SIEMENS

With Siemens SIBOARD Technology & License

SIBOARD

Low-voltage distribution system

SIBOARD
A low-voltage power distribution system

In industry, buildings and infrastructure, the operation of different systems depends on safe and reliable power distribution. Even a short power failure may have serious consequences. To meet relevant safety requirements you need products and systems that can manage all kinds of contingencies.

As one of the world's leading suppliers of low-voltage power distribution systems, Siemens provides its customers with stable, reliable, safe and intelligent solutions. Whether you are looking for energy security or energy efficiency solutions, SIBOARD series products can protect your power distribution system through its excellent safety features and reliability.

SIBOARD offers comprehensive application coverage for your power distribution needs with rated currents up to 800 A. Whether in construction, infrastructure or industry, you can always rely on the efficient, safe SIBOARD series.

SIBOARD has been fully tested by Siemens in accordance with IEC 61439 with test certificate. Siemens license partners can use this system to manufacture distribution boards locally.

Panel builders have many requirements and we support our customers in fulfilling them

- Easy production
- Achieving sustainability goals
- Time-efficient work
- Flexibility
- Opening up new business models
- Cost efficiency
- Quality work
- Local value creation
- Customized solutions
- Reliable security

Efficient and intelligent – **SIBOARD with SENTRON Components**

Today's customers are demanding product customization, energy efficiency and safety, and convenient electrical solutions. These increasingly stringent requirements have created major challenges for product manufacturers, utilities and infrastructure builders.

In this particular landscape, the compatibility of the SIBOARD low-voltage distribution system takes on pivotal significance as it facilitates seamless integration into existing infrastructures to meet these requirements. This innovative system facilitates the effective distribution of energy, making substantial contributions to energy efficiency while concurrently ensuring safety and convenience.

The SIBOARD low-voltage distribution system, integrated with a new generation of intelligent Siemens components, offers a safer and more reliable, flexible and intelligent experience.

Smart protection for reliable power distribution

The new generation of Siemens low-voltage protection components with communication functions can

- Accurately measure and upload different parameters of the entire power distribution system
- Monitor and warn in real time any intelligent power distribution terminal
- Achieve rapid fault diagnosis
- Provide users with continuous and reliable power supply protection

SIBOARD License Partnering – Benefits and steps

A strong partnership with many advantages for both sides

Siemens SIBOARD license

- Based on established products (Siemens ALPHA UNIVERSAL distribution boards)
- Completely tested product (IEC 61439) and VDE-tested
- Provision of a complete set of electrical drawings to our license partner
- Suitable for Siemens protection, switching, measuring and monitoring devices
- Continuous development

License partner

- Local contact
- Market knowledge
- Regional production
- Higher value add
- Faster response times

Becoming a SIBOARD license partner follows a structured process. Firstly, potential partners are evaluated to assess suitability. If successful, the second step is signing a license contract. Next, manufacturing implementation takes place, with initial samples produced by the licensee. The fourth stage is quality approval, including an initial check by Siemens. Lastly, the fifth step involves full-scale SIBOARD manufacturing. This ensures a seamless partnership, resulting in successful SIBOARD production by license partners.

At a glance – How to become a license partner for SIBOARD

Evaluation of partner

Contract

Receiving drawing set through license

Implementation of manufacturing

Production of the first samples of license

Quality approval

Initial quality check by Siemens

Manufacturing of SIBOARD

SIBOARD License Benefits – Meeting the needs of panel builders

Panel builders attach importance to these three primary topics:

Efficiency

Reliability

Safety

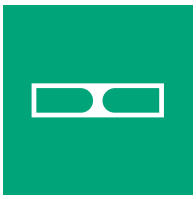
When creating low-voltage distribution boards, panel builders strongly prioritize efficiency, reliability and safety. Streamlined operations, by reducing the time and resources expended during assembly and installation, ultimately lead to enhanced efficiency. Reliability is paramount to ensure uninterrupted power distribution, safeguarding critical systems against disruptions. Safety stands as a cornerstone, as these boards are integral to the electrical infrastructure, necessitating robust protection against hazards for both personnel and equipment. With our distribution boards, we help achieve these objectives and guarantee optimal functionality. This also fosters trust among end users, confirming the board's ability to provide consistent, safe and efficient power distribution across different applications.

SIBOARD Starter Kit – Must-buy parts

To produce SIBOARD distribution boards, a license package and the relevant information will be provided after the kick-off meeting.

