



**SIEMENS**

Totally Integrated Power – SIVACON 8PS

# More flexibility for the manufacturing industry

LI, LD and BD2 busbar trunking systems

[siemens.com/busbar](https://www.siemens.com/busbar)



## Totally Integrated Power (TIP)

A reliable, highly available, and flexible power supply for industries as well as buildings and facilities provides the basis for both industrial processes and infrastructure solutions.

Siemens' solution is Totally Integrated Power (TIP), our comprehensive power supply portfolio of software and hardware products, holistic systems for all voltage levels, as well as energy management solutions. TIP is closely linked to industrial and building automation systems and is integrated into enterprise IT systems. This allows to fully exploit all the optimization potential of an integrated solution. TIP meets even the toughest requirements of supply-critical assets. An extensive support throughout the entire lifecycle starting with planning up to services completes our offering.

### **An important part of TIP for the manufacturing industry: SIVACON 8PS busbar trunking systems**

Manufacturing businesses in fields such as metal processing, mechanical engineering, food and beverage and handicraft face the same challenges everywhere: customer requests must be satisfied on an individual basis, swiftly, at minimal costs – and in an environmentally friendly way. Our LI, LD and BD2 busbar trunking systems help meet these needs every step of the way, boosting operational excellence by keeping the power flow flexible and economical at all times.



SIVACON 8PS  
busbar trunking systems:  
for safe power flows

# SIVACON 8PS busbar trunking systems

For greater power supply flexibility in the  
manufacturing industries

## Power supply: consistent and flexible

With a conventional installation, power flows from the transformer via the main distribution board and power tap-offs to the consumers, motor control centers (MCCs) and sub-distribution boards. These then supply the smaller feeders, while the MCCs feed the motors. Your plant can be made safer, better organized and more flexible by using the SIVACON 8PS busbar trunking systems for efficient, decentralized power distribution. One benefit is how easy it is to make basic adjustments to the power distribution system without impacting production: simply switch<sup>1)</sup> the tap-off units to the next or any other tap-off point. The result is high flexibility.

## Power transmission: reliable and safe

Design verification in accordance with IEC 61439-1/-6 ensures that the systems offer a high level of safety for both people and buildings. Their high short-circuit rating and their low fire load due to the metal housing make them highly reliable.

## Power flow: transparent and efficient

Integrated communications-capable measuring and switching devices enable future-proof integration into company-wide energy management systems in compliance with ISO 50001. The result is improved efficiency for applications in industry and infrastructure.

## SIVACON 8PS Benefits at a glance

### Economic advantages

- Enhanced planning certainty
- Easy to install
- High level of flexibility for planning and operation
- Energy transparency through communications-capable measuring and switching devices

### System and operational safety

- Design verified low-voltage busbar trunking systems and connections to SIVACON S8 switchboard
- Halogen-free

### Reliability

- High short-circuit rating
- Easy troubleshooting and error correction

### Innovation

- Safe, compact, and flexible solution compared to cables

### Everything from a single source

- Assistance with planning, installation, and operation
- Complete portfolio serving a power range from 40 A to 6,300 A

1) In compliance with EN 50110-1 (VDE 0105-1); always observe national regulations/standards.

# LI, LD and BD2 – The abbreviations that give you increased safety and availability



LI system, 800 A to 6300 A



LD system, 1100 A to 5000 A



BD2 system, 160 A to 1250 A

The LI, LD and BD2 busbar trunking systems from the SIVACON 8PS product family all complement each other and deliver nothing but advantages for industrial applications ... every step of the way.

## LI system: for large amount of power over long distances

The LI busbar trunking system is particularly suited to applications in the 800 A to 6,300 A range, and where large amount of power have to be transmitted or distributed flexibly over long distances. In other words, in infrastructure – such as multistory buildings – and industrial applications. Its compact sandwich design enables the system to transmit power with a low voltage drop. The LI system can be run at full load at high temperatures – up to 40°C – without derating. An end-to-end, safe power supply is ensured by the design verified connections to SIVACON S8 switchboards and safe connections to transformers and the other SIVACON 8PS busbar trunking systems, including the LR system for outdoor installation.

