



System pro *E* Power.
Your new key resource.

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System pro *E* Power is the pioneering new main distribution switchboard solution from ABB: rated current up to 6300A and short-circuit current up to 120kV allow the System to meet all plant requirements depending on the type of installation, required protection class and the electrical and mechanical specifications.



ABB's new System pro *E* Power switchboard provides a complete solution for electric power main distribution in infrastructures and industries that complies with the standards, and functions in perfect synergy with all the other ABB low voltage apparatus, such as System pro M modular circuit-breakers, Tmax T and XT moulded-case circuit-breakers and Emax 2 air circuit-breakers.

All ABB's devices can be installed in this switchboard since a full range of accessories ensures that all components are perfectly compatible with each other, with extremely easy assembly and wiring operations.

System pro *E* Power is the market's new benchmark. It redefines the concept of excellence and performance for distribution switchboards.

Just further confirmation of ABB's tradition, experience and standing as leader of the electric power and energy distribution market.

If Flexibility, Velocity and Simplicity are what you're looking for, then this new main distribution switchboard is the right choice for your electrical system.

System pro *E* Power, your new key resource.



Flexibility is Power.

The maximum number of configurations with the fewest part numbers.

System pro *E* Power allows you to achieve high technological standards that guarantee excellent performance thanks to an amazing number of configurations. Choose System pro *E* Power and you'll find the tailor-made solution to suit your needs.

The range of System pro *E* Power structures can be used to create lots of switchboard configurations while guaranteeing flexibility and a certified product. Up to 120 different configurations can be assembled with just a few part numbers. This new series features a structure in hot-dip galvanized sheet steel that guarantees equipotential bonding of the switchboard.

Protection classes up to IP65 can be obtained for every type of application. System pro *E* Power is the only switchboard to reach such a high value.

Advantages

- The structure can be assembled according to different logic sequences.
- Just a few part numbers for 120 enclosure sizes.
- Can be assembled with or without plinth.
- Uprights with two different surface levels per side so that different kits can be installed.
- New ergonomic handle allowing the door to be opened towards the right or left.
- New busbar systems using the same components: crosspieces, fixing brackets and multifunction insulating supports able to house 5 or 10 mm thick flat or shaped section busbars.
- Flexible busbar connections.





Velocity is Power.

There are no speed limits on the road to excellence.

System pro *E* Power speeds up the work required prior to switchboard commissioning. Whatever the configuration may be, each component has been designed for ultra-fast assembly and wiring in full compliance with the standards.

The switchboards can be assembled very quickly even when extremely complex apparatus is involved thanks to the innovative internal kits designed for System pro *E* Power. They create a perfect match with the new uprights and crosspieces with double fixing levels and are available for air and moulded-case circuit-breakers, switch-disconnectors, modular circuit-breakers and internal segregation partitions alike.

Simple, effective systems for fixing the kits save time when the switchboards are assembled.

ABB apparatus can be installed inside the switchboards with high-level integration and optimized use of the available space thanks to the new modules, 150mm in height, as well as the usual 200mm modules.

