



TALEXdriver LC 65W 250/300/350mA fixC Ip ADV
ADVANCED series

Product description

- Fixed output constant current built-in LED Driver
- Output current 250, 300 or 350 mA
- Max. output power 65 W
- Nominal life-time up to 50,000 h
- For class I luminaires
- Temperature protection as per EN 61347-2-13 C5e
- 5-year guarantee

Properties

- Low-profile metal casing with white cover
- Type of protection IP20

Functions

- Intelligent Temperature Guard (overtemperature protection)
- Short-circuit proof
- Overload protection
- Burst protection voltage 1 kV
- Surge protection voltage 1 kV (L to N)
- Surge protection voltage 2 kV (L/N to earth)



Standards, page 3

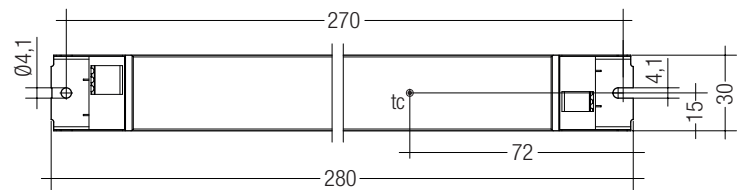
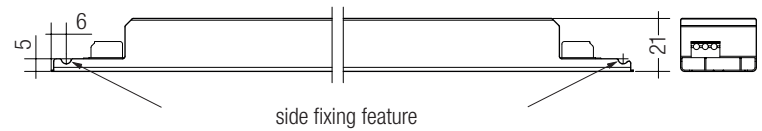
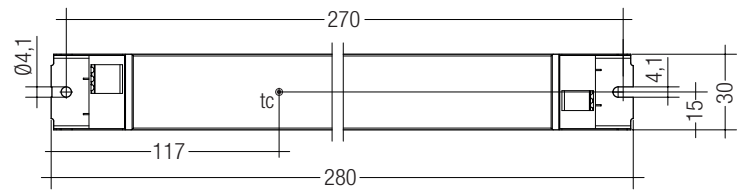
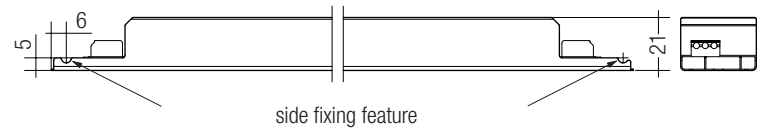


IP20 

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Technical data

Rated supply voltage	220 – 240 V
AC voltage range	198 – 264 V
Mains frequency	50 / 60 Hz
Overvoltage protection	300 V AC, 1 h
λ (at 230 V, 50 Hz, full load)	0.98
Leakage current (PE)	< 0.5 mA
THD (at 230 V, 50 Hz, full load)	< 20 %
Output current tolerance ^①	± 5 %
Typ. current ripple (at 230 V, 50 Hz, full load)	< 3 %
Max. output voltage	250 V
Time to light	< 0.5 s
Ambient temperature t_a	-20 ... +50 °C
Dimensions L x W x H	280 x 30 x 21 mm



Ordering data

Type	Article number	Packaging carton	Packaging, low volume	Packaging, high volume	Weight per pc.
LC 65W 250mA fixC Ip ADV	87500456	50 pc(s).	900 pc(s).	2,700 pc(s).	0.186 kg
LC 65W 300mA fixC Ip ADV	87500457	50 pc(s).	900 pc(s).	2,700 pc(s).	0.186 kg
LC 65W 350mA fixC Ip ADV	87500458	50 pc(s).	900 pc(s).	2,700 pc(s).	0.185 kg

Specific technical data

Type	Output current ^①	Min. forward voltage	Max. forward voltage	Max. output power	Input power (at 230 V, 50 Hz, full load)	Input current (at 230 V, 50 Hz, full load)	Efficiency (at 230 V, 50 Hz, full load)	Max. peak output current	tc point
LC 65W 250mA fixC Ip ADV	250 mA	112 V	250 V	62.5 W	67.5 W	305 mA	93 %	337.5 mA	65 °C
LC 65W 300mA fixC Ip ADV	300 mA	97 V	217 V	65.0 W	70.5 W	320 mA	92 %	405.0 mA	70 °C
LC 65W 350mA fixC Ip ADV	350 mA	83 V	186 V	65.0 W	70.5 W	320 mA	92 %	472.5 mA	70 °C

^① Output current is mean value.

