System pro E power

Empty and 185 mm Busbar System



The ABB range of metal enclosures for main distribution has two fundamental elements with System pro E power Empty and 185 mm Busbar System. The columns have a functional height of 1800, 2100 mm and a functional depth of 300 and 500 mm. Five widths can be selected (functional from 250 mm to 1250 mm, with 250 mm steps) depending on the device type and quantity.

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Your key resource

Empty enclosures

A large selection of enclosures in two heights and five widths and four depths opens unlimited possibilities. With selected accessories, all applications can be adapted to your requirements in no time at all.

The use of CombiLine N modules gives you even more flexibility when mounting the equipment. Crossbars on special mounting brackets and in various sizes allow mounting in any position. In addition, various flanges ensure optimum cable entry.



Dimensions	Height [mm]	1900, 2200
	Width [mm]	350, 600, 850, 1100, 1350
	Depth [mm]	300, 400, 600, 800
Cabinet construction		Individual parts pre-assembled fully assembled with Combline N modules with mounting plates
Form		Form 1
Protection class		IP 30, 40, 55/54 (with double door)

185mm – Busbar system

With the pro E Power 185 mm busbar system the product portfolio of ABB has been extended by an essential component.

The system tested according to IEC 61439-1/-2, is available in two heights and two depths. Depending on the type and quantity of equipment, four different panel widths are available.



Scope of application		Distribution boards up to 2,000 A at max. 75 kA short-circuit current
Location Main busbar		middle
Dimensions	Height [mm]	1900, 2200 without 100 mm plinth
	Width [mm]	600, 850, 1100, 1350
	Depth [mm]	400 up to 1000 A, 600 up to 2000 A
Cabinet construction		Individual parts, kit, complete delivery with or wthout copper
Form		Form 1
Protection class	Accessible parts	IP 30 (without doors), IP 40, IP 55/54 (with double door)
	For bottom plates	IP00 (without bottom plates), IP40, IP54

Reliable in extreme condition

Thanks to the tests performed on the product, System Pro E Power 185 mm busbar system can stand a rated short-time withstand current (ICW) up to 75 kA and a maximum rated current up to 2000 A.

Additionally, in case of installation with external door, cabinet systems are able to reach IP up to 55.



Certifications, design-verifications and laboratory tests

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



System pro E power guarantees quality and safety in accordance with international standards IEC 61439-1 and -2. Design verification was achieved after stringent tests that involved the entire configuration (structure, circuit-breakers, other apparatus and busbar system), thus systems conforming to the new international standards can be created by following ABB 's instructions, configurators and guidelines. System pro E power switchgears was subjected to electrical and mechanical tests at the ABB 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.

The test results guarantee high and reliable performance, so the final ASSEMBLY manufacturer need not to conduct further design verification or assessments if the components have been selected according to configurator and assembled according to ABB 's instructions. Individual routine verifications and testing the wired switchgears are left to the ASSEMBLY manufacture.

Best-in-class devices

Emax 2 Air Circuit Breakers (IEC) are completely integrated with ABB main distribution platforms. They embed more and more functionalities to become the all-in-one solution able to manage the low-voltage distribution systems.

Emax 2 manages any conditions of the grid thanks to advanced functions such as Load Shedding, Power Controller, ATS, Interface Protection, Synchrocheck logics, Adaptive Protection.

Additionally, it perfectly integrates into all automation and energy management systems thanks to the eight communication protocols supported. Easy connection to the cloud computing platform ABB AbilityTM Energy and Asset Manager.

Remote connection through the embedded Bluetooth Low Energy technology.

Tmax XT range, break new ground simply means delivering value through the entire customer journey by leaving behind the traditional concept of circuit-breaker.

The SACE Tmax XT range offers a unique customer experience that, sharing the same features and logics with the Emax 2 range, for the first time ever overcomes the differences between molded case and air circuit-breakers.

The most advanced products designed to maximize data and connectivity, ease of use and installation, performance and protection, safety and reliability. The SACE Tmax XT range offers higher performance, better protection and more precise metering than equivalent units, and can handle from 160 up to 1600A.

Combined with the world's most precise electronic trip units in the smallest frames, the new range delivers significant time savings and enhances installation quality. Reliability is further increased, and speed of installation reduced, thanks to Bluetooth and the EPiC Mobile App for mobile devices.

Perfect integration into all automation and energy management systems thanks to the eight communication protocols supported. Easy connection to the cloud computing platform ABB Ability™ Energy and Asset Manager.

Remote connection through the embedded Bluetooth Low Energy technology.

Moreover to circuit breakers, SlimLine XRG drives exceptional energy efficiency, reducing temperature rise and enabling higher performance across the panel board. Installation is quick and easy with simple plug-in contacts.

Integrated ITS2's cloud connectivity makes it easy to monitor key electrical parameters and real-time monitoring helps you optimize your networks simply and safely.

The InLine II fuse switch disconnector, with built-in metering and monitoring unit, supports more advanced energy management and speedy installation for smart commercial and industrial buildings with ABB Ability™ Energy and Asset Manager.

Space saving

Footprint optimization thanks to side by side Tmax XT, Slimline XRG or Inline II installation. Sub-Distribution devices may be integrated directly in line with low voltage switchgear in Combiline N sections.

Flexible changes in connection direction are allowed directly within the cabinet in most of the cases.



Affordable range

Direct installation of outgoings up to 630 A on the main busbar system. Save at least 50% of copper connection for circuit breakers, they are shorter than standard low voltage switchgear thanks to the central position of 185 mm main busbar system. The systems are available in three delivery forms, flatpack, partially assembled of fully assembled.





Easy to install

System Pro E Power 185 mm busbar system is the simplest solution to be installed, composed by few pieces which can be quickly coupled together. On Empty enclosures the installation is rapid directly on WR frame.







ABB S.p.A Electrification Business - Smart Power

ABB SACE Division

58, Via Italia I-23846 Garbagnate Monastero (LC) Phone: +39 031 3570.111

Fax: +39 031 3570.228 www.abb.com

Due to possible developments of standards as well as of materials, the characteristics and dimensions specified in this document may only be considered binding after confirmation by ABB SACE.