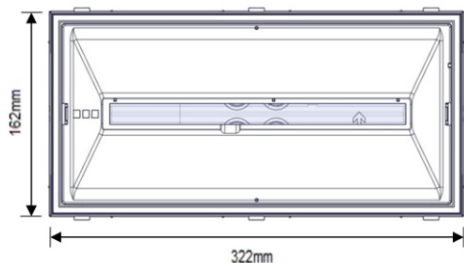
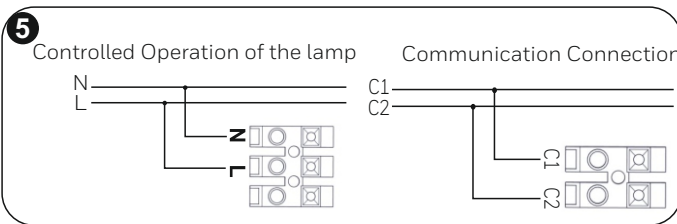
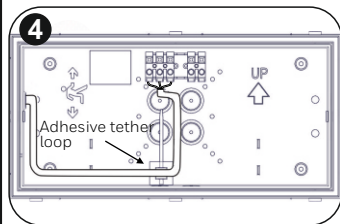
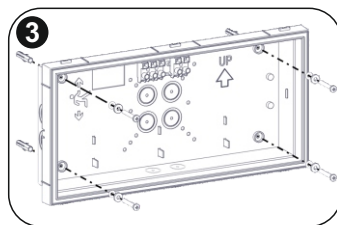
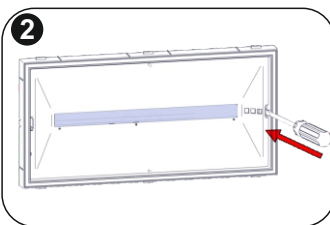
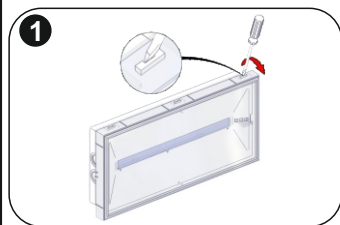


## Surface Mounted

### Dimensional Drawings:



### Installation:



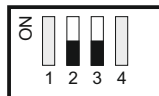
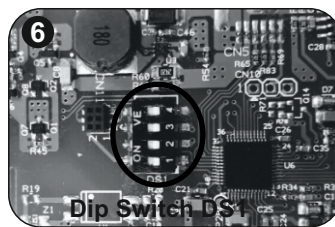
**Step 1:** Place a flat blade screwdriver and pull up gently the diffuser's clips from both sides to remove the diffuser.

**Step 2:** Place a flat blade screwdriver and pull up gently the reflector.

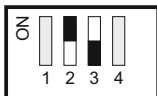
**Step 3:** Install the plastic base with the included mounting screws and plugs. If the hole that exists is not useful, drill another hole on one of the designated positions in order to pass the cables and install the included gasket (verify that are not deformed).

**Step 4:** Install the included rubber gasket (verify that is not deformed). Make a hole in the center of the rubber gasket by using a small screwdriver. Pass the round cable through the rubber gasket. Install the included tie-wrap to the included adhesive tether loop and fasten securely the power cable in order to anchor it. Install the power cable as shown in the picture. Always use in any case round mains cable, with a diameter of 5-10mm (HO5RN-F type 2x1mm<sup>2</sup>) or any other type, at least equal to it's mechanical and electrical properties. ATTENTION!! The cable must not be deformed in any way (This requirement is important to ensure the IP rating).

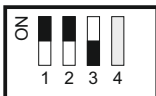
**Step 5:** Connect the mains cable to the respective terminal block: L for live wire, N for neutral. Power supply cables cross section should be 0.8 – 3 mm<sup>2</sup>. The C1 and C2 terminals are used for eBus communication (optional), DALI communication (optional) or voltage free contact (optional).



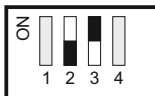
1h  
(default position)



3h



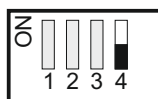
3h  
(with 2 bat.)



