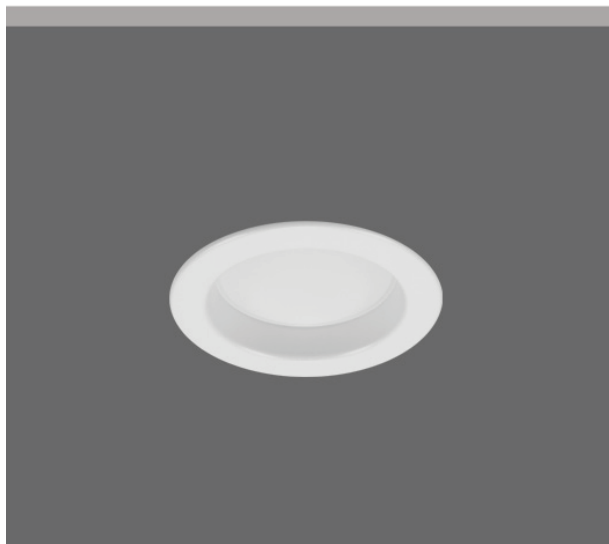


## CODE 38607 - STAR PL3 EM LED



- Χωνευτό led φωτιστικό
- Κατασκευασμένο από αλουμίνιο
- Σταθερό
- Με ματ/οπάλ κάλυμμα
- Τάση τροφοδοσίας 220-240volt
- Λειτουργεί με εξωτερικό/συνοδευτικό led driver
- on/off ή ντιμαριζόμενο phase cut/trailing edge
- Με ενσωματωμένα mid power led τεχνολογίας smd
- Χρωματική θερμοκρασία 3000 kelvin
- Γωνία δέσμης 90°
- Με βαθμό προστασίας IP44 από μπροστά
- Διαθέσιμο κατόπιν παραγγελίας με kit ασφαλείας

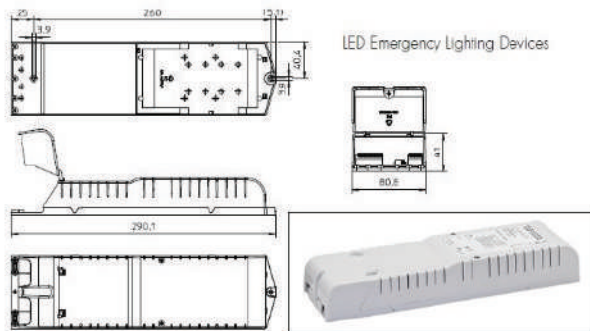
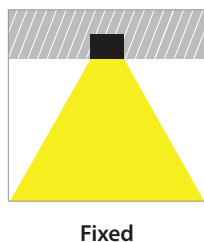
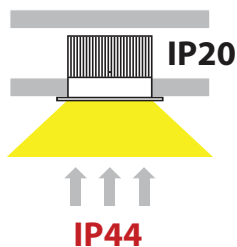
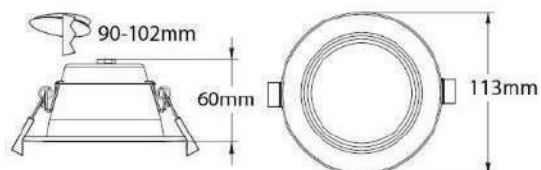
- Recessed led luminaire
- Made from aluminum housing
- Fixed
- With opal/mat cover
- Input voltage 220-240volt
- Works with remote led driver
- on/off or dimmable phase cut/trailing edge
- With incorporated mid power led smd
- CCT 3000 Kelvin
- Angle beam 90°
- With IP44 front protection
- Available upon request with emergency kit

CRI&gt;80

38607 10.0W | 350mA | 3000 KELVIN | 820 LUMEN



∅ 113mm 90-102mm 60mm CE IP44 Front



# LED Emergency Lighting Devices – Emergency Complete

Code EMCc180019 - Vossloh Emergency LED KIT

## Emergency Complete

**With self-diagnosis function and integrated battery**

### Product features

- Designed for independent operation of 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
- With self-diagnosis function acc. to EN 62034
- Ambient temperature: 5 to 50 °C
- Iron phosphate (LiFePO4) rechargeable battery is built-in into the casing
- Charging time of rechargeable battery: up to 24 hrs. depending on the capacity

### Electrical features

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

### Safety features

- For luminaires of protection classes I and II
- Degree of protection: IP20
- SELV
- Surge protection: 3.75 kV
- Earthing: complete emergency module does not have to be earthed.

