Prisma Plus

Solution for **Type Tested** Low Voltage Switchboards up to 3200A

Controlling Power

Under License of Schneider Electric

Our Answers to your needs

System G

Buildings
Offices
Residential, etc.

630 A

Small companies, etc.

Laboratories
Healthcare centres, etc.

Shopping centres
Supermarkets
Malls, etc.

Pack enclosures

160 A

Schools
Hotels, etc.

System P

Hospitals
Internet data centres, etc.

Food industry
Dairy, etc

Bottling factories,
Packaging factories,
Automobile factories, etc

Logistics Centres, etc.

3200 A

Prisma Plus System G up to 630A

The Prisma Plus Functional System

The Prisma Plus functional system can be used for all types of low-voltage distribution switchboards up to 630 A, in commercial and industrial environments.

Switchboard design is very simple.

A functional structure for devices Made up of wall-mountes and floor-standing enclosures that can be used alone or combined

A distribution system

made up of centralised distribution blocks and vertical busbars installed on the side or in the rear of the switch-board.

Complete functional units

Each device is part of a functional unit comprising:

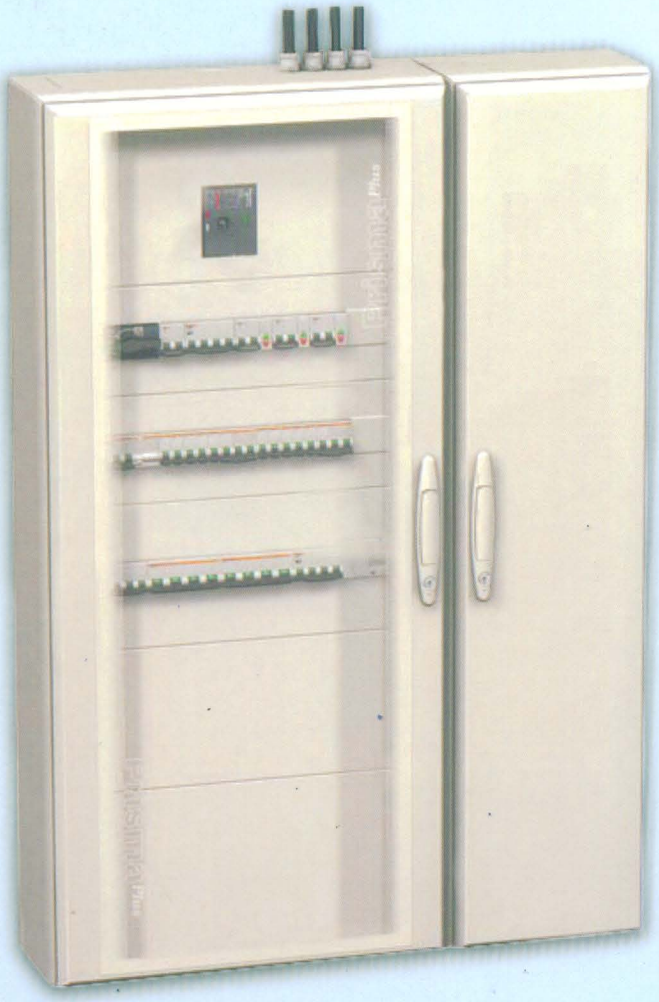
- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections
- systems for on-site connections and running of auxiliary wires.

The functional units are modular and are arranged rationally, one on top of another, within the enclosure.

The system includes everything required for functional unit mounting, supply and on-site connection.

The components of the Prisma Plus system and those of the functional units in particular have been designed and tested taking into account device characteristics.

This design approach ensures a high degree of reliability in system operation and optimum safety for personnel.



Advantages of Prisma Plus System G switchboards

A dependable electrical installation

The total compatibility of Schneider devices with the Prisma Plus system is a key advantage in ensuring a high level of installation dependability.

System Design has been validated by type tests and benefits from the combined experience of Schneider customers over many years.

An upgradeable electrical installation

Thanks to modular design, prisma plus switchboards can be modified easily to integrate new functional units as needed. Maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices and the use of standard components.

Total safety for personnel

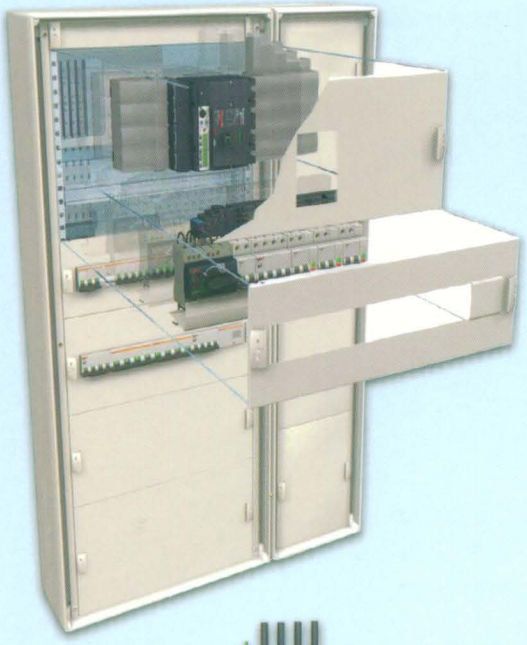
Devices are installed behind protective front plates; only the operating handles are accessible.

