



TALEXconverter LCI 35W 250/300/350mA TEC Ip TEC series

Product description

- Fixed output constant current built-in LED control gear
- Output current 250, 300 or 350 mA
- Max. output power 35 W
- Nominal life-time up to 50,000 h
- For class I luminaires
- 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



Standards, page 3

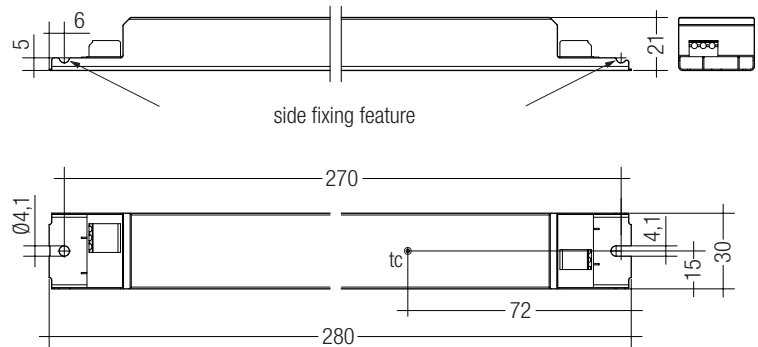


IP20     RoHS

TALEXconverter LCI 35W 250/300/350mA TEC Ip TEC series

Technical data

Rated supply voltage	220 – 240 V
Input voltage, AC	198 – 264 V
Typ. current (at 230 V, 50 Hz, full load)	0.19 A
Mains frequency	50 / 60 Hz
λ (at 230 V, 50 Hz, full load)	0.95
Leakage current (PE)	< 0.5 mA
THD (at 230 V, 50 Hz, full load)	< 20 %
Output current tolerance	± 7.5 %
Output current ripple	± 15 %
Max. output voltage (no-load 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.
LCI 35W 250mA TEC Ip	87500322	50 pc(s).	900 pc(s).	2,700 pc(s).	0.183 kg
LCI 35W 300mA TEC Ip	87500323	50 pc(s).	900 pc(s).	2,700 pc(s).	0.182 kg
LCI 35W 350mA TEC Ip	87500324	50 pc(s).	900 pc(s).	2,700 pc(s).	0.183 kg

Specific technical data

Type	Output current	Min. output voltage	Max. output 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. repetitive output peak current	Max. non-repetitive output peak current	tc point
LCI 35W 250mA TEC Ip	250 mA	47 V	140 V	35 W	39.5 W	190 mA	90 %	300 mA	337.5 mA	70 °C
LCI 35W 300mA TEC Ip	300 mA	47 V	117 V	35 W	39.5 W	190 mA	89 %	360 mA	405.0 mA	70 °C
LCI 35W 350mA TEC Ip	350 mA	45 V	100 V	35 W	39.5 W	190 mA	89 %	420 mA	472.5 mA	70 °C

Standards

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

Overload protection

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

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

Overtemperature protection

The LED control gear will reduce output current at temporary thermal over-heating (exceeding max. tc point).

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

Short-circuit behaviour

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

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

No-load operation or load loss during operation

LED control gear 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 control gear shuts down. Mains reset is required to restart the LED control gear.

Expected life-time

Type	ta	40 °C	50 °C	60 °C
LCI 35W 250mA TEC Ip	tc	60 °C	70 °C	x
	life-time	50,000 h	30,000 h	x
LCI 35W 300mA TEC Ip	tc	60 °C	70 °C	x
	life-time	50,000 h	30,000 h	x
LCI 35W 350mA TEC Ip	tc	60 °C	70 °C	x
	life-time	50,000 h	30,000 h	x

x = not permitted

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	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
LCI 35W 250mA TEC Ip	24	42	46	54	12	21	23	27	23.3 A	168 µs
LCI 35W 300mA TEC Ip	24	42	46	54	12	21	23	27	23.3 A	168 µs
LCI 35W 350mA TEC Ip	24	42	46	54	12	21	23	27	23.3 A	168 µs

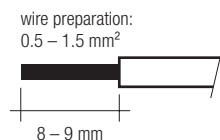
Harmonic distortion in the mains supply (at 230V/50Hz and full load) in %

	THD	3.	5.	7.	9.	11.
LCI 35W 250mA TEC Ip	< 20	< 11	< 5	< 3	< 3	< 2
LCI 35W 300mA TEC Ip	< 20	< 11	< 5	< 3	< 3	< 2
LCI 35W 350mA TEC Ip	< 20	< 11	< 5	< 3	< 3	< 2

Installation instructions

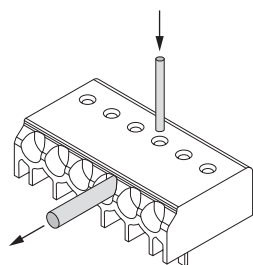
Wiring type and cross section

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.



