EMERGENCY LIGHTING DEVICES FOR LED APPLICATIONS

ELECTRONIC EMERGENCY LIGHTING DEVICES WITH IRON PHOSPHATE BATTERIES

For nominal operating periods of 1 hour or 3 hours

Emergency lighting systems spring to life any time normal mains lighting systems fail. Emergency lighting is designed to ensure that staff can safely leave any rooms and that there is sufficient lighting to illuminate rescue paths/routes as well as to avoid panic situations.

VS emergency lighting devices are designed for use with LED applications and can be operated as part of a combined system with electronic LED drivers.

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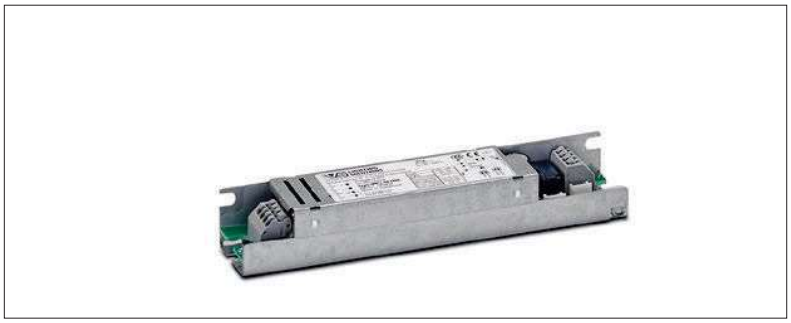
Emergency Basic



IP20 | SELV* | EL | Guarantee 5 years

Product features
- Designed for installation in LED luminaires for safety lighting for rescue routes and extremely hazardous workplaces
- For emergency lighting for 1 hrs. or 3 hrs. operating time
- Suitable for emergency lighting acc. to VDE 0108 or EN 50172
- Ambient temperature: 5 to 50 °C

Electrical features
- Mains voltage: 220–240 V ± 10%
- Mains frequency: 50–60 Hz
- Output voltage: 55 V, 105 V or 220 V
- Output power in emergency operation: 2.5–3 W

Rechargeable batteries
- Material: Iron phosphate (LiFePO4)
- Choice of the rechargeable battery depends on desired operating time and installation position.
- Charging time of rechargeable batteries: up to 24 hrs. depending on the capacity

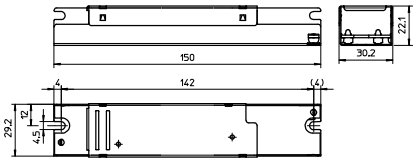
Safety features
- For luminaires of protection class I
- Degree of protection: IP20
- SELV* (186804, 186805, 186806, 186807)
- Surge protection (186804, 186805, 186806, 186807): 3.75 kV
- Metal casing must be earthed using two fixing screws

Status LED
- Intermittent green: battery regeneration after commissioning as well as after each battery replacement
- Permanent green: battery correctly connected, battery charged
- Off: defective battery charge, battery not connected, battery totally flat, defective emergency lighting unit or in emergency operation

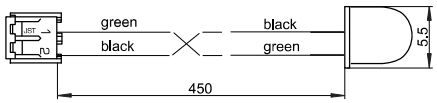
Packaging units

Ref. No.	Packaging unit		
	Pieces per box	Boxes per pallet	Weight g
186804	50	56	109
186805	50	56	109
186806	50	56	109
186807	50	56	109
186808	50	56	109
186809	50	56	109

Dimensions
- Casing: M66
- Length:150 mm
- Width: 30.2 mm
- Height: 22.1 mm



LED



Used standards
- EN 60598-2-22
- EN 61347-2-7
- EN 62384

Product guarantee
- 5 years
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

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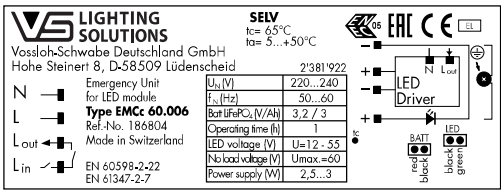
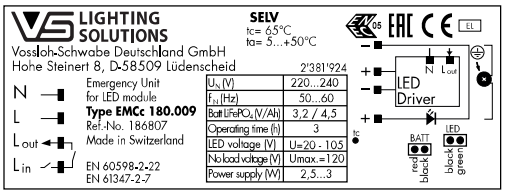
Electrical characteristics