Standards

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

Overload protection

LED Driver will switch off at overload operation. Mains reset is required to restart the LED Driver.

Overtemperature protection

The LED Driver will reduce output current at temporary thermal over-heating (exceeding max. t_c point).

Short-circuit behaviour

LED Driver will switch off in case of short-circuit of LED output. Mains reset is required to restart the LED Driver.

No-load operation or load loss during operation

LED Driver will detect a load loss during operation. In this case and no-load operation the max. output voltage can apply at the LED output for max. 5 s before LED Driver shuts down. Mains reset is required to restart the LED Driver.

Humidity: 5 % up to max. 85 %,
 not condensed
 (max. 56 days/year at 85 %)

Storage temperature: -40 °C up to max. +80 °C

The devices have to be within the specified temperature range (t_a) before they can be operated.

Temperature range

The LED Driver life duration is related to the ambient temperature t_a . The relation of t_c to t_a temperature depends also on the luminaire design. If the measured t_c temperature is approx. 5 K below t_c max. or higher, t_a temperature should be checked and eventually critical components (e.g. ELCAP) measured. Detailed information on request.

Expected life-time

Type	t_a	40 °C	50 °C	60 °C
LC 65W 250mA fixC Ip ADV	t_c	55 °C	65 °C	x
	life-time	50,000 h	30,000 h	x
LC 65W 300mA fixC Ip ADV	t_c	60 °C	70 °C	x
	life-time	50,000 h	30,000 h	x
LC 65W 350mA fixC Ip ADV	t_c	60 °C	70 °C	x
	life-time	50,000 h	30,000 h	x

x = not permitted

The LED Drivers are designed for a life-time stated above under reference conditions and with a failure probability of less than 10 %.

Maximum loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrush current	
Installation \emptyset	1,5 mm ²	1,5 mm ²	2,5 mm ²	2,5 mm ²	1,5 mm ²	1,5 mm ²	2,5 mm ²	2,5 mm ²	I_{max}	time
LC 65W 250mA fixC Ip ADV	12	18	24	28	6	9	12	14	34.9 A	233 μ s
LC 65W 300mA fixC Ip ADV	12	18	24	28	6	9	12	14	34.9 A	233 μ s
LC 65W 350mA fixC Ip ADV	12	18	24	28	6	9	12	14	34.9 A	233 μ s

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

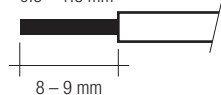
	THD	3.	5.	7.	9.	11.
LC 65W 250mA fixC Ip ADV	< 20	< 11	< 4	< 3	< 2	< 2
LC 65W 300mA fixC Ip ADV	< 20	< 11	< 4	< 3	< 2	< 2
LC 65W 350mA fixC Ip ADV	< 20	< 10	< 4	< 3	< 2	< 2

Installation instructions

Wiring type and cross section

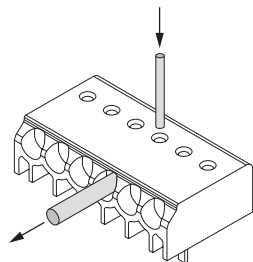
Solid wire with a cross section of 0.5–1.5 mm². Strip 8–9 mm of insulation from the cables to ensure perfect operation of terminals.

wire preparation:
0.5 – 1.5 mm²



Release of the wiring

Loosen wire through twisting and pulling or using a \emptyset 1 mm release tool.



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 and I sel wires is 2 m.
- Secondary switching is not permitted.
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metal parts, metal cable clips, louver, etc.).

