

Power distribution in the age of digitalization

Take advantage of the benefits of digitalization at every step of the project with the SIVACON 8PS busbar trunking systems – from planning to installation on up to operation.

SIMARIS software tools provide efficient support for your planning: among other advantages, you can configure the SIVACON 8PS busbars with SIMARIS busbarplan. A digital twin of the busbar runs is created from the BIM data. The BusbarCheck app assists you during installation.

Energy data and power with plug-and-work: Our innovative powerline technology makes this possible for SIVACON 8PS busbar trunking systems – efficient and reliable. Energy data is simply transferred to the automation and energy management systems, as well as to cloud-based systems (IoT). Data and electricity travel the same path via the conductor circuits and phases of the BD2, LD, LData and LI busbar trunking systems.



Busbar Trunking Systems



All the information you need 16/2

Quick selection guide 16/4

SIVACON 8PS busbar trunking systems 16/4

Planning and installation tools 16/6

A multitude of additional information ...

Information + ordering

All the important things at a glance

For information about busbar trunking systems, please visit our website www.siemens.com/sivacon-8PS

Your product in detail

The Siemens Industry Online Support (SIOS) provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Brochure
 - Energy and data successfully put on track (109747761)
- Catalog
 - LV 70 · 2019 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A (109744546)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Siemens YouTube channel

- SIVACON power distribution (general)
bit.ly/2m4oSLI

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- SIVACON 8PS sie.ag/2IXpCT1
- SIMARIS planning tools sie.ag/2m3oFbS

Direct forwarding to the individual products in the Industry Mall by clicking on the article number in the catalog or entering this web address incl. article number
www.siemens.com/product?Article No.

Order support for SIVACON 8PS – BD01 and BD2
www.siemens.com/LV70

Configurators

Configure your SIVACON 8PS BD01 or BD2 busbar trunking system in the [Industry Mall](#)

The fast track to the experts

Contact persons in your region

We offer a comprehensive portfolio of services. You can find your local contacts at
www.siemens.com/sivacon8PS-contact

You will find further information on services at
www.siemens.com/service-catalog

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/support-request

... can be found in our online services

Commissioning + operation

SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific IFC data (Building Information Modeling) for cross-package planning is also possible.

www.siemens.com/simaris

Manuals

Manuals are available for downloading in Siemens Industry Online Support (SIOS) at

www.siemens.com/lowvoltage/manuals

- Planning Manual
 - Planning with SIVACON 8PS (109478425)

Your product in detail

The Siemens Industry Online Support (SIOS) provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Comprehensive mobile support via the Siemens Industry Online Support app available for download from the [App Store](#) and [Play Store](#)

You will find further information at www.siemens.com/support-app

Engineering data for CAD or CAE systems are available in the CAx Download Manager at www.siemens.com/cax

Face-to-face or online training

Our training courses can be found at

www.power-academy.siemens.com

Technical overview – Busbar trunking systems

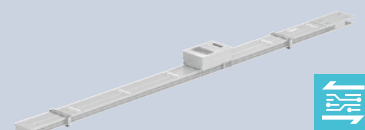


The fast way to get you to our online services

This page provides you with comprehensive information and links on busbar trunking systems

www.siemens.com/lowvoltage/product-support (109769090)

SIVACON 8PS busbar trunking systems



Busbar trunking systems

BD01

BD2

Basic data

System description	Flexible power supply in workshops and production plants for skilled trades and businesses and commercial enterprises	The universal solution for high power levels in a small space, especially in offices and in industrial transfer lines
Typical applications	<ul style="list-style-type: none"> • Workshops and production plants • Supermarkets • Data centers • High-rise buildings • Trade fair buildings • Automotive industry • Marine applications • eMobility 	<ul style="list-style-type: none"> • Workshops and production plants • Production industry • Do-it-yourself centers • Data centers • High-rise buildings • Foodstuffs industry • Trade fair buildings • Hospitals • Automotive industry • Marine applications • eMobility

Basic data

Rated insulation voltage U_i	400 V AC	690 V AC
Rated operational voltage U_e	400 V AC	690 V AC
Degree of protection	IP54, IP55	IP54, IP55
Rated current I_{nA}	40 ... 160 A	160 ... 1250 A
Rated peak withstand current I_{pk}	Up to 15.3 kA	Up to 90 kA
Rated short-time withstand current I_{cw} (1 s)	Up to 2.5 kA	Up to 34 kA
Number of conductors	4 (PE = enclosure)	5
Connection technology	Connecting flange with built-in expansion compensation	With built-in expansion compensation, bolt-type terminal

Outgoing feeders and junctions

Tap-off point	On one side every 0.5 or 1 m	On one side every 0.5 m, on two sides offset every 0.25 m
Tap-off unit	Up to 63 A	Up to 550 A

Material

Conductors	Aluminum/Copper	Aluminum or copper
Enclosures (trunking unit, feeder unit)	Sheet steel zinc-plated and painted	Sheet steel zinc-plated and painted

Communication

Data transmission	data line	powerline, data line
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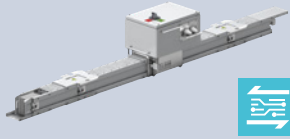
Approvals/Certificates

Approvals	EAC	EAC
Certificates	<ul style="list-style-type: none"> • DNV GL • Environmental Product Declaration (EPD) 	<ul style="list-style-type: none"> • DNV GL • Environmental Product Declaration (EPD)

¹⁾ IP66 for pure energy transfer runs without outgoing feeders.



