

Safety-Related Electronic Circuits



UL Solutions Safety-Related Electronic Circuits (SREC) program helps manufacturers minimize expenses involved with circuit designs.

In response to evolving technologies, manufacturers are moving away from the use of discrete protective devices, such as thermal protectors, fuses, etc., and are relying more on integrated electronic circuits to provide these protective functions.

UL Solutions dedicated, experienced team evaluates electronic circuits to help our customers with product certification by understanding the requirements of global and local standards.

Lighting is becoming more intelligent, and system integration is becoming more prevalent globally. Leverage UL Solutions comprehensive evaluation services to address global standards and regulations to benefit you and your customers' global certification needs.

Examples of protective functions include, but are not limited to:

Limit or reduce power in response to elevated ambient conditions or discrete component failures, analogous to the function of a thermal protector in recessed luminaires



Disconnect power in response to the opening of a service compartment access panel, analogous to the function of a mechanical interlock switch to prevent contact with a hot surface or high-voltage circuit during maintenance



Limit or reduce available voltage or current at accessible terminals during routine maintenance, such as at the pins of a lamp or lamp holder during lamp replacement



Maintain electrical outputs within limits defined as non hazardous during abnormal operation, such as those defined for Class 2 or low-voltage limited-energy (LVLE) power sources



Integrating electronic circuits with lighting systems

The SREC program relates to Supplement SA of UL 8750, the Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, that was added for a more clear decision path to determine compliance. The scope of this Standard includes requirements for LED equipment that are an integral part of a luminaire or other lighting equipment, as well as components like LED drivers, controllers, arrays (modules), circuitry and packages.

Why UL Solutions?

At UL Solutions, a global leader in safety science, testing and inspection, we have the expertise, flexibility and testing capabilities to understand your business needs and help you bring your lighting solutions to market quickly.

Learn more online at <u>UL.com/lighting</u> or connect with our experts in your region.

- In the Americas: <u>LightingInfo@UL.com</u> In Europe: <u>AppliancesLighting.EU@UL.com</u> In China: <u>GC.LightingSales@UL.com</u> In Australia and New Zealand (ANZ): <u>CustomerService.ANZ@UL.com</u>
- In the Association of Southeast Asian Nations (ASEAN): <u>ULASEAN.AHLSales@UL.com</u>
- In Japan: ULJ.AHL@UL.com
- In South Korea: <u>Sales.KR@UL.com</u>
- In the Middle East and Africa: UL.MEA@UL.com
- In South Asia: Sales.IN@UL.com



Safety. Science. Transformation.™

© 2022 UL LLC. All rights reserved. AHL22CS340974