

# Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.



#### Catalog LV 10 · 04/2021

You will find the latest edition and all future editions in the Siemens Industry Online Support at www.siemens.com/lowvoltage/catalogs

Refer to the Industry Mall for current prices www.siemens.com/industrymall

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

#### Technical data

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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# Low-Voltage Power Distribution and Electrical Installation Technology

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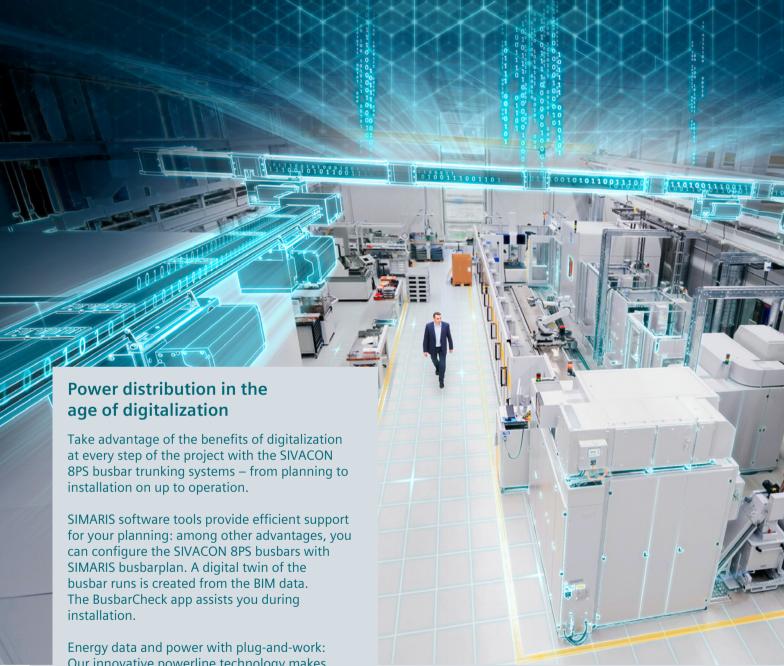
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Α



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.

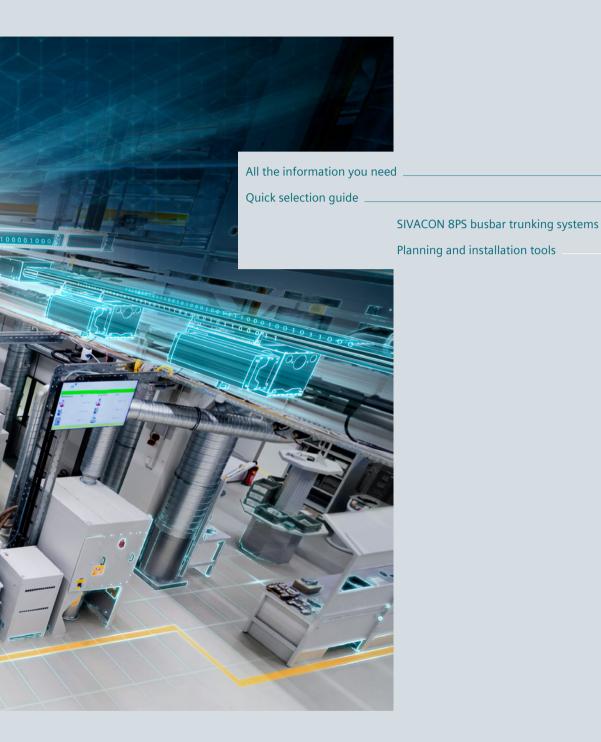
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# **Busbar Trunking Systems**



# 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 2015 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 No. in the catalog or by entering this web address incl. Article No. 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 can 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/lowvoltage/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 BIM (Building Information Modeling) data for cross-package planning is also possible.

www.siemens.com/simaris



## 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 under:

www.siemens.com/support-app

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax



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

www.siemens.com/lowvoltage/manuals

• Planning manual - Planning with SIVACON 8PS (109478425)

# Classroom 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

		1110100
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> <li>Workshops and production plants</li> <li>Supermarkets</li> <li>Data centers</li> <li>High-rise buildings</li> <li>Trade fair buildings</li> <li>Automotive industry</li> <li>Marine applications</li> </ul>	<ul> <li>Workshops and production plants</li> <li>Production industry</li> <li>Do-it-yourself centers</li> <li>Data centers</li> <li>High-rise buildings</li> <li>Foodstuffs industry</li> <li>Trade fair buildings</li> <li>Hospitals</li> <li>Automotive industry</li> <li>Marine applications</li> </ul>
Basic data		
Rated insulation voltage U <sub>i</sub>	400 V AC	690 V AC
Rated operational voltage U <sub>e</sub>	400 V AC	690 V AC
Degree of protection	IP54, IP55	IP52, IP55
Rated current I <sub>nA</sub>	40 160 A	160 1250 A
Rated peak withstand current I <sub>pk</sub>	Up to 15.3 kA	Up to 90 kA
Rated short-time withstand current I <sub>cw</sub> (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 530 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
Approvals / Certificates		
Approvals	EAC	EAC
Certificates	DNV GL     Environmental Product Declaration (EPD)	DNV GL     Environmental Product Declaration (EPD)

<sup>1)</sup> IP66 for pure energy transfer runs without outgoing feeders.

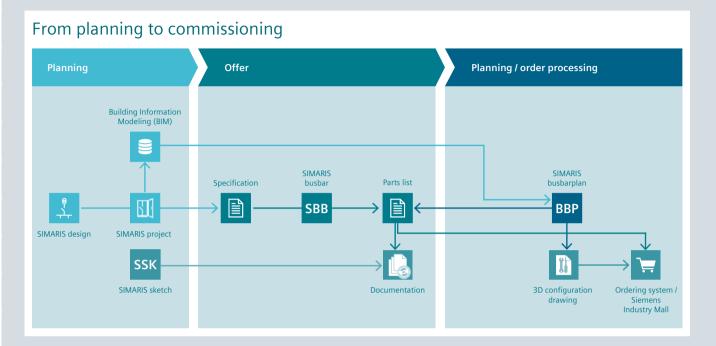


Data transfer with powerline technology



# Planning and installation tools

For planning, visualization and installation of busbar trunking systems



# 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

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

# 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)

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

# 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)

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

# Planning and installation tools

# For planning, visualization and installation of busbar trunking systems

# SIMARIS busbarplan new



The new SIMARIS busbarplan planning tool supports simple configuration of SIVACON 8PS busbars.

- Plugin based on the BIM Autodesk REVIT software
- Version for planners and for Siemens project engineers

www.siemens.com/simarisbusbarplan

## BIM 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

#### 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

# 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:

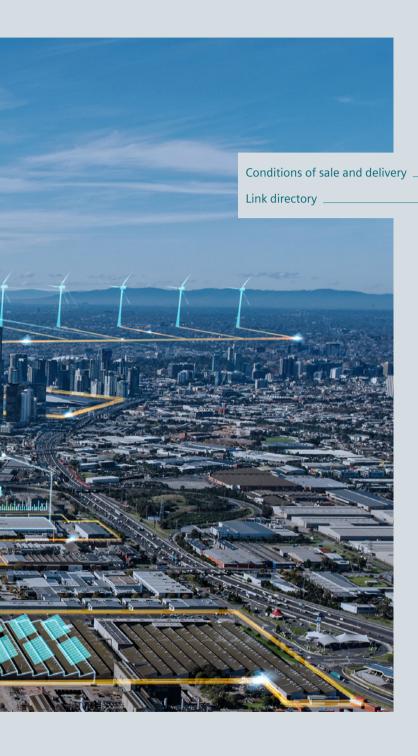
App Store and Play Store

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# Conditions of sale and delivery

#### 1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

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- · for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen der Division DF – Deutschland" (available only in German) and/or
- for other services, the "Supplementary Terms and Conditions for Services ("BL")1) and/or
- for other supplies the "General Conditions for the Supply of Products and Services of the Electrical and Electronics

In case such supplies should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"1), a notice will be contained in the scope of delivery in which the applicable conditions for Open Source Software are specified. This shall apply mutatis mutandis for notices referring to other third party software components.

