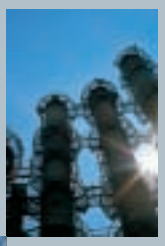
The switchboard –
with a lot more

sivacon



SIEMENS

SIVACON – made in Leipzig

Leipzig – known far beyond the boundaries of Europe as a university and exhibition city – and also where Siemens, the global company, manufactures state-of-the-art switchboards: the low-voltage switchboards from Leipzig are exported to countries all around the world. Our switchboard plant in Leipzig is, today, the unchallenged No. 1 in Europe. A success that not only reflects the technology that is produced here, but also the price and quality – and of course satisfied customers.

Whether in infrastructure projects or in industry: today, the majority of electric loads are supplied with low voltage. High availability has the utmost priority – a prerequisite for a reliable power supply. But that isn't everything – by far. Power distribution both today and in the future demands a lot more from switchboards – a higher degree of flexibility and cost-effectiveness as well as the highest level of safety. And that not only for man and machine, but also for the future. Our SIVACON switchboards include all of this – and much more. For instance, technology that is fit-for-the-future that allows our switchboards to be seamlessly integrated into the automation environment. But take a look for yourself.

With integrated diagnostic function
for communications and more

Today's technology has to be fit-for-the-future. On one hand, it must have a high degree of availability and be flexible, and on the other hand, it must also be communications-capable – so that it can be seamlessly integrated into automation environments. No problem for SIVACON. This is because our switchboards are not only completely communications-capable – but are also completely integrated into the communications architecture of Totally Integrated Automation.

With switching devices that are fit-for-the-future, we can offer you a unified and integrated communications concept for customized solutions.

Always up to speed

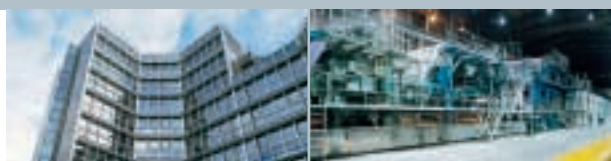
Thanks to the integration of an extremely wide range of modules, e.g. AS-Interface, SIMOCODE DP motor protection and control devices and SIMATIC or the SENTRON circuit-breakers, SIVACON switchboards are fully communications-capable. Via PROFIBUS DP, SIVACON reliably executes all of the control commands and at the same time provides the supervisory control level with diagnostics and operating data. The operating status of the system can be called up from any location via the remote monitoring functionality.

With integrated savings bank
for cost-effectiveness and more

In times of ever-increasing energy costs, power distribution must not only be reliable, but especially cost-effective. Intelligent solutions are demanded that optimize the energy demand. SIVACON fulfills these increased requirements across the board – from planning through production up to cost-effective operation. Not only this, but with Totally Integrated Power, Power Management and the SIVACON Technology Partner concept we open up additional cost-saving potential. For total systems that are optimized, both technically and economically.

Reduced costs – across the board

SIVACON switchboards are part of our seamless Totally Integrated Power concept. With a harmonized system of products and engineering tools, this ensures optimum electrical power distribution throughout all of the phases of your project. For instance, with our integrated Power Management, we can rationally organize your energy procurement. We can also transparently display your energy consumption and, thanks to the improved energy utilization, sustainably increase the cost-effectiveness of your system.



With amazing versatility
for flexibility and more

A switchboard must fulfill some high demands – very high demands. Not only must it function perfectly in day-to-day operation, it must also be able to be easily adapted to future challenges and changes – and that over its long lifetime. This means that the highest degree of flexibility is demanded if your investment is to be effective. With our SIVACON switchboards, we are offering you a switchboard that precisely provides this required flexibility – from many perspectives – thanks to its modular technology.

The modular technology makes it possible

SIVACON exclusively comprises standardized type-related components precisely in-line with the customer's requirements. These modules can be flexibly combined so that they fulfill all of the requirements in industrial environments or in buildings no matter how special these requirements are.

However, flexibility also means: depending on the requirements that your switchboard must fulfill, we can offer you the optimum version, either withdrawable, plug-in or fixed-mounted design.

