The complete portfolio for low-voltage power distribution

Safe, cost-efficient and flexible

Answers for infrastructure.
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Comprehensive product portfolio

Whether in industrial plants or in buildings: Every technical system depends on a reliable supply with electrical energy. Even a short power failure may have serious consequences. We provide the best technology for the responsible use of electrical energy, helping to save and protect human lives, capital assets and natural resources.
Consistent, safe and intelligent power distribution

Our more than 160 years of experience and technical know-how makes us a strong and reliable partner. At the same time we have the expertise and international presence to develop innovative products and systems for a safe and intelligent power distribution and deliver them in accordance with your requirements anywhere in the world.

Our portfolio comprises power distribution boards, busbar trunking systems, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. We will be glad to provide you with extensive support from initial information, planning, configuration and ordering through to commissioning, operation and technical support. Convince yourself of the possibilities we offer you.
Our comprehensive offering for your success

The right product for every need
The consistency, modularity and intelligence of our components and systems offer you numerous advantages – throughout their service life and wherever you are in the world. Developed in accordance with the respective international standards we deliver trendsetting design with innovative functions and guarantee the highest quality standards world-wide.

Sustainability in focus
As global leading supplier of first-class, standard compliant products and systems for low-voltage power distribution we contribute to a sustainable and responsible use of electrical energy. With our consistent portfolio, enabling power supply and distribution, personell, fire and line protection as well as energy management, we support sustainable energy concepts in the areas of wind energy, photovoltaic, electromobility, smart buildings, infrastructure and industry.

Making efficient use of energy
The consistent concept behind the communication-capable components of our low-voltage power distribution range forms a sound basis for the measurement, indication, evaluation and optimization of power flows, thus enabling professional energy management for more cost-effectiveness.

Excellent support
As a competent and reliable partner we offer you comprehensive support. We know the requirements to be met in your area of work and day-to-day business. On this basis we provide you with the type of flexible and efficient help that allows you to concentrate fully on your customers and their needs.

More information
www.siemens.com/lowvoltage

Highlights
- From the medium-voltage to the socket outlet – all from one source
- Cost savings through communication-capable products for efficient energy management
- Comprehensive support – from planning to operation
- Top quality standards world-wide

Read the QR code with the QR code reader in your mobile!

Whether in industrial applications or in the infrastructure – our comprehensive portfolio of products and systems offers safe, flexible and efficient possibilities of application for low-voltage power distribution and electrical installation technology.
Consistent and safe power distribution from the medium-voltage switchgear to the socket outlet – for buildings in infrastructure and industry.

Totally Integrated Power

Everything for power distribution
Consistent end-to-end solutions are needed for power distribution in buildings. Our answer is Totally Integrated Power™ (TIP). TIP stands for innovative products, systems and software tools which ensure the safe and reliable distribution of power. They are supplemented by communication-capable switches and modules which connect the power distribution system to the building automation or industrial automation. These in turn can be linked to a comprehensive energy management system which contributes to optimizing the consumption of electricity and hence to lowering operating costs.

Consistency is the name of the game
Totally Integrated Power accompanies power distribution projects from the planning stage to the installation, use and operation of a building. Our software tools assist electrical planning engineers with the planning of electrical networks and help electrical installers with the configuration. A broad portfolio of products and systems is available for the construction of power distribution systems. On the following pages, you can find further information on our SIVACON power distribution boards and busbar trunking systems, as well as on the ALPHA distribution boards with SENTRON protection, switching, measuring and monitoring devices. Switches and socket outlets round off our range.

More information
www.siemens.com/tip

Highlights
- Consistent software tools for planning and configuration
- Coordinated products and systems from the medium-voltage switchgear to the socket outlet
- Connection to building automation or industrial automation systems through communication-capable switches and modules
1 Medium-voltage switchgear
2 Transformer
3 Busbar trunking systems
4 Low-voltage switchboards
5 Distribution boards
6 Protection devices
7 Switching devices
8 Measuring devices
9 Monitoring devices
10 Switches and socket outlets

11 Operator control and monitoring of energy automation, energy management and protection technology
12 Building automation

Green Applications:

a Wind energy
b Photovoltaic
c Electromobility

Integrated solutions for power distribution.
Consistently well informed
A sustainable reduction of power costs first requires an analysis of the electrical system’s current consumption and power flows. Here, our measuring devices 7KT/7KM PAC and communication-capable circuit breakers 3WL/3VL support you. They precisely and reliably detect the power values for electric feeders or individual consumers. In addition, the measuring devices 7KM PAC provide you with important measured values for assessing the system state and the power quality. For further processing of the measured data the devices come with manifold communication options for smoother integration in higher-level automation and energy management systems.