The must-buy parts:

Handle



Door-locking system

Busbar holder

Item	Article number	Description
	**8GK9560-0CH04**	Standard SIBOARD handle for wall-mounted boards (1 unit)
	8GK9560-1CH04	Standard SIBOARD handle for wall-mounted boards (50 units)
	8GK9560-0CH05	Sealing for Standard SIBOARD handle for wall-mounted boards
	**8GK9800-0CH00**	Door-locking system for floor-mounted boards with double bit including SIBOARD key plate without locking bars
	**8GK5760-0CH11**	Busbar holder for 15×5, 20×5 or 30×5 mm busbar (40 units)
	8GK5760-0CH12	Busbar holder for 30×10 mm (40 units)
	**8GK5760-0CH13**	Busbar holder for two times 20×10 mm or two times 30×10 mm (20 units)

SIBOARD-Branded –
The unique door handle

Experience an immediate value-add component with the branded door handle, which serves as a symbol of quality that fosters optimal customer retention. It will assist you in customer demonstrations, enhance your partner credibility, and support the acceleration of customer engagement and conversion in your target market.

The SIBOARD name is integrated in the door handle.

Article number

8GK9560-0CH04
Standard SIBOARD handle for wall-mounted boards (1 unit)

8GK9560-1CH04
Standard SIBOARD handle for wall-mounted boards (10 units)

SIBOARD Application Fields – At a glance

SIBOARD can be widely used in:

- Residential, administrative or commercial buildings
- Municipal industry, rail transport, industrial production
- Applications such as data centers, power generation and transmission
- Petroleum and petrochemical industries