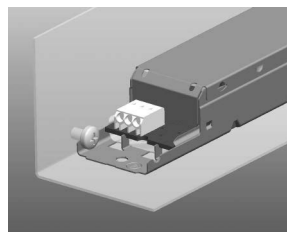
Additional information

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

Guarantee conditions at
www.tridonic.com → Services

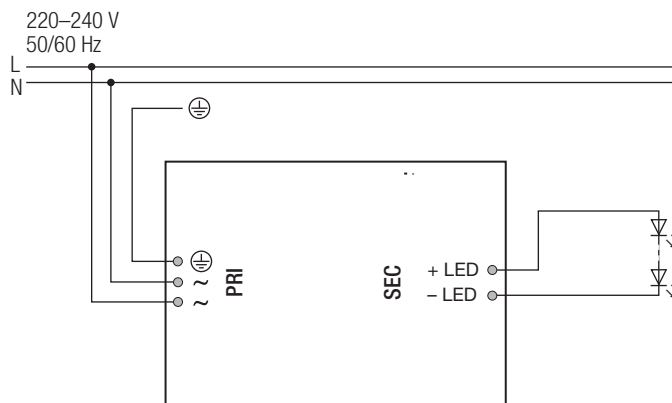
No warranty if device was opened.

Side fixing feature



Screw M4, screw head diameter 8–10 mm

Circuit diagram



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.

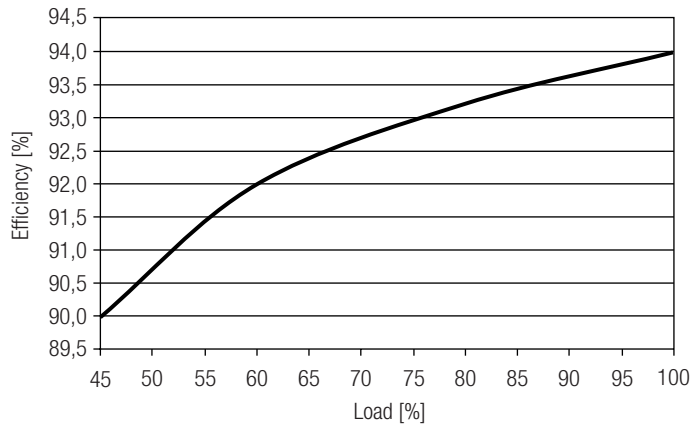
According to IEC 60598-1 Annex Q (informative only!) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with 500 V_{DC} for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.

The isolation resistance must be at least 2 M Ω .

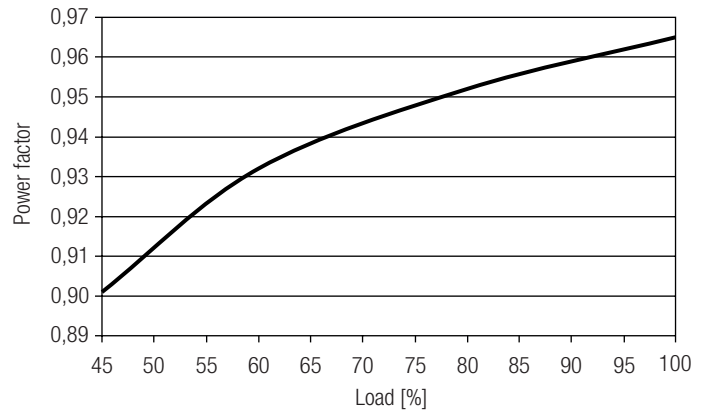
As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with 1500 V_{AC} (or 1.414 x 1500 V_{DC}). To avoid damage to the electronic devices this test must not be conducted.

