

SIEMENS



SIVACON S4 and ALPHA UNIVERSAL distribution systems

Comprehensive portfolio for infrastructure applications
[siemens.com/distributionsystems](https://www.siemens.com/distributionsystems)



Ensuring safe and efficient power distribution

Highlights

- One-stop portfolio for safe power distribution up to 6.300 A
- Failsafe design via SIMARIS configuration
- Enhanced productivity thanks to 3D data provision
- VDE certified systems ensure high reliability
- Enhanced productivity thanks to proven, reliable SIMARIS configuration software and extensive CAx data support



Increasing challenges for panel builders throughout the entire project cycle

Electric power distribution in infrastructure applications is changing. The growing number of electrical consumers, varying load conditions, and the increasing level of automation present new challenges for panel builders.

The availability, safety, and efficiency of power distribution are becoming increasingly important. This is reflected in detailed standards and regulations, as well as requirements placed on operational energy management solutions.

The planning and operation of electric power distribution is becoming increasingly complex, and the systems and products at their core are subject to ever more demanding technical requirements – especially in terms of flexibility, communication, and integration capabilities.

Systems, components, and configuration software – the perfect match

SIVACON S4 and ALPHA UNIVERSAL distribution systems are designed to meet these enhanced requirements and cover all infrastructure applications up to 6.300 A (with extended license).

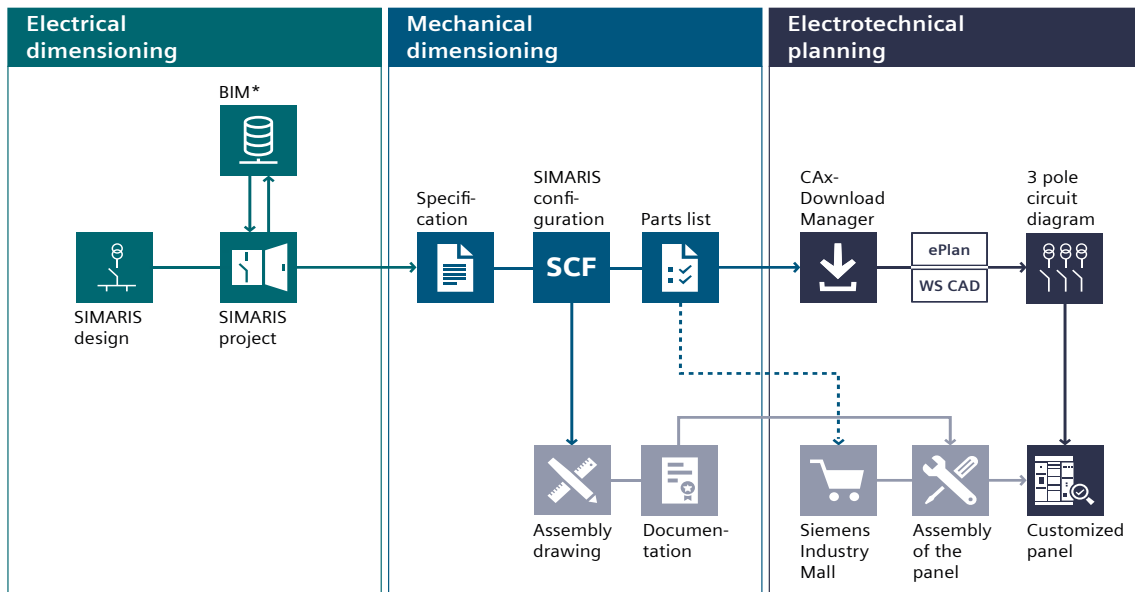
The modular and flexible SIVACON S4 power distribution board is a system for creating design verified solutions according to IEC 61439. The cost-efficient platform structure of the ALPHA UNIVERSAL distribution boards facilitates configuration and assembly.

The entire portfolio of SIVACON and ALPHA UNIVERSAL distribution boards perfectly accommodates the innovative SENTRON protection, switching, measuring, and monitoring devices.

The SIMARIS configuration software supports in configuration, calculation, and documentation of the distribution systems.

Certified distribution systems and innovative components ensure high system availability as well as safety for personnel and equipment. Panel builders profit from productivity increase thanks to data-based engineering.

Increased productivity with data-based engineering



* Building Information Modeling

Electrical dimensioning

- SIMARIS design safely and reliably dimensions a system solution in compliance with all the relevant standards. Suitable components are selected automatically. In addition the software calculates the short-circuit current, load flow, voltage drop and the energy balance.
- The SIMARIS project software provides a quick overview of the space requirements of the electrical distribution systems and corresponding devices. The budget can be determined quickly and the technical specification can be created automatically.
- In addition, project-specific BIM (Building Information Modeling) data can be exported from the SIMARIS project software. BIM data enable the cross-system planning of infrastructure projects (including gas, water, power distribution).

Mechanical dimensioning

The SIMARIS configuration software supports the entire engineering process – from project planning, calculation, and bid preparation all the way to system documentation in accordance with IEC 61439. This enables a quick, easy and failsafe planning and configuration of distribution systems. In addition, a parts list provided in SIMARIS configuration facilitates CAx data download and order placement in the Siemens Industry Mall.

Electrotechnical planning

The CAx Download Manager offers free download of comprehensive CAx data, e.g. commercial and technical product data. This makes further processing in CAD/CAE systems such as EPLAN or WSCAD considerably faster and easier.

SIVACON S4 power distribution boards, modular and flexible



3WA air circuit breakers



High performance
and proven quality

3VA molded case circuit
breakers



Modular,
highly variable system

3NP1 fuse switch
disconnectors



Increased safety for
operating personnel

3NJ6/3NJ4 in-line fuse
switch disconnectors



Space-saving thanks to compact size
and easy assembly

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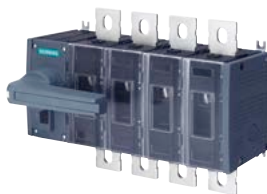


3 multichannel current measuring system



Feeding of up to 45 branches in the main distribution

3KD switch disconnectors



Connecting and disconnecting under load

8WH terminal blocks



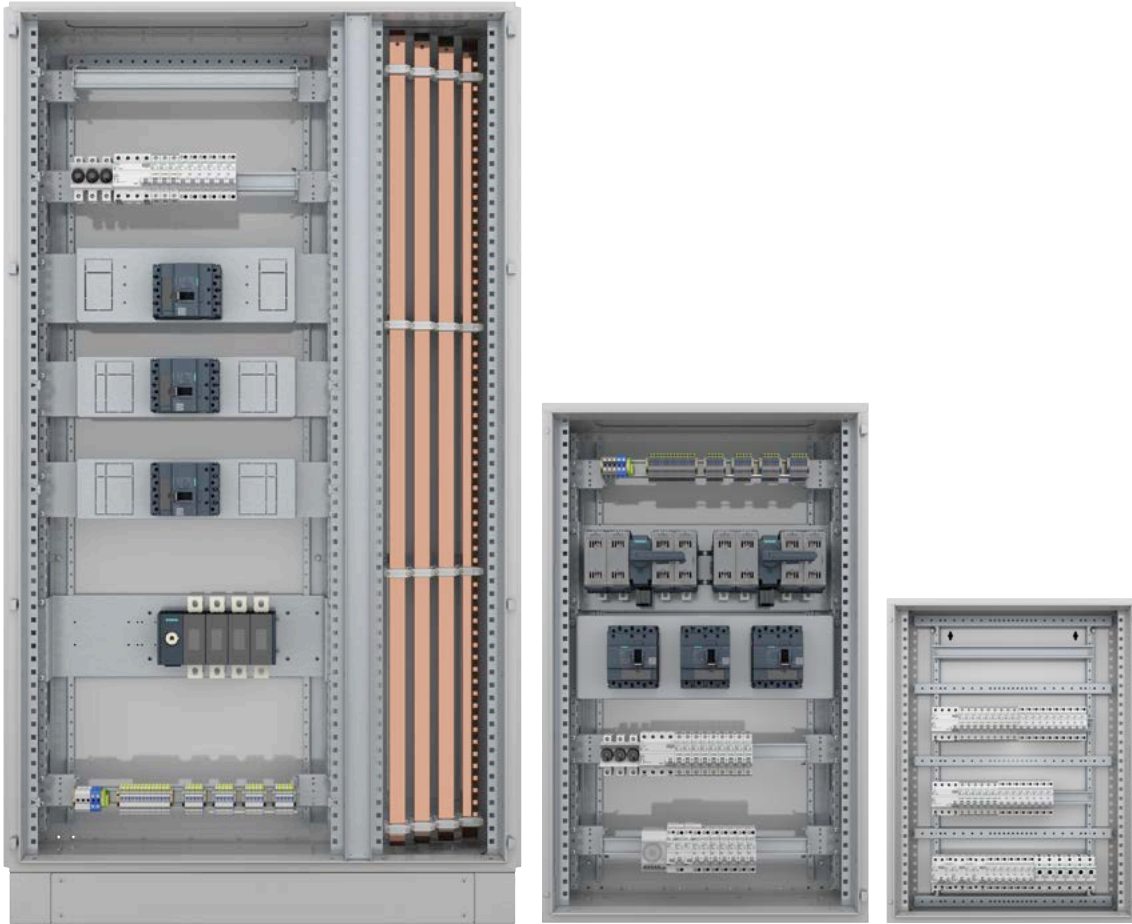
Fast connection and flexible conductors

7KM PAC measuring devices



Comprehensive portfolio for power monitoring from entry-level to specialized expert solutions

ALPHA UNIVERSAL distribution boards, safe and reliable



7KT PAC 1200 multi channel current measuring system



Cost-effective measuring of up to 96 outgoing feeders

5SV3 residual current operated circuit breakers



Reliable protection for people by preventing electrical accidents

5SL miniature circuit breakers



Short-circuit and overload protection due to safe switch-off

5SM6 AFD units



Preventive, proven fire protection against electrical fires

Comprehensive portfolio of low-voltage distribution systems



SIMARIS configuration:

SCF

[Project data](#) | [Configuration](#) | [Calculation](#) | [Documentation](#)

Technical data		ALPHA UNIVERSAL	SIVACON S4
Standards and regulations	System for creating design verified solutions	IEC 61439-1/2/3 EN 61439-1/2/3	IEC 61439-1/2 EN 61439-1/2
Electrical figures main busbar	Rated operational voltage U_e	V AC 690	690
	Rated frequency	Hz 50 / 60	50 / 60
	Rated impulse withstand voltage U_{imp}	kV Up to 6	Up to 12
	Rated current I_n	A Up to 800	Up to 4.000 / 6.300 A (mit Lizenz)
	Rated peak withstand current I_{pk}	kA Up to 53	Up to 220
	Rated short-time withstand current I_{cw}	kA, 1s Up to 25	Up to 100
Degree of protection		Up to IP55	Up to IP55
Form of internal separation		Form 1	Form 1 – 4b
Surface	Standard parts	RAL 7035	RAL 7035
Depth	mm	140, 250, 400	400, 600, 800
Approbations		VDE	VDE

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Smart Infrastructure
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