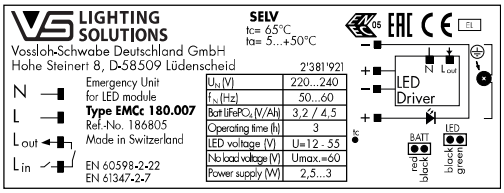
Type	Ref. No. EM gear	Ref. No. Battery	Battery Type	Battery Shape	Nominal emergency operation period hrs.	Output power in emergency operation (W)	Min. lumen in emergency operation* (lm)	Output voltage V	Output voltage V max.
M66 – Dimensions (LxWxH): 150x30.2x22.1 mm									
EMCc 180.007	**186805**	**183204**	3,2 V/4,5 Ah C	Compact	3	2.5–3	250	12–55	60
		183205	3,2V/4,5 Ah L	Linear	3				
EMCc 180.009	**186807**	**183204**	3,2 V/4,5 Ah C	Compact	3	2.5–3	250	20–105	120
		183205	3,2 V/4,5 Ah L	Linear	3				
EMCc 180.011	**186809**	**183204**	3,2 V/4,5 Ah C	Compact	3	2.5–3	250	100–220	300
		183205	3,2 V/4,5 Ah L	Linear	3				
EMCc 60.006	**186804**	**183202**	3,2V/3 Ah C	Compact	1	2.5–3	250	12–55	60
		183203	3,2V/3 Ah L	Linear	1				
EMCc 60.008	**186806**	**183202**	3,2V/3 Ah C	Compact	1	2.5–3	250	20–105	120
		183203	3,2V/3 Ah L	Linear	1				
EMCc 60.010	**186808**	**183202**	3,2V/3 Ah C	Compact	1	2.5–3	250	100–220	300
		183203	3,2V/3 Ah L	Linear	1				

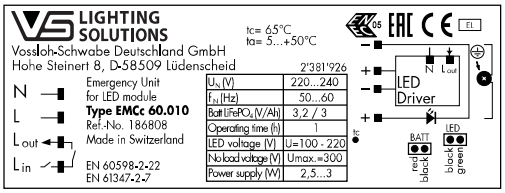
* at 100 lm/W per LED unit

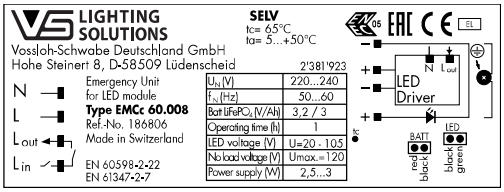
Product lables

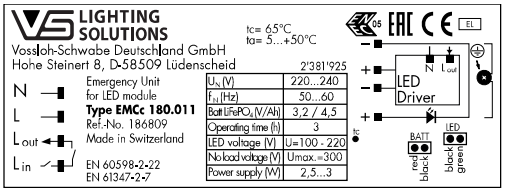












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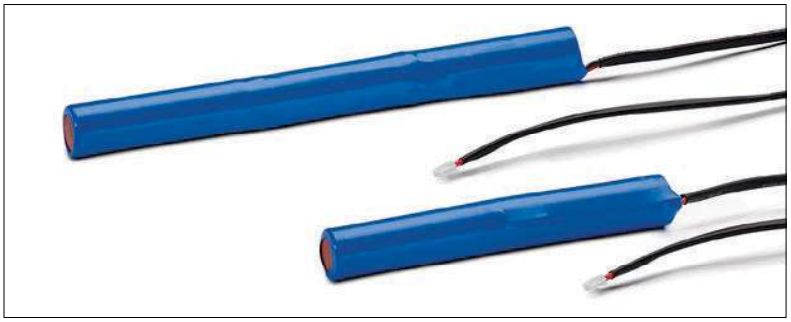
Linear Batterys for Emergency Basic and Smart



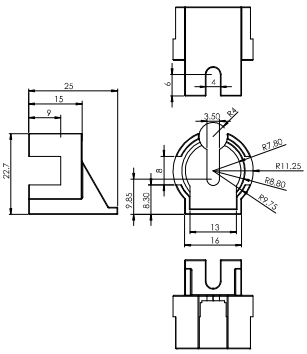
LiFePO4 rechargeable batteries
Charging time of rechargeable batteries:
up to 24 hrs. depending on the capacity
With connection leads (length: 250 mm) and plug;
max. lead length: 750 mm
Choice of the rechargeable battery depends on desired operating time and installation position.

Type	Ref. No.	ELUBAT No.	Dimensions Ø mm	Dimensions Length mm	Nominal operating period hrs.	Weight g	Packaging unit Pieces per box	Packaging unit Boxes per pallet
Linear rechargeable batteries								
3,2 V/4,5 Ah L	**183205**	275809	19	196	3	130	40	32
3,2 V/3 Ah L	**183203**	275802	19	131	1	89	60	32

