2.48GHz			
	Transmitting power	+8dBm (Max.)			
	Transmission distance	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: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	With crimping	Without crimping	With crimping	Without crimping
		72.2±5g	57.6±5g	98.6±5g	82.0±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)

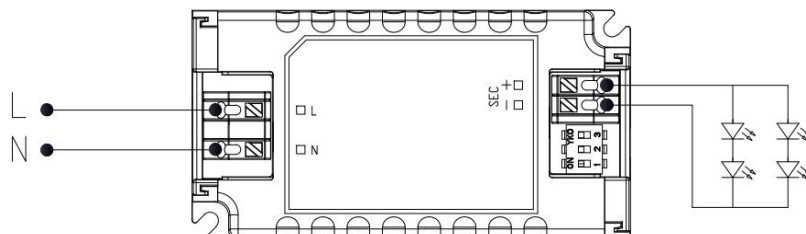


KL20C-B1

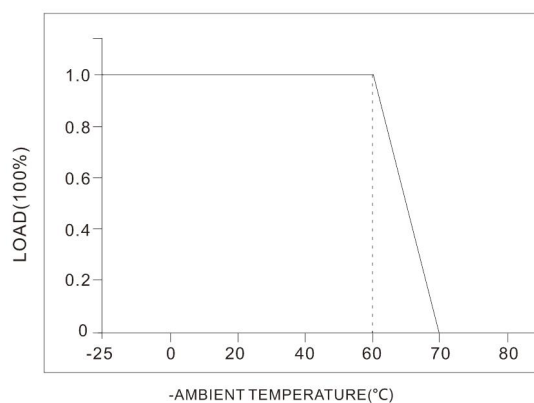


KL30C-B1

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)
350mA (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. APP download



Scan the code to download Casambi APP

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.