



# GL 309 / GL 310 wo

## 72.5 / 100 kV Withdrawable Outdoor Circuit Breaker

### Compatibility

Replacing old switchgear quickly and efficiently with new equipment helps our customers to reduce installation costs. A high priority during the development of the GL 309 / 310 wo withdrawable circuit breaker was the compatibility with older generations of equipment such as HPGE and FXT circuit breakers.

### Safe Operation & Reliable Design

The GL 309 / 310 wo withdrawable circuit breaker is track-mounted and manually activated so that the disconnecter contacts can be closed or opened. The isolating distance status is visible at all times. A catch zone ensures safe disconnections contact insertion during truck movement. A truck travel limiting feature automatically resets ensure that that the specified travel distance will never be extended. Instrument transformers can optionally be mounted on the mobile circuit breaker part. An interlocking device (optional) ensure that the circuit breaker movement is only possible in the open position.

### Enhanced Accessibility

The circuit breaker incorporates standard GL 300 series pole columns and is operated by the well-known and field-proven FK3 spring-operated mechanism, which is positioned at the side of the pole columns and easily accessible. The energy for the closing operation is stored in the mechanism and the energy for the opening operation is provided by the protected spring inside the pole columns. A field-tested manual mechanism handles the disconnecting function.

### Rigorous Testing

GE's live tank circuit breakers meet national and international requirement standards. This has been confirmed by comprehensive type tests according to the latest IEC standards.

### Superior Manufacturing

GE's entire development and production procedures are fully compliant with the latest ISO 9001, ISO 14001 and OHSAS 18001 quality standards. This ensures the high quality of our products and services and is confirmed by regular audits.

## Reliable Performance

Live tank circuit breakers ensure a high level of reliability every day. Even under extreme conditions and climates or in highly active seismic areas customers can count on GE's live tank circuit breakers.

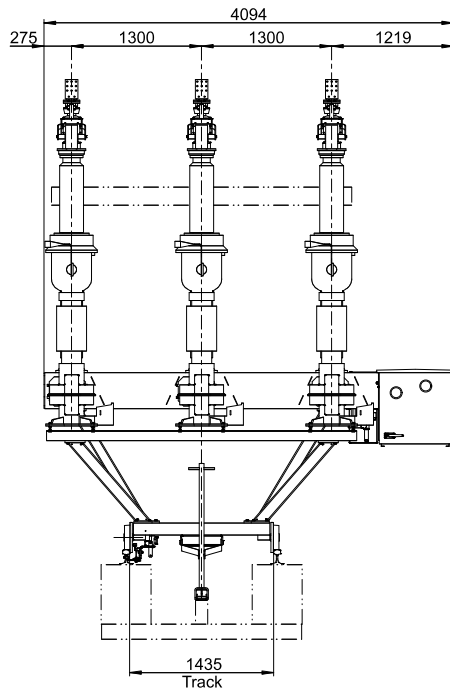
## Key Benefits

- Space saving, compact design integrating various functions such as circuit breakers, disconnecter and instrument transformer (optional)
- Enhanced handling on site due to easy movement on tracks
- Fast replacement through compatibility with prior products HPGE and FXT

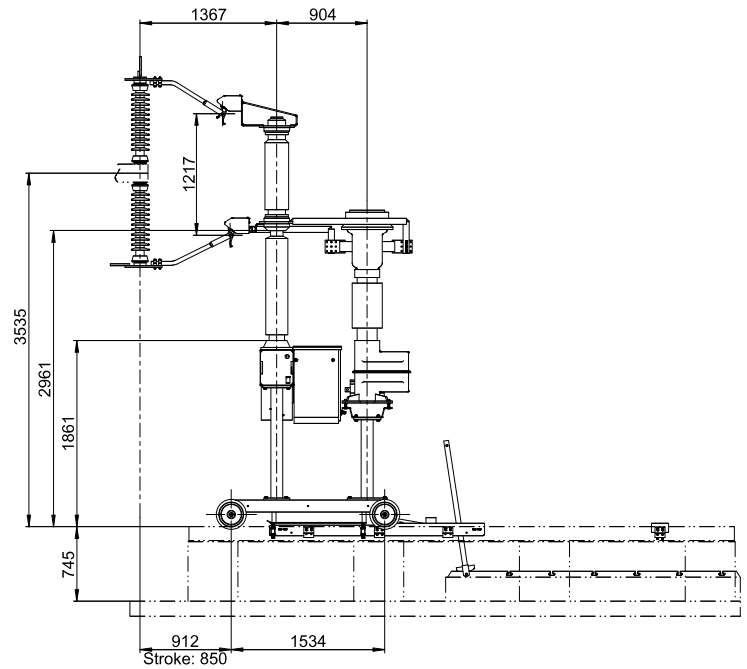


## Dimensions (in mm)

GL 309 F1/3116 wo Front View



GL 309 F1/3116 wo Side View



## Ratings

Breaker Type	GL 309	GL 310
	F1/3116 wo	F1/3116 wo
Rated voltage	72.5 kV	100 kV
Rated frequency	50 Hz	50 Hz
Rated normal current	1,600 A	1,600 A
Rated short-circuit breaking current	31.5 kA	31.5 kA
Rated short-circuit making current	79 kA	79 kA
Rated duration of short-circuit	3 s	3 s
Opening time	40 ms	28 ms
Break time	60 ms	50 ms
Closing time	≤70 ms	≤70 ms
Average ambient temperature*	-30 to +40 °C	-30 to +40 °C
Design altitude*	1,000 m.a.s.l.	1,000 m.a.s.l.

\* Standard values according to IEC. Temperatures up to +70 °C and higher design altitudes are available on request.

## Technical Characteristics

- **Spring-operated mechanism/degree of protection:** FK 3-1
- **Rated operating sequence:** O-0.3s-CO-3min-CO resp. CO-15s-CO
- **Rated supply voltage:** from 24 V up to 250 V dc/ac

## Product Options

- Prearrangement for instrument transformer integration
- Instrument transformers
- Interlocking device
- Different track widths
- Traverse (fixed)
- CBWatch3 monitoring system
- RPH3 controller (F3)

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