

EM converterPACK box Installation and wiring instructions



Terminals

- Terminal block for simple installation
- Terminals included: 2 x 5-pole, 1 x 3-pole, 1 x 2-pole

Note

Suitable battery types: NiCD batteries up to 3 cells-stick and LiFePO₄ batteries up to 3 + 2 cells-stick

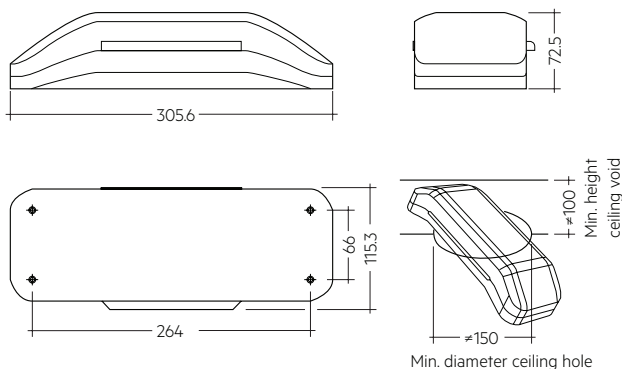
Technical data

Type of protection	IP20
Dimensions LxWxH	305.6 x 115.3 x 72.5 mm

Ordering data

Type	Article number	Packaging carton	Packaging Pallet	Weight ^①
EM converterPACK box 5	89800814	5 pc(s).	300 pc(s).	2.185 kg

^① Weight per carton with 5 pieces



Description

EM converterPACK box housing is designed for use with emergency luminaires in conjunction with LED modules and LED Drivers from Tridonic and other manufacturers.

- Suitable for EM powerLED BASIC/ST/PRO 1-4 W Clip-fix and EM converterLED BASIC/ST/PRO in combination with NiCd and LiFePO₄ batteries
- Suitable for EM powerLED BASIC 32W
- The use of an LiFePO₄ battery allows the addition of an SC driver (max. length 150 mm)
- Suitable for SC (stretch compact) housings with a max. length of 150 mm
- M4 screw included to close the housing
- Drivers and batteries not included
- 5-year guarantee

Important

These instructions contain important safety information, read and follow them carefully. Tridonic will not accept any responsibility for injury, damage or loss, which may arise as a result of incorrect installation, operation, maintenance or disposal.

Isolate switched and unswitched mains and negative battery supply before installing or maintaining.

Note to the installer:

Please ensure this leaflet is made available to the user and/or maintenance engineer together with a test record card.

Conversion

1. It is recommended to carry out the conversion of a luminaire in accordance with ICEL 1004.
2. Ensure that the module and associated battery operate within their temperature ratings.
3. After conversion of a luminaire existing components must continue to operate below their temperature rating.
4. Wire the module and battery into the luminaire according to the wiring diagram.
5. Clearly identify the new unswitched supply to the converted luminaire.
6. Check operation of the LED charge indicator by connecting the unswitched line.
7. Check operation of the LED in the emergency mode by disconnecting the unswitched supply after 15 minutes.
8. Relabel the luminaire to identify the company responsible for the conversion.
9. Fill in test record card if the luminaire is being converted on site.
10. Mark the date of commissioning on the battery label.

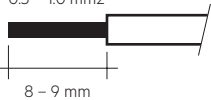
Failure to do as mentioned above will invalidate any warranty claims.

Wiring type and cross section

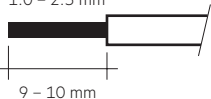
Strip from the cables to ensure perfect operation of terminals.

Wire type	Cross section	Strip length at	
		cross section $\leq 1 \text{ mm}^2$	cross section $> 1 \text{ mm}^2$
Solid	0.5 – 1.0 mm ²	8 – 9 mm	9 – 10 mm
Stranded	0.75 – 2.5 mm ²	8 – 9 mm	9 – 10 mm

wire preparation:
0.5 – 1.0 mm²

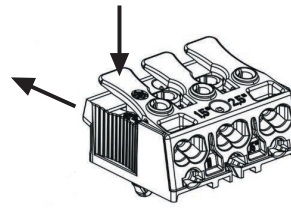


wire preparation:
1.0 – 2.5 mm²



max. = 10 mm
min. = 6,3 mm

Loosen wiring



Wiring guidelines

- Use the supplied terminals for wiring the components in the housing.
- Make sure that the components and terminals are correctly positioned. See the „correct device arrangement/layout“.
- For a good EMC keep the wires as short as possible
- To avoid the damage of the control gear, protect the wiring against short circuits to earth (sharp edged metal parts, metal cable clips, louver, etc.)

To ensure that a luminaire containing LED emergency units complies with EN 55015 for radio frequency conducted interference in both normal and emergency mode it is essential to follow good practice in the wiring layout.

Within the luminaire route the switched and unswitched 50 Hz supply wiring as short as possible and keep it as far away as possible from the LED leads. Through wiring may affect the EMC performance of the luminaire.

For maintained operation in conjunction with a LED Driver:
Do not exceed the length of LED leads. Note the length of the EM converterPACK leads to the LED module adds to the length of the leads from the LED Driver to the EM converterPACK when considering the lead length of the LED Driver.

General notes

Safety

Do not subject batteries to excessive charge or discharge currents. When working with batteries take care not to short circuit them with tools or jewellery etc.

Installation

Installation must be carried out by a competent person, in accordance with the national or local wiring regulations and BS 5266 Part 1; Code of Practice for Emergency Lighting. If in any doubt consult a qualified electrician.

Ensure that voltage and frequency requirements are compatible with the available supply.

Observe the correct polarity when making electrical connections.

User obligation

Every care is taken by Tridonic, in the design and construction of its products, to ensure that as far as is reasonably practical, the products, when properly used are safe, and without risk to health.

The health and safety at work act, however, imposes upon the users of a Company's products, an obligation to ensure that all personnel involved with the installation, handling, use or disposal of the products are acquainted with the information provided by the Company, and are made fully aware of any precautions that need to be taken.

Housing properties

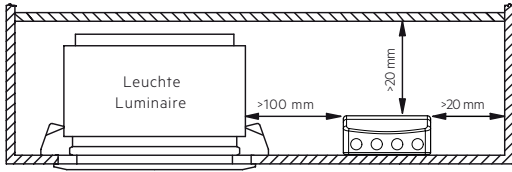
- Casing manufactured from polycarbonate
- Type of protection IP20
- Max. torque for the mounting screws: 0.8 Nm

Glow-wire test

according to EN 61347-1 with increased temperature of 850 °C passed.

Fixing conditions

Dry, acidfree, oilfree, fatfree. It is not allowed to exceed the maximum ambient temperature (t_a) stated on the device. Minimum distances stated below are recommendations and depend on the actual luminaire. Is not suitable for fixing in corner.

