



Safe solutions for  
the packaging sector

## Safe packaging





▲ Sales and Marketing Center in Bamberg



▲ Bamberg headquarters



▲ STOCKO headquarters in Wuppertal

# wieland group

## ACTIVE WORLDWIDE

With its staff of almost 2,000 employees, the Wieland Group is at home on all continents. Subsidiaries in Great Britain, France, Spain, Italy, Poland, Canada, the USA, China and Denmark speak for themselves. With a great number of representatives, Wieland Holding is active in almost all strategically important countries. Just a medium-size global player with a clear commitment to the German location where most of the products are still manufactured.



*automation*

*building*

*electronics*

**One company group,  
a thousand opportunities**

The philosophy of the Wieland Group with its headquarters in Bamberg can be summarized that simply. The independent subsidiaries, Wieland Electric and STOCKO Contact, operate under Wieland Holding.

Together they cover an extraordinarily wide product portfolio in the field of electrical engineering and electronics. It comprises control cabinet engineering, industrial multipole connectors as well as overvoltage technology and building system technology.

Wieland Electric is active in most areas of automation technology and delivers as the industry's driver for innovation. Safety first – Wieland Electric is ideally positioned with its modular system solutions such as



**Series 4000, samos<sup>®</sup>, samos<sup>®</sup>PRO** and the new **sensor<sup>PRO</sup>** safety sensors.

**podis<sup>®</sup>**, the solution-oriented system for remote power distribution, and **ricos TP**, the latest development in the field of automation systems for heavy duty industrial requirements, are only two examples.

In the building installation system sector, Wieland Electric, with its **gesis<sup>®</sup>** system, is the world market leader in pluggable electrical installation. With good reason do planners and architects of the tallest and most interesting construction projects worldwide, such as the Petronas Towers in Kuala Lumpur, rely on **gesis<sup>®</sup>** components from Wieland. Wieland is a pioneer on the path toward the intelligent home by consistently developing its

**gesis<sup>®</sup>** product range, especially with regards to the demands of electronic networking.

Wieland Electric was founded in 1910 in Bamberg. With 1350 staff members it is the largest subsidiary within the company group of Wieland Holding. With its numerous innovations, Wieland Electric has become a major supplier of electrical connection technology. Export share is currently at 58 %.

STOCKO Contact is located in North Rhine-Westphalia's Wuppertal and has been a member of the Wieland Group since 2001. The company can look back at a history of more than 100 years. STOCKO Contact is one of the biggest European manufacturers of connector systems and crimp contacts.

**100 years young and full of innovative energy ...**

... this is the foundation of our company philosophy.

From this statement Wieland Electric will not just maintain, but expand its social responsibility into the future. Eco-friendly high-tech products, manufactured according to state-of-the-art production standards, an audited environmental management system and extensive investments in our facilities with cutting-edge environmental technologies are a matter of fact. A company policy that also commits us to the long-term responsibility for the future of our families and children, as well as for the city of Bamberg, in addition to innovative system solutions for our customers. In our opinion, worldwide action and regional responsibility are united.





## In **GOOD** hands! Safe solutions for the packaging sector



### A safe concept

Packaging is the hallmark of a product, lending it an unmistakable and indispensable identity of its own. Ergonomics, storability and design with high recognition value are vital to the success of a product.

Machines and systems for filling, dispensing, sealing, coding, conveying, labeling, and packing the products into boxes and onto pallets are as varied as the products themselves.

Be it in the cooled production hall of a food manufacturer or during the highly precise volumetric dosing of pharmaceutical products, the safety of the operating personnel and the safety and stability of the product are top priority. Only the most reliable processes providing the highest machine availability mean commercial success.

Given that the range of tasks is so varied within the packaging process, machines and systems are combined and integrated into complete system processes. The integrating capacity of machines plays an important role here. Wieland Electric products provide intelligent connection technology concepts and flexible solutions in control and safety technology. Convenient and economical – even for the most complex machines.

With comprehensive expertise in the sector and a wealth of experience accumulated over 100 years, Wieland Electric is your competent partner worldwide, supporting you in the implementation of your applications.

### Applications in the following sectors:

- Pharmaceuticals
- Beverages
- Food & nutrition
- Cosmetics
- Household goods
- Hygiene articles
- Transport packaging

