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Certificate of compliance

Applicant: ZIEHL industrie-elektronik GmbH+Co KG
Daimlerstrasse 13
74523 Schäbisch Hall
Germany

Product: Network and System Protection device

Model: UFR1001E

Network and System Protection device for three-phase parallel connection to the public grid.

Applied rules and standards:

EN 50549-1:2019, SFS-EN 50549-1:2019

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

4.4 Normal operating range

4.9 Interface protection

4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-2:2019, SFS-EN 50549-2:2019

Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network - Generating plants up to and including Type B

4.4 Normal operating range

4.9 Interface protection

DIN V VDE V 0126-1-1:2006 (4.1 Functional safety)

Automatic disconnection device between a generator and the public low-voltage grid

Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).

Type approval for generation units to use in Type A and Type B plants.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: 11TH0501-EN50549-1_0
11TH0501-VDE0124-100_2
11TH0501_V2_TR3_1

Certification Program: NSOP-0032-DEU-ZE-V01

Certificate number: U22-0170

Date of issue: 2021-03-17

Certification body



Thomas Lammel



Certification body Bureau Veritas Consumer Products Services Germany GmbH accreditation to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH



Annex to the EN 50549-1 certificate of compliance No. U22-0170

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Appendix	
Extract from test report according to EN 50549-1	No. 11TH0501-EN50549-1_0 11TH0501-VDE0124-100_2 11TH0501_V2_TR3_1

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016

Manufacturer / applicant	ZIEHL industrie-elektronik GmbH+Co KG Daimlerstrasse 13 74523 Schäbisch Hall Germany
Type	Network and System Protection device
	UFR1001E
Rated supply voltage	AC/DC 24 - 270V, 0/45 - 65Hz (<5VA)
Range of voltage	
Measurement range phase-phase	15 – 530 V _{AC}
Setting range phase-phase	15 – 520 V _{AC}
Measurement range phase-neutral	10 – 310 V _{AC}
Setting range phase-neutral	15 – 300 V _{AC}
Range of frequency	
Measurement range	40 – 70 Hz
Setting range	45 – 65 Hz
Firmware version	Beginning with 0-12

Description of the structure of the power generation unit:
 The grid- and plant protection device UFR1001E monitors voltage and frequency in plants for own generation of electricity. The UFR1001E is a dual-channel device and thus one-fault-proof. The function of the output-relays and of the connected switches can be monitored with feed-back contacts. When a connected switch does not switch off, the UFR does not switch on again. When a switch does not switch on it makes 2 restarts and thus improves availability of monitored plant. The limits are pre-set according to VDE-AR-N 4105-2018-11 and other standards. They can be changed if required and be protected with a code and/or a seal. With a 2-step test both channels can be tested individually, and the triggering time of connected switches is measured. The standby input allows a remote shutoff e.g. with a RCR.