DRIESCHER
Medium-Voltage
Switching Station EL

- Rated current
  630 A / 1000 A / 1250 A
- Rated voltage 12 / 24 kV

ELEKTROTECHNISCHE WERKE
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General information

What does EL stand for?

The DRIESCHER Medium-Voltage Switching Station EL 12/24 is a withdrawable unit design for circuit breakers. This design offers our customers the following advantages:

- compact dimensions and an extensive range of feature variants
- economical, service-orientated and variable engineering design
- circuit breaker can be drawn out in the shortest possible time for servicing and maintenance purposes. There are two different truck variants available for withdrawing the circuit breaker:
  - the auxiliary truck for the vacuum circuit breaker is designed with a docking device which prevents tipping, it is vertically adjustable and operator-friendly
  - the service truck has an additional mechanical device for lifting and lowering the circuit breaker
- all switching activities incl. driving the circuit breaker into disconnected position are carried out behind locked front doors to guarantee maximum operator safety
- the used DRIESCHER vacuum circuit breaker is distinguished by minimum maintenance and high operational safety

Panel structure

The switching station comprises air-insulated individual screw-type panels which can be mounted side by side:

- single-wing solid sheet doors with three-point central locking and inserted compound glass
- metal-enclosed switching station with sheet-metal - air - sheet-metal partitions from panel to panel
- busbar partition from panel to panel with glass-reinforced plastic insulating plates and three openings (optional)
- integrated secondary equipment box (3 different sizes) with separate door in front of busbars
- self-closing flap (optionally with lock) for inserting a glass-fiber reinforced plastic insulating plate when switch is in disconnected position and with closed door
- adjustable cable fixing brackets
- top covers of galvanized sheet steel for relief of pressure; closed at the back and open at the bottom (full bottom cover optional)
- mimic diagram with integrated mech. position indicators on the front side (electrical position display optional)
- available in 5 different colors at an extra charge

Dimensions and Technical Data

Panel dimensions:

Width: **12 kV:** 800 mm **24 kV:** 800 mm • 900 mm • 1000 mm

Depth: 1100 mm
Height: 2100 mm without relay box
Height: 2100 mm with simple relay box
Height: 2280 mm with raised relay box
Height: 2460 mm with high relay box

Type tests:
Type-tested, metal-encapsulated switching station, tested in compliance with DIN VDE 0670, Part 6 - 03.94 - 16 kA / 1s - 20 kA / 1s.

Technical data
corresponding to DIN VDE 0670, Part 6 or IEC 60298
DIN VDE 0670, Part 101-104 or IEC 60056
DIN VDE 0670, Part 1000 or IEC 60694:

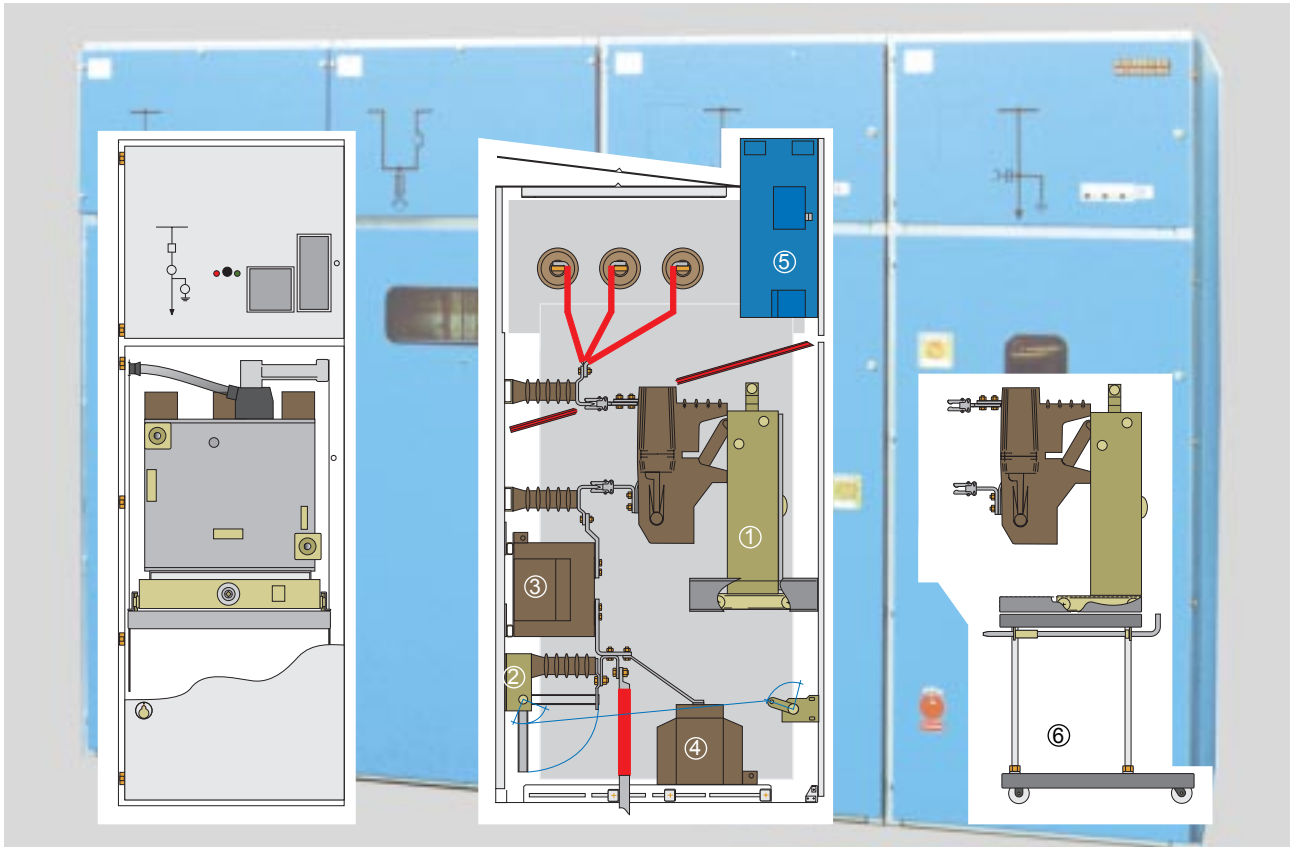
Rated voltage	U_r	**12 kV**	**24 kV**
Rated short-time withstand voltage (1 min, 50 Hz)	U_d	**28 kV**	**50 kV**
Rated lightning impulse withstand voltage (1.2 / 50 µs)	U_p	**75 kV**	**125 kV**
Rated short-time current	I_k	**20 kA**	**16 kA**
Rated peak short-circuit current	I_p	**50 kA**	**40 kA**
Rated current	I_r	630 A / 1000 A / 1250 A	
Rated frequency	f_r	50 Hz	
Application temperature		-20°C to +40°C	
Altitude at place of installation		≤ 1000 m above sea level	
Degree of protection		IP3X	

Voltage supply
Switchgear and actuator U_v = 24 V DC, 48 V DC, 60 V DC, 110 V DC, 220 V DC, 110 V AC, 230 V AC

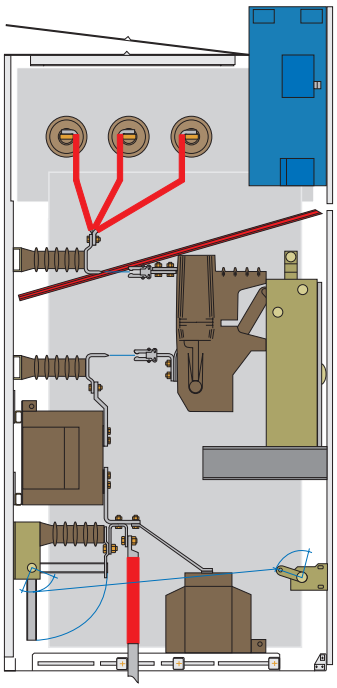
Power consumption (vacuum circuit breaker):
Motor for spring actuator of switchgear P_s = 256,5 W
Charging time (at 230 V AC) t_s = 6,3 s

Power consumption (withdrawable part):
Truck drive P_F = 342 W
Travel time (at 230 V AC) t_F = 2,75 s

Weight of vacuum circuit breaker including the inserting and withdrawing unit m = 170 kg



① Circuit breaker (see 745)
② Earthing switch (see 731)
③ Current transformer
④ Voltage transformer
⑤ Secondary equipment box
⑥ Auxiliary truck



Circuit breaker in disconnected position

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