

# 7SR23 - The Siemens Solution for High Impedance Protection

Protecting your electrical assets, today and tomorrow.

Based on decades of experience in High Impedance Protection SPDL have developed the 7SR23 DAD relay which provides comprehensive, configurable high impedance protections with enhanced functionality and performance. Relay functionality is accessed via our familiar user friendly interface.

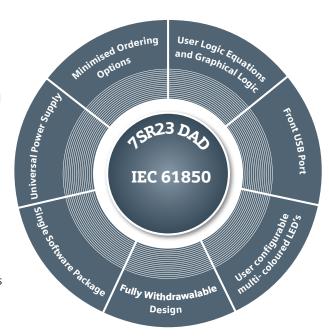
### What is High Impedance Protection?

Proven, straightforward, high performance protection! The high impedance principle provides a unit protection used in restricted earth fault, busbar and connections protection schemes. It ensures sensitive, high speed operation for internal faults and guaranteed stability during external faults.

By incorporating the latest technology, including IEC 61850, we have designed a dedicated High Impedance Relay that offers increased protection functionality and performance, whilst retaining the familiar look and feel of the Reyrolle product range.

#### **IEC 61850**

The IEC 61850 protocol implementation on the Ethernet EN100 module, utilised on the Reyrolle products, benefits from the knowledge and expertise of Siemens who are world leaders in this field with several years service experience gained through the large number of installed Siprotec relays.





# Decades of Experience in High Impedance Protection



# **User Interface**

# **Standard Monitoring Functionality**

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

# **Function Overview**

#### Protection

50G Instantaneous/DTL Earth

Fault

87REF High Impedance REF 87/50 Phase segregated

O Phase segregated Differential Protection

CT50 CT Supervision

User Programmable Logic

# **Monitoring & Data Functions**

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

# **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**

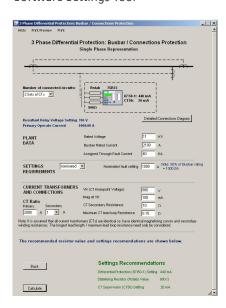
- 2 rear ST fibre optic ports (2  $\times$  Tx/Rx)
- + IRIG-B port
- 1 rear RS485 + IRIG-B port
- 1 rear RS232 + IRIG-B port
- 2 rear electrical Ethernet RJ45
- 2 rear optical Ethernet duplex

#### **Protocols**

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

# **Options**

High Impedance Component Box Software Settings Tool



Comprehensive software function package optimized for all high impedance applications