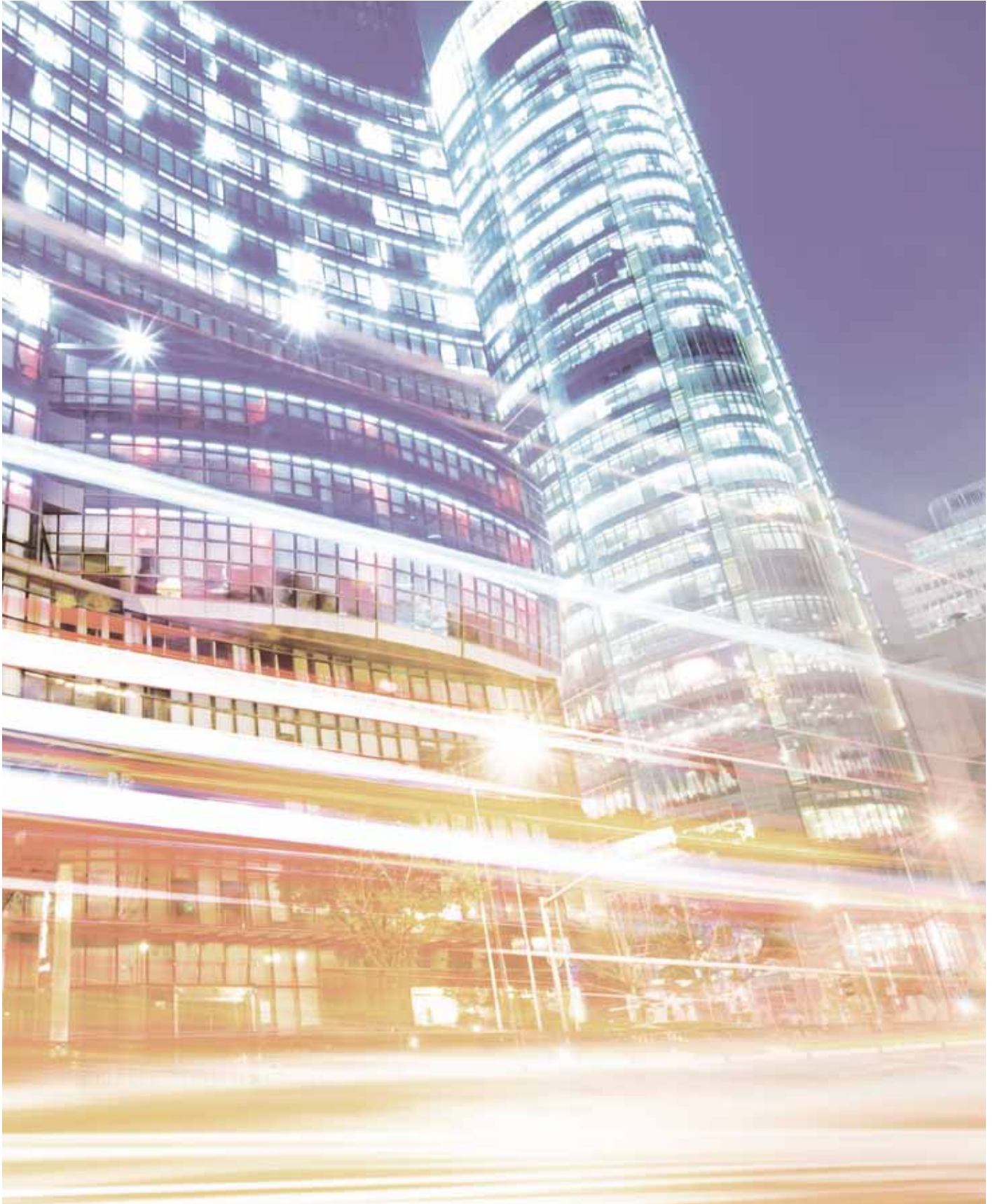
The circuit-breakers can be internally separated from Form 1 to Form 4b.

Advantages

- New mounting plates with rapid click-in system.
- Panels with ¼-turn screws.
- Circuit-breaker kits fixed straight onto the mounting rails.
- Internal segregation partitions created by simply adding accessories in sequence.
- New handle allowing different inserts to be housed.

Important technical characteristics plus extremely sturdy construction thanks to the new upright with 13 folds.





Simplicity is Power.

The utmost simplicity in a single solution.

System pro *E* Power increases productivity by simplifying your projects at all stages: from design engineering to assembly and commissioning.

The main distribution systems that can be used inside System pro *E* Power switchboards meet the requirements of all applications, starting from 250A up to 6300A configurations. The new System pro *E* Power main distribution system has been designed for improved flexibility and simple busbar connections. Linear and scaled solutions allow the busbars to be installed in any position: horizontal under-roof, on the bottom and at each height, vertical along the side or at the rear side and in the cable compartment.