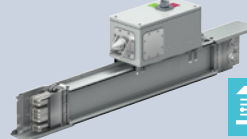
Data transfer with powerline technology



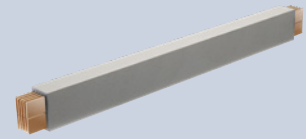
LD



LData



LI



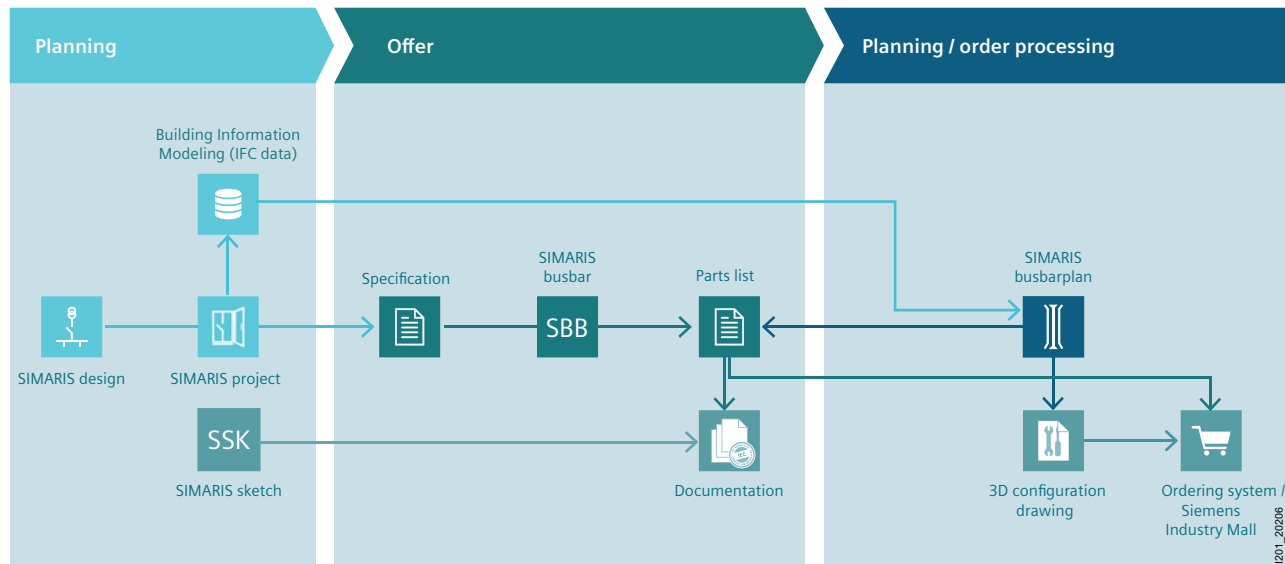
LR

The proven high-current busbar for industry and special applications	Efficient and reliable power supply for today and tomorrow's data centers	An integrated solution for safe and efficient infrastructure power supply – for example in multi-story buildings and industrial applications	The reliable busbar for a high degree of protection in harsh environments, for example for networking of building sections outdoors or for power supply in tunnels
<ul style="list-style-type: none"> Automotive industry Production industry Foodstuffs industry Trade fair buildings Wind power plants Semiconductor production Marine applications eMobility 	<ul style="list-style-type: none"> Data centers 	<ul style="list-style-type: none"> Data centers High-rise buildings Production industry Chemicals industry Airports Trade fair buildings Hospitals Do-it-yourself centers Shopping malls Supermarkets eMobility 	<ul style="list-style-type: none"> Chemicals industry Oil and gas Tunnels and subways Outdoor applications
1000 V AC	600 V AC	1000 V AC	1000 V AC
1000 V AC	600 V AC	1000 V AC	1000 V AC
IP34, IP54	Trunking units: IP21 Tap-off units: IP21, IP41	IP55, IP66 ¹⁾	IP68
1100 ... 5000 A	1000 ... 2500 A	800 ... 6300 A	400 ... 6300 A
Up to 286 kA	Min. 84 kA	Up to 330 kA	Up to 275 kA
Up to 116 kA	Min. 40 kA	Up to 150 kA	Up to 125 kA
4, 5	5	4 ... 6 conductors (incl. 200% N or add. clean earth)	3 and PEN or 3, N and PE
Bolt-type terminal connection with hook and bolt connection	Direct hook and bolt connection (LD technology)	Hook and bolt connection with shear nut	Bolt terminal block
On one side every 1 m	Can be plugged in anywhere along the system	Up to 3 for every 3 m (per side)	On one side every 1 m
Up to 1250 A	Up to 250 A	Up to 1250 A	On request
Aluminum or copper	Aluminum, nickel and tin-coated	Aluminum or copper	Aluminum or copper
Sheet steel zinc-plated and painted	Sheet steel, tin-coated and powder-coated, black (RAL9017)	Aluminum painted	Epoxy resin
powerline, data line	powerline, data line	powerline, data line	–
EAC	–	EAC	EAC
<ul style="list-style-type: none"> DNV GL Environmental Product Declaration (EPD) 	–	<ul style="list-style-type: none"> SEISMIC Qualification Certificate (earthquake test) Environmental Product Declaration (EPD) 	<ul style="list-style-type: none"> DNV GL SEISMIC Qualification Certificate (earthquake test) ATEX Product Environmental Profile (PEP)

