



Deutschland
Land der Ideen



Ausgewählter Ort 2011



Emergency Cutout Switch for Photovoltaic Installations



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Indispensable in the event of a fire:

**Eulektra FireSec-Switch interrupts
the dangerous voltage supply to
photovoltaic installations**

We let the power flow.

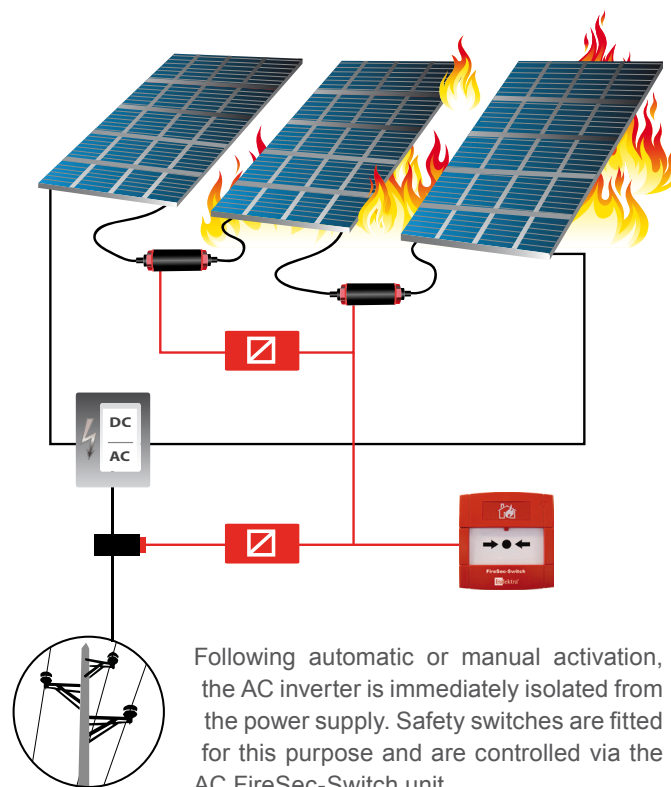
The Photovoltaic Fireman's Switch

In the event of a fire, the Eulektra emergency cutout switch for photovoltaic installations interrupts the dangerous power flow between solar module and AC inverter. As the power supply is isolated directly at each individual module, the fire service is able to tackle fires in buildings where PV installations are installed.

The Eulektra fireman's switch is an electronic extension for PV installations that employs compact high-capacity relays, installed between the individual solar modules of a series-connected string. These high-capacity relays are controlled via an autonomous control cable. In the event of a fire, the system is activated automatically or manually via an emergency switch and in a coordinated sequence, disconnects the AC inverter from the grid and the individual solar modules from the DC grid of the PV installation.

Every evening after sunset, a night circuit disconnects the power supply to the installation in accordance with the Eulektra safety concept, monitoring and guaranteeing the mechanical function of the relays.

Design and Function



Compact high capacity relays are installed between the series-connected solar modules in a string. A control cable connects these relays to the DC FireSec-Switch unit. The relays interrupt the power flow to each individual module immediately. The residual voltage of each module is no longer dangerous.

In the evening, when power generation is no longer taking place, a night circuit isolates the PV installation. The mechanical function of the circuit is thus checked and guaranteed on a daily basis.

Benefits at a Glance

- ✓ If necessary or in an emergency, isolates the PV installation from the dangerous voltage supply
- ✓ Makes it possible for fire crews to tackle fires in buildings with solar power systems and renders them safe for maintenance work
- ✓ Automatic and manual control are both possible. The closed current principle guarantees tripping in extreme cases
- ✓ Compact high-capacity relays are easy to install or retrofit
- ✓ The design and switching principle minimises power losses in power production mode
- ✓ Nightly activation verifies and guarantees the mechanical function of the relays
- ✓ Offers a value for money safety concept that can be customized for operation with all solar module installations