

### Product features



- Built-in non isolated adjustable power LED driver
- Supports NFC readers for precise setting and control of multiple functions
- Support wireless dimming and color temperature adjustable
- Current adjustment via NFC
- Output current 100...900 mA
- Max. output power 110 W
- DC emergency
- Current output default value 100%
- For luminaires with protection class I
- With anti glow function
- Flicker-free, with a dimming range of 1...100% via an Skylink.
- Constant lumen output (CLO)
- Packing unit programming: configure a large number of drivers in parallel via NFC
- The external antenna must be ordered separately



### Product specifications

#### 166800 ID ELNCB 110/230/100-900 SKY NFC TW

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension L x W x H (mm)
100...900 mA	220...240 Vac 220...240 Vdc	50...240 Vdc	93%	± 5%	0.9 (@ 35...110 W)	405.0 x 29.5 x 16.0

### Electrical specifications

#### Mains voltage supply

Rated input voltage range	220...240 Vac
Max. input voltage range	198...264 Vac
Rated frequency range	0/50/60 Hz
Max. input current	0.6 A @ 230 Vac

#### Battery operation

DC voltage range	220...240 Vdc
Max. DC voltage range	198...280 Vdc

#### Protection against voltage peaks

Withstand voltage	I/p-FG: 1.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N 1 kV, L-FG 2 kV, N-FG 2 kV

#### Total harmonic distortion (THD)

At rated input voltage range @ full load	10%
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### Output data

Output current tolerance	± 5% at rated input voltage range
Ripple output current	5% (ripple = peak/average total 100 Hz)
Output PstLM	≤ 1 at full load @ rated input voltage
Output SVM	≤ 0.4 at full load @ rated input voltage
DC emergency level	Current output decreased to 15% (programmable)

### Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 250 Vdc
Overpower protection	The output power is less than or equal to 122 W
Short circuit protection	Short circuit protection is designed to turn off the output and cannot be automatically restored. After removing the short circuit, the output can be restored by one of the following two operations: <ul style="list-style-type: none"> <li>• Turn on the light using the BLE dimming command.</li> <li>• Restart the driver: Turn off the power first, and then turn on the drive power after five seconds</li> </ul>
No load output voltage	Open circuit protection is designed to shut off the output and cannot be automatically restored. After removing the open circuit, the output can be restored by one of the following two operations <ul style="list-style-type: none"> <li>• Turn on the light using the BLE dimming command.</li> <li>• Restart the driver: Turn off the power first, and then turn on the drive power after five seconds</li> </ul>

### Dimming operation and interface

Standby power consumption	≤ 0.4 W
Dimming mode	BLE dimming
Dimming method	AM dimming
Dimming current range	1%...100%

### Connection terminals

Connection terminal type	0° push in terminal
Wire cross section	Input wire: 0.5...1.5 mm <sup>2</sup> ; Output wire: 0.2...1.5 mm <sup>2</sup>
Wire stripping length	8...9 mm

### Degree of protection

Protection rating	IP20
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### Operating data

Output current range (DT8)	NFC control adjusts the current: 100...900 mA
Output current range (DT6)	NFC control adjusts the current: 100...900 mA per channel Max sum of output current: 1500 mA
Default current	100 mA
Output voltage range	50...240 Vdc

### Circuit breaker / Inrush current

MCB loading quantity	Inrush current I <sub>peak</sub> : 29.4 A		Inrush current T <sub>width</sub> : 200 μs		
	MCB type	B10	C10	B16	C16
	Units	15	15	24	24

### Supplementary instructions

- The luminaire manufacturer is responsible for measuring and verifying the EMI compliance of the complete luminaire, as the level of radio interference will vary depending on the luminaire construction. Especially primary and secondary cable lengths and their routing may have a significant effect on radio interference.
- The recommended NFC communication distance: 5...20 mm.

### Environmental specifications

Operating temperature	-20... +55°C
Storage temperature	-25... +85°C
Working humidity	10%...90%
Store humidity	5%...95%
Lifetime	at Tc 75°C: 50,000 hrs @ 230 Vac
Maximum Tc temperature	80°C

### Safety & EMC compliance

CE
EN 61347-1:2015/A1:2021
EN 61347-2-13:2014/A1:2017
EN IEC 55015:2019/A11:2020
EN IEC 61547:2023
EN IEC 61000-3-2:2019/A2:2024
EN 61000-3-3:2013/A2:2021
EN 301 489-1 V2.2.3:2019
EN 301 489-3 V2.1.1:2019
EN 301 489-3 V2.3.2:2023
EN 300 330 V2.1.1:2017
EN 301 489-17 V3.2.4:2020
EN 300 328V2.2.2:2019
EN 62479:2015
EN 50663:2017