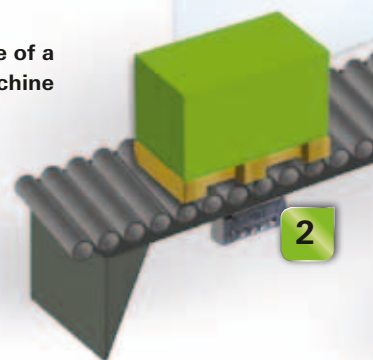




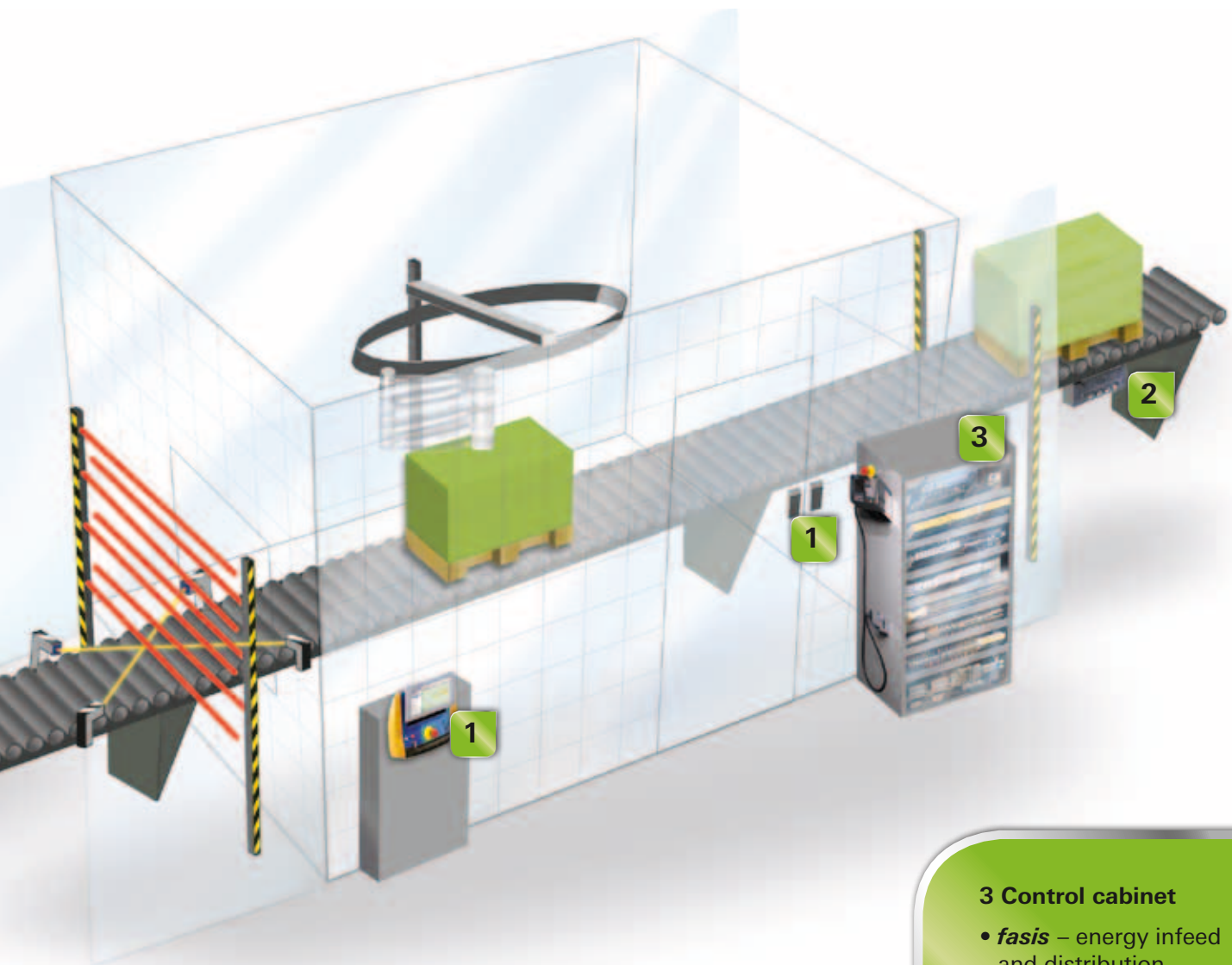
**Modularity means flexibility**

Modularity is the key concept behind modern packaging machines and packaging lines. By erecting a complex system of individual function modules in a structured manner, systems can be customized to meet the customer's individual requirements. In addition to increased flexibility made available to the customer, it reduces construction costs and start-up times.

**Example of a packaging machine**



**WELL** wrapped up!  
Control cabinet components, **safety** sensors  
and **podis** motor starters in operation



### 1 Safety switches

Wieland sensors provide safety and high system availability.

### 2 podis

Flat cable systems with compact decentralized motor starters allow quick start-up and simple project planning.

### 3 Control cabinet

- **fasis** – energy infeed and distribution
- **revos** – pluggable system installation
- **safety** – compact safety control and safety switching devices
- **wipos** – reliable power supply



*revos*

# CONTROL CABINET

solutions for your applications



*wipos*

*safety*

*flare*

*selos, fasis, taris*

*interface*

Wieland offers perfect control cabinet solutions that complement one another perfectly in meeting customer requirements.



## Production SAFETY in real time.



### Safety in series

Reliable and innovative solutions offer top quality and safety without compromising productivity and system availability.

#### Safety for applications

<b>sensor</b> PRO	SMA solenoid switch, SNH emergency stop button
<b>S4000</b>	Safety switching devices for all applications
<b>samos</b>	Modular safety control Parameterization using a screwdriver
<b>samos</b> PRO	Smallest and quickest modular safety control, programmable



### Supplying controls reliably

The **wipos** series features power supplies. Power supplies carry out a central function in control cabinets. Therefore its reliability plays a major role in the availability of machines and processes. For this reason, a robust, tried-and-tested power supply is very important.

#### wipos switching power supplies

No. of phases	1 to 3-phase
Rated current	0.42 ... 40 A
Power	100% to +60 °C
Temperature range	-25 ... +70 °C
Connection type	Parallel or serial switching possible
PFC technology	yes

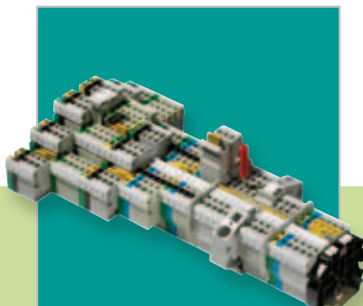


### Pluggable systems installation

**revos** Heavy-duty industrial plug connectors are specially designed for use in particularly rough conditions. They make the simple and time-saving installation of machines and systems possible. The housings protect against mechanical stress and protect against splash water and dust penetration.

#### revos heavy-duty industrial plug connectors

Rated current up to	100 A
Rated voltage up to	1000 V
Rated cross-section up to	25 mm <sup>2</sup>
Connection technology	Screw, spring clamp and crimp technology



### Energy infeed and distribution

The terminal blocks in the **fasis** product range are simple. They save time and money on wiring and stock-keeping, and guarantee a vibration-safe and maintenance-free connection with predefined contact strength. A real alternative to screws.

#### fasis DIN rail terminal blocks with tension and plug-in spring connection

Rated cross-section up to	35 mm <sup>2</sup>
Rated current up to	125 A
Rated voltage up to	1000 V
Flammability class	UL-V0

# safety



**Safety first!**  
A range of potential dangers in open and closed packaging systems and production lines must be eliminated using reliable control and monitoring systems. The safety program "safety" by Wieland works reliably to protect both people and machines.



## safety – safety for people, machines and processes

When modern systems and machines are designed, the safety of the persons who will later be working with these machines must be considered.

Reliable and innovative solutions are called for which are also capable of increasing system productivity and availability.

