



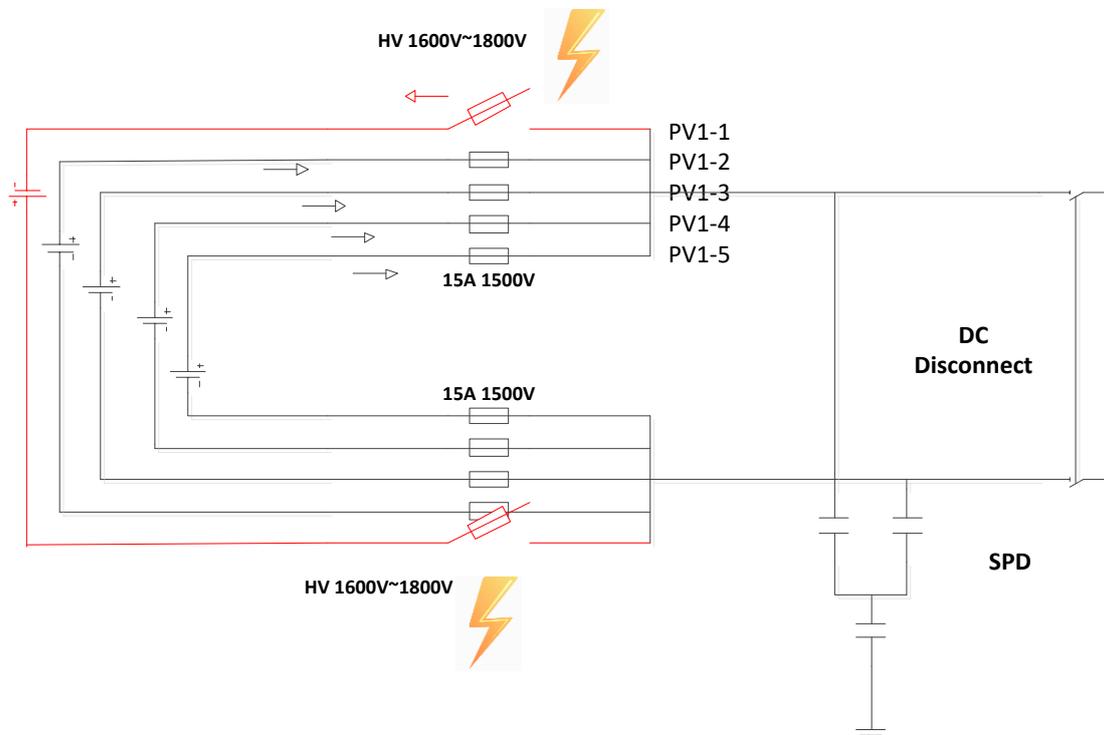
Service Bulletin, May 10, 2018

**Subject: PV strings polarity and voltage difference check prior to closing fuse holders**

Products: CPS SCA50/60KTL-DO/US-480 (wire box)

This service bulletin provides a reminder and requirement for installer to inspect PV string polarity prior to closing the fuse holders.

5 strings are connected to each MPPT group, and 3 MPPT groups are wired to the DC disconnect switch separately. In each MPPT group, if any one of the strings is reversely connected, as shown below, strings 2/3/4/5 will be in parallel and in series with string 1. According to Kirchhoff Law, string 1 and strings 2/3/4/5 will form a closed loop path with 1600~1800 voltage drop (2x of Panel group voltage), and the current going through string 1 fuse is the sum of other four strings. This 15A/1000V rated fuse will be slowly burnt or broken, and the plastic fuse holder housing could be heated up and result in a fire, melt or burnt incident.



In this situation, when the DC switch is in "OFF" position, it may just burn fuse holders and the whole wire box. When the DC switch is in "ON" position, it may cause further damage to internal components.



CPS also recommends checking the voltage difference between each string to make sure the inverter can produce proper power. The difference between each string should be within 1 PV panel group open circuit voltage.

Without proper string polarity and installation per the product manual, the customer will have risk of inverter wire-box and electronic circuit damage when solar power is applied to the inverter during startup.

Customers can contact CPS through the hotline for further advice. If any question please do contact CPS;

- CPS hotline: 855-584-7168

CPS is committed to delivering the ultimate solution in products and customer satisfaction. With this goal in mind, CPS provides assistance to ensure successful and trouble-free power up of your solar power system.

Sincerely,

CPS America