



Changelog

EOR-3DS Firmware V 2.1.3

Combined Earth Fault and
Short Circuit Indicator



03/2023

firmware V2.1.3

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1. General

1.1 Content

This document contains version and change information for the different releases of released firmware for the Earth Fault and Short Circuit Indicator EOR-3DS since firmware version V 2.1.1.

The version information is structured in “Innovations and Improvements” and “Bugfixes”. Within this structure there is differentiated between general, locating methods and SCADA.

2. Change information

2.1 Version 2.1.3 from 03.03.2023

Innovations and Improvements

- General
 - The parameters significance threshold for voltage and current measurement are now visible and not hidden anymore

Bugfixes

- general
 - Calculation of the secondary and primary values for C21/C25/U10 adapters adjusted
 - Standardisation factors (factors between terminal and secondary values) now also part of recorder file

2.2 Version 2.1.2 from 28.02.2023

Innovations and Improvements

- General
 - The parameters knu 0/1/2/3 (VT ratio) are read-only now and are calculated in the device with the parameter "U12" for every voltage measurement input:
 $knu\ 1/2/3 = U12 / 100\ V$ or $knu\ 0 = U12 / 100\ V / \sqrt{3}$
 - The parameter Un terminal 0/1/2/3 defines the nominal value for the secondary voltage of the connected sensor or transformer
 - The parameters kni 0/1/2/3 (CT ratio) are read-only now and are calculated in the device with the parameter "In prim":
 $kni\ 0/1/2/3 = In\ prim\ 0/1/2/3 / 1\ A$
 - The parameter In terminal 0/1/2/3 defines the nominal value for the secondary current of the connected sensor or transformer
 - Indication of the measurements and sequence adjusted: the indication page BA 5..8 can be defined but is skipped on the device because the EOR-3DS has only 4 relays; the indication page PT100 is only displayed with a Siemens measurement card C31/U31
 - Active logbooks are saved on the flash and saved on the SD card in an fixed interval (24h), exceeding the minimal size (>0,5 MB) or during an interruption of the supply voltage
 - For the Siemens measurement card (C31/U31) the parameters "calculate U0" and "calculate I0" are always activated and read-only
 - New default setting for LEDs:
 - green LED for faultless feeder (no arrow on this feeder displayed)
 - red LED for faulty feeder
 - Display pages are deactivated when there are set on "00:OFF"
- SCADA
 - IEC60870-5-103 measurement values of type 4 can be parameterized in the CSV file so that they are transmitted with an general interrogation

- Factory reset
 - The passwords for the panel users and operators have two new parameters to define if they are unchanged after a factory reset. By default, the passwords are set back to 0000 after a factory reset.
 - Depending on the order C and U characteristic the parameters Un terminal 0/1/2/3, In prim 0/1/2/3 and In terminal 0/1/2/3 are set

Bugfixes

- General
 - Current measurement direction for Siemens measurement cards adjusted (rotated by 180° because definition of Siemens SIBushing: P1 directed to conductor and P2 directed to busbar)
 - The secondary and primary values are scaled right in the fault record
 - Behaviour during burststest improved
- SCADA
 - Default values in the IEC60870-5-103 target.csv file for the following data points are scaled on kV and for that the MAX-value is adjusted:
 - U12_MEA_I_0, U23_MEA_I_0, U31_MEA_I_0
 - U12_MEA_II_0, U23_MEA_II_0, U31_MEA_II_0
 - MQTT MAO: wrong reconnecting behaviour after a short interrupted connection fixed
- Factory reset
 - At a factory reset all SCADA files (.csv and .xml) and LUA files are deleted and replaced **with** the default files

2.3 Version 2.1.1 from 28.07.2022

Innovations and Improvements

- General
 - Display indication for short circuits and earth faults improved. Active method is displayed
 - The parameters kniV and knuV are by default 1 unlike to the EOR-3D compact. There is no need for “sensor sheets” to set the measurement inputs with the parameters kniV and knuV depending on the ordered C and U characteristic. Furthermore, an amplitude correction can be done with the parameters kniV and knuV.
 - The parameters kniV and knuV and the corresponding parameter correction of angle are read-only for Siemens measurement cards C31/U31. The values are set by a “sensor configuration file” which is uploaded via the files tab.
 - LUA variable can be named
 - Default values for IP address, IP mask and language changed
- Factory reset
 - It is possible to consider customer specific factory reset parameters, so that after a factory reset the device has customer specific parameters and not the default parameters.