



# DT1-145 63

## Dead Tank Circuit Breakers for 145 kV/63 kA

The DT1-145 63 rated for 63 kA represents the latest dead tank circuit breaker technology. This circuit breaker is specifically designed and tested for general or definite purpose applications as well as for severe environmental conditions including low temperature, highly active seismic areas and regions with high pollution levels or corrosive atmospheres.

### Reliable Performance

The DT1-145 63 is suitable for application up to nameplate ratings, including definite purpose ratings. Our spring-spring-operated mechanism and extensive mechanical design testing to 10,000 operations and class M2 certification ensure trouble-free operation for the lifetime of the circuit breaker.

### Gas Tightness Guarantee

GE is an industry leader in SF<sub>6</sub> gas tightness testing technology including seals, castings and plumbing systems. Each breaker is factory tested using GE's proprietary gas tightness testing system which provides measurable, quantifiable test results on the breaker in its fully assembled, as-shipped condition.

### Certified Quality

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

### Enhanced Installation and Maintenance

The DT1-145 63 is factory tested and adjusted and does not require any "special tools" for installation. Designed with the smallest symmetrical footprint to allow for minimized foundation costs, they are recognized worldwide as easy-to-install and operate circuit breakers. Thanks to the low energy mechanism and lifetime lubricants, the DT series is virtually maintenance free.

The DT1 series on-site installation requires only a few simple steps. For installations where truck shipment is impossible, all DT series circuit breakers can be readied for standard container shipment with only their bushings disassembled.

## Main Characteristics

- Advanced self-blast interrupters
- Leak resistant 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

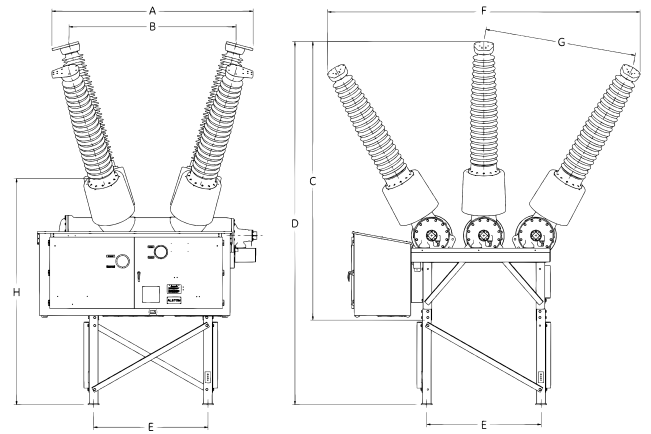
## Key Benefits

- SF<sub>6</sub> gas tightness guarantee with quantifiable production test
- High performance ratings without capacitors for short line fault
- Reliability under the most severe conditions
- Design customization
- Virtually maintenance free
- Easy to install



## Dimensions

	mm	in
A	2,314	91
B	1,922	76
C	3,205	127
D	4,179	165
E	1,317	52
F	3,596	142
G	1,742	69
H	2,603	102



## Technical Data

	Value	Units
Motor	1,600	watts
Close coil/Trip coil	440/440	watts
Ambient temperature range*	-30 to +40	degree C
High seismic capability in accordance with IEEE 693-2005		
Weight (without current transformers)	5,000/1,900	lb/kg

\* Optional values available on request \*\* Please contact GE for special purpose, high TRV, high X/R or other ratings requirements.

## Ratings

IEEE/ANSI	IEC	Value	Units
Rated maximum voltage	Rated voltage	145	kV
Rated power frequency	Rated frequency	50/60	Hz
Rated dielectric withstand capability	Rated insulation level		
dry withstand	at power frequency, dry	310	kV
wet withstand	at power frequency, wet	275	kV
Rated lightning impulse withstand voltage	at lightning impulse	650	kV
Rated chopped wave impulse voltage 2us		838	kV
Rated continuous current	Rated normal current	3,000	A
Rated short-circuit current	Rated short-circuit breaking current	63	kA
Rated closing, latching, and short time carrying		164	kA
Rated capacitance switching*			
	Rated single capacitor bank breaking current	400	A
Rated interrupting time		3	cycles
	Rated break time	50	ms
Rated standard operating duty	Rated operating sequence	O-0.3s-CO-15s-CO	

\* Ratings available upon request

For more information please contact  
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### Worldwide Contact Center

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