Withdrawable unit compartments can be quickly replaced

With additional protective functions
for safety and more

The protection of man and machine always has topmost priority. Even during the development phase, our products in Leipzig are subject to an extensive range of tests to guarantee, in every situation, the highest level of operational and personnel safety. Our many years of experience in research and development are incorporated in every part of SIVACON. But we are just not satisfied with a standard approach. This is why we also provide you with that added level of safety. With extensive passive and active safety equipment and devices – and innovative SENTRON WL circuit-breaker technology. This means that with SIVACON you can safely switch for many, many years.

New standards when it comes to safety

SIVACON sets new standards when it comes to reliability and safe operation by incorporating a series of passive and active safety equipment and devices. Whether solid wall design, separate function areas or spring-loaded locking devices – with SIVACON, you are always on the safe side.

Even for special applications, you can absolutely rely on the quality of our products. In addition to many load and function tests, for some time now, we have been carrying out arcing tests, which are becoming increasingly important for personnel protection.

The Leipzig switchboard plant is the Competence Center responsible for developing switchgear and control gear assemblies according to IEC 60439.

SIVACON 8PV
for the process industry

Overview

Type-tested SIVACON 8PV switchgear and controlgear assemblies are used everywhere, for example in power generation and distribution, in the chemical and oil & gas industries and also in major capital investments. They distinguish themselves with a high degree of availability as well as a high level of personnel and plant safety – and can be used for all applications up to 6300 A.

Advantages

- Type testing ensures proven safety and quality for every switchboard
- Fulfill every requirement profile as a result of the high quality of series production
- Can be simply re-ordered and with short delivery times
- Type-tested standard modules (TTA)
- Space-saving with base areas from 400 mm x 400 mm
- Solid wall design for safe cubicle-to-cubicle separation
- Highest packing density with up to 40 feeders per cubicle
- Standard operator interface for all withdrawable units
- Test and disconnected position with the door closed
- Visible isolating gaps and point of contact
- Variable busbar arrangements at the top of the panel or at the rear
- 3- and 4-pole busbar systems up to 6300 A
- Cable/busbar connection from above or below

SIVACON 8PV up to 6300 A. Only Siemens manufactures the SIVACON 8PV switchboard.

SIVACON 8PT
for infrastructure projects

Overview

Type-tested SIVACON 8PT switchgear and controlgear assemblies are used for infrastructure supply in industry and in buildings (administration, as well as all types of commercial and industrial buildings), but also in the process industry. SIVACON 8PT is tailored to the requirements of the global market and takes into account the demand for standard solutions from a single source as well as local manufacturing. It can be used for all applications up to 7400 A.

Advantages

- Type testing ensures proven safety and quality for every switchboard
- Siemens switching devices for reliable operation
- Global presence using local production facilities
- High flexibility for cost-effective solutions
- Type-tested standard modules (TTA)
- Busbar system either located at the top of the cubicle or at the rear
- 3- and 4-pole busbar systems up to 7400 A
- Rated peak withstand current I_{pk} up to 375 kA
- Deep device compartments for universal mounting and installation
- Modular structure of device compartments
- Many combination possibilities
- Cable/busbar connection from above or below

For plug-in and withdrawable designs

- Easy and safe handling
- Rapid replacement without interrupting operation
- High degree of availability

Your special advantage

SIVACON 8PT is manufactured world-wide by qualified and permanently audited "SIVACON Technology Partners" who we have selected – with all of the advantages that only a local supplier can offer.

SIVACON 8PT
Top busbar up to 7400 A

SIVACON 8PT
Rear busbar up to 3200 A

Standards and specifications of SIVACON 8PV and 8PT

- IEC 60439-1
- DIN EN 60439-1, VDE 0660 Part 500
- DIN VDE 0106 Part 100 (protection against electric shock)
- IEC 61641, VDE 0660 Part 500, Sheet 2 (arcing faults)
- IEC 60068, IEC 60980 (induced vibration and shock)
- Certification, DIN EN 9001 or DIN EN 14001 (Quality/Environmental Management System)

A solution close to you – SIVACON 8PT switchboards from SIVACON Technology Partners – close to you around the world

There are many reasons why it makes sense to use strong local partners: they are committed to use local labor, they are close to the customer, have regional experience – but there are also other advantages – trade barriers are no longer an issue. This is the reason that our SIVACON Technology Partners are always close by – equipped with the know-how from Siemens and all of the advantages of a medium-sized company.