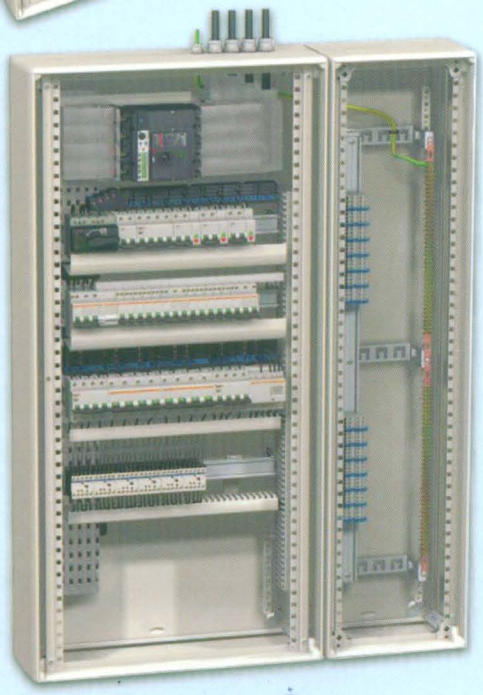
The electrical installation and operating personnel are fully protected.

In addition, all distribution components are protected by an IPxxB degree of protection.

Terminal shields are mandatory for installation of Compact NSX and INS/INV devices in Prisma Plus enclosures.

Electrical switchboards built using the Prisma Plus functional system and Schneider recommendations fully comply with international standard IEC 60439-1.





The Prisma Plus System G Enclosures

- steel sheet metal
- electrophoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9001.
- IP30 / 31 / 43 wall-mount enclosures
  - degree of protection:
    - IP30: with or without door
    - IP31: with door + canopy
    - IP43: with door + canopy + IP43 gasket
  - IK07 (without door), IK08 (with door)
  - can be dismantled
  - can be combined side by side and one on top of another
  - eight heights from 330 to 1380 mm
  - width: 595 mm
  - width of duct: 305 mm, can be combined side by side
  - depth: 250mm with door (205mm without door)
- IP30 / 31 / 43 floor-standing enclosures
  - degree of protection:
    - IP30: with or without door
    - IP31: with door + canopy
    - IP43: with door + canopy + IP43 gasket
  - IK07 (without door), IK08 (with door)
  - can be dismantled
  - can be combined side by side
  - three heights: 1530, 1680 and 1830 mm
  - width: 595 mm
  - width of duct: 305 mm, can be combined side by side
  - depth: 250mm with door (205mm without door)
- IP55 enclosures
  - IK10
  - can be dismantled
  - can be combined side by side and one on top of another
  - width: 600 mm
  - seven heights: 450 to 1750 mm
  - widths: 325 and 575 mm, can be combined side by side and one on top of another
  - depth: 260 mm with door + 30 mm (handle).

Electrical characteristics

Prisma Plus components comply with standard IEC 60439-1 and have the following electrical characteristics:

- rated insulation level of main busbars at rear of enclosure: 1000 V
- rated operational current Ie (40°C): 630 A
- rated peak withstand current Ipk: 53 kA
- rated short-time withstand current Icw: 25 kA rms /1 second
- frequency: 50/60 Hz.

Prisma Plus System P up to 3200A

The Prisma Plus System P Functional

The Prisma Plus functional system can be used for all types of low-voltage distribution switchgear (main, sub distribution and final) up to 3200A, in commercial and industrial environments.
Switchboard design is very simple.

A metal structure

The switchboard is made up of one or more frameworks combined side-by-side or back-to-back, on which a complete selection of cover panels and doors can be mounted.

A distribution system

Horizontal busbars or vertical busbars positioned in a lateral compartment or at the rear of the cubicle are used to distribute electricity throughout the switchboard.

Complete functional units

Each device is part of a functional unit comprising:

- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections
- devices for on-site connections.

Each functional unit contributes to a function in the switchboard.

The functional units are modular and are arranged rationally, one on top of another, within the enclosure.
The system includes everything required for functional unit mounting, supply and on-site connection.
All front plates for the functional units can be used as partial door by simple provision of hinges. The hinged front plate can be interlocked with direct rotary handle of breakers by addition of accessory ``MCC Conversion``.
The components of the Prisma Plus system and those of the functional units in particular have been designed and tested taking into account device characteristics. This design approach ensures a high degree of reliability in system operation and optimum safety for personnel.

