

# SIEMENS

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## Reyrolle 7SR23 DAD

High Impedance Protection

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

### Description

High impedance protection is applied where faults must be cleared in the shortest possible time and where discrimination must be ensured. High impedance schemes can provide low fault settings.

The 7SR23 DAD provides comprehensive, configurable high impedance protection with enhanced functionality and performance. Relay functionality is accessed via a familiar user friendly interface.

Main Function	Phase segregated high impedance differential protection / high impedance REF / Earth Fault
Inputs and Outputs	4 Current Transformers with 1A and 5A Inputs, 9 or 19 Binary Inputs and 8 or 16 Binary Outputs
Communication	Front USB, Rear RS485, Additional optional comms interfaces as below.
Housing	Size E6 or E8, 4U high withdrawable design

### Benefits

- Operating time <20ms (1 cycle)
- High impedance busbar protection with IEC61850
- Calculation tool provided for relay and metrosil/stabilising resistor settings requirements
- Additional flush mounted box (metrosil/stabilising resistors) available to save internal panel space



### Applications

- 3 phase high impedance differential protection is typically applied to busbar, connectors, auto-transformers, reactors and motors.
- Restricted earth fault protection is typically applied to provide protection of transformer windings.
- The CT supervision function provides monitoring of CT secondary wiring connections.
- The relay can be configured to provide the following modes of operation: 3 pole Diff + REF, 3 Pole Diff + EF, REF1 + REF2

# Protecting your electrical assets... today and tomorrow

## Standard Monitoring Functions

- Primary and secondary differential currents
- Binary Input/Output status
- Trip circuit healthy/failure
- Time and date, Time and synchronizing commands
- Fault, Event and Waveform records

## Data Communications

### Standard Communications Ports

Communication access to relay functionality is via a front USB port for local PC connection or rear electrical RS485 port for remote connection

### Optional Communications Ports

- 2 rear ST fibre optic ports (2 x Tx/Rx)
- + IRIG-B port
- 1 rear RS485 + IRIG-B port
- 1 rear RS232 + IRIG-B port
- 2 rear electrical Ethernet RJ45
- 2 rear optical Ethernet duplex

## Protocols

IEC60870-5-103, Modbus RTU, DNP 3.0 and optional IEC61850 protocols  
– User selectable with programmable data points

## Function Overview

### Protection

- 50G Instantaneous/DTL Earth Fault
- 87REF High Impedance REF
- 87/50 Phase segregated Differential Protection

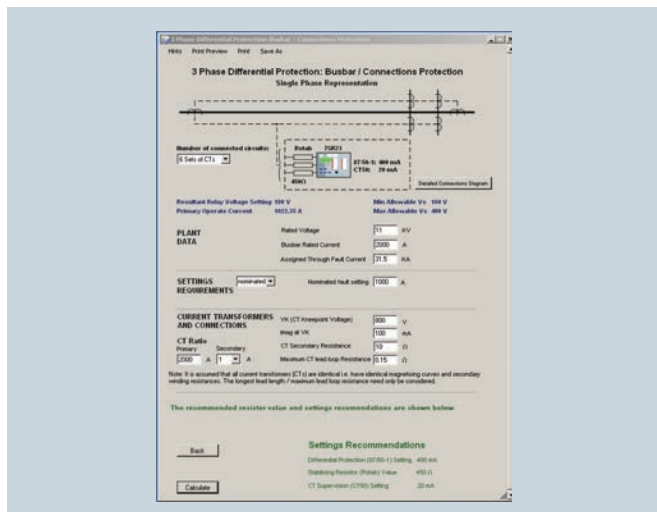
CT50 CT Supervision  
User Programmable Logic

## User Interface

- 20 character x 4 line backlit LCD
- Menu navigation keys
- 3 fixed LEDs
- 8 or 16 Programmable Tri-colour LEDs (Option)

## Additional Tools

Siemens High Impedance Protection Software Settings Tool



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