



SPRECON®-E-P RS6

Multifunctional Overcurrent Protection for Railway Applications



OVERCURRENT PROTECTION FOR RAILWAY APPLICATIONS

The Sprecher Automation railway overcurrent protection devices are used in railway systems and networks as main or backup protection for switchgear and catenary systems. They protect, for example, catenary feeders fed from one or both sides and can be used as higher-level protection for indoor switchgear. In addition, the devices provide back-up protection for transformers, busbars as well as catenary and overhead line feeders in railway systems. As an ISO 27001-certified company, we have, of course, also implemented comprehensive IT security features for the secure operation of your critical infrastructure.

FLEXIBLE APPLICATIONS

Our railway overcurrent protection devices are based on the established concept of the SPRE-CON-E platform. Additional railway-specific hardware is not necessary.

- Device configuration: same hardware for all railway branch protection devices
- Comprehensive concept for spare parts stock and equipment maintenance

SPRECON-E-P RS..6-2 devices offer you, in addition to the sophisticated solutions for the protection, communication and control of switchgear, a wide range of options for expansion with specific measuring and bay control functionalities. The railway protection devices thus form a flexible basis for customised protection and control applications.

Main or backup protection for AC catenary systems in single or two-wire applications with different grid frequencies (16.7 Hz, 25 Hz, 50 Hz)

- High-current stage
 (max. 2.5 ms tripping time in connection with electronically supported command outputs)
- Directional overcurrent protection with adjustable voltage release
- Switch-on to fault protection & inrush stabilisation
- Supervised circuit breaker close command (voltage maximum or zero crossing)
- Overload protection with redundant coolant temperature detection
- Circuit breaker failure protection with breaker monitoring



VARIOUS PROTOCOLS

So that you can optimally integrate the Sprecher protection devices into your communication system, they support different protocols:

- IEC 60870-5-103/-104
- IEC 61850
- RSTP, PRP, HSR

COMFORTABLE OPERATION

Both in terms of configuration and on-site operation, the Sprecher protection devices offer several advantages:

The SPRECON-E COMM3 tool in the Sprecher Engineering Center accompanies you through all phases of your project, from engineering, commissioning and protection testing to daily operation.

On site, you use the detachable control panel with a high-resolution colour display and 25 freely settable, three-colour signal LEDs. Of course, this also allows you to make protection and control settings directly in the system, as well as to clearly display process and device information.

You can carry out simple service tasks via the multiply secured web server – without the need for any additional tools:

- Alarm & event lists, display process images
- Information on network & system status
- Service & diagnostic functions (settings, firmware & parameter updates, process data, download of files & fault records etc.)

System protection for indoor MV stations

- Frame protection for insulated switchgear architecture
 (max. 2.5 ms tripping time in connection with electronically supported command outputs)
- System trip duplication for circuit breaker failure or direct intertrip signals
- Substation summation current protection with adjustable voltage release
- Specific control & visualisation
- Simultaneous control of max. 64 potential-free command outputs possible

 Indoor Switchgear System Protection SPRECON-E-P RS6

INTEGRATED BACKUP

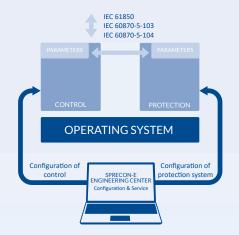
If a device needs to be replaced, you can do it quickly and without additional tools. Remove the integrated SD memory card, insert it into the new device, done! Operating system, firmware, parameter set — everything is copied automatically. The protection is restored without losing any data.

ALWAYS THE RIGHT HOUSING

Two different housing sizes with many different digital and analogue I/O cards and redundant power supply offer the best device for every application.

SEPARATE PROTECTION & CONTROL TECHNOLOGY

The protection process in our protection devices always runs independently of the control process. This ensures the required reaction time under all conditions. If you change the control process settings, it doesn't affect the protection process and you don't have to change your tested protection settings.



Backup protection for transformer or railway line feeders with different grid frequencies (16.7 Hz, 25 Hz, 50 Hz)

- Tank protection for insulated transformers or coils
 (max. 2.5 ms tripping time in connection with electronically supported command outputs)
- Directional overcurrent protection with adjustable voltage release
- Switch-on to fault protection & inrush stabilisation
- Supervised circuit breaker close command (voltage maximum or zero crossing)
- Overload protection with redundant coolant temperature detection
- Voltage, frequency & power monitoring
- Circuit breaker failure protection with breaker monitoring



TECHNICAL DATA

Of course we have a great deal of information about SPRECON-E-P RS..6 devices – so much that we cannot list it all in detail here:

- the implemented protective functions,
- the dimensions of the different housings,
- the number of possible inputs and outputs,

• available communication options, and much more. On our website at www.sprecher-automation.com/overcurrent-protection-rail we have listed all technical data. The QR code will take you there directly.



GIVE US A CALL OR SEND US AN E-MAIL!

Together we will find exactly the solution that best suits your requirements.

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