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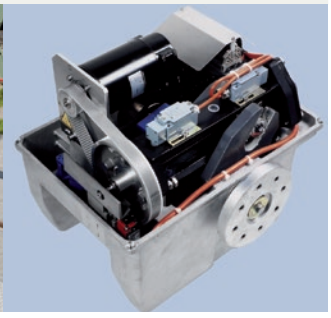
Wayguard Sim 6/13 Barrier Drive

Cost-effective and maintenance-friendly for new and old installations

Low-cost in operation

The Wayguard Sim 6/13 barrier drive is a cost-effective solution: low procurement costs, easy-to-install design and minimal operating costs. Maintenance is simple and can be performed without needing any specialist knowhow: hardly any parts subject to wear and short repair times due to the easily accessible modular design. Another benefit: current consumption has been drastically reduced.

Benefits
Environmentally friendly since no hydraulic oil is required
Compatible with all known controllers and power supplies
Reliable
Maintenance-friendly, ideal working height
Cost-effective
No holding magnet test in the controller, thus enabling shorter strike-in distances
Full electronic control with a soft start for Wayguard Simis LC
Lightweight design, no hoisting gear required
For square and round boom lengths of up to 10 m, also with fringes



Robust design

The Wayguard Sim 6/13 barrier drive is equipped with a DC motor. Protected by a compact, permanently corrosionproofed aluminum housing, it is installed on a hot-galvanized steel stand.

Counterweights balance out the weight of the barrier booms so that the movement forces for raising and lowering the barrier are offset.

The friction clutch and the time-limited control current activation circuitry prevent damage if the end positions are not reached.

Sophisticated power transmission and kinematics

The electric motor operates a ball spindle drive via a gearbox with toothed belt. The rotating motion of the spindle moves a ball nut which is inside the rotor. The two supporting rollers fitted to the rotor move linearly to the ball spindle drive. They transfer the torque via the two driver forks to the shaft of the barrier drive. The shaft turns and moves the boom.

Intelligent kinematics and the speed controller in the end position zones of the spindle cause the boom to be gently raised from and lowered into its end positions. Limit switches monitor the end positions and switch off the motor.

Individual and flexible

The design of Wayguard Sim 6/13 complies with the known national requirements. If required, it is available with round or square booms, supported on one or both sides, and fitted with boom lighting, broken boom detection facility and skirt. An emergency lowering function is available as an option.

Risk-free operation

The torsionally rigid pedestal prevents any consequential damage in the case of a broken barrier. The electrical connection is screened. When the crank handle is inserted, a control current cut-off mechanism automatically interrupts the control current and makes it safe to manually operate the barrier. Even if the barrier drive is mechanically key-locked, the control current is cut off.

The key can only be removed if the drive has been unlocked again. As overload protection for the screw gearing and the motor, the supply voltage is cut off on a time-dependent basis and

- in the case of EBUET 80, a mechanical friction clutch protects the barrier drive against damage, and
- in the case of Simis LC, the increase in current is evaluated by the electronic barrier operating module and the motor current is limited by an electronic friction clutch.

Easy replacement

Old, maintenance-intensive barrier drives can be rapidly and easily replaced by new Wayguard Sim 6/13 drives. On the basis of prepared basic circuitry diagrams, replacement, including the boom bearing assemblies, is both fast and straightforward. Replacement is ergonomic, since the fitter can work upright.

Wayguard Sim 6/13 is compatible with level-crossing systems of conventional design:

- Simis LC
- BUE S7
- EBUET 80
- NE BUE 90E
- BUE 95F
- FÜ 60
- BUES 72

High reliability

Robust mechanics and a low level of susceptibility to faults combined with a long service life and long maintenance intervals all speak for themselves. Wayguard Sim 6/13 is not dependent on seasonal factors. The pedestal-mounted barrier drive housing protects Wayguard Sim 6/13 against snowdrifts and flooding.

References

- Germany
- Greece
- Hungary
- Saudi Arabia
- Switzerland
- Lithuania

Technical data	
Supply voltage	36 V DC or 48 V DC for Wayguard Simis LC
Boom length	max. 10 m
Raising / lowering times	6 s or 10 s or 4 to 12 s or 8 to 16 s for Simis LC; raising / lowering times individually adjustable
Upper end position	85° (max. 90°)
Weight of barrier drive	95 kg
Width (flange to flange)	500 mm
Maintenance intervals	every 12 months (running-in phase 6 months) or after 100,000 operations
Service life	> 10^6 operations
IP rating	IP54
Temperature range	– 40 °C to + 60 °C

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