Reliable through communication
Technical plants must run economically. This means continuously optimizing their capacity utilization and avoiding downtimes. Against this background the data from measuring devices and communication-capable switching and protection devices are being analyzed and documented to an increasing extent. From load profile curves and trend analyses to the visualization of switching states: Our measuring devices and software provide you with the information you need.

More information
www.siemens.com/lowvoltage/energy-management

Measuring devices for collecting and providing consumption data and electrical characteristics.

Through the transparency of power flows it is easy to identify savings potential.
**Measuring devices 7KT/7KM PAC**

<table>
<thead>
<tr>
<th></th>
<th>7KT PAC3000</th>
<th>7KM PAC3100</th>
<th>7KM PAC3200</th>
<th>7KM PAC4200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of measurement variables</td>
<td>&gt; 30</td>
<td>&gt; 30</td>
<td>&gt; 50</td>
<td>&gt; 200</td>
</tr>
<tr>
<td>Basic measurement variables</td>
<td>e.g. voltage, current, power, energy values, frequency, power factor (min./max. values)</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Extended measurement variables</td>
<td>e.g. THD, unbalance for current and voltage</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>e.g. phase angle, phase displacement angle, harmonics in voltage and current</td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power measurement</td>
<td>Power meters (input and output)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Load profile record with time stamp</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>System integration and communication</td>
<td>Ethernet</td>
<td>optional</td>
<td>integrated</td>
<td>integrated</td>
</tr>
<tr>
<td></td>
<td>RS485 (Modbus RTU)</td>
<td>optional</td>
<td>integrated</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td>PROFIBUS DP (V1)</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>S0 interface</td>
<td>×</td>
<td>-</td>
<td>IS/DO usable as S0 interface</td>
<td></td>
</tr>
</tbody>
</table>

**Measuring devices 7KT PAC1500**

<table>
<thead>
<tr>
<th></th>
<th>Single-phase measuring devices</th>
<th>Three-phase measuring devices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7KT1 530</td>
<td>7KT1 531</td>
</tr>
<tr>
<td>Direct connection</td>
<td>up to 80 A</td>
<td>up to 80 A</td>
</tr>
<tr>
<td>Transformer connection</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Calibrated version</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S0 interface</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>IR interface (for the connection of communication modules)</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

**Software for energy management powermanager**

- Visualizing and archiving of measured values, e.g. also as a load curve
- Limit value monitoring by means of freely configurable alarms
- Predefined cost center reports for consumption evaluation
- Important block for energy management systems, e.g. according to the new standard EN 16001
- Scalable software for flexible adaptation to diverse requirements
The increasingly complex area of building management, but also considerably improve the efficiency of industrial applications by ensuring a safe and reliable power supply. The busbar trunking systems SIVACON 8PS offer optimum safety thanks to typetested low-voltage switchboard and controlgear assemblies (TTA) in accordance to IEC/EN 60439-1 and -2. The high shortcircuit strength and low fire load due to the sheet-steel enclosure of the systems increase safety for people and buildings.

More information
www.siemens.com/sivacon

Cost-efficient system
The SIVACON® S8 low-voltage power distribution board sets new standards as a power distribution board for industrial applications or in infrastructure. The power distribution board system up to 7,000 A for the simple and consistent distribution of power guarantees maximum personal and system safety and, thanks to its optimal design, offers a wide range of possible uses. Thanks to the modular technology, the power distribution board can be optimally adapted to every requirement when designing the complete system. With its combination of maximum safety and a modern design, the system offers a highly cost-efficient solution.