Airports

Hospitals

Commercial buildings

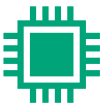
Power plants

Rail

Oil and gas

Renewable energy

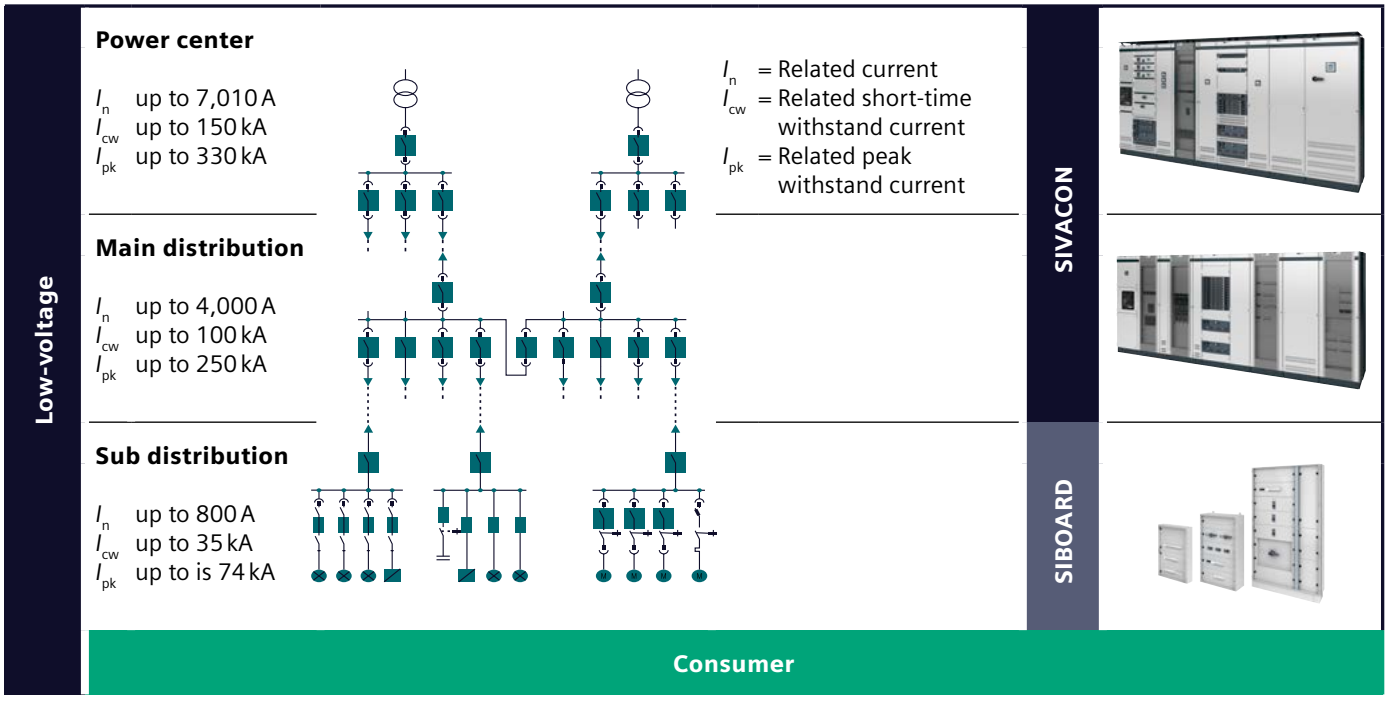
Manufacturing



Electronics industry

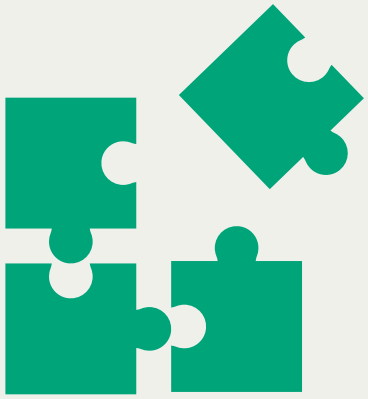
SIBOARD –
Ensuring a continuous power supply

With SIVACON and SIBOARD we ensure a continuous power supply from sub-distribution level to 7,010 A



SIBOARD Installation – Convincing through the modular concept

SIBOARD facilitates wall-mounted and floor-mounted installation applications. Thanks to the well-designed modular installation concept, SIBOARD can provide modular quick-installation kits to simplify your design and installation work



Modular

SIBOARD presents itself as a versatile protection solution with a combination of:

Modular design

The modular design concept enables an efficient, flexible, secure and reliable solution for a wide range of applications. It covers the current range from 125 to 800 A and provides various options for installation in cabinets that meet the specific requirements of different application scenarios.

Efficient assembly

Very helpful are the quick-assembly kits that significantly expedite the assembly and installation of the cabinet. This not only reduces assembly time but also enhances the overall efficiency of production. Furthermore, customers can utilize simulation software to design their own configurations free of charge. This grants them significantly more configuration options tailored to their specific requirements.

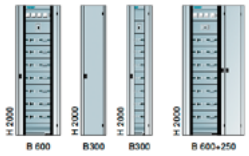
Flexible configuration

The product provides a significant level of protection through its IP54 protective rating. This ensures its dependable operation in diverse environments and safeguarding against external influences. Overall, SIBOARD is a versatile protective solution with a fusion of modular design, efficient assembly and customizable configurations that cater to a multitude of protection requirements.

SIBOARD –
Different sizes according to needs and space

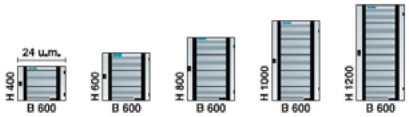
Different sizes according to the needs and space requirements

SIBOARD 800 floor-mounted
SIBOARD 630 floor-mounted



SIBOARD 630 wall-mounted

SIBOARD 125



Sheet-metal thickness 1.2 mm / 1.5 mm (two versions).
Sheet-metal or glass doors are available.

Our license partners benefit in many ways from the local production of SIBOARD distribution boards:

Efficiency

- Local contact and market know-how
- Regional production and short delivery times
- Cost reduction and greater competitiveness
- Reduction of CO_2 emissions

Reliability

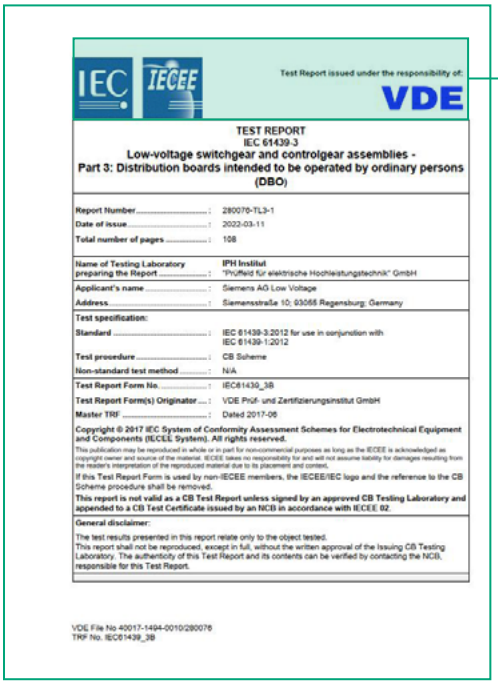
- Provision of complete drawing set
- Production with standard machines and tools
- Usage of the knowledge of Siemens
- Every improvement to Siemens ALPHA UNIVERSAL distribution boards will also be incorporated into SIBOARD