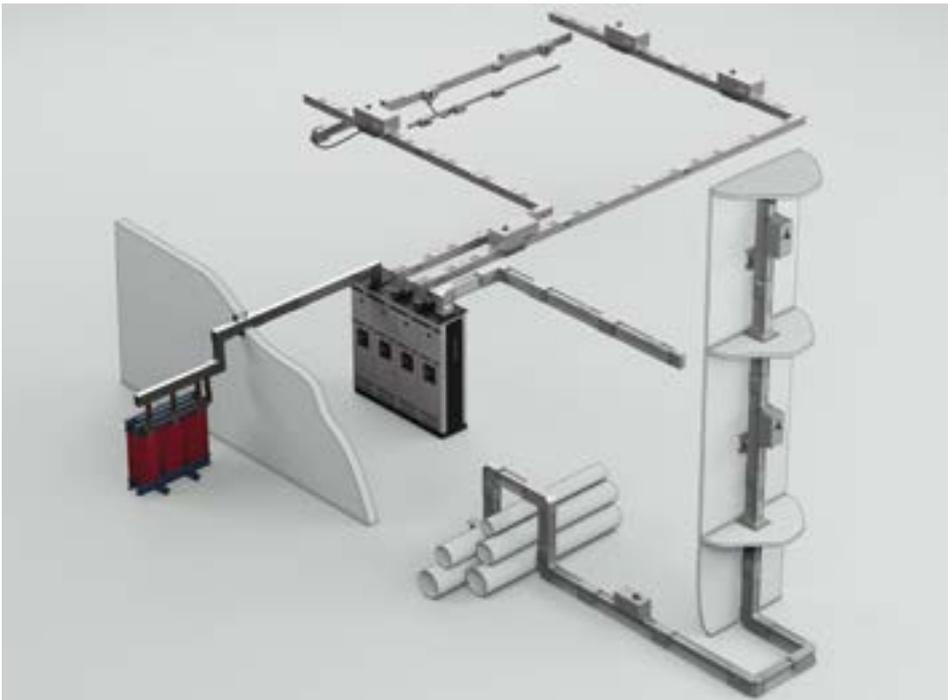
## LD system: for safe power in a production environment

The air-ventilated LD busbar trunking system, from 1,100 A to 5,000 A, is the system for transmitting and distributing current in production lines with a large energy requirement, such as in the semiconductor industry. This enables power distribution to be planned reliably and easily. A separate PE conductor ensures that the protective device in such a system responds reliably even if the current paths are relatively long.

The LD system's high short-circuit rating allows medium-voltage switches to be used as protective elements for the transmission of power between transformer and main power supply and saves the need for a protection device at the low-voltage end. This allows a high degree of flexibility in power distribution. Tap-off units of up to 1250 A can be plugged in under voltage<sup>1)</sup>.

## BD2 system: high performance in a small area

The BD2 system is the specialist for applications between 160 A and 1,250 A. It is used to supply medium-sized consumers with power in buildings and all industrial environments. Universal application is provided by prefabricated tap-off units with a wide range of fittings. And the fact that only two standard sizes are needed to cover all current ranges makes storage and planning much easier.



## LI, LD and BD2: What all the systems offer

### **Design verified: for a high safety level**

The SIVACON 8PS busbar trunking systems are design verified in accordance with the state of the art (IEC 61439-1/-6). A safe connection to the transformer and the design verified standard connection components in the SIVACON S8 low-voltage switchboard with the SIVACON 8PS busbar trunking system keep faults and their consequences to a minimum. The system has a very low fire load, which could save lives in extreme cases.

### **Short circuit-proofed: for high reliability**

All systems are made to handle very high short-circuit currents, ex factory. This means your facilities are safer and more reliable when it comes to energy availability.

### **Energy transparency: for high economic efficiency**

The ability to integrate communications-capable measuring and switching devices into higher-level systems is crucial for implementing and monitoring power-saving measures.

The result is holistic transparency when it comes to optimizing power costs and consumption. The information that is obtained provides a realistic basis for allocation to cost centers, measures aimed at increasing energy efficiency, and safety of operation.

