# wieland



# Innovations 2013/2014

System solutions for automation and building system technology



# Products and solutions for industrial applications

## selos, fasis

#### **DIN** rail terminal blocks

**selos, fasis** WKFN & **fasis** WTP – 3 product families, 3 interconnect technologies – a unique range of products. Regardless of whether you prefer screw, tension spring or push-in connection technology. Regardless of whether used in control cabinets, plants or buildings – with an extensive product range of one of the pioneers of DIN rail terminal blocks, you have played the right card!

# safety

### Safety technology

safety first! The great portfolio of safety switching devices covers all major safety functions and meets even complex customer requirements. From the safety sensors of the sensor PRO series through the safe RELAY safety relays and the modular safety modules samos to the safety control samos PRO you always get the suitable product for the protection of man and machine.



## interface

# Relays, power supply, overvoltage protection

Wherever electricity flows and signals are processed, *interface* products from Wieland Electric prove their extraordinary strength. The wide range of relays, the components for power supply and overvoltage protection as well as the passive interfaces and analog modules make your application a winner, too. Send a message with our *interface* technology!



### wiecon

# PC board terminals/ PC board connectors

**wiecon** PC board terminals are a fixed component in innumerable innovative applications. Whether with screw or spring clamp connection, pluggable or in solder version – **wiecon** can be found wherever control systems are required. Unique marking, effortless wire connection and intelligent test functions guarantee service-friendly usability and reliable connections.





# Products and solutions for building installation

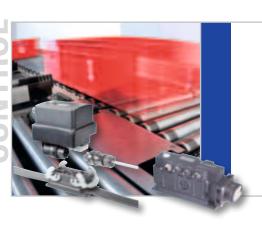
# **gesis**® - Contemporary installation

Other than the *gesis* ° CON system for the classical electrical installation of lights, sunblinds or power receptacles, the *gesis* ° MINI product line with a size smaller than 1/3 follows the miniaturization trend. *gesis* ° MICRO, which is still a size smaller, can also be used in confined spaces due to its compact dimensions. Building automation systems are an integral part of modern utility buildings. International standardized systems like KNX, LON or Enocean (radio technology) are used. Components in the *gesis* ° ELECTRONIC programm use this technology for the decentrally installed room automation.

# **gesis**® RST

#### Connectors for IP65...IP68

What is the result when a unique installation philosophy gets ready for use in rough environments? 1000 new application options: In systems, for outdoor lighting, on construction sites, in solar systems or in functional buildings... <code>gesis</code> RST in IP65...IP68 protection degree feels at home everywhere and definitely guarantees, also under the roughest conditions, the plug & play benefits of <code>gesis</code>: consistent pluggability, invaluable advantage in time during installation, and complex system possibilities.



# podis®

#### **Decentralized power distribution**

**podis** is a modular power bus system for decentralized power distribution and simplifies planning, procurement, installation and maintenance of industrial plants. Use the quick and flawless installation for short installation times and the high system availability due to the maintenance-friendly connector system, to your specific advantage.

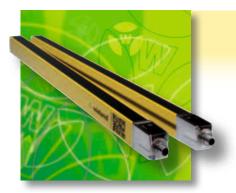


#### revos

#### **Industrial multipole connectors**

The industrial multipole connectors **revos** can handle even the toughest applications in the roughest environments. Whether flexible and universal connections or voltage tests with wires connected – with **revos** it is no problem at all.

Clear assignments when wiring, service-friendliness in the case of maintenance and individual marking options help you to maintain an overview at any time.



#### Safety light curtains SLC

Safety light curtains of the SLC series work on the human and machine interfaces. Application areas of the SLC series range from finger, hand and arm protection to access or area protection.

#### **Features**

- Safety light curtain BWS type 4 or type 2
- Beam resolution 14, 20, 30, 40 and 90 mm
- Protection field heights 150 1800 mm
- High ranges for each resolution
- M12-connection technology



#### Safety light grid SLD

Safety light grids of the SLD series are ideal for the development of electro-sensitive protective equipment that accomplish access protection for spacious machines and plants.

#### **Features**

- Safety light grid BWS type 4
- 2-, 3- and 4-beam versions
- High range up to 70 m
- Robust (protection class IP 67, operating temperature -30°C...55°C)
- Even as a universal device (transmitter/receiver in a single column)
- M12-connection technology



#### Muting accessories - SLC/SLD series

The muting accessories with pre-assembled muting light barriers, reflectors and cables facilitate the installation of a muting e. g. at a material lock. The muting accessories can be mounted either directly at the safety light grids SLD or at the device columns SLX-COL.

