Recessed Emergency Luminaire

Product Specification

- Mains voltage: - Mains frequency: - Power Consumption	230V +/- 10% 50 - 60Hz 4VA
 No user-serviceable fuses internal fuses: Emergency output: 	155 -188lm
- Emergency Duration:	3 Hours
- Battery:	3.6V 3.0Ah LiFePO4
- Ambient temperature range:	+10°C to +35°C
- Min/Max Conductor sizes:	0.5-2.5mm ²
- Weight	400g
- Charging time:	24 hours
- Protection class:	Π
- Degree of protection:	IP20
- Material:	UL94 V0 PC
- Em module complies with:	BS EN 61347-2-7/2-13

- Suitable for installation to EN50172 and BS7671

The unit provides reinforced insulation between the mains supply and battery charging circuit and employs self-resetting protection against short-circuit of battery terminals. Normal charging will resume automatically once a fault is removed.

Installation

Ensure the mains supply is isolated before attempting installation! Please refer to the diagrams on page 2 for fixing details.

It should not be mounted in an external location or in areas where temperatures below 10°C may be frequent in cold months and likewise, do not use the luminaire in a hot environment where the temperature is maintained at 35°C or above. In either case, the battery's design life of 4 years will be compromised and provision of three hour emergency duration may not be possible when needed.

Prepare supply cables with a strip length of 6mm (10mm maximum). Min/max Conductor sizes: 0.2 - 1.5 mm².

It is recommended that a 42mm diameter hole is provided to insert the recessed ceiling lamp head and luminaire. The mains connections should be made to the terminals marked 'LIVE' and 'NEUTRAL'. This product requires a permanent supply (via test key switch where required). Restrain and protect the terminations by affixing the cord restraint and terminal cover provided.

Commissioning

Note: This luminaire will only operate the white LED upon mains supply failure from the internal battery supply; it cannot be operated as a standard light source.

If it is anticipated that the un-switched supply may be interrupted before normal use, we advise that the battery is left disconnected and commissioning is delayed until the supply is stable.

If the luminaire has been stored for a number of months, it may be necessary to repeat the initial charge/discharge process several times to re-condition the battery and achieve full rated emergency duration.

When ready for commissioning, the battery lead should be connected to the emergency driver PCB and then the mains supply turned on.

Features

- > Self-contained emergency luminaire
- > Optional lensed versions for corridor applications
- > Built-in charge indicator LED and 'push to test' switch on lamp head
- > Incorporates a high temperature LiFePO4 battery as standard
- Emergency spacing (2.5m ceiling) : 8m open area/ 19m escape route
- Deep discharge protection (DDP) to protect cells from over discharge

NOTE – To comply with regulations, installation must be carried out by suitably qualified competent person and in accordance with the current IEE wiring regulations (BS7671) and building regulations. This luminaire requires a <u>permanent</u> supply for charging the battery pack.

The green indicator LED should now be visible on the lamp head's front bezel, showing the battery is connected and being charged.

The mains supply should remain un-interrupted for a minimum of 24 hours for the luminaire to charge its internal battery. The supply should then be removed and all luminaires checked for a minimum of 3-hours duration.

After successful commissioning, the battery should be marked with the date of commission.

Testing

Regular testing must be carried out and recorded in accordance with BS EN 50172.

To facilitate monthly checks, a discrete green charge indicator and manual push-to-test feature are incorporated into the product. Depressing the facia at the point shown in the illustration below will operate the lamp in the emergency mode for as long as it is pressed. This feature allows regular testing to be carried out with minimal inconvenience to the building occupants. Please take care to avoid looking directly at the LED when under test. Finger contact with the power LED should also be avoided. For commissioning and the annual full-rated duration test, it is recommended that the supply is isolated via conventional methods such as isolation of the circuit at the MCB or via a key test switch.

Short discharge periods each month for the Function Test will not adversely affect the battery and should be considered as a maintenance exercise. Regular full discharge cycles could however adversely affect the design life of the battery, so excessive testing should be avoided wherever possible.

Emergency Lighting 'standard' or 'manual' Test

The following manual inspections must be carried out: <u>Monthly</u>

Switch off the mains power supply to the luminaire. Inspect the emergency light for satisfactory operation. Any defects should be noted and actioned by a competent person as soon as possible. <u>Yearly</u>

Switch off the mains power supply to the luminaire. Leave the unit to run for the rated period (e.g. three hours). The light should remain operable from the battery for the whole period.

Please be aware that further inspection / testing may be required, e.g. by risk assessment / local legislation.

Maintenance

There are no user serviceable parts within the product. The battery pack must be replaced when the 3 hour duration is no longer achieved.

The battery is not considered user-replaceable and must be referred to a competent engineer. Please contact the luminaire manufacturer suitable replacement parts.

Batteries and Disposal

The battery has a designed service life of 4 years and must be replaced in a timely manner to ensure the integrity of the emergency lighting system is maintained. In any case, the battery should be replaced with when it no longer provides the rated duration (3 hours). The manufacturer of this luminaire is committed to fulfil its obligations as a producer of batteries used in emergency lighting applications. End-of-life batteries may either be returned to the manufacturer at the customers cost and arrangements will be made to ensure their correct disposal. Alternatively it may be more convenient for the customer to deliver end-of-life batteries to site(s) of authorized treatment facilities at their cost and it will be ensured that they are accepted back and subsequently treated to the standard required by the regulations.

Disclaimers

This product and its associated accessories have been designed and manufactured to comply with the requirements of EN60598-2-22 and required additional standards. Operation beyond the parameters specified in this document and the associated standards may result in reduced performance and ultimate premature failure, with the warranty made void. The specifier should be aware of the environment to which this luminaire and components are used and adhere to its specifications. Please contact our Technical department if you are in any doubt.

