



Wheel Detection

Wheel Detection System RSR123-AEB

The Wheel Detection System RSR123-AEB is commonly used in the area of level crossings. A special feature is the flexible software interface, which can be extended by a hardware interface.



Information

Wheel detection (SIL 4)
Direction (SIL 4)
Numbers of axles
Diagnostic data



Applications

Track vacancy detection
Level crossing protection
Switching tasks



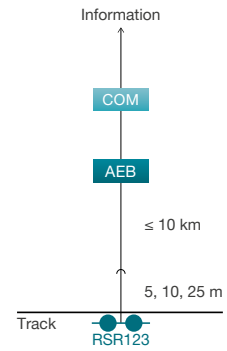
Benefits

Highly resistant to electromagnetic interferences
Convenient plug-in connection and rail claw
Software interface, optocoupler or relay

RSR123-AEB

Based on the patented V.Mix Technology, the RSR123 combines different inductive sensing methods making it highly resistant to electromagnetic interferences caused by eddy current brakes or rail currents.

The AEB evaluation board in combination with COM communication board has a flexible software interface. This can be adapted to customer-specific systems and can be extended by a hardware interface.



COM Communication board
AEB Evaluation board
RSR Wheel sensor

Technical Data

RSR123



AEB



Interfaces

Flexible software interface (COM)
 Optocoupler or relay via IO board

Safety level

SIL 4

Temperature

-40 °C to +85 °C

-40 °C to +70 °C

Humidity

Up to 100%

Up to 100% (without condensation or ice formation for the entire temperature range)

Electromagnetic compatibility

EN 50121-4

EN 50121-4

Conditions

UV resistance: yes
 Protection class: IP65 / IP68 to 8 kPa/60 min.
 Wheel diameter: 300 mm to 2 100 mm
 Speed: 0 km/h (static) to 450 km/h

Mechanical stress: 3M2 in accordance with EN 60721-3-3

Dimensions

Height: 60 mm
 Width: 270 mm
 Depth: 77 mm

Format: 19" housing for 100 mm x 160 mm boards
 Width: 4 width units
 Height: 3 height units

Optocoupler

Relay

Signal limits

Max. C-E voltage: 72 V DC
 Max. switching current: 17 mA

Max. voltage: 110 V DC or 120 V AC
 Max. switching current: 50 mA (inductive at 110 V DC) depending on the max. switching voltage

Power supply

Voltage: +19 V DC to +72 V DC
 Power: approx. 3 W per counting head
 Insulation voltage: 3 100 V

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