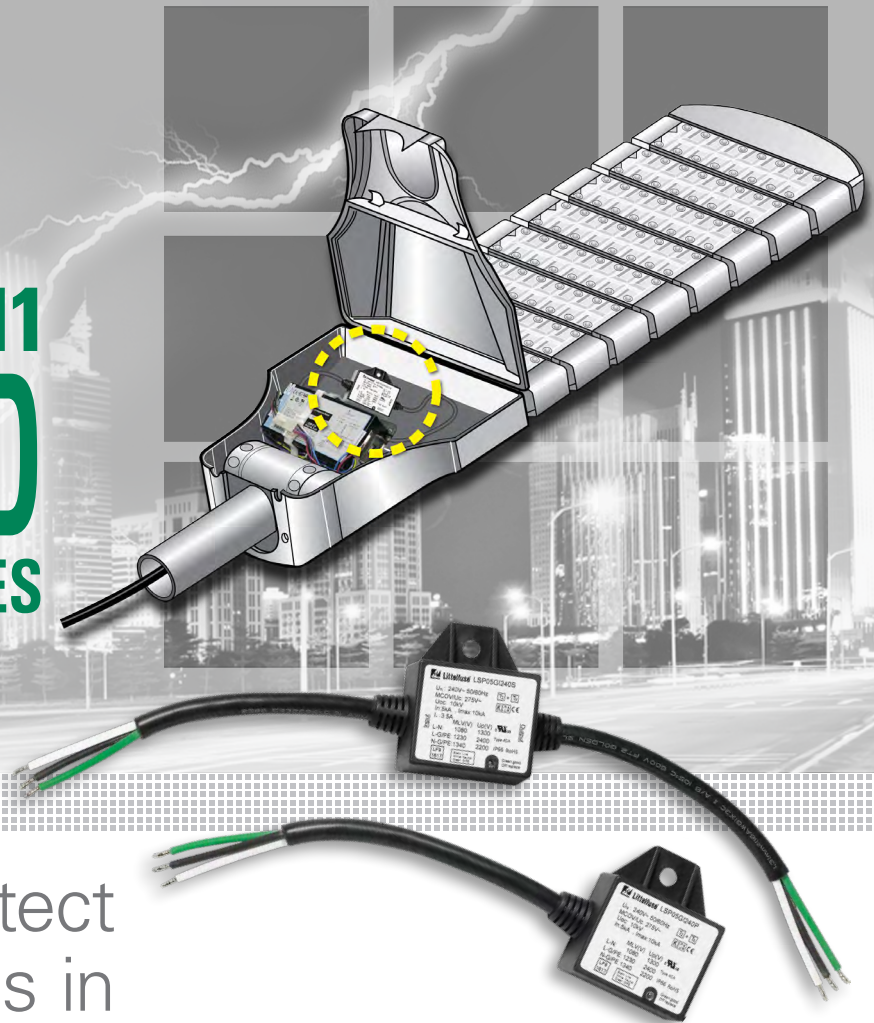


IEC/EN 61643-11 APPROVED 10KV/5KA MODULES



Designed to Protect Luminaires in Class I or Class II Installations

The LSP05GI Series from Littelfuse is a 10kV/5kA capable surge protection module with IEC/EN 61643-11 certification to help luminaire manufacturers meet the latest testing standards. It also provides double-insulated cable to simplify cable routing design in the luminaire.

This UL 1449 approved surge protective device (SPD) has a built-in LED indicator that notifies maintenance personnel when it should be replaced.

