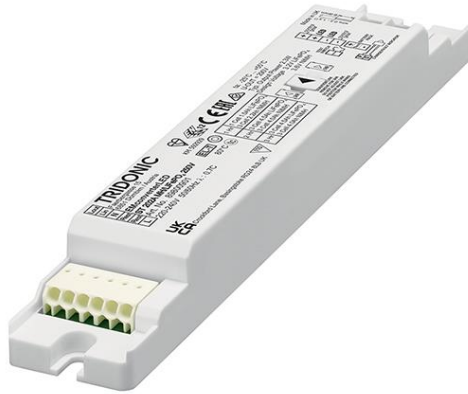


EM converterLED ST MH/LiFePO4 250 V

SELFTEST version

**Product description**

- _ Emergency lighting LED driver with selftest function
- _ For self-contained emergency lighting
- _ For LED modules with a forward voltage of 50 – 250 V
- _ Low profile casing (21 x 30 mm cross-section)
- _ For luminaire installation
- _ EM = Emergency
- _ Nominal lifetime up to 100,000 h
- _ 5 years guarantee

Properties

- _ Non maintained operation
- _ Self-test as per IEC 62034
- _ 1, 2 or 3 h rated duration
- _ Operating time selectable with plug (duration link)
- _ Compatible with most constant current LED drivers (see data sheet, LED driver compatibility)
- _ 3-pole technology: 2-pole LED module changeover and delayed power switching for the LED driver
- _ Automatic shutdown of output if LED load is out of range
- _ Constant power output
- _ Two-colour status display LED
- _ Electronic charge system
- _ Deep discharge protection
- _ Short-circuit-proof battery connection
- _ Polarity reversal protection for battery provided by 3-pole connector
- _ Automatic detection of the connected battery technology (NiMH or LiFePO4 batteries)
- Self-test:
 - _ Status of the battery
 - _ Status of the LED
 - _ Function test
 - _ Duration test

Batteries

- _ High-temperature cells
- _ NiMH or LiFePO4 batteries
- _ LA or 18650 cells
- _ 4-year design life for NiMH batteries
- _ 1 years guarantee for NiMH batteries
- _ 4 – 8 years design life for LiFePO4 batteries
- _ 4 years guarantee for LiFePO4 batteries
- _ LiFePO4 batteries with Tridonic LiFeGuard
- _ For battery compatibility refer to data sheet, battery selection

**Website**

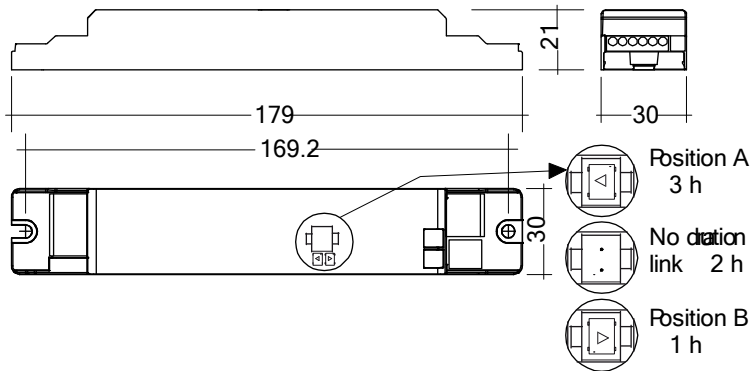
<http://www.tridonic.com/89800636>



EM converterLED ST MH/LiFePO4 250 V

SELFTEST version

The complete data sheet for this product is available in the Downloads section.



Note: LED driver supplied with duration link in 3 hours position. Duration link must be set before battery and mains connection.

