

CG APPLICATIONS

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Application Note:	January 2010
Market involved :	Renewable energy
Product :	DPC72DM48B002
Customer :	Panel builder, OEM's
Subject :	Sun energy generation

CUSTOMER ISSUE :

In Germany, when connecting a sun generator set to the mains, each energy supplier is following their own regulations, which are generally based on VDE0126-1-1 German standard.

It includes the specifications of the interface device: variables to be monitored, relevant setpoints, reaction time, and calibration.

The interface relay output has to open the contactor connecting the inverter and the grid as soon as voltage or frequency are out of the stated limits.

OUR SOLUTION:

DPC72 is the new interface device which is VDE0126-1-1 certified, when considering voltage, voltage quality and frequency.

It monitors over/under voltage, the voltage average over 10 minutes and over/under frequency, phase sequence and phase loss.

Therefore if any fault occurs DPC72, disconnecting the generator from the grid, avoids the former to continue supplying the mains and therefore immediately removes any dangerous condition for both users and devices.

ACHIEVED BENEFITS:

DPC72 is supplied with an LCD display to simplify the programming procedure and to have a local indication of the monitored variables and of the occurred events.

DPC72 counts the events (trips of the contactor) and logs the details of the last 10 events, so it is possible to carry out an off-line data analysis.

A RS485 communication port allows the remote programming of the device and the retransmission of the variables and logged data using the new DpcSoft (available for free in our website), or any external supervision system.

Last but not least, DPC72 has a very compact size (only 4 DIN modules) saving space in small cabinets.