Optimum power flow
A total of six different busbar trunking systems offer everything required for modern power transportation and distribution matched to your individual requirements. With the busbar trunking systems SIVACON 8PS, you will not only benefit from a transparent and flexible solution for controlling the increasingly complex area of building management, but also considerably improve the efficiency of industrial applications by ensuring a safe and reliable power supply. The busbar trunking systems SIVACON 8PS offer optimum safety thanks to typetested low-voltage switchboard and controlgear assemblies (TTA) in accordance to IEC/EN 60439-1 and -2. The high shortcircuit strength and low fire load due to the sheet-steel enclosure of the systems increase safety for people and buildings.

More information
www.siemens.com/sivacon

SIVACON 8PS busbar trunking systems ensure the safe distribution of power.

SIVACON switchboards provide personnel and plant safety.
SiVACON S8 power distribution board with SENTRON components

Switch disconnectors with 3KL/KM LV HRC fuses

Switch disconnectors 3KA/3KE

Switch disconnectors with LV HRC fuses 3NJ62

Molded-case circuit breakers 3VL

Main and EMERGENCY-STOP switches 3LD

Measuring devices 7KM PAC

Air circuit breakers 3WL

1 Circuit breaker system – compact and safe
2 Universal installation system – can be individually combined

3 Fixed-mounted system – cost-effective construction
4 3NJ4 in-line system – flexible implementation

5 3NJ6 in-line system – compact and highly functional
6 Reactive power compensation – reduce energy costs efficiently

SiVACON 8PS busbar trunking systems

<table>
<thead>
<tr>
<th>CD-K system – 25 A and 40 A</th>
<th>BD01 system – 40 A to 160 A</th>
<th>BD2 system – 160 A to 1,250 A</th>
</tr>
</thead>
</table>

Power supply of lighting systems and small consumers in shopping malls, logistic warehouses and any type of buildings

Power supply for small loads in workshops and lighting systems

Power transportation and distribution in office buildings and transfer lines in all industrial application areas

LD system – 1,100 A to 5,000 A

LX system – 800 A to 6,300 A

LR system – 630 A to 6,300 A

Power transportation and distribution in exhibition halls, the automotive industry, heavy industry and on ships

Power transportation and distribution of high currents in large buildings, broadcasting stations, data centers and for chip and semiconductor productions

Transportation of large power volumes in harsh ambient conditions, for supplying tunnels or for the outdoor networking of building sections, and for power transportation in the chemical industry
The system idea counts
Whether you need small, wall-mounted or floor-mounted distribution boards – with our ALPHA distribution systems you are sure of getting a well thought out system that is fully coordinated in technology and design. All ALPHA distribution boards offer highly reliable quality and safety meeting the regional standards. ALPHA SELECT configuration software makes planning easier and therefore reduces costs.

Flexible for every need
ALPHA distribution boards offer you a comprehensive range of wall-mounted and floor-mounted distribution boards for currents of 125 A to 1,250 A. ALPHA SIMBOX small distribution boards are used peripherally as sub-distribution boards. They are particularly notable for their uniform design and functionality.

Functional in every environment
ALPHA 8HP molded-plastic distribution system is a specially designed modular system which shows its strengths in harsh and aggressive environments. Therefore, it is particularly suitable for industrial applications and infrastructure.

Always the right connection method
ALPHA FIX terminal blocks satisfy all expectations when it comes to easy and clearly arranged wiring. They are available for all standard connection methods.

More information
www.siemens.com/alpha
### ALPHA distribution boards and terminal blocks

**ALPHA small distribution boards and distribution boards (up to 1,250 A)**

Consistent technology and uniform design of the ALPHA distribution boards and components thanks to a platform structure.

**ALPHA BHP molded-plastic distribution systems (1,000 A)**

The ALPHA BHP molded-plastic distribution system in modular design offers room for all types of devices. The modular support rack permits flexible and easy assembly – also as a floor-mounted distribution board.

**ALPHA FIX terminal blocks**

ALPHA FIX terminal blocks are available for all standard connection methods.
Always on the safe side
We offer a protection concept with a coordinated range of devices: for line, personnel and fire protection, lightning and overvoltage protection, as well as device and plant protection. You therefore increase plant availability in industrial applications, in infrastructure and in buildings.