Diagrams LC 65W 250mA fixC Ip ADV

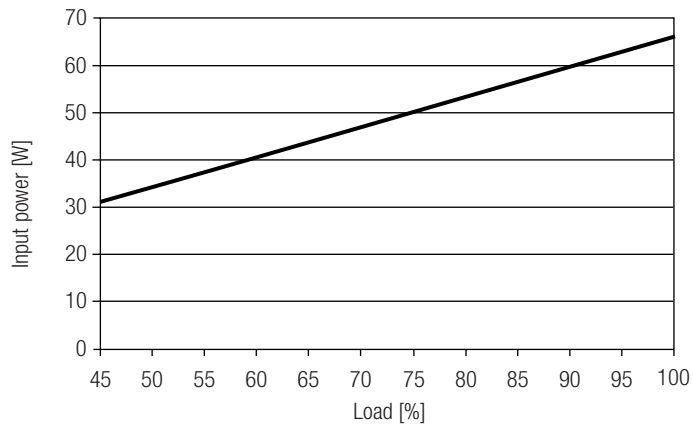
Efficiency vs load



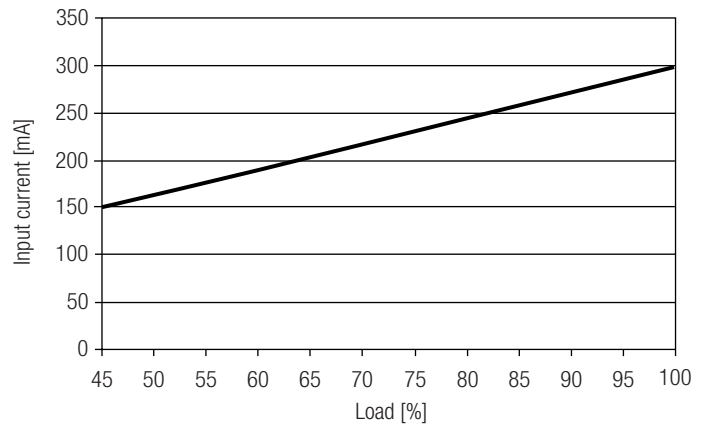
Power factor vs load



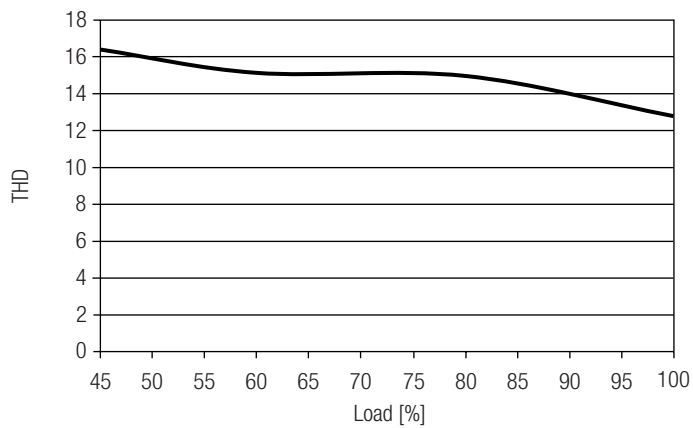
Input power vs load



Input current vs load

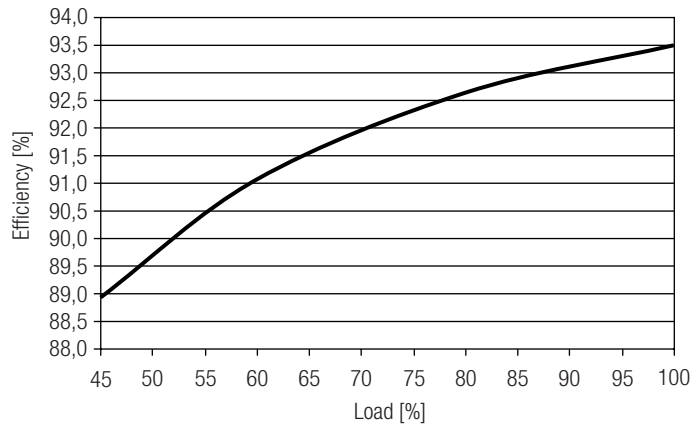


THD vs load