Applications

- Roadway and street lighting
- Traffic lighting
- Parking garage lighting
- Wash wall lighting
- Digital signage
- Tunnel lighting
- Flood lighting



DataSheet



Design Guide



Samples

10kV/5kA Surge Protection for IEC/EN 60598-1 Luminaires

Features



LSP05GI240S



LSP05GI240P

- IEC 61643-11/EN61643-11 approved
- Double-insulated cable wire
- Built-in LED indicator
- Meets ANSI C82.77-5-2015: Location C Medium, 10kV/5kA, 1.2/50µs-8/20µs Combination Wave
- Meets ANSI C136.2-2015: Enhanced Level, 10kV/5kA, 1.2/50µs-8/20µs Combination Wave
- Meets IEEE C62.41.2: Location Category C Low, 6kV/3kA, 1.2/50µs-8/20µs Combination Wave
- Thermally protected
- Series-connected and parallel-connected options
- IP66 rated

Benefits

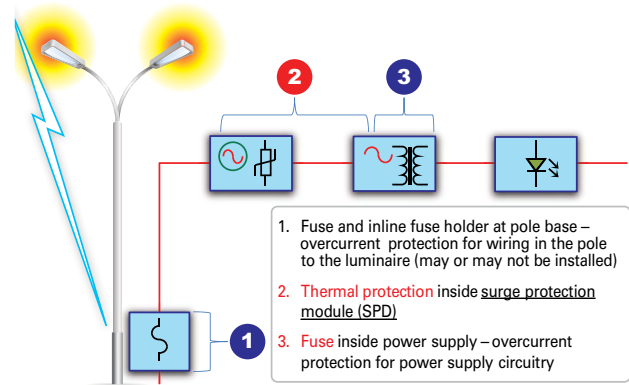
- Enables meeting IEC/EN 60598-1 international testing standard for luminaire
- Allows routing the cable freely, the cable can be routed freely in the luminaire or lighting pole without additional insulation tube or cable management clip/tie in a Class II insulation installation
- Alerts maintenance to the need for replacement
- Offers an option suitable for use in many parts of the world
- Protects against light or facility hazards due to 'end-of-life' or extreme surge conditions
- Series connection disconnects the power to protect the luminaire; parallel connection disconnects itself at end-of-life and keeps luminaire powered
- Offers a dust-tight and water-resistant solution



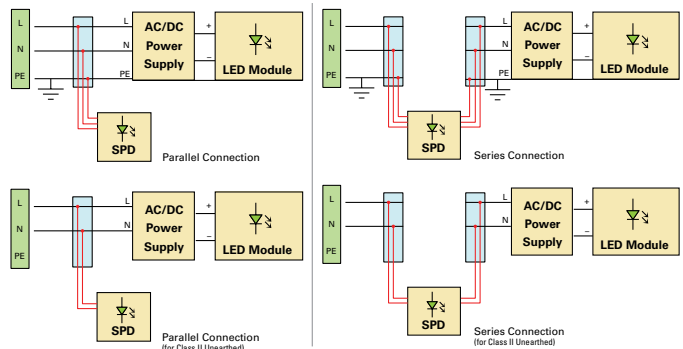
Surge Protection Module Key Characteristics

Model	LSP05GI
Connection Type	Parallel and Series
Indication for SPD Replacement	Parallel: Built-in LED indicator turn off Series: Luminaire and built-in LED indicator turn off
Thermal Protection	MOV thermal disconnection when overheated
Recognition/Compliance	UL 1449 Type 4 CA IEEE C62.41.2 C Low Exposure ANSI C136.2 Extreme ANSI C82.77-5 High Exposure US DOE MSSLC Roadway Elevated EN/IEC 61643-11 Class II + III CE KEMA-KEUR (10kV/5kA, 1.2/50µs-8/20µs)
U _n (nominal operating voltage)	120/240/277/347/480VAC
I _{max} (maximum surge current, one hit)	10kA
I _n (nominal surge current, 15 hit)	5kA
Luminaire Insulation Class	Class I earthed/Class II unearthed
Water-proof and Dust-proof	IP66
Dimensions	46.36 x 39.28 x 26mm (mounting tab excluded)
Applicable Markets	America/Europe

LED Street Light Protection Scheme



Parallel and Series Connections Using an SPD



Parallel Connection

- Thermal protection prevents MOV fire hazard caused by unstable line voltage and end-of-life failure
- LED indicator alerts maintenance personnel to replace the module

Series Connection

- Thermal protection prevents MOV fire hazard caused by unstable line voltage and end-of-life failure
- Series-connected SPD cuts-off power to the luminaire to indicate clearly when module replacement is required