Release of the wiring

Loosen wire through twisting and pulling or using a Ø 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 control gear 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.).

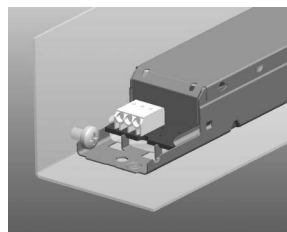
Additional information

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

Guarantee conditions at
www.tridonic.com → Services

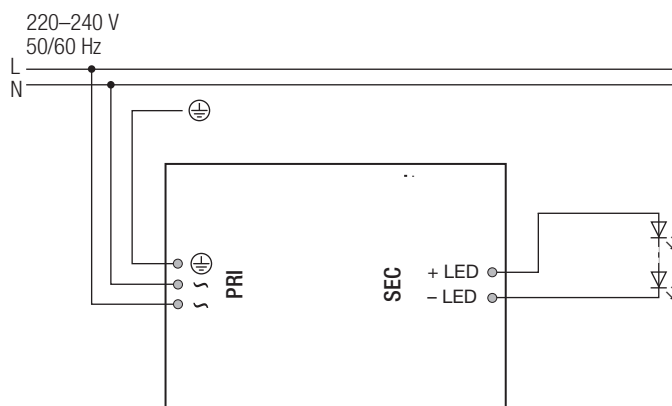
No warranty if device was opened.

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.

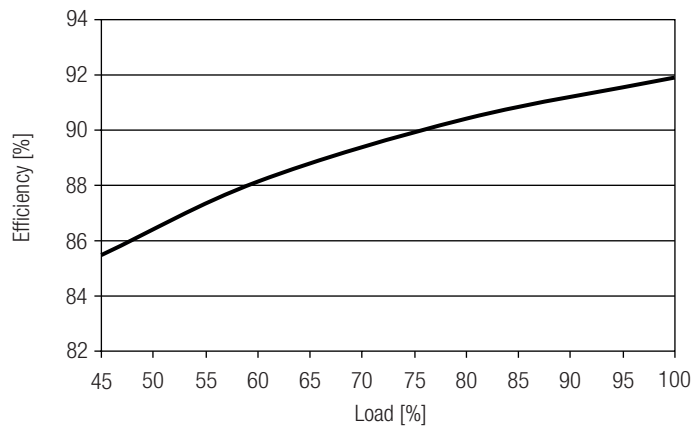
According to IEC 60598-1 Annex Q (informative only) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with 500 V_{DC} for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.

The isolation resistance must be at least 2 MΩ.

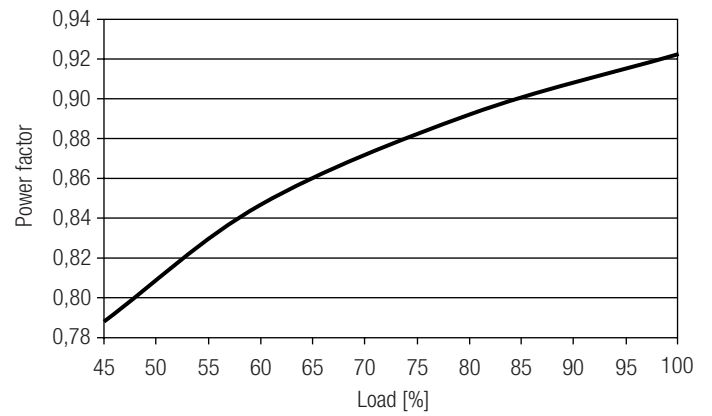
As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with 1500 V_{AC} (or 1.414 x 1500 V_{DC}). To avoid damage to the electronic devices this test must not be conducted.

