High Resistance Neutral Grounding Systems

HRG Series
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High Resistance Neutral Grounding Systems (HRG) are used that are limit the fault current up to 5 – 10 A. These systems are designed to withstand the fault current continuously.

Application Areas
- Hospitals
- Datacenters
- Textile Factories
- Cement Factories

Standards
- ANSI/IEEE Std 32
- IEEE-C57.32
- IEC 60071
- IEC 60060-1
- IEC 60529
- EN 10346
- EN ISO 1461

Advantages
- One of the most important features of HRG systems is the possibility of detecting the location of the fault.
- When a phase-to-earth fault occurs in the network, the HRG system automatically reduces the resistance value by half, so as to flow twice the rated fault current for 1 second (E.g. 1 second 5A, 1 second 10 A).
- The fault current changes in such a way that the current can be easily detected even in high phase current and the currents of the outputs in the distribution panels are controlled with the help of a simple clamp meter and fault location is determined.
- Aktif HRG systems automatically monitor and confirm that the system is functional.
- In case of a system failure, visual and audio alarms are sent to the user.
- Resistance material for which the resistance value does not change with temperature to ensure the fault current stable fault and pulse current
- Fully-modular, rigid, strong enclosure design with resistor blocks mounted to the frame for safety lifting from the upper or lower side
- Corrosion-resistant handling rings and connectors
- Lockable door with hinges

Technical Characteristics
- Nominal voltage up to 6.9 kV
- Suitable for continuous current up to 10 A and impulse current up to 20 A
- Adjustable fault current, impulse time
- Smart fault detection system to determine the location of fault
- Smart auto control system to check system operation
- Stainless steel resistance material suitable for extreme ambient conditions, resistant to oxidation and corrosion (AISI304, AISI310, AISI316, AISI430, CrAl, CrNi)
- Special mechanical and electrical design to withstand high temperature and extreme current values

Options
- Hot-dipped galvanized, stainless steel, aluminium cabinet
- Painting enclosure in desired color code
- Entry from top or bottom with bushings
- Modular elevation leg suitable for extreme environmental conditions
- Special design for high altitude