THERMARESTOR®
innovation transforming fire safety

How Thermarestor can protect a PV installation?

Where do fires occur in a PV installation?

Switchgear equates 89% of the fire incidents recorded

A2.2.3 An analogous UK study, undertaken in 2017 by the BRE and submitted to Government, investigated the PV components most likely to develop faults that led to a fire incident. Their results, based on investigation of 46 incidents, are shown in Figure A2.2.2.

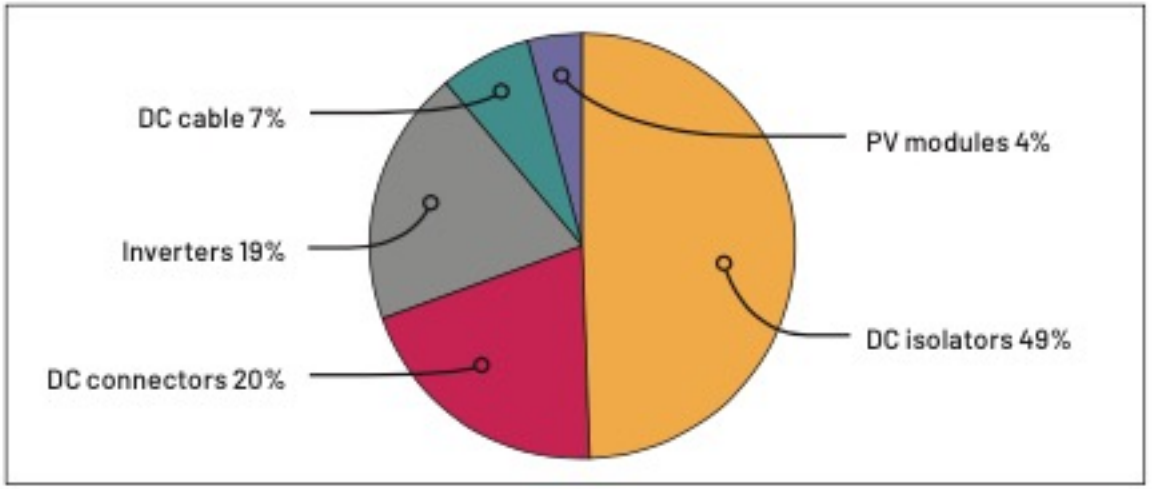
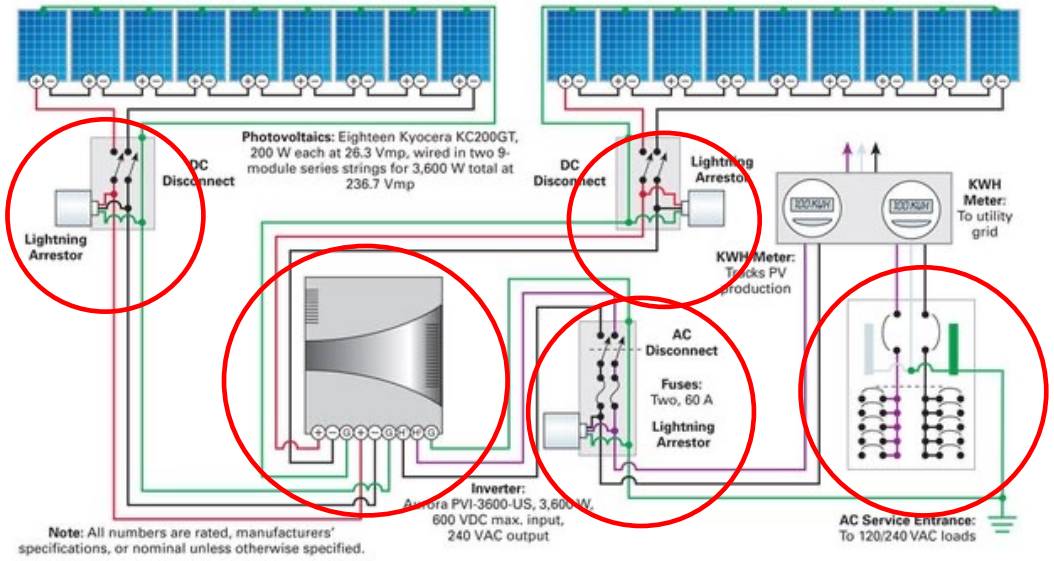
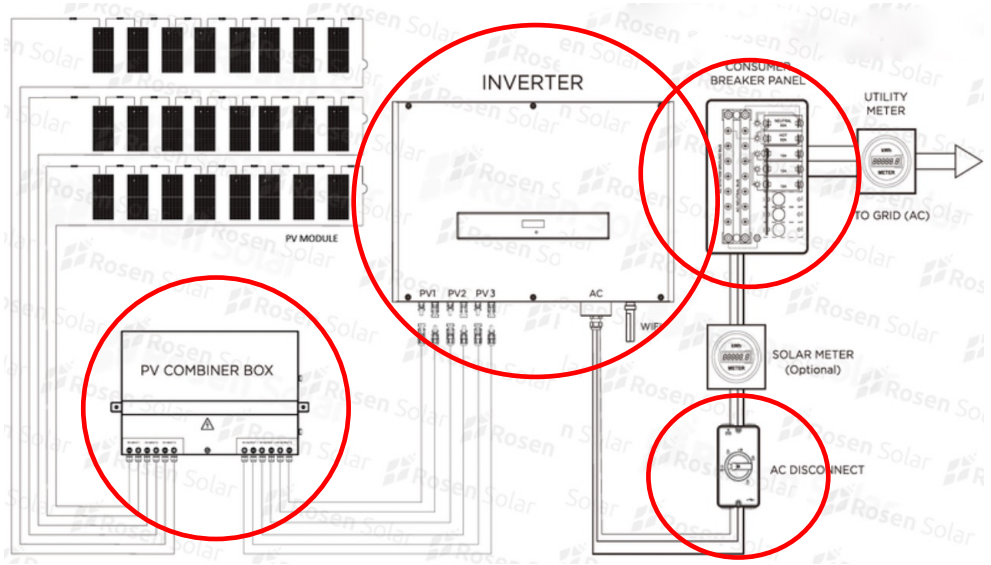


