TRIDONIC

LED Driver Constant voltage

TALEX: driver LCU 35W 12V 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. 300 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 protection with automatic restart
- Overload protection
- Short-circuit protection with automatic restart
- SELV
- Type of protection IP67
- Metal casing





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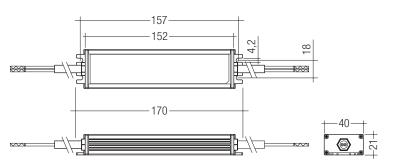
IP67 SELV Class 2 EL ₩ ₩ ₩ © 9 91 @. ⓓ C € ∰ Rohs

TALEX(driver LCU 35W 12V IP67 EXC

EXCITE outdoor IP67 series

Technical data

Rated supply voltage	100 – 277 V
Input voltage, AC	90 – 305 V
Input voltage, DC	176 – 288 V
Rated current (at 230 V, 50 Hz, full load)	0.19 A
Mains frequency	0 / 50 / 60 Hz
Efficiency (at 230 V, 50 Hz, full load)	> 85 %
λ (at 230 V, 50 Hz, full load)	0.95
Output voltage tolerance	-0 /+10 %
Output power (ta \leq 60 °C)	35 W
Output power (ta > 60 °C)	28 W
Output power range	3.5 – 35 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	170 x 40 x 21 mm
Hole spacing D	157 mm



Ordering data

Туре	Article number	Packaging carton	Packaging pallet	Weight per pc.	
LCU 35W 12V IP67 TOP	28000508	15 pc(s).	900 pc(s).	0.32 kg	

Specific technical data

Туре	Max. casing temperature tc	Output voltage	Max. input power	Output current range	Max. output voltage®
LCU 35W 12V IP67 TOP	85 °C	12 V	43 W	0.29 – 2.92 A	13.2 V

^① At failure mode (230 V, 50 Hz).

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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 shutdown of the LED Driver if the temperature limit is exceeded. Automatic restart 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 removal of the short-circuit fault the LED Driver will recover automatically.

Expected life-time

Exposion nio anno					
Туре	Output voltage	ta	40 °C	50 °C	60 °C
LCU 35W 12V IP67 TOP	12 V	tc	65 °C	75 °C	85 °C
LGU 35W 12V IP67 TUP	12 V	Life-time	> 100,000 h	> 50,000 h	> 25,000 h

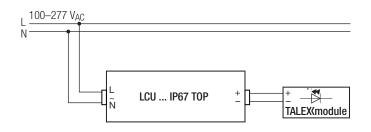
Maximum loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrust	n current
Installation Ø	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5mm^2	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5 mm ²	l max	time
LCU 35W 12V IP67 TOP	17	21	25	32	10	12	15	19	32 A	0.108 ms

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

туре	INU	3	5	1	9	11
LCU 35W 12V IP67 TOP	10	2	1	2	1	1

Wiring diagram

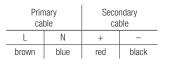


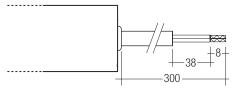
Installation instructions

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.







PRI:

Ø 7.7 ±0.2 mm; 2 x 1.04 mm² (17 AWG)

SEC:

Ø 7.7 \pm 0.2 mm; 2 x 1.04 mm² (17 AWG)

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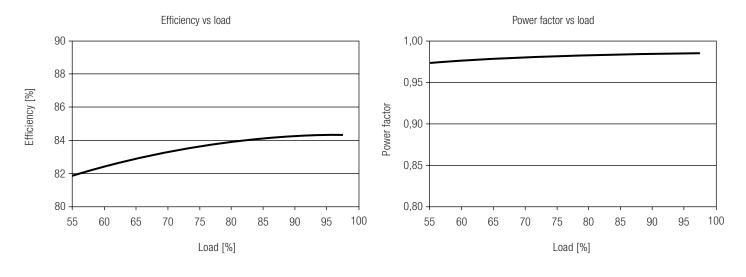
Isolation and electric strength testing of luminaires

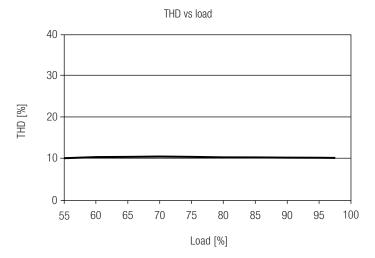
Electronic devices can be damaged by high voltage. This has to be considered during the routine testing of the luminaires in production.

According to IEC 60598-1 Annex Q (informative only!) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with $500 V_{DC}$ 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 $2 M\Omega$.

As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with $1500\,V_{\text{AC}}$ (or $1.414\,x\,1500\,V_{\text{DC}}$). To avoid damage to the electronic devices this test must not be conducted.

Diagrams for 12 V





Additional information

Additional technical information at $\underline{www.tridonic.com} \rightarrow \text{Technical Data}$

Guarantee conditions at $\underline{www.tridonic.com} \rightarrow Services$

No warranty if device was opened.