



## System Solutions



We plan, design, assemble and test complete system solutions and integrate them into existing systems.

04

### **Electronic interlocking solutions SIL4**

EUROLOCKING is a customisable electronic interlocking system that uses industry standard products and is ready for you to use in a minimal amount of time.

06

### **Interlocking solutions in relay technology**

We have extensive experience in the project planning of interlockings of the Domino-type.

08

### **System integration**

Delivery of comprehensive turnkey systems consisting of different subsystems from various manufacturers around the core interlocking system.

10

### **Train Control Standard ZBMS**

Comprehensive services in train control ZBMS.

# Electronic Interlocking Solutions **SIL4**

EUROLOCKING is a customer focused, modular electronic interlocking system that uses industry standard products and is ready for you to use in a minimal amount of time.





The consistent use of an IP-based system enables a high degree of flexibility. This means that centralised and decentralised interlocking architectures can be implemented.

EUROLOCKING interlockings can be easily adapted to changing conditions. The hardware is modular and can be modified as required. Changes to the software as well as later adaptations to the system can be made at low cost.

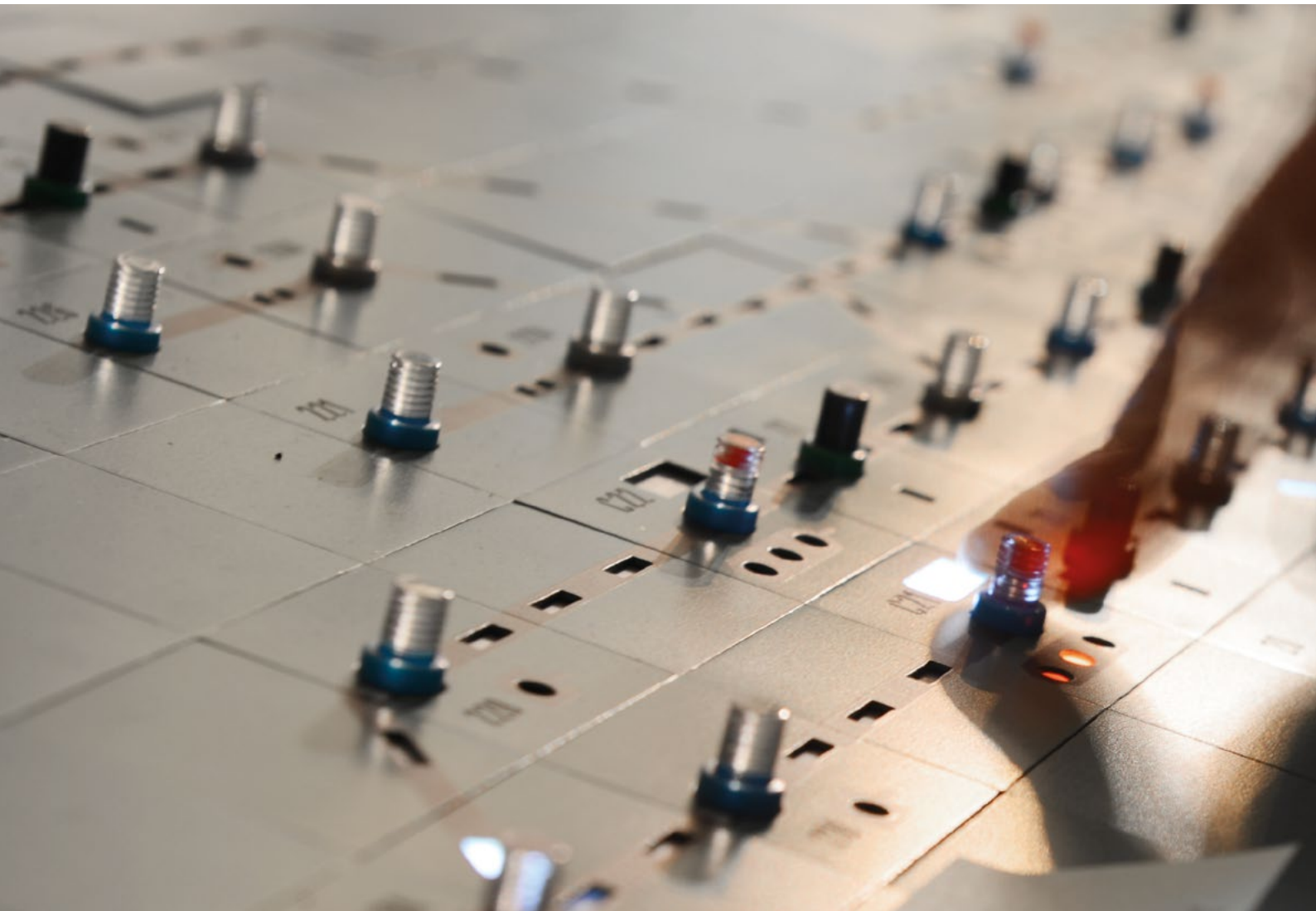
Based on the generic system design, we develop and configure your new interlocking.

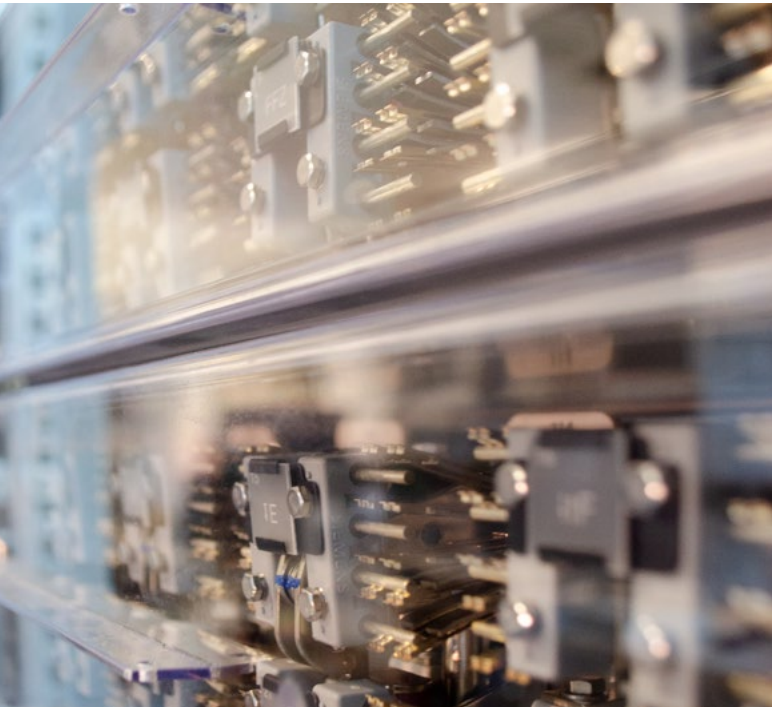
The EUROLOCKING system can be used for all railways that require a safety system.

The generic system design of the EUROLOCKING interlocking system with a SIL 4-certified CPU enables customised solutions to be planned and implemented with a certified architecture from existing software and industry components.

# Interlocking Solutions in Relay Technology

We have extensive experience in the project planning of interlockings of the Domino-type.





Aside from having extensive experience in new builds and rebuilds of the widely used Domino 69 and Domino 67 interlockings, we also offer our vast knowledge in rebuilds of Domino-C and Domino-55 interlockings.

We are also highly experienced with the interfaces to electronic interlockings and the project planning of SPS.

We are highly knowledgeable in interlocking and level crossing control systems which gives us the capability to develop new constructions, conversions, and extensions of railway safety installations of any size according to customer requirements.

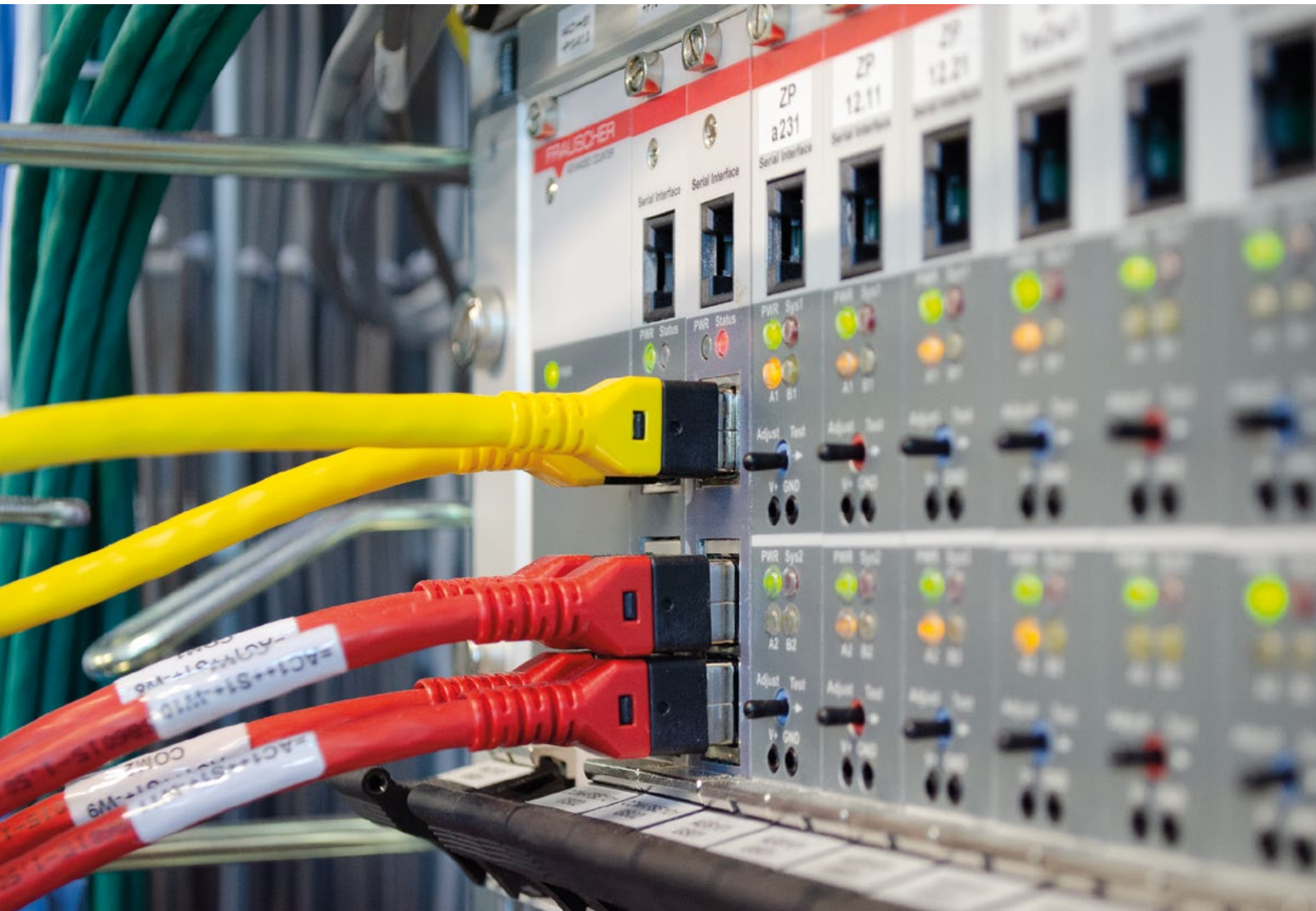
Our strength lies in implementing the orders in a way that it is economical for the company and costs are optimised. We do not hesitate when it comes to unconventional ways of thinking. Compliance with the rules and regulations is our top priority.

Our expertise and services are directed towards the future. Connections to electronic systems and the associated interfaces are just as familiar to us as SPS- technology for automatic functions in Domino interlockings.

- Detail project planning Domino
- Detailed project planning for level crossing control systems
- Planning and project development for outdoor and cable systems
- Connection of electronic interlocking systems
- Project and technical construction management support for customers
- Executive project management
- Safety verification according to BAV guidelines
- Factory testing
- Drawing in Auto CAD
- Preservation and further development of Domino Know-how
- Circuit and control development according to safety standards
- Automatic functions with SPS-controls

# System Integration

Delivery of comprehensive turnkey systems consisting of different subsystems from various manufacturers around the core interlocking system.







Maintain your flexibility and independence. Thanks to our high level of system and technical know-how, we can combine different sub-systems into a complete system or integrate new products into an existing architecture.

We project the interface between interlocking and control technology, between two interlockings (line block) or integrate your new level crossing. The integration of track vacancy messages, signals or even new functionalities are also part of our service portfolio.