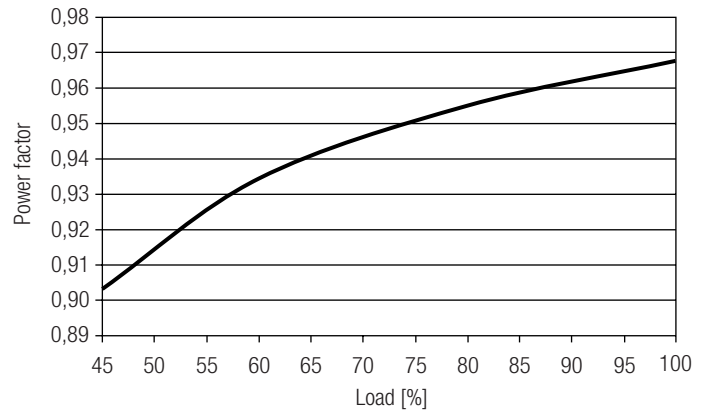


Diagrams LC 65W 300mA fixC Ip ADV

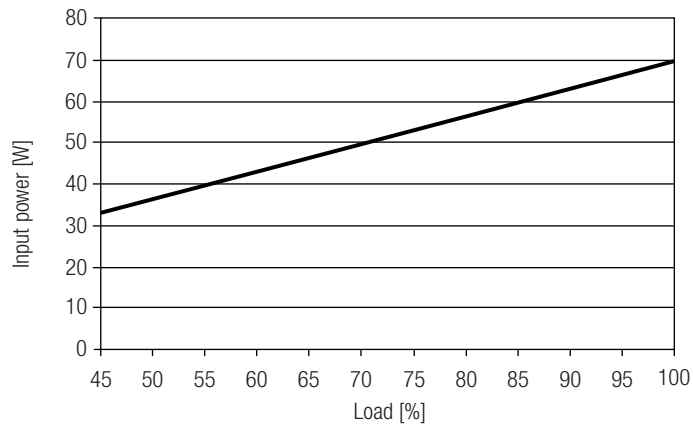
Efficiency vs load



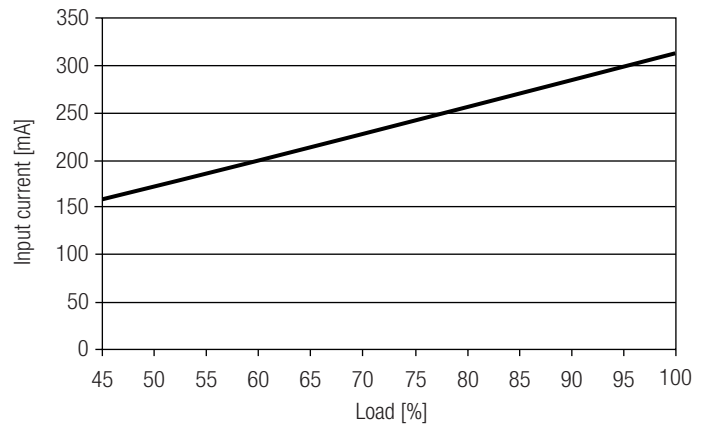
Power factor vs load



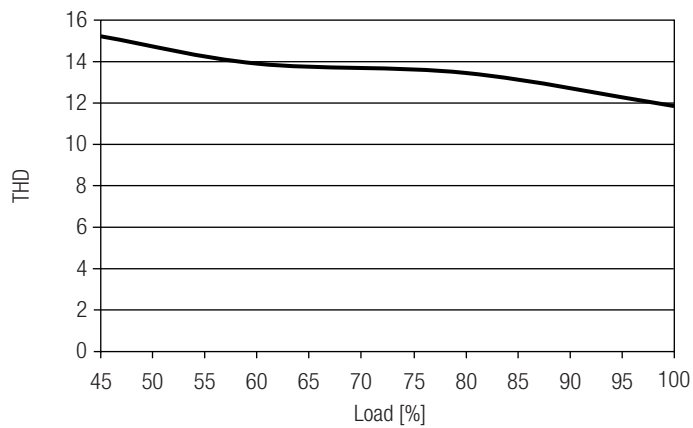
Input power vs load



Input current vs load