The structural components include:

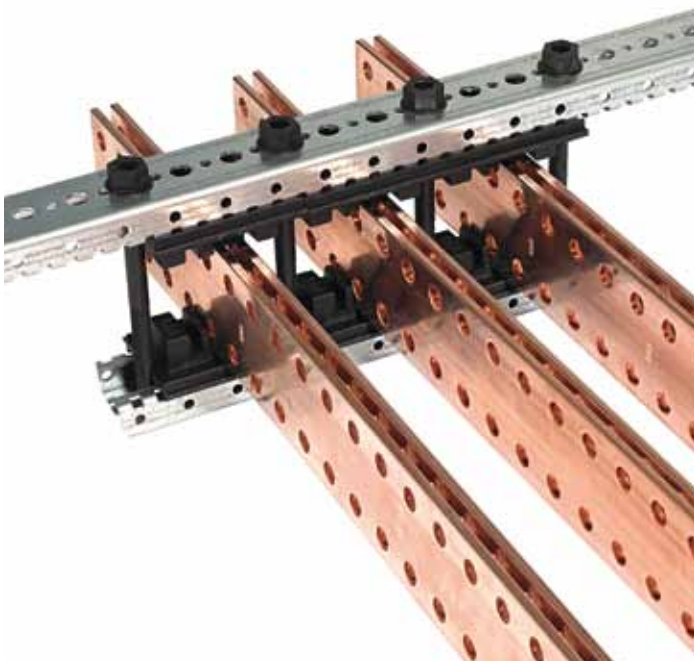
- insulating supports and tie rods
- crosspieces and fixing brackets.

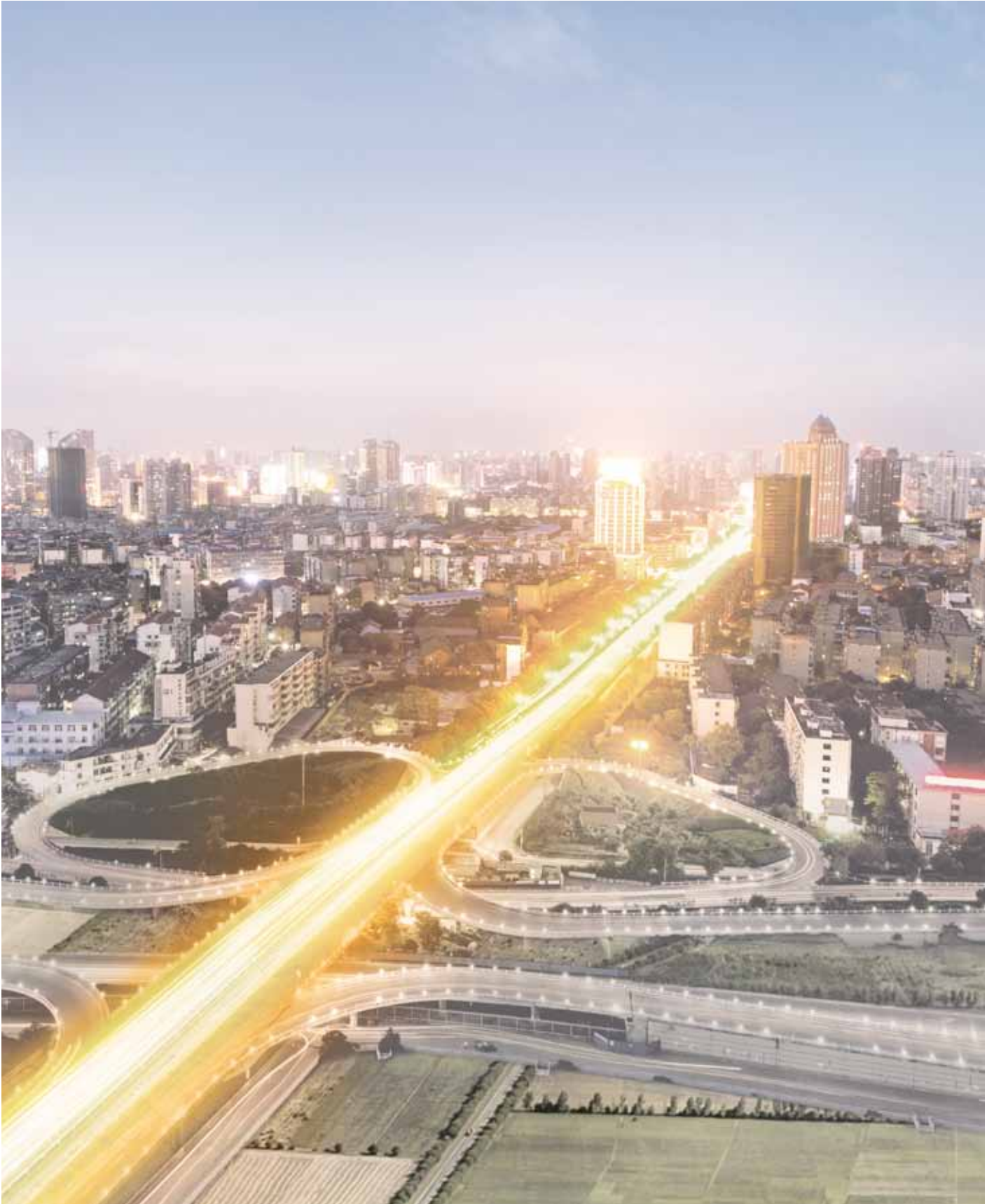
When it comes to the linear and scaled insulating supports, one side houses 5mm section flat or shaped section busbar systems while 10mm section flat or shaped section busbar systems are housed on the other side.

