

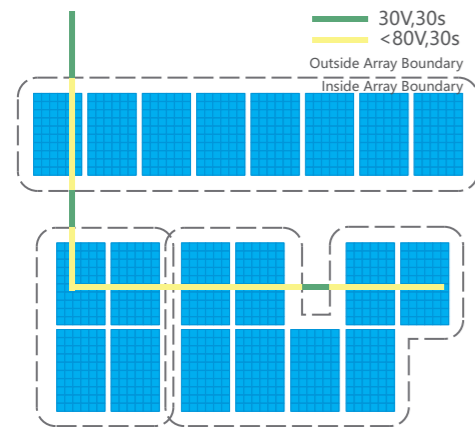
Photovoltaic DC Components YCRP-□C Rapid Shutdown Device



General

The component-level rapid shutdown PLC control box is a device that cooperates with the component-level fire rapid shutdown actuator to form the photovoltaic DC side quick shutdown system, and the device conforms to the American National Electrical Code NEC2017&NEC2020 690.12 for rapid shutdown of photovoltaic power stations. The specification requires that the photovoltaic system on all buildings, and the circuit beyond 1 foot (305 mm) from the photovoltaic module array, must drop to below 30 V within 30 seconds after the rapid shutdown start; The circuit within 1 foot (305 mm) from the PV module array must drop to below 80V within 30 seconds after the fast shutdown start. The circuit within 1 foot (305 mm) from the PV module array must drop to below 80V within 30 seconds after the rapid shutdown start.

The component-level fire rapid shutdown system has automatic power off and reclosing functions. On the basis of meeting the rapid shutdown function requirements of NEC2017&NEC2020 690.12, it can maximize the power generation of the photovoltaic power generation system and improve the power generation rate. When the mains power is normal and there is no emergency stop demand, the module level fast shutdown PLC control box will send a closing command to the fast shutdown actuator through the photovoltaic power line to connect each photovoltaic panel; When the mains power is cut off or the emergency stop is started, the component-level rapid shutdown PLC control box will send the disconnection command to the rapid shutdown actuator through the photovoltaic power line to disconnect each photovoltaic panel.



Features

- Meet the requirements of NEC2017&NEC2020 690.12;
- MC4 quick connection terminal quick installation without opening the cover;
- Integrated design, without additional distribution box;
- Wide operating temperature adaptability -40~+85 °C;
- Compatible with SUNSPEC rapid shutdown protocol;
- Support PSRSS rapid shutdown protocol.

Selection

| | | | |
|-----------------------|--------------------|-----------------------------------|----------------------|
| YCRP | 15 | C | S |
| Model | Rated current | Usage | DC input |
| Rapid shutdown device | 15: 15A 25: 25A | C: Control box (Use with YCRP) | S: Single D: Dual |

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Technical data

| Model | YCRP-□C-S | YCRP-□C-D |
|--|-----------|-----------|
| Maximum input current(A) | 15、25 | |
| Input voltage range(V) | 85~275 | |
| Maximum system voltage(V) | 1500 | |
| Working temperature(°C) | -40~85 | |
| Protection degree | IP68 | |
| Maximum number of PV panel strings supported | 1 | 2 |
| Maximum number of PV panels supported per string | 30 | |
| Connection terminal type | MC4 | |
| Communication type | PLC | |
| Over-temperature protection function | Yes | |

Sketch map

