

# wieland



selos **DIN Rail Terminal Blocks** with Screw Connection

**Professional** Screw Technology









▲ Photo of the Bamberg headquarters



▲ STOCKO headquarters in Wuppertal



# automation 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, are active beneath 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.

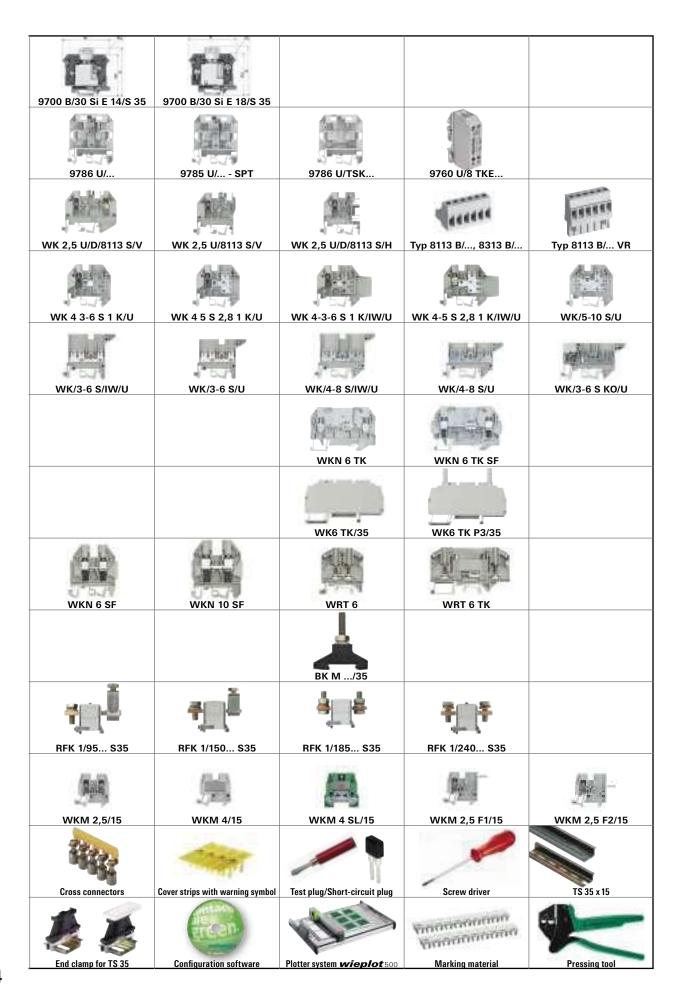
Wieland Electric is active in most areas of automation technology and delivers as the industry's driver for innovation. Safety first - Wieland Electric is ideally positioned with its modular system solutions such as

# Wielectron

### **ACTIVE WORLDWIDE**

With its staff of almost 2,200 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.

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WK 2,5/U	WK 4/U	WK 6/U	WKN 10/U	WKN 16/U
WKN 35/U	WKN 70/U	WKN 150/U		
WKN 4 ETK/U	WKN 10 ETK/U	WKN 16 ETK/U		WAK 16/2 BLAU, WAK 35/2 BLAU, WAK 35/2
		1		
WK 2,5 SL/35	WK 4 SL/U	WK 6 SL/U	WKN 10 SL/U	WKN 16 SL/U
WKN 35 SL/U	WKN/70 SL/U	9700 A/35 E S 35	9700 A/70 E S 35	Supply set
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WK 4/D/1/2/U	WK 4/D/2/2/U	WK 4/D E/U	WK 4/D/2/2SL/U	
WK 4 E/U	WK 4 E/U/VB	WK 4 E SL/U	WK 4 E/U	WK 4 E/rot
VVK 4 E/O	VVK 4 E/O/VB	VVK 4 E 3L/U	VVK 4 E/O	VVK 4 E/IOL
WKN 2,5 E/U	WKN 2,5 E/U/VB	46-10	41.10	
WK 2,5-4 KI/U	WK 2,5-3 D/U	WK 2,5-4 KI/SL	WK 2,5-3 D/SL	
5.7				
WK 2,5-4 KOI/U	WK 2,5-4 KOI/U-NGN	WK 2,5-4 KOI/U-PGN		
WK 4 TKG THSI 5x20	WK 4 TKG THSI 6,3x32	WK 4/TKM	WK 4 TKG-TRST/U	WK 4 TKS D/U
WK 4 TKG	WK 4 TKG	WK 4/Si-D/U 5 x 25		
WK 4 THSI 5/U	WK 4 THSI 6,3/U	WK 10/SI/U	WK 10/SI/U with indicator	WK 10/SI/U D





Wieland Electric offers you selos  $\mbox{WKN}$  – a complete assortment of DIN rail terminal blocks with screw connection technology.