With the **sensor** PRO, **S4000**, **samos** and **samos** PRO Wieland Electric offers safety components of the highest quality which can make a decisive contribution to safety in the production and operation of modern facilities and machines. Wieland Electric is happy to support you with advice on applications and compliance with applicable norms.



Wieland Electric supports you with advice on applications and compliance with applicable norms.

**EN 415**  
Safety of packaging machine

**EN 13849-1**

**EN 62061**

**Safety components**

Suitable components, all the way from safety switching devices to compact safety controls, can be chosen specifically according to the level of complexity and type of diagnostics required.

**Typical applications are:**

- **Emergency stop**
- **Safety switches**
- **Muting & press application**
- **Standstill and motion monitoring**
- **Fast shut-off**

**S4000, samos, samos<sup>PRO</sup> advantages:**

- Up to Category 4, SIL3, PL<sub>e</sub>
- Space-saving
- Flexibility
- High system availability
- Time-saving during project planning and start-up
- Communications module for diagnostics and remote maintenance
- MonoFlop function
- Fast shut-off
- Interconnectibility of safety functions
- Documentation support
- Numerous approvals (UL, GOST,...)
- SISTEMA library
- EPLAN macros

**samos<sup>PRO</sup> advantages:**

- Failure protection
- High degree of protection
- Easy to install



Safe signal acquisition  
**samos<sup>PRO</sup>**



Universal safety relays  
**S4000**



Modular safety modules  
**samos<sup>®</sup>**



Compact safety controllers  
**samos<sup>®</sup> PRO**



## **interface**

### Electronic components – ready for packaging

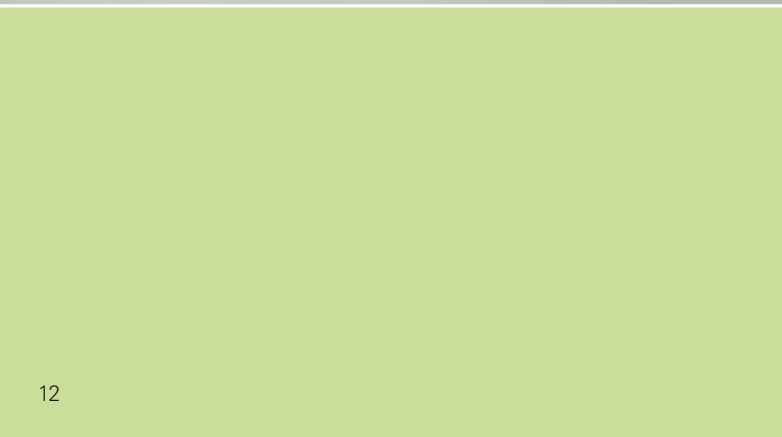
Whenever current flows and signals are processed, the **interface** products from Wieland Electric display their unique strength. The broad range of relays, the components for power supply and overvoltage protection and the transfer and analog modules mean that any packaging line or packaging plant can be equipped perfectly.

#### **wipos power supply**

A 24 V control voltage can be generated using the robust **wipos** power supplies. The devices are designed and approved worldwide for a broad temperature range from -25°C to +71°C. In this way they provide full power up to 60°C.

#### **wietap lightning and overvoltage protection**

With lightning and overvoltage modules from Wieland, a complete safety system can be created. The devices fulfill the most extreme demands made on their current carrying capability. The pluggable spacing technology enables quick replacement of modules and meets the highest shock and vibration requirements during operation.





**wipos**

Power supply



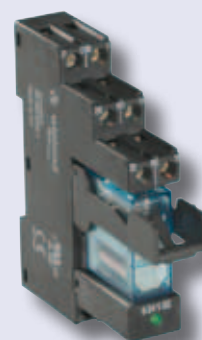
**wietap**

Lightning and overvoltage protection



**flare**

coupling relays



**wienet**

Ethernet-Switches



**flare coupling relays**

Various coupling functions can be carried out by the broad range of products in the **flare** series. Pluggable coupling relays are also available with high shock and vibration impact certification in various designs and are ideally suited to the demands of the sector.

**wienet Ethernet-Switches**

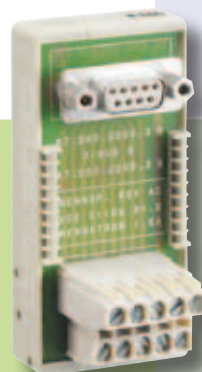
The **wienet** series is ideally suited for safe inter-connection of machine parts.

**Measuring and monitoring relays**

Whether voltage, current, phase or temperature monitoring: Individual monitoring functions can be implemented both reliably and independently using Wieland's measuring and monitoring relays.

**Passive interface modules**

Various transfer functions must be implemented within the control cabinet. Our R&D team specializes in designing customer-specific electronic and electro-mechanical transfer modules.



Passive interface modules



Measuring and monitoring relays



*revos* heavy-duty industrial plug connectors are specially designed for use in particularly rough conditions. The powder-coated aluminum housing stands up to even the harshest working environments.



## **revos** – connected reliably with heavy-duty industrial plug connectors

### **Flexible, safe, tough**

Thanks to their design, revos industrial plug connectors are always capable of guaranteeing the safety of electrical signals, even in tough conditions.

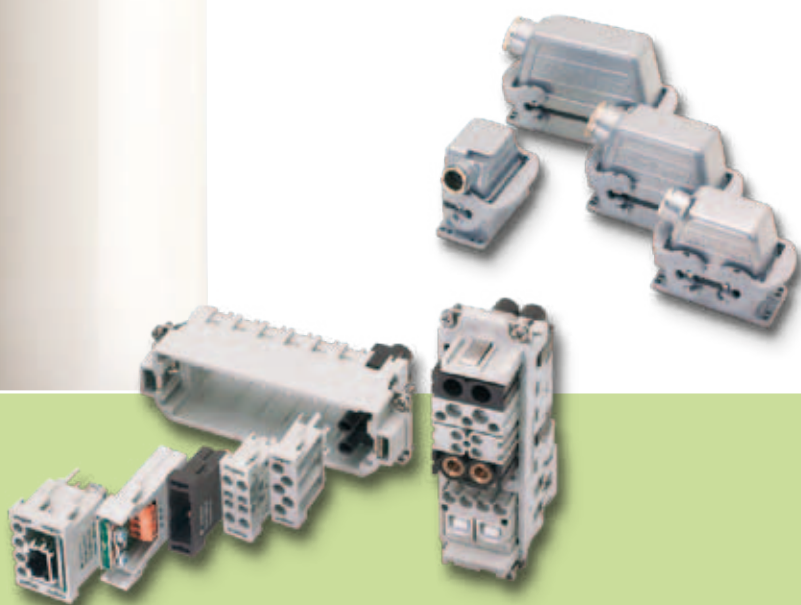
In the food and beverage industries in particular, machines and systems come into direct contact with water and other fluids. Furthermore, connections are placed under considerable mechanical stress, not to mention the challenges posed by daily cleaning.

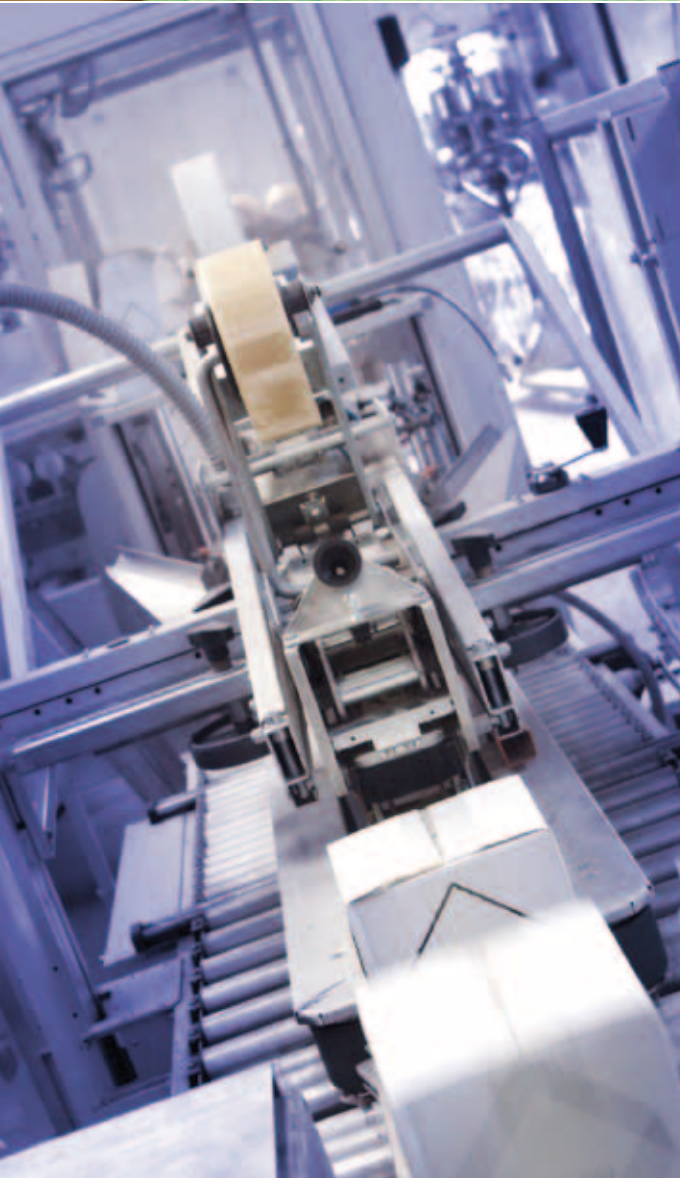
Thanks to their powder-coated aluminum housing, the heavy-duty **revos** industrial plug connectors are protected from these mechanical stresses and from splash water, liquids and dust, offering the utmost precision and reliability.

**revos** industrial plug connectors are classified according to their housing, contact insert and connection technology. There is a broad standard range to choose from, as well as modular components which can be combined individually, depending on the application. The interactive configurator from Wieland Electric simplifies the selection process when choosing industrial plug connectors.

### **Advantages:**

- Configurator
- Maintenance-friendly
- Fast and fault-free installation
- Flexibly extendable
- Degree of protection IP 65





## *selos, fasis, taris*® – DIN rail terminal blocks

Wieland components for the packaging industry are versatile and durable. Whether for signal distribution, system control or energy infeed and distribution, terminal blocks are standard connection devices for all parts of packaging systems.

With its ***selos, fasis*** and ***taris*** DIN rail terminal block product ranges, Wieland offers solution options for the most diverse connection points.

### **Advantages:**

- Cost effective
- High-performance
- Pluggable
- With system
- Configuration software





**fasis<sup>CON</sup> Plug & Play in the control cabinet**

The electrical connection technology of packaging systems is based on modular and multi-functional wiring concepts. With the **fasis<sup>CON</sup>** DIN rail terminal block system, pre-assembled series modules can simply be plugged together on site via Plug & Play.

Fasis con features a vibration-safe spring clamp connection which guarantees contact reliability in all climatic and environmental conditions, thereby minimizing maintenance. Thanks to its high-capacity contacts of up to 32 A, this system is suitable for both signal transmission in 24 V sensor circuits and for powering motors in power circuits.

