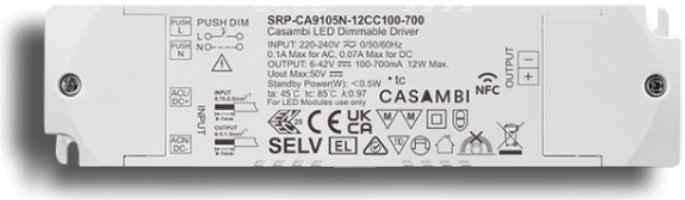
SUNRICHER

# CASAMBI NFC 1-Channel LED Driver

# SRP-CA9105N-12CC100-700

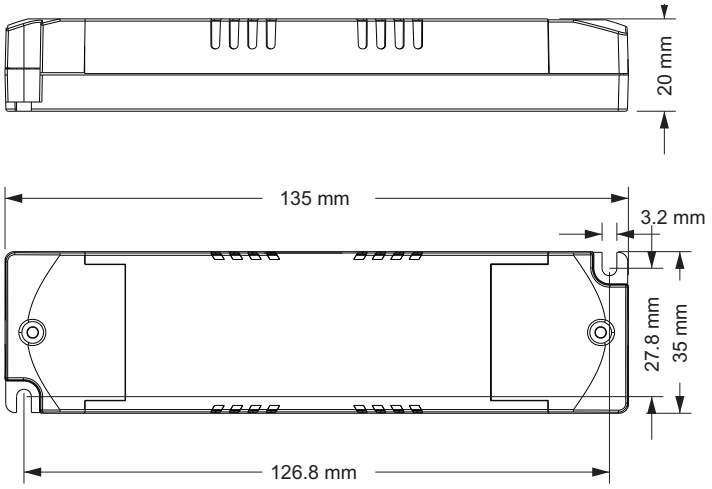



## Features:

- Casambi-enabled NFC programmable constant current LED driver
- 12W single-channel output, adjustable 100~700 mA via NFC
- Smooth, flicker-free dimming for LED lighting
- IP20: Ingress Protection
- 5 year warranty

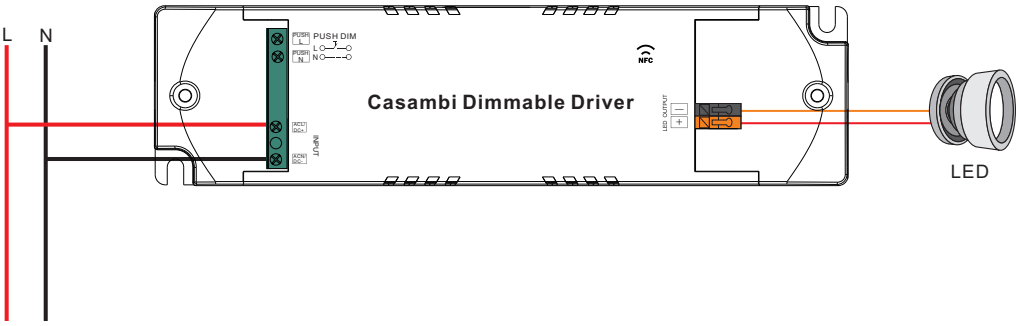
| Model | | SRP-CA9105N-12CC100-700 |
|---|---|---|
| Output | LED Channel | 1 |
| | DC Voltage | 6~42V, Max. 50V |
| | Current | 100~700mA via NFC Tool; Min. current gear lower to 0.1mA<br>default 300mA |
| | Current Accuracy | ±3% (±1@Certain full load) @ full load |
| | Rated Power | Max. 12W |
| Input | Voltage Range | 220~240VAC / 220~240VDC |
| | Absolute Voltage Range | 196~264VAC / 196~264VDC |
| | Frequency Range | 0/50/60Hz |
| | Power Factor (Typ.) | >0.95 @ 230VAC Full load* |
| | Total Harmonic Distortion | THD ≤ 12% (@ full load / 230VAC) |
| | Efficiency (Typ.) | > 77% @ 230VAC full load* |
| | AC Current (Typ.) | 0.1A Max |
| | Inrush Current (Typ.) | Max. 3.96A at 230VAC; 90μs 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 | 135*35*20mm (L*W*H) |
| | Warranty | 5 Years |
| Safety & Warnings | • DO NOT Install with power applied to the device<br>• DO NOT expose the device to moisture | |
| Notes | *PF/THD/Eff shall be different per different testing setup and equipment.<br><br>• Casambi dimmable LED driver, works with Casambi network<br>• 1 channel dimmable LED driver.<br>• Class II power supply, full isolated plastic case<br>• High power factor and efficiency | • To switch and dim LED lighting luminaries<br>• Amplitude/CCR dimming, smooth and deep dimming<br>• IP20 rating, suitable for indoor LED lighting applicationsy<br>• 5 years warranty |

