

# 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 (I- 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: I changeover contact
  MH 9300: 2 x I changeover contacts
- ► Relay function selectable (energized/de-energized on trip)
- As option with plugable 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

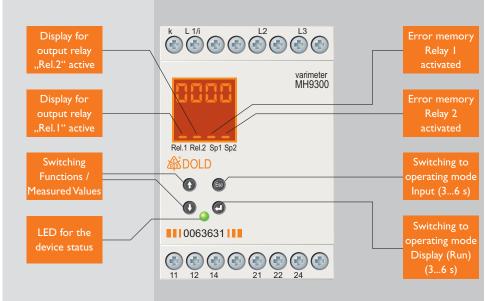
Item number: 0063630

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



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**DOLD** 2

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