

## Article Overview

In Indonesia, the phase (live) wires are color-coded as black (L1), brown (L2), and grey (L3), carrying the electrical current from the power source to the load.

## Phase Wire Color Standards

Indonesia follows the PUIL 2011 standard, adapted from IEC 60446, for electrical wiring color codes:

- o Black wire (L1): The primary phase wire used in most household circuits, carrying live current from the substation into the building. It should never be used as neutral or ground .
- o Brown wire (L2): Typically used for higher power applications, such as machine operations or commercial installations .
- o Grey wire (L3): Serves as an additional phase wire for modern commercial and industrial needs, providing higher electrical capacity .

## Neutral and Ground Wires

- o Blue wire: Neutral wire, negatively charged or near zero, returning current to the source and serving as a reference point in the circuit .
- o Green-yellow wire: Ground wire, providing a safe path for excess current to prevent electric shock or equipment damage .

## Electrical System Overview

- o Voltage and frequency: Indonesia uses 230 volts at 50 Hz .
- o Plug types: Standardized on Type F sockets, compatible with Type E and C plugs, but Type F is required for grounding safety .
- o Safety compliance: Electrical installations must comply with SNI (Indonesian National Standard) to ensure safety, reliability, and legal compliance .

## Practical Notes

- o Always verify the wire color before connecting, as incorrect connections can cause electric shock, short circuits, or fire hazards.
- o For industrial or multi-phase systems, L1, L2, and L3 allow three-phase power distribution, which is common in commercial and industrial settings.
- o Older installations may have outdated color codes; modern rewiring typically follows the PUIL 2011 standard . Understanding these standards ensures safe and compliant electrical installations in Indonesia,



# Phase wire Indonesian electricity

whether for residential, commercial, or industrial applications.

Each circuit in the premises can be connected to either one of two 120 V supplies (at 180° of phase

What are the voltage requirements in Indonesia? What is the state of the electricity power supply in Indonesia?

Do I need a power plug adapter or power converter for Indonesia? All you need to know about electrical outlets, plug types and

The Type C electrical plug (or Europlug) is a two-wire plug that has two round pins. It fits into any socket that accepts 4.0 - 4.8 mm

Indonesia Indonesia, an archipelago nation in Southeast Asia, spans over 17,000 islands with a population

Indonesia - power plug and socket In Indonesia, electrical sockets and plugs are type C or F. Type C has two round pins and type F

Three-phase electrical power was first developed in the 1880s by several inventors and has remained the backbone of modern

As Indonesia is an archipelago consisting of thousands of islands, there are hundreds of

Power sockets in Indonesia are two pin types C and E/F and the standard voltage is 230V with 50 Hz frequency. The vast majority of

The document provides tables from the Indonesian electricity company (PLN) that list the minimum required cable sizes based on

This is the ATO online store's general guide to the electrical wire colour codes implemented in some major countries and regions.

Knowing these color codes is essential for working on any electrical system in Indonesia. PUIL provides a clear and

Berikut ini adalah daftar negara dan wilayah, dengan colokan, tegangan dan frekuensi yang umumnya digunakan untuk

Planning to visit Indonesia? Find out how to charge your important gadgets with this guide to

## Phase wire Indonesian electricity

The Indonesian electrical standard says that the earth and neutral wires in a three phase system should not be connected together

The color coding system in Indonesian electrical installations (Phase: brown/black/grey, Neutral: blue, Earth: green-yellow) is crucial

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