State Grid Standard Distribution Box Specifications Table



Overview

State Grid Corporation Corporate Standard Q/GDW 11221-2023 On November 9, 2023, the first national propaganda meeting of State Grid Corporation's corporate.

Key Takeaways

State Grid low-voltage distribution boxes follow Q/GDW 11221-2023, specifying material, protection, bus bar, MCCB, earthing, and cable gland requirements. Key Specifications TableParameterRequirementBox TypeLow-voltage integrated distribution box (indoor/outdoor)Material2 mm GI sheet steel with reinforced channelsRoof DesignSlightly slanting with 50 mm overhang front and backLocking SystemGodrej Type 3-position locking; separate galvanized manual lock provisionDoor HingesConcealed from outsideEarthing PointsTwo solid earthing points on either sideProtection LevelIP-55 (type-tested at CPRI or approved lab)Bus Bar ArrangementOne bus bar with 4-pole MCCB; outgoing feeder with 2 sets of 3-pole MCCBsBus Bar MaterialCopper flat, 25x4 mm, insulated with red, yellow, blue, black tubing or phase-colored paintCable GlandsHeavy-duty, double compression brass glands for incoming and outgoing cablesMCCB StandardsIS: 13947, magnetic trip release with manual reset; neutral unbalance protection with test reportInsulation & BarriersMetallic/heat-resistant insulating barriers between MCCBsDimensionsIllustrative; tolerances ±10% over specified dimensionsAdditional FeaturesProvision for lighting inside cabinet; non-detachable nameplate; purchaser identification marksDesign and Technical NotesStructural Reinforcement: The box body must be sufficiently reinforced to maintain rigidity and durability under operational conditions.

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Quality Control: Door handles, locks, and hinges must meet quality standards; substandard components may lead to rejection. Electrical Safety: Adequate clearance between bus bars and box body is required to comply with LT supply rules. Testing: Type test certificates for IP-55 protection and MCCB compliance must be provided from CPRI or government-approved laboratories.

Customization: Boxes may include modular capacitors, intelligent fusion terminals, and SVG rails/connectors as per station requirements. These specifications ensure safety, reliability, and compliance with State Grid standards for low-voltage distribution systems, covering both mechanical and electrical design requirements for integrated distribution boxes.

Article Content

State Grid Corporation Corporate Standard Q/GDW 11221-2023

On November 9, 2023, the first national propaganda meeting of State Grid Corporation''s corporate standard Q/GDW 11221-2023 “Technical Specification for Low-voltage Comprehensive Distribution

Specifications Electrical for Installations 2024

ESB 756-2024 references all requirements for parallel generation connected to National Grid facilities located in transmission jurisdictions in Upstate New York, Massachusetts, New Hampshire, and

Transmission and distribution

IEC TC 7 publishes Standards which establish the guidelines and specifications for overhead electrical conductors, notably IEC 61089 and IEC 62219, as well as IEC TR 61597 on the calculation methods

Distribution Box and Selection Guide: Internal Structure, Components ...

Learn how to choose a distribution box and understand its internal structure, including MCBs, busbars, neutral bars, earth bars, RCDs, RCBOs, SPDs, enclosure ratings, and wiring layout.

Supplement to Specifications for Electrical Installations

The Customer shall refer to the Company''s “Specifications for Electrical Installations Underground Commercial Distribution (UCD) Installation and Responsibility Guide” (Electric System Bulletin No.

TECHNICAL SPECIFICATION FOR LT DISTRIBUTION BOX

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

General Technical Particulars for LT Distribution Boxes : - The L.T. Distribution Boxes should be of the dimensions as per the drawing & details in the table furnished.

Distribution box catalogue | PDF

This document provides specifications for various distribution boxes including dimensions, mounting sizes, and number of ways. It includes specifications for TOP-TS, TOP-TF, TOP-LS, TOP-PS, TOP

SPECIFICATIONS & REQUIREMENTS FOR ELECTRIC

1.11.2 In addition, normal electric distribution system operations include reacting and responding to the following events, any of which can cause voltage spikes, dips, temporary low voltage, and even

Specifications for Electrical Installations 2010

Printed copies of these specifications are not document controlled and may be obtained from the Company by contacting the applicable Customer Service Center in Massachusetts for New England

Distribution Box Specifications & IEC Protection Standards

Evaluate distribution box parameters, bus bar configurations, and overcurrent protection requirements for industrial compliance.

Distribution Boards | Legrand DB Board for Safe Power

Legrand''s Distribution Boards deliver safe, reliable power distribution for homes, commercial spaces, and industrial applications, combining smart design, easy

TECHNICAL SPECIFICATIONS FOR A. C. DISTRIBUTION BOARD

SCOPE: This specification covers the design, manufacturing, testing at works and supply of Indoor type A.C. Distribution Boards for power supply to yard lighting, Battery charger, 33 kV substation

TECHNICAL SPECIFICATION I.R.O. 63,100,160 & 315 KVA

Distribution Boxes shall have Isolator (Switch Disconnector) on incoming circuit and Porcelain CUTOUT fuse base disconnector on outgoing circuits with necessary interconnecting Bus Bars.

Policy report

In addition, Group Projects & Engineering is responsible for communication and distribution of any changes to this Specification and its version control. This specification will be reviewed and updated

GROUND GRID SPECIFICATIONS

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

GROUNDING OF NON-CURRENT CARRYING METALLIC PARTS AND STRUCTURES TO LIMIT POTENTIAL GRADIENTS DURING GROUND FAULT CONDITIONS FOR PROTECTION OF

IEEE 525-2007_accepted

IEEE-SA Standards Board Abstract: The design, installation, and protection of wire and cable systems in substations are covered in this guide, with the objective of minimizing cable failures and their

Standard specifications for distribution boxes default

Overview This document provides specifications for various distribution boxes including dimensions, mounting sizes, and number of ways. This publication contains the following new or updated

CM7526_SpecforElec 2020 Errata and Revisions.pdf

Covering National Grid''s Service Areas in MA, NY, and RI NOTICE: This publication contains changes and corrections to the Company''s Specifications for Electrical Installations, the “ESB750 - 2020

Contact Us

Continue your research online:

Website: https://cgweb.co.za
Technical inquiry: https://cgweb.co.za/project-enquiry.html

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

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved