

**TALEXdriver LCU 60W 12/24V IP67 EXC**  
EXCITE outdoor IP67 series

### Product description

- Constant voltage LED Driver
- Universal input voltage range
- Constant output voltage
- Connection: Cable with end sleeves (length approx. 500 mm)
- Polarity identifiers, secondary + red / – black
- Metal casing, encapsulated
- Nominal life-time up to 50,000 h (at ta 50 °C with a failure rate max. 0.2 % per 1,000 h)
- 5-year guarantee
- Suitable for emergency installations according to EN 50172
- Complies with CLASS C from minimum to maximum load range according to EN 61000-3-2

### Properties

- Small design
- High efficiency
- Low power loss
- Overtemperature and overload protection
- Short-circuit shutdown feature with automatic restart
- SELV
- Type of protection IP67
- Metal casing

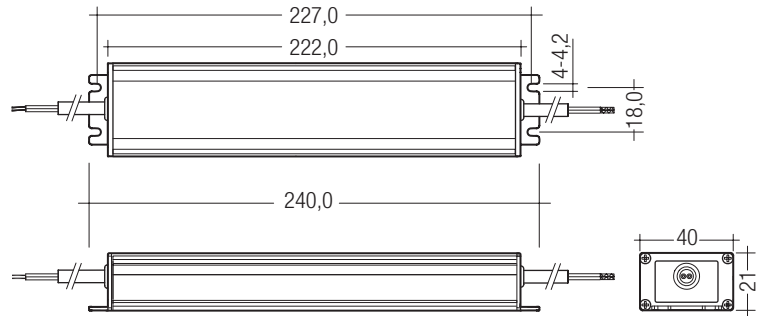


IP67 SELV Class 2 

**TALEXdriver LCU 60W 12/24V IP67 EXC**  
EXCITE outdoor IP67 series

### Technical data

Rated supply voltage <sup>2)</sup>	100 – 277 V
Input voltage, AC <sup>2)</sup>	90 – 305 V
Input voltage, DC	176 – 288 V
Rated current (at 230 V, 50 Hz, full load)	0.32 A
Mains frequency	0 / 50 / 60 Hz
Efficiency (at 230 V, 50 Hz, full load)	> 85 %
$\lambda$ (at 230 V, 50 Hz, full load)	0.95
Output voltage tolerance 12 V	-0 / +10 %
Output voltage tolerance 24 V	-0 / +5 %
Output power (ta ≤ 60 °C)	60 W
Output power (ta > 60 °C)	48 W
Output power range	6 – 60 W
Turn on time (output)	≤ 0.5 s
Turn off time (output)	≤ 1 s
Hold on time at power failure (Output)	10 ms
Ambient temperature ta	-40 ... +70 °C
Ambient temperature ta (at life-time 50,000 h)	-40 ... +50 °C
Storage temperature ts	-40 ... +85 °C
Dimensions LxWxH	240 x 40 x 21 mm
Hole spacing D	227 mm



### Ordering data

Type	Article number	Packaging carton	Packaging pallet	Weight per pc.
LCU 60W 12V IP67 TOP	28000509	10 pc(s).	480 pc(s).	0.45 kg
LCU 60W 24V IP67 TOP	28000512	10 pc(s).	480 pc(s).	0.45 kg

### Specific technical data

Type	Max. casing temperature tc	Output voltage	Max. input power	Output current range	Max. output voltage <sup>1)</sup>
LCU 60W 12V IP67 TOP	90 °C	12 V	74 W	0.50 – 5.0 A	13.2 V
LCU 60W 24V IP67 TOP	90 °C	24 V	74 W	0.25 – 2.5 A	25.2 V

<sup>1)</sup> At failure mode (230 V, 50 Hz).

<sup>2)</sup> 90 – 108 V AC: ta ≤ 60 °C: max. load = 48 W, ta > 60 °C: max. load = 38 W.

**Standards**

EN 55015  
 EN 60598-1  
 EN 60598-2-22  
 EN 61000-3-2  
 EN 61000-3-3  
 EN 61347-1  
 EN 61347-2-13  
 EN 61547  
 EN 62384  
 EN 62493  
 Acc. to EN 50172: suitabel for central battery systems

**Overload protection**

Automatic shutdown of the LED Driver if the maximum output current is exceeded.  
 Automatic restart if the output current is below the limit.

**No-load operation**

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

**Over temperature protection**

Automatic power reduction of the LED Driver if the temperature limit is exceeded.  
 Automatic restart to nominal mode if the temperature falls below the limit.

**Short-circuit behaviour**

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

**Expected life-time**

Type	Output voltage	ta	40 °C	50 °C	60 °C
LCU 60W 12V IP67 TOP	12 V	tc	65 °C	75 °C	85 °C
		Life-time	> 100,000 h	> 50,000 h	> 25,000 h
LCU 60W 24V IP67 TOP	12 V	tc	65 °C	75 °C	85 °C
		Life-time	> 100,000 h	> 50,000 h	> 25,000 h

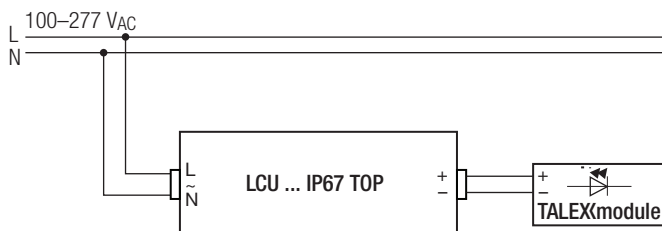
**Maximum loading of automatic circuit breakers**

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
LCU 60W 12V IP67 TOP	14	18	22	28	8	10	13	16	47 A	95 µs
LCU 60W 24V IP67 TOP	14	18	22	28	8	10	13	16	47 A	95 µs

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

Type	THD	3	5	7	9	11
LCU 60W 12V IP67 TOP	10	2	1	2	1	1
LCU 60W 24V IP67 TOP	10	2	1	2	1	1

**Wiring diagram**

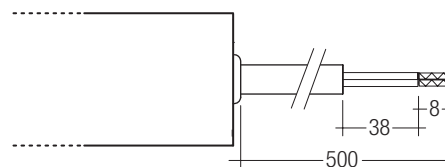


**Installation instructions**

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.

**Connection**

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



**PRI:**

Ø 7.7 ±0.2 mm; 2x1.04 mm<sup>2</sup> (17 AWG)

**SEC:**

Ø 7.7 ±0.2 mm; 2x1.04 mm<sup>2</sup> (17 AWG)

**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.

**Additional information**

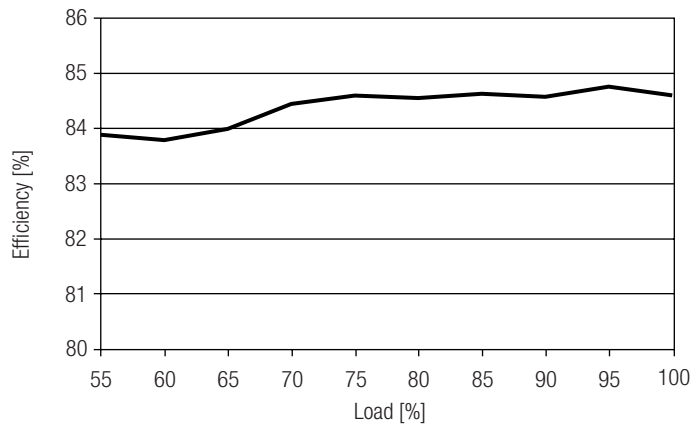
Additional technical information at [www.tridonic.com](http://www.tridonic.com) → Technical Data

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

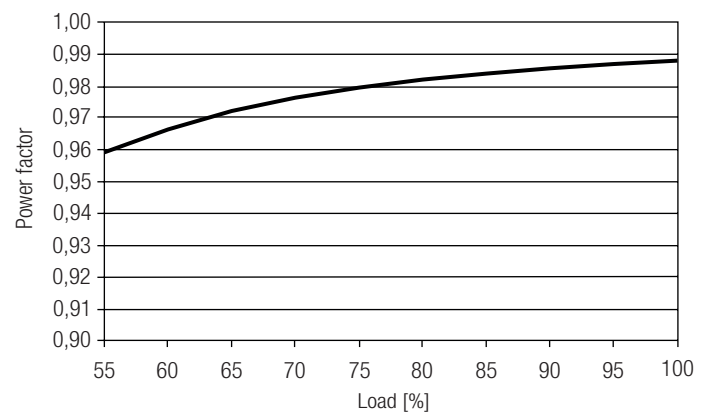
No warranty if device was opened.

**Diagrams for 12 V**

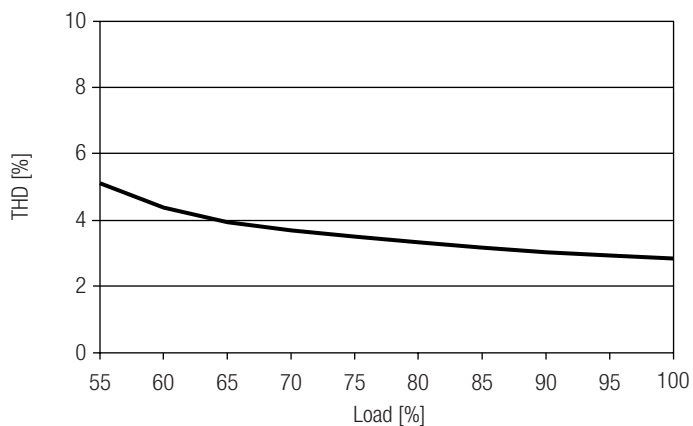
Efficiency vs load



Power factor vs load

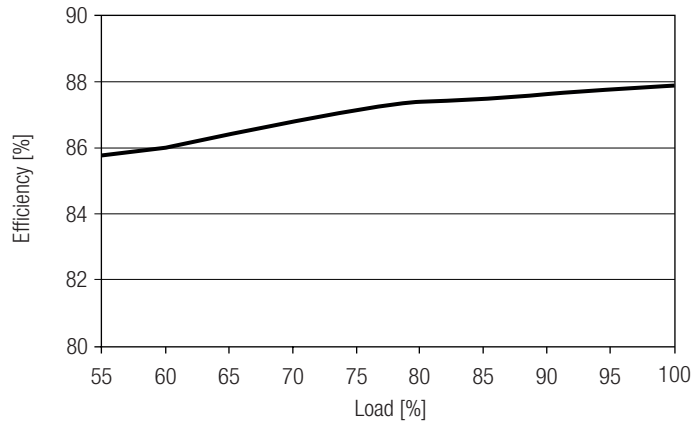


THD vs load

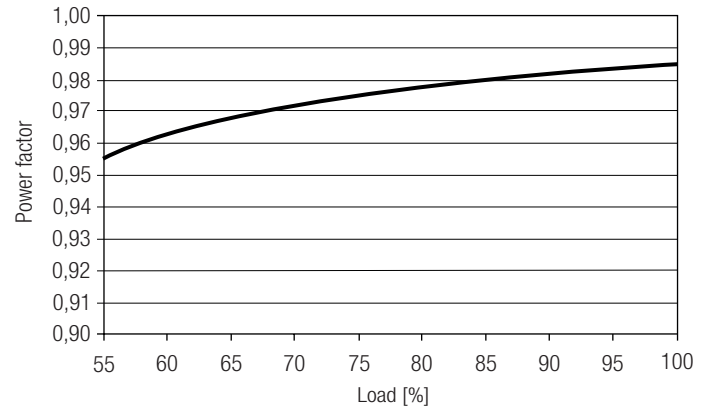


Diagrams for 24 V

Efficiency vs load



Power factor vs load



THD vs load

