TALEXdriver LC 25/30/35/40W 600/700/800/900mA fixC SC ADV

ADVANCED series

Product description

- Fixed output LED Driver
- Can be either used build-in or independent with clip-on strain-relief (see accessory)
- Constant current LED Driver
- Output current 600, 700, 800 or 900 mA
- Max. output power 26.5, 31, 35 or 40.5 W
- Nominal life-time up to 50,000 h
- For luminaires of protection class I and protection class II
- Temperature protection as per EN 61347-2-13 C5e
- Independent LED Driver with cable clamps
- 5-year guarantee

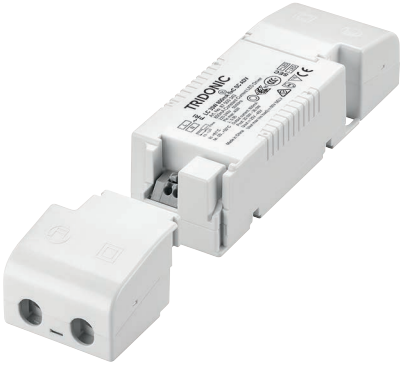
Properties

- Casing: polycarbonat, white
- Type of protection IP20

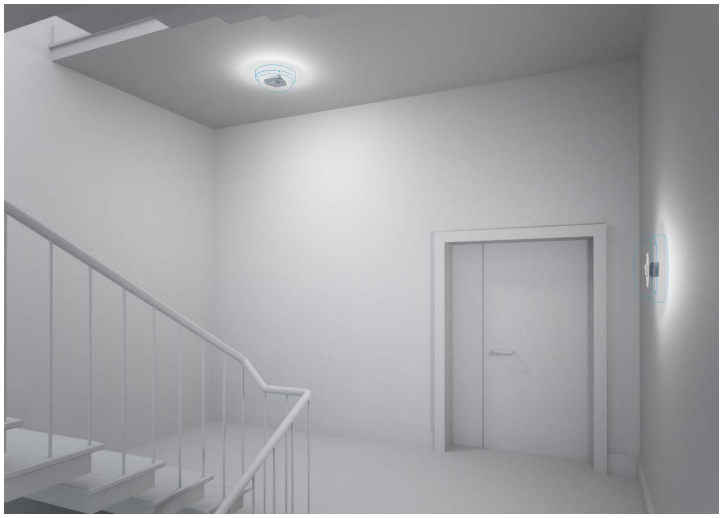
Functions

- Overtemperature protection
- Overload protection
- Short-circuit protection
- No-load protection

Standards, page 3
Wiring diagrams and installation examples, page 4



With strain-relief



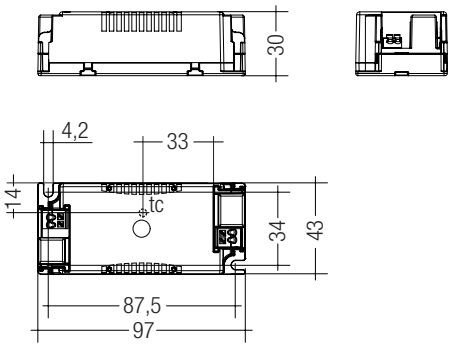
IP20 SELV RoHS

TALEXdriver LC 25/30/35/40W 600/700/800/900mA fixC SC ADV

ADVANCED series

Technical data

Rated supply voltage	220 – 240 V
AC voltage range	198 – 264 V
Mains frequency	50 / 60 Hz
Overvoltage protection	320 V AC, 1 h
THD (at 230 V, 50 Hz, full load)	< 20 %
Output current tolerance	± 7.5 %
Typ. current ripple (at 230 V, 50 Hz, full load)	± 5 %
Max. output voltage	60 V
Turn on time (at 230 V, 50 Hz, full load)	≤ 0.5 s
Turn off time (at 230 V, 50 Hz, full load)	≤ 0.2 s
Hold on time at power failure (output)	0 s
Ambient temperature ta	-20 ... +50 °C
Ambient temperature ta (at life-time 50,000 h)	40 °C
Storage temperature ts	-40 ... +80 °C
Dimensions L x W x H	97 x 43 x 30 mm
Dimensions with strain-relief L x W x H	157 x 43 x 30 mm



Ordering data

Type	Article number	Packaging, carton	Packaging, low volume	Packaging, high volume	Weight per pc.
LC 25W 600mA fixC SC ADV	**87500341**	15 pc(s).	480 pc(s).	3,840 pc(s).	0.099 kg
LC 30W 700mA fixC SC ADV	**87500342**	15 pc(s).	480 pc(s).	3,840 pc(s).	0.101 kg
LC 35W 700mA fixC SC ADV	**87500450**	15 pc(s).	480 pc(s).	3,840 pc(s).	0.100 kg
LC 35W 800mA fixC SC ADV	**87500343**	15 pc(s).	480 pc(s).	3,840 pc(s).	0.101 kg
LC 40W 900mA fixC SC ADV	**87500344**	15 pc(s).	480 pc(s).	3,840 pc(s).	0.102 kg