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### Accessories (Required) - SkyLink Antenna

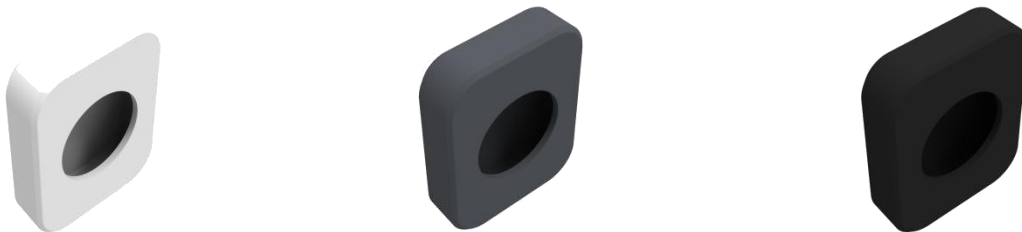


SkyLink	Black	White
IC EC BLE TW CS	168910	167692
IC EC BLE MM	168873	167739
IC EC BLE ML	168866	167746

CS = Casambi, MM = Mymesh, ML = Meshle

Dimensions	Length (mm)	Width (mm)	Height (mm)
SkyLink casing	40	31	16
Wire	300	N/A	N/A

### Accessories (Optional) - IP65 protection for SkyLink Antenna



XZ-SKY IP W		XZ-SKY IP G		XZ-SKY IP B	
Art.	110267	Art.	110281	Art.	110274

### Dimensions

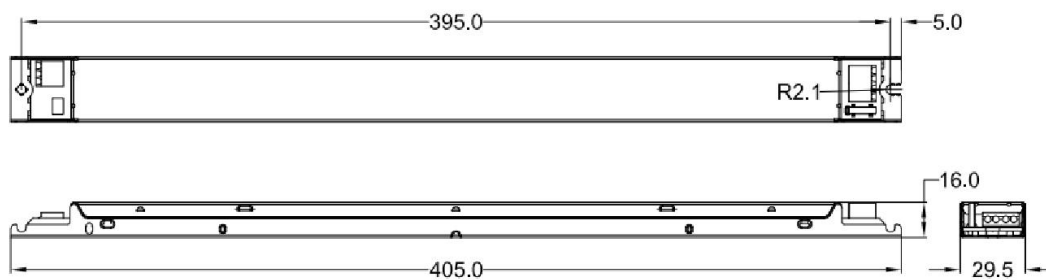
#### Housing dimensions

Length (L)	405.0 mm
Width (W)	29.5 mm
Height (H)	16.0 mm

For all dimensions: values in mm; tolerances:  $\pm 0.5$  mm

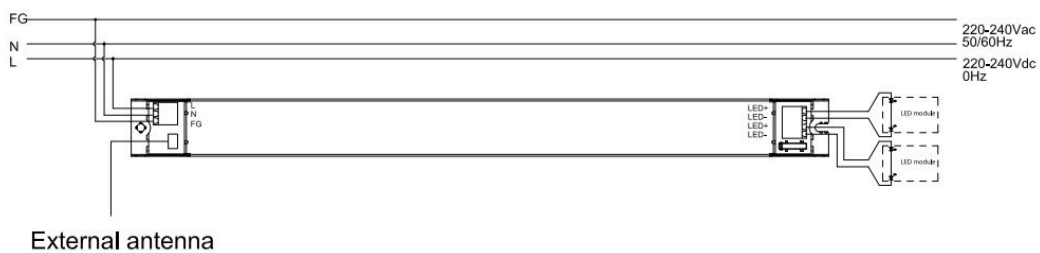
#### Packaging details

Packing units	20 pcs.
Carton size	426 x 128 x 102 mm
Weight	6.5 kg
Product weight	0.28 kg



