Grid Solutions

DT1-38

Dead Tank Circuit Breakers for 38 kV

One of the keys to safety in your substation is the circuit breaker. Safety can be ensured by using the DT1 circuit breaker, a product based on state-of-the-art technology and manufactured in modern production facilities.

A Rugged Performer

Due to its robust design, the DT1-38 is a highly reliable circuit breaker even under the most severe operating conditions and is tested to meet or exceed ÎEEE/ANSI and IEC standards, including the definite purpose applications.

Unique Performance

The DT1-38 is suitable for applications up to nameplate ratings, including definite purpose ratings and is uniquely qualified under the latest IEEE/ANSI and IEC standards as C2 class for capacitance switching including back-to-back (very low restrike probability) and reactor switching applications. Extensive mechanical operation design testing ensures trouble-free operation for the lifetime of the circuit breaker. Intensive production leak testing ensures superior in-service SF_6 performance.

Flexibility for New and Retrofit Applications

The compact DT1-38 design can be used in new or retrofit applications. The three-pole circuit breaker forms a complete, fully assembled, factory-tested, transportable unit. The on-site installation requires only a few simple steps. For installations where truck shipment is impossible, the DT1-38 can be readied for standard container shipment as a fully assembled unit.

Certified Quality

GE Vernova designs, manufactures, tests, and delivers its circuit breakers in accordance with IEEE/ANSI and IEC standards, maintaining a quality assurance system according to ISO-9001 and ISO-14001. The competence center for dead tank circuit breakers is located in Charleroi, PA (USA).

Installation and Maintenance

The DT1-38 is factory tested and adjusted. It does not need any special tools for installation. With a self-contained adjustable support structure, it is recognized worldwide as an easy-to -install circuit breaker. Due to the low-energy mechanism and lifetime lubricants, the DT series is virtually maintenance-free.

GE VERNOVA

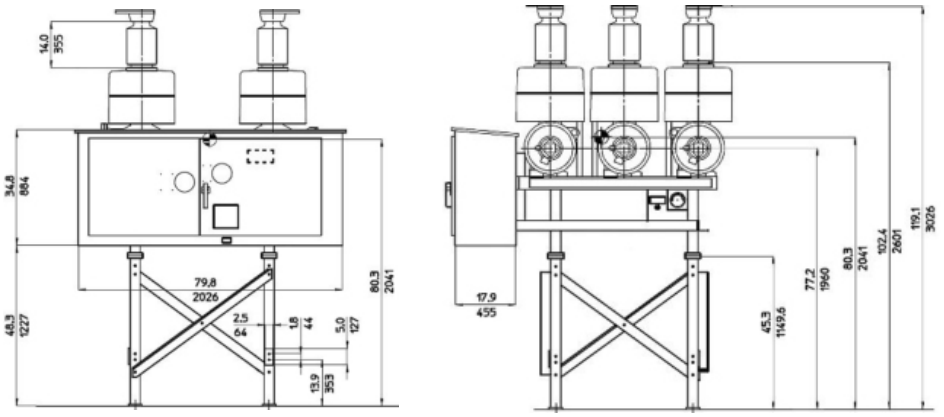
Main Characteristics

- Advanced self-blast interrupters
- Leak-resistent cast aluminum enclosures
- Durable low energy spring-operated mechanisms
- More than 100,000 circuit breakers with self-blast interrupters and FK spring-operated mechanisms in service since 1989

Key Benefits

- Proven reliability
- High performance
- ISO quality systems
- Near-zero maintenance
- Same interrupter and mechanism as DT1-72.5 with over 20 years of service experience and over 10,500 products in service worldwide

Dimensions



Technical Data

	VALUE	UNITS
SF_6 pressure	67/0.46	psig/Mpa
Motor	1600	watts
Close coil/Trip coil	440/440	watts
Ambient temperature range*	-40 to +50	°C
Seismic capability	High Seismic per IEEE 693	
Weight (without current transformers)	2166/962	lb/kg
Weight SF_6	26/12	lb/kb

Ratings

IEEE/ANSI	IEC	VALUE	UNITS
Rated maximum voltage	Rated voltage	38	kV
Rated power frequency	Rated frequency	50/60	Hz
Rated dielectric withstand capability: • dry withstand • wet withstand	Rated insulation level • at power frequency, dry • at power frequency, wet	 80 75	 kV kV
Rated lightning impulse withstand voltage	at lightning impulse	200*	kV
Rated chopped wave impulse voltage 2us/ /3us		258	kV
Rated continuous current	Rated normal current	I,200/2,000/3,000	A
Rated short-circuit current	Rated short-circuit breaking current	40	kA
Rated closing, latching and short time carrying current		104	kA
	Rated short-circuit making current	100	kA
Rated interrupting time		3	cycles
	Rated break time	50	ms
Rated standard operating duty	Rated operating sequence	O-CO-15s-CO O-0.3s-CO-180s-CO	

**Standard values: further data is available an request. **Please contact GE Vernova far special purpose, high TRV, high X/R ar other ratings requirements.*

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

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English
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