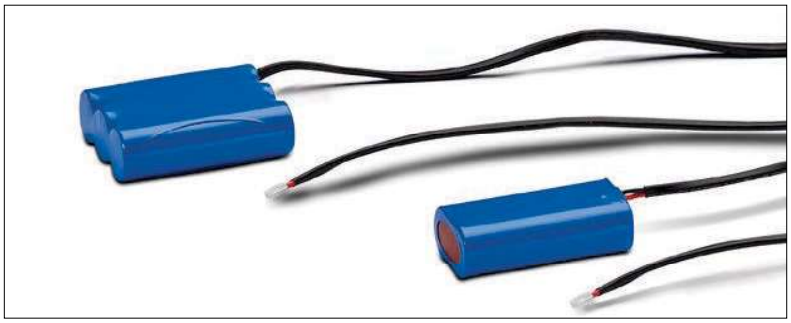
Storage time rechargeable batteries: max. 1 year; storage temperature: 0–50 °C

Product guarantee
- 3 years in combination with Emergency Smart
- 1 year in combination with Emergency Basic
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

Holders for linear rechargeable batteries for emergency LED lighting modules
Sold separately
Two holders per battery required.
Material: PBT
For linear batteries 183203, 183205
Weight: 4 g, packaging unit: 175 pcs.
Type: Batteryholder LiFePO4
Ref. No.: 183206



Compact Batteries for Emergency Basic and Smart



LiFePO4 rechargeable batteries
Charging time of rechargeable batteries:
up to 24 hrs. depending on the capacity
With connection leads (length: 250 mm) and plug;
max. lead length: 750 mm
Choice of the rechargeable battery depends on desired operating time and installation position.

Type	Ref. No.	ELUBAT No.	Dimensions Length mm	Dimensions Width mm	Dimensions Height mm	Nominal operating period (hrs.)	Weight g	Packaging unit Pieces per box	Packaging unit Boxes per pallet
Compact rechargeable batteries									
3,2 V/4,5 Ah C	**183204**	275813	55	19	65	3	130	36	32
3,2 V/3 Ah C	**183202**	275810	36	18	65	1	89	60	32

Storage time rechargeable batteries: max. 1 year; storage temperature: 0–50 °C

Product guarantee
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- 1 year in combination with Emergency Basic
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Assembly and Safety Information

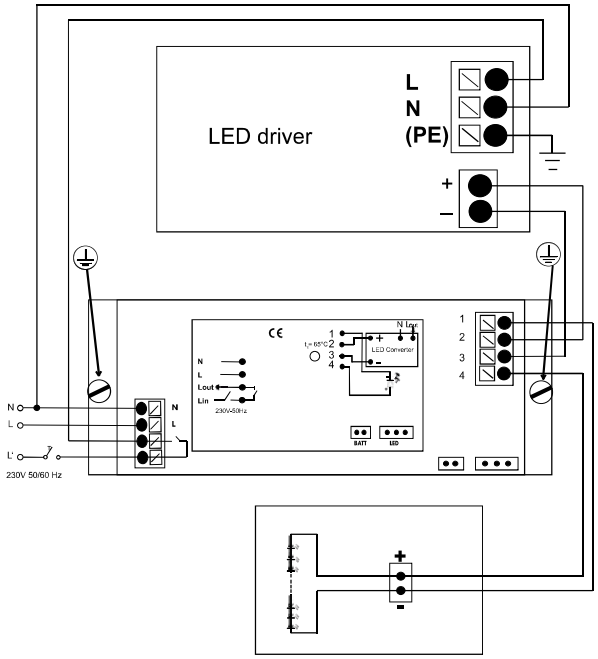
Installation must be carried out under observation of the relevant regulations and standards. Installation must be carried out in a voltage-free state (i.e. disconnection from the mains). The following advices must be observed; non-observance can result in the destruction of the LED emergency lighting devices, fire and/or other hazards.

Mandatory regulations
- DIN VDE 0100
- EN 60598-1

Emergency Basic

Mechanical mounting
- Mounting position: On an earthed metal surface
  Installation in an LED luminaire of protection class I. Installation in a separate casing of protection class I or II.I
- Fastening/Earthing: Fix and/or earth using two suitable metal screws
- Installation of the battery and LED driver for constant switching:
  Installation is possible within the same casing as the emergency lighting unit.
- Ambient temperature of the battery: max. 50 °C
- Length of the status LED lead: 400 mm

Electrical installation
- Connection terminals: Push-in terminals for leads of 0.5-1.5 mm²
- Stripped length: 8.5–10 mm
- Battery connection: Push-in connection with cables (length: 250 mm) (red = + / black = –), max. extension to 750 mm
- Battery discharge current:
  The deep discharge protection of all lithium ion batteries is lower than 10 µA. This makes deliveries with connected battery possible, as long as no logistics restrictions apply.
- Polarity: Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Secondary load (LED):
  The sum of forward voltages of LED loads has to be within the tolerances which are mentioned in the table "Electrical Characteristics" in this data sheet.
- Wiring: During mains-powered operation, the current that flows into the LED luminaire is regulated by the LED driver.
  During emergency lighting operation, the LED unit will be supplied by the battery. The current that is supplied by the battery during emergency lighting operation is converted into "LED current" by the Basic emergency lighting unit.



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