

TALEXdriver LC 100W 12/24V IP66 slim SNC  
ESSENCE series

## Product description

- Fixed output constant voltage built-in control gear for LED in 12/24 V
- Input voltage range 220 – 240 VAC
- Max. output power 100 W
- Connection cable with stripped cable end (300 mm ±10 mm)
- Polarity identifiers, secondary + red / – black
- IP66 metal casing
- Nominal life-time up to 30,000 h (at ta 50 °C with a failure rate max. 0.2 % per 1,000 h)
- 3-year guarantee
- Complies with CLASS C from 70 to 100 % load according to EN 61000-3-2



## Properties

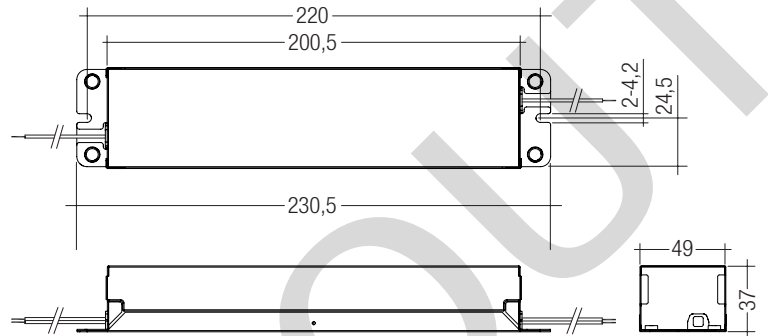
- Type of protection IP66
- Metal casing
- SELV
- Low power loss
- Over temperature, over load and short-circuit protection

IP66 SELV 

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### Technical data

Rated supply voltage	220 – 240 V
Input voltage, AC	198 – 264 V
Rated current (at 230 V 50 Hz)	0.33 A
Mains frequency	50 / 60 Hz
Efficiency 12 V (at 230 V, 50 Hz, full load)	> 85 %
Efficiency 24 V (at 230 V, 50 Hz, full load)	> 86 %
$\lambda$ (at 230 V, 50 Hz, full load)	> 0.93
Output voltage tolerance 12 V	0 /+10 %
Output voltage tolerance 24 V	-5 /+5 %
Output power	100 W
Output power range	10 – 100 W
Turn on time (output)	$\leq$ 0.5 s
Turn off time (output)	$\leq$ 1 s
Hold on time at power failure (Output)	10 ms
Ambient temperature $t_a$	-25 ... +50 °C
Ambient temperature $t_a$ (at life-time 30,000 h)	-25 ... +50 °C
Storage temperature $t_s$	-25 ... +85 °C
Dimensions LxWxH	230.5 x 49 x 37 mm
Hole spacing D	220 mm



### Ordering data

Type	Article number	Packaging carton	Packaging pallet	Weight per pc.
LC 100W 12V IP66 slim SNC	28001027	10 pc(s).	560 pc(s).	0.85 kg
LC 100W 24V IP66 slim SNC	28001029	10 pc(s).	560 pc(s).	0.85 kg

### Specific technical data

Type	Max. casing temperature $t_c$	Output voltage	Max. input power	Output current range	Max. output voltage <sup>Ⓢ</sup>
LC 100W 12V IP66 slim SNC	80 °C	12 V	130 W	0.83 – 8.33 A	13.2 V
LC 100W 24V IP66 slim SNC	80 °C	24 V	123 W	0.41 – 4.17 A	25.2 V

<sup>Ⓢ</sup> At failure mode (230 V, 50 Hz).

**Standards**

EN 55015  
EN 61000-3-2  
EN 61000-3-3  
EN 61347-1  
EN 61347-2-13  
EN 61547  
EN 62384

**Expected life-time**

Typw	ta	40 °C	50 °C
LC 100W 12V IP66 slim SNC	tc	70 °C	80 °C
	Life-time	>100,000 h	>30,000 h
LC 100W 24V IP66 slim SNC	tc	70 °C	80 °C
	Life-time	>100,000 h	>30,000 h

**Maximum loading of automatic circuit breakers**

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrush current
Installation Ø	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	I <sub>max</sub> time
LC 100W 12V IP66 slim SNC	9	12	15	19	5	7	9	11	36A 550 µs
LC 100W 24V IP66 slim SNC	9	12	15	19	5	7	9	11	36A 550 µs

**Harmonic distortion in the mains supply (at 230V/50Hz and full load) in %**

Type	THD	3	5	7	9	11
LC 100W 12V IP66 slim SNC	7	6	2	2	2	2
LC 100W 24V IP66 slim SNC	7	6	2	1	2	2

**Wiring diagram**



**Installation instructions**

The switching of LEDs on secondary side is not permitted. A proper functioning of the LCU in combination with third party dimming devices (e.g. PWM) cannot be guaranteed.

**Isolation and electric strength testing of luminaires**

Electronic devices can be damaged by high voltage. This has to be considered during the routine testing of the luminaires in production.

According to IEC 60598-1 Annex Q (informative only!) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with 500 V<sub>DC</sub> for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.

The isolation resistance must be at least 2 MΩ.

As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with 1500 V<sub>AC</sub> (or 1.414 x 1500 V<sub>DC</sub>). To avoid damage to the electronic devices this test must not be conducted.

**Overload protection**

In case of overload the driver switches into hiccup mode. When overload condition is removed, the power supply will automatically recover.

**No-load operation**

The LED control gear is not damaged in the no-load operation. The max. output voltage (see page1) can be obtained during no-load operation.

**Over temperature protection**

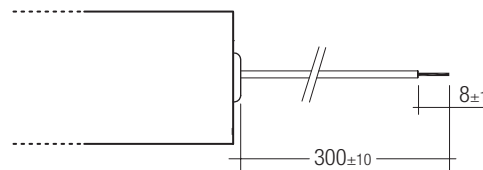
Automatic shut down if temperature limit is exceeded. Temperature limit is roughly set at ta 70 °C. Manual AC reset required for restart when temperature is below limit.

**Short-circuit behaviour**

In case of a short circuit on the secondary side (LED) the LED control gear switches into hiccup mode. After the removal of the short-circuit fault the LED control gear will recover automatically.

**Connection**

Primary cable		Secondary cable	
L	N	+	-
brown	blue	red	black



**PRI:**

Ø 2.8 ± 0.2 mm; 2 x 0.82 mm<sup>2</sup> (18 AWG)

**SEC:**

12 V: Ø 3.5 ± 0.2 mm; 2 x 2.08 mm<sup>2</sup> (14 AWG)  
24 V: Ø 2.8 ± 0.2 mm; 2 x 0.82 mm<sup>2</sup> (18 AWG)

**Additional information**

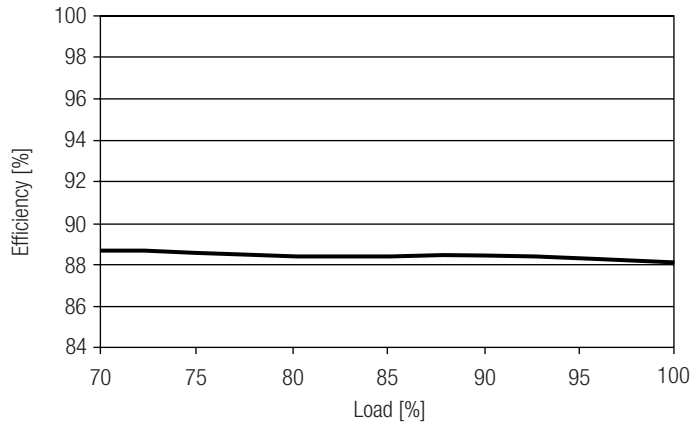
Additional technical information at [www.tridonic.com](http://www.tridonic.com) → Technical Data

