A fully compliant system with guaranteed consistency between electrical devices and equipment.

IEC standardization that integrates security, availability and reliability in its recommendations

LV functional switchboards that are already fully compliant, for assembly manufacturer's peace of mind

Make the most of your energy >

All **stakeholders** are **satisfied**

Standard IEC 61439 clearly defines the type of verifications that must be conducted by both organisations involved in final conformity of the solution: **the Original Manufacturer,** guaranteeing **Assembly System** design and **the Assembly Manufacturer,** responsible for the final conformity of the switchboard.

Schneider Electric insurance to be **100% compliant with IEC 61439-1&2 standard**

> To find out more

> Ask for these free materials from your Schneider Electric local representative.

> For more information, please visit: www.schneider-electric.com

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Prisma and IEC 61439-1&2

The most reliable switchboard combination

Schneider Electric

The main 10 functions of standard IEC 61439

All the verifications proposed by standard IEC 61439 contribute to the achievement of 3 basic goals: safety, continuity of service and compliance with end-user requirements

Safety

1 Voltage stress withstand capability
Insulation to withstand long-term voltages, transient and temporary overvoltages guaranteed through clearances, creepage distances and solid insulation.

2 Current-carrying capability
Protect against burns by limiting excessive temperatures:
- when any single circuit is continuously loaded to its rated current
- when any circuit is continuously loaded to its rated current multiplied by its rated diversity factor.

3 Short-circuit withstand capability
Withstand short-circuit thanks to short-circuit protection devices, short-circuit coordination, and capability to withstand the stresses resulting from short-circuit currents in all conductors.

4 Protection against electric shock
Hazardous live parts are not accessible (basic insulation protection) and accessible conductive parts are not hazardous for life (fault protection, and continuity of protective equipotential bonding).

5 Protection against fire or explosion hazard
Protect persons against fire hazards: resistance to internal glowing faulty elements through selection of materials and design provisions.

Continuity of service

6 Maintenance and modification capability
Capability to preserve continuity of supply without impairing safety during assembly maintenance or modification through basic and fault protection and optional removable parts.

7 Electro-Magnetic compatibility
Properly function and avoid generation of EMC disturbances through incorporation of electronic devices complying with the relevant EMC standard, and their correct installation.

Compliance with end-user requirements

8 Capability to operate the electrical installation
Properly function, according to:
- The electrical diagram and the specifications (voltages, co-ordination, etc.) by selecting, installing and wiring the appropriate switching devices.
- The specified operating facilities (access to Human-Machine Interfaces, etc.) through accessibility and identification.

9 Capability to be installed on site
Withstand handling, transport, storage and installation constraints, and be capable to be constructed and connected through selection or design of the enclosure and the external terminals, and by provisions and documentation.

10 Protection of the assembly against environmental conditions
Protect the assembly against mechanical and atmospheric conditions through selection of materials and design provisions.

Prisma... 100% and more tha

Short-circuit withstand capability

- Conditional short-circuit test is passed thanks to full coordination using Schneider Electric's devices associated with Prisma distribution components from incoming to outgoers stages.
- This panel design characteristic allows a much improved service continuity of the switchboard in case of electrical fault.

Protection against electrical shock

- IPxxB Prisma offers standard components to achieve the right level of electrical protection.
- Terminal block covers
- Terminal shields for devices
- Partitioning for busbar and connections.

Voltage stress withstand capability

- Creepage distances and clearance distances: all functional units are designed from an early engineering stage taking into account minimum clearance distance for any type of assembly of Schneider Electric devices configuration.
For instance the Compact NSX breaker can be installed with a rotary handle or motor control or plug-in base with guaranteed clearance distances.
- For creeping distances all busbar supports are designed to take into account minimum creepage distances required by the IEC standard.

an IEC standard!

Maintenance and modification capability

- Beyond IPxxB for panel accessibility Prisma functional system has been designed to offer a clear and logical electrical organisation. It enables safer and more secure accessibility for maintenance and upgrades.
- Interventions are made quicker with reduced risks of mistakes therefore decreasing down time and improving service continuity.

Linergy and Linergy Evolution busbars

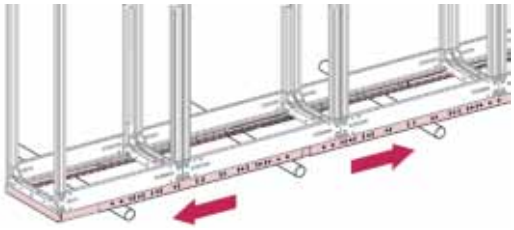
- Linergy and Linergy Evolution busbars can safely be accessed for installation upgrade by removing a single Form 2 front barrier only.
- All conductors are shifted 25 mm enabling qualified electricians to perform intervention from the front of the cubicle only, no need to dismantle the side partitioning for access.
- Upgrade or maintenance interventions are made faster and more straight forward.

Capability to operate the electrical installation

- Prisma components are designed to match Schneider Electric's devices with impulse voltage withstand reaching up to 12.8 kV specification.
- Customers are guaranteed to have the right safety margin in case of network transients, increasing safety and installation service continuity over time.

Capability to be installed on site

- In addition to being lift-tested, Prisma also features handling plinths in order to cover all possibilities for site installations where lifting space is too limited.



** Using only Schneider Electric devices guaranties the compliance with IEC as well as the reliability of installations.*