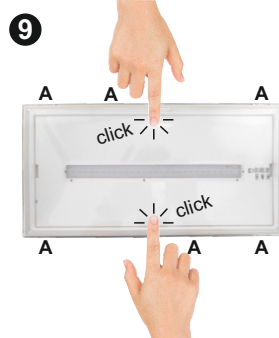
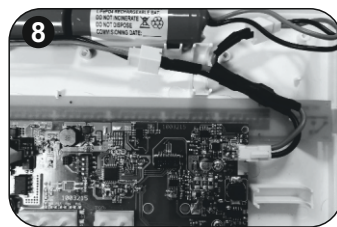
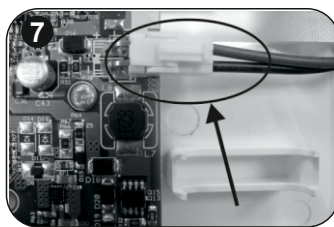
8h  
(with 2 bat.)



Switch 4 = ON  
Maintained operation  
(default position)



Switch 4 = OFF  
Non-maintained operation



**Step 6:** The control of maintained or non maintained operation of the luminaire is achieved through Switch 4 of DS1. For maintained operation, switch number 4 must be in ON position. For non-maintained operation, switch number 4 must be in OFF position. The user can select one of the 3 available minimum autonomy durations: 1 hour, 3 hours and 8 hours. The selection must be done while the luminaire is disconnected from AC and battery supplies. The selection is achieved through Switches 1 - 3 of Ds1. One additional label is included in the package for 3 hours duration (180). The installer must cover the default 1 hour (60) printing. Please take notice of the orientation of the label.

**Step 7:** Place the battery's connector to the corresponding connector on the PCB.

**Step 8:** For accomplishing 3h (for more illumination) and 8h autonomous light, an extra battery and adaptor is required (Part No. 290BAT.13). Place the battery on the diffuser, connect the two batteries to the adaptor and then the adaptor's connector to the corresponding connector on the PCB. Two additional label is included in the package, one for 3 hours duration (180) and one for 8 hours duration (480). The installer must cover the default 1 hour (60) printing. Please take notice of the orientation of the label.

**Note!** 8hour duration can be achieved only with 2 batteries, while 3hour duration can be achieved with 1 battery and if you need more illumination you can connect a second battery and switch the Ds1 as the image above (Step 6).

**Step 9:** Refit carefully the removed plastic parts. Finally place the diffuser. Attention!! The plastic lathces (A) must be secured (click sound). This requirement is important to ensure the IP65 rating. Power on the luminaire.

Important notice when installing luminaires within the same area!!!

To avoid that luminaires perform their battery test at the same day, connect the battery packs with more than 1,5 minutes inbetween.

**Note:** In case of battery replacement, this must be replaced with parts of the same type and characteristics. The replacement must be performed by the manufacturer or a competent person.

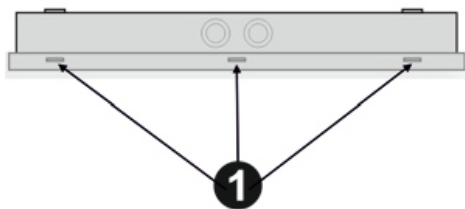
**Note:** If the supply cable of the luminaire is damaged, it shall exclusively be replaced by a competent person in order to avoid hazard.

**Note:** In case of mains power disconnection for a period of more that two months, the battery must be disconnected.



The light source of this luminaire is not user replaceable. When the light source reaches its end of life the whole luminaire shall be replaced.

## Pictogram Installation



**Step 1:** Place a flat blade screwdriver and pull up gently the diffuser's clips from both sides to remove the diffuser.

**Step 2:** Install the pictogram you need in the diffuser and refit it to the luminaire. (In case you need to change the pictogram follow the same procedure.)

**Step 3:** Fill in the letter G on the specification label. 

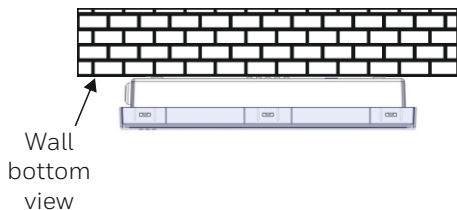
X	1	A	E	60
---	---	---	---	----

↑  
G



## Mounting Methods

Wall installation

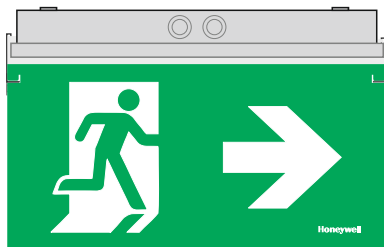


Ceiling installation

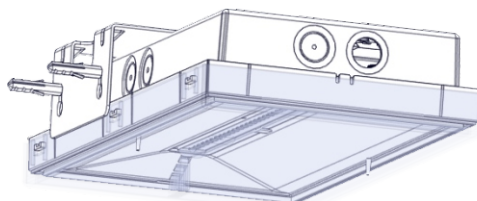


ImperLED luminaires can be surface mounted on walls or ceilings.
