Diagrams LCI 35W 250mA TEC Ip

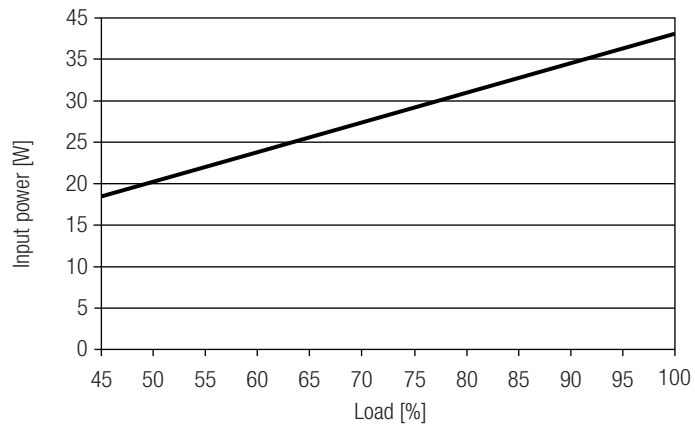
Efficiency vs load



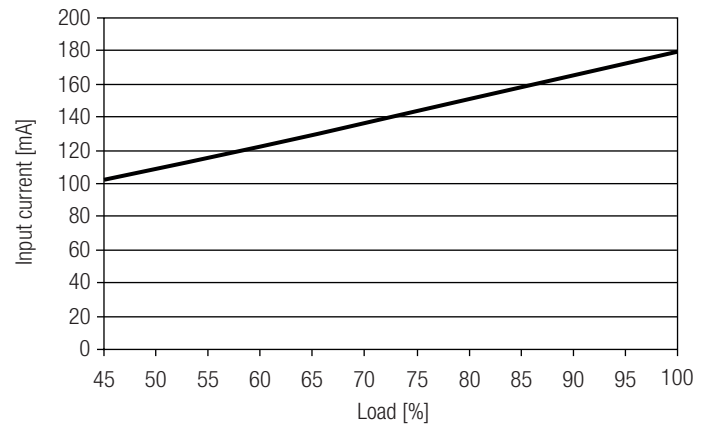
Power factor vs load



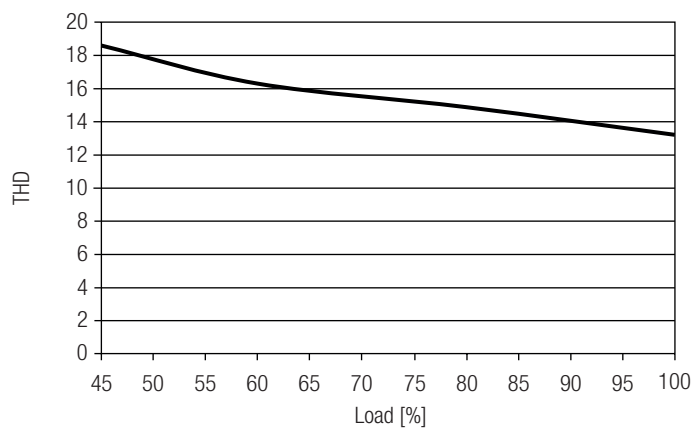
Input power vs load



Input current vs load

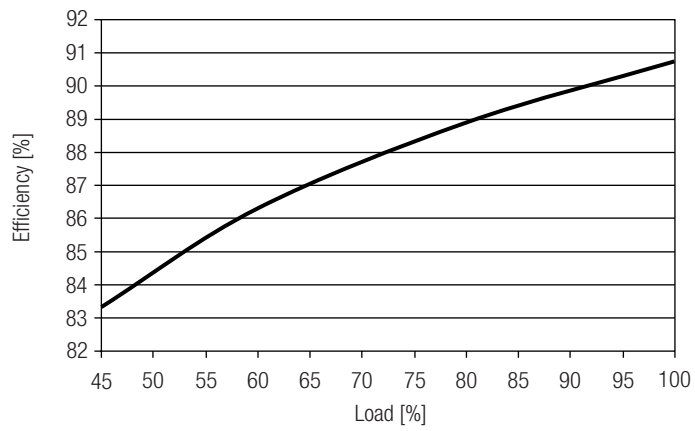


THD vs load