Flexible in its range of applications
The air circuit breaker 3WL or the molded-case circuit breaker 3VL take on important switching and protection functions in power distribution. Designed to be consistently modular and with an extensive range of accessories, they have a wide range of applications.

High operational reliability
All safety and security systems to protect people, plant and devices from short-circuits and overcurrents are available. LV HRC fuses and LV HRC fuse switch disconnectors are perfectly coordinated. The compact switch disconnectors are used for occasional manual switching and activation of load feeders and current distribution in industry and infrastructure.

Certain reliability
Fault current protective devices protect human lives and prevent electrical fires.

In addition to ground-fault circuit interrupters, combined RCBOs and RC units are available. They, in conjunction with miniature circuit breakers, unify personnel, fire, short-circuit and overvoltage protection in one device.

Comprehensive protection – world-wide
Miniature circuit breakers protect cables from damage from overcurrents or short-circuits. The comprehensive range of products is characterized by simple assembly and connection methods, uniform additional components and a consistent design. Our products comply with IEC/EN and UL standards, therefore they can be used world-wide.

More information
www.siemens.com/lowvoltage/sentron

We always have the right device for any application – to protect human lives and assets.

Safe and reliable power distribution for requirements in industry, infrastructure and buildings.
# SENTRON protection devices (excerpt from the portfolio)

## Circuit breakers

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Circuit Breakers</td>
<td>3WL</td>
</tr>
<tr>
<td>Molded-case Circuit Breakers</td>
<td>3VL</td>
</tr>
</tbody>
</table>

## Miniature circuit breakers and overvoltage protection devices

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miniature Circuit Breaker</td>
<td>5SL, for 6kA standard applications</td>
</tr>
<tr>
<td>Miniature Circuit Breaker</td>
<td>5SJ6 ...-KS with plug-in terminal</td>
</tr>
<tr>
<td>Miniature Circuit Breaker</td>
<td>5SY6 Q, for little installation space</td>
</tr>
<tr>
<td>Miniature Circuit Breaker</td>
<td>5SY and 5SP, for very high requirements</td>
</tr>
<tr>
<td>Miniature Circuit Breaker</td>
<td>5SJ4 ...-HG, for world-wide use</td>
</tr>
<tr>
<td>Surge arrester</td>
<td>5SD7, type 2</td>
</tr>
</tbody>
</table>

## Residual current protective devices

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual Current Circuit Breaker</td>
<td>5SM3</td>
</tr>
<tr>
<td>RC Unit</td>
<td>5SM2</td>
</tr>
<tr>
<td>RCBO</td>
<td>5SU1</td>
</tr>
</tbody>
</table>

## Fuse systems

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuse System</td>
<td>NEOZED</td>
</tr>
<tr>
<td>Fuse System</td>
<td>DIAZED</td>
</tr>
<tr>
<td>Cylindrical Fuse System</td>
<td></td>
</tr>
<tr>
<td>Fuse System</td>
<td>Class CC</td>
</tr>
<tr>
<td>LV HRC Fuse System</td>
<td></td>
</tr>
<tr>
<td>Semiconductor Fuses</td>
<td>SITOR</td>
</tr>
<tr>
<td>Photovoltaic Fuses</td>
<td></td>
</tr>
</tbody>
</table>

## Switch disconnectors with LV HRC fuses

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch Disconnectors with 3KL LV HRC fuses</td>
<td></td>
</tr>
<tr>
<td>Switch Disconnectors with LV HRC fuses and Isolating Plug Connector</td>
<td>3KM</td>
</tr>
<tr>
<td>In-line Switch Disconnectors with LV HRC fuses</td>
<td>3NJ6</td>
</tr>
<tr>
<td>LV HRC Fuse Switch Disconnectors</td>
<td>3NP</td>
</tr>
<tr>
<td>In-line LV HRC Fuse Switch Disconnectors</td>
<td>3NJ4, 3NJ5</td>
</tr>
</tbody>
</table>
Isolated from the mains supply safely
The switch disconnectors 3KA and 3KE are specialists for unfused isolation in all low-voltage networks. They act as main, EMERGENCY-STOP, maintenance and transfer switches.