The emergency lighting module features three earth terminals for an LED driver and LED unit, if required.

### 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

### Packaging units

Ref. No.	Packaging unit		Weight g
	Pieces per box	Boxes per pallet	
186816	20	24	348
186817	20	24	389

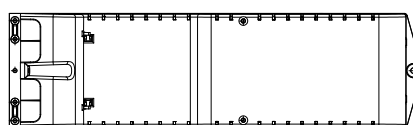
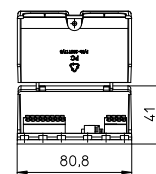
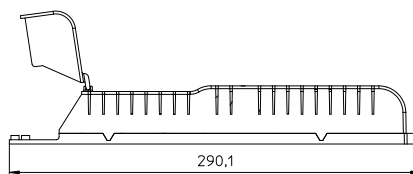
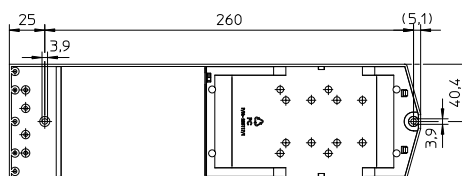


### Dimensions

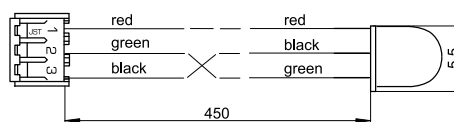
- Casing: K68
- Length: 290.1 mm
- Width: 80.8 mm
- Height: 41 mm

### Used standards

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



### LED



### Product guarantee

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

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.







# LED Emergency Lighting Devices – Emergency Complete

## Electrical characteristics

Type	Ref. No.	Battery		Nominal emergency operation period hrs.	Output power in emergency operation (W)	Min. lumen in emergency operation* (lm)	Output voltage	
		Type	Shape				V	V max.
<b>K68 – Dimensions (LxWxH): 290.1x80.8x41 mm</b>								
EMCc 180.019	<b>186817</b>	3,2 V/4,5 Ah C	Compact	3	2,5-3	250	12-55	60
EMCc 60.018	<b>186816</b>	3,2V/3 Ah C	Compact	1	2,5-3	250	12-55	60

\* at 100 lm/W per LED unit

## Product labels

**V5 LIGHTING SOLUTIONS**      

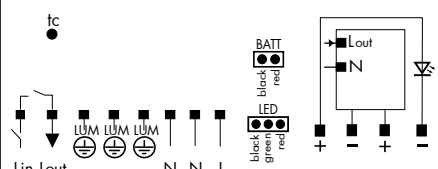
Vossloh-Schwabe Deutschland GmbH  
Hohe Steinert 8, D-58509 Lüdenscheid  
Emergency Unit  
for LED module  
**Type EMCc 60.018**  
Ref.-No. 186816  
Made in Switzerland







**Automatic self-testing mode**

2'382'158 EN 60598-2-22  
EN 61347-2-7  
EN 62034

U <sub>N</sub> (V)	220...240
f <sub>N</sub> (Hz)	50...60
Batt LiFePO <sub>4</sub> (V/Ah)	3,2 / 3
Operating time (h)	1
LED voltage (V)	U=12 - 55
No load voltage (V)	U <sub>max.</sub> =60
Power supply (W)	2,5...3

**SELV**  
t<sub>c</sub> = 65°C  
t<sub>a</sub> = 5...+50°C



**V5 LIGHTING SOLUTIONS**      

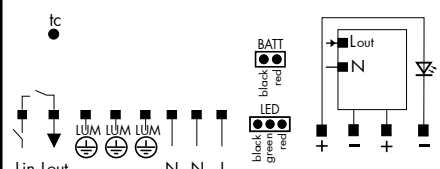
Vossloh-Schwabe Deutschland GmbH  
Hohe Steinert 8, D-58509 Lüdenscheid  
Emergency Unit  
for LED module  
**Type EMCc 180.019**  
Ref.-No. 186817  
Made in Switzerland

**Automatic self-testing mode**

2'382'950 EN 60598-2-22  
EN 61347-2-7  
EN 62034

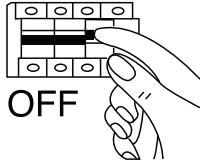
U <sub>N</sub> (V)	220...240
f <sub>N</sub> (Hz)	50...60
Batt LiFePO <sub>4</sub> (V/Ah)	3,2 / 4,5
Operating time (h)	3
LED voltage (V)	U=12 - 55
No load voltage (V)	U <sub>max.</sub> =60
Power supply (W)	2,5...3

