

What is the return of relay protection



Article Overview

In relay protection, "return" refers to the process by which a relay resets and its contacts go back to their normal, non-operated position after the actuating quantity falls below a specified reset level.

Detailed Explanation

In protective relays, the return function is closely related to the relay's reset behavior. When a relay detects an abnormal condition, such as overcurrent or earth fault, it operates once the measured quantity exceeds the pickup level. After the fault is cleared or the actuating quantity drops below a certain reset value, the relay returns to its original state, opening its contacts and stopping the trip signal to the circuit breaker. This ensures that the relay does not remain in an operated state unnecessarily and allows the system to resume normal operation.

Relation to Electrical Circuits

The concept of return also involves the return path of current in the circuit. For a relay to function correctly, the electrical loop must be complete, allowing current to flow back to the source. This return path ensures that the relay can sense the current accurately and reset properly once the fault condition is removed.

Practical Implications

- **Time Delay:** The return is not instantaneous; there is a small time interval between the actuating quantity dropping below the reset level and the relay contacts fully re...

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The most important requisite of the protective relay is reliability since they supervise the circuit for a long time before a

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Types of Protective Relays

This article covers various types of protective relays, such as overcurrent, directional, and differential relays, highlighting their

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Types of Electrical Protection Relays or Protective Relays

Protective relays can be categorized based on their operating mechanisms into electromagnetic relay, static, and

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What is Protection Relay?

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Relays Part 4: The Protective Relay Basic Theory

The types of protective relays that exist are overcurrent, electromechanical, directional, distance, pilot, and differential

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Protective Relay Basics

Traditionally, protective relays were electromechanical devices utilizing induction disk, coils, contacts, and solenoid elements to

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Using Protective Relay For Fighting Against Faults

Introduction to Protective Relay Protective relay works in the way of sensing and control devices to accomplish its

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Protective relay

Electromechanical protective relays at a hydroelectric generating plant. The relays are in round glass cases. The rectangular devices

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Basic protection relay knowledge

Relion protection and control relays for several application reduce complexity. Long term cost reduction (TCO) for trainings and

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