Specific technical data

Type	Output current	Input current (at 230 V, 50 Hz, full load)	Input power (at 230 V, 50 Hz, full load)	Output power range	Power factor at full load①	Efficiency at full load①	Power factor at min. load①	Efficiency at min. load①	Min. forward voltage	Max. forward voltage	Max. output peak current at full load②	Max. output peak current at min. load②	Max. casing temperature tc
LC 25W 600mA fixC SC ADV	600 mA	0.133 A	30.0 W	13.0 – 26.5 W	0.95	88 %	0.9C	81 %	21.4 V	44 V	774 mA	900 mA	80 °C
LC 30W 700mA fixC SC ADV	700 mA	0.153 A	34.3 W	15.0 – 31.0 W	0.95	88 %	0.9C	82 %	21.4 V	44 V	903 mA	1,000 mA	83 °C
LC 35W 700mA fixC SC ADV	700 mA	0.174 A	40.0 W	17.5 – 35.0 W	0.95	88 %	0.9C	82 %	25.0 V	50 V	903 mA	1,000 mA	75 °C
LC 35W 800mA fixC SC ADV	800 mA	0.181 A	40.0 W	20.0 – 36.0 W	0.95	89 %	0.9C	83 %	25.0 V	45 V	1,032 mA	1,100 mA	81 °C
LC 40W 900mA fixC SC ADV	900 mA	0.210 A	45.3 W	22.5 – 40.5 W	0.95	89 %	0.9C	83 %	25.0 V	45 V	1,161 mA	1,200 mA	83 °C

① Test result at 230 V, 50 Hz.

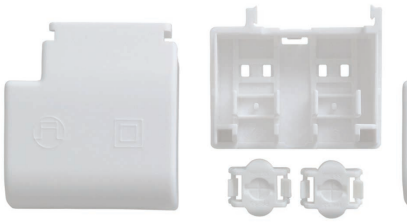
② The trend between min. and full load is linear.

ACCES-SORIES

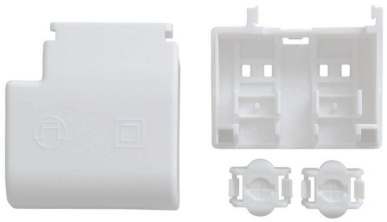
Strain-relief set 43x30mm

Product description

- Optional strain-relief set for independent applications
- Transforms the LED Driver into a fully class II compatible LED Driver (e.g. ceiling installation)
- Easy and tool-free mounting to the LED Driver, screwless cable-clamp channels for long strain-relief (30 x 43 x 30 mm)
- With screws for short strain-relief (15 x 43 x 30 mm)
- Overall length = length L (LED Driver) + 2 x 30 mm (long strain-relief set), 2 x 15 mm (short strain-relief) or long and short strain-relief any combination
- Standard SC (L = 30 mm) available as non-pre-assembled and pre-assembled
- Short SC (L = 15 mm) only pre-assembled available



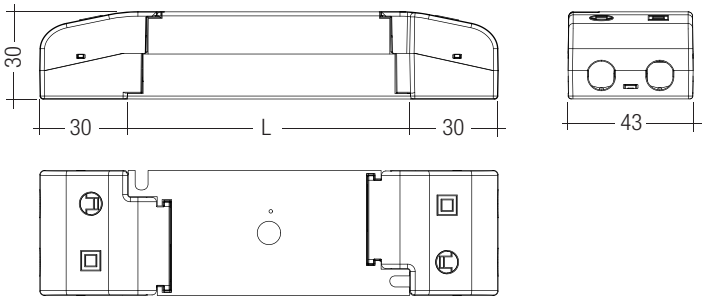
ACU SC 30x43x30mm CLIP-ON SR SET (28001168, non-pre-assembled)



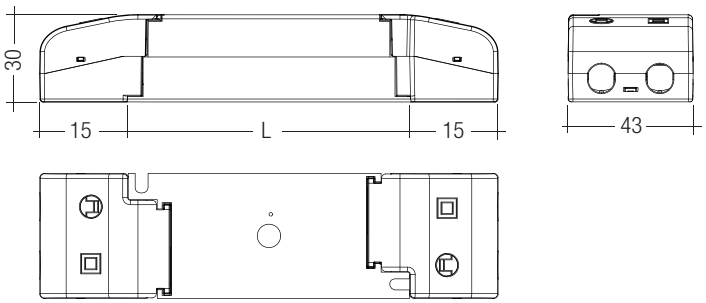
ACU SC 30x43x30mm CLIP-ON SR SET 300 (28001351, non-pre-assembled, 300 pcs. packaging)

ACU SC 30x43x30mm CLIP-ON SR PA (28001699, pre-assembled)

ACU SC 15x43x30mm CLIP-ON SR PA (28001574, pre-assembled)



ACU SC 30x43x30mm CLIP-ON SR SET / PA



ACU SC 15x43x30mm CLIP-ON SR PA

Ordering data

Type	Article number	Packaging carton[1]	Packaging outer box	Weight per pc.
ACU SC 43x30mm CLIP-ON SR SET	**28001168**	10 pc(s).	500 pc(s).	0.021 kg
ACU SC 43x30mm CLIP-ON SR SET 300	**28001351**	300 pc(s).	300 pc(s).	0.021 kg
ACU SC 30x43x30mm CLIP-ON SR PA	**28001699**	10 pc(s).	500 pc(s).	0.021 kg
ACU SC 15x43x30mm CLIP-ON SR PA	**28001574**	10 pc(s).	1,200 pc(s).	0.010 kg

[1] 28001168: A carton of 10 pcs. is equal to 10 sets, each with 2 strain-reliefs parts.
28001351: A carton of 300 pcs. is equal to 300 sets, each with 2 strain-reliefs parts.
28001699 + 28001574: A carton contains exactly 10 pcs. strain-reliefs (no sets).

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 Driver reduces the LED output current. If the output voltage is exceeded by a certain degree the driver will start working in a pulsed light output mode. After elimination of the overload the nominal operation is restored automatically.

Overtemperature protection
The LED Driver will reduce the LED output current or it works in a pulsed light output mode if the temperature reaches a certain degree.

Short-circuit behaviour
In case of a short circuit on the secondary side (LED) the LED Driver switches off. After elimination of the short-circuit fault the LED Driver will recover automatically.