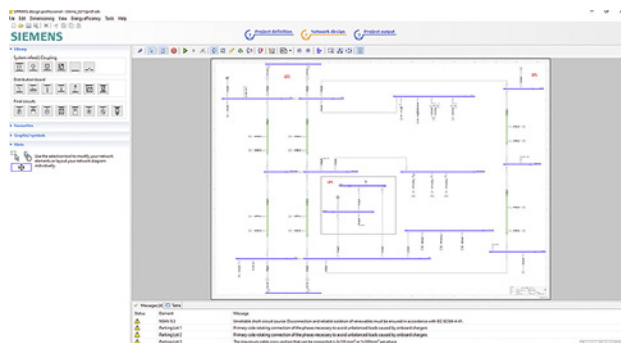
Planning and installation tools

For planning, visualization and installation of busbar trunking systems

From planning to commissioning



SIMARIS design



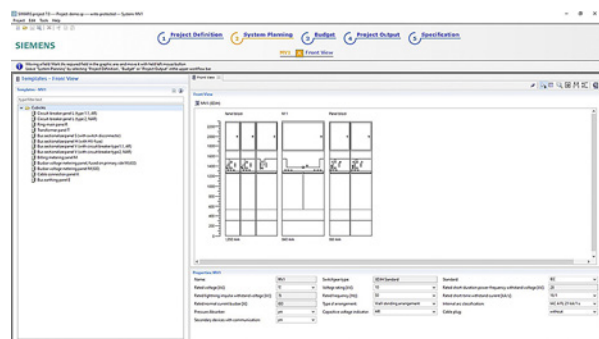
SIMARIS design is a planning tool for fast and efficient grid calculation and dimensioning of electrical power distribution for special-purpose and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the stored product database

SIMARIS design forms part of SIMARIS Suite.

Free download of the SIMARIS Suite and further information at: www.siemens.com/simarisdg

SIMARIS project



SIMARIS project is a planning tool used to quickly determine the necessary space requirements and the budget for electrical energy distribution for special-purpose and industrial buildings and for automatic generation of specifications.

- Import into projects created with SIMARIS design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

SIMARIS project forms part of SIMARIS Suite.

Free download of the SIMARIS Suite and further information at: www.siemens.com/simarispj

SIMARIS Toolbox (online)



The SIMARIS Toolbox is a platform for provision of online tools for assisting electrical installation planners. It includes, for example:

- EMC Busbar (tool for calculating magnetic field strength in the vicinity of SIVACON 8PS busbar trunking systems)

SIMARIS Toolbox forms part of SIMARIS Suite.

Free download of the SIMARIS Suite and further information at: www.siemens.com/simaristoolbox

SIMARIS busbarplan



The new SIMARIS busbarplan planning tool supports BIM-compliant 3D configuration of SIVACON 8PS busbar trunking systems.

- Plugin based on the BIM Autodesk REVIT software (Export in IFC format possible)
- Version for planners and for Siemens project engineers

SIMARIS busbarplan forms part of SIMARIS Suite.

Free download of the SIMARIS Suite and further information at: www.siemens.com/simaribusbarplan

Planning and installation tools

For planning, visualization and installation of busbar trunking systems

BusbarCheck app



BusbarCheck is an installation app to use for easy and high-quality installation and documentation.

- Detailed explanation of all steps
- Written record and proper documentation for better and easier evaluation of the installation
- Can be used by all installation companies and SIVACON 8PS busbar trunking installations in Germany and in other selected countries

Free download from:
[App Store](#) and [Play Store](#)

SIMARIS sketch



SIMARIS sketch is a software tool for quick and easy planning and visualization of busbar trunking systems.

- Representation of complex building structures
- Presentation of complete projects directly in 3D
- Export of parts lists as Excel files and graphics for preparation of orders

Free download and further information available at:
www.siemens.com/simarissketch

IFC data



BIM simplifies the planning process. While the simple exchange of relevant building data between the planners and the facility manager ensures high quality and reduces costs, the digital twin for power distribution fits in seamlessly with the overall structure – for efficient planning, performance and maintenance.

www.siemens.com/bim-eplanning

