TRIDONIC

EM converterLED BASIC MH/LiFePO4 90 V

BASIC version

Product description
_ Self contained emergency lighting LED Driver for manual testing
_ For LED modules with a forward voltage of 40 – 97 V
_ SELV for output voltage < 120 V DC
_ Low profile casing (21 x 30 mm cross-section)
_ For luminaire installation
_ 5-year guarantee

Properties
_ Non maintained operation
_ 1 or 3 h rated duration
_ Operating time selectable with plug (duration link)
_ Compatible with all dimmable and non-dimmable constant current LED Driver (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
_ Maximum light output for all LED modules
_ 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)

Batteries
_ High-temperature cells
_ NiMH or LiFePO4 batteries
_ LA or 18650 cells
_ 4-year design life for NiMH batteries
_ 1-year guarantee for NiMH batteries
_ 4 – 8 years design life for LiFePO4 batteries
_ 3-year guarantee for LiFePO4 batteries
_ For battery compatibility refer to datasheet, battery selection

Website
http://www.tridonic.com/89800578

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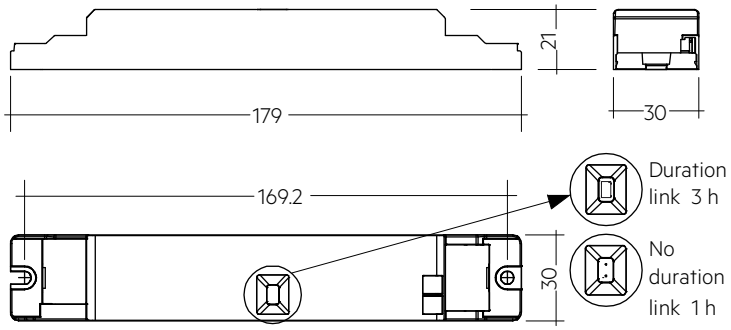
The complete data sheet for this product is available in the Downloads section.



Note: Supply of control gear with duration link in 3 hours position. Remove duration link for duration of 1 h. Duration link must be set before battery and mains connection.

Ordering data

Type [2]	Article number	Rated duration	Packaging, carton	Packaging, pallet	Weight per pc.	Dimensions L x W x H
EM converterLED BASIC 203 MH/LiFePO4 90V	**89800578**	1/3 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
Mains frequency	50 / 60 Hz
Forward voltage range LED module	40 – 97 V
Output current	See 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)	120 V
Max. open circuit voltage	120 V
Battery charging time [1]	24 h
Ambient temperature ta	-5 … +55 °C
Max. casing temperature tc	75 °C
Mains voltage changeover threshold	According to EN 60598-2-22
Type of protection	IP20
Dimensions L x W x H	179 x 30 x 21 mm

Approval marks

SELV RoHS

Standards

Acc. to EN 50172, Acc. to EN 60598-2-22, 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

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	Fast recharge	Trickle® charge	Initial charge	Fast recharge	Trickle® charge
EM converterLED BASIC 203 MH/LiFePO4 90V	NiMH	1 / -1 h	0.60C	2.5 W	18 mA	18 mA	18 / 12 mA	2.6 W	2.6 W	2.6 / 1.4 W
EM converterLED BASIC 203 MH/LiFePO4 90V	NiMH	3 / -1 h	0.60C	2.5 W	21 mA	21 mA	21 / 12 mA	3.3 W	3.3 W	3.3 / 1.4 W
EM converterLED BASIC 203 MH/LiFePO4 90V	LiFePO4	1 / -1 h	0.60C	2.5 W	20 mA	20 mA	20 / 12 mA	2.8 W	2.8 W	2.8 / 1.4 W
EM converterLED BASIC 203 MH/LiFePO4 90V	LiFePO4	3 / -1 h	0.60C	2.5 W	25 mA	25 mA	25 / 12 mA	3.9 W	3.9 W	3.9 / 1.4 W

① 16 h battery charging time for 2 h emergency lighting function according to AS 2293.

② EM = Emergency
③ 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.