No-load operation
The LED Driver will work in a pulsed light output mode to limit the output voltage lower than 60 V which allows the application to be able to work safely when LED string opens due to a failure.

Output over voltage protection
The LED Driver will work in a pulsed light output mode to limit the output voltage lower than 60 V, even in fault conditions.

Installation instructions
The LED module and all contact points within the wiring must be sufficiently insulated against 1 kV surge voltage.
Air and creepage distance must be maintained.

Replace LED module
1. Mains off
2. Remove LED module
3. Wait for 10 seconds
4. Connect LED module again

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

Expected life-time

Type	ta	40 °C	50 °C
LC 25W 600mA fixC SC ADV	tc②	65 °C①	75 °C①
	Life-time	50,000 h	30,000 h
LC 30W 700mA fixC SC ADV	tc②	67 °C①	77 °C①
	Life-time	50,000 h	30,000 h
LC 35W 700mA fixC SC ADV	tc②	65 °C①	75 °C①
	Life-time	50,000 h	30,000 h
LC 35W 800mA fixC SC ADV	tc②	67 °C①	77 °C①
	Life-time	50,000 h	30,000 h
LC 40W 900mA fixC SC ADV	tc②	68 °C①	78 °C①
	Life-time	50,000 h	30,000 h

① Test result at max. output voltage.

② The tc temperature could be higher with different output voltages (refer to the tc vs. output voltage diagram for the details).

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

Glow-wire test
according to EN 61347-1 with increased temperature of 960 °C passed.

Mounting of device
Max. torque for fixing: 0.5 Nm/M4

Storage conditions
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 (ta) before they can be operated.

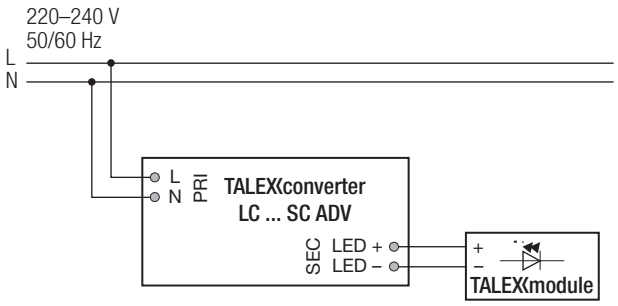
Maximum loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrush current	
Installation Ø	1.5 mm²	1.5 mm²	1.5 mm²	2.5 mm²	1.5 mm²	1.5 mm²	1.5 mm²	2.5 mm²	I_{max}	Time
LC 25W 600mA fixC SC ADV	20	30	40	47	10	15	20	24	25 A	150 µs
LC 30W 700mA fixC SC ADV	20	30	40	47	10	15	20	24	25 A	150 µs
LC 35W 700mA fixC SC ADV	20	30	40	47	10	15	20	24	25 A	150 µs
LC 35W 800mA fixC SC ADV	20	30	40	47	10	15	20	24	25 A	150 µs
LC 40W 900mA fixC SC ADV	20	30	40	47	10	15	20	24	25 A	150 µs

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

	THD	3.	5.	7.	9.	11.
LC 25W 600mA fixC SC ADV	< 20	< 7	< 3	< 3	< 3	< 3
LC 30W 700mA fixC SC ADV	< 20	< 7	< 3	< 3	< 3	< 3
LC 35W 700mA fixC SC ADV	< 20	< 7	< 4	< 4	< 3	< 3
LC 35W 800mA fixC SC ADV	< 20	< 7	< 3	< 3	< 3	< 3
LC 40W 900mA fixC SC ADV	< 20	< 7	< 3	< 3	< 3	< 3

Wiring 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 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

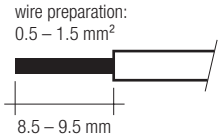
Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

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

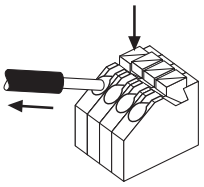
Installation instructions

Wiring type and cross section
The wiring can be in stranded wires with ferrules or solid with a cross section of 0.5–1.5 mm². Strip 8.5–9.5 mm of insulation from the cables to ensure perfect operation of the push-wire terminals.
Use one wire for each terminal connector only.



Release of the wiring

Press down the “push button” and remove the cable from front.

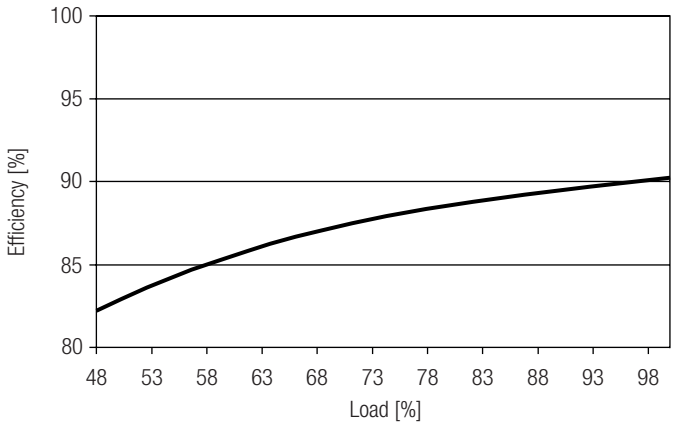


Wiring guidelines

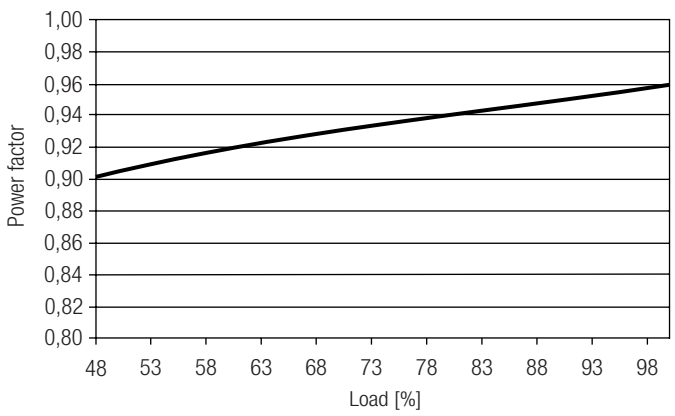
- All connections must be kept as short as possible to ensure good EMI behaviour.
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Max. lenght of output wires is 2 m.
- Secondary switching is not permitted.
- Incorrect wiring can demage LED modules.
-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

