Grid Solutions

GL 100-F1/ 72-100/20 WO

72.5 / 100 kV Withdrawable Outdoor Circuit Breaker

Replacing old switchgear quickly and efficiently with new equipment helps our customers to reduce installation costs. Worldwide references at all voltage levels confirm the trust in our design. Customers can count on high voltage switchgear made by GE Vernova.

A high priority during the development of the GL 100 wo withdrawable circuit breaker was the compatibility with older equipment such as GE Vernova's HPGE and FXT circuit breakers.

Operation and Design - Safe and Reliable

The GL 100 wo withdrawable circuit breaker is track-mounted and manually activated so that the disconnector contacts can be closed or opened. The isolating distance status is visible at all times. A catch zone ensures safe disconnection contact insertion during truck movement. A truck travel limiting feature automatically resets to ensure 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) ensures that circuit breaker movement is only possible when in the open position.

The GL 100 wo withdrawable circuit breaker is compatible with prior products such as HPGE and FXT circuit breakers.

The circuit breaker incorporates standard GL 100 series pole columns and is operated by the well-known and field-proven FK3 spring-operated mechanism.

Testing

Our live tank circuit breakers meet the requirements of national and international standards. This has been confirmed by comprehensive type tests according to the latest IEC and ANSI standards.

Quality

The entire development and production procedures for our live tank circuit breakers 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, confirmed by regular audits.



Key Benefits

- Space saving, compact design integrating various functions:
 - Circuit breaker
 - Disconnector
 - Instrument transformer (optional)
- Rapid replacement through compatibility with prior products HPGE and FXT
- · Circuit breaker moves easily on tracks

Field-proven FK3 Mechanism

- Energy for the closing operation is stored in the spring-operated mechanism
- Energy for the opening operation is provided by the protected spring inside the pole columns
- Field-tested manual mechanism handles the disconnecting function



Ratings

| BREAKER TYPE | GL 100- F1/72/20/WO | GL 100- F1/100/20/WO |
|--------------------------------------|------------------------|-------------------------|
| Rated voltage | 72.5 kV | 100 kV |
| Rated frequency | 50 Hz | 50 Hz |
| Rated normal current | up to 1,600 A | up to 1,600 A |
| Rated short-circuit breaking current | up to 20 kA | up to 20 kA |
| Rated short-circuit making current | 50 kA | 50 kA |
| Rated duration of short-circuit | 3 s | 3 s |
| Opening time | 39 ms | 39 ms |
| Break time | 60 ms | 60 ms |
| Closing time | ≤70 ms | ≤70 ms |
| Average ambient temperature* | -25 °C up to +40 °C | -25 °C up to +40 °C |
| Design altitude* | 1,000 m.a.s.l. | 1,000 m.a.s.l. |

^{*} Standard values according to IEC; other temperatures and / or higher altitudes available on request

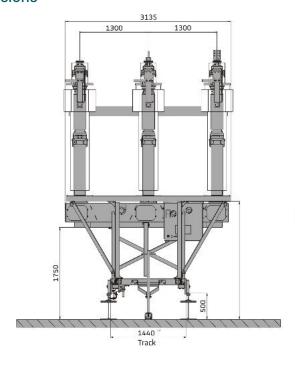
Technical Characteristics

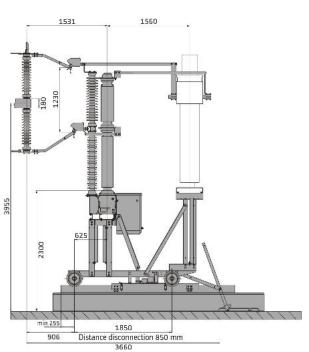
- Installation location: Outdoor (and indoor)
- Spring-operated mechanism / degree of protection: FK 3 / IP 55
- Rated operating sequence:
 0-0.3s-CO-3 min-CO resp. CO-15s-CO
- Rated supply voltage: 24 up to 250 V dc/ac

Product Options

- Prearrangement for instrument transformer integration
- · Instrument transformers
- Interlocking device
- · Different track widths
- Operation: single pole (F3)
- Traverse (fixed)

Dimensions





For more information, visit **gevernova.com/grid-solutions**

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