Profit from an exclusive partnership

Our SIVACON Technology Partners are selected, highly-qualified local companies with production facilities with considerable regional experience, a high degree of flexibility and are always close to the customer. They are responsible for the quality, and Siemens carries out annual audits to guarantee the high technical level of the products and the competence of the partner.

Your advantage: "SIVACON Technology Partner"

These are qualified switchboard manufacturers close to you that Siemens have carefully selected and permanently audit. This means that you'll always have the combined know-how of Siemens at conditions that only a local supplier can offer. Fast, flexible and favorably-priced.

You can find our partners under www.siemens.de/sivacon

Selection criteria	SIVACON 8PV		SIVACON 8PT	
				
Busbar position	Top	Rear	Top	Rear
Rated busbar currents up to	2500 A	6300 A	7400 A	3200 A
Rated line currents up to	2500 A	6300 A	6300 A	3200 A
Rated peak withstand current I_{pk} of the busbars up to	110 kA	220 kA (250 kA)	375 kA	187 kA
Designs	Fixed-mounted In-line Plug-in Withdrawable	Fixed-mounted In-line Plug-in Withdrawable	Fixed-mounted In-line Plug-in Withdrawable	Fixed-mounted[1)] In-line
Mounting	Free-standing/on the wall back-to-back –	Free-standing/on the wall back-to-back double front	Free-standing/on the wall back-to-back –	Free-standing/on the wall back-to-back –
Applications	Motor Control Center Power distribution	Motor Control Center Power distribution	Motor Control Center Power distribution	– Power distribution
Manufactured by SIVACON Technology Partners	–	–	•	•

[1)] Circuit-breakers are optionally available in a withdrawable design

Safety features	SIVACON 8PV	SIVACON 8PT	
Verified safety for every specifically designed switchboard system	TTA – type-tested standard modules acc. to IEC 60439-1	TTA – type-tested standard modules acc. to IEC 60439-1	
Cubicle-to-cubicle safety	Solid wall design	Additive partitions	–
Safety for the test and disconnected position	The degree of protection of the system remains up to IP54: • Increased degree of protection for operating personnel • Prevents damaging deposits in the switchboard	The degree of protection of the system remains – for circuit-breaker designs up to IP54, for withdrawable designs up to IP30: • Increased degree of protection for operating personnel • Prevents damaging deposits in the switchboard	
Standard operator interface of withdrawable units	Standard operator interface of the small and normal withdrawable units with integrated operator error protection: • Maloperations are avoided • Less time required for instruction	Standard operator interface for all withdrawable units: • Maloperations are avoided • Less time required for instruction	
Arcing faults safety (IEC 61641)	Graduated upgrade concept with additive modules for active and passive limiting of the fault: • 690 V, 65 kA, 300 ms • Insulated busbars as additive option	Graduated upgrade concept with additive modules for active and passive limiting of the fault: • 690 V, 50 kA, 300 ms • Insulated busbars as additive option	• 440 V, 50 kA, 300 ms
Earthquake safety (IEC 60068-3-3, IEC 60068-2-57, IEC 60980, KTA 2201.4)	Acceleration at the switchboard fastening level: • Function during the earthquake 0.6 g • Function after the earthquake 0.9 g		–
And of course	Switchgear from Siemens: • No premature failures • Short downtimes • Short delivery times		

Fax Order +49/911/978-3321 CD/Z 1082

SIVACON

☐ **Leipzig Facility**

E20001-A90-P309-X-7600

☐ **The Variable Low-Voltage Switchboard 8PV**

E20001-A180-P309-X-7600

☐ **Type-Tested Power Distribution Board 8PT**

E20001-A30-P309-V1-7600

☐ **Type-Tested Motor-Control-Center 8PT in Plug-In Design**

E20001-A50-P309-V1-7600

☐ **Type-Tested Motor-Control-Center 8PT in Withdrawable-Unit Design**

E20001-A70-P309-V1-7600

☐ **Type-Tested Power Distribution Board 8PT with Rear Busbars**

E20001-A190-P309-X-7600

Please send the information that I have selected to the following address:

Company/Dept.

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Street, Postal code/City

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Siemens AG

Low Voltage Controls and Distribution Division

Südstraße 74, 04178 Leipzig

Tel. 0341/4470-0, Fax 0341/4470-400

www.siemens.com/sivacon