## Mounting Accessories (Available After Request)



290405.11 ImperLED Suspended Pictogram



290471 ImperLED Wall Bracket

Indicator LEDs	Description	
GREEN 	Normal	
RED 	Charging (battery test not possible while charging)	
YELLOW 		
	Mains off, battery not connected or charger fault	
	Battery test	
		
	Battery fault	
	Light source test	
		
	Light source fault	
		
	Battery fault and light source fault	
LED Status explanation		
 Off	 On	 Flashing

Technical description	ImperLED Combi ST LED 230V w/pict 10Y 138h	
Part no.:	138002.10	
Operation Voltage:	220-240V AC, 50-60 Hz	
Maximum Power Consumption:	5.3W / 5.6VA	
Battery (LiFePO <sub>4</sub> ):	1h & 3h: 3.2V / 2Ah	3h & 8h: 2 x 3.2V / 2Ah
Battery Protection:	Overcharge protection / full discharge protection	
Min./Max. Charge Current:	165 / 250mA	
Charge Voltage Range:	3 - 4.5V	
Charging Time:	1h & 3h: 12hours	3h & 8h: 24hours
Emergency Mode Duration:	1h / 3h / 8h manually selected (default 1h)	
Lumen output, normal:	360lm	
Lumen output, emergency:	1h: 350lm / 3h: 210lm or 340lm / 8: 190lm	
Produced in accordance with:	EN 60598-1, EN 60598-2-22, EN 55015 EN 61547, EN 61000-3-2, EN 61000-3-3	
Ambient Temperature Range:	5 to 40 °C	
Relative Humidity:	Up to 95%	
Degree of cover protection:	IP65	
Technical lifetime (light source):	> 100000 hours	
Weight:	820 gr	
Expected Battery Lifetime:	10 years	
Controlgear classification in accordance with IEC 62034:	with automatic test function	

The ImperLED is a self-contained luminaire with selftest function. It can be configured as maintained or non-maintained.

### Selftest functions

Every 15 days the luminaire will perform an emergency operation test. This will light the light source for approximately 3 seconds. The red indicator LED will flash during this test sequence.

Every 6 months the luminaire will perform a battery capacity test. The test lasts for the selected autonomy. The light source will be lit and the yellow indicator LED will flash during this test sequence.

Note: When using DALI or Wireless communication, the frequencies and schedules for tests will instead be determined by the connected PC software.

### Manual test functions

Manual tests can only be performed if both mains and battery are connected.

By activating the magnetic contact briefly (less than 5 seconds) an emergency operation test is performed. The light source will be lit for approximately 3 seconds, the red indicator LED will flash during this test sequence. The test will start only if the battery has enough charge.

By activating the magnetic contact for a time space between 5 and 10 seconds, a battery capacity test is performed. This test will last for the selected autonomy and can only be performed when the battery is fully charged (steady green indicator LED). The exit sign will be lit and the yellow indicator LED will flash during this test sequence.

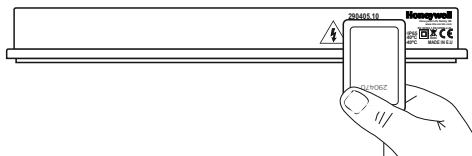
### Resetting errors

Activate the magnetic contact for a time space between 10 and 15 seconds to delete all indicated errors. Then the luminaire enters regular operation mode.

### Test and Faults Reset operations with the 290470 card (not included and available after request).

In order to activate an emergency operation test, you must place the card in front of the TEST indicator and remove it immediately.

In order to proceed to capacity test, you must place the card in front of TEST and hold it for 5 to 10 seconds. To reset errors you must place the card in front of TEST by holding it for 10 to 15 seconds and removing it.



At the end of their useful life the packaging, product & batteries should be disposed of via a suitable recycling centre. Do not dispose of with your normal household waste. Do not burn.