The portfolio includes feed through and ground blocks with 2, 3 or 4-wire connection points, multi-tier blocks in two and three-tier design, knife edge disconnect blocks and fuse blocks. In addition, function blocks are available with a wide variety of diode circuits as well as diverse, special application – specific blocks (e.g., measuring converter disconnect blocks or compensating terminals).

**selos** is designed for use in mechanical and plant engineering as well as in explosion-protected areas.

### Technical data as per EN 60947-7:

Rated cross section: 2.5 mm² - 240 mm² Rated current: Up to 415 A Rated voltage: 800/500 V

- Globally recognized, proven and self-explanatory connection technology
- Space-saving, compact design with side wire entry
- Reliable and maintenance-friendly electrical connection
- with maximum contact strength



### Universal use

Classical

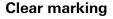
connection

- Flexible connection of different wire sizes via large connection capability of the clamping points
- Simple expansion or potential distribution via multi-wire connection
- Connection of fine-wire conductors with ferrules up to the rated cross section
- Low feed-through resistance due to large contact surface and good contact strength



### Many uses

- DIN rail terminal block solutions for all conventional circuiting jobs and functions
- Special blocks for branch-specific applications
- Extensive accessories for function expansion
- Global, national and branch-specific approvals for use around the world



- Clearly legible marking tags even after wires are connected
- Unmistakable wire-termination point assignment during wiring
- Simplified trouble-shooting in case of maintenance
- Individual marking with the **wiemarc** marking system





# Screw connection technology

### Rising cage connection with elastic clamping body

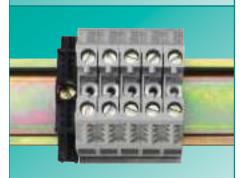
- Maximum possible stable contact strength regardless of cross section
- Functional dependability—no damage to the screw's threading even after screws are tightened and loosened several times
- Gas-proof electrical connection in accordance with approvals.



### **Universal foot**

### Universal usability on conventional types of mounting rails

- Assembly foot for TS 35 and TS 32 as per DIN 60715
- Seat centered to mounting rail
- Functional and mounting dependability due to asymmetrical design of the clamping foot. Incorrectly mounted blocks are detected immediately.



### **Guide ducts**

### Enclosed guide ducts for screwdrivers

- When power screwdrivers are used, the screwdriver duct prevents the blade from slipping off.
- When clamping screws are completely screwed out, the integrated screw brake ensures that they are not lost even during over head work.



### Wire entry guide

### Correct and quick wiring

- User-friendliness and speed provided by the wire guide during connection
- Multi-stranded and fine-stranded wires can also be easily inserted in the terminal without ferrules.
- The connection space is open on delivery.



### Selection of high-quality materials

- Special alloys offer low feed through resistance and ensure a gas-proof contact area:
  - Current rail: copper or brass
  - Clamping bodies and clamping screws: Zinc-plated and chromated steel
- Polyamide has excellent electrical, chemical and mechanical properties:

Temperature resistant: Up to 120°CCreepage resistance: CTI 600

- Flammability class: UL94-V0, self-extinguishing





### Accessories for selos

We offer an extensive assortment of a wide variety of accessories to go with our **selos** screw terminal block program so that you can individually adjust Wieland DIN rail blocks to your applications.

This includes, among others, the reliable Wieland standard marking system as it is also used by our other product lines, and a complete program of cross connectors as cross connectors or combs in insulated or uninsulated design.

Various test accessories are also a standard part of the Wieland program as are connection plates, partitions, and special extra covers with warning symbol.



### Marking system

### All blocks clearly marked

- Large selection of marking tags with the spacing of the block
- Clearly legible marking tags even after wires are connected
- Individual marking with the wiemarc and wieplot marking systems



### **Cross connectors**

### Jumpering all blocks with load-carrying capacity

- High current-carrying ability with nominal current of the rated cross section
- Available from 2 to 12-pin. Larger numbers of pins via ready made goods.
- End plates, partitions or partition plates must be used for cross connectors so that the rated voltage is maintained.
- Displaced assembly is required for blocks with different potentials.



