

Ref: 42.085

Emergency Smart

Features:

- Designed for installation in led luminaires for safety lighting for rescue routes and extremely hazardous workplaces.
- For emergency lighting for 1hr. or 3 hr. operating times.
- Suitable for emergency lighting acc. to VDE 0108 or EN 50172.
- With self-diagnosis function acc. to EN 62034.
- Ambient temperature: 5 to 50°C.
- Degree of protection: IP20.



Electrical characteristics	Output voltage (V)	100V – 220V
	Output voltage max. (V)	300V
	Type (battery)	3,2 V/4,5 Ah L
	Shape (battery)	linear
	Nominal emergency operation period hours	3
	Output power in emergency operation (W)	2.5W – 3W
	Mains voltage	220V - 240V ±10%
	Mains frequency	60Hz - 60Hz
	Output Voltage	55V - 105V - 220V
AC Operation	Min. voltage	100V
	Max. voltage	220V
	Min. mains frequency	50Hz
	Max. mains frequency	60Hz
DC Operation	Time to light on in DC operation	850ms
	Degree of protection	IP20
Safety features	Isolation primary - secondary	basic Isolation
	Battery charging time	22h
	Open circuit voltage (Umax.)	300V
	Protection against transient main peaks L-N	1kV
	Protection against transient main peaks L/N-PE	2kV
Dimming	Dimmable	no
	Dimming interface DALI	no
Other	Dimension	177x30x21.5mm
	Casing shape	K67
	Weight	83g
	Guarantee	5 years

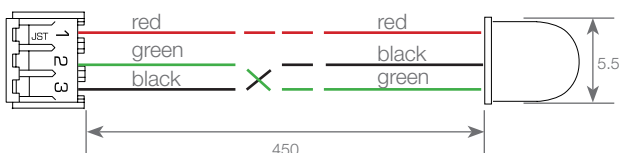


Rechargeable batteries

- 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.

Status led

- Intermittent green: battery regeneration after commissioning as well as after each battery replacement.
- Permanent green: battery correctly connected, battery charged or self-test operation
- Flashing red: defective battery charge, battery not connected or battery capacity too low.
- Flashing intermittent red: defective or unconnected LED luminaire unit.
- Off: battery totally flat, defective emergency lighting unit or in emergency operation.



Measurements:

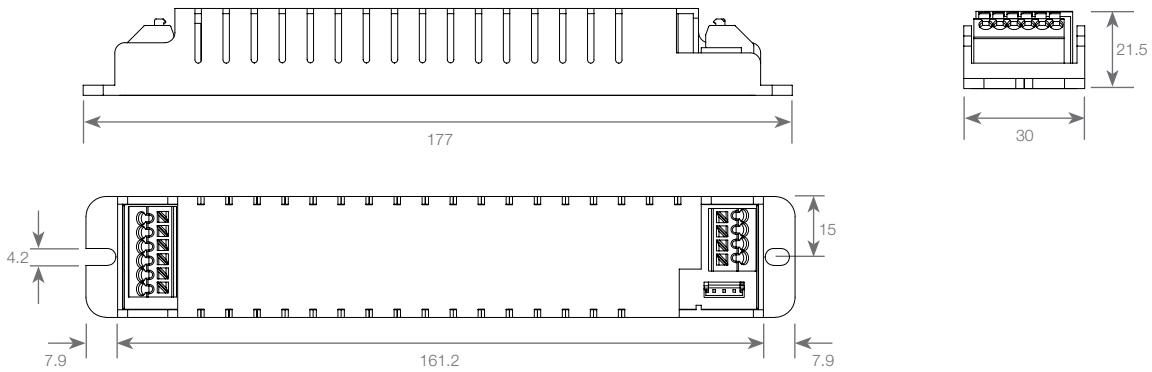
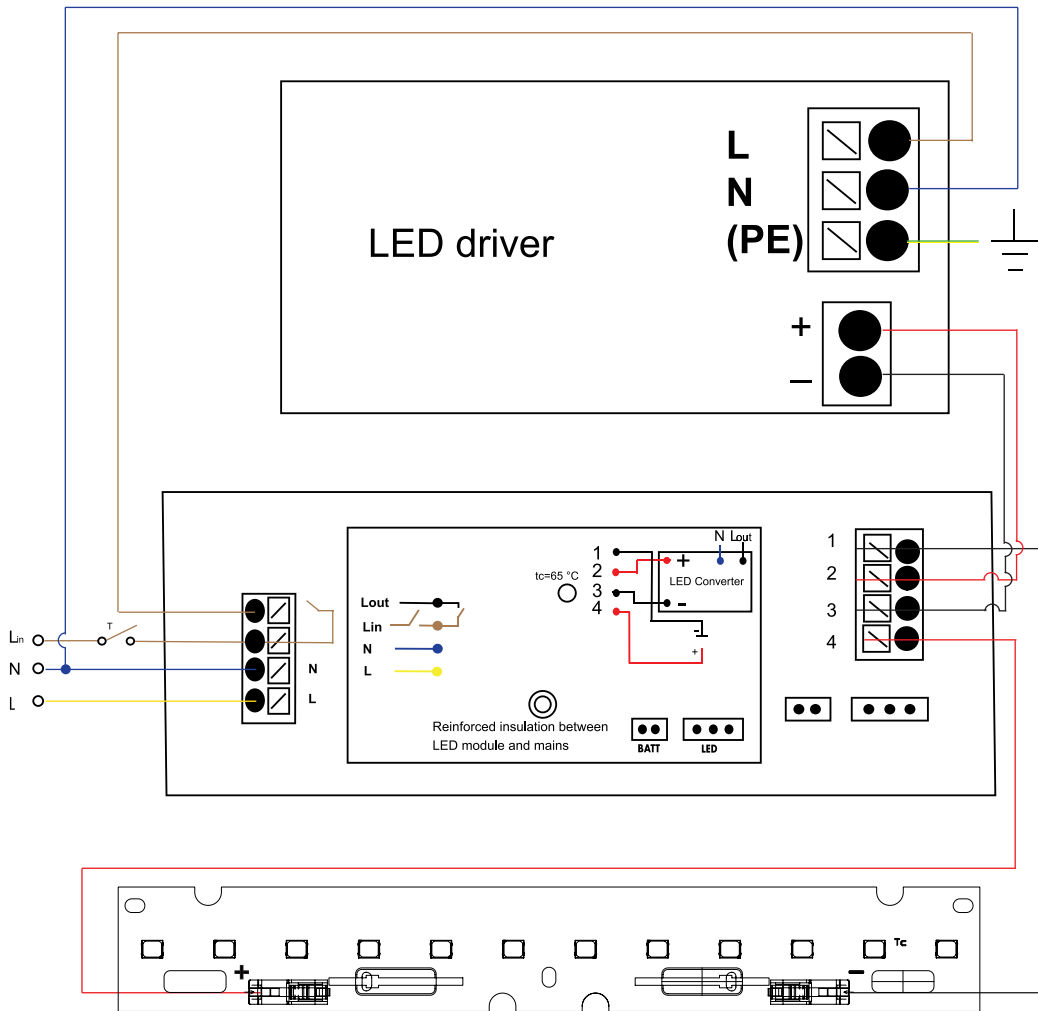


Diagram:



Assembly and safety information

Applied standards:

- EN 60598-2-22
- EN 61347-2-7
- EN 62034
- EN 62384

Mechanical mounting:

- Mounting position: in an led luminaire or in a separate casing.
- Fastening: using two suitable 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: 400mm.


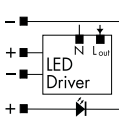
Electrical installation:

- Connection terminals: Push-in terminals for leads of 0.5-1.5 mm².
- Stripped length: 8.5 – 10mm.
- 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.
- 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 Smart emergency lighting unit.
- Polarity: please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Secondary load: the sum of forward voltages of led loads is within the tolerances which are mentioned in the Electrical Characteristics on the data sheet.

Electrical installation:

- Connection terminals: screw terminals for rigid or flexible conductors with a section of 0.5–2.5 mm² for independent operation.
- Stripped length: 9–10 mm.
- Wiring: the main conductor within the luminaire must be kept short (to reduce the induction of interference). Mains and lamp conductors must be kept separate and if possible should not be laid in parallel to one another.
- Polarity: please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Through-wiring: is not allowed.
- Secondary load: the sum of forward voltages of LED loads is within the tolerances which are mentioned in the Electrical Characteristics on the data sheet.

Product labels:

VS LIGHTING SOLUTIONS L out → Vossloh-Schwabe Deutschland GmbH L in → Hohe Steinert 8, D-58509 Lüdenscheid N → Emergency Unit for LED module L → Type EMC80.016 Ref.No. 186815 Made in Switzerland	2'381'913 U _n (V) 220...240 f _n (Hz) 50...60 BatLifePO _{0.1V/Ah} 3,2 / 4,5 Operating time (h) 3 LED voltage (V) U=100-220 I _{No load voltage} (V) U _{max} =300 Power supply (W) 2,5...3	t _c = 650C t _a = 5...+500C Automatic self-testing mode EN 60598-2-22 EN 61347-2-7 EN 62034		
	red BATT black BATT black to green LED			

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Linear batteries for emergency and smart

Features:

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



Electrical characteristics	Type	3.2V / 4.5 Ah L
	Dimension ø	19mm
	Length	196mm
	Nominal operating hours	3
	Material	PBT
	Weight	130g
	Guarantee	5 years

Measurements:

