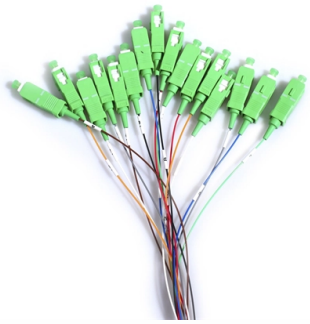
# ZITHA TECH SPECIALTY CABLES (Pty) Ltd

# Relay protection code 47



## Overview

Protection IEC symbol (IEC60617) ANSI (IEEE C37. 2) Operate time Voltage unbalance (voltage asymmetry) UUB> 47 < 200 ms* Note: * The operate time includes the minimum user-defined delay of 100 ms. In electric power systems and industrial automation, ANSI Device Numbers can be used to identify equipment and devices in a system such as relays, circuit breakers, or instruments. Letters are sometimes added to specify the application (IEEE Standard C37. These types of devices protect electrical systems and components from damage when an unwanted event occurs, such as an electrical. The widely used United Sates standard ANSI/IEEE C37. The phase-to-phase voltage is. The protection and control devices in electrical equipment can be referred to by numbers, with appropriate suffix letters when necessary, according to the functions they perform.

## Article Content

ANSI Standard Device Numbers & Common Acronyms

ANSI Standard Device Numbers & Common Acronyms ANSI Standard Device Numbers & Common Acronyms

Table of ANSI IEEE Standard Device Numbers

Protection used to check that remanent voltage sustained by rotating machines has been cleared before allowing the busbar supplying the machines

ANSI (IEEE) Protective Device Numbering

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Protective relays are commonly referred to by standard device numbers. For example, a time overcurrent relay is designated a 51 device, while an instantaneous overcurrent is a 50 device.

Voltage unbalance (ANSI 47)

The alarm response is based on the highest difference between any of the three phase-to-phase voltage or phase-to-neutral true RMS values and the average voltage, as measured by the controller. The

Protection and Control Device Numbers and Functions

These numbers are based on a system that is adopted by a standard for automatic switchgear by Institute of Electrical and Electronics Engineers (IEEE), and incorporated in American Standard

What is the definition of ANSI 47

Protection against phase unbalance resulting from phase inversion, unbalanced supply or distant fault, detected by the measurement of negative sequence voltage.

Help me understand how ANSI 47 relay works | Eng-Tips

Can you post a schematic of how the relay is wired into the close/trip circuits? That will explain exactly how the ICR53A is being used. The left contact

ANSI Device Numbers and Acronyms

The ANSI standard device numbers ( As per ANSI/IEEE standard C37.2) are used in the design of an electrical power system. These devices

How to test 47 Phase unbalance protection in SEPAM relays?

In this case we are going to explain about two scenario to test Ansi code 47. 47 is phase unbalance protection resulting from phase inversion, unbalanced supply or distant fault which is

Protection and Control Device Numbers and Functions

Description The protection and control devices in electrical equipment can be referred to by numbers, with appropriate suffix letters when necessary, according to the functions they perform.

Decoding ANSI Codes for Protection Relays

Codes of ANSI protection enable engineers and technicians to identify the functions and capacities of protection relays. Are you looking for the

Protection Relay – ANSI Standards

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*

ANSI 49RMS – Thermal overload Protection against thermal damage caused by overloads on machines (transformers, motors or generators). The

Protective relays

Protective relays A special type of relay is one which monitors the current, voltage, frequency, or any other type of electric power measurement either from a generating source or to a load for the

Intro to Relays #2

Protective Relays are an advanced area of electrical engineering and contracting that can be intimidating, but they don''t have to be! This series of 3 articles will introduce basic relaying to the

Help me understand how ANSI 47 relay works | Eng-Tips

One of the relay on our main circuit breaker is a GE#12ICR53A1A, Ansi#47, Phase Sequence and UnderVoltage Relay. I''ve read the manual but

ANSI Codes for Protection Relays | PDF | Relay | Switch

The ANSI has standardized codes for protective relay functions, with each function assigned a specific number. Some common codes include 50 for instantaneous

ANSI (IEEE) Protective Device Numbering

The widely used United Sates standard ANSI/IEEE C37.2 ''Electrical Power System Device Function Numbers, Acronyms, and Contact Designations'' deals with protective device

ANSI CODES FOR PROTECTION FUNCTIONS

Following is the list of the functions. The codes are sometimes followed by an alphabet which gives some additional information for instance, the code 51G may indicate an overcurrent ground relay.

What is the definition of ANSI 47

Protection against phase unbalance resulting from phase inversion, unbalanced supply or distant fault, detected by the measurement of negative sequence voltage.

ANSI Codes for Protective Relays | PDF | Relay | Switch

The document lists 99 international codes and their corresponding descriptions of protective devices used in drawings of circuits for protective relaying in power

ANSI Codes

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*

Device Numbers 1. Master Element is the initiating device, such as a control switch, voltage relay, float switch, etc., which serves either directly or through such permissive devices as

Protection Relay : Circuit, Working, Types, Codes & Its

Protection Relay : Working, Circuit, Types, Codes, Functions & Its Applications November 1, 2023 By Wat Electrical A relay is a four-terminal

How to test 47 Phase unbalance protection in SEPAM relays?