### Jumper combs

### Additional jumpering option

- Jumper combs are introduced with the wire into the connection space.
- Jump combs are available in touch-proof design in accordance with BGV A2.
- When jumper combs are used, the connection cross section is reduced by one stage.
- Available from 2 to 12-pins. Larger numbers of pins via ready made goods.



### Insulation of potentials

- Optical separation of individual block groups
- Adherence to air and creepage distances for cross connectors mounted next to each other
- For safety reasons partitions are constructed so that they can only be removed when the adjacent DIN rail block is also removed.





### **Covers**

### Marking potentials under voltage

- Safety due to reference to network voltage
- For snapping onto blocks which are still under voltage even though the main switch was switched off.
- Marking of the network power input
- Available as single cover or as strip

# Test sockets and plugs

### Checking the potentials

- Test sockets are mounted in the middle threading of the DIN rail block.
- Test plugs in 2, 3 or 4 mm design
- Short circuit plugs

# Modular test adapters

### Testing and commissioning terminal block assemblies

- Test with full wiring on fabricated DIN rail blocks
- Function test with modular test adapter by direct pickup from the current rail of the block
- Test adapters with locking lever can be snapped in with any number of pins.

### **Connection link**

### Connecting potentials so that they can be separated

- Easy-to-separate 2-pin cross connection
- Mounting in the middle threading of the DIN rail block

### **Partition plates**

### Insulating potentials

- To maintain the full rated voltage when cross connectors are used
- Later snap-in possible
- Marking option with the Wieland standard marking system

### Configuration software for DIN rail terminal blocks, wieplan



**wieplan** was developed to provide you with a powerful software tool for the configuration of terminal block assemblies using Wieland DIN rail terminal blocks.

**wieplan** is available in 4 languages. It is user-friendly and its intuitive user interface guides you step by step through the entire configuration process. After completion you can optionally order your configured terminal block assembly from Wieland for complete pre-assembly.

Thus wieplan helps you to save time and money.



# Managing projects

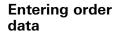
### Benefits:

- To begin each configuration you automatically start from the basic project management menu.
- You create new projects and are reliably guided through the easy and practice-oriented program logics.
- You always have the choice of either opening an already existing project or of creating a new one.

### Configuring terminal block assemblies without errors

### Benefits:

- You work with high-quality graphs viewing the terminal blocks from the top; the accessories added are visible at any time.
- You continually use the plausibility check that reminds you of the accessories required such as end plates.
- You are provided with a product catalog with search function; you can add your own order numbers, if required; and you can create libraries for self-defined products.



### Benefits:

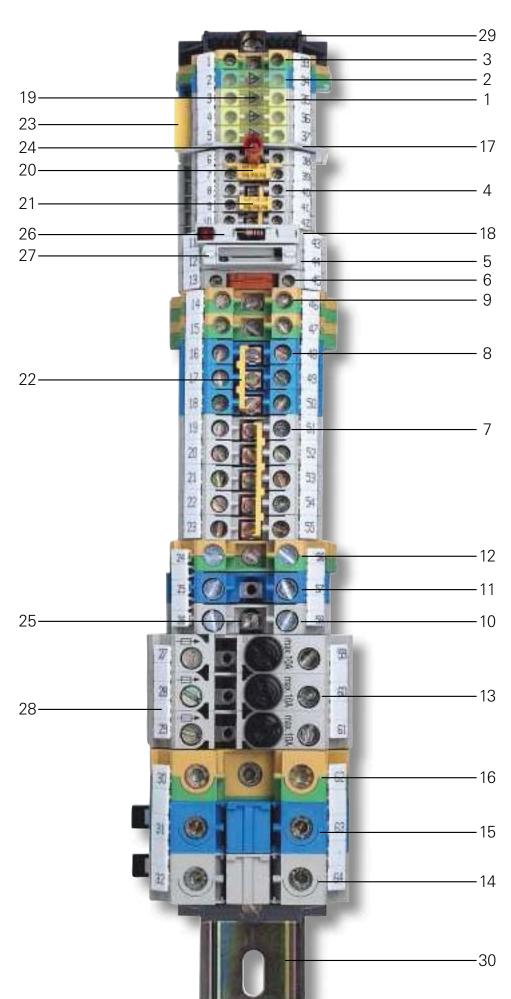
- You enter your data such as invoice and delivery address in the order data screen only once and can use this information for any follow-up orders.
- You may order by e-mail; in this case the terminal block assembly data are zipped automatically.