**SELV**  
t<sub>c</sub> = 65°C  
t<sub>a</sub> = 5...+50°C



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

1



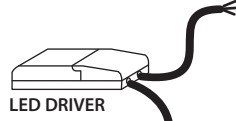
OFF

Turn off power

افصل الطاقة

A. Open the boxes and take the luminaire, the led driver and the emergency kit

أ- أفتح الصندوق و خذ المصباح و التحكم و بطاريات الطوارئ

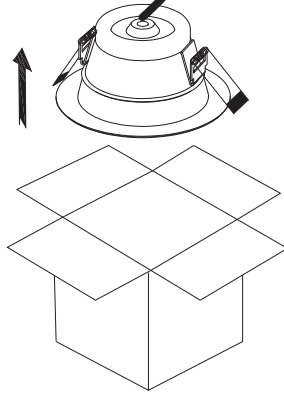


LED DRIVER



EMERGENCY KIT

عدة ضوء الطوارئ

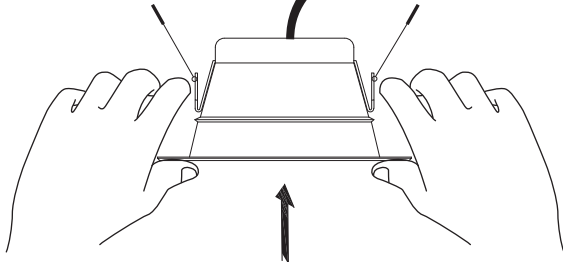


3

D. Place the emergency kit and the led driver through the hole to false ceiling

د- ضع المتحكم و بطاريات الطوارئ داخل

السقف من خلال الثقب



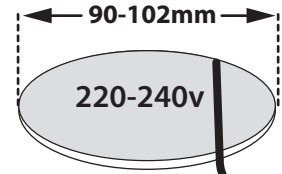
E. Bend the two side springs and insert the luminaire into the false ceiling

ي- احني المشابك من الجهتين وادخلهما في الثقب

2

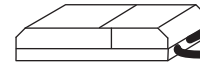
B. Open/cut a hole on the ceiling 90-102mm

ب- افتح ثقب في السقف قطره مم 102-90



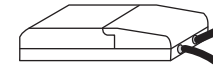
\* Check the wiring informations below

تحقق من معلومات الأسلاك أدناه



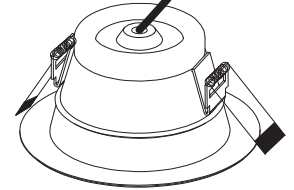
EMERGENCY KIT

عدة ضوء الطوارئ



LED DRIVER

المتحكم

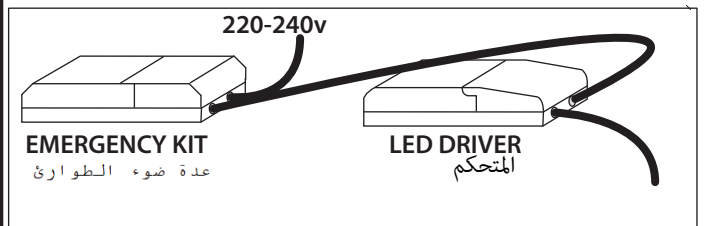


C. Connect the emergency kit and the led driver

قم بتوصيل سدادات الكابلات

\* Check the wiring informations below

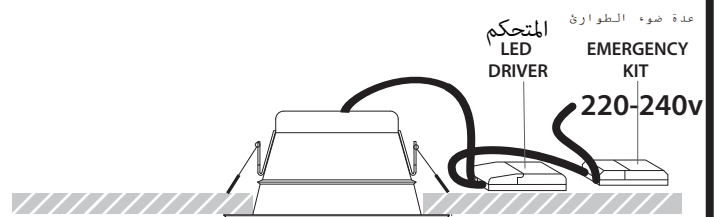
تحقق من معلومات الأسلاك أدناه



4

F. Luminaire into the false ceiling

ف - الانارة في السقف



Code EMCc180019 - Vossloh Emergency LED KIT

## Emergency Complete

### Mechanical mounting – Emergency Complete

- Mounting position: Outside of an LED luminaire; suitable for independent operation
- Fastening: Using two suitable screws
- Ambient temperature of the battery: max. 50 °C
- Length of the status LED lead: 400 mm

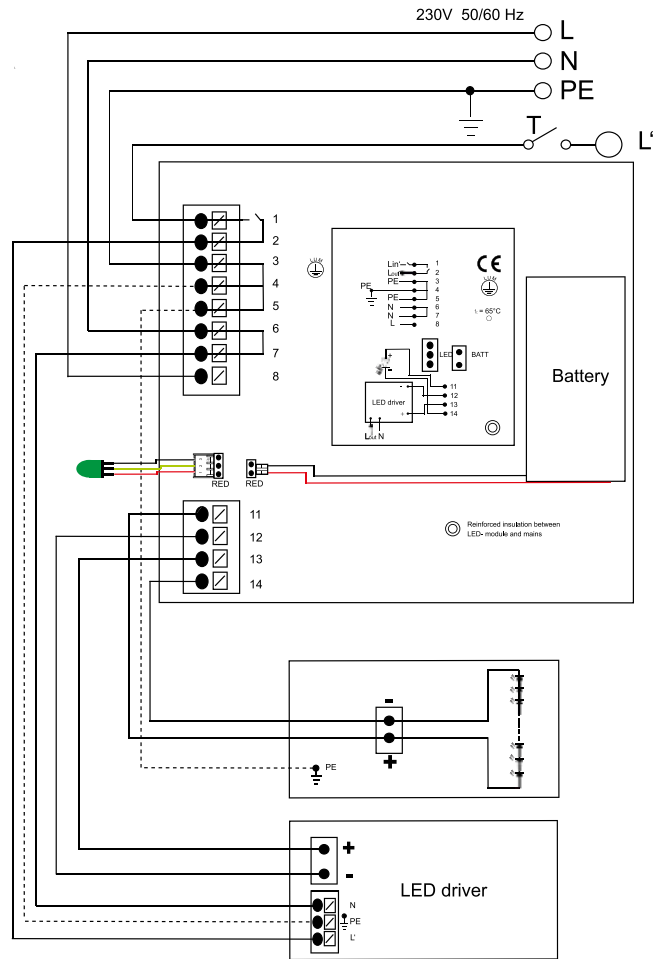
### Electrical installation

- Connection terminals: Push-in terminals for leads of 0.5-1.5 mm<sup>2</sup>
- 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: The Emergency Complete casing is fitted with a lid for a cord grip. As shown in the circuit diagram, the following three leads must be connected to the mains terminal of the Emergency Complete unit:
  - mains cable (switched phase, direct phase, neutral and earth, if required for the driver and/or the LED unit)
  - LED driver cable (switched phase, neutral and earth, if required)
  - bus line (DALI)

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 Complete emergency lighting unit.



### Self-testing function

- Self-test: Self-testing function in acc. with EN 62034 included. Every 8 days (random period between 8 and 8.25 days) an automatic self-test will be carried out. During this time, the LED unit will be supplied by the battery for 2 minutes via the emergency smart emergency lighting module. This ensures the LED unit and the correct functioning of the emergency lighting can be checked.
- Fatigue test: In addition, a quarterly fatigue test is carried out to check battery capacity. The first fatigue test is carried out 8 days after commissioning.
- Battery recovery: Within the space of about four days following commissioning and/or after a change of battery, three short charging and discharging cycles will be automatically carried out to regenerate the battery.

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## الطوارئ الأساسية ، الذكية ، كاملة - LED أجهزة إضاءة الطوارئ

أجهزة إضاءة الطوارئ LED الذكية

### التركيب الميكانيكي الكامل لبطاريات الطوارئ

- مكان التركيب : خارج مصباح LED , مناسب للاستخدام المستقل
- التركيب : استعمال برغيان مناسبان
- درجة الحرارة المحيطة للبطارية: كحد أقصى 50 درجة مئوية
- طول Status LED lead : 400 مم

### التركيبات الكهربائية

- أطراف التوصيل: ضغط الوصلات Push in Terminals
- طول السترب: 0,5- 1,5 مم
- توصيلات البطاريات: توصيل Push in connection مع ضغط كابلات

(طول 250مم) (أحمر =+) (أسود=-) لاقصى تمديد حتى 750مم

- تفريغ البطارية من التيار: الحماية من التفريغ العميق لايونات الليثيوم أقل من 10µA .