Switching of loads and control units
Whether a two-way, group or control switch – control switches solve many tasks. Two-way switches are used in control cabinets and distribution boards for switching small loads on/off or switching them over. Group switches with a middle position permit open/stop/closed positions, for example to control counter-clockwise rotation – off clockwise rotation. Control switches also show, with an integrated pilot lamp, the “ON” switch position.

Remote switching
Where equipment and load are controlled by electric signals, switching devices such as remote control switches, switching relays or Insta connectors are used.

Time switching
Whether heating in an apartment, the exterior lighting of an office building or the drying equipment of production lines, time switches are used everywhere. They maximize safety and comfort and minimize energy consumption.

Safe monitoring around the clock
High plant availability and low downtimes keep costs low. The transfer control device 3KC ATC5300 increases the supply safety between two power supplies through automatic or manual switching.

Mobile monitoring and control
You always have the system in view from anywhere with the GSM alarm module. It makes it possible to report breakdowns and interruptions as well as to easily send commands to up to five mobile phones by SMS.

More information
www.siemens.com/lowvoltage/sentron

Highlights
- Components that are perfectly coordinated with one another
- Comfort, safety and reduced energy consumption through time switches
- Increased operational safety due to monitoring devices
- Mobile monitoring of systems and messaging of failures by SMS

SENTRON Switching, Measuring and Monitoring Devices

Increased safety and comfort through switching and monitoring.

High plant availability due to safe power distribution.
### SENTRON switching, measuring and monitoring devices (excerpt from the portfolio)

#### Switch disconnectors
- Main and EMERGENCY-STOP switches 3LD
- Switch disconnectors 5TE1
- Switch disconnectors 3KA, 3KE

#### Switching devices
- Control switches 5TE8
- Pushbuttons 5TE4
- Light indicators 5TE5
- ON/OFF switches 5TE
- Remote control switches 5TT4
- Switching relay 5TT4
- Insta contactors 5TT5
- Timers 7LF

#### Measuring devices
- Detection of energy:
  - Measuring devices 7KT PAC1500
- Cost-effective devices for digital measurement:
  - Measuring devices 7KT PAC3000
  - Measuring devices 7KM PAC3100
- The specialist for precise power measurement:
  - Measuring devices 7KM PAC3200
- The expert for communication and monitoring:
  - Measuring devices 7KM PAC4200

#### Monitoring devices
- Transfer control devices 3KC ATC5300
- Monitoring devices for medical premises 7LQ3
- Monitoring devices for electrical values
- Monitoring devices for plants and devices
Diversity of design and function
Whether classical design or exclusivity, a flexible system or a high-grade material – our ranges are as varied as tastes themselves, and as international as our customers. You have a choice of numerous switch ranges made of different materials and with countless combination options. The switches are functional and easy to install. Besides switches our offering includes also other user-friendly solutions for making your life safer, more agreeable and comfortable. This includes dimmers, motion detectors, central shutter/blind controls and remote control systems. Most ranges are suitable for GAMMA building control for greater comfort and safety in the building.

Environmentally friendly products
Another positive aspect of the DELTA ranges is the use of environmentally friendly materials. For example, the device inserts contain no cadmium or nickel, and the socket outlets and design elements no PVC or halogens. Our products are developed and manufactured in accordance with the most stringent environmental standards.

International product portfolio
We offer a comprehensive range of products: switches and socket outlets in modular and monobloc technology for Asia and South America, for Europe in VDE technology and according to British standard.

More information
www.siemens.com/delta
### International switches and socket outlet range

<table>
<thead>
<tr>
<th>British standard: UK / UAE</th>
<th>DIN VDE: Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crabtree</td>
<td>Delta miro artist</td>
</tr>
<tr>
<td>Volex</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modular and monoblock: Asia</th>
<th>Modular and monoblock: South America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta lavie</td>
<td>Iriel brava</td>
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<tr>
<td>Delta azio</td>
<td></td>
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<tr>
<td>Delta mondo</td>
<td>ilus</td>
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</table>
**Products for the UL/CSA market**

**Comprehensive UL portfolio**
For residential, commercial and industrial applications, we offer a complete range of products for the UL/CSA market for low-voltage power distribution and circuit protection. It includes circuit breakers, safety switches, power distribution systems such as switchgear, switchboards and busway systems, panelboards and standby power units, as well as energy management systems and circuit protection solutions. In the residential and light commercial markets we are also represented with the Murray brand.