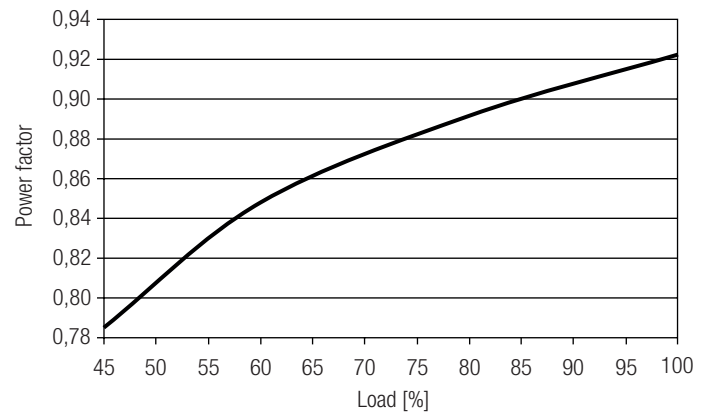


Diagrams LCI 35W 300mA TEC Ip

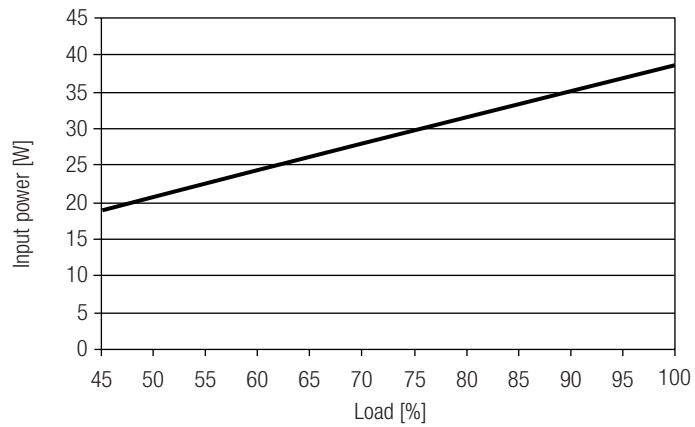
Efficiency vs load



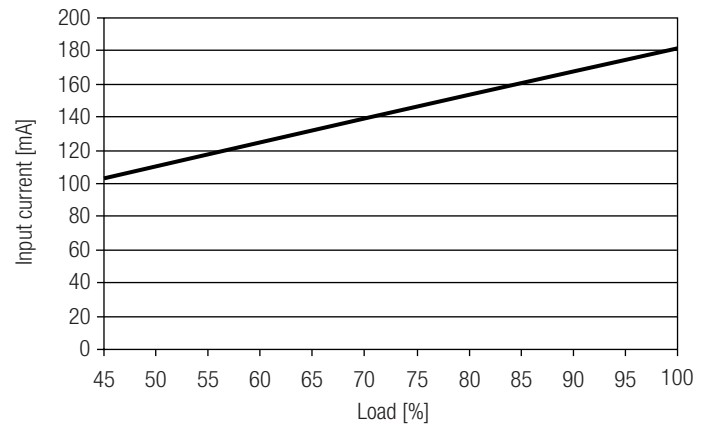
Power factor vs load



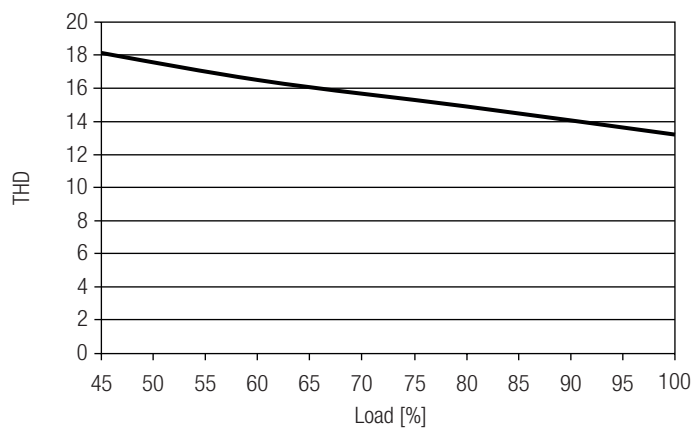
Input power vs load



Input current vs load

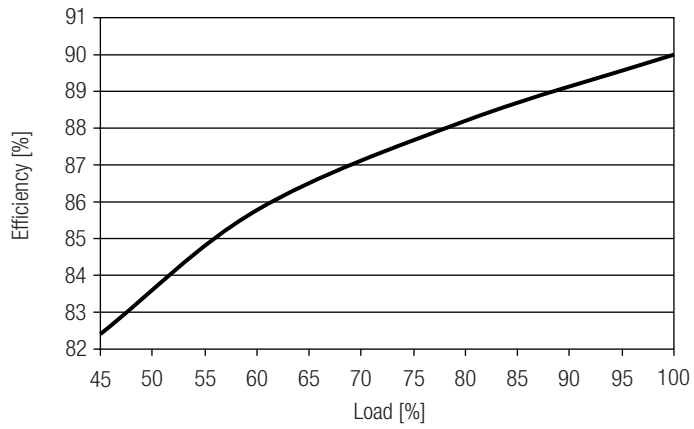


THD vs load

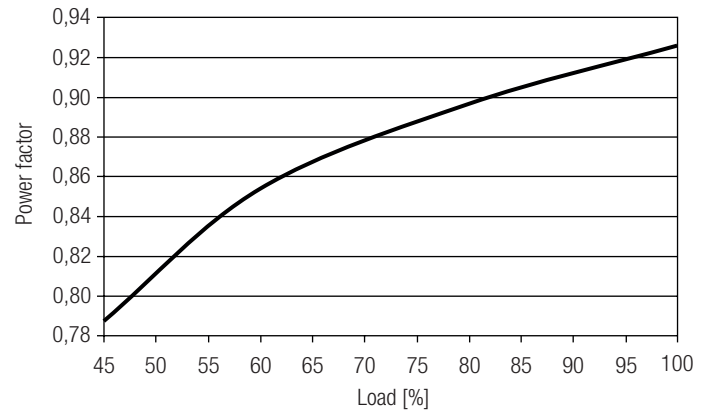


Diagrams LCI 35W 350mA TEC Ip

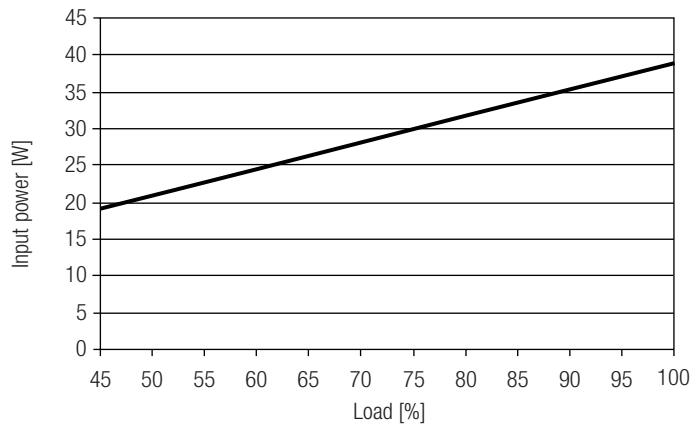
Efficiency vs load



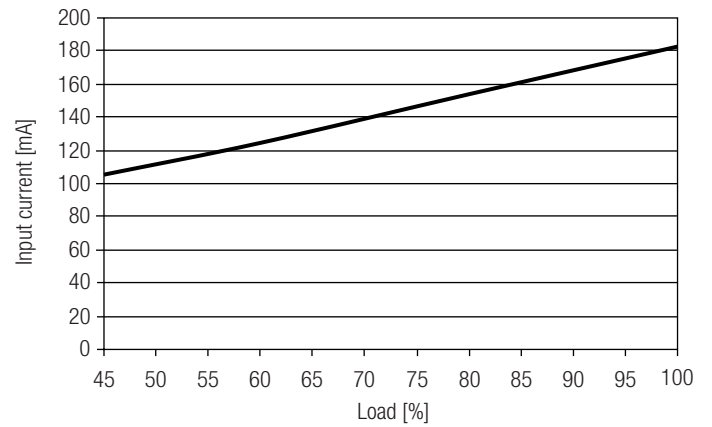
Power factor vs load



Input power vs load



Input current vs load



THD vs load

