



WatchDog for photovoltaic systems

Network monitoring in compliance with VDE 0126-1-1

Problem

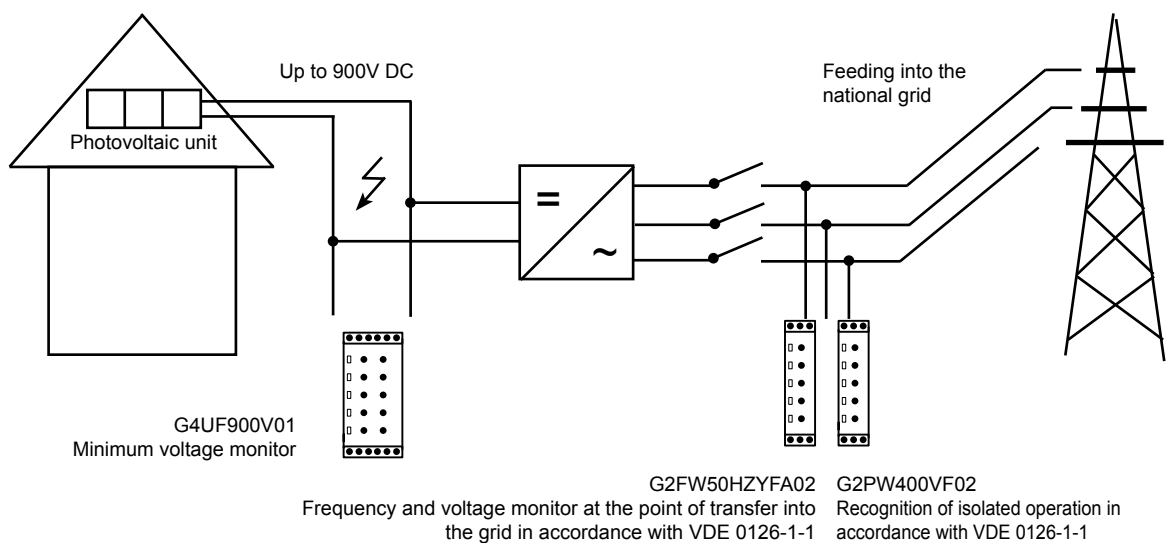
Grid operators are not able to directly control systems operated by private suppliers to the national grid. In order to ensure grid safety, however, power utilities must at all times be able to control how power suppliers feed power into the network. It must also be possible to disconnect private suppliers from the grid irrespective of the power they are providing as unchecked supplies in the form of isolated feeds constitute a safety risk.

Task

An independent switching system (DIN VDE 0126-1-1) is required that is able to monitor power feeds into the 230/400 V grid from photovoltaic, bio gas or combined heat-and-power pump systems. It must be possible to disconnect small power generators from the grid within 200 ms when the power utility or a protective body wishes to interrupt the link. Voltage monitoring, frequency monitoring and the recognition of isolated operations are the main demands that automatic switch points must fulfil.

Solution

The G2FW50HZYFA02 voltage and frequency monitoring relay complies with VDE 0126-1-1 and may therefore be used to set up automatic switch points between the power generators and the national low-voltage grid. With the G2PW400VF02, TELE has made a unit for recognizing isolated operation in accordance with VDE 0126-1-1 available. TELE's WatchDogs ensure that the required monitoring is achieved with separate equipment – equipment that may also be protected and sealed against tampering.



Modules



G2FW50HZYFA02
Art.No. 2390910



G2PW400VF02
Art.No. 2390515