SIEMENS

Voltage and Frequency Protection
Reyrolle 7SR158 Argus

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The Reyrolle 7SR158 Argus is a voltage and frequency protection relay. Part of the numerical, multifunctional device range, the 7SR158 is designed for connection to voltage transformers, indicating its primary role in monitoring and protecting electrical systems against abnormal voltage and frequency conditions.
Its multifunctional nature suggests it can perform a variety of protective functions, making it suitable for diverse applications.

Highlights

Load Shedding

Optional Ethernet optical or electrical interface for IEC 61850, compatible with editions 1 & 2

Waveform recorder stores 10 records (1 second duration)

Circuit breaker trip and maintenance counter

Your benefits

- Comprehensive Protection – shields electrical systems from voltage and frequency disturbances, preventing equipment damage
- Reliability and User-Friendliness – reliable performance with an easy-to-use interface for straightforward operations
- Integration and Communication – easily integrates with existing systems, supporting modern communication for efficient management

Main Function	Automatic load-shedding and connection for secure grid operation in the voltage and frequency band
Inputs and Outputs	• 3 Voltage Transformers • 6 Binary Inputs • 8 Binary Outputs
Communication	Front USB, Rear RS485, Rear option for two Electrical or Optical Ethernet Port
Housing	Size E4 or E6, 4U high - Withdrawable design

Protection Functions

- 27/59 Under/Over Voltage - 4 stages
- 47 Negative Phase Sequence Voltage - 2 stage
- 59N Neutral Voltage Displacement
- 78 Voltage Vector Shift
- 81 Under/Over Frequency - 6 stages
- 81R Rate Of Change Of Frequency - 6 stages

Applications

- 4 Stage Under & Overvoltage protection
- 6 Stage Under Frequency protection & 6 Stage Rate of Change of Frequency for Load Shedding
- Vector Shift for Islanding Schemes
- Flexible VT configuration
- Suitable for Auto Transfer Schemes with user defined logics. Voltage monitoring and protection for Bus-Bar PT

Further functions

- 10 Fault records are displayed on the relay fascia
- Up to 1000 events are stored and time tagged to 1ms resolution. The time and date can be set and are maintained while the relay is de-energised by a back up storage capacitor
- 9 User Programmable Tri-colour LEDs
- Four Settings Groups
- 2 Levels Password Protection

Supervision Functions

- 74T/CCS Trip And Close Circuit Supervision

Control Functions

- 86 Lockout
- User Programmable Logic
- CB Control

Communication

- IEC 60870-5-103
- MODBUS RTU
- DNP 3.0
- IEC 61850 (optional)

↗ Configuration software - Reydisp Evolution

↗ Webinar series - Reyrolle essentials

↗ Catalog Reyrolle 7SR158 Argus

↗ Online shop - Industry Mall