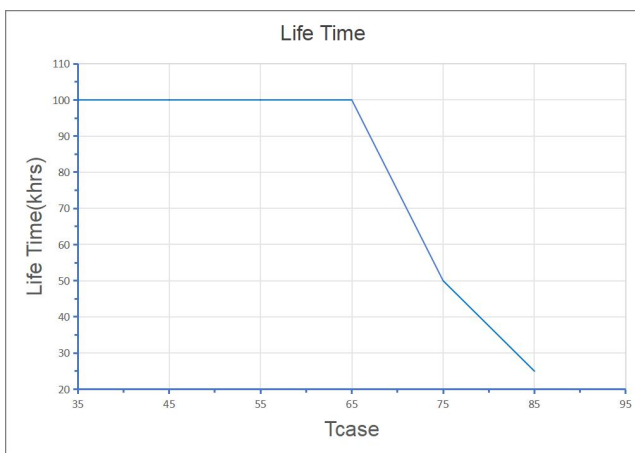
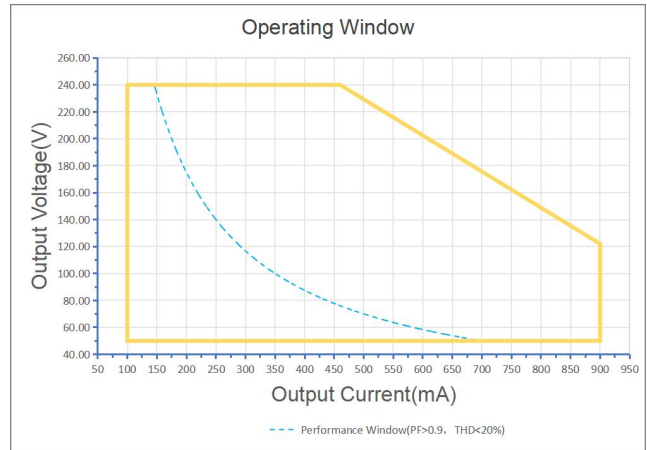
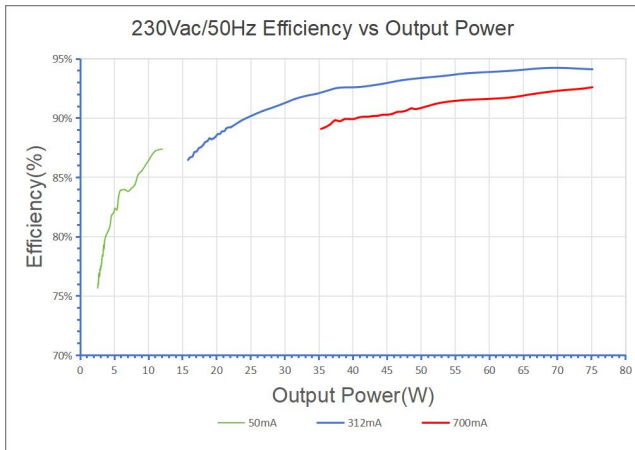
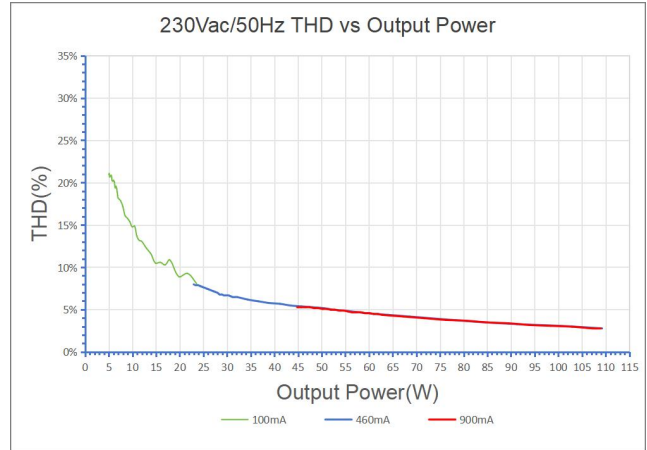
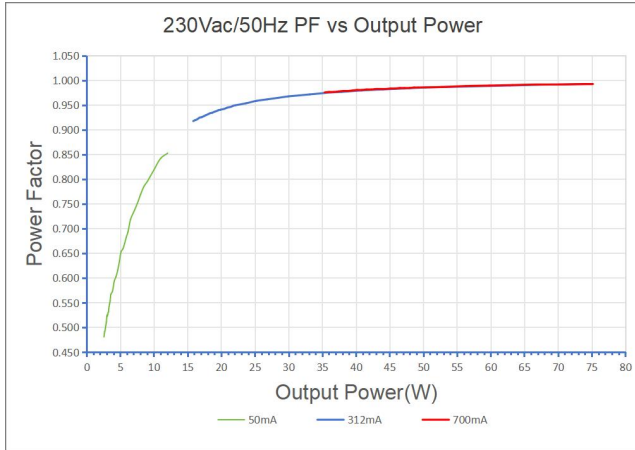
unit: mm  
tol:  $\pm 0.5$  mm

### Wiring diagram



- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5...10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuits.

## Technical information



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 110 W + 5%.

### Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
240	100 mA	24
240	300 mA	72
220	500 mA	110
122	900 mA	109.8