Diagrams LC 25W 600mA fixC SC ADV

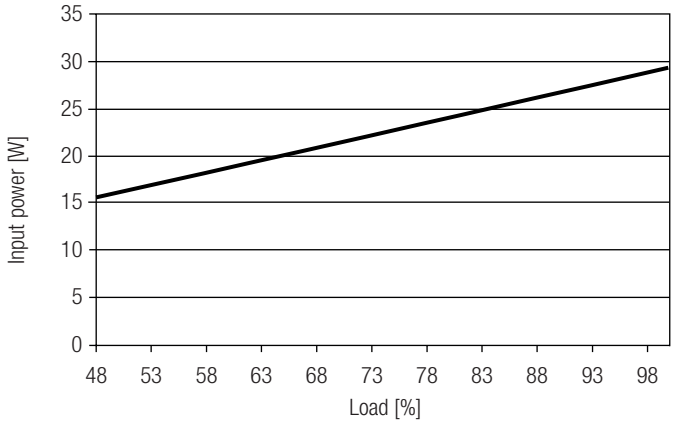
Efficiency vs load



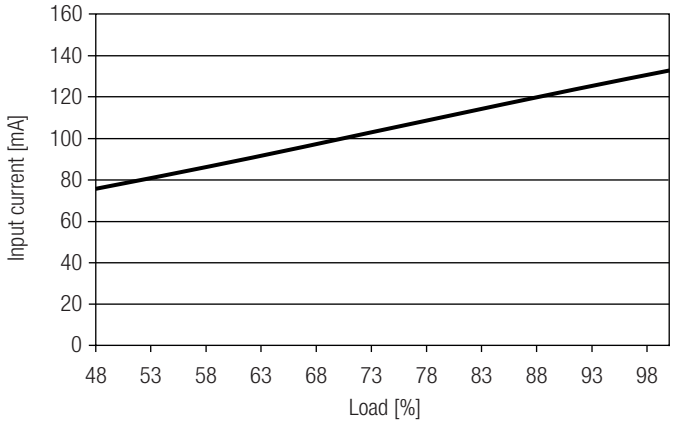
Power factor vs load



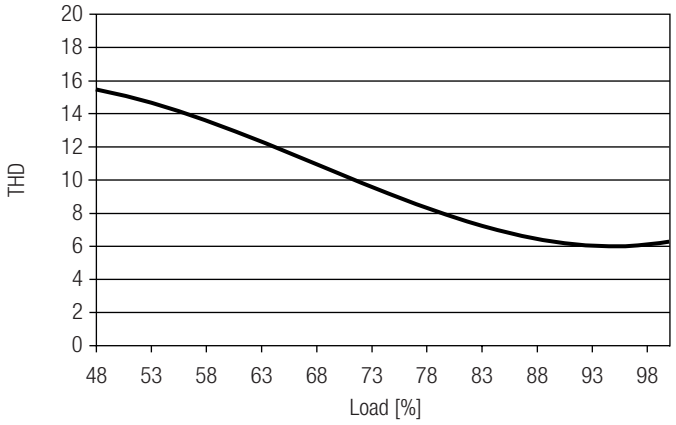
Input power vs load



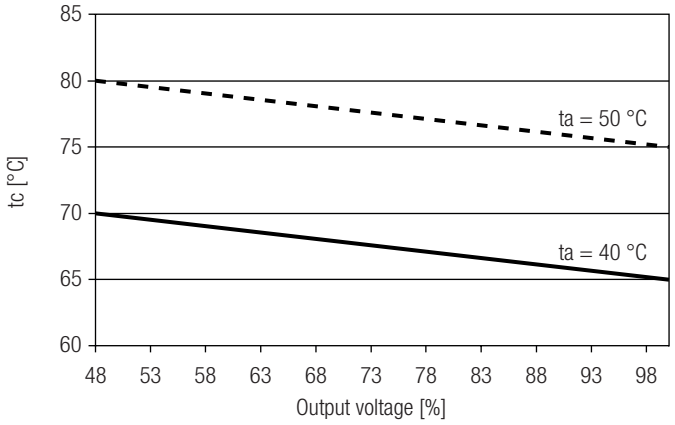
Input current vs load



THD vs load

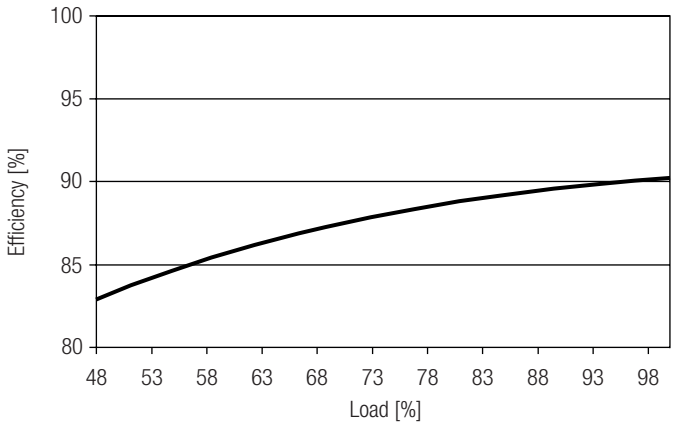


tc vs output voltage

