# TRIDONIC

**LED Driver** Compact fixed output

IP20 SELV V 🛛 🛛 🖓 [A C C C K Rohs]

# Driver LCCI 16 W

TOP series

# Product description

- 350, 500 or 700 mA output signal
- Over temperature protection with current back control
- Cage clamp terminals for rigid and flexible wires
- Double assignment of the terminal possible
- Rapid installation of cable clamp and terminal cover, no tool required
- Connecting cable, cable cross-section 0.5 2.5 mm²
- Output power 16 W
- Protection class 2, SELV
- Type of protection IP20
- LED Driver for individual luminaires
- Nominal life 50,000 hours (at ta 55 °C with a failure rate
  0.2 % per 1,000 hours)
- 5-year guarantee

## Properties

- Casing: polycarbonate, black
- Large connection compartment
- Adjustable output current via potentiometer or resistor <sup>10</sup>
- Compact dimensions

Technical data	
Rated supply voltage	220 – 240 V
AC voltage range	198 – 264 V
Rated current (at 230 V 50 Hz)	0.15 A
Mains frequency	50 / 60 Hz
Efficiency at full load	> 85 %
Max. input power	20 W
λ	> 0.5 C
Output current ripple	± 10 %
Max. output voltage®	60 V
Potentiometer®®	100 kOhm, linear
Output power	16 W
Output power range	1 – 16 W
Startzeit	< 100 ms
Ambient temperature ta	-25 +55 °C
Max. casing temperature tc	75 ℃
Weight	0.08 kg
Dimensions LxWxH	101.5 x 51 x 29.5 mm

## Specific technical data

Туре	Output current range <sup>®</sup>	Output current tolerance Ma	ax. repetitive output peak current	Max. non-repetitive output peak current	Output voltage range
LCCI 016/0350 B020	70 – 350 mA	332.5 – 367.5 mA	405 mA	405 mA	3 – 48 V
LCCI 016/0500 B020	100 – 500 mA	475.0 – 525.0 mA	580 mA	580 mA	3 – 33 V
LCCI 016/0700 B020	140 – 700 mA	665.0 – 735.0 mA	810 mA	810 mA	3 – 24 V

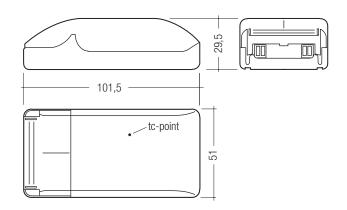
www.tridonic.com

 $^{\textcircled{}}$  In non-load operation.

<sup>®</sup> Each LED Driver must be adjusted by a separate potentiometer. It is not allowed to adjust more than one LED Driver by one potentiometer.

<sup>®</sup> For details please refer to page 2: "Output current according to resistance"





## Ordering data

Туре	Article number	Packaging carton	Packaging pallet	Weight per pc.		
LCCI 016/0350 B020	28000738	24 pc(s).	1,200 pc(s).	0.08 kg		
LCCI 016/0500 B020	28000739	24 pc(s).	1,200 pc(s).	0.08 kg		
LCCI 016/0700 B020	28000740	24 pc(s).	1,200 pc(s).	0.08 kg		

# Standards

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

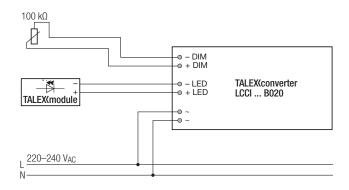
## Installation instructions

Please note that LCCI 016 complies with protection class II so special measures are needed if it is to be installed in protection class I applications / luminaires. Please note the requirements set out in the document LED\_Betriebsgeraete\_installationshinweis.pdf (http://www.tridonic.com/com/de/technische-doku.asp).

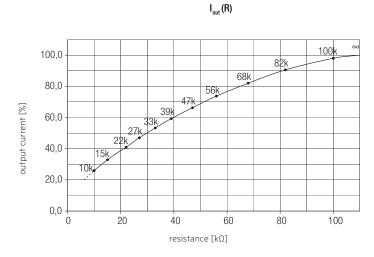
#### Maximum loading of automatic circuit breakers

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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>	l max	Pulse
LCCI 016/0350 B020	30	40	50	60	15	20	25	30	5 A	1ms
LCCI 016/0500 B020	30	40	50	60	15	20	25	30	5 A	1ms
LCCI 016/0700 B020	30	40	50	60	15	20	25	30	5 A	1ms

#### Wiring diagram



#### Output current according to resistance



Used resistor range E12 Component tolerances are not considered in the diagram

#### Wiring type and cross section

The wiring can be in stranded wires with ferrules or solid. For perfect function of the cage clamp terminals the strip length should be 4-5 mm for the input terminal.

The max. torque at the clamping screw (M3) is 0.2 Nm.

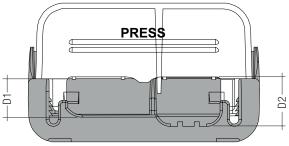
# Input terminal (D2)



#### **Output terminal (D1)**



To get a proper working strain relief it is recommended that the cable jacket diameter of the side D2 is 2 mm bigger than the diameter of the side D1. (This can vary if the used cable jacket material varies from side D2 to D1 in pinching property).



#### Wiring guidelines

- All connections must be kept as short as possible to ensure good EMI behaviour.
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 10 cm distance)
- Max. length of output wires is 2 m.
- Secondary switching is not permitted.
- Incorrect wiring can demage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metal parts, metal cable clips, louver, etc.).

Data sheet 10/16-LC004-13 Subject to change without notice.

## 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  $_{\rm DC}$  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 <u>www.tridonic.com</u>  $\rightarrow$  Technical Data

Guarantee conditions at <u>www.tridonic.com</u>  $\rightarrow$  Services

Life-time declarations are informative and represent no warranty claim. No warranty if device was opened.