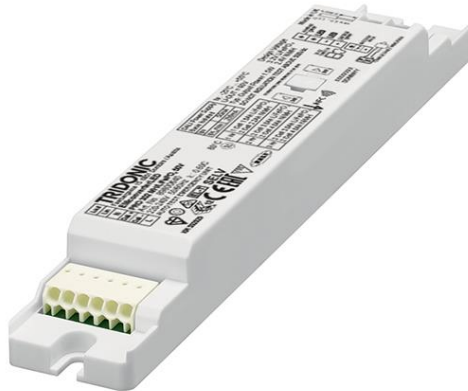


EM converterLED PRO NFC MH/LiFePO4 50 V

Powered DALI PRO NFC version

**Product description**

- _ Self-contained emergency lighting LED driver with DALI interface and automatic test function
- _ For LED modules with a forward voltage of 10 – 54 V
- _ For luminaire installation
- _ Compatible with Tridonic's LLE FLEX modules (ADV, EXC)
- _ EM = Emergency
- _ Nominal lifetime up to 100,000 h
- _ 5 years guarantee

Functions

- _ Non maintained operation
- _ SELV for output voltage < 60 V DC
- _ Integrated DALI bus power supply
- _ 1, 2 or 3 h rated duration selectable with 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
- _ Constant power output
- _ Two-colour status display LED
- _ Black Box data recording

Interfaces

- _ DALI interface for controlled testing and monitoring
- _ Near field communication (NFC)

Battery management

- NiMH/LiFePO4:
 - _ Intelligent charge system
 - _ Deep discharge protection
 - _ Polarity reversal protection for battery via polarised connector plug
 - _ Automatic detection of the connected battery technology (NiMH or LiFePO4 batteries)
- LiFePO4:
 - _ Tridonic LiFeGuard ensures safety in use (refer to data sheet, Safety LiFePO4)
 - _ Temperature protection

Batteries

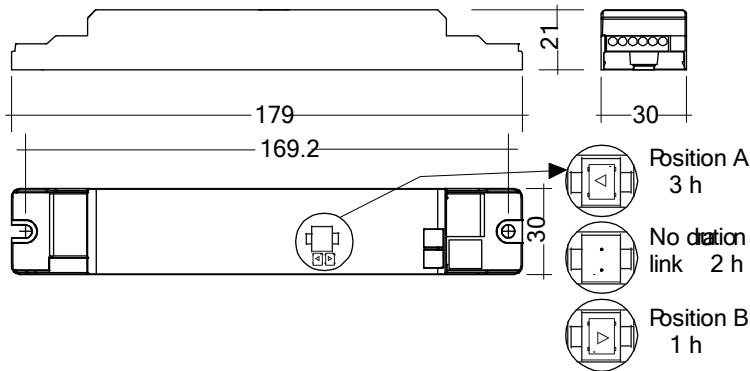
- _ NiMH or LiFePO4 batteries
- _ NiMH: 4 years design life / 1 year guarantee
- _ LiFePO4: 4 – 8 years design life / 4 years guarantee
- _ LiFePO4 batteries with Tridonic LiFeGuard
- _ For battery compatibility refer to data sheet, battery selection

Website
<http://www.tridonic.com/89800642>


EM converterLED PRO NFC MH/LiFePO4 50 V

Powered DALI PRO NFC 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 PRO 304 MH/LiFePO4 50V	89800642	1/2/3 h	10 pc(s).	1,600 pc(s).	0.075 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	10 – 54 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)	60 V
Max. open circuit voltage	60 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
Integrated DALI bus power supply IPS	50 mA
Type of protection	IP20
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, EN 62386-101 (DALI-2), EN 62386-102 (DALI-2), DALI standard EN 62386-202, according to EN 50172, according to EN 60598-2-22, acc. to EN 62034

Specific technical data

Type	Battery technology	Rated duration	Typ. λ (at 230 V, 50 Hz)	Typ. output power P _{emergency}	Mains current in charging operation			Mains power in charging operation		
					Initial charge ^①	Fast recharge ^①	Trickle charge ^{②①}	Initial charge ^①	Fast recharge ^①	Trickle charge ^{②①}
EM converterLED PRO 304 MH/LiFePO4 50V	NiMH	1 / -1 h	0.6C	3.5 W	18 mA	22 mA	18 / 12 mA	2.5 W	3.1 W	2.5 / 1.6 W
EM converterLED PRO 304 MH/LiFePO4 50V	NiMH	2 / -1 h	0.6C	3.5 W	26 mA	27 mA	22 / 12 mA	3.8 W	4.1 W	3.0 / 1.6 W
EM converterLED PRO 304 MH/LiFePO4 50V	NiMH	3 / -1 h	0.6C	3.5 W	26 mA	27 mA	22 / 12 mA	3.8 W	4.1 W	3.0 / 1.6 W
EM converterLED PRO 304 MH/LiFePO4 50V	LiFePO4	1 / -1 h	0.6C	3.5 W	22 mA	22 mA	22 / 12 mA	3.0 W	3.0 W	3.0 / 1.6 W
EM converterLED PRO 304 MH/LiFePO4 50V	LiFePO4	2 / -1 h	0.6C	3.5 W	27 mA	27 mA	27 / 12 mA	4.0 W	4.0 W	4.0 / 1.6 W
EM converterLED PRO 304 MH/LiFePO4 50V	LiFePO4	3 / -1 h	0.6C	3.5 W	27 mA	27 mA	27 / 12 mA	4.0 W	4.0 W	4.0 / 1.6 W

① Integrated DALI bus power supply is switched OFF. With the Integrated DALI bus power supply switched ON and fully loaded the input power and current is increased by 1 W and 6 mA in any charging mode.

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. Value 1 is for charge on / Value 2 is for charge off.