In this case we are going to explain about two scenario to test Ansi code 47.47 is phase unbalance protection resulting from phase inversion, unbalanced supply or fault

How to test 47 Phase unbalance protection in SEPAM relays:

Here below you see the Sepam setting for negative sequence overvoltage 47 protection function: I would like to grab your attention into the fact that in Sepam relays all voltage settings are done according to

How to test 47 Phase unbalance protection in SEPAM relays?

In this case we are going to explain about two scenario to test Ansi code 47. 47 is phase unbalance protection resulting from phase inversion, unbalanced supply or distant fault which is

Protection and Control Device Numbers and Functions

Description The protection and control devices in electrical equipment can be referred to by numbers, with appropriate suffix letters when necessary, according to the functions they perform.

Decoding ANSI Codes for Protection Relays

Codes of ANSI protection enable engineers and technicians to identify the functions and capacities of protection relays. Are you looking for the

Protection Relay – ANSI Standards

ANSI 49RMS – Thermal overload Protection against thermal damage caused by overloads on machines (transformers, motors or generators). The

Protective relays

Protective relays A special type of relay is one which monitors the current, voltage, frequency, or any other type of electric power measurement either from a generating source or to a load for the

Intro to Relays #2

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*

Protective Relays are an advanced area of electrical engineering and contracting that can be intimidating, but they don''t have to be! This series of 3 articles will introduce basic relaying to the

ANSI Relay Code Reference Guide | PDF | Relay | Switch

This document contains an ANSI device reference table listing relay codes and their corresponding devices and descriptions. It includes relay codes from NO 1 to NO

How to test 47 Phase unbalance protection in SEPAM relays?

In this case we are going to explain about two scenario to test Ansi code 47. 47 is phase unbalance protection resulting from phase inversion, unbalanced supply or distant fault which is detected by the

ANSI/IEEE Relay Protection Codes Guide

Protection Relay Code - Free download as PDF File (.pdf), Text File (.txt) or read online for free. This document lists standard device numbers for protective relays used in North America according to

ANSI Relay Protection Code List

This document lists 57 ANSI codes and their corresponding descriptions of protection devices and functions. The codes cover a wide range of protection

ANSI Standard Device Numbers & Common Acronyms

ANSI Standard Device Numbers & Common Acronyms ANSI Standard Device Numbers & Common Acronyms

Table of ANSI IEEE Standard Device Numbers

Protection used to check that remanent voltage sustained by rotating machines has been cleared before allowing the busbar supplying the machines

ANSI (IEEE) Protective Device Numbering

Protective relays are commonly referred to by standard device numbers. For example, a time overcurrent relay is designated a 51 device, while an instantaneous overcurrent is a 50 device.

Voltage unbalance (ANSI 47)

The alarm response is based on the highest difference between any of the three phase-to-phase voltage or phase-to-neutral true RMS values and the average voltage, as measured by the controller. The

Protection and Control Device Numbers and Functions

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*

These numbers are based on a system that is adopted by a standard for automatic switchgear by Institute of Electrical and Electronics Engineers (IEEE), and incorporated in American Standard

What is the definition of ANSI 47

Protection against phase unbalance resulting from phase inversion, unbalanced supply or distant fault, detected by the measurement of negative sequence voltage.

Help me understand how ANSI 47 relay works | Eng-Tips

Can you post a schematic of how the relay is wired into the close/trip circuits? That will explain exactly how the ICR53A is being used. The left contact

ANSI Device Numbers and Acronyms

The ANSI standard device numbers ( As per ANSI/IEEE standard C37.2) are used in the design of an electrical power system. These devices

ANSI Standard Device Numbers & Common Acronyms

ANSI Standard Device Numbers & Common Acronyms ANSI Standard Device Numbers & Common Acronyms

Table of ANSI IEEE Standard Device Numbers

Protection used to check that remanent voltage sustained by rotating machines has been cleared before allowing the busbar supplying the machines

ANSI (IEEE) Protective Device Numbering

Protective relays are commonly referred to by standard device numbers. For example, a time overcurrent relay is designated a 51 device, while an instantaneous overcurrent is a 50 device.

Voltage unbalance (ANSI 47)

The alarm response is based on the highest difference between any of the three phase-to-phase voltage or phase-to-neutral true RMS values and the average voltage, as measured by the controller. The

Protection and Control Device Numbers and Functions

These numbers are based on a system that is adopted by a standard for automatic switchgear by Institute of Electrical and Electronics Engineers (IEEE), and incorporated in American Standard

What is the definition of ANSI 47

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*

Protection against phase unbalance resulting from phase inversion, unbalanced supply or distant fault, detected by the measurement of negative sequence voltage.

Help me understand how ANSI 47 relay works | Eng-Tips

Can you post a schematic of how the relay is wired into the close/trip circuits? That will explain exactly how the ICR53A is being used. The left contact

ANSI Device Numbers and Acronyms

The ANSI standard device numbers ( As per ANSI/IEEE standard C37.2) are used in the design of an electrical power system. These devices

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

## Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

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

*© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved*