POWERING THE FUTURE

Sivacon S4

Safe, Flexible, Efficient & Digital
siemens.com

SIEMENS

Contents:

The right one for everyone

Our portfolio includes switchboards, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. All over the world, the universality, modularity and intelligence of our components and systems give you innumerable benefits - all the time they are in use. With products developed according to the respective national & international standards, we offer forward-looking design with innovative functions while ensuring the highest quality standards worldwide.

Sustainability in focus

As a worldwide leader in the provision of high-quality, conforming products and systems for low-voltage power distribution, we contribute to the sustainable and responsible handling of electrical energy. With our integrated portfolio which ranges from power supply and distribution, short-circuit and overload protection through to power monitoring, we support the implementation of environmentally friendly energy concepts based on wind power, photovoltaics, intelligent buildings and electromobility.

Universal, safe and intelligent power distribution

Whether in industrial plants, in infrastructure or in buildings: every technical plant depends on the reliable supply of electricity. Our products provide a safe, reliable and efficient electrical infrastructure at the medium and low-voltage levels.

Our components reliably protect against accidents, faults and fires caused by electrical installations and allow consumers to utilize electrical power in a sustainable, responsible manner. We are happy to help you with comprehensive support from the initial information gathering stage through to operation.

Sivacon S4: Safe, Flexible, efficient and Digital.
Your Sustainable Solution

SIVACON S4: Safety without any ifs and buts

With a SIVACON S4 low voltage switchboard, Customers are always on the safe side : Its design verified to BS EN IEC/IEC 61439 – 1/2. For us, there are no compromises in questions of Safety, only clear regulations. Our low voltage switchboards are developed, manufactured and tested according to the stipulations of IEC 61439 – 1/2. Quality is not a luxury here, but the precondition for the cost efficient operation of your switchboard and high level of reliability of your production or infrastructure.

Whether in Industrial application, Infrastructure, Transport Electrification or Mixed Used Development etc. SIVACON S4 offers safe, cost efficient, flexible application options for low voltage power distribution.

- **Mixed Use Developments:** Multi-story buildings that accommodate retail, leisure, residential apartments and hotels

- **Transport Electrification:** EV Charging Stations and traditional forecourt conversion to electrification projects

- **Residential Care Homes:** Large scale care home developments typically with multiple floors, wings and numerous buildings

- **Industrial:** Any size of manufacturing facility across any sector will require an electrical distribution system of some scale

- **Education:** Universities, schools

- **Health:** Hospitals

- **Hotels**

- **Student Accommodation**

- **Entertainment & Leisure:** Shopping complex

Features

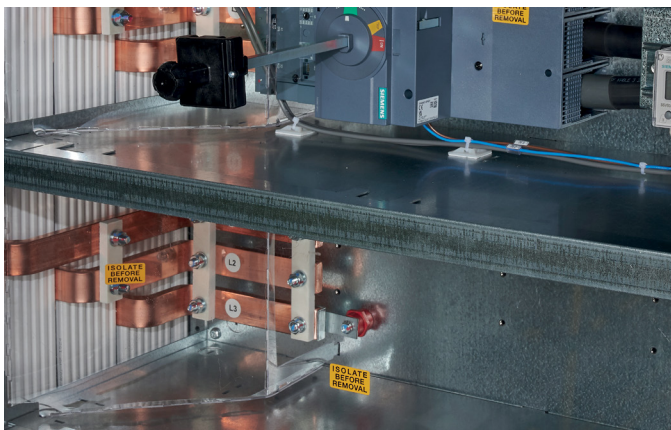**High-Quality Components ensures reliability, durability, and long-term performance**

- 30 yr + life expectancy

- Protection & Metering functionality in one device

- Low maintenance / Only yearly inspection w/o lubrication.

- Continuous self-monitoring

- Unbeatable user friendliness via Parameterization possibilities with USB-C & Powerconfig software.

- Remote Parameterization Via SENTRON powerconfig Application.

Advanced Protection Features & Future proof

- Self-Monitoring & integrated test functionality – Internal self-test, error display & trip log with ETU 600 platform.

- High Personal safety through Maintenance mode DAS+ (Dynamic Arc flash Sentry). Better protection of employees from arcs during work. DAS+ is included as a standard.

Decarbonization and Sustainability

- Less emissions / reduced Carbon footprint via local production in Wigan factory which is centrally located in UK.

- Make to stock productions / Lean processes.

Predictive Maintenance

Inbuilt conditioning monitoring with SENTRON 3VA (MCCB) & 3WA Air circuit breakers

- Health indicator & remaining lifetime display with Powerconfig app & software.

- Optimization of energy availability.

Communication Capable / IOT Features

- S4 can be configured to communicate with Building Management Software.

- It supports various communication protocols, including Modus TCP , Profibus TCP, Profinet and Ethernet.

Cyber Security & Efficient Energy with PowerCenter 3000

- Transparency of energy flows and thus offers the base for measures to increase energy efficiency.

- Security Gateway as the heart of cybersecure low- voltage power distribution: A component that greatly improves your plants external security.

- Robust communication interface: Achilles certification confirms the functionality needed to ensure the security and stability of industrial systems.

- Protection through targeted security settings within SENTRON PowerCenter 3000.

Internal separation, either Galvanised steel or polycarbonate, providing robust partitioning between different internal parts of the switchboard and facilitates an individual adaptation to the user's requirements.

Safety is paramount when it comes to door security. All door hinges and locking systems have been rigorously tested to meet and exceed the requirements of BS EN IEC/IEC 61439-2.

Customer benefits

+

Sustainable Solution via local manufacturing reduces the carbon footprint and makes us & our customers sustainable.

Multi-sectional deliveries.

Maximize energy efficiency with integral power factor correction.

Innovative clone manufacturing reduces Lead time.

High Reliability with 30 yr + life expectancy & availability of replacement components.

Future Proof product with an upgradable application processor, an extendable busbar system & provisions for additional spare ways.

Increased Digitalization with communication capable Devices like 3WA ACB, 3VA MCCBs etc.

Predictive maintenance with SENTRON protection devices.

IOT enabled devices like POC 3000 make system monitoring easier and increase energy efficiency.

Reduced Onsite Connections.

Technical support - easy access to online technical support facilities and quick response times for any issues that may arise.

SIVACON S4 – Argument for Safety, Flexibility and efficiency

Argument for Safety

- Design Verification by test conforming to BS EN IEC/IEC 61439-1 & 2.

- Comprehensive ASTA certification.

- Patented locking system. Central locking keeps the doors closed even in the event of an arc fault.

- Rapidly detects and isolates short-circuits, safeguarding equipment.

- Ensuring high personal safety with DAS+. The dynamic arc flash sentry providing better protection for employees in the workplace.

- Enables rapid de-energization during emergencies, enhancing overall safety.

Argument for Flexibility

- A variety of connection options via vertical distribution bus bars. Flexible layout suites every specific customer requirement.

- Variable busbar positioning (Top and Bottom bus bar).

- Multi-section shipping splits improve access to awkward installation environment.

- Plinths with removable cover plates.

- Spare ways for future devices.
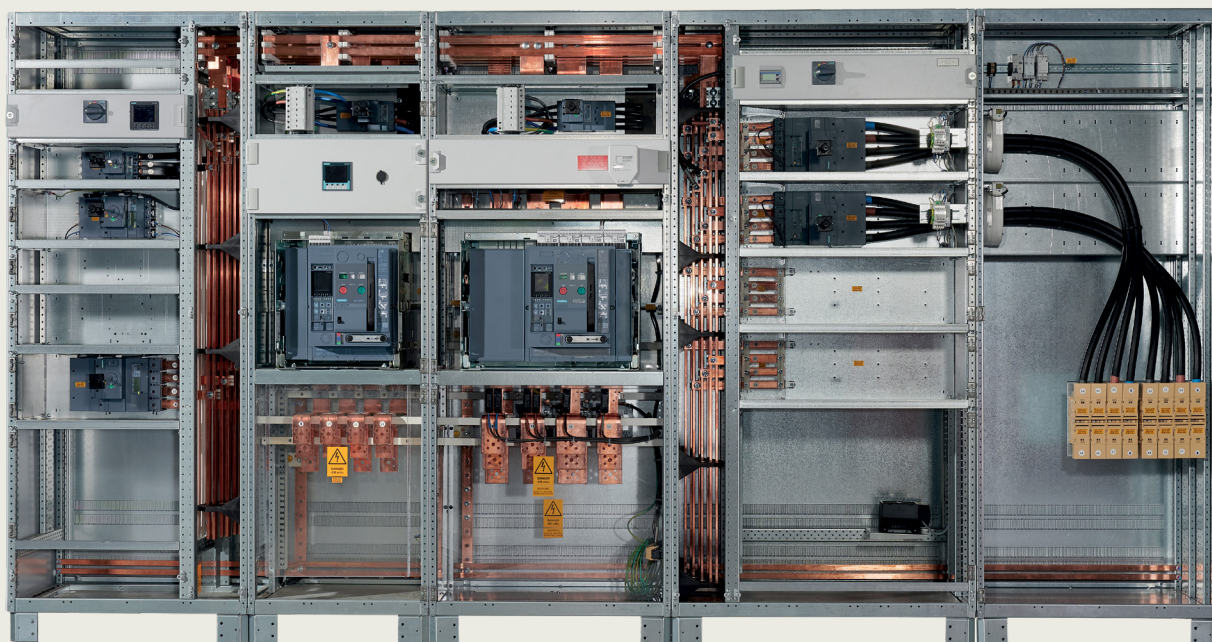
Argument for efficiency

