



## General Specifications



- BGK type SF6 circuit breakers guarantees high level of safety and reliability due to applied SF6 arc quenching technic and experience in medium and high voltage switchgear production more than 35 years.
- By these means BGK circuit breakers provide high level continuity and availability for the electricity distribution systems. These specifications also obtain longer operational endurance and less maintenance. 3 separate poles have epoxy resin insulated enclosure which are filled with SF6 gas and this sealed pressure system guaranteed for its life.
- The safety of the gas filled pole enclosure is secured by the membrane system on the bottom cap.
- Operating mechanism can be charged manually by lever or by motor. Charged mechanism has stored energy for closing and opening. Closing and opening functions can be done by the push-buttons or by the release coils.
- BGK circuit breakers have both frontal mechanism and lateral mechanism versions.
- Circuit breaker poles can be optionally equipped with pressure switch or pressure indicator for alarm and low pressure conditions.
- For OPEN / CLOSED positions, 4NO + 4 NC or 6 NO + 6 NC auxiliary contacts can be selected optionally.

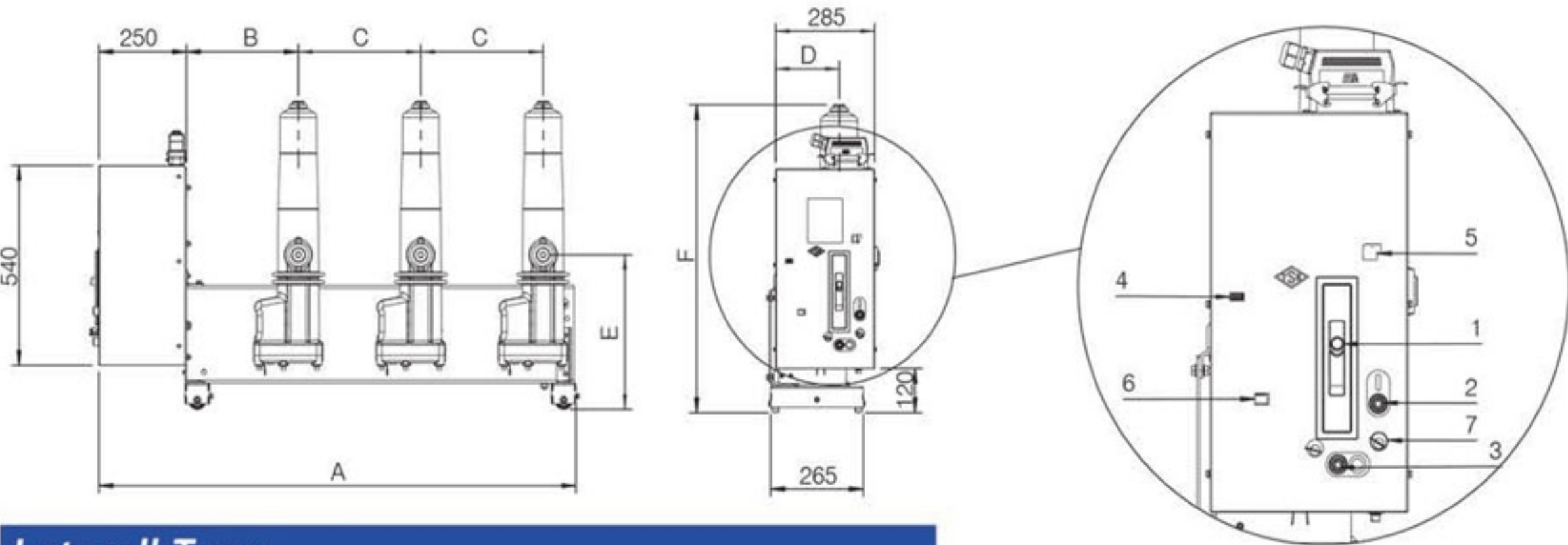


# BGK SF6 CIRCUIT BREAKER

TYPE 12-24-36 kV



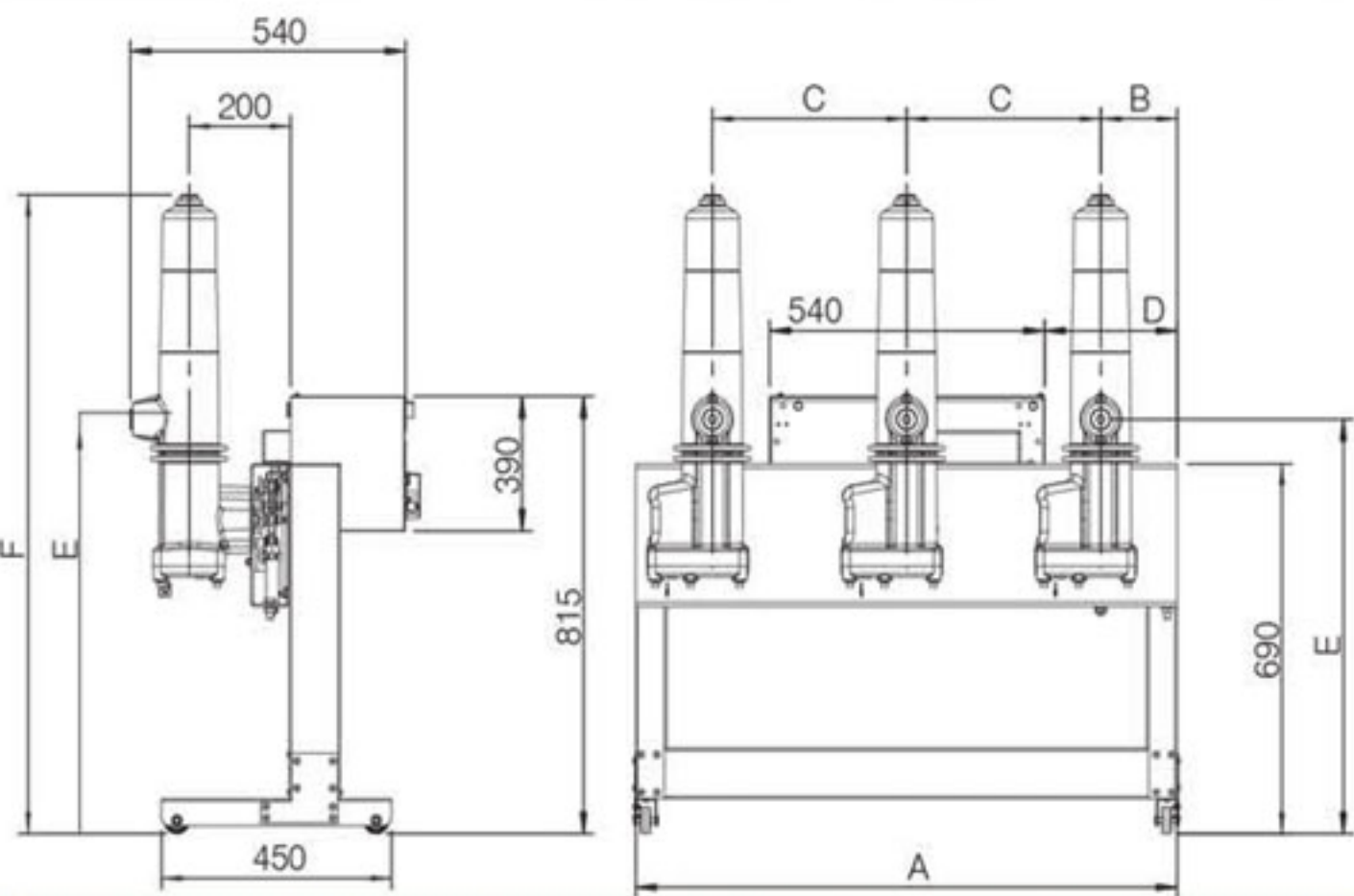
## BGK 12 - 24 - 36 kV



### Lateral Type

Rated Current (A)	Rated Voltage (kV)	Dimensions (mm)						Weight (kg)
		A	B	C	D	E	F	
630	12-17,5	750	125	220	180	770	1190	95
	24	860	150	280	180	770	1190	100
	36	1060	150	380	180	770	1190	105
1250	12-17,5	740	150	220	180	760	1240	105
	24	860	174	80	180	760	1240	110
	36	1020	126	380	180	760	1240	115

- 1. Charging arm
- 2. Closing button
- 3. Opening button
- 4. Counter
- 5. Position indicator
- 6. Spring indicator
- 7. Mechanical lock



### Frontal Type

Rated Current (A)	Rated Voltage (kV)	Dimensions (mm)						Weight (kg)
		A	B	C	D	E	F	
630	12-17,5	750	125	220	125	770	1190	100
	24	860	150	280	160	770	1190	105
	36	1060	150	380	260	770	1190	110
1250	12-17,5	740	150	220	125	760	1240	115
	24	860	174	280	160	760	1240	120
	36	1020	126	380	212	760	1240	125



