VARIMETER EDS - Fault localization during operation

In extensive industrial plants the localisation of insulation faults can be very costly and time-consuming. The VARIMETER EDS insulation fault location system locates insulation faults quickly and reliably in complex unearthed AC/DC networks.

An Insulation Fault Location System (IFLS) enables the rapid location of insulation faults in unearthed power supply systems. It is used in addition to an insulation monitor and, in the event of a fault, imprints a test current between the live conductors and earth. Components that have been damaged with regard to insulation can be located as quickly as possible and replaced before a failure occurs.





Insulation fault location – with Modbus RTU

The test current generator RR 5886 in conjunction with the insulation fault locators RR 5887 monitors and locates insulation faults in insulated AC/DC networks. The external current transformers ND 5017 operate independently and are easy to connect to the measuring channels of the insulation fault locator RR 5887. Via the Modbus RTU interface, insulation fault current values can be read out from the connected devices.



Monitoring, switching and controlling via Modbus RTU interface



ND 501



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Monitoring, switching and controlling - with Modbus RTU

UG 9411

The Modbus protocol is an open communication standard based on a master/slave architecture that enables simple and reliable communication and user-friendly set-up and control between automation and field devices.

The Modbus RTU connection is characterized by reduced wiring as well as extremely low susceptibility to interference and increased EMC resistance. In addition, it offers extensive diagnostic options that improve reliability and increase system availability.

IE3 ready The DOLD Modbus modules are equipped with an interface which allows process, status and configuration data to be transferred quickly and easily.

Due to the multipoint capability, up to 32 Modbus slaves can be integrated into the bus without additional repeaters. Optionally, additional functions such as "watchdog monitoring" can be easily configured.

Analog and digital – Input / output modules

Input and output modules are used to extend digital and analog inputs and outputs in switchgears. They acquire either analog or binary signals from limit switches, pushbuttons and sensors. They also control, for example, the activation of actuators. The compact design of only 22.5 mm allows space-saving use in the switch cabinet and simultaneously reduces installation costs due to the high number of inputs and outputs.

MINISTART — Smart motorstarters In modern machines and plants, it occurs repeatedly that the drive elements and the associated working machines are subjected to shock loads at the moment of switching on and are thus overloaded. Dumage to workpieces and conveyed objects is also possible. The ideal solution to these problems is the use of soft-starters, which enable a shock-free and thus gentle start. This reduces wear and increases the service life of the entire system. UCG 9461

Soft start of motors

– with Modbus RTU

The smart motorstarters UG 9410 and UG 9411 offer up to 7 functions in a compact enclosure of only 22.5 mm width. They combine the functions reversing, soft start, soft stop and protection of 3- or 1-phase asynchronous motors in one device and enable simple communication via the Modbus RTU interface.

Input and output extensions – for Modbus RTU

The input / output module UG 9460 has 8 digital DC 24 V inputs and 4 relay outputs. The UG 9461 has 8 analog inputs and 2 analog outputs and is suitable for connecting thermocouples and thermistors. In addition, the device offers 2 configurable measuring inputs (0 ... 10 V or 0 ... 20 mA).