**UL approval ensures safety**
We have comprehensive expertise in the area of UL approval, from manufacturing to wiring of control cabinets in accordance with UL. In doing so, we work together closely with Underwriters Laboratories Inc.® – the leading world-wide organization for testing and certification in the field of product safety. The result is a wide portfolio of UL-certified products for low-voltage power distribution. We offer a complete range of products to support OEM manufacturers and infrastructure alike, in accordance with American regulations, compliant with UL and NFPA, as well as CSA. Our products are rated from over 5,000 A to 1 A – from the incoming main to the branch protective device.

**More information**
www.usa.siemens.com/residential
www.usa.siemens.com/powerdistribution
www.siemens.com/lowvoltage/ul

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**Highlights**
- Consistent portfolio for the UL/CSA market
- High level of expertise in standards and specialist knowledge due to comprehensive UL know-how
- Long-running cooperation with Underwriters Laboratories Inc.®
We supply core components for power distribution for residential buildings, commercial and industrial applications.

1 Standby power units
2 Transformers
3 Low-voltage switchgear/switchboards
4 Power breakers
5 Molded-case circuit breakers
6 Main and EMERGENCY-STOP switches
7 Energy management solutions
8 Busway systems
9 Panelboards, load centers, metering
10 Electronic and thermal magnetic circuit breakers
11 Lighting control
12 Safety switches
13 Building control
Our references prove our expertise

As an international supplier, our products can be used world-wide thanks to numerous certifications. Our comprehensive offering and specific sector know-how are put to use world-wide.

**Highlights**
- A reliable partner with a wide sector know-how
- Development of innovative products and systems according to customer requirements
- References from all sectors world-wide

**Comprehensive experience**
We have many years of experience in low-voltage power distribution and electrical installation technology in all sectors of industry, infrastructure and buildings. We develop innovative products and systems which meet your requirements and stand out by their safety, reliability, cost-efficiency and comfort.

**We are at home in all sectors**
We can look back on countless projects which were successfully completed for our customers. Convince yourself of our broad product range, comprehensive sector know-how and unique technology experience.

**More information**
www.siemens.com/lowvoltage/references

Read the QR code with the QR code reader in your mobile!
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office buildings</td>
<td>Low operating costs and optimum working conditions</td>
</tr>
<tr>
<td>Industry: Water and sewage</td>
<td>Maximum safety required</td>
</tr>
<tr>
<td>Electromobility</td>
<td>A comprehensive and safe charging infrastructure</td>
</tr>
<tr>
<td>Hospitals</td>
<td>Safer, more cost-effective and smoother operation</td>
</tr>
<tr>
<td>Airports</td>
<td>A safe infrastructure for the hubs to the world</td>
</tr>
<tr>
<td>Photovoltaics</td>
<td>Safe and cost-effective generation of electricity</td>
</tr>
<tr>
<td>Hotels</td>
<td>A high degree of comfort and efficient operating processes</td>
</tr>
<tr>
<td>Data centers</td>
<td>Provision of fail-safe IT infrastructure</td>
</tr>
<tr>
<td>Industry: Manufacturing</td>
<td>Guarantee of flexible production processes</td>
</tr>
<tr>
<td>Stadiums</td>
<td>Flexible adaptation to different usage requirements</td>
</tr>
<tr>
<td>Industry: Processes</td>
<td>Plant availability and maximum plant protection</td>
</tr>
<tr>
<td>Wind</td>
<td>High reliability with maximum availability and transparency</td>
</tr>
</tbody>
</table>
## Non-residential buildings

