Grid Solutions

GL 309

Live Tank Circuit Breakers for 72.5 kV

Down to -40°C with pure SF_6

GE Vernova's live tank circuit breakers for outdoor installation feature third-generation self-blast interrupter chambers and spring-operated mechanisms. The field-proven interrupter chamber operates on the basis of the energy-optimized self-blast principle.

High Quality Components

- Third-generation self-blast interrupter chamber
- Pressure relief system for passive protection of substation and personnel
- Field-proven, temperature-compensated density monitor with two-stage transducer and three-color dial
- Easy access to the SF_6 filling connection (type DILO)
- SF_6 non-return (check) valve on each pole column
- Protected opening springs inside each pole column
- Hot-dip galvanized steel parts
- Mechanism housing made completely of aluminum
- Reliable spring-operated mechanism with position indicator clearly visible from outside

Enhanced Installation and Maintenance

- Pole units pre-filled with SF_6 at factory before shipping
- Independent disassembly of the interrupter chamber without having to remove the entire pole column
- Pole columns and base frame completely pre-assembled before delivery; no adjustments necessary during installation and commissioning)

Rigorous Testing

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

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 Vernova's live tank circuit breakers.

Superior Manufacturing

The 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.

Key Benefits

- Temperatures down to -40°C with pure SF_6
- Quick and easy installation and comissioning (completely pre-assembled before delivery)
- Long maintenance intervals

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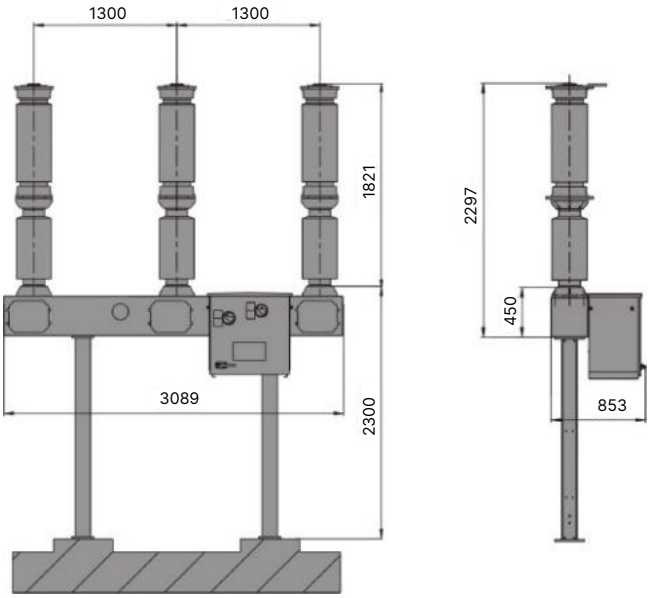
Dimensions (in mm)



Ratings

BREAKER TYPE	GL 309 F1/4031 P
Rated voltage	72.5 kV
Rated frequency	50/60 Hz
Rated normal current	up to 3,150 A
Rated short-circuit breaking current	up to 40 kA
Rated short-circuit making current	104 kA
Rated duration of short-circuit	3 s
Opening time	29 ms
Break time	50 ms
Closing time	≤ 70 ms
Average ambient temperature*	-30 °C up to +40 °C
Design altitude*	1,000 m.a.s.l.

** Standard values according to IEC. Temperatures down to -40°C, up to +70°C and higher design altitudes are available on request.*

Technical Characteristics

- **Spring-operated mechanism/degree of protection:**
  FK 3/IP 55
- **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

- **Composite insulators**
- **More phase center distances available on request**
- **CBWatch3 monitoring system**

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

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