

Power^{IT} Compact Secondary Substations, CSS

Substations



Industrial^{IT}
—enabled™

ABB



The New Standard for Individual Solutions

Those who go with the flow don't lead the way

It is ABB's vision to create value for our customers by helping them to achieve competitive advantages through advances in technology and developments in their markets.

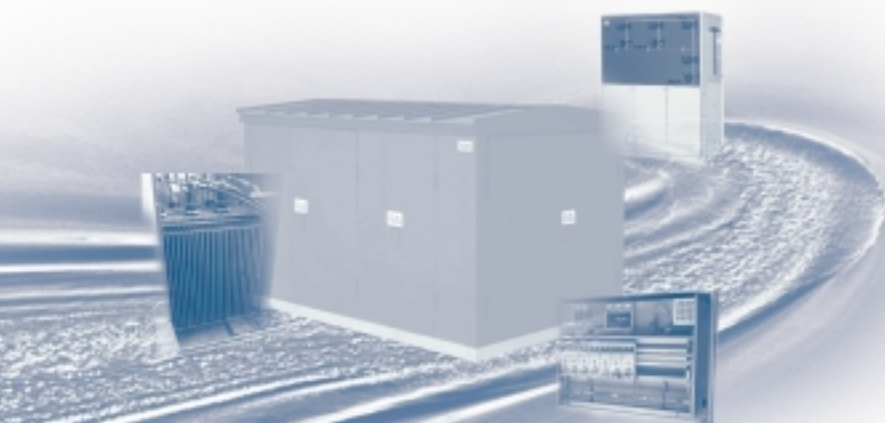
ABB is a world leader in the field of the transformation, distribution and operation of energy in low-voltage and medium-voltage networks. We develop intelligent solutions based on our global know-how. Our pioneer spirit and creativity represent a significant driving force.

We have the strength and the desire to explore new ways of guaranteeing optimal operational reliability and sustainability at competitive prices.

ABB's new concept for substations

We have developed a concept that sets new standards for substations. The new features are mainly a broader, modular product range, a new product configurator, type-tested solutions and shorter delivery times. All products are based on the latest technology and form part of ABB's Industrial IT Platform.

ABB's new "Power^{IT} Compact Secondary Substations, CSS" not only provide a number of benefits in the form of shorter delivery times and safe energy supply, they also reduce overall plant and operating costs.



The substations connect, transform and transmit energy in cable nets at low-voltage and medium-voltage level.



The Intelligent Solution to Suit all Needs

CSS provides the facility to create individual solutions based on one joint product platform. A broad portfolio of modular products provides several possible options and greater flexibility, from planning and delivery through to final operation and maintenance. It is the needs that steer the solution.

you an immediate overview of all specifications together with the necessary diagrams and drawings of the substation.

Welcome to a new age. A new way of producing intelligent solutions.

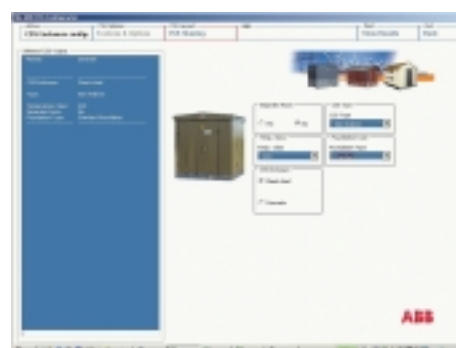
CSS Pro – the new way of looking at substations

CSS saves time and reduces process costs before, during and after installation. Specification and configuration take place in close collaboration between your and our sales staff, as we create a safe, detailed basis for producing the right solution. ABB has developed a product configurator, CSS Pro, which guides everyone through all the possible options that lead to the specific application on the basis of the substation requirements.

The options in CSS Pro include the technical selection of the transformer, low-voltage and medium-voltage plants as well as functional and aesthetic alternatives in the design of the building – e.g. in terms of style, roof pitch, cladding materials and colours. The configurator gives



During configuration the technical and functional specifications are defined, and the options are visualised in overview form using pictures and diagrams.



The decision on the design of the buildings is based on both the practical operation of the substations and the aesthetic appearance of the buildings.

Simplicity from Concept to end Result

CSS provides a shorter, simpler order and delivery process, because we have simplified the entire specification and design phase. This means that from the outset you have an overview and an insight that enable you to make the right decision quickly, thus saving both time and money.

We have reduced the time from order to delivery

In a process with long delivery times there is always a risk that specifications will be changed along the way. The order can now wait until you have a full overview over the specific needs technical, functional or aesthetic. This reduces process costs.

The total solution is based on the just-in-time principle with reference to the individual preferences agreed during configuration. We are thus able to deliver the fully assembled, tested station within days or a few weeks.

Engineering relieved by configuration

In developing the CSS range, ABB has designed both components and configuration of the finished solutions. The range has been created on the basis of modules using a joint platform. The large number of options in the product configurator provides for better matching up of needs with the solution – combined with a short delivery time that reduces your planning and plant costs.





Joint Product Platform – Lots of Solutions

In the CSS range we supply buildings in two different materials, steel and concrete, and three different basic models: Compact, Non Walk-in and Walk-in.

The CSS range is used in electricity distribution networks, for energy supply to industry and for power supply in connection with major plant works and to wind power installations.

