Fault Diagnosis of 10kV Bus Line

Overview

Circuit Breaker Failure to Operate or Maloperation: Check the energy storage mechanism, closing/tripping coils, auxiliary switches, and secondary circuits. High-Voltage Fuse Blown: Measure voltage across the fuse terminals; inspect busbar joints, cable terminations, and. 10kV high-voltage switchgear is widely used in power systems and has dual functions of control and protection. The invention discloses a method for identifying a single-phase disconnection and ground falling fault of a 10kV distribution line based on bus zero-sequence voltage information, which is used for a neutral point ungrounded distribution system and mainly solves the problem that the single-phase. In practice, faults in CAN bus systems often follow a very similar pattern. The network does not start, stops when a new node is connected, shows sporadic dropouts, or error frames occur. In most cases, the root cause is not the protocol itself, but the physical structure of the network. Prolonged operation can damage the VT. Therefore, based on traveling wave theory, this paper designs a reliable grounding fault location method suitable.

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Article Content

On-line detection and fault diagnosis system of 10kV high voltage ...

The high-voltage switch cabinet fault online detection system designed with CAN bus has better reliability, openness and anti-interference than the detection system using BITBUS bus and RS-485

Fault Diagnosis in a 10 kV Transmission Line Using a One

To address these problems, this paper proposes a fault diagnosis method based on a one-dimensional convolutional neural network (1D-CNN) integrated with the Mish activation function.

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The fault identification method is based on the power frequency component of the bus zero sequence voltage, has low sampling requirement, does not need to additionally increase a detection...

CAN-Bus Troubleshooting | MicroControl

CAN bus troubleshooting: identify common causes such as termination, bit rate, cable issues and topology faults, and resolve communication problems quickly and methodically.

Study on fault state detection of 10kv overhead transmission line

Abstract: In order to improve the accuracy of fault state detection for overhead transmission lines, a research on fault state detection for 10kV overhead transmission lines based on

Method of grounding fault in 10-kV distribution network based on ...

For multiple ranging results, Grubbs test method is used to eliminate abnormal values and determine the fault location. The test results show that the accuracy of the ground fault location

Busbar fault diagnosis method based on multi-source ...

Therefore, this paper proposes a busbar fault diagnosis method based on multi-source information fusion. Initially, the diagnostic method for busbar faults is explored, conducting both time

(PDF) Research and Application of Automatic Fault Diagnosis and ...

This paper takes the equipment of a specific project as an example to develop an automatic fault diagnosis and isolation device for 10kV overhead line or cable line when a user has...

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Study on fault diagnosis and recovery mechanism of 10kV railway

Experimental results show that this fault diagnosis and recovery mechanism can significantly enhance the fault handling eficiency and reliability of 10kV railway power supply lines, providing strong support

Bus network decomposition for fault detection and isolation through ...

Abstract This paper deals with fault detection and isolation (FDI) in complex embedded wired communication networks. The considered faults are soft faults which do not prevent the

Fault location for 10kV distribution line based on ...

Abstract A new method is presented for accurate fault location on a distribution line with branches which integrates the C-type-traveling-wave location method with Artificial Neural Network

Methodology to differentiate type of single-phase line break fault in ...

Single-phase line break and grounding fault frequently occurs in 10kV distribution networks, threats the safe and stable operation of power grid and damages people''s lives and

Automotive LIN-BUS & K-LINE Intro, Application & Diagnosis

What you''ll learn You will learn to explain the main features and operation of Local Interconnect Network. You will learn to explain the main features and operation of K-Line. You will learn to locate

Application of edge computing in fault diagnosis of 10kV ring net ...

In this paper, a fault diagnosis system for 10kV ring net switch cabinet based on edge computing is proposed. Various parameters collected by sensors are input into the edge gateway.

INFO-RF-based fault diagnosis and analysis method for busbars

This paper presents a method for busbar fault diagnosis and analysis that combines the weighted mean of vectors (INFO) algorithm with the Random Forest (RF) model.

A fault diagnosis method of double-layer LSTM for 10 kV ...

At present, research of cable fault diagnosis based on artificial intelligence mainly takes statistical characteristics as inputs, which means the appropriateness of statistical characteristic

Research on Remote Diagnosis Model of Metering Point Anomaly of 10kV ...

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In order to improve the fault location effect of 10kV distribution line metering point anomaly remote diagnosis model, a 10kV distribution line metering point anomaly remote diagnosis model based on

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The invention discloses a method for identifying a single-phase disconnection and ground falling fault of a 10kV distribution line based on bus zero-sequence voltage information, which is used for a neutral

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