## **Solar (PV) Application Products**

## 1500 V Dc Solar Fuse Products

#### **SPXC Series Fuses**

- 1500 V dc 1-4 A
- 10 x 57 mm
- UL 248-19 Listed
- Meets IEC 60269-6\*
- Up to 50,000 A interrupting
- Ferrule or PCB mount available
- Application: string inverters



#### **SPXV Series Fuses**

- 1500 V dc 1-60 A
- UL 248-19 Listed
- TUV IEC 60269-6
- Applications: inverters and combiner boxes
- SPXVS silver-plated series available



### **SPXI In-line Series Fuses**

- 1500 V dc 1-60 A
- UL 248-19 Listed
- TUV IFC 60269-6\*
- Accommodates large wire range
- No fuse holder required
- Application: PV wire harness (eliminate combiner boxes)



#### **SPNH Series Fuses**

- 1500 V dc 50-400 A
- UL 248-19 Listed
- Meets IEC 60269-6
- Bolted directly onto busbar or inserted into fuse blocks
- Applications: inverters and re-combiners



#### LFXV15 Series Fuse Block & Cover

- Dead-front cover for protection
- Ventilated design keeps fuse cool
- Easy fuse removal, no tools required
- 35 mm DIN-rail mountable
- Holds 20 x 127 mm 35–60 A SPXV fuses



## **LFPXV Series - Touch-Safe Holders**

- Finger-safe design
- No fuse pullers or tools required
- 35 mm DIN-rail mountable
- Holds 10 x 85 mm SPXV/SPXVS fuses



## 1000 V Dc Solar Fuse Products

#### **SPFI In-line Series Fuses**

- 1000 V dc 2-30 A
- UL 248-19 Recognized
- TUV IEC 60269-6\*
- No fuse holder required
- Application: PV wire harness (eliminate combiner boxes)



#### **SPF Series Fuses**

- 1000 V dc 1-30 A
- UL 248-19 Listed
- TUV IEC 60269-6
- Ferrule or PCB mount available
- Applications: combiner boxes, inverters, and battery charge controllers



#### **LPHV Series Fuse Holders**

- Touch-safe design offers protection
- 35 mm DIN-rail mountable
- Designed to hold SPF 1000 V dc fuses



#### **SPFJ Series Fuses**

- 1000 V dc 70-450 A
- Listed to UL 248-19 (PV) and UL 248-8 (Class J)
- Meets IEC 60269-6\*
- Compact footprint reduces panel size
- Applications: re-combiner boxes and inverters



## **LFJ1000 Series Fuse Blocks**

- 1000 V dc fuse block
- UL 4248-18 Listed
- Available in clip or stud configurations
- Designed to hold SPFJ fuses



## **High-Speed Protection**

## PSR High-Speed Series Fuses ■ 550–1300 V ac and 500–1000 V dc

- 40 A-2000 A
- UL 248-13 Recognized
- Meets IEC 60269-4
- Optional remote indication microswitch available
- Application: dc couple PV-BESS central inverters



## **PSX Series High-Speed Square Body Fuses**

- 1500 V dc 80-1400 A
- Dc breaking capacity up to 250 kA at 1500 V dc
- UL248-13 Recognized
- Meets IEC 60269-4
- Optional remote indication micro-switch available
- Application: hybrid PV-BESS inverters



## **Switch Products**

## **Dc Disconnect Switches**

- 1000 and 1500 V 200, 320, 400 and 500 A
- Design eliminates need for external bridging links (jumpers) to lower heat dissipation and save installation time
- Applications: combiner boxes, array combiners and string inverters



## **Class J Fuse Disconnect Switches**

- 600 V ac voltage rating
- 30 A, 60 A, 100 A and 200 A
- Breaks circuit upstream and downstream enabling the switch to handle higher voltages and provide a longer switch life
- Small footprint saves space and provides design flexibility
- Applications: Auxiliary Services Transformer (SSVT) in central inverter and string inverter







# **Solar (PV) Application Products**

## **Ground Fault Protection**

## **SE-601 Series Ground-Fault Relays**

- Provides sensitive ground-fault protection for ungrounded systems
- Application: central inverters



## **EL731 Series Earth Leakage Relays**

- Provides sensitive earth-leakage protection for grounded systems
- Application: central inverters



## **600 V Dc Solar Products**

## IDSR Series Indicator® Fuses KLKD Series 10 x 38 (Midget) Fuses

- 600 V ac/dc
- KLKD UL 248-19 Listed
- Applications: combiner boxes, inverters, battery chargers and high amp power distribution
- Negative terminal combination blocks available



## 100 V Dc and Below Solar Products

## 400PV Series - 2410 Photovoltaic Fuse

- 86 V dc .375 A
- Recognized to UL/CSA 248-1 and UL/CSA 248-19
- Wide temperature operating range
- 2410 size; surface mountable
- Applications: photovoltaic shingles and cells



## **Overvoltage Protection**

## SPD2 PV Series Surge Protective Devices (SPDs)

- 1100 and 1500 V dc in 3+0 configuration
- Protects equipment from transient overvoltage
- Applications: combiner boxes and inverters

For more information on all surge protective devices visit Littelfuse.com/SPD



## **Arc-Flash Protection**

## AF0025 & PGR-8800 Arc-Flash Detection Relays

- Reduces arc-fault damage
- Applications: combiner boxes and central inverters





#### **Solar Applications** D String Inverter Micro Inverter & Solar Shingles 600 V to 1000 V Fuses TVS Diodes/SCRs Touch-Safe Fuse Holders Varistor Products Power Distribution Blocks Varistor Products Temperature Sensors A Central Inverter B Small Inverter 86 V Surface-Mount Fuse TVS Diodes/SCRs 600 V to 1500 V Fuses Surge Protective Devices Power Distribution Blocks Varistor Products Dc Disconnect Switches Dc Earth Leakage/Gound-Fault Relays Temperature Sensors Temperature Sensors Varistor Products Class J Fuse Disconnect Switches Surge Protective Devices 1000 V to 1500 V High-Speed Semicondutor Fuses Temperature Sensors Arc-Flash Relays Class J Fuse Disconnect Switches E Wiring Harness 1000 V to 1500 V In-Line Fuses G Е

With over 60 million devices installed in photovoltaic power systems, Littelfuse understands the global challenges of the solar market. We offer numerous circuit-protection products that are uniquely suited to protect the equipment and systems subject to the harsh environments of standard photovoltaic installations. For more information, visit **Littelfuse.com/Solar** 

F

G Array Combiner

Fuse Blocks

1000 V to 1500 V Fuses

Touch-Safe Fuse Holders Surge Protective Devices Dc Disconnect Switches

Disclaimer Notice – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/product-disclaimer.



F Combiner Box

1000 V to 1500 V Fuses Touch-Safe Fuse Holders Power Distribution Blocks

Surge Protective Devices

Dc Disconnect Switches

Arc-Flash Relays