Sensors   **Switches**   **Controls**

Application notes

Application Note : May 2020

Market involved : Energy

Product : PI-DIN 0126

Customer : Installers, electrical-generators manufactures

Subject : PI-DIN0126 multi-standard interface protection with UCS software for reducing installation, commissioning and maintenance costs

CUSTOMER ISSUE :

The diffusion of renewable energy sources into the European energy mix and the gradual transition to the distributed generation led to the adoption of several national regulations for ensuring the electrical system standards. When a small or medium generator produces and feeds electrical energy into the distribution grid, the main issue is to guarantee the grid stability and protect any system type (low, medium or high). The uncontrolled energy-introduction could worsen existing faults causing voltage increases, frequency variations and even blackouts. Interface protection devices are the solution to these issues as they have been developed for connecting energy production plants to the public grid. Moreover, according to the installation country and the system type to protect, the interface protections are designed to be compliant with the relevant regulations.

OUR SOLUTION :

The PI-DIN 0126 is an interface protection device able to connect energy generators to low voltage public grids. It is compliant with the following European standards:

- VDE-AR-N 4105 for Germany
- ENA G98 and G99 Engineering for UK
- Dansk Energi – Tekniske betingelser LV production for Denmark

The PI-DIN 0126 reduces the time and costs of installation commissioning and maintenance for ESCOs, small/medium electrical-generators manufacturers, renewable energy sources or generator installers.

It can be installed with the following electrical generators connected to low-voltage grids:

- Photovoltaic power plants
- Biomass or traditional fuels co-generators
- Gas or hydro micro turbines

BENEFITS :

- **Flexible setup:** you can perform the commissioning or modify the settings directly from the device's display or via the free UCS (Universal Configuration Software) software from Carlo Gavazzi
- **Fast commissioning:** thanks to the Norm function, you can select the desired country reference standard to automatically set the relevant default parameters
- **Installation-statement document generation:** using the export function from the UCS software, the installer can print a PDF installation-statement document containing the device's configuration values, for any post-commissioning documentation purpose
- **Two-level security system** thanks to a double-password system.
- **Monitoring:** from the device's display or the UCS software dashboard you can manage the main electrical real time values