

Relay Protection PD Number

LoRawan outdoor base station



Overview

In and, ANSI Device Numbers can be used to identify equipment and devices in a system such as,, or. The device numbers are enumerated in In and, ANSI Device Numbers can be used to identify equipment and devices in a system such as,, or. The device numbers are enumerated in / Standard C37.2 Standard for Electrical Power System Device Function Numbers, Acronyms, and Contact Designations. Many of these devices protect electrical systems and individual system components from damage when an unwanted event occurs such as an. Historically, a single protective function was performed by one or more distinct devices, so each device would receive its own number. Today, -based relays can perform many protective functions in one device.

- 1 - Master Element
- 2 - Time-delay Starting or Closing Relay
- 3 - Checking or Interlocking Relay, complete Sequence
- 4 - Master Protective
- 5 - Stopping Device, Emergency Stop Switch
- 6 - Starting Circuit Breaker
- 7 - Rate of Change Relay
- 7F - Alternative number for Rate Of Change Of Frequency Relay ()
- 8 - Control Power Disconnecting Device
- 9 - Reversing Device
- 10 - Unit Sequence Switch
- 11 - Multifunction Device
- 12 - Overspeed Device
- 13 - Synchronous-Speed Device
- 14 - Underspeed Device
- 15 - Speed or Frequency Matching Device
- 16 - Data Communications Device
- 17 - Shunting or Discharge Switch
- 18 - Accelerating or Decelerating Device
- 19 - Starting-to-Running Transition Contactor
- 20 - Electrically-Operated Valve (Solenoid Valve)
- 21 - Distance Relay
- 21G - Ground Distance
- 21P - Phase Distance
- 22 - Equalizer Circuit Breaker
- 23 - Temperature control device, Heater
- 24 - Volts per Hertz Relay (in some old analog applications, a 59 and an 81 device would be chained together as a 59/81 to implement the equivalent of V/Hz protection)

A suffix letter or number may be used with the device number; for example, suffix N is used if the device is connected to a Neutral wire (example: 59N in a relay is used for protection against Neutral Displacement); and suffixes X, Y, Z are used for auxiliary devices. Similarly, the "G" suffix can denote a...

Article Content

Oct 26, 2025

How Electrical Relays Work

A relay is an electromagnetic switch that opens and closes circuits electromechanically or electronically. A relatively small electric current that can turn on or off a much larger electric current operates a relay.

Jun 05, 2026

Amazon Relay | Load board & trucking contracts for carriers

Amazon Relay directly tenders power-only loads to trucking companies through our free load board and contracts. We have nationwide freight available for box trucks, dry vans, containers, ...

Jan 23, 2026

Intro to Relays #2

Protective relays are designed by using standard device numbers to describe its functionality. Instead of verbal descriptions, we use numbers to describe the functions of a relay.

Feb 05, 2026

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.

Feb 25, 2026

Protection and Control Device Numbers and Functions

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.

Feb 07, 2026

Relay | Online Business Banking | On The Money, All The Time

Relay (Relay Financial), is an all-in-one business banking and money management platform helping businesses understand what they're earning, spending & saving.

Jun 27, 2026

Protection Relay

In the design of electrical power systems, the ANSI Standard Device Numbers denote what features a protective device supports (such as a relay or circuit breaker). These types of ...

Aug 29, 2025

What Is Relay? How Relay Works?

A Relay is a simple electromechanical switch. While we use normal switches to close or open a circuit manually, a Relay is also a switch that connects or disconnects two circuits.

Jan 06, 2026

ANSI codes and IEC Relay Symbols – Electrical Engineering

To assist the Protection Engineer in converting from one system to the other, a select list of ANSI device numbers and their IEC equivalents are given in the following figure.

Jun 05, 2026

What is a relay, its function, types and relay wiring

A relay is an electrical switch that can be activated by a low-power signal. Learn more about what is a relay and their many applications here!

May 06, 2026

ANSI device numbers

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.

Aug 23, 2025

ANSI Standard Device Numbers & Common Acronyms

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

Apr 08, 2026

ANSI Device Numbers for Relays | PDF | Relay | Switch

Ansi Code for Protective Relay - Free download as PDF File (.pdf), Text File (.txt) or read online for free. ANSI device numbers denote the functions of protective devices like relays and circuit breakers. ...

Dec 06, 2025

How a Relay Works and How to Use It in Circuits

Learn how a relay works and how you can use it to turn on/off high-power devices with tiny signals. Includes practical circuit examples.

Oct 25, 2025

Relays | RS

Relays are in stock and ready to ship same-day from RS. RS is an authorized distributor for relays from leading manufacturers like Phoenix Contact, IDEC Corporation, ABB, Schneider Electric and TE ...

Oct 21, 2025

Table of ANSI IEEE Standard Device Numbers

In North America protective relays are generally referred to by standard device numbers. Letters are sometimes added to specify the application (IEEE Standard C37.2-2008).

Mar 12, 2026

Understanding the ANSI/IEEE Device Numbering System | Delgado ...

For protection engineers, a thorough understanding of this numbering system is essential for effective communication, proper relay configuration, and coordinated protection design.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg, 2196, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