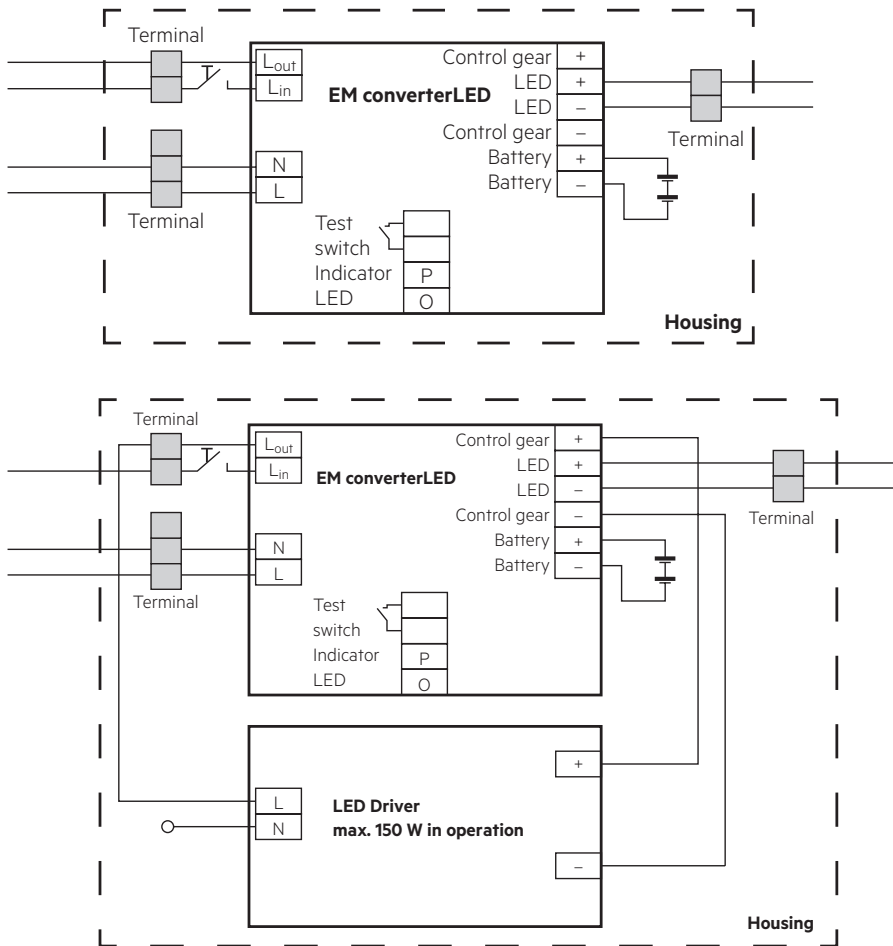


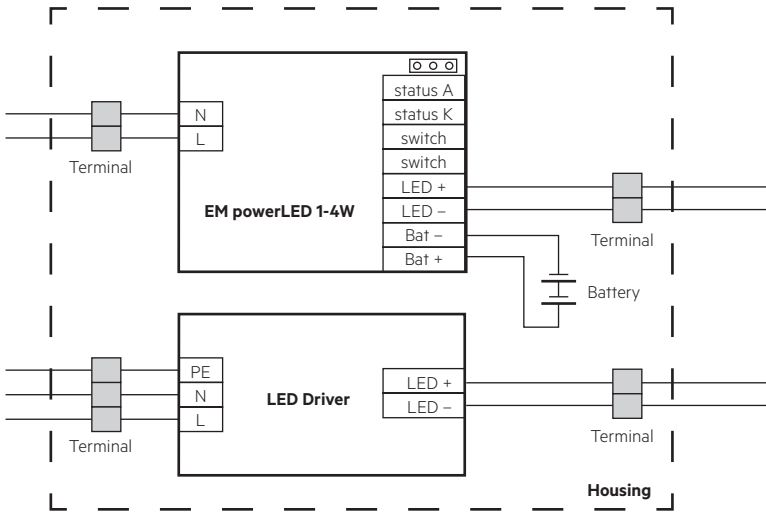
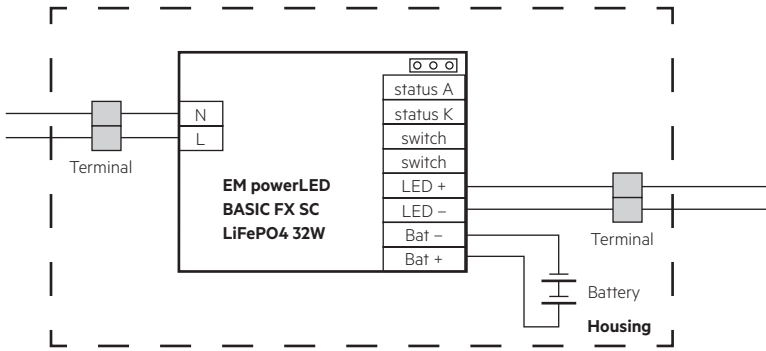
Additional information

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

Guarantee conditions at www.tridonic.com → Services

Wiring examples





Correct device arrangement / layout