Guarantee conditions at [www.tridonic.com](http://www.tridonic.com) → Services

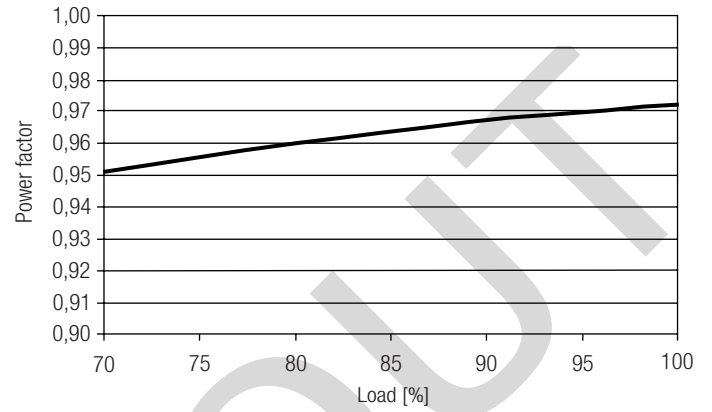
No warranty if device was opened.

Diagrams LC 100W 12V IP66 slim SNC

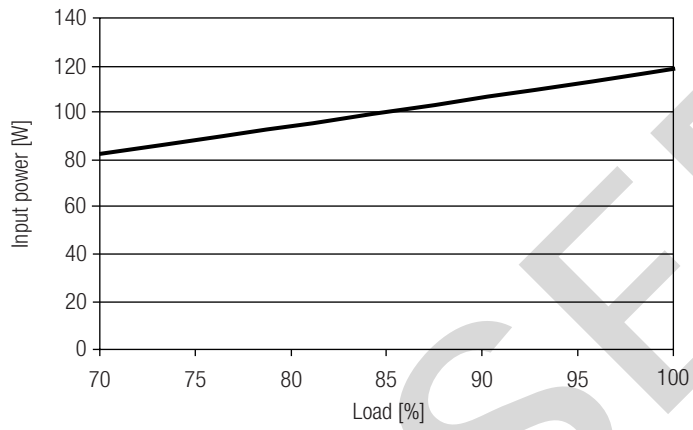
Efficiency vs load



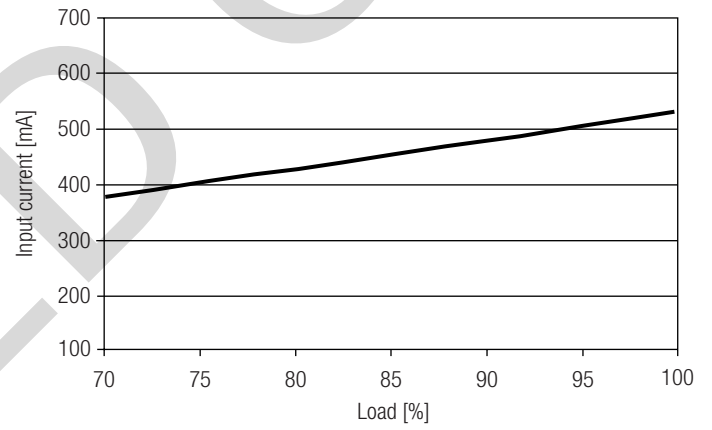
Power factor vs load



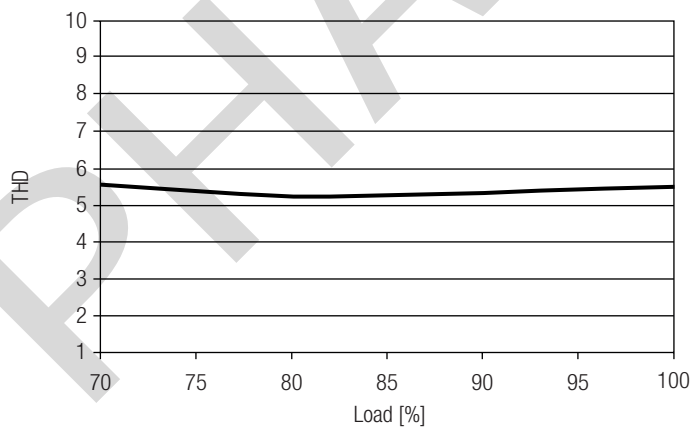
