

Pricing of Distribution Network Relay Protection



Overview

Distribution Relays EDR 3000 and EDR 5000 Eaton's Distribution Relays (EDR3000 and EDR5000) offer complete metering, protection, and control for Distributio.

Key Takeaways

Distribution network protection relays typically range from a few hundred to several thousand USD per unit, depending on functionality, communication capabilities, and manufacturer. Overview of Pricing

The cost of distribution network relays varies widely based on type, features, and application. For example:

- ABB RED615 relays are phase-segregated, two-end line differential protection devices suitable for overhead lines and cable feeders. Prices are pre-tax and indicative, excluding delivery, customs, installation, or activation charges, and can vary by country due to raw material costs and exchange rates .
- SEL relays offer high-speed protection for feeders, transformers, generators, and busbars, with advanced fault-locating and digital substation capabilities. Pricing depends on the relay type, communication options, and additional features like arc-flash protection .



- Siemens SIPROTEC 5 and 7 series relays provide modular, multifunctional protection for feeders, lines, and motors. Costs are influenced by the selected modules, engineering tools, and IoT or cybersecurity features .

Typical Price Ranges

- Basic feeder or overcurrent relays: \$500–\$2,000 per unit
- Advanced multifunctional relays with communication and digital integration: \$2,000–\$10,000 per unit
- High-end line differential or universal relays for complex distribution networks: \$10,000–\$20,000+ per unit These ranges are indicative and can fluctuate based on manufacturer, country, and additional services such as installation, commissioning, and lifecycle support.

Factors Affecting Cost

- Functionality: Single-function relays are cheaper than multifunctional or universal relays.
- Communication capabilities: Fiber-optic or pilot-wire communication increases cost.
- Network complexity: Radial, looped, or meshed networks may require more sophisticated relays.
- Manufacturer and brand: ABB, SEL, and Siemens have different pricing strategies and service packages.
- Additional services: Installation, configuration, and lifecycle support can add significantly to the total cost.

How to Obtain Accurate Pricing

Since prices are indicative and region-specific, the most reliable approach is to contact suppliers or manufacturers directly for a quote tailored to your network requirements, including any installation or activation options . By considering these factors, utilities and industrial operators can budget effectively for distribution network relay protection while ensuring the selected devices meet technical and operational needs.

Article Content

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Distribution Line Protection

From multi-functional line protection relays to residual current and leakage protection relays, our offerings cater to a wide array of

Relion REX615 | ABB

The ABB Relion REX615 protection and control relay is an all-in-one protection and control relay for power generation and

Protection relays

Numerical relays are based on the use of microprocessors. The first numerical relays were released in 1985. A big difference

Protective Relays

SEL feeder relays enhance distribution system safety and reliability with comprehensive overcurrent, arc-flash, and backup

Protection Relays | Overcurrent, Differential & Distance Relays

RSP Supply offers a comprehensive range of protection relays for industrial, utility, and infrastructure applications. Our selection

Protection Relays

Compact medium voltage protection relays From overcurrent to advanced protection, these easy-to-use protection relays (formerly

Power protection relay

Find out all of the information about the ABB Oy Distribution Automation product: power protection relay REX615. Contact a supplier

A coordinated relay protection strategy of distribution network based ...

In this paper, an economical FCL model is constructed and a coordinated relay protection strategy based on current

Multiapplication protection and control

Freely configurable all-in-one protection devices represent a flexible and cost-effective choice.

A coordinated relay protection strategy of distribution network based ...

Abstract In order to solve the problem of difficult coordination of traditional overcurrent relay protection caused by short

POWER SYSTEM PROTECTION RELAYS AND HARDWARE

You will gain a thorough understanding of the capabilities of power system protection relays and how they fit into the overall

Protective Relays

Protect critical components in your power system with a wide range of SEL protective relays covering applications and use cases

POWER SYSTEM PROTECTION & CONTROL PANELS GUIDE

Medelec designs protection and control panels to cater for various applications according to customer requirements, using latest

Formal performance analysis of optimal relays-based protection

Although formal methods-based studies have been used for analyzing the impact of communication network failure,

SIPROTEC Protection Relays | Siemens

Future-proof your power supply with protection relays and control for digital substations. SIPROTEC includes: Engineering tools for

6 different types of relaying schemes to protect the EHV and UHV ...

A substation can employ many relaying systems to protect the equipment associated with the station. The most

What is Protection Relay?

A protection relay is a crucial component of electrical systems that safeguard infrastructure, employees, and

Relays-Online

ABB Relays-Online makes finding, selecting, ordering, and tracking of your next digital substation product

Protection Relays | Medium & high voltage power system protection

Protection relay solutions for reliable power management A protection relay is a critical component in any electrical system, designed

High Reliability Relay Protection Setting Scheme of Distribution Network

Aiming at the complex situation of multi-branch and multi-distributed power supply in distribution network, a high reliability relay

System for Automated Calculation of the Operation Parameters of the ...

Currently, low-capacity power plants, connected to distribution networks of medium voltage class near electricity

Protection Relays by Range

Our catalog of Protection Relays provide leading and reliable protection and control for any network

Protection Relays | Schneider Electric South Africa South Africa

Schneider Electric South Africa. offers a wide range of relays for protection and control, designed for motors, transformers, and

Optimization of Multi level Relay Protection Adaptive ...

In order to address the shortcomings of the above meth-ods and improve the reliability and sensitivity of relay protection for

Protective Relay Market Size, Share & Industry Trends Report, 2031

By Product Type: Generator Protection Accelerates with Renewables Feeder models held 27.95% of protective relay

The essentials of power systems: Relay protection and communication ...

Protection functions and communications First, I would like to make a note that there are many essentials when we

POWER SYSTEM PROTECTION RELAYS AND HARDWARE

Architecture of the modern numerical (or microprocessor based) relay How to configure the various relays How to apply the modern

Impact of Distributed Resources on Distribution Relay Protection

This report covers how the addition of distributed resources will impact the distribution relay protection of the system. The issues

Protective Relay Basics

They require relays and sensors to complete the system. Virtually any manufacturer / model relay can be used with any manufacturer

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To improve the reliability and sensitivity of multi-level relay protection in distribution networks with distributed power

Research on Relay Protection Fault Handling Method in Automatic ...

This paper proposes a high reliability relay protection configuration and setting scheme for distribution network. The system includes

Protection of Electricity Distribution Networks | IET Digital Library

A protection relay is a device which senses any change in the signal it receives, usually from a current and/or voltage source. If the

Prospective Relay Protection System for Digital Distribution Networks ...

With the development of 6 – 35 kV digital distribution networks, the manual calculation and input of operation

6 different types of relaying schemes to protect the EHV and UHV ...

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

