



## VARIMETER PRO

**DOLD** 

### Universal measuring relay - One device, many functions

With the **universal measuring relay MK 9300N** of the **VARIMETER PRO** series, DOLD combines up to nine monitoring functions in a housing only 22.5 mm wide. This universal measuring and monitoring relay thus offers a functional diversity unparalleled so far at this minimal unit width.

Troublefree and economic operation of machines and systems is guaranteed only by the reliable and continuous monitoring of three-phase systems. Depending on the need, the VARIMETER PRO therefore monitors the three-phase system simultaneously for overvoltage/ undervoltage, voltage asymmetry, overcurrent/undercurrent, cos phi, active power, apparent power and reactive power, frequency and phase sequence. Employment in single-phase systems is also possible.

To facilitate simple fault diagnostics, this all-rounder features a display and a multicoloured LED. The user-friendly device configuration permits optimal adjustment to the application. For example, the response values for all monitoring functions can be easily set. The space-saving multifunctional measuring relay is optionally equipped with one or two output relays, independently configurable.

#### Advantages and customer benefit

- ▶ Min-, Max. value or window monitoring
- ▶ Simultaneous monitoring of up to 9 different parameters
- ▶ Simple configuration and fault diagnostic
- ▶ Different fault indications
- ▶ Large measuring range 3 AC 24 ... 690 V
- ▶ Auxiliary voltage ranges DC 24 V, AC 230 V or AC/DC 110 ... 400 V
- ▶ Early detection of irregular states
- ▶ Space and cost saving
- ▶ Reduced wiring

**Our experience. Your safety.**

# Universal measuring relay MK 9300N

## Technical features

- ▶ Multifunction measuring relay acc. to EN 60255-1, DNV GL
- ▶ Voltage monitoring (1- and 3-phase)
- ▶ Current monitoring
- ▶ Frequency monitoring
- ▶ Power factor cos phi
- ▶ Phase sequence, phase failure, asymmetry
- ▶ Effective-, reactive- and apparent power
- ▶ Start up delay, on delay
- ▶ Adjustable hysteresis 0.2 ... 50 % of response value
- ▶ Manual reset
- ▶ LCD for indication of the measuring values
- ▶ Relay output  
MK 9300N: 1 changeover contact  
MH 9300: 2 x 1 changeover contacts
- ▶ Relay function selectable (energized/de-energized on trip)
- ▶ As option with pluggable terminal blocks  
- with screw terminals  
- or with cage clamp terminals
- ▶ MK 9300N: Width 22,5 mm
- ▶ MH 9300: Width 45 mm



Universal measuring relay  
MK 9300N



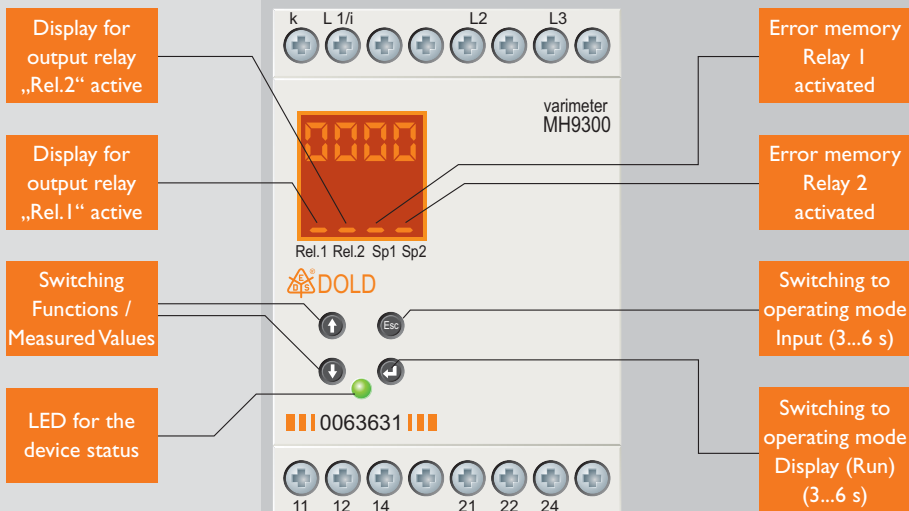
Universal measuring relay  
MH 9300

## Order information

Standard type:  
MK 9300N.11/022 3 AC 24 ... 400 V AC 12 A DC 24 V  
Item number: 0063630

Standard type:  
MH 9300.12/022 3 AC 24 ... 400 V AC 12 A AC 230 V  
Item number: 0063631

## Device setting



## Areas of application

- ▶ Shipbuilding, ports, shipyards
- ▶ Refrigeration lorry
- ▶ Mill drives
- ▶ Fan drives
- ▶ Pumping unit
- ▶ Signal systems
- ▶ Contactor controls
- ▶ Crusher

## Further information

MK 9300N

Start

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

**DOLD**

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