

#### **Data sheet**

# **Differential Current Relay KDS**



#### **Technical Data**

**Auxiliary Voltage** 

24 V DC (18 - 36 V DC) 230 V AC / 12 V DC \*

**Power Consumption** 

approx. 4 W at 24 V DC approx. 6 VA at 230 V AC \*on customers request

**Digital Inputs** 

LowActive (contact voltage 12 V DC, 5 mA, opto-decoupled) cables not longer than 3 m.

**Relay Outputs** 230 V / 50 Hz / 2 A (potential free)

**Measuring Ranges: Current:** 

approx. 0.02 to 4.0 A AC (1 A Version) approx. 0.08 to 20.0 A AC (5 A Version) tolerance < 0.2 % of full scale

Frequency:

15.0 Hz up to 100.0 Hz from approx. 150 mA measured accuracy< 0,01 Hz

**Climatic Conditions** 

acc. to DIN EN 60255-1 (09-2010) ambient temperature:

-20 ... +55 °C in operation: transport / storage: -25 ... +55 °C

**Housing Dimensions** 

W / H / D 100 x 75 x 110 mm for mounting on 35 mm top-hat rail according to DIN EN 60715

## **Description**

The KDS 3xx is a device for measurement and monitoring of differential current at generators, motors and transformers. As well possible is the monitoring of mixed constructions, such as a generator with an upstream transformer. In addition to the differential current, it is also possible to measure the individual conductor currents as well as the earth current in three-wire networks. The connection to the system must be done using external current transformers.

The KDS 3xx includes the following protective functions [according to ANSI/IEEE C37.2]:

- Protection on differential current for generators, motors and transformers [87GP, 87MP, 87TP]
- (Earth-) overcurrent protection [50, 50N, 50G]
- Overcurrent-time-protection [51]
- Frequency monitoring [81U, 81O]

The comfortable configuration of all settings of the DSR-8 is done by means of the parameterisation software KuPa010 (- Version V2.36 or later required). Alternatively values can be entered directly at the device. Any access to the device's parameterisation can be protected by a PIN. The output of display-texts at the device standardly takes place in German and English (switching between languages is possible at any time during operation). Alternative languages, suitable to the customers' requirements, can be configured and conveniently made available, by means of our parameterisation software Kupa010.

### Order number

**Ordering Information:** 

DSR-8 / 1 A / 24 V DC: 2W301KDS00 DSR-8 / 5 A / 24 V DC: 2W305KDS00

Accessories:

USB A: USB Mini B parameter. cable 1,5

on request

parameter. cable 3.0

current transformers, various converter ratios, e.g. 200A/5