## 🐼 wieland



## Innovations 2015/16

System solutions for automation and building system technology

# Qualified, certified expertise for design and development engineers

Legislation requires that manufacturers of plants and machinery comply with fundamental health and safety requirements according to Machinery Directive 2006/42/EC.

safety

CSE Certified Safety Engineer in accordance with EN ISO 13849 by SGS-TÜV Saar

The new Wieland training course to qualify as a Certified Safety Engineer not only provides design and development engineers with extensive expertise, it also demonstrates how machine manufacturers can increase their legal certainty.

The wealth of practical tasks involved in the course ensures that participants have an excellent command of how to apply standards – from risk assessments in line with EN ISO 12100:2010 right through to EN ISO 13849-1/-2. Attending the CSE seminar also entitles participants to sit a final examination with the SGS-TÜV Saar. On passing the examination, they are awarded a personalized certificate and the status of Certified Safety Engineer.

#### Seminar content:

- Safety-relevant EU directives
- Risk assessment according to EN ISO 12100:2010
- Functional safety according to EN ISO 13849-1
- How to identify and achieve the performance level (PL)
- Safety-relevant sensor, logic, and actuator technology
- Verification of a complete system
- Systematic errors and validation
- Introduction to the IFA SISTEMA software wizard



Max Mustermann	
ist berechtigt zum Führen des Titels	
<b>CNNE</b>	
Certified Safety Engineer	INCLUSION OF DESCRIPTION OF DESCRIPTIONO OF DESCRIPTONO OF DESCRIPTONO OF DESCRIPTONO OF DESCRIP
Mit dem Titel werden folgende Qualifikationen bestätigt:	
<ul> <li>Mindestens 2 Jahre Berufserfahrung in Konstruktion oder Instandhaltung von Systemen der funktionalen Sicherheit</li> </ul>	
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<ul> <li>EU-Richtlinien, Gesetze und Normen</li> </ul>	the second se
<ul> <li>Riskobeurtailung nach EN ISO 12100</li> </ul>	
<ul> <li>Funktionale Sicherheit nach EN ISO 13849-1 und -2</li> </ul>	
<ul> <li>Sicherheitsreievante Sensorik, Logik, Bektrik, Pneumatik und Hydraulik</li> </ul>	
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safety service

Issues of safety and durability are key to plant construction.
 The challenge is to have the integrative solutions for tomorrow available today <sup>66</sup>





Use our comprehensive support to create your risk assessment in compliance with the relevant standards. More info at:





#### samos® pro compact

The next generation of safety controls now offers even more functionalities in the smallest space.

#### **Features**

- Function blocks for presses
- Integrated Profinet IO protocol
- Integrated Ethernet/IP protocol
- Cover for the SD card slot as an accessory



#### **SP-EN-ETC**

The new EtherCAT gateway for security control, **samos**®PRO COMPACT.

#### **Features**

- EtherCAT, the industrial Ethernet protocol
- Bi-directional data transmission
- Transmission of up to 50 bytes of data
- Simple configuration via samos®PLAN5+





#### STS – Safe Transponder Switch

The non-contact switches in the STS series are used for monitoring positions, at isolating protective devices for example, and offer maximum protection against manipulation through their coding function.

#### **Features**

- Maximum protection against manipulation
- IP67 / IP69K protection rating
- Cascading to PL e / Category 4
- Extremely compact design
- Switching distance of 8 mm / 10 mm
- Cable or M12 connection



Information about these products: 0860.1 *safety* System solutions for automation technology or at https://eshop.wieland-electric.com



#### flare TIME HM8-2U-A

Universal, multi-function timer relay as a substitute for electromechanical timer relay and with special functions, such as stepping relay and watchdog function.

#### Features

- 8 time ranges
- 4 time functions/4 special functions: Stepping relay (inverted), watchdog, single shot
- Multi-voltage range 20.4 ... 264 V AC/DC
- Assembly width of 22.5 mm



#### flare CONTROL IL-1-A; UL-1-A

Measuring and monitoring relay for sub-region detection with settable response delay at threshold underrun.

#### **Features**

- 3 measuring ranges in one device
- Broad supply voltage range of 20.4 ... 264 V AC/DC
- Settable response delay at threshold underrun: upper and lower thresholds can be set separately
- Settable operating current and closed current principle



#### wienet WR-LTE v3 SL Industrial mobile radio router

v3, the latest generation of the **wienet** VPN industrial router, offers the ideal communication platform for Teleservice, remote maintenance and Industry 4.0.

#### **Features**

- Internet access via either LAN, WLAN or mobile radio
- Up to 5 Ethernet ports, configurable for 1-3 LAN networks
- 2 digital inputs, 1 digital output
- Application range of -40°C to +75°C



Information about these products: 0800.1 *interface* Solutions for the Control Cabinet or at https://eshop.wieland-electric.com



#### selos fuse and knife disconnect terminals

The innovative screw terminal range with connection solutions of up to 300 mm<sup>2</sup> continues to expand. The compact design, with an assembly width of just 5 or 6 mm, makes the new WT 2.5 TKM knife disconnect terminals and the WT 4 FSI automotive fuse terminal the ideal solution for space-saving wiring. The terminals have a two-row jumpering channel and are easy to connect to the **selos** system via plug-in jumpers.

#### **Features**

- Knife disconnect terminals of 2.5 and 4 mm<sup>2</sup>
- Fuse terminal for flat fuses on an assembly width of just 6 mm
- Two-row, plug-in jumpering channel
- Also with integrated test sockets



Information about these products: 0500.1 *selos/fasis* DIN rail terminal blocks catalog or at https://eshop.wieland-electric.com



### **revos** FLEX COMPACT **1M now with transport cover and protection to IP69K**

This housing range allows **revos** FLEX modules to be used in one housing without the need for a module frame. The internal seals protect the housings from age-accelerating UV radiation and permits use in all seasons. The robust housing withstands constant vibrations, high thermal and mechanical stresses such as stone chipping, dust, hot and cold temperatures, and corresponds to IP65, IP68 and IP69K protection ratings.

#### **Features**

- Compact, robust housing
- EMC protection –70 dB < 10 MHz
- IP65, IP68 (3 m/10 h) and IP69K
- Easy and quick assembly / 30% time saving



Information about these products: 0530.1 *revos* Industrial multipole connectors or at https://eshop.wieland-electric.com



#### Decentralized protection module for 24 V DC networks

The increasingly decentralized arrangement of electrical installations requires equipment to protect 24 V DC networks. The **podis**<sup>®</sup> PROTECTOR 24V module offers simple pluggable installation and reliably protects auxiliary voltage networks.

#### **Features**

- Protection module for protecting branches on the 24 V energy bus
- Settable current strengths of 2 A, 4 A, 6 A
- Lag-free reset
- Two independent channels
  Pluggable with *gesis*<sup>®</sup> RST



#### podis<sup>®LED</sup> 2klm with UL approval

A UL-certified model is available and simplifies use of the **podis**<sup>®</sup>LED 2klm. Workstations at plant and machinery for the North American market can be continuously and reliably illuminated without having to forgo the known benefits of the **podis**<sup>®</sup>LED.

#### **Features**

- Input voltage range of 100...240 V AC
- Uniform illumination of the work area
- Pluggable with *gesis*® RST20i3
- Through-wired
- High protection rating of IP68/IP69K



Information about these products: 0830.1 *podis*<sup>®</sup> Decentralized Automation or at https://eshop.wieland-electric.com



#### saris M8/M12 pre-assembled cables

The M8/M12 cabling system is the ideal solution for fast and safe field installation in automation technology. The various basic components create an infinite number of installation topologies.

#### **Features**

- Simple and intuitive operation
- Tested and certified products
- Ouick and safe thanks to pre-assembled components
- High drag chain capability and oil resistance of cables



#### Field-wireable M8/M12 connectors

Connectors for field assembly makes practically any installation fast, safe and flexible. No matter whether via screw connection technology or insulation displacement contact (IDC) technology.

#### **Features**

- Mechanical coding eliminates incorrect mating
- High protection rating of IP65/67 for use in harsh environments
   More reliable and faster connection with screw connection or insulation displacement contact technology
- Insulation displacement contact technology now also available for shielded cables



#### saris<sup>®</sup> M8/M12 distributor

The distributor of the M8/M12 field installation program makes decentralized installation incredibly simple. The installation effort is significantly reduced by replacing cables laid in parallel by just one single main cable.

#### **Features**

connector

- Decentralized field installation
- Defined and standardized interfaces
- Quick and safe installation thanks to pre-assembled components
  Available with main cable, M12/M16 connector or a field-wireable



Information about these products: 0620.1 *saris*<sup>®</sup> Sensor/actor wiring, M8 / M12 and valve connectors or at https://eshop.wieland-electric.com



#### gesis® RST® MINI product line 16i5

Smallest installation plug connector with highest IP rating. With the new series RST<sup>®</sup> MINI, Wieland Electric opens up the 3rd dimension of successful RST<sup>®</sup> round plug connector systems.

The 3-pole version will be available from January 2016.

#### **Features**

- 16 A / 400 V
- IP66/68 (3m; 2h)/69K
- Newly developed TWISTLOCK locking technology
- 19.9 mm diameter (2 and 3-pole)
- 24 mm diameter (4 and 5-pole)



Information about these products: 0690.1 gesis®RST® Pluggable electrical installation with highest IP rating (IP6X) or at https://eshop.wieland-electric.com



#### gesis®NRG, the new flat cable system generation

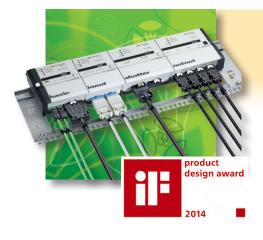
Complete redesign of the established, flexible bus bar for the GST18<sup>®</sup> installation. The new generation **gesis**<sup>®</sup>NRG can be used not only for energy distribution, but also for illumination installations. Fewer components, more potentials.

#### **Features**

- Supply module for 6 mm<sup>2</sup> cable with rugged pull relief
- Pluggable outputs parallel to flat cable
- GST18i3 adapter with phase selection without relocating the adapter
- New cable geometry with 2.5 and 4 mm<sup>2</sup>
- DALI components and cables for illumination control
- Through-hole piercing connection with Torx<sup>®</sup> screws



Information about these products: 0670.1 *gesis*<sup>®</sup> Pluggable electrical installation for indoors or at https://eshop.wieland-electric.com



#### gesis® FLEX modular system expansion

The modular KNX room automation system, 100% pluggable with base module for managing up to six system extensions, has bee expanded in terms of its basic functions. A 4-way, AC semiconductor with and without fusing, and a DC version with electronic fusing, have been added for illumination and heating control. For blind control, the AC and DC actuators have been complemented by a fused version.

#### **Features**

- System for decentralized operation
- 100% pluggable
- Illumination, blind and heating control in one KNX device
- Expandable via AC/DC semiconductors with and without fusing
- Expandable via AC/DC blind control with fusing



#### gesis® FLEX SMI and Fan Coil

An SMI gateway for blind automation and air conditioning, and a modular fan coil actuator are set to join device range shortly. The modular **gesis**<sup>®</sup> FLEX system will be expanded by devices with an intrinsic KNX connection. Until now, this system has realized the radio segment with the Enocean gateway and add-on functions by installing KNX devices into the system housing.

#### **Features**

- System for decentralized operation
- 100% pluggable
- SMI gateway for 8 motors (network and SMI in one plug-in system)
- Fan coil actuator with base module and expansion can be scaled in accordance with requirements



#### Pluggable presence detector with slave versions

The pluggable presence detectors enable simple, convenient integration into the pluggable installation. DALI as well as scalable applications are supported. When used in large areas, slave sensors must signal the presence of persons to the master. Thereby the DALI sensors are simply connected in parallel. The switching sensors are wired in series.

#### **Features**

- Closely intermeshed motion detection
- 100% pluggable, simple to integrate
- No separate master slave assignment required
- Coverage of expanded areas



Information about these products: 0700.1 gesis<sup>®</sup>ELECTRONIC Dezentralized building installation via plug&play or at https://eshop.wieland-electric.com



#### **Product portfolio**

- Electronic and electrical engineering for the control cabinet
- Safety technology
- Network and field bus systems
- Energy bus systems for industry and buildings
- Connectors up to protection type IP6X
- Building automation
- PCB terminals and plug connectors
- Sensor/actuator cabling



#### Industries

- Machine building
- Construction machines & cranes
- Buildings and lighting
- Logistics
- Power engineering
- Renewable energy sources
- Heating, ventilation and air conditioning systems



#### **Business services**

- Pre-assembly and wiring
- Product labeling service
- Integrated solutions inside distributors
- Customized solutions
- On-site project support
- Optimization of decentralized, pluggable installation solutions
- Certified machine safety tests



#### Safety training

- Software validation
- CSE certified safety engineers
- Basics and standards of functional safety
- Modification of old machines and major changes
- Design of safety functions and calculation with Sistema
- Machinery Directive, liability issues and CE conformity explanations



#### Software/configuration tools

- **wieplan**, configuration of terminal strips
- **wiemarc**, marking software for
- DIN rail terminal blocks
- *revos* configurator for connectors • *gesis*®PLAN for building installation
- **podis**<sup>®</sup>PLAN for configuring the
- podis<sup>®</sup> energy bus system
- *samos*®<sub>PLAN5+</sub>, programming tool for *samos*®<sub>PRO</sub> comPACT



#### Why Wieland?

- Standardized industrial solutions
- Customized solutions
- Support for your project
- Broad product portfolio
- Application worldwide due to
- international licensesGroup-wide observance of human rights, including at suppliers
- Eco-friendly production









DGNB° Deutsche Gesellschaft für Nachhaltiges Bauen e.V. German Sustainable Building Council

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