**fasis<sup>WKN</sup> terminal blocks with tension spring connection**

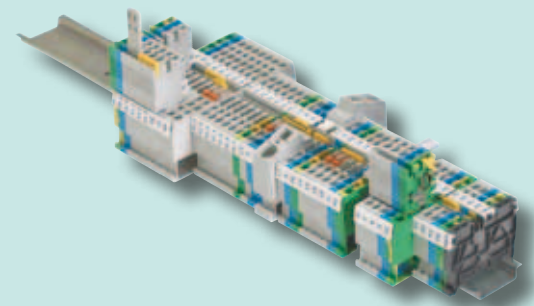
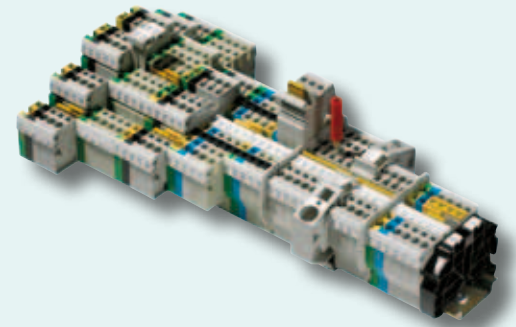
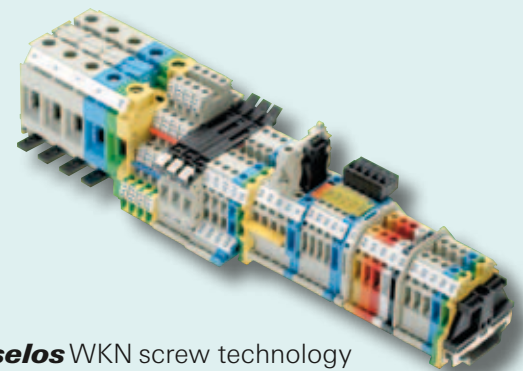
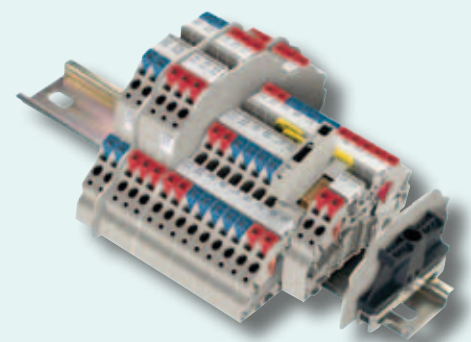
The terminal blocks in the **fasis** product group are simple to use, and save time and money on wiring and stock-keeping while