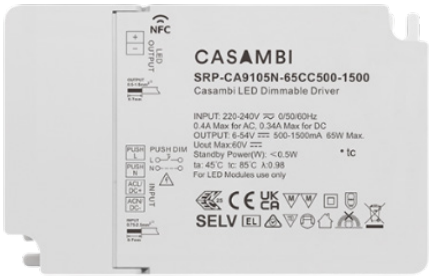
SUNRICHER

CASAMBI NFC 1-Channel LED Driver

SRP-CA9105N-65CC500-1500

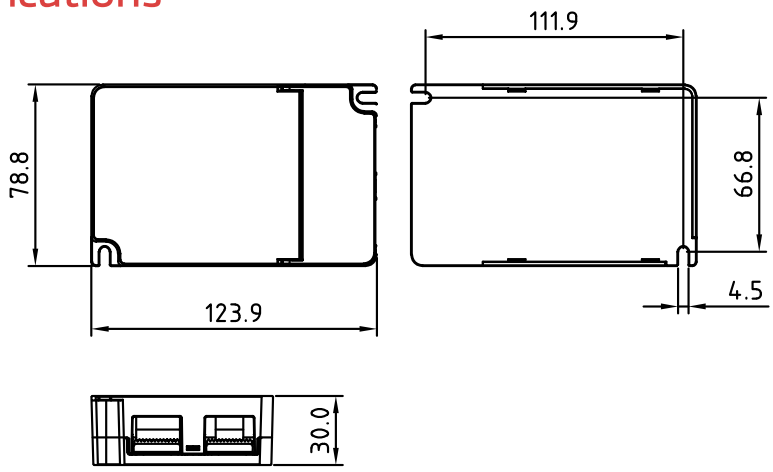


Features:

- Casambi-enabled NFC programmable constant current LED driver
- 65W single-channel output, adjustable 500~1500 mA via NFC
- Smooth, flicker-free dimming for LED lighting
- IP20: Ingress Protection
- 5 year warranty

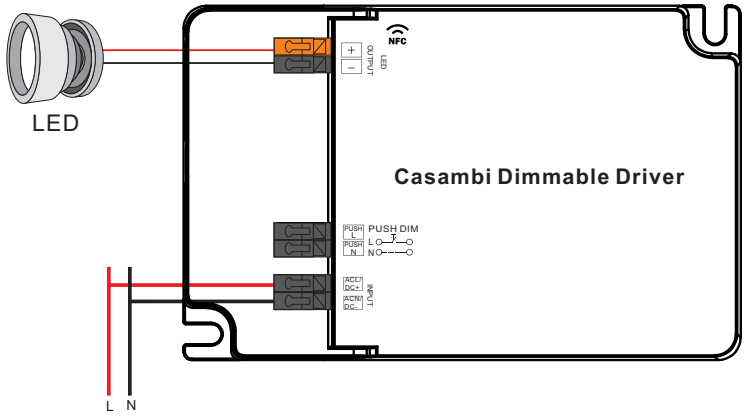
Model		SRP-CA9105N-65CC500-1500
Output	LED Channel	1
	DC Voltage	6~54V, Max. 60V
	Current	500~1500mA via NFC Tool; Min. current gear lower to 0.1mA, default 1050mA
	Current Accuracy	±3% (±1@Certain full load) @ full load
	Rated Power	Max. 65W
Input	Voltage Range	220~240VAC / 220~240VDC
	Absolute Voltage Range	196~264VAC / 196~264VDC
	Frequency Range	0/50/60Hz
	Power Factor (Typ.)	>0.97 @ 230VAC Full load*
	Total Harmonic Distortion	THD ≤ 10% (@ full load / 230VAC)
	Efficiency (Typ.)	> 85% @ 230VAC full load*
	AC Current (Typ.)	0.4A Max
	Inrush Current (Typ.)	Max. 9.68A at 230VAC;70μs duration
	Leakage Current (Typ.)	< 5mA / 230VAC
	Anti-Surge	L-N: 2KV
Control	Dimming Interface	Casambi
	Dimming Range	0.01%-100% @ Max current
	Dimming Method	Amplitude/CCR Dimming
	Dimming Curve	Linear/Logarithmic optional
Protection	Short Circuit	Yes, remove the fault conditions and re-power the device.
	Over Current	Yes, remove the fault conditions and re-power the device.
	Over Temperature	Yes, remove the fault conditions and re-power the device.
Environment	Working Temp	-25°C ~ +45°C
	Max. Case Temp	TC=85°C
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	EN61347-1, EN61347-2-13, GB/T 19510.1-2023, GB/T 19510.213-2023
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
	EMC Emissions	EN55015, EN61000-3-2, EN61000-3-3, GB 17625.1-2022, GB/T 17743-2021
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11
Others	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature
	Dimensions	123.9*78.8*30mm (L*W*H)
	Warranty	5 Years
Safety & Warnings	• DO NOT Install with power applied to the device • DO NOT expose the device to moisture	
Notes	*PF/THD/Eff shall be different per different testing setup and equipment. • Casambi dimmable LED driver, works with Casambi network • 1 channel dimmable LED driver. • Class II power supply, full isolated plastic case • High power factor and efficiency	• To switch and dim LED lighting luminaries • Amplitude/CCR dimming, smooth and deep dimming • IP20 rating, suitable for indoor LED lighting applicationsy • 5 years warranty