- The innovative, communication capable SENTRON components are easy to integrate.

- Low maintenance cost with 3WA Air circuit breakers.

- Remote parametrization / USB-C & Bluetooth options are available Via Powerconfig software and Mobile App.

- Cost-effective entry into energy management according to DIN ISO 50001 with PowerCenter 3000.

SIVACON S4 – System Overview

	Compartmentalised	Group Mounted solution
Mounting design	Fixed-mounted design MCCB / Withdrawable ACB design with Compartment doors	Fixed Mounted MCCB
Functions	Incoming feeder/ Outgoing feeder / Bus coupler	Incoming feeder/ Outgoing feeder / Bus coupler
Busbar ratings	up to 3200 A	800 A each section (Higher rating achievable with Multiple sections)
Busbar position	top, bottom	Top & bottom (central spine layout)
Fault rating (kA)	50 kA for 1 sec	50 kA for 1 sec
Cabling access	front access	front access
Cubicle width (mm)	400 • 600 • 800 • 1000 • 1200	1200
Internal separation	Form 4a type 2 , Form 4b type 5 & 6	Form 4b type 6
Device configuration	TPN & 4P	SP , TPN & 4P
Degree of protection	IP4X, IP55	IP4X
Max outgoing rating	3200 A	250 A

	Functions	Special features	Communication Capability
3WA air circuit Breaker	Protection against Overload & Short-circuit, GF, High level of personal & plant safety	Fixed mounted & withdrawable designs for fast and easy maintenance. Modular compact design. Easy of future upgrade/ retrofit, Past sale upgradability, Restricted Earth Fault Protection	Protection against lightning & Transient voltage In the form of Type 1, Type 2 & Type 1 & 2
3VA Moulded Case Circuit Breaker	Protection against Overload & Short circuit, GF, High level of personal & plant safety	High Breaking capacity with compact design. Superior selectivity properties Easy of future upgrade / Retrofit	Communication capable Protocols available - Modbus TCP, Modbus RTU, DI/DO, Profinet & Profibus Software available - Power config, TIA Portal v18+, SCADA
Surge Protection Device	Protection against lightning & Transient voltage In the form of Type 1, Type 2 & Type 1 & 2	Plug in Modules for quick change over of individual blocks	Volt free signal (No comms)
7KT/7KM PAC Meter	Power monitoring for general or fiscal billing purposes. Measuring & monitoring electrical & thermal characteristics as well as power consumption	Measurement of individual feeders Identification of current peak Presentation in web server & app CT fed / Direct Fed Version	Communication capable Protocols available - Modbus TCP, Modbus RTU, DI/DO, Profinet & Profibus Software available - Power config, TIA Portal v18+, SCADA
Power factor correction	Improving the quality of power supply	Multistep switching in 25 kVAr steps Standard and detuned options available	Multistep switching in 25 kVAr steps