guaranteeing a vibration-safe and maintenance-free connection with predefined contact strength. A real alternative to screws.

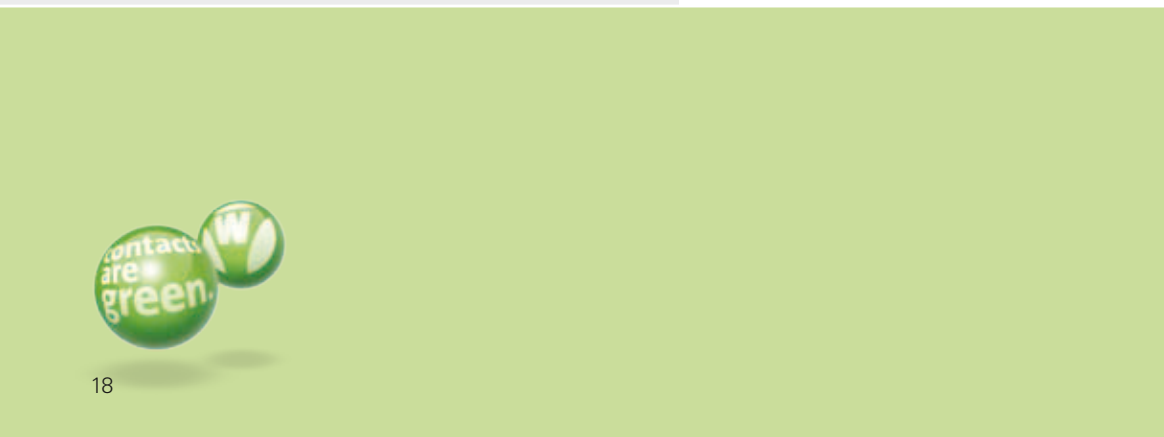
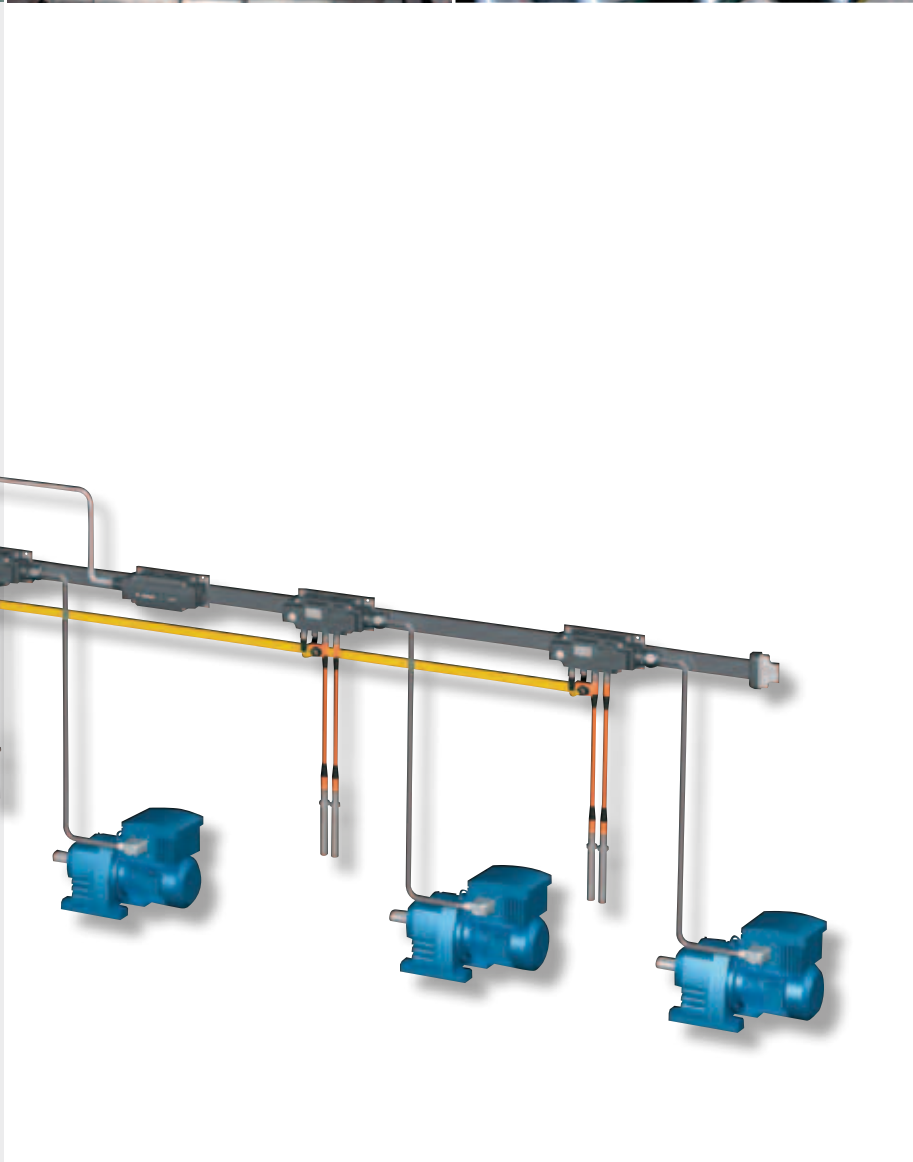
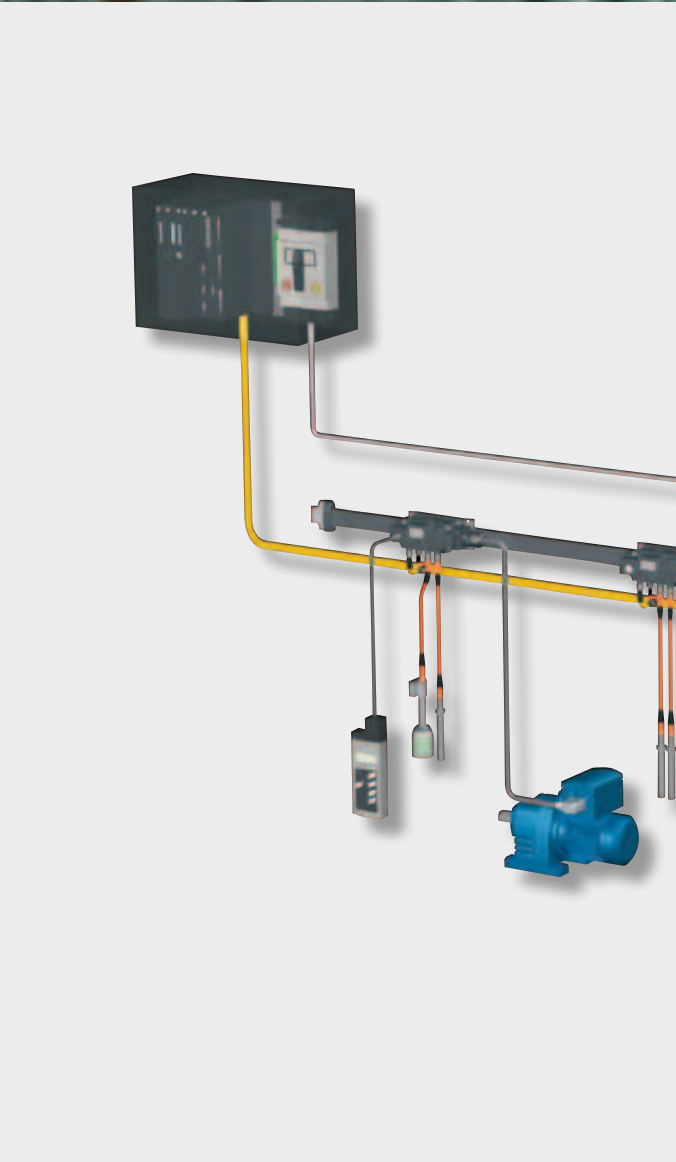
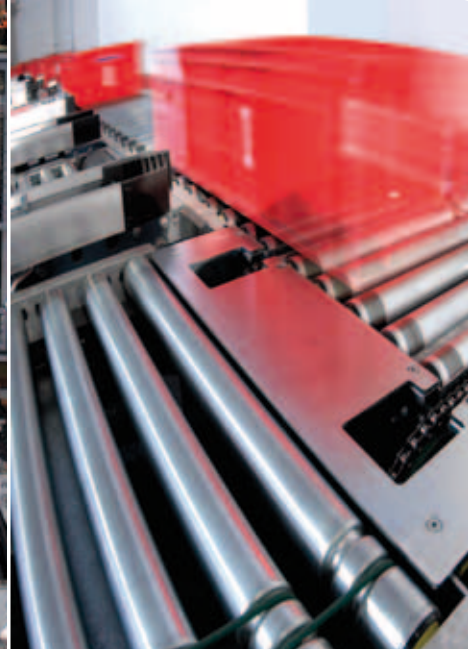
**selos<sup>WKN</sup> DIN rail terminal blocks in screw technology**