# Mechanical Specifications




# Wiring Diagram

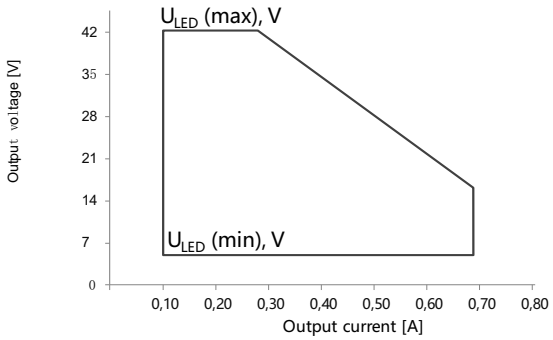
**Application 1 (Without PUSH)**



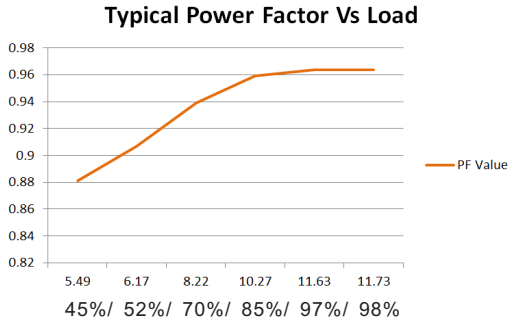

**Application 2 (With PUSH)**


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

## Operating Window



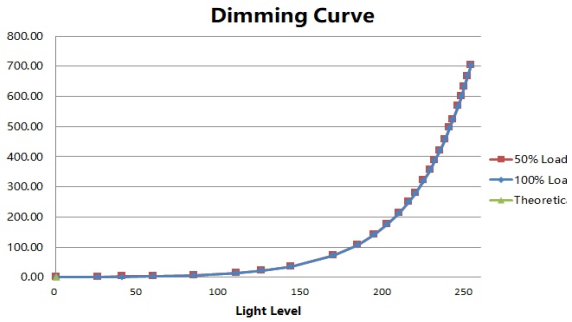

## Driver Performance




45%/ 52%/ 70%/ 85%/ 97%/ 98%

Note: Test data under 700mA gear

## Dimming Curve

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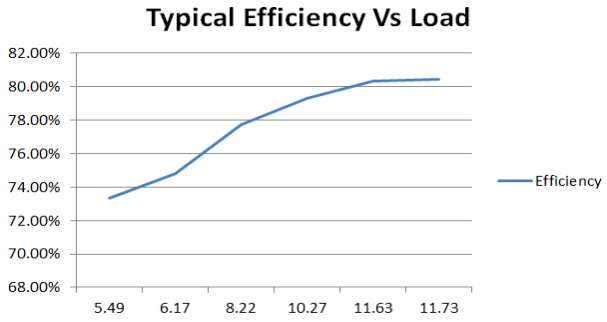
## Driver Performance




45%/ 52%/ 70%/ 85%/ 97%/ 98%

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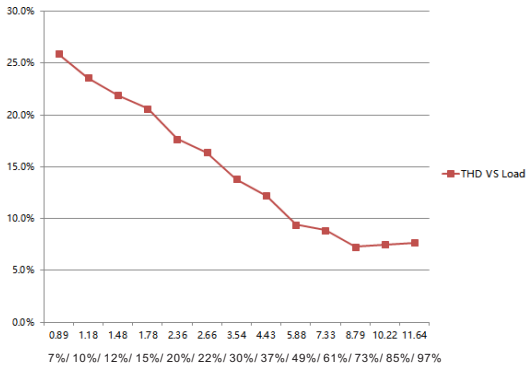
## THD VS Load




7%/ 10%/ 12%/ 15%/ 20%/ 22%/ 30%/ 37%/ 49%/ 61%/ 73%/ 85%/ 97%

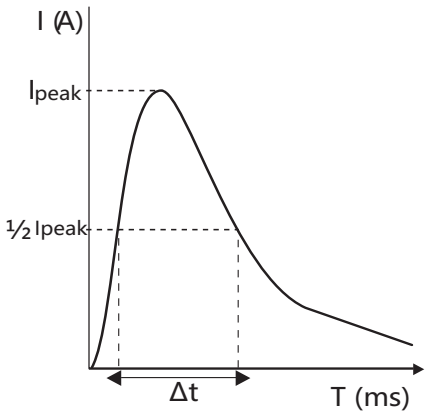
## Expected Lifetime

| Module Number | Output current | Ta | 30 °C | 40 °C | 45 °C | ••• | |
|---|---|---|---|---|---|---|---|
| SRP-CA9105N-12CC100-700 | 100 – 700 mA | Tc | 50 °C | 60 °C | 65 °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-12CC100-700 | 3.96A | 90μs | 37 | 49 | 60 | 75 | 94 | 63 | 81 | 100 | 125 | 156 | 80 | 104 | 128 | 160 | 200 |




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