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Solution</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A significant part of the planning of the new group headquarters consisted of the development of a power concept that went beyond the provisions of the German Energy Saving Ordinance in force at the time of planning and fulfilled the particularly high noise protection requirements imposed by the developer. In addition, the building and building facilities had to be able to adapt flexibly to the fast-moving changes in the world of publishing.</td>
<td>As part of the holistic consideration of cost-effectiveness, sustainability and fire load, the planners decided to use the modular and space-saving SIVACON S8 power distribution board as well as the SIVACON 8PS busbar trunking system for power conveyance and power distribution up to the storeys. The 8PS busbar trunking system also forms the basis for the overall integrated concept from Siemens.</td>
<td>The group headquarters, the first office building in Germany to be awarded the LEED Gold certificate, is an example of how cost-effectiveness, sustainability, building efficiency, flexibility of use and a productive working environment can be combined with an adjustable indoor climate. A significant part of the conversion of the complex building functions played the Siemens systems, which are interdisciplinary and communicate with one another without loss.</td>
</tr>
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</table>

## Data centers

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Solution</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies that have their servers housed and looked after by Info AG expect maximum availability and a precise statement of usage costs. In the new construction of their data center, Info AG therefore required a power distribution that permitted both a flexible and fail-safe power supply as well as the precise evaluation of consumption values.</td>
<td>In order to guarantee the flexibility of the room layout at all times, the SIVACON 8PS busbar trunking system was installed in the attic. The modular tap-off units, in which the measuring devices 7KT1 PAC3000 from the SENTRON range are installed, enable easy and cost-saving repositioning when needs change. The measuring devices were integrated into the company’s own LAN with LAN couplers 7KT.</td>
<td>The SIVACON 8PS busbar trunking systems make it possible to adapt the power distribution flexibly at any time when requirements change. 34 measuring devices 7KT1 PAC3000 were integrated into the LAN and to up to 10 respective measuring devices using the LAN couplers 7KT. The measured values can therefore subsequently be clearly allocated to the individual Info AG customers and visualized and evaluated for each specific user.</td>
</tr>
</tbody>
</table>
### Electromobility

<table>
<thead>
<tr>
<th>Pilot region</th>
<th>Requirement</th>
<th>Solution</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich</td>
<td>To supply electric vehicles with electricity, there must be a corresponding charging infrastructure and intelligent power distribution network. Together with BMW and the Stadtwerke München (Munich City Utilities – SWM), Siemens is implementing a joint electromobility project in the pilot region of Munich. The partners examine the behavior and preferences of users using different scenarios. In addition, innovative technical components, products and systems for electromobility are developed and tested.</td>
<td>With our SENTRON protection, switching, measuring and monitoring devices, we offer a safe electric infrastructure and provide components that are tailored to each other and solution packages for standards-compliant, quick and safe construction of a charging station.</td>
<td>As an integrated technology group and pioneer in electrical technology, for over 160 years, Siemens can create the conditions for innovative and holistic solutions for world-wide electromobility like no other enterprise. In doing so, our proven, high-quality products guarantee the highest degree of safety and efficiency.</td>
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### Industry (Food & Beverage)

<table>
<thead>
<tr>
<th>Pepsi</th>
<th>Requirement</th>
<th>Solution</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow</td>
<td>Pepsi’s iced tea filling facility in the south of Moscow is one of the most modern facilities in Russia and covers a length of around 300 meters. An important precondition for smooth operation is a safe and reliable power distribution. Pepsi already established during the planning stage that this should come from one source and that it should provide a high degree of safety and flexibility.</td>
<td>The overall solution for the medium- and low-voltage is based on the Totally Integrated Power concept from Siemens. All components required for power distribution were dimensioned precisely, easily and quickly using the planning software SIMARIS – from the GEAFOL transformers and NXPLUS C medium-voltage switchgear through to the SIVACON S8 power distribution board and SIVACON 8PS busbar trunking systems and the air circuit breakers 3WL.</td>
<td>When constructing Pepsi’s giant new filling plant, the benefits of Totally Integrated Power were evident. All products and systems are ideally tailored to one another and can be adapted flexibly to different requirements at any time. The planning of the power distribution was also simplified considerably by the SIMARIS software.</td>
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</tbody>
</table>
Support

A strong partner
As your competent and reliable partner we provide you not only with high-quality products and systems but also with comprehensive support – 24 hours a day, every day of the year. You get everything from one source – from initial information, planning, configuration and ordering through to commissioning, operation and technical support.