The DIN rail terminal block with the classic **selos** screw connection is solid and functional. With millions already in operation, it is well-known worldwide. The broad range of versions offers solutions for all types of application. The screw technology offers the highest contact strength at low transition resistance.

**taris® WKC DIN rail terminal blocks in IDC connection technology**

**taris®** is the DIN rail terminal block for simple, convenient and quick wiring using insulation-penetrating contacts (insulation displacement technology, IDC technology). The conductor is simply cut to length and fed in, and the termination point then closed with a screwdriver. Time-consuming insulation removal and attachment of ferrules becomes a thing of the past. With **taris®** wiring time is reduced by up to 60 %.

**fasis<sup>CON</sup>** spring clamp connection**fasis<sup>WKN</sup>** spring clamp connection**selos<sup>WKN</sup>** screw technology**taris®** WKC IDC connection technology



## DISTRIBUTED installation

### The power bus solution

#### Integrated system solution

Hardly any other industry places such demanding requirements on the flexibility and availability of system technology as the packaging sector. Within minimal time periods, goods must be packed, labeled and transported.

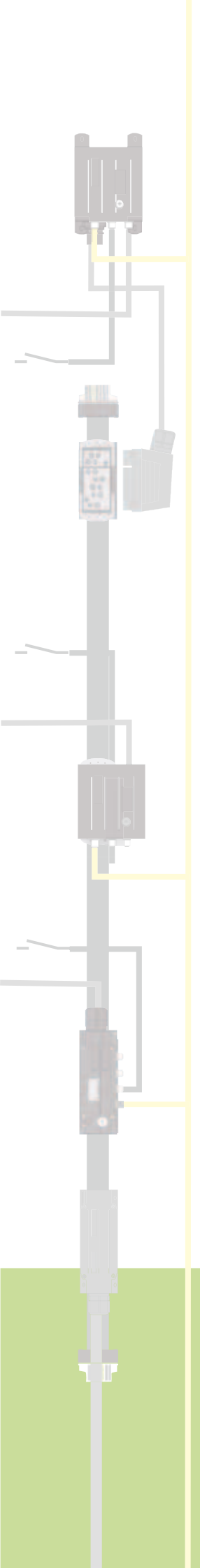
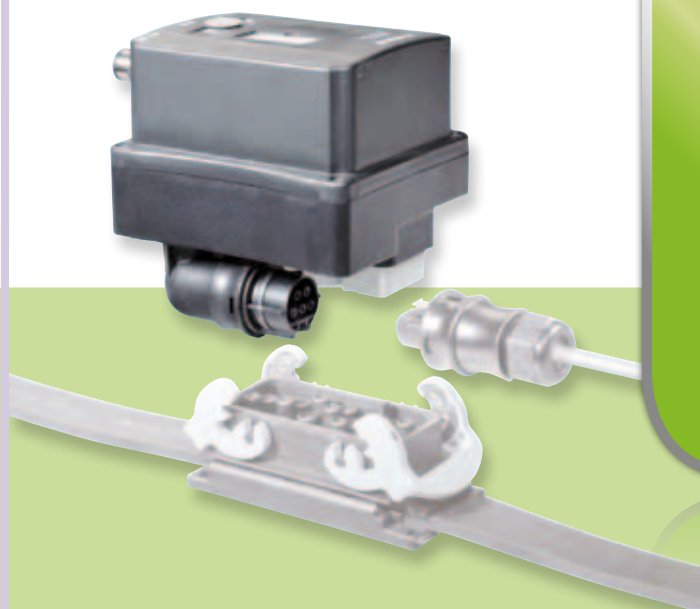
The **podis**® flat connection power bus by Wieland is perfectly suited to the construction of distributed solutions for drive control in conveyor systems. Modular and standardized functional units allow for total cost savings of 10 – 30% compared to conventional solutions.

Possible applications range from power distribution and field bus activation to motor starters for switching and protecting three-phase asynchronous motors. If required, sensors may also be connected to the drives.

With the uncut podis flat connection power bus, **podis** CON installation components, **podis** MOT function modules and **podis** MCU motor starters, Wieland power bus solutions offer ideal system solutions which make new installations possible within minimal time periods.

#### Advantages

- Easy project planning
- Short installation times
- Error-free installation
- High system availability
- Compact and accessible field distributors and motor starters
- Easy extension
- On-site diagnosis via LED
- Optimum service and maintenance
- UL approval for international use



# Software TOOLS

## Wieland Software perfects your applications

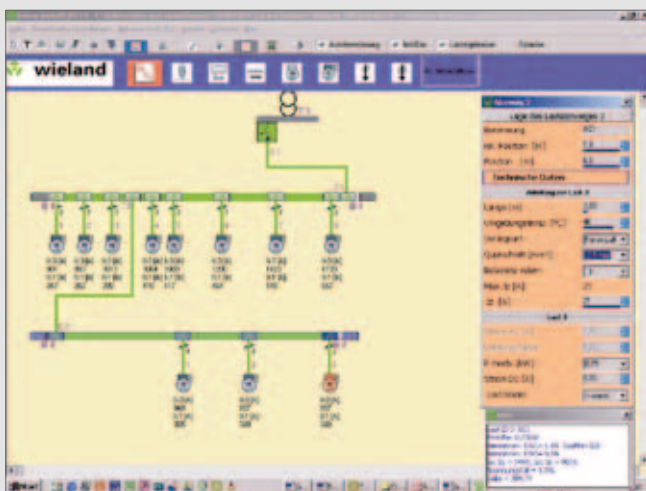
Wieland Electric offers specially designed software for its individual products, making them exceptionally easy to use and making configuration and product selection easy.



### Wieland e-Catalog

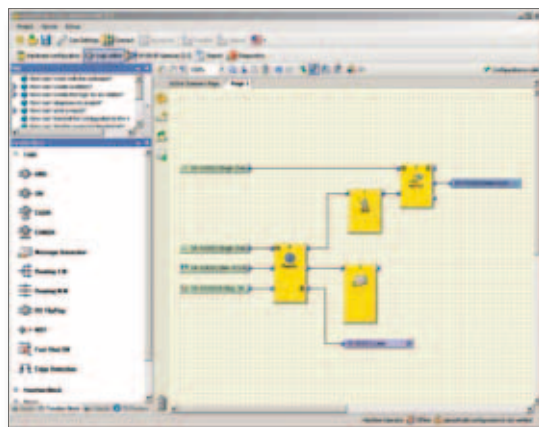
For further technical information and the latest news on interface technology, go to:

<http://ecat.wieland-electric.com>

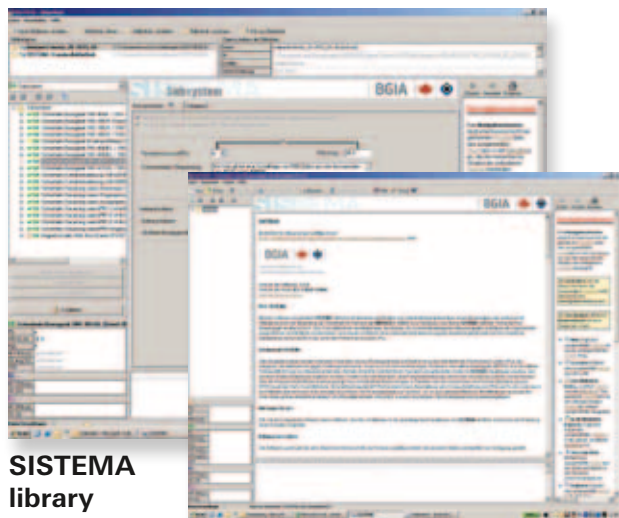


### podis<sup>PLAN</sup>

podis<sup>PLAN</sup>, allows you to design your distributed power bus perfectly and test important electrotechnical parameters.



