

# **Emergency lighting luminaires with LEDs** *X-light 180*

#### Cat. No(s): 6 601 40/41/52/54/55/57



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230 V self-test

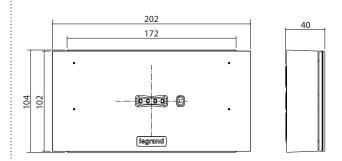
## **1. DESCRIPTION**

IP 42 - IK 07 emergency lighting luminaires with LEDs Class II:  $\blacksquare$ 

Cat. No.	Flux/ standby power	Mode	M pwr cons. (W)	NM pwr cons. (W)	Batteries	No. of LEDs
6 601 40	160 lm/1 hr	M/NM	1.9	0.4	Ni-MH	6
6 601 41	100 lm/3 hrs	M/NM	1.9	0.4	Ni-MH	4
6 601 52	100 lm/1 hr	M/NM	1.6	0.35	Ni-MH	4
6 601 54	200 lm/1 hr	NM	-	1.9	Ni-MH	4
6 601 55	350 lm/1 hr	M/NM	1.9	0.4	Ni-MH	8
6 601 57	200 lm/2 hrs	NM	-	0.35	Ni-MH	6

## **1. DESCRIPTION (CONTINUED)**

#### Dimensions



#### Technical characteristics

Power supply: 230 V  $\sim$  - 50/60 Hz Equipped with screw terminals 2.5 mm² max. (draw-out connector). Class II:  $\square$ 

Operating temperature: 0°C to +40°C

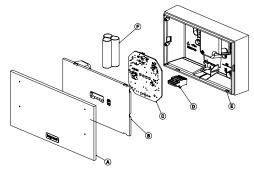
Connection to remote control 0 039 00/01 for setting to rest mode during intentional mains power breaks.

Remote control input terminals protected against connection errors.

Conforming to standards: UNE EN 60598-2-22: 2014 + AMD: 2020 Awarded ENEC EN 60 598 2-22 quality mark and AENOR quality mark Product for surface mounting on walls or ceilings and flush mounting in ceilings with accessory 6 601 90. X-light 180

## **1. DESCRIPTION (CONTINUED)**

Materials



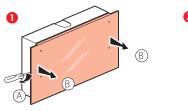
A Diffuser: opal polycarbonate, self-extinguishing 850° 30 s

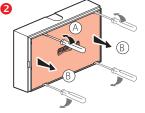
- **B** Reflector: white polycarbonate, self-extinguishing 850° 30 s
- Circuit board
- **D** Power supply and remote control connector
- **E** Base: white polycarbonate, self-extinguishing 850° 30 s
- **F** Battery pack

All plastic parts weighing more than 50 g are marked with their material type so that the materials can be recycled at the product's end of life.

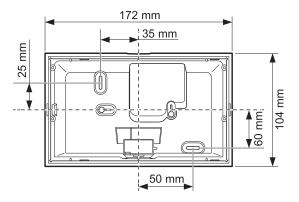
## 2. INSTALLATION

## Opening the unit



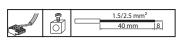


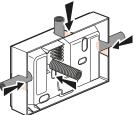
#### • Fixing the base

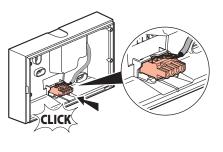


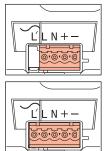
## 2. INSTALLATION (CONTINUED)

#### • Wiring



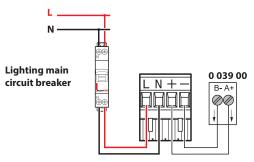




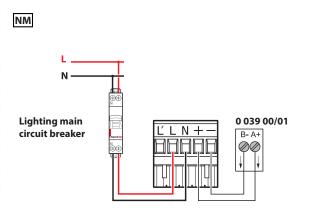


TELEC - Connection terminals: direction of connection with Legrand remote control Cat. No. 0 039 00/01 must be complied with. Terminal capacity: 2.5 mm<sup>2</sup> max

## • Wiring up NM products

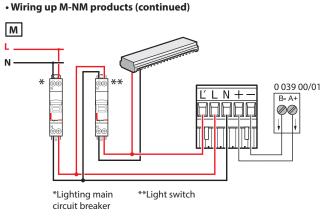


#### • Wiring up M-NM products



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## 2. INSTALLATION (CONTINUED)



**Note**: Although self-contained emergency lighting units do not consume much power, you must check that the line dedicated to these lighting units can deliver the necessary current. You will find below the current the line needs to withstand for 100 installed lighting units according to the catalogue number (for simplicity, we have assumed just one type of lighting unit is installed per line):

100 x 6 601 54 current = 7 A

100 x 6 601 40/41/52/55/57 current = 1 A

## **3. OPERATION**

## 3.1 Switch-on/standby state

#### - Maintained



The emergency LEDs come on

2 Luminaire green status LED on



## • The emergency LEDs are off

Non-maintained

2 Luminaire green status LED on

#### 3.2 Mains supply break/emergency operation



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## MaintainedThe emergency LEDs come on at the rated

- flux
- Provide the state of the sta

## Non-maintained

• The emergency LEDs come on at the rated flux

Provide the state of the sta

## **3. OPERATION (CONTINUED)**

## ■ 3.3 Setting to rest state via the remote control Cat. No. 0 039 00 After the lighting is switched off intentionally:

Pressing the  $\bigotimes$  button sets the luminaire to rest state to prevent the

#### battery discharging. Lighting switched back on:

The luminaire automatically returns to standby in its operating mode.

#### ■3.4 Automatic testing of emergency lighting luminaires

This luminaire automatically checks its operating status, the light sources and battery.

#### Once a week:

It tests the operating status and light sources by switching to emergency mode for 15 seconds.

#### Once every three months:

It tests the battery by switching to emergency mode for the rated operating time.

#### ■3.5 Result of automatic checks

LEDs	Luminaire OK	Battery fault	Electronic fault/ light source
Green	پېر (steady or flashing)	0	0
Yellow	0	کچر (steady)	(rapid flashing)

The time of the tests is set at the time the unit is first switched on. The day of the test is chosen randomly in order to ensure that a minimum number of units is tested at the same time.

The time at which all the luminaires are tested can be changed to the required time by simultaneously pressing the  $\frac{1}{2}$  and  $\stackrel{\text{$\widehat{M}$}}{\to}$  buttons on the remote control.

#### ■3.5.3 Stopping a test in progress

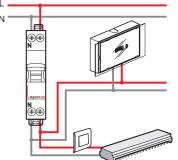
If a standby power test hinders operation, it can be stopped immediately. Press the OFF button on remote control unit Cat. No. 0 039 00/01. The test is stopped and postponed until the following day.

#### ■3.5.4 Specific cases

When the unit has been switched off for more than 3 days, the tests are no longer carried out. The test cycle will resume after the unit is switched back on and the batteries have been recharged. The tests planned for the day the unit is switched back on are automatically postponed for 24 hours.

#### 4. CONNECTION

#### ■4.1 Connection of emergency lighting luminaires to the mains power



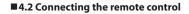
The branch can be joined in the electric cabinet, on the switch or in a junction box.

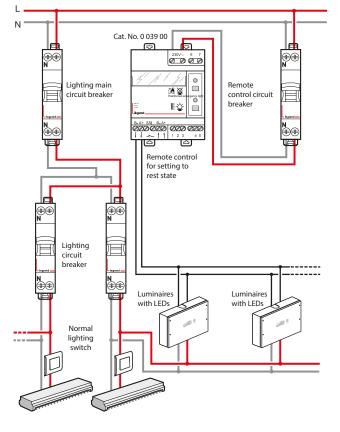
The rules concerning the power supply are the same for emergency lighting as for any other type of luminaire.

Updated:

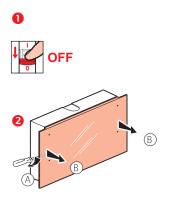
## X-light 100

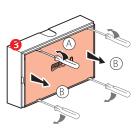
## 4. CONNECTION (CONTINUED)

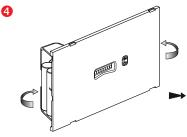


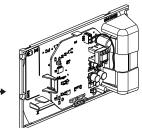


## **5. MAINTENANCE (CONTINUED)**









#### Note:

In the event of interference on the remote control line or unwanted switching on of the self-contained emergency lighting units: add a 1 kohm resistor between the A+ and B- terminals on remote control 0 039 00/01 (this resistor is supplied with the remote control).

## **5. MAINTENANCE**

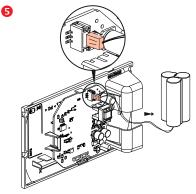
## ■5.1 Spare parts

Luminaire Cat. No.	Battery	Spare battery Cat. No.
6 601 52	3.6 V 0.5 Ah Ni-MH	6 601 82
6 601 40/41/54	3.6 V 1.1 Ah Ni-MH	6 601 83
6 601 55/57	3.6 V 1.5 Ah Ni-MH	6 601 84

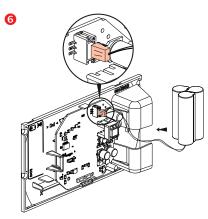
#### ■5.2 Replacing the batteries

The batteries must be replaced when the self-contained luminaire can no longer stay on for its rated operating time.

Caution: The product must be switched off before dismantling.