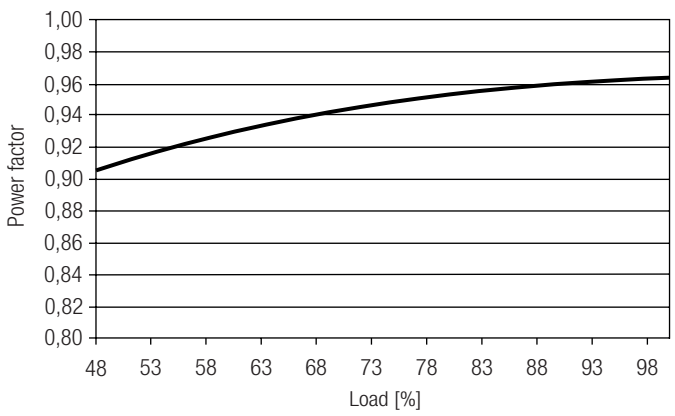


Diagrams LC 30W 700mA fixC SC ADV

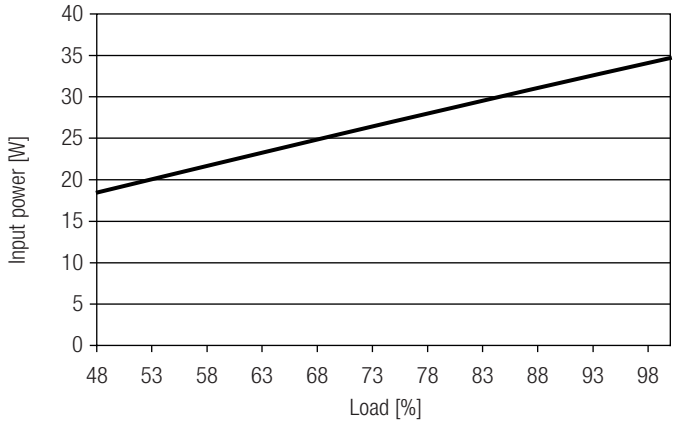
Efficiency vs load



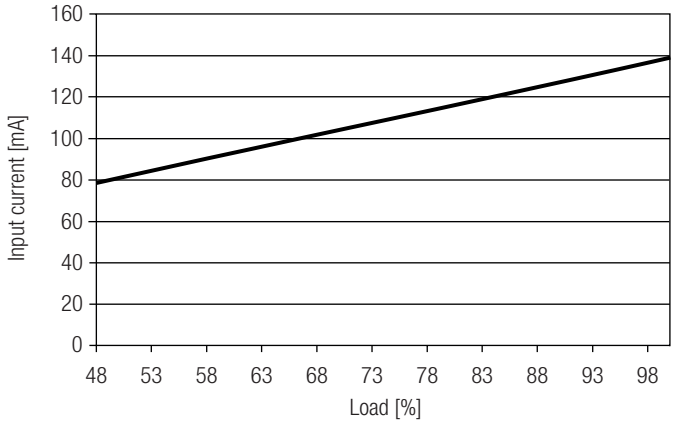
Power factor vs load



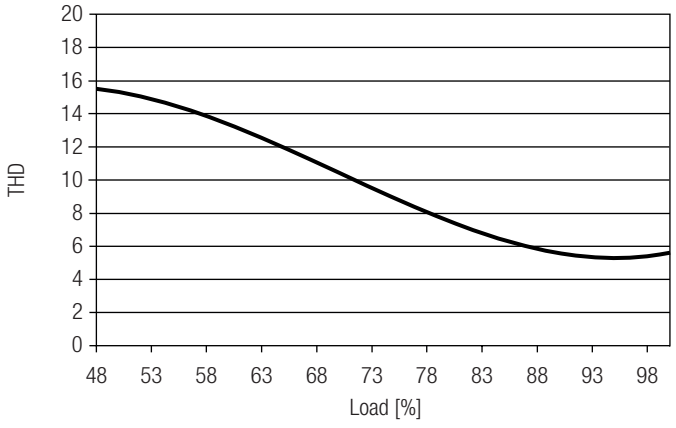
Input power vs load



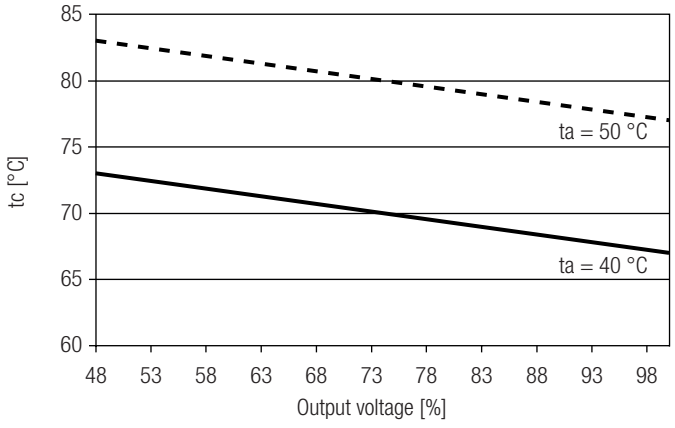
Input current vs load



THD vs load

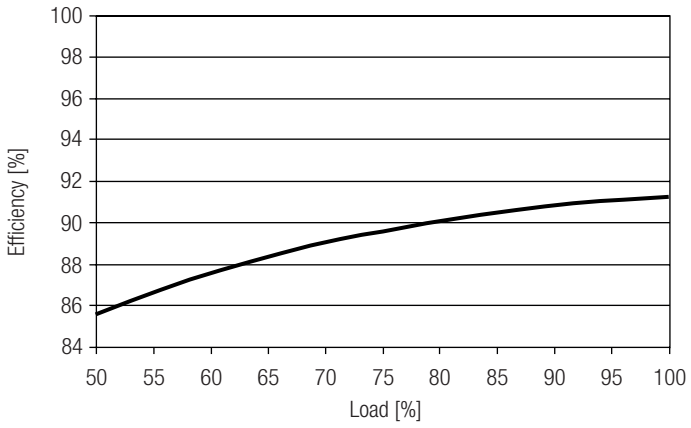


tc vs output voltage

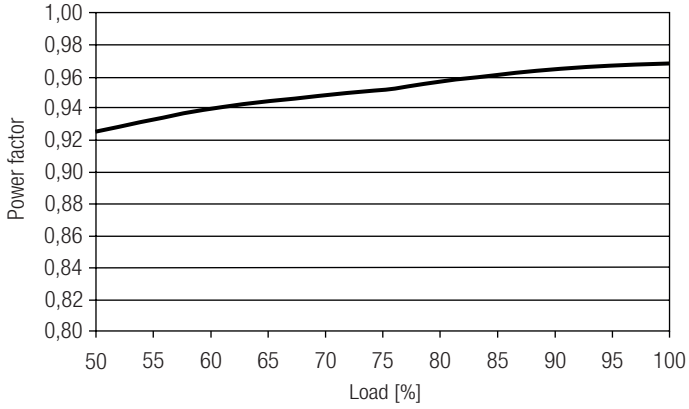


Diagrams LC 35W 700mA fixC SC ADV

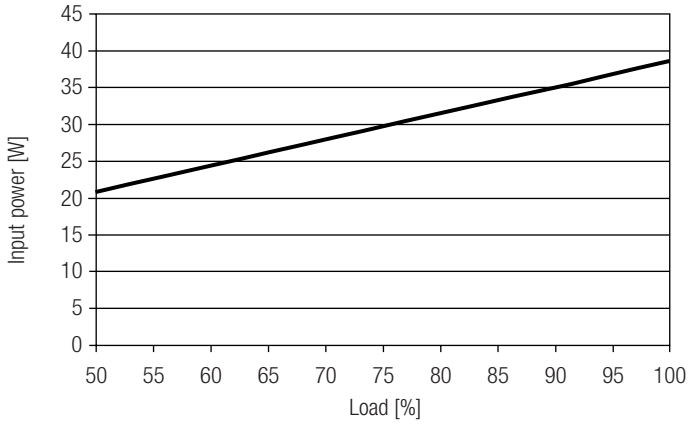
Efficiency vs load



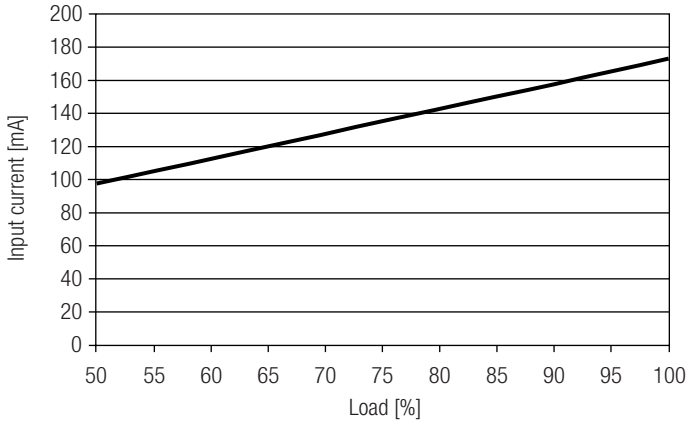
Power factor vs load



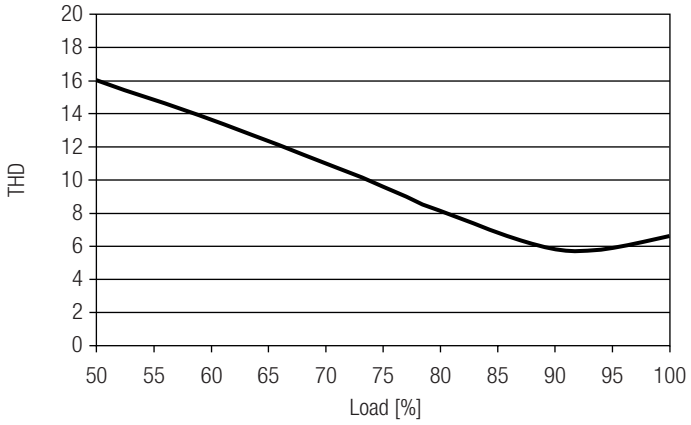
Input power vs load



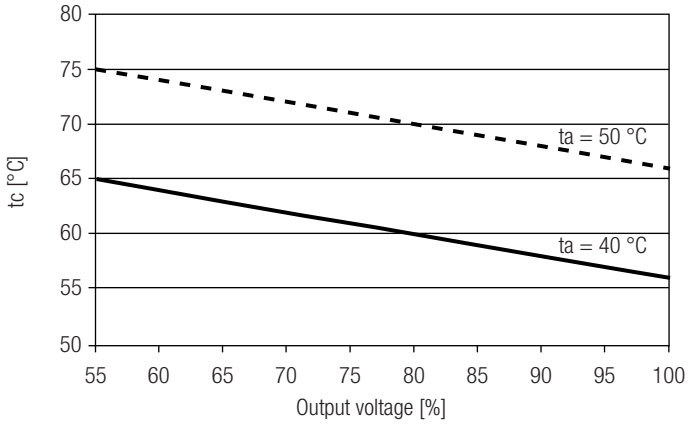
Input current vs load



THD vs load

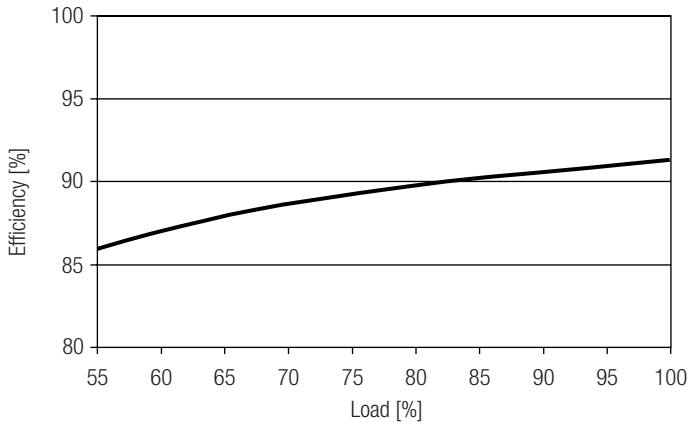


