

IP67 SELV          RoHS

TALEXconverter LCU 100 W 12/24 V outdoor IP67 LCU outdoor IP67

Product description

- Constant voltage LED control gear
- Universal input voltage range
- Constant output voltage
- Connection: Cable with end sleeves (length approx. 2,000 mm)
- Polarity identifiers, secondary + red / – black
- Metal casing, encapsulated
- Nominal life-time up to 50,000 h (at ta 40 °C with a failure rate max. 0.2 % per 1,000 h)
- 5-year guarantee
- Complies with CLASS C from minimum to maximum load range according to EN 61000-3-2

Properties

- 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

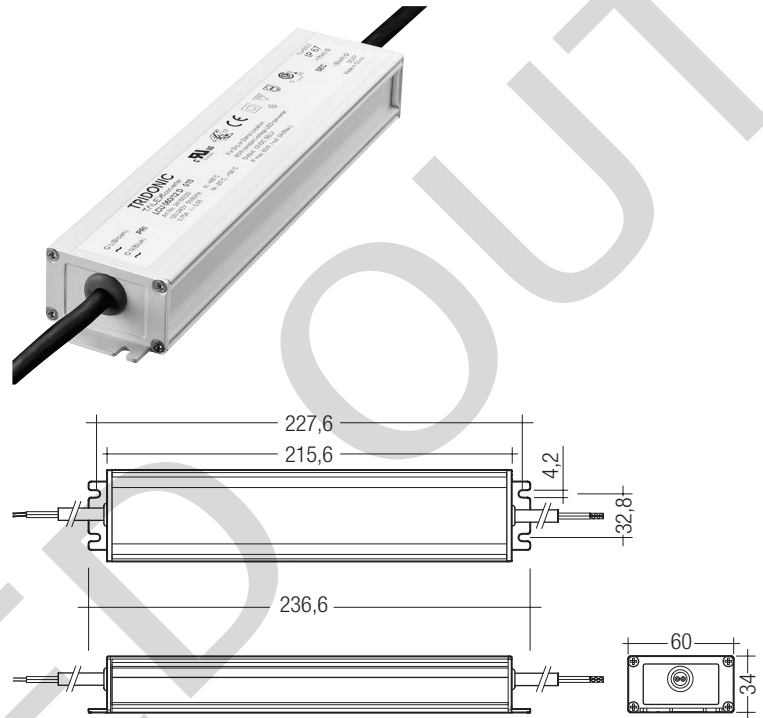
Technical data

Rated supply voltage	120 – 240 V
Input voltage, AC	108 – 264 V
Rated current (at 230 V 50 Hz)	0.55 A
Mains frequency	50 / 60 Hz
Efficiency	> 85 %
λ (at 230 V 50 Hz)	0.95
Output voltage tolerance	+ 10 %
Output power	100 W
Output power range	10 – 100 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	-25 ... +50 °C
Ambient temperature ta (at life-time 50,000 h)	-25 ... +40 °C
Storage temperature ts	-30 ... +85 °C
Dimensions LxWxH	237 x 60 x 34 mm
Hole spacing D	228 mm

Specific technical data

Type	Max. casing temperature tc	Output voltage	Max. input power	Output current range	Max. output voltage ^①
LCU 100/12 D010	85 °C	12 V	118 W	0.80 – 8 A	13.2 V
LCU 100/24 D010	65 °C	24 V	118 W	0.40 – 4 A	26.4 V

^① At failure mode (230 V, 50 Hz).



Ordering data

Type	Article number	Packaging carton	Packaging pallet	Weight per pc.
LCU 100/12 D010	24166326	10 pc(s).	300 pc(s).	1.318 kg
LCU 100/24 D010	22185185	6 pc(s).	300 pc(s).	1.400 kg

Standards

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

Overload protection

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

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 shutdown of the LED control gear if the temperature limit is exceeded. Automatic restart if the temperature falls below the limit.

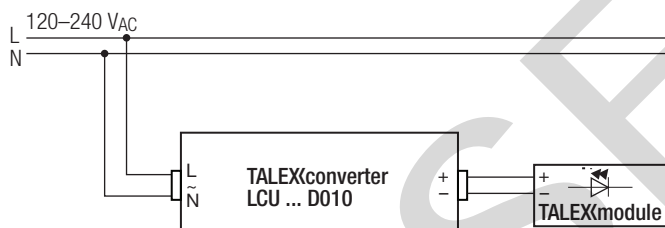
Maximum loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrush current	
Installation Ø	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5 mm ²	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5 mm ²	I _{max}	time
LCU 100/12 D010	6	8	12	14	3	5	6	7	81 A	0.180 ms
LCU 100/24 D010	6	8	10	12	3	5	5	6	98 A	0.140 ms

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

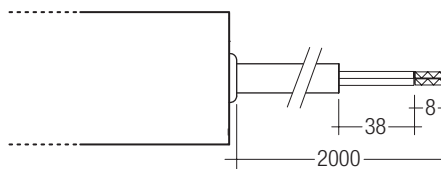
Type	THD	3	5	7	9	11
LCU 100/12 D010	10	9	2	2	2	1
LCU 100/24 D010	11	10	2	2	2	1

Wiring diagram



Connection

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



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_{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 MΩ.

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

Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

No warranty if device was opened.

PRI:

Ø 7.7 ±0.2 mm; 2 x 1.04 mm² (17 AWG)

SEC:

LCU 100/0008 D010:
Ø 8.7 ±0.2 mm; 2 x 2.08 mm² (14 AWG)

LCU 100/0012 D010/LCU 100/0024 D010:
Ø 8 ±0.2 mm; 2 x 1.31 mm² (16 AWG)