5.2 Replacing the batteries (continued)

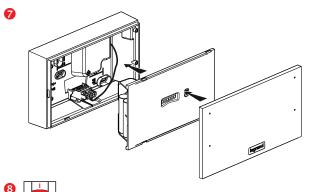


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## Emergency lighting luminaires with LEDs

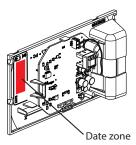
X-light 180

## **5. MAINTENANCE (CONTINUED)**



#### • NB: The LEDs cannot be replaced

Legrand distribution partners take back used luminaires and batteries. After changing the batteries, write down the date on which the luminaire was returned to service in the designated location.



#### 5.3 Troubleshooting

#### Steady yellow LED:



Check whether at least one of these faults is present:

- The battery is disconnected
- The battery has a voltage fault
- The battery has a standby power fault

#### Flashing yellow LED:



Check whether at least one of these faults is present:

- The charger and/or the electronics have a fault
- The light source has a fault

## 6. COMPLIANCE AND APPROVALS

EN 60598-2-22: 2014 + AMD: 2020: European standard "Luminaires: specific rules. Luminaires for emergency lighting" EN 60598-1 2015 + A1 2018: European standard "Luminaires". EN 50172: European standard "Emergency lighting systems" EN 1838: European standard "Lighting applications – Emergency lighting" Products certified with the AENOR N mark

## Electromagnetic effects: EMC

## Emission

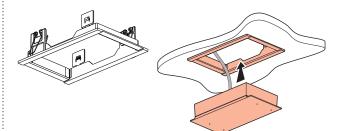
- EN 55015 (disturbance voltages)
- EN 61000-3-2 (harmonic measurements) class C
- EN 55022 (radiated interference) class B

#### Immunity

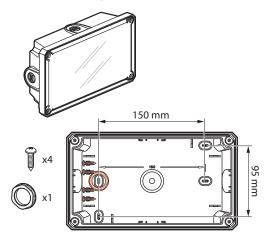
- EN 61000-4-2 (electrostatic discharges)
- EN 61000-4-3 (radiated fields)
- EN 61000-4-4 (fast transients/bursts)
- EN 61000-4-5 (lightning impulses)
- EN 61000-4-6 (radiated fields)
- EN 61000-4-8 (magnetic fields)
- EN 61000-4-11 (voltage dips and short interruptions)

## **7. EQUIPMENT AND ACCESSORIES**

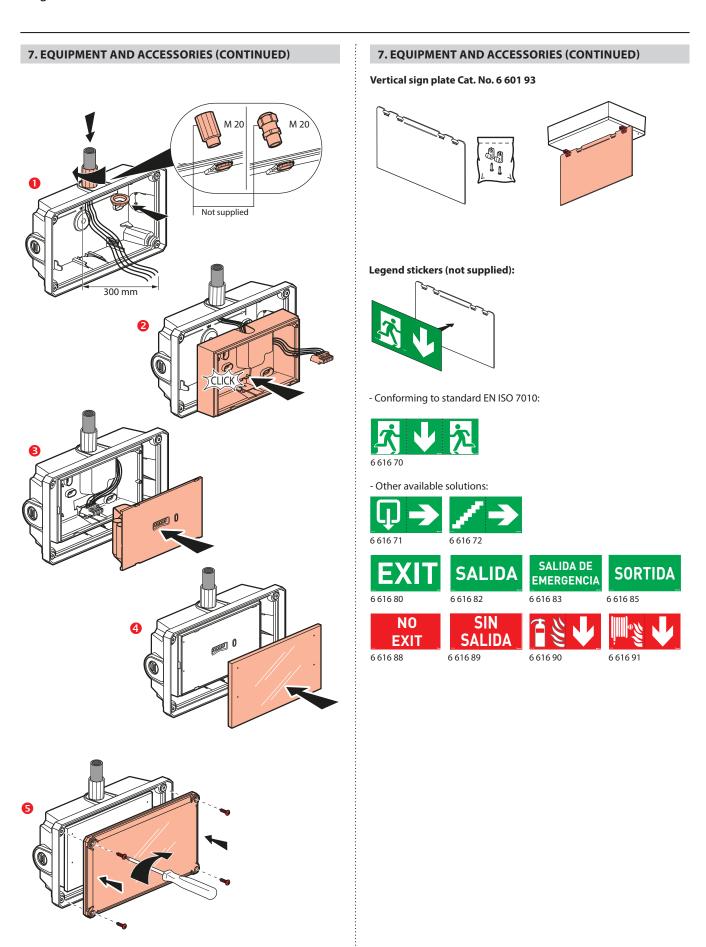
#### Flush-mounting box Cat. No. 6 601 90



## IP 66/IK1 0 weatherproof box, 6 601 91



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Updated:

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