

Sub-meter distribution box connection



Summary of Content

A sub-meter is connected to a distribution box by linking the main supply through protective devices to the meter, then distributing power to individual loads with proper neutral and earth connections.

Overview of Connection

A sub-meter allows monitoring of electricity consumption for a specific circuit or unit. To connect it to a distribution box:

- **Main Supply Connection:** Identify the main power supply entering the distribution box. Connect the phase (live) and neutral wires to the input terminals of the main MCB or breaker that will feed the sub-meter .
- **Protective Devices:** The output of the main MCB is connected to an RCCB (Residual Current Circuit Breaker) for safety. From the RCCB, the output wires are routed to the sub-meter and then to the load MCBs .
- **Sub-Meter Wiring:** Single-phase sub-meters typically have four wires: live (L), neutral (N), and two protective earth/ground wires. Connect the live and neutral from the RCCB output to the corresponding terminals on the sub-meter. Ensure the earth wire is connected to the distribution box's earth link .
- **Load Distribution:** From the sub-meter, connect the output terminals to the load MCBs. For single-pole MCBs, connect only the phase wire to the MCB input and the neutral to the neutral link. For double-pole MCBs, connect both phase and neutral wires from the sub-meter output to the MCB input .

Article Content

Wiring of the Distribution Board From Energy Meter to

Below is a Wiring diagram of the distribution board, Single phase electric supply from electric pole and

How to Wire a Home Distribution Box

How to Wire a Home Distribution Box - Step-by-Step | Distribution DB box wiring diagram Welcome to our channel! In this video, we'll

Electricity Submetering

Electricity submetering tracks energy use beyond the main utility meter, enabling cost allocation, energy savings, and

The Ultimate Guide to Submetering

Welcome to the Ultimate Guide to Submetering, the comprehensive resource for anyone considering submetering utilities at multi

DIY Wiring a Consumer Unit and Installation

/ Consumer Unit Background Wiring a Distribution Board is vital in any electrical installation. All the electrical sub circuits are

complete house wiring with submeter connection wiring diagram

Three phase to single phase energy meter wiring diagram • Three phase to single phase

How To Wire & Install a 1-Phase kWh Energy Meter? NEC & IEC

Now connect the outgoing Phase wire in the 4th slot and connect it to the main distribution board as shown in the fig. Below is the

How to Install an Electric Sub Meter

When installing an Electric Sub Meter REMEMBER TO: Switch off the main circuit breaker. Locate & record the CT number on the

Electrical Wiring At The Meter Box (DIY Version).

A meter box or board wiring is easy for DIY electrician pros. It is the link between the

Single Phase Sub Meter Wiring Diagram

Now that you understand the basics of single-phase sub meters, let's take a look at a single-phase sub meter wiring

Water Submeter Installation

Here are some basics on a submeter installation for new construction. This will give you an idea of what is

Wiring of the Distribution Board with RCD (Single Phase Home Supply)

The above mentioned electrical wiring accessories and protective devices are used to control and distribute electric supply (safely to

Single Phase Sub Meter Wiring Diagram

These wires must be connected correctly for the meter to work properly. Now that you understand the basics of single

Submeter Wiring and Connection Diagram | PDF

It includes details on the entrance cap, service head, secondary rack, single service wire, porcelain spool insulator, main meter, sub

Electric Sub Meter Wiring Diagram

Overview of Electric Sub Meter Wiring Diagrams A wiring diagram is a schematic representation of an electrical

How to wire a DB - Distribution Board Wiring - Mechatrofice

How to wire a DB - Distribution Board Wiring Distribution Board or DB is an electricity supply system or a common

Wiring the Electric Sub Meter: Simplified Diagram

Discover how to wire an electric sub meter with a comprehensive wiring diagram. Ensure accurate electricity usage measurements

Single Phase Distribution Box (DB) Wiring Diagram and

Hey, in this article we are going to see the Single Phase Distribution Box Wiring Diagram and

Wiring of the Distribution Board with RCD (Single Phase Home Supply)

The Sub distribution board is connected and supplied from the Main Distribution Board through different wires and cables rated

How To Wire & Install a 3-Phase kWh Energy Meter? NEC & IEC

Below is the basic connection diagram for installation of a three-Phase, 4-Wires, Wye-400V) kWh meter (Digital or Analog Energy

Wiring of the Distribution Board From Energy Meter to the Consumer

Electrical Wiring Installation of the Distribution Board (Single Phase Supply) (From Utility Pole & Energy Meter to the Consumer Unit.

How to Installing a Sub Meter Correctly

After completing the connection and configuration, perform system testing and adjustments to ensure that the

Wiring diagram of electrical distribution box

You can see the wiring diagram of single phase distribution box from main meter to DB and other sub-circuit in the

Wiring of the Distribution Board From Energy Meter to the Consumer

The electric main supply (230V AC & 120V AC in US) is connected through secondary of the transformer (3, Phase 4 Wire System),

What Is a Submeter? Guide to Types & Benefits 2025

We mount the submeter securely near the panel, then connect input wires to the main circuit breaker, and attach load

Residential Electric Meter Box Wiring Diagram Guide

Residential Electric Meter Box Wiring Diagram Guide Understanding how to safely set up the main

Residential Electric Meter Box Wiring Diagram Guide

Clear wiring diagram for residential electric meter box, showing connections, safety components, and layout for accurate installation

Sub Main Connection From Meter Box

The sub main cable length will be approximately 30M. The tails in the meter box will be split between the isolator and

Home Distribution Box (DB) Wiring Diagram | DB box connection

In this video, I'll show you the complete wiring diagram of a home distribution board

How To Connect A Electric Sub Meter

In this article, we'll discuss how to connect an electric sub-meter and some of the benefits

full Wiring of the Distribution Board From Energy Meter to ...

This video shows the full Wiring of the Distribution Board From the Energy Meter to the

Distribution Board Wiring Diagram For Single Phase Wiring

Distribution board wiring is very important for controlling the E wiring. For this post I

sub meter connection# sub meter wiring#

sub meter connection# sub meter wiring# sub meter fitting# meter connection#

Submeter Connection Practically! How to Install Electrical Submeter!

Submeter connection practicallyin this video we explain teo submeter connection

A Complete Guide to Distribution Boards

What are Distribution Boards Used for? Whether it is an outdoor distribution board, a commercial distribution board, or

SUBMETER CONNECTION! 1 MAIN METER & TWO SUBMETER CONNECTION

House meter connection with submeter connectionIn this video we explain two submeter

Submeter Wiring and Connection Diagram | PDF

Submeter Wiring and Connection Diagram The document provides a diagram and description of a power service drop. It includes

Wiring of the Distribution Board From Energy Meter to the Consumer

The Neutral from the Main DP MCB is connected to the Neutral Link and the outgoings wires are connected to the sub, final sub

Sub Main Connection From Meter Box

The proposal is to run a 16mm SWA sub main cable buried underground from the meter box to the garage. The sub

Contact Us

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

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

Email: sales@benniedesignstudio.co.za

Phone: +27 82 391 4765

Address: The Towers, 1 St Georges Mall, Cape Town, 8001, South Africa

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