Mechanical Specifications

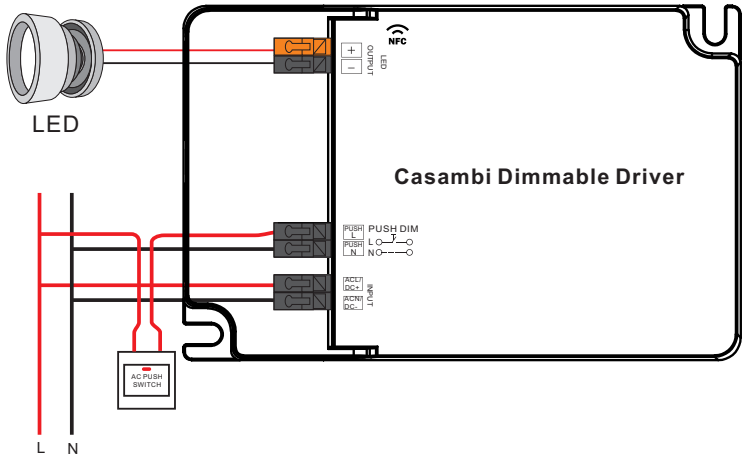


Wiring Diagram

Application 1 (Without PUSH)

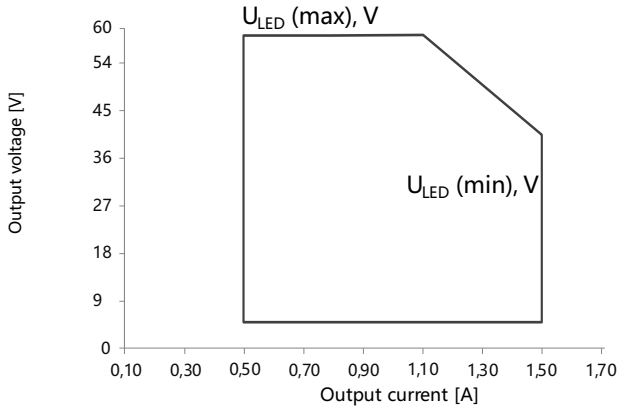


Application 2 (With PUSH)

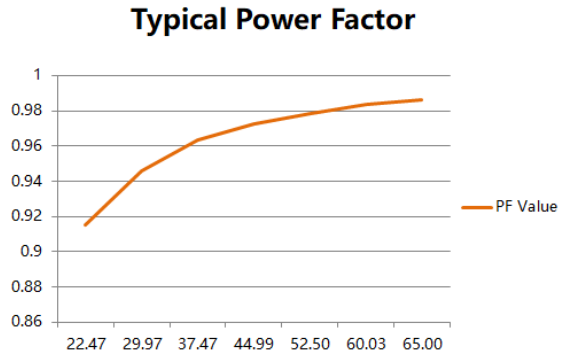


Push Dim
1) Short press to switch on or off.
2) Long press to dim up or dim down.

Operating Window



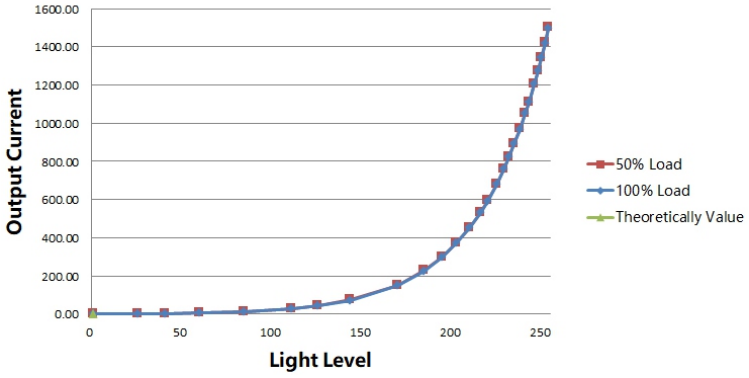
Driver Performance



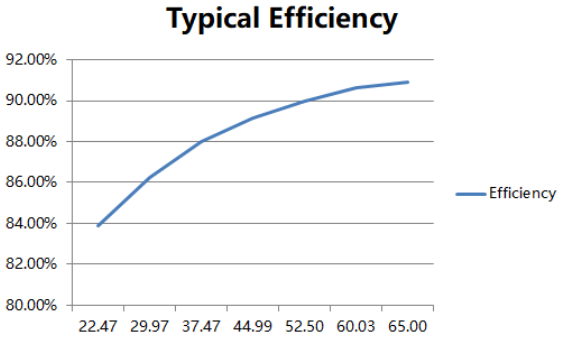
35%/ 46%/ 57%/ 70%/ 80%/ 92%/ 100%

Note: Test data under 1500mA gear

Dimming Curve



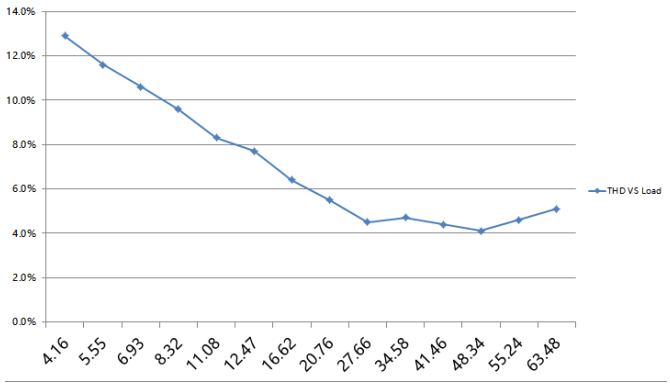
Driver Performance



35%/ 46%/ 57%/ 70%/ 80%/ 92%/ 100%

Note: Test data under 1500mA gear

THD VS Load



6%/ 9%/ 11%/ 13%/ 17%/ 19%/ 26%/ 32%/ 43%/ 53%/ 64%/ 74%/ 85%/ 98%

Note: Test data under 1500mA gear

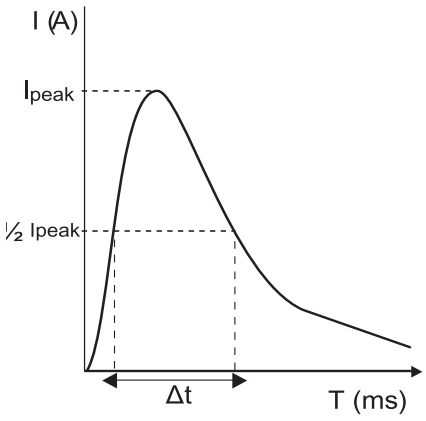
Expected Lifetime

Module Number	Output current	Ta	30 °C	40 °C	45 °C	•••	
SRP-CA9105N-65CC500-1500	500 – 1500 mA	Tc	50 °C	60 °C	68 °C	•••	85 °C

The LED driver is designed for a lifetime stated above under reference conditions.
The relation of tc to ta temperature depends also on the luminaire design.

MCB Load Quality

Module Number	Ipeak	Twidth	Max.quantity of LED Driver per MCB													
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-CA9105N-65CC500-1500	9.68A	70μs	15	20	24	30	38	20	26	32	40	50	22	29	36	45	57



Note:

1. Those MCB parameters are based on ABB S200 series circuit breakers.
2. For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.
3. Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.
4. When the installation environment temperature of MCBs exceeds 30°C or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.
5. Type C MCB's are strongly recommended to use with LED lighting