samos<sup>PLAN</sup>



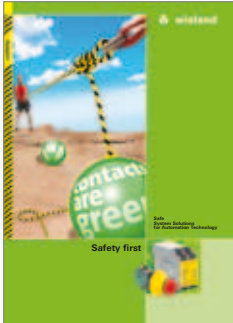
SISTEMA library



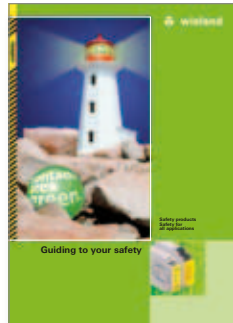
wieplan  
wiemarc



revos configurator



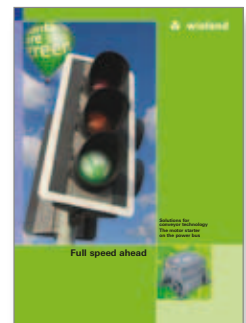
**safety**-Catalog  
Safe System Solutions  
for the Automation  
Technology  
**Part No. 0152.0**



**safety** products  
Safety for all  
Applications –  
Overview  
**Part No. 0152.5**



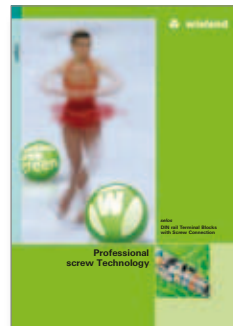
**Logistics**  
Solutions for conveyor  
technology. Decentralized  
automation via power bus  
**Part No. 0158.0**



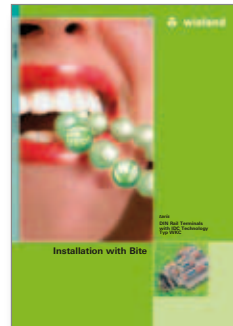
**Motor starter**  
on the power bus  
**Part No. 0158.2**



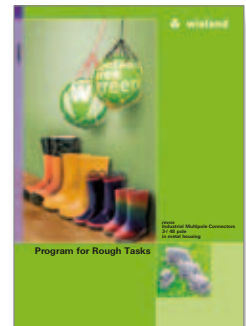
**fasis**-Catalog  
DIN rail terminal blocks  
with tension spring  
connection  
**Part No. 0124.0**



**selos**-Catalog  
DIN rail terminal blocks  
with screw connection  
**Part No. 0125.0**



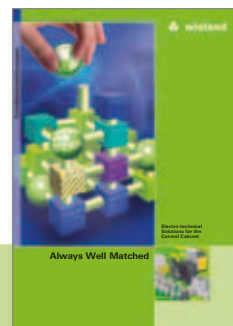
**taris**<sup>®</sup>-Catalog  
DIN rail terminal blocks  
with IDC technology  
**Part No. 0123.0**



**revos**  
Industrial Multipole  
connectors. 3-/ 48 pole  
in metal housing  
**Part No. 0078.6**



**interface**-Catalog  
Solutions  
for the Control cabinet  
**Part No. 0156.0**



Electrotechnical  
Solutions for the  
Control Cabinet  
**Part No. 0401.1**



## Hotline numbers

### Sales Department:

### Phone

Questions for the sales department:  
availability, delivery time and prices

+49 951 9324-990

### Technical Support:

Technical questions regarding product features and application options of our products as well as functionality and equipment:

### Area of Automation technology:

### Phone

- Terminal blocks **fasis, selos, taris**<sup>®</sup> +49 951 9324-991
- Safety engineering **safety** +49 951 9324-999
- Decentralized I/O , +49 951 9324-995  
current supply, overvoltage protection,  
measuring and monitoring relays,  
time lag relays, belt relays, analog modules,  
passive interfaces **interface**
- Decentralized power distribution **podis**<sup>®</sup> +49 951 9324-998
- Industrial plug connector **revos** +49 951 9324-997
- Device terminals, European terminal  
strips, empty housings +49 951 9324-993
- PCB terminals **wiecon** +49 951 9324-994

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### Area of facility installation technology: Phone

- System plug connectors for building  
installation **gesis**<sup>®</sup>, **gesis**<sup>®</sup> ELECTRONIC +49 951 9324-996
- Terminal blocks **fasis**<sub>BIT</sub>, **selos**<sub>BIT</sub> +49 951 9324-992

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General information, news and our e-catalog at:

**[www.wieland-electric.com](http://www.wieland-electric.com)**

## Our subsidiaries

... and the addresses of our representatives worldwide are available at:

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## Industrial technology

Solutions for the control cabinet

- DIN rail terminal blocks
  - Screw, spring clamp or IDC connection technology
  - Wire cross sections up to 240 mm<sup>2</sup>
  - Numerous special functions
  - Software solutions interfacing to CAE systems
- Safety
  - Safety sensors
  - Safety relays
  - Modular safety systems with fieldbus link
- PLC and fieldbus components
  - Standard applications in IP 20
  - Increased environmental conditions with railroad and ship approvals
- Interface
  - Coupling relays, semiconductor switches
  - Measuring and monitoring relays
  - Timer and switching relays
  - Analog modules
  - Passive interfaces
  - Power supply units
  - Overvoltage protection

Solutions for field applications

- Remote automation technology
  - Power distribution
  - Fieldbus interfaces and motor starters
- Connectors for industrial applications
  - Square and round connectors
  - Aluminum or plastic housings
  - Degree of protection up to IP 68
  - Current-carrying capacity up to 100 A
  - Connectors for hazardous areas
  - Modular, application specific technology

PC board terminals and connectors

- Screw or spring clamp connection technology
- Spacings: 3.5 mm to 10.16 mm
- Reflow or wave soldering process

## Building and installation technology

- Building installation systems
  - Main power supply connectors IP 20/IP 65 ... IP 68
  - Bus connectors
  - Combined connectors
  - Low-voltage connectors
  - Power distribution system with flat cables
  - Distribution systems
  - Bus systems in KNX, LON and radio technology
  - DIN rail terminal blocks for electrical installations
  - Overvoltage protection

**contacts  
are  
green.**

**Product Range**