SIEMENS

ENERGY AUTOMATION PRODUCTS

7SR11 and 7SR12

Overcurrent protection

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The Reyrolle 7SR11 and 7SR12 feeder protection devices provide overcurrent and earth fault protection with the 7SR12 also offering voltage elements for directional control and a suite of supporting voltage functions. In addition to the extensive protection function package our cost effective relays provide control, integrated input and output logic, monitoring, instrumentation and fault reports.

Highlights

- User configurable overcurrent curves provide enhanced grading of the protection system
- Optional Ethernet Optical or Electrical interface for IEC 61850, compatible with Editions 1 & 2
- Comprehensive function package with optional Auto reclose
- Ethernet Redundancy protocols PRP and HSR supported

Benefits

- Comprehensive Protection Functions – Offers a variety of protection functions that can be customized to specific system requirements
- Enhanced System Safety and Reliability – Detects and isolates faults promptly to maintain system safety and reduce the risk of prolonged outages
- Integration and User-Friendliness – Local interface designed to ensure consistency across products and provide a user friendly access to the menu structure

Main Function	Feeder protection for distribution and industrial networks
Inputs and Outputs	1 or 4 Current Transformers with 1A and 5A Inputs, 3 Voltage Transformers, 3 or 6 Binary Inputs and 5 or 8 Binary Outputs
Communication	Front USB, Rear RS485, Rear option for two electrical or two optical Ethernet
Housing	Size E4 or E6 (with Ethernet option)

Protection Functions

- 37 Undercurrent
- 46BC Broken Conductor / Load Unbalance
- 46NPS Negative Phase Sequence Overcurrent
- 49 Thermal Overload
- 50 Instantaneous Overcurrent
- 50G/N/SEF Instantaneous Earth Fault
- 50AFD Arc Flash Detection (6 zones)
- 50BF Circuit Breaker Fail
- 51 Time Delayed Overcurrent
- 51G/N/SEF Time Delayed Measured/Derived/Sensitive EF
- 64H High Impedance REF
- 27/59 Under/Over Voltage
- 47 Negative Phase Sequence Voltage
- 51V Voltage Controlled Overcurrent
- 59N Neutral Voltage Displacement
- 67/50 Directional Instantaneous Overcurrent
- 67/50/G/N/SEF Directional Instantaneous Earth Fault
- 67/51 Directional Time Delayed Overcurrent
- 67/51G/N/SEF Directional Time Delayed Earth Fault
- 32 Directional Power
- 32S Directional Sensitive Power
- 55 Power Factor
- 81HBL2 Inrush Detector
- 81 Under/Over Frequency
- Line Check/Switch onto Fault

Supervision Functions

- 60CTS CT Supervision
- 74T/CCS Trip & Close Circuit Supervision
- 60VTS Supervision

Control Functions

- 79 Auto Reclose
- 86 Lockout
- CB Control
- 51C Cold Load

Applications

- Single CT option for Restricted Earth Fault applications
- Sensitive earth fault input available
- Measured and calculated/derived earth fault Protection elements to provide a flexible solution when both earth fault and Restricted Earth Fault are required
- Detection of earth faults in all networks including isolated and compensated networks
- High speed overcurrent elements for use with arc detectors to provide a high speed fault detection and tripping
- Directional power and directional sensitive power

Monitoring functions

- Primary/Secondary Current Phases and Earth
- Primary/Secondary Line and Phase Voltages
- Apparent Power and Power Factor
- Real and Reactive Power
- W Hr & VAr Hr Forward and Reverse
- Positive Phase Sequence (PPS) Voltage & Current
- Negative Phase Sequence (NPS) Voltage & Current
- Zero Phase Sequence (ZPS) Voltage
- Frequency
- Direction
- Binary Input/Output status
- Trip circuit healthy/failure
- Fault records
- Event records
- Circuit breaker data

Configuration software - Reydisp Evolution

Virtual Relay Tool

Webinar series - Reyrolle essentials

Catalog Reyrolle 7SR11 and 7SR12 Argus

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