Figure A2.2.2 PV system component faults as causes of fire (Source: P100874-1004 Issue 2.5 Fire and Solar PV Systems – Investigations and Evidence)

Protect the important elements of the installation

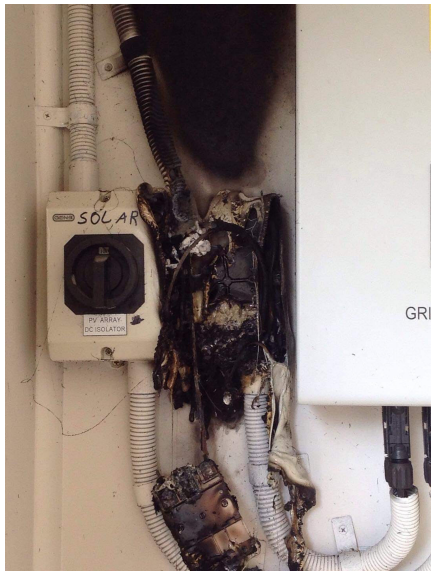
No matter the ultimate system design there will be field installed connections between the panel strings, inverter and an AC output. These are potential locations for resistive joints where heat can occur.

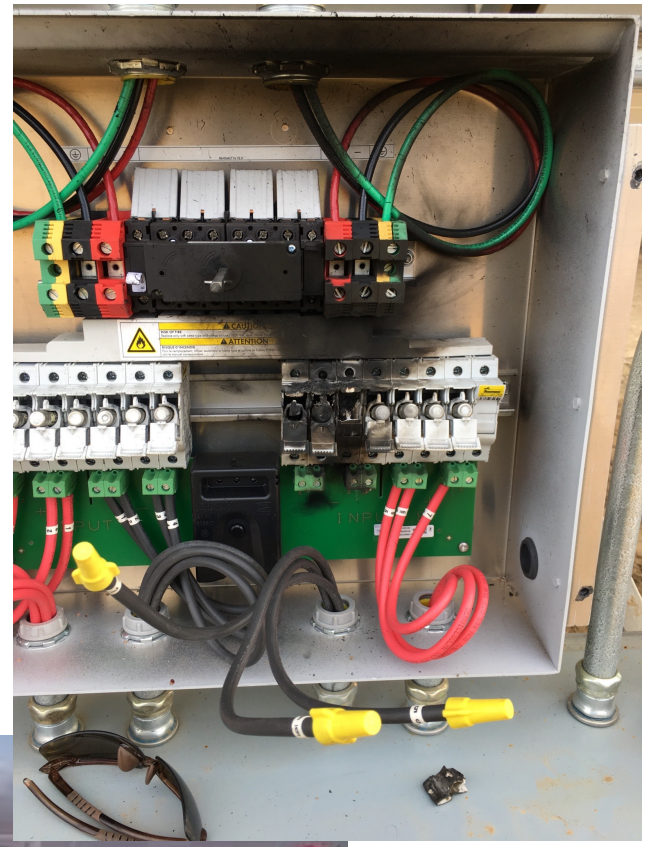




Effects of fires in the switchgear

The fires cause physical and economic damage.