tc vs output voltage

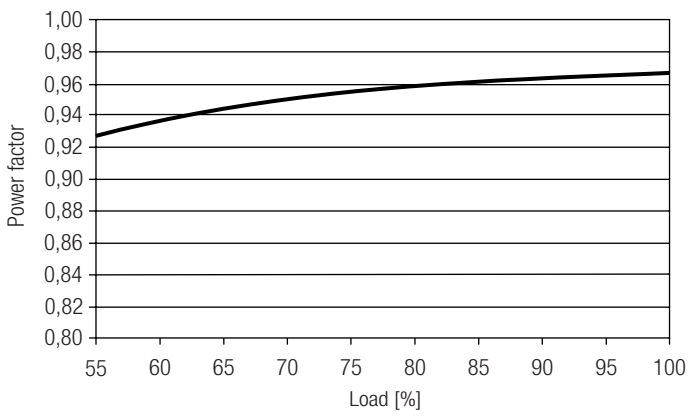


Diagrams LC 35W 800mA fixC SC ADV

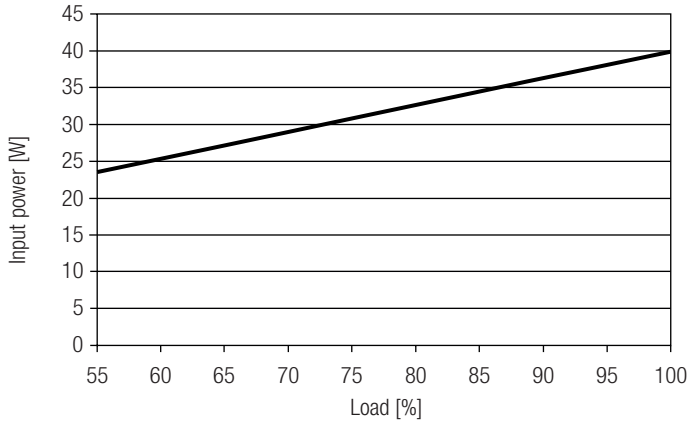
Efficiency vs load



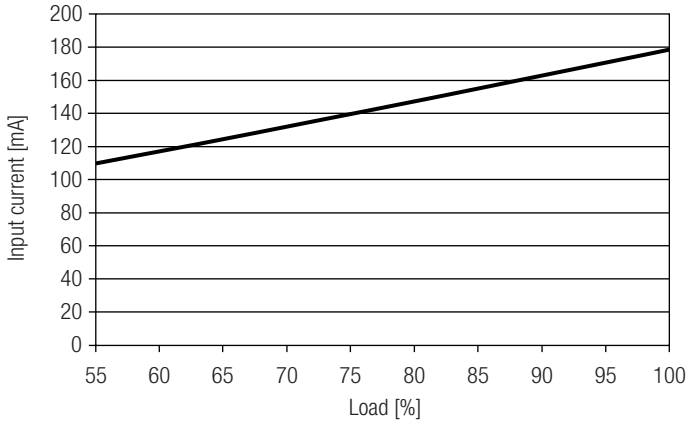
Power factor vs load



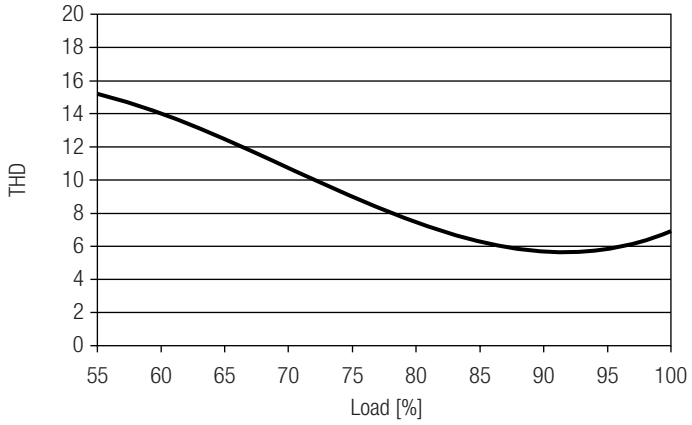
Input power vs load



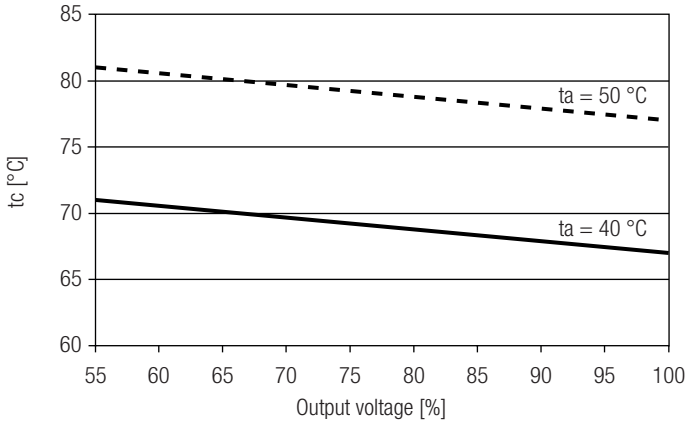
Input current vs load



THD vs load