#### 1.2 For customers with a seat or registered office outside **European Union**

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the "Standard Terms and Conditions for Consulting Services of the Division DF for Customers with a Seat or Registered Office Outside of Germany"1) and/or
- for other services the "International Terms & Conditions for Services"

  1) supplemented by "Software Licensing Conditions" and/or
- for other supplies of hard- and software the "International Terms & Conditions for Products"1) supplemented by "Software Licensing Conditions"1)

#### 1.3 For customers with master or framework agreement

To the extent our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

#### 2. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

<sup>1)</sup> The text of the Terms and Conditions of Siemens AG can be downloaded at https://mall.industry.siemens.com/legal/ww/en/ terms\_of\_trade\_en.pdf

## 3. Export Regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

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Prior to any transfer of goods, works and services provided by us to a third party you shall in particular check and guarantee by appropriate measures that

- there will be no infringement of an embargo imposed by the European Union, by the United States of America and/ or by the United Nations by such transfer, by brokering of contracts concerning those goods, works and services or by provision of other economic resources in connection with those goods, works and services, also considering the limitations of domestic business and prohibitions of by-passing those embargos;
- such goods, works and services are not intended for use in connection with armaments, nuclear technology or weapons, if and to the extent such use is subject to prohibition or authorization, unless required authorization is provided;
- the regulations of all applicable Sanctioned Party Lists of the European Union and the United States of America concerning the trading with entities, persons and organizations listed therein are considered.

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The products listed in this catalog may be subject to European/ German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities. Errors excepted and subject to change without prior notice.

#### A

# Link directory

# Catalog LV 10

# **General information**

Information on low-voltage power distribution and electrical	www.siemens.com/lowvoltage
installation technology	
Tender specifications	www.siemens.com/lowvoltage/tenderspecifications
Conversion tool	www.siemens.com/conversion-tool
Image database	www.siemens.com/lowvoltage/picturedb
CAx download manager	www.siemens.com/lowvoltage/cax
Newsletter system	www.siemens.com/lowvoltage/newsletter
Siemens YouTube channel	www.youtube.com/Siemens
Brochures / catalogs	www.siemens.com/lowvoltage/catalogs
Operating instructions / manuals	www.siemens.com/lowvoltage/manuals
Siemens Industry Online Support (SIOS)	www.siemens.com/lowvoltage/product-support
Siemens Industry Online Support app	www.siemens.com/support-app
My Documentation Manager (MDM)	www.siemens.com/lowvoltage/mdm
Configurators	www.siemens.com/lowvoltage/configurators
Siemens Industry Mall – product catalog and	www.siemens.com/lowvoltage/mall
online ordering system	
Direct forwarding to the Industry Mall	www.siemens.com/product?Article No.
Training	www.siemens.com/sitrain-lowvoltage
Local contacts	www.siemens.com/lowvoltage/contact
	www.siemens.com/lowvoltage/components/contact
	www.siemens.com/lowvoltage/systems/contact www.siemens.com/lowvoltage/software/contact
Tachnical Cunnert	www.siemens.com/lowvoltage/support-request
Technical Support Information on services	
	www.siemens.com/service-catalog
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Energy Suite	www.siemens.com/energysuite
SITOP power supplies	www.siemens.com/sitop
Power distribution with Totally Integrated Power	www.siemens.com/tip

# Catalogs and further information



LV 10 Low-Voltage Power Distribution and Electrical Installation Technology SENTRON • SIVACON • ALPHA

Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

PDF (E86060-K8280-A101-B3-7600)



LV 14 Power Monitoring Made Simple SENTRON

E86060-K1814-A101-A7-7600



LV 18
Air Circuit Breakers and Molded Case
Circuit Breakers with UL Certification
SENTRON

PDF (E86060-K8280-E347-A6-7600)



ET D1 Switches and Socket Outlets DELTA

PDF



IC 10 Industrial Controls SIRIUS

PDF (E86060-K1010-A101-B2-7600)



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www.siemens.com/industrymall



**Siemens TIA Selection Tool** 

for the selection, configuration and ordering of TIA products and devices

www.siemens.com/tst



SITRAIN
Digital Industry Academy
www.siemens.com/sitrain

The catalogs listed above and additional catalogs are available in PDF format at Siemens Industry Online Support www.siemens.com/lowvoltage/catalogs

Further information on low-voltage power distribution and electrical installation technology is available on the Internet at www.siemens.com/lowvoltage

### Get more information

#### www.siemens.com/lowvoltage

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# **Security information**

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the Internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/industrialsecurity