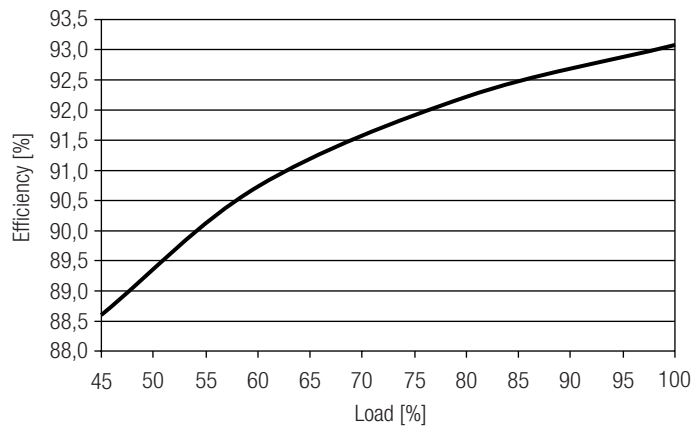


THD vs load

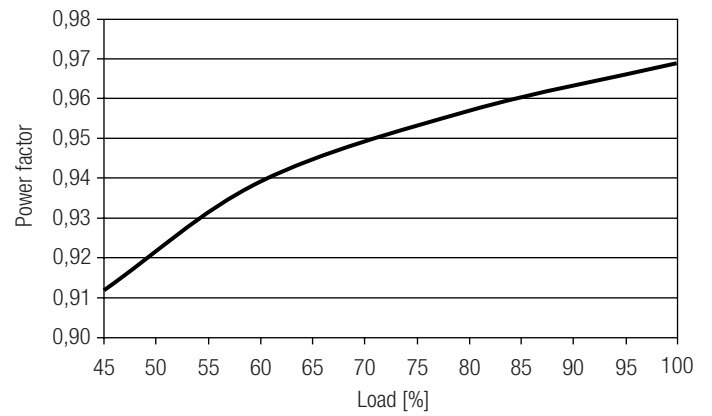


Diagrams LC 65W 350mA fixC Ip ADV

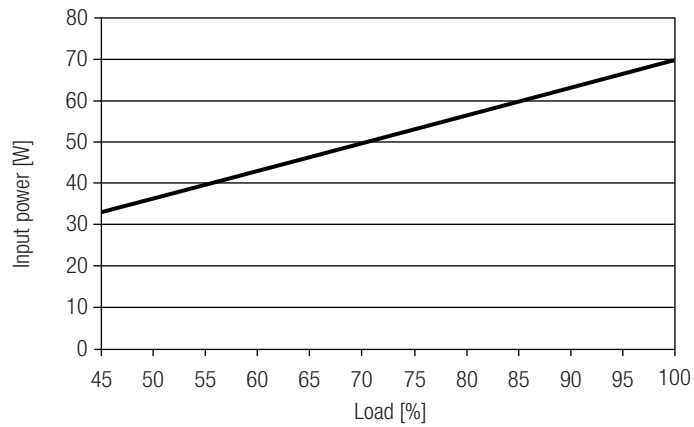
Efficiency vs load



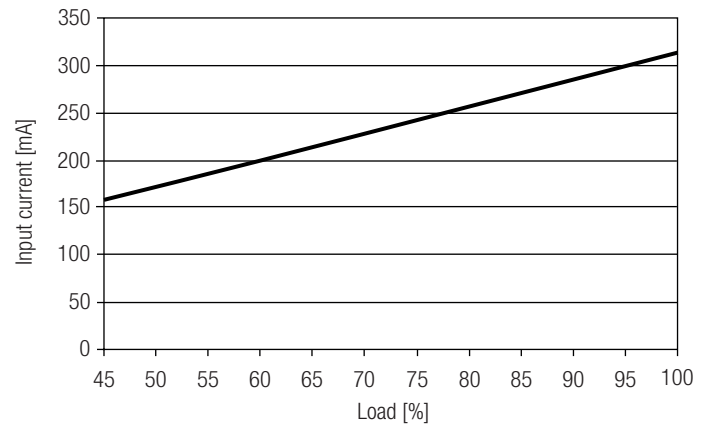
Power factor vs load



Input power vs load



Input current vs load



THD vs load