Input power vs load



Input current vs load

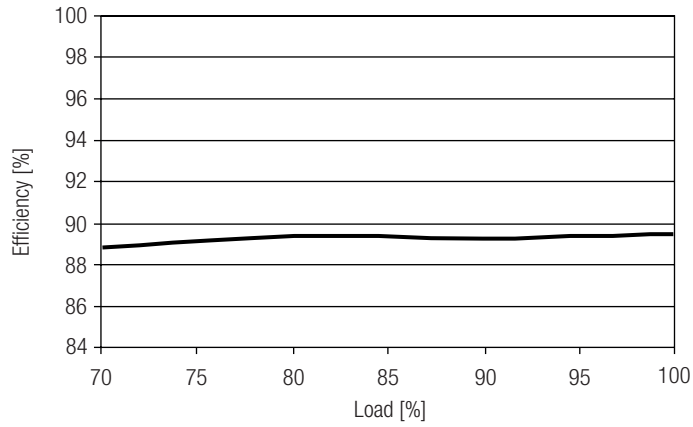


THD vs load

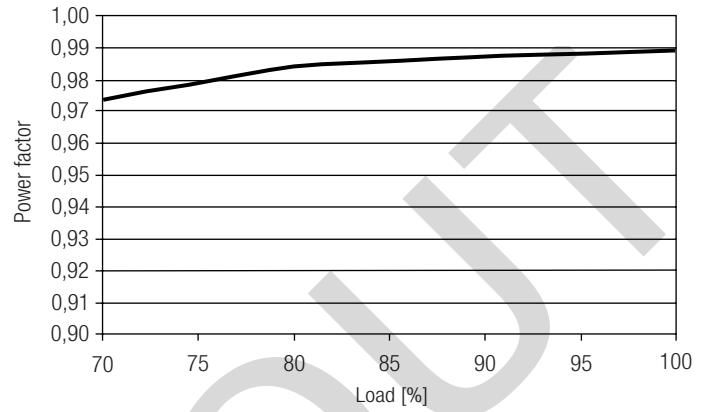


Diagrams LC 100W 24V IP66 slim SNC

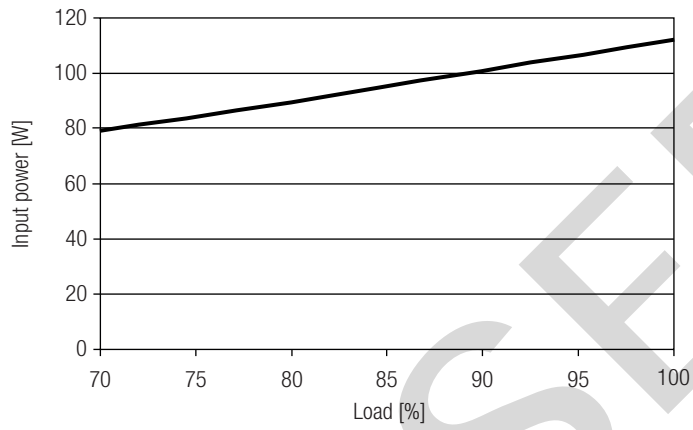
Efficiency vs load



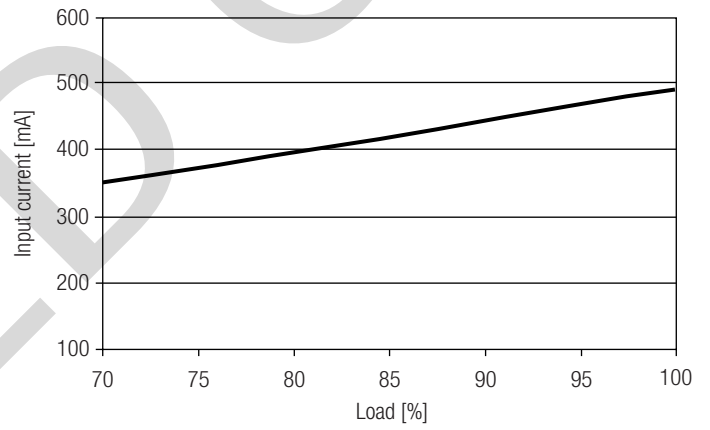
Power factor vs load



Input power vs load



Input current vs load



THD vs load