We ensure efficiency
We know the requirements to be met in your area of work and your day-to-day business, and offer you efficient tools to improve your productivity.

Everything under control
You have access to all important promotional and technical information: from our website and newsletter to downloads of complete brochures and catalogs. At the same time you are welcome to use the Industry Mall as an ordering and information platform for our products and systems as well as the Service & Support Portal as a source of comprehensive technical information on questions of configuration and plant documentation. And for expert advice there’s our product hotline.

Highlights
- Easy access to all important, up-to-date information via the internet
- 24 hours a day, every day of the year
- Comprehensive support from one source – from planning to operation
- Use of tools for working more efficiently
## Comprehensive support from A to Z

### Product Info

<table>
<thead>
<tr>
<th>Website</th>
<th>Information on our state-of-the-art products and systems.</th>
<th><a href="http://www.siemens.com/lowvoltage">www.siemens.com/lowvoltage</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Newsletter</td>
<td>Always up-to-date on low-voltage power distribution issues</td>
<td><a href="http://www.siemens.com/lowvoltage/newsletter">www.siemens.com/lowvoltage/newsletter</a></td>
</tr>
</tbody>
</table>

### Product Info/Product & System Selection

| Information and Download Center | The latest catalogs, customer magazines, brochures, demo software and campaign packages. | www.siemens.com/lowvoltage/informaterial |

### Product & System Selection

| Industry Mall | Platform for E-business and product information. Round-the-clock access to a comprehensive information and ordering platform for our entire low-voltage power distribution portfolio, including selection aids, product and system configurators, availability checking, delivery status tracking. | www.siemens.com/lowvoltage/mall |

### Product & System Engineering

<table>
<thead>
<tr>
<th>SIMARIS Software Tools</th>
<th>SIMARIS design® for dimensioning, SIMARIS project® for calculating the space required for distribution boards, and SIMARIS curves® for displaying the related characteristic curve.</th>
<th><a href="http://www.siemens.com/simaris">www.siemens.com/simaris</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA SELECT Configuration Software</td>
<td>Simple and quick configuration of distribution boards together with SENTRON protection, switching, measuring and monitoring devices, GAMMA building control and other products from the industry shopping basket.</td>
<td><a href="http://www.siemens.com/alpha-select">www.siemens.com/alpha-select</a></td>
</tr>
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</table>

| Switch Manager | Free software for calculating switch and socket outlet components. It quickly and precisely calculates the costs of all the switch components which are needed to equip a building. | www.siemens.com/switch-manager |

### Product Documentation

| Service & Support Portal | Comprehensive technical information from the planning and configuration phase through to the operation phase. 24 hours a day, every day of the year. Product data sheets, manuals/operating instructions, certificates, characteristic curves, downloads and FAQs. | www.siemens.com/lowvoltage/support |

| CAx DVD | Configuration-relevant CAx data for SENTRON are available on DVD: commercial and technical product master data, 2D dimensional drawings, isometric representations, 3D models, product data sheets and tender specification texts. Order number: E86060-D1000-A207-A6-6300 (via the Industry Mall) | |

| Image Database | Various versions of the current product photos, 2D dimensional drawings, isometric representations, 3D models, internal circuit diagrams and symbols for downloading free of charge. | www.siemens.com/lowvoltage/picturedb |

### Product Training

| SITRAIN Portal | A comprehensive training program for acquiring more in-depth knowledge about our products, systems and engineering tools. | www.siemens.com/lowvoltage/training |

### Product Hotline

| Technical Support | Technical Support for low-voltage power distribution and electrical installation technology provides support on all technical issues concerning our products – both before and after the start of delivery: e.g. on questions of product selection, conversion from old to new codes, inquiries concerning special versions, particular requirements to be met by our products, commissioning and ongoing operation. Mon. to Fri., 8:00 to 17:00 h (CET) Tel.: +49 (911) 895 7222 Fax: +49 (911) 895 7223 support.automation@siemens.com www.siemens.com/lowvoltage/technical-support |
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