



Classification of batteries used for self-contained emergency lighting luminaires as industrial batteries according to the EU Battery Regulation

Introduction

The EU Batteries Regulation (2023/1542) is an important step towards a more sustainable and circular market for batteries in the EU. LightingEurope acknowledges the significance of the Regulation in contributing to reducing the environmental footprint of batteries, minimising the use of hazardous substances, and improving the collection, recycling, and reuse of batteries and their embedded critical raw materials.

However, we detected that the text of the regulation contains ambiguities related to the classification of batteries. Particularly in the case of batteries used in emergency lighting systems, legislative clarity through the classification of these batteries as industrial batteries should be achieved. Some EU countries have already concluded that batteries used in emergency lighting should be considered industrial batteries but a full harmonisation in the EU single market must follow.

Characteristics of Batteries used for self-contained Emergency Lighting luminaires

Batteries are key components of emergency lighting systems as they contribute to the functionality of emergency lighting independent of power supply, and thus helping in the safe evacuation of building occupants in emergency situations. Self-contained emergency lighting luminaires are mostly installed in premises open to the public, or buildings for professional or industrial use, and only verified and maintained by duly qualified professionals.

Batteries used in self-contained emergency lighting luminaires are specific to each emergency lighting manufacturer as they are developed to meet their specific technical characteristics. Furthermore, they are normally customized for the luminaire, which means that they cannot be used for other products. For example, these batteries are usually outfitted with a dedicated connector and supplied and charged by customized charger system as they are permanently connected to the supply. The batteries are specifically selected to maintain the temperature within the correct range for proper service life. These special requirements ensure a constant state of readiness and reliability of the emergency lighting application.

In addition international and European standards provide guidance for the characterization of battery types, where portable batteries are defined as “battery for use in a device or appliance which is conveniently hand-carried” and batteries for industrial use are defined as including those providing “emergency power”. These standards must be taken into consideration for the development of self-contained emergency luminaires.

Industrial Batteries in the Battery Regulation

Recital 15 in the preamble of the EU Batteries Regulation gives a clear outline of the characteristics and fields of application of industrial batteries. According to the preamble, batteries are considered industrial batteries if they are either:

- intended to be used for industrial activities, communication infrastructure, agricultural activities, or generation and distribution of electric energy.
- given industrial uses after being subject to preparation for repurposing or repurposing, even though they were initially designed for a different use.
- used for energy storage in private or domestic environments.

Based on the characteristics described in the EU Batteries Regulation, batteries utilised in self-contained emergency lighting luminaires should be considered industrial batteries if they meet all the following criteria:

- They are specific to a self-contained emergency luminaire (e.g. they are selected to meet the safety, the minimum life and the performance required by the luminaire standard)
- they are designed and customized for operation in a self-contained emergency lighting luminaire by using a specific connector or other connecting device that normally prevents the use in different products or different applications
- they are designed and intended to be used in circuit permanently connected to the normal supply to keep them fully charged for the event where the normal supply fails.

The device-specific requirements for batteries in emergency lighting use and their role in ensuring a continuous and reliable functioning of the self-contained emergency lighting luminaire necessitates the categorisation of these batteries as industrial batteries.

Contact

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LightingEurope is the voice of the lighting industry, based in Brussels and representing 32 companies and national associations. Together these members account for over 1,000 European companies, a majority of which are small or medium-sized. They represent a total European workforce of over 100,000 people and an annual turnover exceeding 20 billion euro. LightingEurope is committed to promoting efficient lighting that benefits human comfort, safety and wellbeing, and the environment. LightingEurope advocates a positive business and regulatory environment to foster fair competition and growth for the European lighting industry. More information is available at www.lightingeurope.org.