Flexible power supply for workshops and production

BD01 and BD2 busbar trunking systems
Totally Integrated Power

Totally Integrated Power (TIP) stands for integrated power supply solutions for industries, buildings, and facilities. Siemens’ comprehensive electrification portfolio enables a reliable, safe, and efficient power supply using software and hardware products, systems, and solutions for all voltage levels. TIP comprises everything it takes to supply power for challenging environments. Smart interfaces to industrial and building automation systems are the key to tapping the full potential offered by an integrated power supply solution. The portfolio is rounded out by comprehensive support throughout the entire lifecycle – from planning to maintenance.

Purpose-designed for workshops and production – flexible SIVACON 8PS busbar trunking systems
The most important requirement placed on a workshop or production is to be able to tap small volumes of power as near as possible to the consumer load location. The solution: BD01 and BD2 busbar trunking systems from SIVACON 8PS product family. These systems use standardised tap-off units that can be flexibly changed, and are economical as well as safe and reliable.
SIVACON 8PS busbar trunking systems
Versatile power supply in workshops and production

In contrast to conventional cable installation, BD01 and BD2 busbar trunking systems combine cost-effectiveness, flexibility, reliability and safety – and thus deliver real benefits over your competition.

Economic planning and installation
Thanks to simple planning and fast installation of the power distribution network, the SIVACON 8PS busbar trunking systems enable reliable, efficient power supply throughout buildings.

Flexible system when expansions are needed
Both systems are comprised of straight busbar trunking units measuring up to 3.25 m in length, either with or without tap-off points, as well as feeding units, flexible junction units, tap-off units and ancillary equipment units that allow the system to be adjusted or expanded as needed.

High reliability and safety of every module
The design verified switchgear and control-gear assemblies in compliance with IEC 61439-1/-6 allow hazard-free plug-in disconnected from load while energized 1) thanks to a contact apparatus in the tap-off units. Supplementary coding of the modules reduces the risk of operating errors.

1) In accordance with EN 50110-1 (VDE 0105-1); please always observe all national regulations/standards
Modular system for complete freedom in planning and operation

Right from the start, SIVACON 8PS lowers installation and operating costs over the long term because the planning phase goes quickly and thus saves costs.

It’s simple with SIMARIS
The SIMARIS planning tools and our local Siemens contacts provide all necessary support, from planning and network calculation to generating line routing plans. Among other tools, SIMARIS sketch can be used to intuitively route busbar runs, visualising the busbar routing, including accessories, in 3D display.

Flexible adaptation using BD2
The BD2 system is particularly well suited to applications in the 160 A to 1250 A range with increased safety requirements. Available in two sizes and in aluminium or copper design, the system covers seven current ratings. Junction units allow flexible adjustments to building structures. Power distribution can be individually adjusted thanks to variable mounting positions and flexible end fittings. The system can configure standard lengths of 1.25 m, 2.25 m and 3.25 m as well as freely selectable lengths ranging from 0.5 m to 3.24 m, fitting with tap-off points spaced at 0.50 m on either side or offset on both sides every 0.25 m.

Equipping systems with flexible tap-off units using BD01
The BD01 system designed in a single size for 40 A to 160 A applications can be individually supplemented with protection devices as well further components (Schuko and CEE sockets). The tap-off units can be flexibly positioned without having to de-energise the system. Standard lengths of 2 m and 3 m fitted with tap-off points at 0.5 m or 1 m spacing and junction units round out the system features.
Reducing the time needed for installation
Even during production operations, busbar trunking systems allow simple, fast installation of power runs offering facility-wide power supply. Mounted on the building superstructure, the mechanical and electrical connections can be completed in a single work step. Thanks to the numerous tap-off points available, the system can be installed without precise division of the production hall into sections, or any final machinery arrangement drawing – which saves additional time.

Optimum use in operation
Laying new power cables often entails having to shut down production work. With SIVACON 8PS, however, systems can be changed over quickly. Modular tap-off units and system components simplify system expansion and ensure power supply is maintained. In this way, a facility’s entire machinery inventory can be flexibly changed over by plugging and removing tap-off units while energised 1). Another advantage is the clearly arranged configuration of the overall power supply system.

1) In accordance with EN 50110-1 (VDE 0105-1); please always observe all national regulations/standards
Enhanced safety in all areas

**Tested safety**
The design verified low-voltage switchgear and controlgear assemblies in compliance with IEC 61439-1/-6 make it possible to achieve a high level of safety for people and buildings. Compared to cable installations, the busbars offer a high short-circuit rating and a low fire load.

**Reliable in every operational phase**
These busbar trunking systems also offer a high degree of protection. Installation of additional machinery will consequentially diminish the easy comprehensibility of power cable installation arrangements, for example, while such additions in facilities served by busbar trunking systems will be accommodated by installing switching devices near to the power consumer loads, thus reducing the risk of operating errors.

**Protection for personnel**
The mechanically guided dismantling and installation of the system, which uses coding of the tap-off units to prevent mix-up errors, ensures a high level of safety.

**More areas of application, more orders**
Compared to cable installations, these highly flexible busbar trunking systems are more economical in terms of overall cost. Whether for an automotive workshop, a bakery or a manufacturing plant – an innovative power supply system design can be prepared at your premises with the support of expert advisors, starting with initial planning and covering the facility’s entire lifecycle. You benefit from a future-proof power supply system that is adaptable for future expansion at low cost.
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

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

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

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

siemens.com/lowvoltage/product-support

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

siemens.com/specifications

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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.

Expert staff from our TIP Consultant Support unit will provide you with targeted support for the planning and design of electrical power supply systems.

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