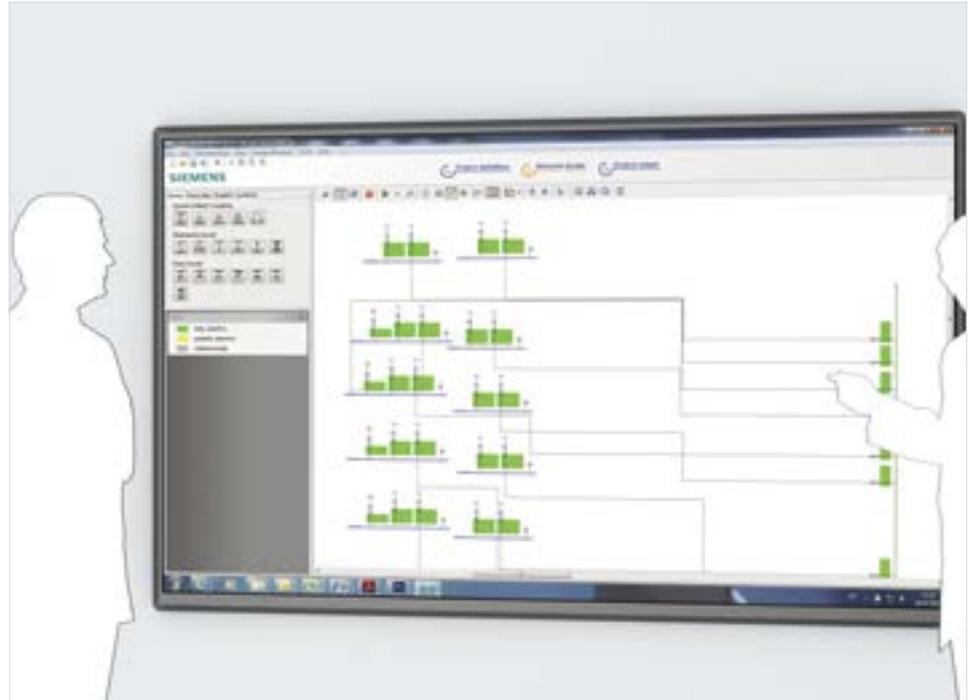
### **Compact: for high cost effectiveness**

All systems are very compact, which allows them to transmit and distribute very large volumes of electricity even in very small spaces. This offers two main advantages: It simplifies planning many times over and lets you make the best possible use of the spaces available for power supply.

### **High level of flexibility: for high economic efficiency**

All systems also offer the ability to switch consumers on and off while the system is under voltage<sup>1)</sup>. As a result, changes and rearrangements to your production facilities can be made without having to interrupt the production flow – a major plus in terms of cost effectiveness.

1) In compliance with EN 50110-1 (VDE 0105-1); please always observe national regulations/standards.



## SIVACON 8PS busbar trunking systems: Always a safe investment

Flexibility, cost effectiveness and safety are the key demands of the manufacturing industry on its technology. The SIVACON 8PS busbar trunking systems satisfy all of these while providing a true competitive edge:

- They are the technologically superior alternative to using cables;
- They make it possible to implement flexible, state-of-the-art power distribution strategies;
- And they ensure a long-term, safe and reliable power supply...
- ... that can be adapted to your needs at any time.

Our specialists provide you with support throughout the entire lifecycle, from planning to commissioning and after-sales service.

# Support

Time optimization with Siemens as your expert partner at your side

## SIVACON 8PS busbar trunking systems on the Internet

Our website offers you a wide range of promotional and technical information as well as helpful tools for the SIVACON 8PS busbar trunking systems.

[siemens.com/busbar](https://www.siemens.com/busbar)



### Convenient planning using SIMARIS tools

Planning of electrical power distribution for industrial plants, infrastructure and buildings is increasingly complex. Innovative SIMARIS software tools provide effective support for your planning process enabling you, the electrical designer, to work better and faster under the given conditions.

#### ■ SIMARIS design

Dimensioning electricity networks and selecting components automatically

#### ■ SIMARIS project

Calculating space requirements and budgeting for power distribution

#### ■ SIMARIS sketch

Creating 3D line routing plans for the BD01, BD2, LD and LI busbar trunking systems

[siemens.com/simaris](https://www.siemens.com/simaris)

### Technical documentation on the Internet

An up-to-the-minute overview of the available technical documentation on the SIVACON 8PS busbar trunking systems is available on the Internet at

[siemens.com/lowvoltage/product-support](https://www.siemens.com/lowvoltage/product-support)

### Tender specifications

We offer you a comprehensive range of tender specification texts to assist you at

[siemens.com/specifications](https://www.siemens.com/specifications)

### Building on a sound foundation

Our training courses provide you with a solid foundation for your business success.

Experts provide the theoretical and practical knowledge you need for our SIVACON 8PS busbar trunking systems.

[siemens.com/lowvoltage/training](https://www.siemens.com/lowvoltage/training)

### Reliable on-site support

Our local experts are there for you worldwide. They help you develop power supply solutions and offer you support with their specialist knowledge in project management and financial services, while always taking important aspects such as safety, logistics, and environmental protection into account.

For your TIP contacts, see [siemens.com/tip-cs](https://www.siemens.com/tip-cs)

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