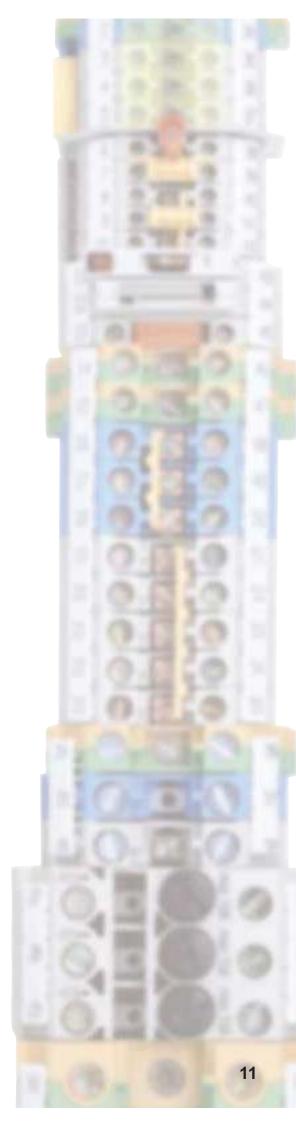
# Terminal block assembly output

### Benefits:

- You print out the order, the parts list and the drawing data, and, if required, your own order numbers.
- You create a DXF file and export the current terminal block assembly to a CAD program.
- You export the marking in CSV format including all marking data for further processing in **wiemarc**, for example.
- A bidirectional interface is available to your CAE system EPLAN.



Pos	. Description	Туре	Part number
1	Feed-through block	WK 4/U	57.504.0055.0
2	Feed-through block, blue	WK 4/U BLAU	57.504.0055.6
3	Ground block	WK 4 SL/U	57.504.9055.0
4	Feed-through block	WK 2,5/U	57.503.0055.0
5	Disconnect block	WK 4 TKG/U	57.504.4055.0
6	Knife edge disconnect block	WK 4 TKM/U	57.504.2055.0
7	Feed-through block	WK 6/U	57.506.0055.0
8	Feed-through block, blue	WK 6/U BLAU	57.506.0055.6
9	Ground block	WK 6 SL/U	57.506.9055.0
10	Feed-through block	WKN 10/U	57.510.0155.0
11	Feed-through block, blue	WKN 10/U BLAU	57.510.0155.6
12	Ground block	WKN 10 SL/U	57.510.9055.0
13	Fuse block	WK 10 SI/U 5x20	57.910.5055.0
14	Feed-through block	WKN 35/U	57.535.0155.0
15	Feed-through block, blue	WKN 35/U BLAU	57.535.0155.6
16	Ground block	WKN 35/U	57.535.9055.0
17	Partition	TW 2,5-4	07.311.1155.0
18	End plate	AP 2,5-4	07.311.0155.0
19	Cover strip with warning symbol over 4 blocks	AD VB 6/4 GELB	04.343.4856.8
20	Partition plate, yellow	TS 2,5 GELB	07.311.2053.8
21	Single cover for cross conn. with mark. facil.	AD VB 2,5 GELB	04.326.2053.8
22	Cross connector with screws, insulated	IVB WK 6-3	Z7.282.2327.0
23	Jumper comb, insulated	IVB 0,5 WK 4-3	Z7.255.0327.0
24	Test plug	ST 2/2,3	Z5.553.2921.0
25	Ring lug for test plug	9011B	05.508.3221.0
26	Fuse holder with indicator	SIST LED	Z1.299.4155.0
27	Diode plug, without contacts	DIST	Z1.299.3155.0
28	Marking strip	9705 A/8/10 B	04.842.0153.0
29	End clamp	9708/2 S35	Z5.522.8553.0
30	Mounting rail	35x27x7,5 gelocht	98.300.0000.0





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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
- - Safe signal acquisition
  - Safety switching devices
  - Modular safety modules
- Compact safety controllers
- Applicative consultancy 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
  - Aluminum 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 radio technology
  - DIN rail terminal blocks for electrical installations
  - Overvoltage protection

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