Safety

- Completely tested distribution boards
- VDE-certified
- Fulfillment of all requirements of IEC 61439
- Protection of people and environment

SIBOARD Quality – Tested and approved by the VDE Institute

The SIBOARD distribution board system is tested and approved by the third-party VDE Testing and Certification Institute. The Association for Electrical, Electronic and Information Technologies (VDE) certifies that a product or a system meets specific quality and safety standards. The VDE Institute was founded in 1920 and operates worldwide.



Test Report issued under the responsibility of: VDE

TEST REPORT
IEC 61439-3
Low-voltage switchgear and controlgear assemblies -
Part 3: Distribution boards intended to be operated by ordinary persons (DBO)

Report Number	280076-TL3-1
Date of issue	2022-03-11
Total number of pages	108
Name of Testing Laboratory preparing the Report	IPH Institut "Prüffeld für elektrische Hochleistungstechnik" GmbH
Applicant's name	Siemens AG Low Voltage
Address	Siemensstraße 10, 93055 Regensburg, Germany
Test specification:	
Standard	IEC 61439-3:2012 for use in conjunction with IEC 61439-1:2012
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No.	IEC61439_3B
Test Report Form(s) Originator	VDE Prüf- und Zertifizierungsinstitut GmbH
Master TRF	Dated 2017-06

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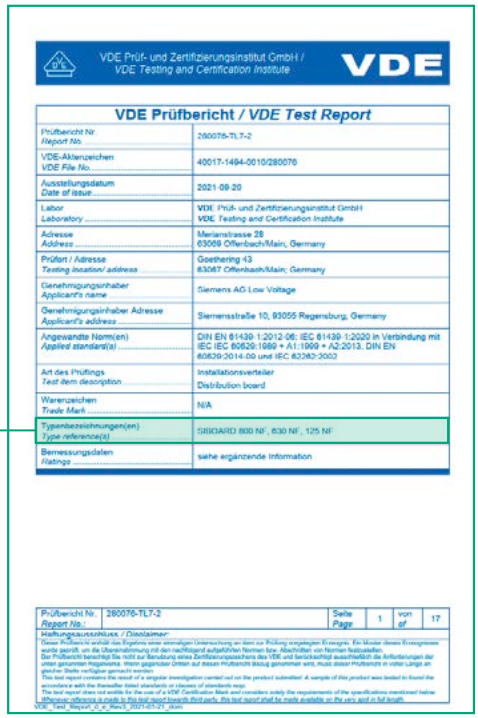
VDE File No.40017-1494-0010/280076
TRF No. IEC61439_3B

SIBOARD is certified according to IEC 61439



VDE Prüf- und Zertifizierungsinstitut GmbH / VDE Testing and Certification Institute

VDE Prüfbericht / *VDE Test Report*

Prüfbericht Nr. / *Report No.*	280076-TL7-2
VDE-Aktenzeichen / *VDE File No.*	40017-1494-0010/280076
Ausstellungsdatum / *Date of issue*	2021-09-20
Labor / *Laboratory*	VDE Prüf- und Zertifizierungsinstitut GmbH / *VDE Testing and Certification Institute*
Adresse / *Address*	Merianstrasse 28, 63069 Offenbach/Main, Germany
Prüfort / Adresse / *Testing location/ address*	Goethering 43, 63067 Offenbach/Main, Germany
Genehmigungsinhaber / *Applicant's name*	Siemens AG Low Voltage
Genehmigungsinhaber Adresse / *Applicant's address*	Siemensstraße 10, 93055 Regensburg, Germany
Angewandte Norm(en) / *Applied standard(s)*	DIN EN 61439-1:2012-06; IEC 61439-1:2020 in Verbindung mit IEC IEC 60529:1989 + A1:1999 + A2:2013, DIN EN 60529:2014-09 und IEC 62262:2002
Art des Prüfings / *Test item description*	Installationsverteiler / Distribution board
Warenzeichen / *Trade Mark*	N/A
Typenbezeichnungen(en) / *Type reference(s)*	SIBOARD 800 NF, 630 NF, 125 NF
Bemessungsdaten / *Ratings*	siehe ergänzende Information

Prüfbericht Nr. / *Report No.*: 280076-TL7-2 | Seite / *Page* 1 von / *of* 17

Haftungsausschluss / *Disclaimer*

The VDE test report includes SIBOARD 800, 630 and 125

SIBOARD Distribution Boards – All sizes fully tested

What does certified according to IEC 61439 mean?