One single tie rod in different lengths is used to fasten all types of busbars. The crosspieces that fix to the structure are for universal use and can take both linear and scaled busbar holders.

Advantages

- New, simple assembly sequence.
- Error-free assembly of the structure, which is perfectly symmetrical.
- Modular uprights and crosspieces joined together by means of a patented new system with axial screws.
- Dedicated kits for 3-pole moulded-case circuit-breakers and common kits for 3- and 4-pole moulded case circuit-breakers.
- Same front panels for fixed and swing frames, and for screwed and hinged solutions.
- Two front panel height sizes available (150 and 200mm) for the DIN rail kit.





System pro *E* Power.

The future of switchboards has just begun.

System pro *E* Power is the new, unique and integrated main distribution switchboard solution - quickly assembled and designed for all types of plant installation.

System pro *E* Power boosts productivity by allowing each project to be created with performance levels and simplicity as never before. Assembly times can be reduced by up to 15% and storage space by up to 10% thanks to small size, simple assembly operations, an extremely high degree of connectivity among components and 120kV to 6300A performance.

Fewer part numbers means that storage costs can be drastically cut. Less space occupied by stocks but with lots more configurations ready for prompt delivery.

1 Plinth | 2 Handle





System pro *E* Power. Certifications, type-approvals and laboratory tests.

System pro *E* Power guarantees quality and safety in accordance with international standards IEC 61439-1 and 2.

Fully assessed and certified, the new System pro *E* Power switchboards have been subjected to all the type tests required by new standards IEC 61439-1-2 and IEC 60439-1-2. Certification was achieved after stringent tests that involved the entire configuration (structure, circuit-breakers and busbar system), thus systems conforming to the new international standards can be created by following ABB's instructions. The System pro *E* Power switchboard was subjected to electrical and mechanical tests at the ABB SACE Division's test laboratory, accredited in Italy by ACCREDIA and by important international certification bodies like ACAE/LOVAG, ANCE, ASTA, ETL SEMKO, UL, CSA and Shipping Registers.

