35kV bus voltage is abnormal

Summary of Content

Abnormal 35 kV bus voltage can result from single-phase grounding, fuse blowouts, or resonance, and requires careful diagnosis and timely corrective action to maintain system reliability.

Common Causes of 35 kV Bus Voltage Anomalies

• High-Voltage Fuse Blowouts: When a single-phase, two-phase, or three-phase high-voltage fuse blows, the voltage of the affected phase drops significantly. If the fuse is partially blown, a bus grounding signal may not be triggered, making detection more challenging .

• Single-Phase Grounding Faults: A grounded phase voltage drops close to zero, while the other two phases rise to line voltage levels. This often triggers a “busbar grounding” alarm. Indicators include dimming of the faulted phase VT light and brightening of the healthy phases .

• Resonance (Ferroresonance): All three-phase voltages rise abnormally but remain balanced. The bus voltage transformer may emit a buzzing sound, and overvoltage can reach 1.5–3.5 times the normal phase voltage. No bus grounding signal is typically issued .

• Low-Voltage Fuse Blowouts: Secondary voltage drops significantly without triggering a busbar grounding signal .

Identification and Diagnosis

• Voltage Transformer (VT) Observations: Check VT indicator lights; the faulted phase dims while others brighten. Measure $3V_0$ output to detect neutral displacement voltage .

Article Content

BUS Voltage Fault

1 eck the frequency of the fault. It is normal if the frequency of the fault is less than once every three days. If the frequency is

VFD Overvoltage Fault on Power-Up: Deep Analysis of DC Bus

By following a structured diagnostic approach—verifying real voltage, analyzing signal chains, and testing

A 35-kV system voltage sag improvement

Most of the 35-kV voltage drop, during a fault, occurs in the substation power transformer. The low voltage appears at the substation

Bus Voltage Fault

Use a multimeter to measure the voltage at each MPPT, make sure that the Max. PV input voltage in Datasheet is not exceeded.If

35kV Distribution Line Single-Phase Ground Fault Handling

How to identify 35kV single-phase ground faults? Use SCADA and voltage analysis now—quickly isolate faults and maintain power

Judgment and treatment method of 35 kV system voltage anomaly

(2) Bus voltage abnormality: The voltage above 35 kV bus voltage transformer is abnormal. It can be divided into

Danfoss DC Drive Error AL35: Bus Voltage High

Fix Danfoss DC Drive error code AL35 (Bus Voltage High). Symptoms, causes, and step-by-step repair guide from Synchronics —

What are the causes of the breakdown and burning of the 35 kV GIS ...

Explore the detailed cause analysis and retrofit strategies for a 35kV GIS voltage transformer accident. Learn about design flaws,

35 kV Switchgear: High-Voltage Distribution Design Guide

Enwei Electric provides 35 kV switchgear with vacuum interrupters, robust bus systems, arc-resistant options, and

DC bus overvoltage fault on SURT10000XLI

I''ve checked the high voltage relays and all appear to be proper continuity and impedance across the coil. The unit

Contact Us

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