It means that a product or installation complies with the requirements set forth by the IEC 61439 international standard. This standard pertains to electrical low-voltage switchgear assemblies. It specifies various technical and safety-related requirements to ensure the safe and reliable operation of switchgear assemblies, meeting the relevant norms.

Certification according to IEC 61439 indicates that the respective product or installation has been developed, manufactured and tested in accordance with the standards defined in the norm. This certification helps ensure the quality, safety and interoperability of electrical switchgear used in various industrial applications, whether in power distribution, industrial control, building automation or other fields.

All ratings are tested according to IEC 61439.

Example of SIBOARD 125

Rated voltage	Un	AC 690 V
Rated operational voltage	Ue	AC 520 V
Rated insulation voltage	Ui	690 V
Rated impulse withstand voltage	Uimp	6 kV
Rated current of the assembly	InA	125 A
Rated current of a main circuit	Inc	125 A
Rated conditional short-circuit current	Icc	≤ 10 kA
Rated short-time withstand current	Ipk	≤ 17 kA
Frequency	fn	40 to 60 Hz

SIBOARD – A suitable distribution board for each electrical current rating

Whether you are looking for wall-mounted or floor-mounted distribution boxes, SIBOARD power distribution system will be your best choice.

SIBOARD 125 embedded, wall-mounted distribution box:
A maximum current of 200 A, standardized installation components, modular design scheme and flexible device configuration provide more possibilities for the selection of power distribution equipment.

SIBOARD 630 wall-mounted or floor-mounted distribution box:
Maximum current 630 A. Larger accommodation space and more installation methods enhance the adaptability of the power distribution system.

SIBOARD 800 floor-mounted distribution box:
Up to 800 A current application solution to meet more stringent operating environment requirements.

Highlights:

- Comprehensive current coverage, from 125 A to 800 A
- A variety of cabinet installation methods are available depending on the application scenarios
- Rapid assembly kits greatly shorten the cabinet assembly and installation time and improve production efficiency
- The customer's free design concept verified by simulation software provides more configuration possibilities
- Protection grade up to IP54

SIBOARD low-voltage power distribution system – technical specifications

		SIBOARD 125	SIBOARD 630	SIBOARD 800
Basic parameters				
Rated current	A	125	630	800
Overvoltage category		III	III	III
Rated impulse withstand voltage (U_{imp})	kV	6	6	6
Rated insulation voltage (U_i)	V	690	690	690
Rated operating voltage (U_e)	VAC	400	690	690
Rated pick withstand current (I_{pk})	kA	17	53	74
Rated short-time withstand current I_{cw} (1s)	kA	10	25	35
Degree of protection (IEC 60529/EN 60529)		IP30/IP31D/IP43	IP30/IP54	IP30/IP54
IK grade		IK10	IK10	IK10
Security level		I	I	I
Color code		RAL 7035 (Light Grey)	RAL 7035 (Light Grey)	RAL 7035 (Light Grey)
Size				
Height	mm	400/600/800/1000/1200	400/600/800/1000/1200/2000*	2000
Width	mm	600	300*/600/900/600+250	300/600/900/600+250
Depth	mm	140	250	400
Steel thickness	mm	1.5	1.5	1.5
Standards				
GB		GB 7251.1 / 3	GB 7251.1 / 12	GB 7251.1 / 12
IEC		IEC 61439-1/-3	IEC 61439-1/-2	IEC 61439-1/-2
Certified		VDE	VDE	VDE
Equipment				
Form of internal separation		1	1	1
Other				
Installation form		Recessed/Wall-mounted	Wall-mounted/Floor-mounted	Floor type

Published by
Siemens AG

Smart Infrastructure
Electrical Products
Siemensstrasse 10
93055 Regensburg
Germany

Article No. SIEP-B10425-00-7600
HL 23060942 WP 1223

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