Specifically:

- Temperature rise test
- Dielectric properties test
- Short-circuit withstand test

- Short-circuit strength of the protection circuit and short-circuit withstand test
- Clearances and creepage test
- Mechanical operation test
- Protection class test
- Verification of thermal stability of enclosures
- Verification of resistance of insulating materials (Glow Wire test)
- Mechanical impact test
- Resistance to corrosion test
- Lifting and handling.

The test results guarantee tip-top performance, so the final switchboard constructor need not to conduct further type-tests or assessments if the components have been selected and assembled according to ABB's instructions. Individual verifications and testing the wired switchboard are left to the assembler.



System pro *E* Power. Committed to protecting the environment.

The ABB group has always actively pursued policies for environmental management improvement implemented by rationalizing our use of raw materials and energy, preventing pollution, monitoring air and water quality, reducing noise emissions and the waste created by our production processes as well as conducting regular environmental audits with our major suppliers.

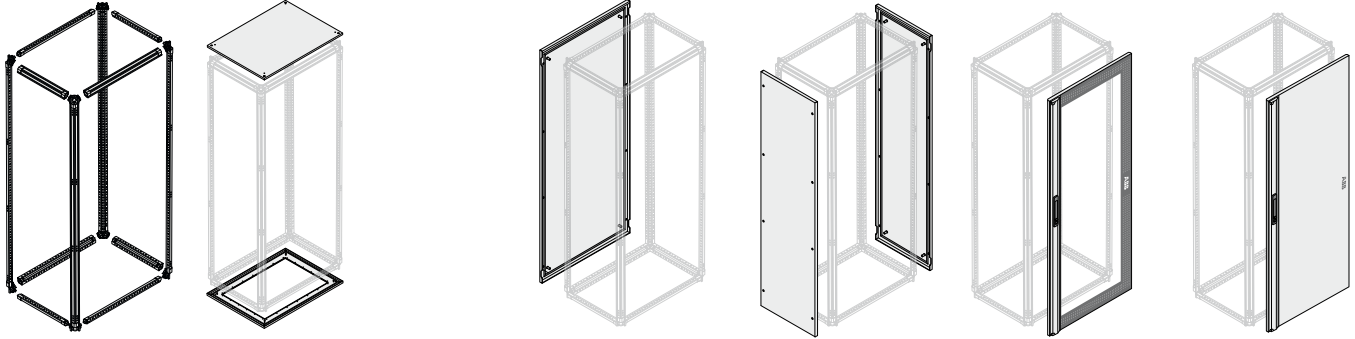
Right from the very start, ABB SACE's design engineering work already includes the assessment and improvement of the environmental performance of the products throughout their entire life cycle thanks to use of analysis tools like LCA (Life Cycle Analysis).

This guarantees technical and energy performance optimization during operation, control and reduction of environmental impact during the manufacturing phase and allows the product end of life management process to be defined.



System pro E Power. Components.

Components



| STRUCTURE | | | EXTERNAL PANELS | | | | | | | | | | | |
|-----------------------|--------|--------|-----------------|---------------------|---------------|------------|---------|-------------|---------|---------|------|---------|------|---|
| Functional dimensions | | | Base/Top | | | Rear panel | | Side panels | | Door | | | | |
| | | | Blind | Open ⁽¹⁾ | Internal base | Blind | Vented | Blind | Vented | Glass | | Blind | | |
| H (mm) | L (mm) | W (mm) | IP30÷65 | IP65 | IP40 | IP30÷65 | IP30÷41 | IP30÷65 | IP30÷41 | IP40/41 | IP65 | IP40/41 | IP65 | |
| 1800 2000 | 300 | 200 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | |
| | | 300 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | |
| | | 500 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | |
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| | 700 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | |
| 1250 | 900 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | |

⁽¹⁾ Use the dedicated incoming cable flanges to obtain protection class IP65.

Contact us

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