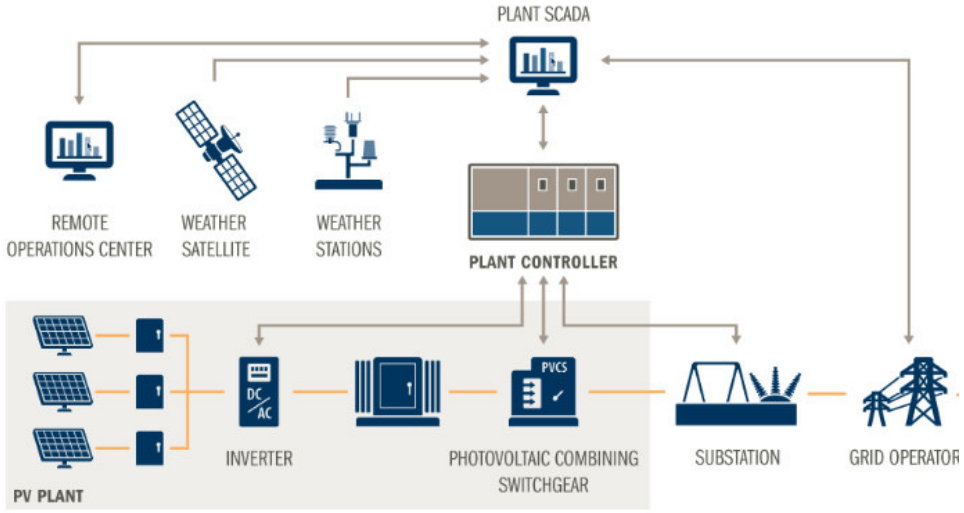




Thermarestor solutions

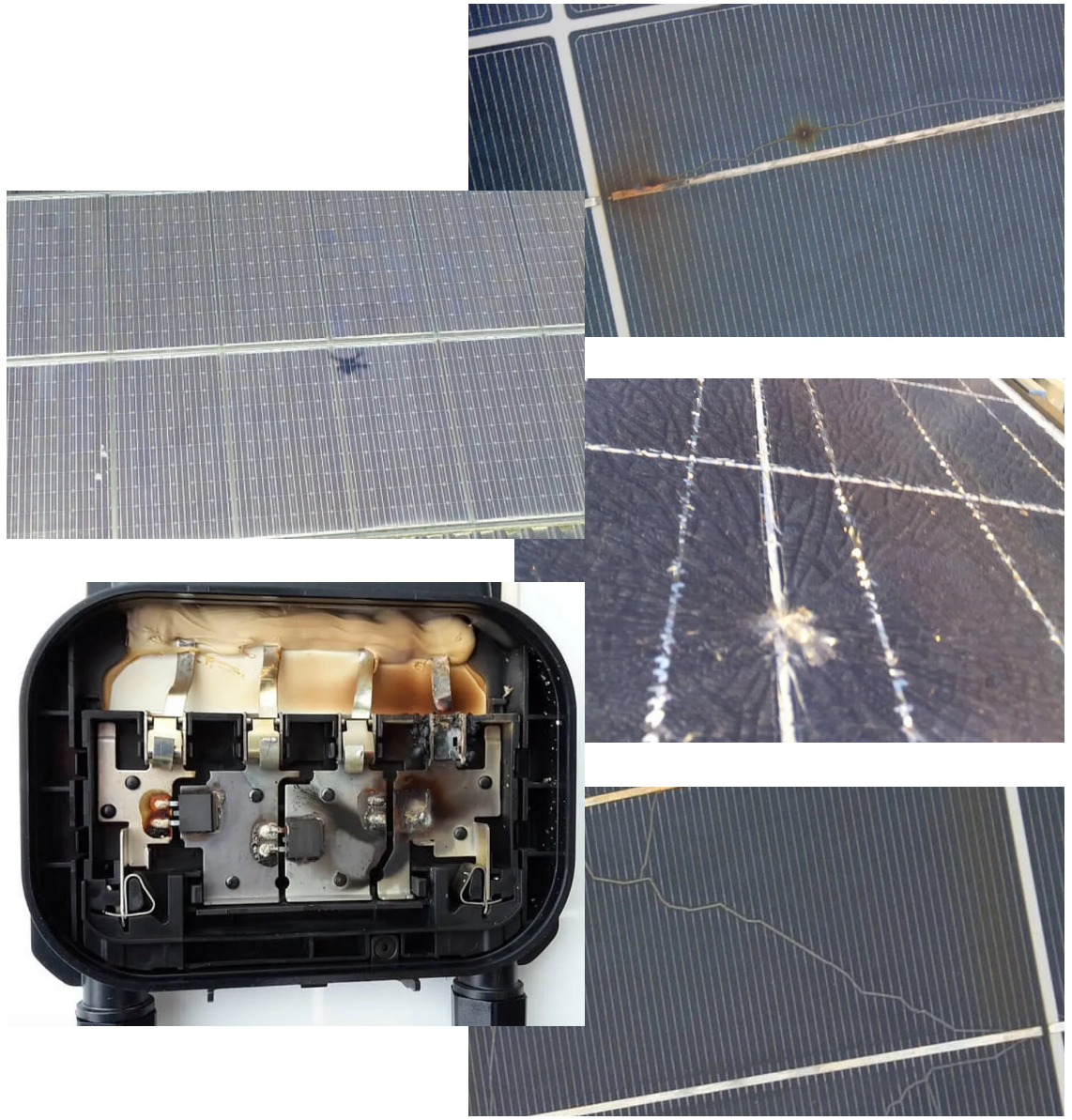
MultiPoint and Single point sensors protect field installed wiring connections

Signalling / reporting



Signalling from Thermarestor sensors can be made by incorporating a system wide SCADA system or via self contained systems using 2/4G communicator

Panel, Panel Connection and DC Cable failures



These failures equates to only
11% of the fire incidents recorded