

Differential Current Relay DSR-8



The DSR-8 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 DSR-8 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 'Geräteverwaltung' (GV 2 – 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 "Geräteverwaltung".

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 cy / 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 cy up to 100.0 cy
from approx. 150 mA measured
accuracy < 0,01 cy

Climatic Conditions
acc. to DIN EN 60255-1 (09-2010)
ambient temperature:
in operation: -20 ... +55 °C
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

Ordering Information:
DSR-8 / 1 A / 24 V DC: E1988
DSR-8 / 5 A / 24 V DC: E1990

Accessories:
USB A : USB Mini B
parameter. cable 1,5 m: KC0215
parameter. cable 3,0 m: KC0329

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