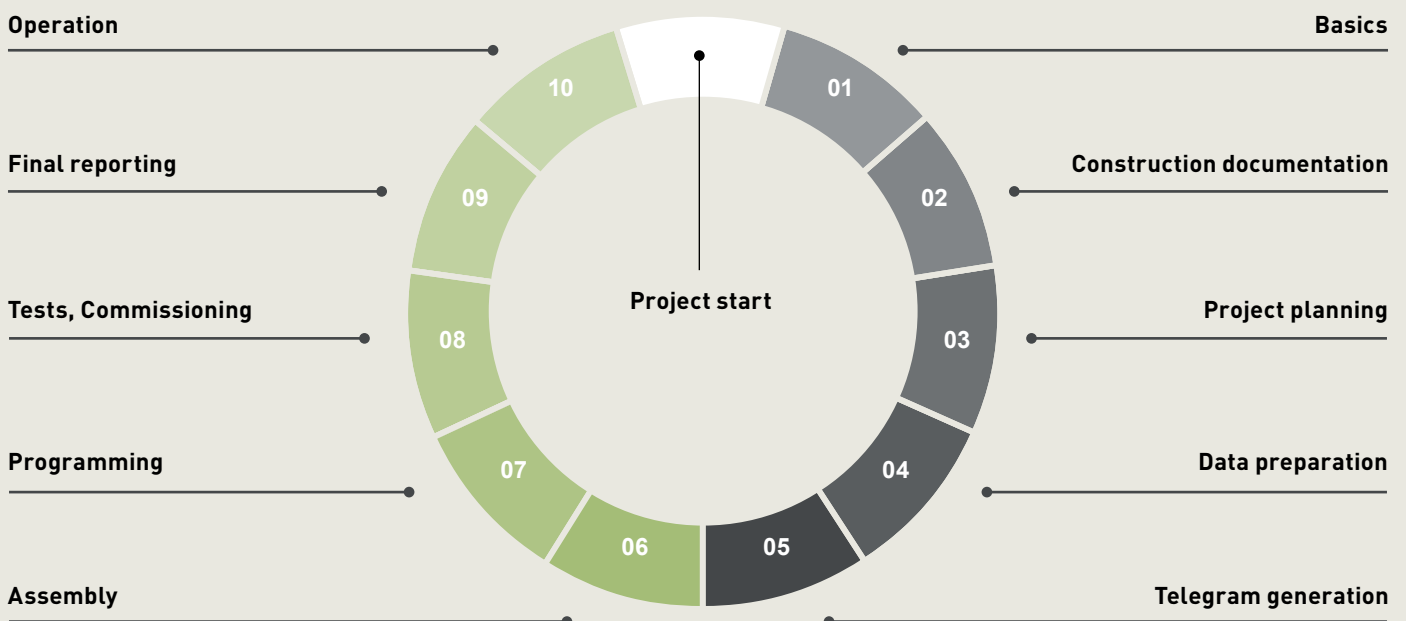
Technical challenges drive our motivation and elevate our expertise on a daily basis. Whether interfaces between different relay technologies or proprietary electronic controls: We understand your needs and can present a safe and certifiable solution for the world of safety installation systems.

Do not hesitate to contact us with your questions or concerns and to challenge us with your inquiries. We are ready.

# Train Control ZBMS

Comprehensive services  
in train control ZBMS.

The development of ZBMS route points takes place according to the following process phases:





For the train control standard for Metre and special gauge railways set by the Federal Office of Transport, we offer you all services from planning to project planning, assembly, programming, testing as well as test runs up to commissioning.

The extensive knowledge covers all project phases and the entire equipment for Metre and special gauge railways. The experience of past completed projects merges directly into the planning work for plan approval dossiers.

As a major player in train control ZBMS, BÄR Bahnsicherung is involved in system leadership and is actively working on the fundamentals and further development of the standard.

Due to the interdisciplinary knowledge, tailor-made solutions can already be developed for each railway company during the planning of a system. The tools and aids of fulfilment are also already available for the planning and enable an optimal design of the train control.

The implementation of the interlocking adaptation runs parallel to the project execution of the train control. For the connection of the signal terms and additional criteria, a comparison with the interlocking project planning takes place in phases 3 and 4.

For the data preparation and the generation of the telegram data, we work together with the supplier of the hardware components. The interface with the third-party company is standardised and completely managed by us. Therefore, the generated telegram data are compatible with the test and programming devices of the material supplier.

Components of the trackside equipment of ETCS Level 1 from Siemens are used as hardware. We supply the detailed material list for ordering the components or, if required, also carry out the entire disposition. Warranty services regarding the material run directly with the manufacturer.

## BÄR Bahnsicherung AG

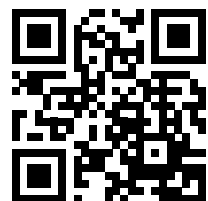
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