

# SIEMENS

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## Reyrolle 7SR242 – Duobias

Transformer Protection

[siemens.com/reyrolle](http://siemens.com/reyrolle)

### Description

The 7SR242 transformer protection relay is the latest development of the “Duobias” family of products. The relay provides protection, control and monitoring for two winding transformers of all vector groups, primary configurations/connections and earthing connections.

The 7SR242 provides an integrated, basic, intermediate or comprehensive transformer protection package. The relay can also be applied to other plant items such as motors, reactors or auto transformers.

Main Function	Protection Relay for Winding Transformers
Inputs and Outputs	4 Current Transformers with 1A and 5A Inputs, Up to 39 Binary Inputs and Up to 14 Binary Outputs
Communication	Front USB, Rear RS485, Rear option for Two Electrical or Two Optical Ethernet
Housing	Size E8,E10 & E12 4U high-withdrawable case

### Benefits

- Password Protection – 2 levels
- User Programmable Logic Equations, via HMI
- 16, 24 or 32 Programmable Tri-colour LEDs
- Up to 5000 events are stored and time tagged to 1ms resolution
- Provides a rolling record of current and voltage over a user selectable period of time
- 100 records of 1, 2, 5 or 10 seconds are stored.
- Graphical Programmable Logic, via pc application
- 8 Settings Groups
- Self Monitoring



### Applications

- 2 Winding biased differential protection
- Integrated high impedance restricted earth fault on both windings
- Suitable for protection of power transformers, Auto transformers, Short interconnection, Reactors, Capacitors, Motors, Generators, etc.
- Integrated Backup Protection (optional)
- 2nd & 5th Harmonic Blocking
- Overflexing Protection (optional)
- Monitoring of transformer auxiliary faults

# Protecting your electrical assets... today and tomorrow

## Protection functions

- 50BF Circuit Breaker Fail
- 64H High Impedance REF
- 74TCS/CCS Trip/Close Circuit Supervision
- 81HBL2 Inrush Detector
- 81HBL5 Overfluxing Detector
- 87BD Biased Differential (2 Windings)
- 87HSCurrent Differential High-Set

## Optional Functions

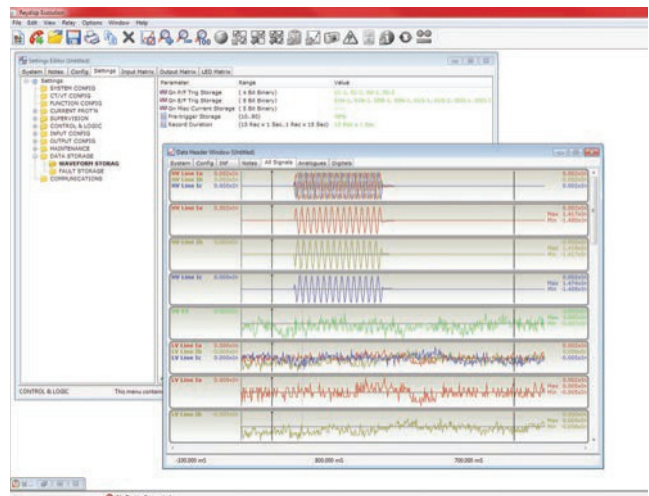
- 24 Over-Fluxing
- 27/59 Under/Over Voltage
- 37/37G Undercurrent
- 46BC Open Circuit
- 46NPS Negative Phase Sequence Overcurrent
- 49 Thermal Overload
- 50 Instantaneous Overcurrent
- 50G/N Instantaneous Earth Fault
- 51 Time Delayed Overcurrent
- 51G/N Time Delayed Measured Earth Fault /SEF
- 59N Neutral Voltage Displacement

## Communications

- IEC60870-5-103
- MODBUS RTU
- DNP 3.0
- IEC61850 (optional)

## Reydisp software

- Our user friendly PC software tool ensures a smooth installation providing an efficient and intuitive interface to the relay.



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