Connection to energy management **with SIVACON S4**

Digital Intelligence for your SIVACON S4
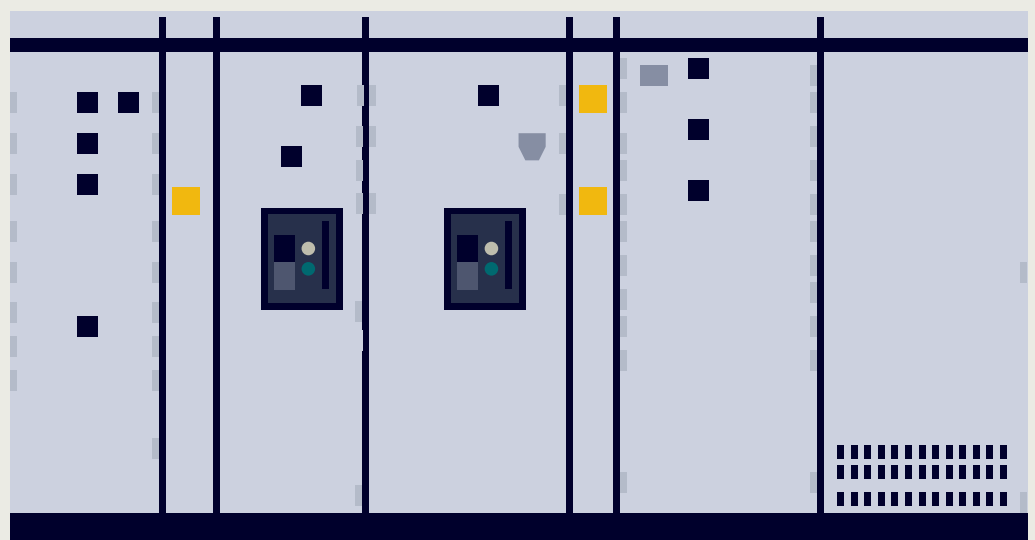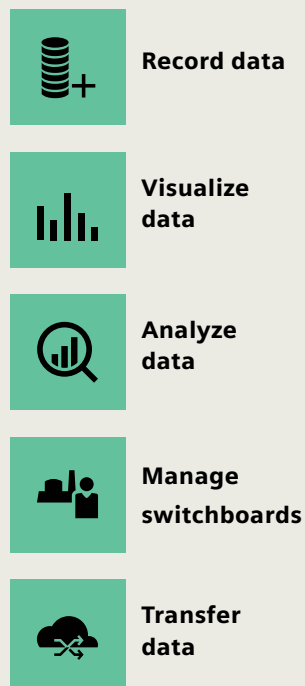
Manage your energy data

Accelerate and simplify your operational diagnostics - on the basis of your energy data. Define your threshold values for early signaling for monitoring, control, and diagnostics - and transparency down to each individual feeder.

Use the data on switching rates and runtimes or temperatures to increase the switchboard availability through predictive maintenance and optimized energy management and to reduce your costs as well as the power demand of your application.

Your advantages

- Simplified diagnostics: All tools on board!
- More overview: Operational and diagnostic data perfectly visualized!
- Higher switchboard availability: Continuous monitoring and diagnostic information for predictive maintenance!
- Higher efficiency; Perfect energy transparency!
- Optimal connectivity: To higher-level automation and energy management systems, and to the cloud!

Record data

Visualize data

Analyze data

Manage switchboards

Transfer data

Measuring devices, power monitoring and **digitalization solutions**

To reduce your energy costs on a long-term basis, you requires a clear overview of power consumption and power flows. The 7KT/7KM PAC measuring devices, 3WA/3VA circuit breakers, PowerCenter 3000 which are integrated in the switchboard, can help you to achieve this with the help of software solutions we provide like Powerconfig, Powermanager etc.

+ Software and digitalization solutions

SENTRON POWERCONFIG - The combined commissioning and service tool for communication-capable measuring devices, circuit protection devices and circuit breakers.

SENTRON Powerconfig is available free of charge at **siemens.com/powerconfig**

You will find further information on the internet at **siemens.com/sentron**

Sentron Powermanager - PC Based power monitoring Software. SENTRON Powermanager increases the energy transparency and availability of your energy infrastructure in the building, in the plant or in your factory.

This contributes significantly to improving your energy efficiency in accordance with national and international norms and standards.

You can find the latest download and change information at **support.industry.siemens.com/cs/ww/en/view/109771760**

SENTRON PowerCentre 3000 - Edge/IoT-based data acquisition and visualization for low-voltage power distribution. Basis for certified energy management according to ISO 50001 to improve energy efficiency and optimize maintenance management.

For more information: **siemens.com/sentron-powercenter3000**

+ Measuring devices

- 7KT/7KM PAC measuring device options available.

- Your entry to energy management. Measured values are easy to handle, analyze, monitor and archive with the power monitoring software.

- Total Harmonic Distortion (THD) measured up to the 15th harmonic.

- High accuracy MID versions available.

Free download SENTRON Powerconfig mobile via:

App store

Play store

Technical support

The Technical Support for low-voltage power distribution and electrical installation technology assists you with all your technical queries about our products and systems - both before and after delivery.

Get in Touch

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