



[siemens.com/mobility](http://siemens.com/mobility)

# Switchguard ELS 710 point machine

## Safe and reliable throwing of points

The Siemens Switchguard ELS 710 point machine is used to operate points of every type and gage. It can be used at all points with external lockings and at derailleurs.

This point machine is compact, modular and robust in design and universally applicable. Its short overall length is a major advantage in confined conditions, for example in tunnels.

Modern materials and permanently lubricated components ensure long inspection and maintenance intervals and thus low life-cycle costs.

If required, the compact point machine comprising motor and spindle can be replaced manually in next to no time at all, without affecting the mechanical retaining function of the rodding.

Modification to the opposite position (from right-hand to left-hand position) is possible within a few minutes by simple reconnection in the housing without having to completely dismantle the detector slides.

The Switchguard ELS 710 point machine offers the possibility of being retrofitted with one floating contact per end position for additional switching functions depending on the point position.

The Switchguard ELS 710 point machine is the successor product of the Switchguard S 700 and S 700 K point machines, will be available in different design variants and offers the following features:

- trailable or non-trailable
- with or without detector slides
- operating voltage of motor:  
400/230 V three-phase AC, 230 V AC, 110 V AC/DC
- throwing stroke: 120-150-220-240 mm
- throwing force: 3 to -8.5 kN
- throwing time with a throwing stroke of 220 mm:  
2.8 to 7.5 s
- Further variants can be implemented.

### Benefits

Universal applicability

High level of reliability

Rugged and compact design

Compatibility with Switchguard S 700 K and Switchguard S 700

Compatibility with existing element operating modules

Low-maintenance operation

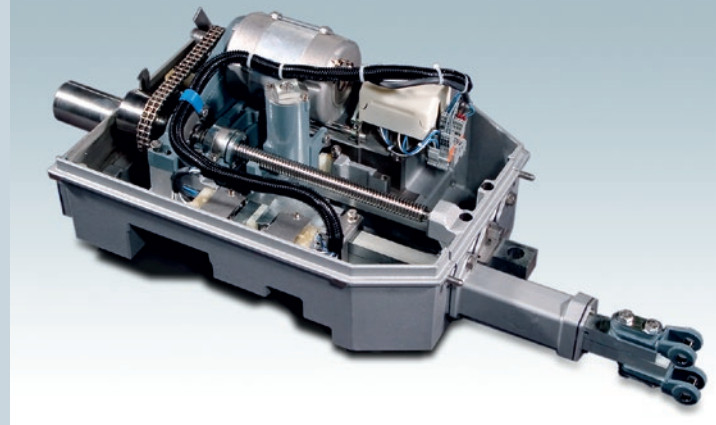
Long inspection and maintenance intervals

Low maintenance and life-cycle costs

Technical data	
Rated voltage	400 V three-phase AC
Throwing stroke	220 mm
Point opening	160 mm
Throwing force	5,000 N ± 500 N
Retention force (trailable point machine)	7,000 N ± 500 N
Trailing resistance (trailable point machine)	9,000 N + 500 N
Line resistance/core	< 54 Ω
Throwing time	approx. 6 s
Control distance	max. 1900 m at a core diameter of 0.9 mm max. 4640 m at a core diameter of 1.4 mm max. 7680 m at a core diameter of 1.8 mm
Width	420 mm
Length	1,030 mm (including detector slide)
Height	290 mm
IP rating	IP55
Weight	110 kg
Temperature range	-40 °C to +80 °C

## References

DB Netz AG



Switchguard® is a registered trademark of Siemens AG.

**Siemens AG**  
Mobility Division  
Nonnendammallee 101  
13629 Berlin  
Germany

[www.siemens.com](http://www.siemens.com)

© Siemens AG 2014

Printed in Germany  
PPG230 PA09140.5  
Dispo 01000  
Order No.: A19100-V101-B100-X-7600

The information in this document contains general descriptions of the technical options available. The required features should therefore be specified in each individual case at the time of closing the contract. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action and integrate each component into a holistic, state-of-the-art security concept. Third-party products that may be in use should also be considered.