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Clearguard ACM 200 axle counting system

Smart track vacancy detection for cost-effective operations

A track vacancy detection system supplies the information about whether a track in a particular section is clear or occupied, thereby permitting safe, trouble-free and efficient operations management.

The Clearguard ACM 200 axle counting system is made up of maintenance-free Clearguard ACM 200 modules which are programmed via an ID plug and combined with an Ethernet bus and Clearguard ZP 43 E/V and Clearguard ZP D 43 counting heads into a fail-safe axle counting system.

The detection equipment used meets the latest compatibility requirements for cross-border traffic in Europe.

Fields of application:

- mainline and regional railways
- metro and tramway systems
- freight lines and depots
- main lines and secondary lines, station areas, point areas
- single-track and multiple-track lines
- lines with and without blocking
- all traction types
- all common types of car
- track sections of any length
- train speeds of up to 400 km/h

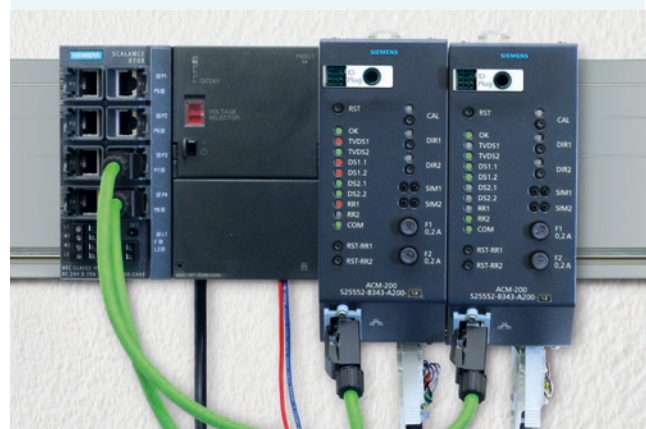
Benefits

Connection to electronic and relay interlockings

HTML communication for attribute configuration, logging and diagnostics

Modular, compact hardware

Deployment of Clearguard ZP D 43 and Clearguard ZP 43 E/V counting heads





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Technical data

Counting capacity	2,000 axles per track vacancy detection section 20 axles per second for the Clearguard ZP D 43 and Clearguard ZP 43 E counting heads
Max. number of connectable wheel detectors per ACM	Two counting heads: Clearguard ZP 43 E/V and Clearguard ZP D 43
Max. number of detectable track vacancy detection sections per ACM	2
Power consumption	Clearguard ZP D 43: 5 W Clearguard ACM: 7.8 W
ACM supply voltage	24 V DC (21.6 V to 31.2 V DC), approx. 1 A
Outputs	
Relay contacts for DC	
Switching voltage	10 V DC to 72 V DC 10 V AC to 150 V AC
Switching current	2 mA DC to 0.25 A DC 2 mA AC to 1 A AC
Switching power	15 W
Relay contacts for AC	
Switching voltage	24 V (-10%) to 110 V (+10%) AC
Switching current	2 mA to 1 A
Switching power	15 W
Inputs	
Voltage range	21.6 V to 72 V DC (max. 6 mA)
Current range	up to 6 mA at 21.6 V to 72 V DC (with series resistor limited to 6 mA)
Operating conditions	-40 °C to +70 °C

- 1 Clearguard ACM 200
- 2 Power transformer
- 3 Ethernet switch
- 4 Router
- 5 Clearguard ZP D 43 (DEK 43) with trackside connection box

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