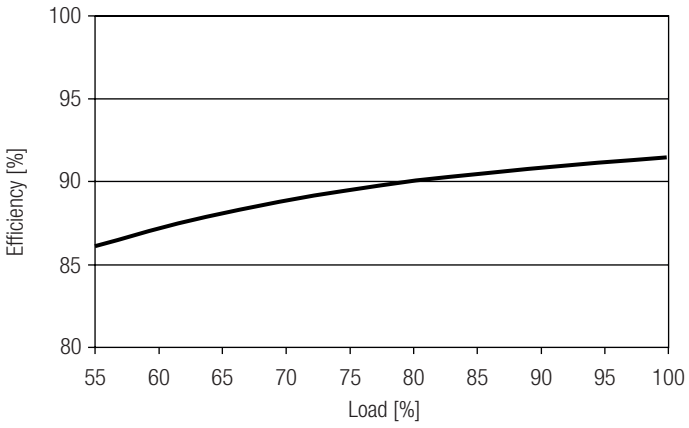


tc vs output voltage

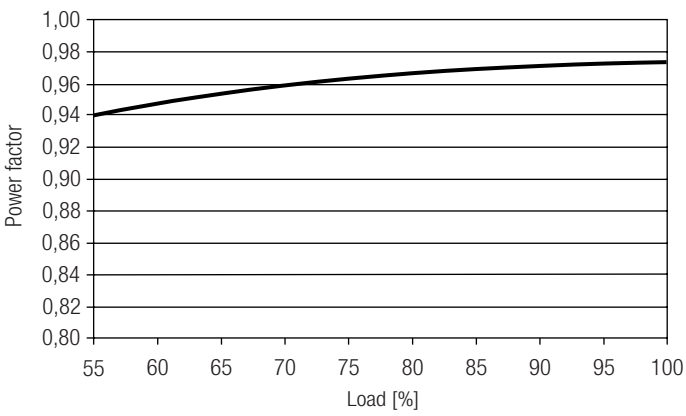


Diagrams LC 40W 900mA fixC SC ADV

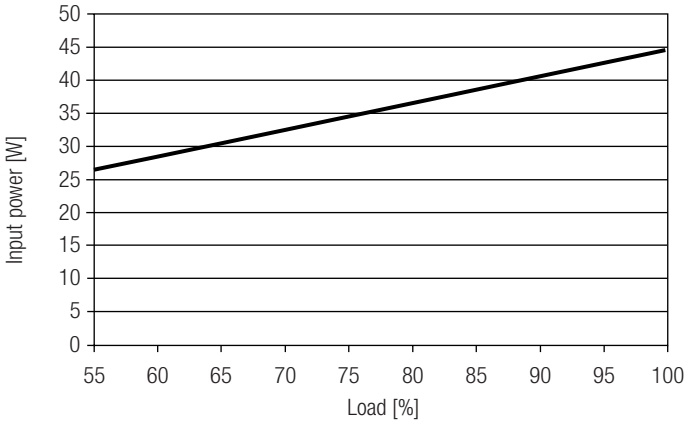
Efficiency vs load



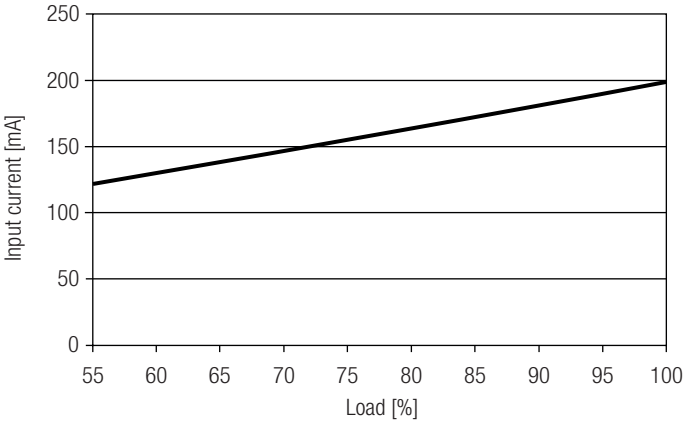
Power factor vs load



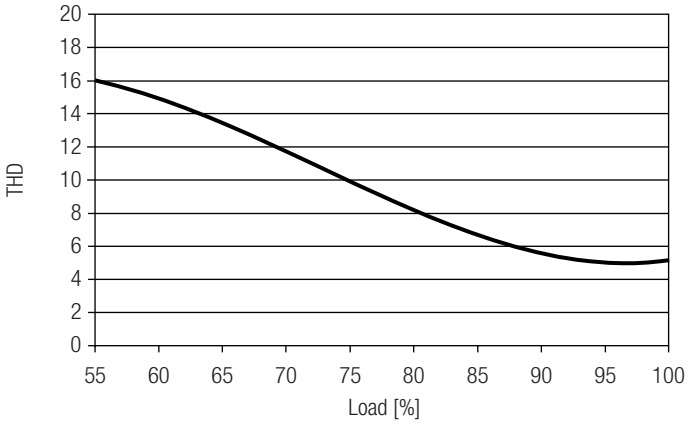
Input power vs load



Input current vs load



THD vs load



tc vs output voltage