#### **Features**

- 2-sensor-parallel-muting set
- 4-sensor-sequencial-muting set
- 2-sensor-sequencial-muting set



Information to our products:
0860.1 safety – system solutions
for automation technology

For further technical details please use our eCatalog on our website at https://eshop.wieland-electric.com



#### **SVM 4001K**

A safe stand-still monitoring of AC power is now possible with the new SVM 4001K without additional sensors.

#### **Features**

- no additional sensors required
- Connection voltage upto 690 V AC3
- Adjustable threshold voltage
- Control of tumblers and lockout devices
- Relay outputs (230 V AC / 8)
- Supply voltage 24 V DC



#### **SNE 1 contact extension relay**

The contact expansion relay SNE 1 is an affordable solution for a safety-oriented contact multiplication of safe control devices of series *safe*RELAY, *samos* und *samos*PRO or optical safety devices of series SLC and SLD.

#### **Features**

- Stop categories 0 and 1 according to EN 60204-1
- Single-channel control
- 2 changers (positively driven)
- Sturdy retaining bracket



#### Reflectors and reflector columns for SLC/SLD series

Multilateral optical safety devices can be realized without problems by using the device columns SLX-COL and the safety light grids or safety light curtains in connection with the suitable reflector columns or reflectors.

#### **Features**

- Device columns SLX-COL for SLC/SLD series
- Reflector columns SLD-COLM for SLD series
- Reflector columns SLX-COLM for SLC series
- Reflectors SLX-MIR for SLC series





#### fasis WTP

Do you wish to terminate wires easily, directly and without tools? **fasis** WTP – these are DIN rail terminal blocks with push-inconnection. With an effective global concept, compact design and high-performance contact technology, **fasis** WTP minimizes the installation time and reduces inventory costs to a minimum.

#### **Features**

- Tool-free push-in connection
- Double-row, pluggable bridging duct
- Optimized portfolio fewer terminal blocks same functionality
- Integrated release lever



#### revos MINI Gehäuse

The **revos** MINI connector series has now been expanded by a connector housing with high design.

#### **Features**

- Protection class IP65
- High design
- Robust, corrosion-resistant upper part of housing



#### **revos** POWER

The **revos** POWER connector series continues to grow. It has been expanded by more high-performance contact inserts.

#### **Features**

- Contact inserts with number of poles: 6/36, 12/2, 6/12, 8/24 and 4/8
- Mixed assembly of signal and power contacts in a connector



Information to our products: 0500.1 DIN rail terminal blocks catalog

For further technical details please use our eCatalog on our website at https://eshop.wieland-electric.com



#### revos IT data cable feedthrough

**revos** IT data cable feedthrough has been expanded by yet another option. It is now possible to lead 4 securely sealed and strain-relieved Ethernet cables from a cable diameter of 4 mm through a control cabinet.

#### **Features**

- Execution of 4 data cables from a cable diameter of 4 mm
- Protection class IP65
- Execution of pre-assembled cables



#### revos flex compact 1M

The housing family facilitates use of **revos** FLEX modules in a housing without the need of a module frame. The housing is made from aluminum, which is highly resistant to corrosive atmosphere like e.g. salt spray.

#### **Features**

- Compact and robust housing
- EMC protection: -70 dB < 10 MHz
- High flexibility due to modular design
- IP65 and IP68
- Easy and quick assembly / saves time by 30 %



#### revos BASIC housing

The **revos** BASIC standard housing series now gets a unique modern design with recognition value. Voltage ranges of up to 690 V can be covered by an integrated insulation strip.

#### **Features**

- Unique modern design with high recognition value
- Reduced number of variants
- Robust, corrosion-resistant housing family



Information to our products:
0530.1 revos industrial
multipole connectors



# **FSC - Fast Signal Connenction**

### Efficient, Fast, Safe, Flexible

#### Install signal lines quickly and faultlessly.

The innovative FSC system allows a virtually unlimited variety of coded plug-in connections to be made. The FSC system unites feedthrough and the distribution of signal lines in especially compact form on the wall of the control cabinet. The pluggability to the inside and outside enables quick installation thanks to the nearly unlimited variety of coding nearly error-free.

The marking of colored codes enables an easy assignment of plugs and sockets and shortens the installation time. Wieland also offers the total solution including intelligent electronics or simple transmission boards. Complex and conventional wiring in the control cabinet can be saved.