CSS-SN (steel) and CSS-CN (concrete)

The Non Walk-in station is located at ground level and is operated from the outside. Used where there is limited space and where internal operation is not required.



CSS-SW (steel) and CSS-CW (concrete)

The Walk-in station is located at ground level and is operated from the inside. Used where there is sufficient space, and where operation has to be more comfortable.



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CSS-SC (steel) and CSS-CC (concrete)

The Compact station is partly below ground level, and is operated from the outside. Takes up minimum space in relation to surroundings.



Quality Built into Every Detail

CSS is an ideal solution in terms of both operational and personal safety

Production of the building and the electrical equipment is based on ABB's latest technology for uniform production. Everything is designed on the basis of our unique Industrial IT Platform, which provides quick, easy access to information about service, spare parts and documentation. The advanced industrial production methods based on robot technology guarantee that we always deliver products that comply with our stringent quality standards, in which both uniform product quality and documentation correspond with all agreed specifications. The finished stations are type-tested.

Low-voltage terminals

Low-voltage terminals with fuse strips, overload cutouts or combinations of these.



Transformer

The CSS range contains modular substations for voltages up to 24 kV and rated power of up to 1600 kVA.



The substations are produced in line with strict quality and environmental procedures that are certified in accordance with ISO 9001 and ISO 14001. They are also designed and type-tested in accordance with EN 61330. We conduct routine tests on all stations before delivery.

The use of robot technology in production combines with the new product platform and the product configurator to produce uniform, high quality. The result is lower repair costs and fewer operational breakdowns.

ABB respects the environment

ABB works on the development of technologies, systems and products that do not have an unnecessary impact on the environment. CSS stations can be recycled, reused or disposed of safely.



Medium-voltage plants

The CSS range has been type-tested with ABB's medium-voltage plants.



Industrial^{IT} – The Next Way of Thinking

Industrial IT is ABB's new, integrated system platform, which gives you access to all the information about the company's processes and business activities. The objective is to have one single joint architecture for all of ABB's products and systems.

The concept is based on a vision of automation and information technologies throughout the company being integrated in real time. Updated information is always available at the right time, at the right place, for the right person. The result is improved productivity, plant optimisation and increased profitability.

to documentation and information on topics such as a substation's electrical and mechanical components in the form of drawings, diagrams, specifications, manuals and maintenance schedules.

This makes operation and maintenance easier, and also provides increased operational reliability, lower repair costs and fewer, shorter operational breakdowns.



Industrial IT keeps you informed

All key data about CSS is available in electronic form and structured in a user-friendly way. Industrial IT thus provides quick, easy access

*The text and illustrations are intended as guidelines.
Reservation for changes.*

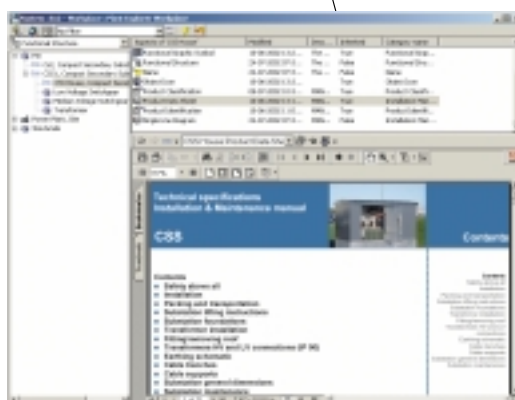
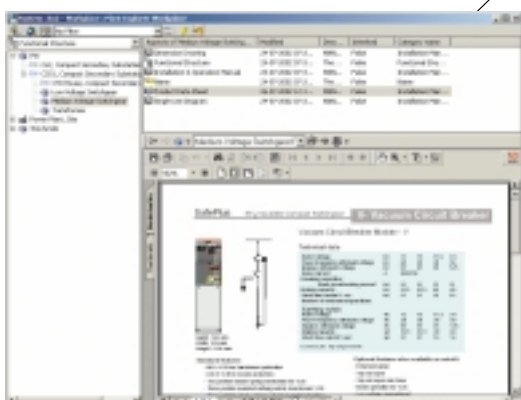
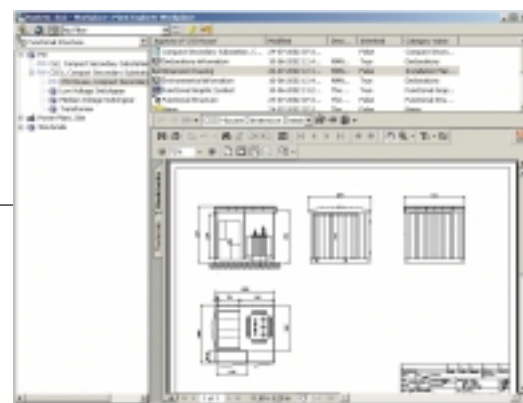
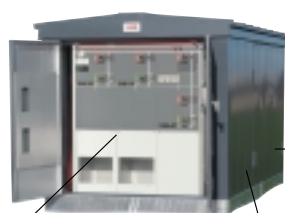




ABB A/S

Head Office

Meterbuen 33
DK-2740 Skovlunde
Phone: +45 4450 4450
Fax : +45 4450 4460

Branch Office

Håndværkervej 23
DK-7000 Fredericia
Phone: +45 7924 7924
Fax : +45 7594 4321

www.abb.dk
E-mail: abb.dk@dk.abb.com