Ordering data

| Type | Article number | Rated duration | Packaging, carton | Packaging, pallet | Weight per pc. | Dimensions L x W x H |
|--|----------------|----------------|-------------------|-------------------|----------------|----------------------|
| EM converterLED ST 205 MH/LiFePO4 250V | 89800636 | 1/2/3 h | 10 pc(s). | 1,600 pc(s). | 0.07 kg | 179 x 30 x 21 mm |

Technical data

| | |
|---|---|
| Rated supply voltage | 220 – 240 V |
| AC voltage range | 198 – 264 V |
| Mains frequency | 50 / 60 Hz |
| Forward voltage range LED module | 50 – 250 V |
| Output current | Refer to data sheet |
| Starting time | < 0.5 s from detection of emergency event |
| Overvoltage protection | 320 V (for 48 h) |
| U-OUT (including open- / short-circuit and double load) | 300 V |
| Max. open circuit voltage | 300 V |
| Ambient temperature t_a | -25 ... +55 °C |
| Max. casing temperature t_c | 80 °C |
| Mains voltage changeover threshold | According to EN 60598-2-22 |
| Mains surge capability (between L - N) | 1 kV |
| Mains surge capability (between L/N - PE) | 2 kV |
| Type of protection | IP20 |
| Rest mode max. number of emergency units | 100 |
| Rest mode max. wiring distance | 1,000 m |
| Functional test | Weekly 5s test |
| Duration test | Yearly 1 h / 2 h / 3 h test |
| Lifetime | up to 100,000 h |
| Guarantee | 5 Year(s) |
| Dimensions L x W x H | 179 x 30 x 21 mm |

Approval marks



Standards

EN 61347-1, EN 61347-2-13, EN 61347-2-7, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547, EN 60068-2-64, EN 60068-2-29, EN 60068-2-30, EN 62384, according to EN 50172, according to EN 60598-2-22, acc. to EN 62034

Specific technical data

| Type | Battery technology | Rated duration | Typ. λ Cat 230 V, 50 Hz) | Typ. output power P emergency | Mains current in charging operation | | | Mains power in charging operation | | |
|---|--------------------|----------------|----------------------------------|-------------------------------|-------------------------------------|---------------|-----------------|-----------------------------------|---------------|-----------------|
| | | | | | Initial charge | Fast recharge | Trickle charge® | Initial charge | Fast recharge | Trickle charge® |
| EM converterLED ST 205 MH/LiFePO4 250V | NiMH | 1 / -1 h | 0.70C | 4.5 W | 18 mA | 22 mA | 18 / 11 mA | 2.6 W | 3.2 W | 2.6 / 1.4 W |
| EM converterLED ST 205 MH/LiFePO4 250V | NiMH | 2 / -1 h | 0.70C | 4.5 W | 25 mA | 26 mA | 25 / 11 mA | 4.1 W | 4.1 W | 4.1 / 1.4 W |
| EM converterLED ST 205 MH/LiFePO4 250V | NiMH | 3 / -1 h | 0.70C | 4.5 W | 25 mA | 26 mA | 25 / 11 mA | 4.1 W | 4.1 W | 4.1 / 1.4 W |
| EM converterLED ST 205 MH/LiFePO4 250V | LiFePO4 | 1 / -1 h | 0.70C | 4.5 W | 19 mA | 19 mA | 19 / 11 mA | 2.8 W | 2.8 W | 2.8 / 1.4 W |
| EM converterLED ST 205 MH/LiFePO4 250V | LiFePO4 | 2 / -1 h | 0.70C | 4.5 W | 24 mA | 24 mA | 24 / 11 mA | 3.8 W | 3.8 W | 3.8 / 1.4 W |
| EM converterLED ST 205 MH/LiFePO4 250V | LiFePO4 | 3 / -1 h | 0.70C | 4.5 W | 24 mA | 24 mA | 24 / 11 mA | 3.8 W | 3.8 W | 3.8 / 1.4 W |

① 12 h battery charging time for 2 h emergency lighting function when used with LiFePO4 batteries.

② In case of NiMH batteries: Intermittent charge is used. Value 1 is for 4 min. charge on / Value 2 is for 16 min. charge off. In case of LiFePO4 batteries voltage dependent constant current charging is used.