



## VARIMETER NA

### Voltage and frequency monitor RP 9810 according to VDE-AR-N 4105

**DOLD** 

The number of distributed power generation systems supplying to the low-voltage mains has dramatically grown over the past few years. To ensure the availability and stability of the power grids the forum Grid technology/Grid operation (FNN) has prepared the new application guideline **VDE-AR-N 4105**. It has been published since 01/08/2011 and is effective as of 01/01/2012. The power grid operators stipulate that new systems should conform with this VDE regulation.

With the **voltage and frequency monitor RP 9810** of the **VARIMETER NA** family DOLD offers a safe and standard solution for optimal mains monitoring when supplying energy. It meets the demanding requirements of **VDE-AR-N 4105** as well as DIN VDE 0126-1-1 currently in its transition period. The RP 9810 can be used for the central mains and system protection. The tactile rotary switches permit a quick and easy adjustment of the required values. An illuminated LCD display indicates the system state.

#### Your advantages

- ▶ Certificate of conformity (test certificate) of the BG ETEM
- ▶ Fail-safe with 2-channel structure and fault signalling relay output
- ▶ Easily set via rotary switches, preset parameters according to VDE-AR-N 4105
- ▶ All values set can be viewed simultaneously
- ▶ Indication of the system state via illuminated LCD display
- ▶ Enabling input for connection of a ripple control receiver
- ▶ Detailed fault diagnostics and indication with history
- ▶ Quick response time  $t < 100$  ms (typ. 75 ms)
- ▶ Test button for isolator switch
- ▶ Tamper protection through sealable clear cover

 **BG ETEM**  
**SysStab V**

**Our experience. Your safety.**

# Voltage and frequency monitor RP 9810

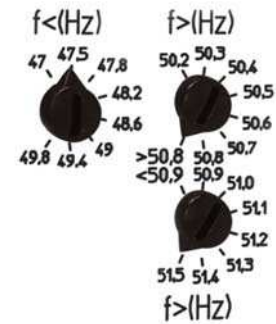
## Technical features

- ▶ Grid and system protection for distributed power generation systems on the low-voltage mains in accordance with VDE-AR-N 4105 and DIN VDE 0126-1-1
- ▶ For 3-phase mains with N according to VDE-AR-N 4105
- ▶ Voltage peak and drop protection
- ▶ Frequency peak and drop protection
- ▶ Monitoring of 10 minute mean value
- ▶ Passive isolated grid detection
- ▶ Indication, diagnostics and fault presentation via display
- ▶ Fail-safe 2-channel design with monitoring of the section switches
- ▶ Test button for trigger test
- ▶ Connection or re-connection after adjustable delay time
- ▶ Tamper protection through sealable cover
- ▶ All setting parameters can be read simultaneously
- ▶ Certificate of conformity (test certificate) of the BG ETEM
- ▶ Can be used according to EEG 2012 and SysStabV

**Device measurements in mm (W x H x D)**  
70 x 90 x 71



Voltage and frequency monitor RP 9810



## Ordering information

Standardtype:  
 RP 9810.13 3/N AC 400/230 V with systems > 30 kVA  
 Article number: 0064814  
 RP 9810.13/100 3/N AC 400/230 V with systems ≤ 30 kVA  
 Article number: 0064860  
 RP 9810.13/\_ \_ 2 counting of disconnection times  
 on request

## Applications

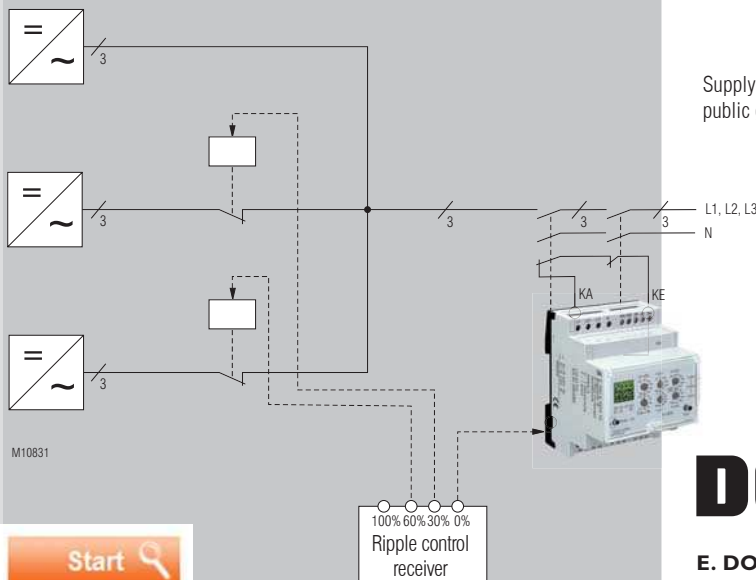
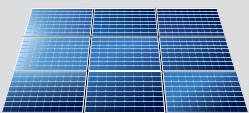
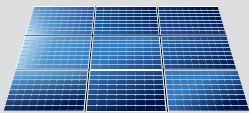
The RP 9810 provides reliable and safe monitoring of the grid parameters as stipulated in the guideline and guarantees stable power grids.

Typical applications:

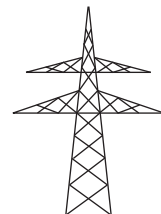
- ▶ When too much power is supplied and too little withdrawn the frequency in the public power grid increases. The RP 9810 detects this excessive increase and disconnects the system from the grid.
- ▶ The public utility company performs maintenance work on the power grid. The RP 9810 detects a disconnected grid and disconnects the system in a secure manner.

## Application examples

- ▶ Wind power plant
- ▶ Photovoltaic
- ▶ Hydroelectric plant
- ▶ Combined heating and power generators
- ▶ Biomass plant



Supply to the public grid



## More information

RP 9810

Start

[www.dold.com](http://www.dold.com)

**DOLD**

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