وهذا يجعل الاتصال بالبطارية ممكن , طالما لتوجد اي عوائق لوجستية

يرجى التأكد من التوصيل الصحيح لأن القطبية المعكوسة يمكن ان تدمر الوحدات

يجب ان يكون مجموع قدرة التيار الكهربائي الوارد من لوحات LED أدنى من قدرة

التحمل الواردة في ورقي , ضمن نطاق التسامح المذكور في الجدول الكهربائية

(Electrical Characteristics) يتم تجهيز غلاف الطوارئ الكامل غطاء

لقبضة الحبل. كما هو موضح في مخطط الدائرة , يجب توصيل الخيوط الثلاثة التالية

بمحطة التيار الكهربائي لوحدة الطوارئ الكاملة:

- (Switchphase , ...) الكابل التيار الرئيسي

- كابل التحكم LED (Switchphase , ...)

- Bus Line (DALI) - أثناء التشغيل الذي يعمل بالطاقة الرئيسية

Mains-powered يتم تنظيم التيار بواسطة المتحكم LED driver

الذي يتدفق الى وحدة الانارة LED.

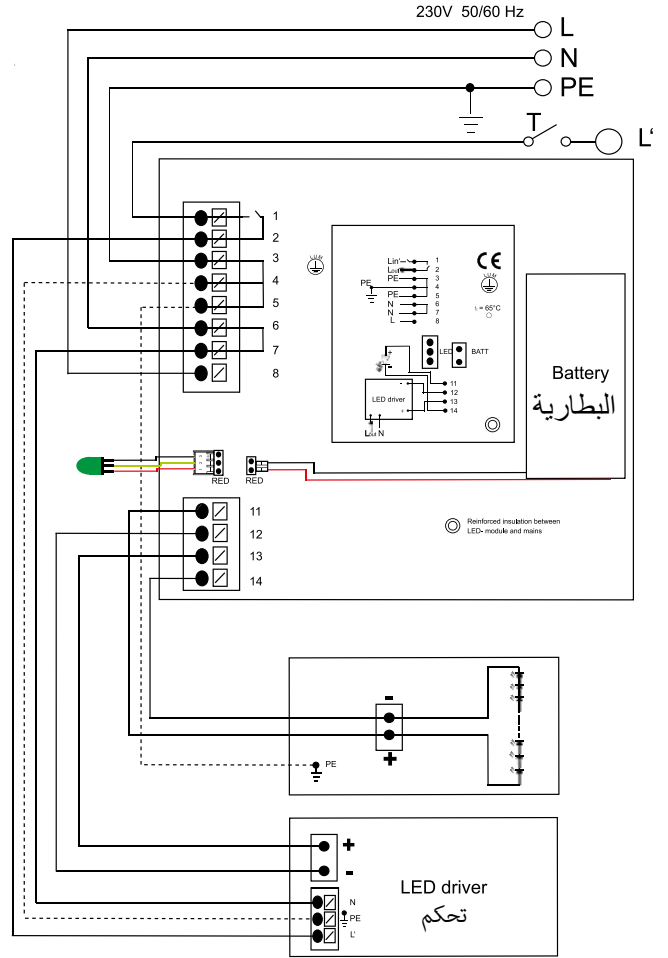
أثناء تشغيل اضاءة الطوارئ , سيتم تزويد التيار LED current الذي يتم توفيره

بواسطة البطارية أثناء عملية اضاءة الطوارئ .

• قطبية Polarity :

• الثانوي Load (LED) :

• الاسلاك :



### وظيفة الاختبار الذاتي

- اختبار ذاتي: وظيفة الاختبار الذاتي حسب EN62034 يتم اجراء الاختبار الذاتي تلقائي كل 8 ايام (فترة عشوائية بين 8 و 25,8 يوم). خلال هذه الفترة يتم تغذية LED من البطاريات لمدة دقيقتين عبر وحدة اضاءة الطوارئ الذكية في حالات الطوارئ , وهذا يضمن التحقق من العمل الصحيح لوحدة الطوارئ ولاضاءة LED
- اختبار الاجهاد: بالإضافة الى ذلك يتم اجراء اختبار اجهاد ربع سنوي (فصلي) للتحقق من سعة البطارية. يتم اجراء أول اختبار للتعب بعد 8 ايام من التركيب.
- أصلح البطارية: في غضون حوالي أربعة أيام متتالية بعد التركيب و/ أو بعد تغير البطارية. سيتم تنفيذ ثلاث دورات شحن وتفريغ قصيرة تلقائيا لتوليد البطارية

يمكن أن تتغير القيم الواردة في ورقة البيانات هذه بسبب الابتكارات التقنية. سيتم اجراء أي تغييرات من هذا القبيل دون إخطار منفصل