#### **Features**

#### **Efficient & Compact**

- Switchgear cabinet installation, signal distribution and electronics in one product
- Complete solution from one source
- Optimized logistics and production thanks to pre-assembled components

#### Fast & Safe

- Connect without tools plug in instead of hardwire
- Incorrect plug-in connection impossible no qualified personnel necessary
- Intuitive wiring connection thanks to color coding

#### Flexible for use

- Customized electronic solutions
- Individually pre-assembled lines
- Easy-maintenance, replaceable components



Information to our products: 0572.1 Customer Information FSC





#### Technical data::

Nominal voltage: up to 230V
Nominal current: 3A
Protection class: IP 54
Coding options: 35
Number of poles: up to 6

Plug-in positions: 18 (more on request)

Size: 105 x 140 mm (other sizes on request)
Electronics: Customized electronic equipping

Certification: UL / CSA







### gesis FLEX

The compact and de-centralized mountable housing concept allows the use of small inspection openings for installation. Due to the modular construction, different applications can be implemented.

#### **Features**

- Compact, pluggable, modular, decentralized, easy to install
- Clear and neatly arranged installation
- Fast, easy, error-free planning and installation
- Very flat design for mounting through bottom tank
- Simple adjustments for change of use
- Flexibility secures long-term value of the property



#### flare TIME HM

The **flare** TIME **HM** series is enlarged by some new products, which have beside a timed contact also an instantaneous contact.

#### **Features**

- Multi-function timer
- 8 selectable time functions
- Pluggable clamps
- Double A2 clamps for wiring through
- Double 15 and 25 clamp for wiring through
- Wide temperature range -20 ... 60°C
- Wide input voltage range 20,4 ... 264 V AC/DC



#### ricos FLEX I/O fieldbus system

Economical, compact and modular. The new I/O fieldbus system is offering a continuous fieldbus concept for the interchange of data between controller and field periphery. The modular I/O nodes are installed decentrally, close to the machine, and networked via the fieldbus. A broad range of I/O modules process the various actuator/sensor signals. Diverse diagnostic functions permit a significant reduction in machine standstill times.

#### **Features**

- Cost-efficiency through a highly modular design
- 2 to 8-channel modules
- Narrow module width of 12,9 mm
- Up to 64 modules can be connected to each bus coupler
- Spring tension connection terminals
- Very fast reaction time
- Individual channel inscription



#### podis LED Luminaire FCS 70-250 V AC 5W

**podis** LED FCS 70-250 V AC 5W; energy saving LED-luminaire pluggable on flat cable outlet; orientation independent mounting; 70...250 V AC; 5 W;

#### **Features**

- pluggable on flat cable outlet (Art.-No. 75.015.5153.1)
- for harsh industrial environments
- integrated reverse polarity-, overload- and shortage protection
- IP65 encapsulation



#### podis LED Leuchte RST 70-250V AC 5W

**podis** LED RST 70-250 V AC 5W; energy saving LED-luminaire pluggable by round connectors RST 20i3; black coding; for harsh industrial environments.

#### **Features**

- emergency light acc. EN 60598-2-22;
- orientation independent mounting; 70...250 V AC;
- daytime white, 6500 K; integrated reverse polarity-, overloadand shortage protection
- IP65 encapsulation; operating temperature -40...+70 °C (-40...160 °F)

#### Advantages of LED lighting:

- Energy-saving LED technology
- Meets the requirements for emergency lighting according to DIN EN 60598-2-22
- Suitable for extreme operating temperature ranges (-40 °C to +70 °C) Wide input voltage range
- Resistant to shock and vibrations





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### Industrial technology

#### Solutions for the control cabinet

- DIN rail terminal blocks
  - Screw, tension spring or push-in connection technology
  - Wire cross sections up to 240 mm<sup>2</sup>
  - Numerous special functions
  - Software solutions interfacing to CAE systems
- Safety
  - Safe signal acquisition
  - Safety switching devices
  - Modular safety modules
  - Compact safety controllers
- Application consulting and training
- Network engineering and fieldbus systems
  - Remote maintenance via VPN industrial router and VPN service portal
  - Industrial Ethernet switches
  - PLC and I/O systems, standard and increased environmental conditions
- Interface
  - Power supply units
  - Overvoltage protection
  - Coupling relays, semiconductor switches
  - Timer relays, measuring and monitoring relays
  - Analog coupling and converter modules
  - Passive interfaces

#### Solutions for field applications

- Decentralized installation and automation technology
  - Electrical installation for wind tower
- Fieldbus interfaces and motor starters
- Connectors for industrial applications
  - Rectangular and round connectors
- Aluminium or plastic housings
- Degree of protection up to IP68
- 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 IP20/IP65... IP68
  - Bus connectors
  - Low-voltage connectors
  - Power distribution system with flat cables
  - Distribution systems
  - Bus systems in KNX, LON and wireless technology
  - DIN rail terminal blocks for electrical installations
  - Overvoltage protection