Advantages of Prisma Plus System P Switchboards

A dependable electrical installation
The total compatibility of Schneider devices with the Prisma Plus system is a key advantage in ensuring a high level of installation dependability.
System design has been validated by type tests as per standard IEC 60439-1 and benefits from the combined experience of Schneider customers over many years.

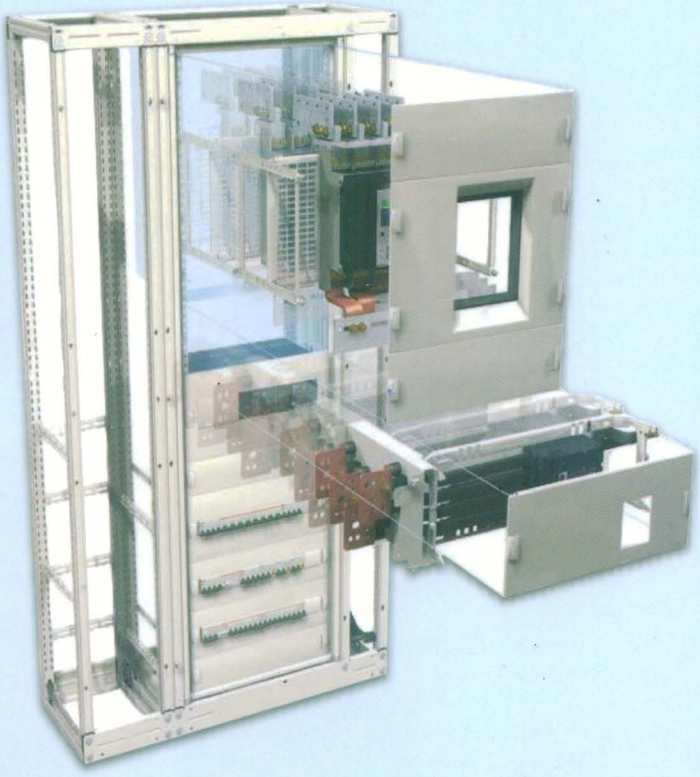
An upgradeable electrical installation

Thanks to modular design, prisma plus switchboards can be modified easily to integrate new functional units as needed maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices.

Total safety for personnel

Work in a switchboard must be carried out by authorized persons in compliance with all applicable safety regulations. To increase the safety of personnel, devices are installed behind protective front plates; only the operating handles are accessible. Additional internal protection (partitions, barriers) is available to create form 2, 3 or 4 separation to protect against direct contacts with live parts. Terminal shields are mandatory for installation of Compact NSX and INS/INV devices in Prisma Plus enclosures.

Electrical switchboards built using the Prisma Plus functional system and Schneider recommendations fully comply with international standard IEC 60439-1.



The Prisma Plus System P Enclosures

- steel sheet metal
- electrophoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9001.
- can be dismantled
- can be combined side-by-side and back-to-back
- degree of protection:
  - IP30: with IP30 cover panels including a door or a cover frame
  - IP31: with IP30 cover panels including a door + gasket
  - IP55: with IP55 cover panels
- degree of protection against mechanical impacts:
  - IK07: with cover frame
  - IK08: with IP30 door
  - IK10: with IP55 door
- framework dimensions:
  - four widths:
  - W = 300: cable compartment
  - W = 400: cable compartment or device compartment
  - W = 650: device compartment or cable compartment
  - W = 800: device compartment with busbar compartment or cable compartment
- two depths: 400, 600 mm
- height: 2000 mm
- indoor cubicles

Electrical characteristics

Use of the components in the Prisma Plus functional system ensures the creation of switchboards complying with standards IEC 50298, EN 50298, IEC 60439-1 and EN 60439-1, as well as local versions with the following electrical characteristics:

- rated insulation level of main busbars: 1000 V
- rated operational current Ie: 3200 A
- rated peak withstand current Ipk: 187 kA
- rated short-time withstand current Icw: 85 kA rms / 1 second
- frequency: 50/60 Hz.

Controlling Power

Under License of

Schneider Electric

JEI Switchgear (Pvt) Limited

HEAD OFFICE
10-A, Fazil Road Lahore Cantt,
Lahore-54810, Pakistan.

Tel: +92 42 366 87 931 - 3
Fax: +92 42 366 86 200

E-mail: info@jei.com.pk
URL: www.jei.com.pk

REGIONAL OFFICE
29/3, I&T Centre, G-8/4
Islamabad, Pakistan.

Tel: +92 51 285 4207
Fax: +92 51 285 4208

E-mail: isb@jei.com.pk

FACTORY
23-km, Multan Road, (Chung)
Lahore-53800, Pakistan.

Tel: +92 42 375 10 222 / 333
Fax: +92 42 375 10 334

E-mail: works@jei.com.pk