TRIDONIC

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TALEX:converter LCBI 25 W 700 mA BASIC phase-cut SR BASIC series

Product description

- Dimmable via leading-edge and trailing-edge phase dimmer
- Nominal life of 50,000 h (at ta max. 50 °C with a failure rate of max. 0.2 % per 1,000 h)
- 700 mA output current
- Screw terminals
- Connecting cable, wire cross-section $0.5 2.5 \text{ mm}^2$
- Output power 25 W
- SELV
- Type of protection IP20
- Output dimmed analogue (current amplitude)
- Dimming range typ. 5 to 100 % (depending on dimmer)

Properties

- Casing: polycarbonate, white
- Compact dimensions
- Overload protection
- Short-circuit protection
- No-load protection

Technical data

Rated supply voltage	220 – 240 V
Input voltage, AC	198 – 264 V
Mains frequency	50 / 60 Hz
Typ. rated current (at 230 V, 50 Hz, full load)	0.13 A
Power factor at full load®	0.99
Power factor at min. load®	0.97
Output current tolerance at full load®®	± 7.5 %
Typical ripple current at full load	± 30 %
Turn on time (at 230 V, 50 Hz, full load)	≤ 0.1 s
Turn off time (at 230 V, 50 Hz, full load)	≤ 0.1 s
Hold on time at power failure (output)	0 s
Ambient temperature ta	-25 +50 °C
Ambient temperature ta (at life-time 50,000 h)	50 °C
Max. casing temperature tc	75 °C
Storage temperature ts	-40 +85 °C
Dimensions L x W x H	145 x 51 x 30 mm

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Specific technical data

Туре	Efficiency	Efficiency	Output	Max. repetitive	Max. repetitive	Max. non-repetitive	Max. non-repetitive	Max.	Min.	Max.	Max.	Max.
	at full	at min.	current	output peak current	output peak current	output peak current	output peak current	forward	forward	output	input	output
	load®	load®		at full load®	at min. load®®	at full load®	at min. load®	voltage®	voltage®	voltage	power	power
LCBI 25W 700mA BASIC phase-cut SR	83 %	82 %	700 mA	950 mA	1,180 mA	950 mA	1,180 mA	35 V	16 V	39 V	30 W	25 W

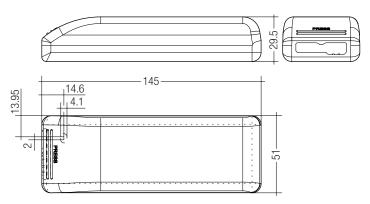
 $^{\scriptscriptstyle (1)}$ Test result at 230 V, 50 Hz.

 $^{\scriptscriptstyle (\! 2\!)}$ The trend between min. and full load is linear.

[®] Output current tolerance at min. load max. 22 %.

^④ At failure mode.





Ordering data

Туре	Article number	Packaging, carton	Packaging, pallet	Weight per pc.
LCBI 25W 700mA BASIC phase-cut SR	89800307	10 pc(s).	600 pc(s).	0.115 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

If the output voltage range is exceeded the LED control gear reduces the LED output current. After elimination of the overload the nominal operation is restored automatically.

Short-circuit behaviour

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

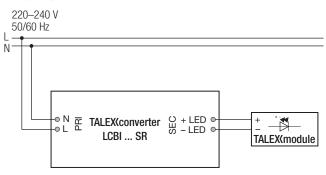
No-load operation

The LED control gear works in constant current mode. In no-load operation there is the max. output voltage at the output (see page 1).

Maximum loading of automatic circuit breakers

Automatic circuit									Inrus	h current
breaker type	C10	C13	C16	C20	B10	B13	B16	B20		
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	Imax	Time
LCBI 25W 700mA BASIC phase-cut SR	30	39	48	60	30	39	48	60	2.5 A	60 µs

Wiring diagram



Glow wire test according to IEC 60695-2-11 960 °C passed.

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 $1500\,V_{\rm AC}$ (or $1.414\,x\,1500\,V_{\rm DC}$). To avoid damage to the electronic devices this test must not be conducted.

Installation instructions

Note the requirements set out in the document LED_driver_installation_advise.pdf (http://www.tridonic.com/com/en/technical-docs.asp).

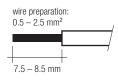
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

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 7.5-8.5 mm for the input terminal.

The max. torgue at the clamping screw (M3) is 0.5 Nm.

Input / Output terminal



Wiring instructions

The secondary leads should be separated from the mains connections and wiring for good EMC performance.

Maximum lead length on secondary side is 2 m. For a good EMC performance keep the the LED wiring as short as possible.

Additional information

Additional technical information at www.tridonic.com \rightarrow Technical Data

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

No warranty if device was opened.