## BGK 24 kV

CIRCUIT BREAKER



## BGK 36 kV

CIRCUIT BREAKER

### Technical Characteristics

Rated voltage	kV	12	17,5	24	36
Power frequency withstand voltage 50 Hz, 1 min	kV rms	28	38	50	70
Lightning impulse withstand voltage 1.2/50 µs	kV peak	75	95	125	170
Rated frequency	Hz	50	50	50	50
Rated current	A	630/1250	630/1250	630/1250	630/1250
Short circuit breaking current	kA	16/20/25	16/20/25	16/20/25	16/20/25
Short time withstand current	kA, 3s	16/20/25	16/20/25	16/20/25	16/20/25
Short circuit making current	kA peak	40/50/62,5	40/50/62,5	40/50/62,5	40/50/62,5
Operating sequence		0 - 0.3 s - CO - 3 min -CO			
Related Standard		IEC 62271-100			
Electrical endurance class		E1 ( E2 for non-recosing )			
Mechanical endurance class		M1 ( 2000 operations)			
Capacitive current switching class		C2			
Ambient temperature for working	°C	- 15 / + 40			

Release coil and charging motor options :

Power supply

24 V DC - 48 V DC - 110 V DC - 220 V AC



# **BVK** VACUUM CIRCUIT BREAKER

TYPE 12-24-36 kV



## **General Specifications**



- BVK type vacuum circuit breaker guarantees high level of safety and reliability due to applied vacuum interrupter technic and experience in medium and high voltage switchgear production more than 35 years.
- BVK type vacuum circuit breakers equipped with BVI type vacuum interrupters
- By these means BVK type circuit breakers provide high level continuity and availability for the electricity distribution systems. These specifications also obtain longer operational endurance and less maintenance.
- 3 separate poles have epoxy resin insulated housing which contains the vacuum interrupter and terminals. Operating mechanism can be charged manually by lever or by motor. Charged mechanism has stored energy for closing and opening. Closing and opening functions can be done by the push-buttons or by the release coils.
- BVK circuit breakers have both frontal mechanism and lateral mechanism versions.  
For OPEN / CLOSED positions, 4NO + 4 NC or 6 NO + 6 NC auxiliary contacts can be selected optionally.



# BVI TYPE VACUUM INTERRUPTERS

**3Z ELEKTRIK**

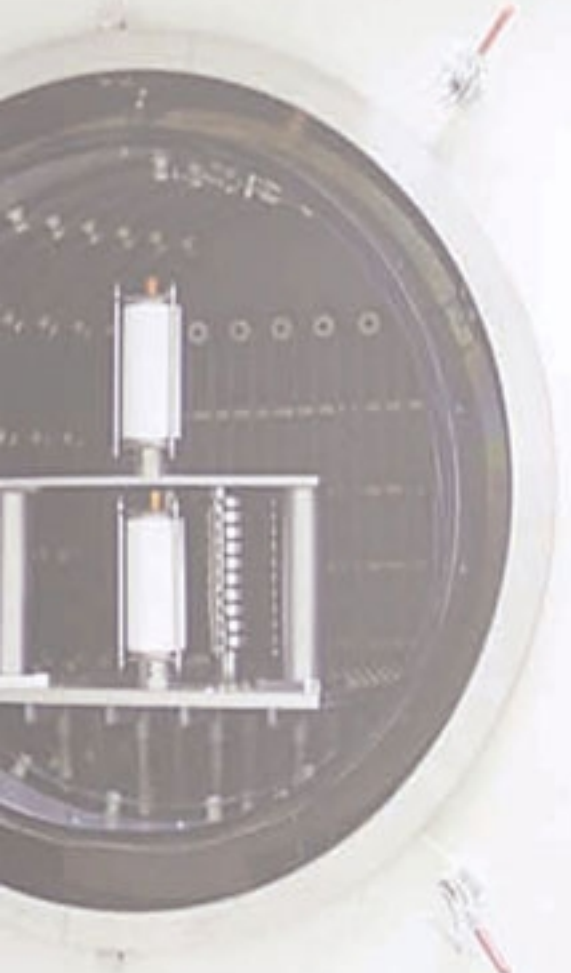




is a pioneer company in electromechanical industry, offering environmentally friendly medium voltage vacuum interrupters that manufactured under latest technologies for high quality mass-production with ISO 9001 & 14001 quality assurance systems in facilities.

BVI type Vacuum interrupters' unique compact and robust design provides long life and low maintenance, save space, and reduce costs.

BVI type Interrupters fully type tested under severe conditions.





## Technical Specifications

	Unit	Value
Rated Voltage	$U_r$ (kV)	36
Power Frequency Withstand Voltage, 50 Hz, 1 min.	$U_d$ (kV)	70
Rated Impulse Withstand Voltage, 1.2/50 $\mu$ s	$U_p$ (kV)	170
Rated Frequency	$f$ (Hz)	50
Rated Current	$I_r$ (A)	1250 - 2000
Rated Peak Withstand Current	$I_p$ (kA)	40

## Breaking Capabilities

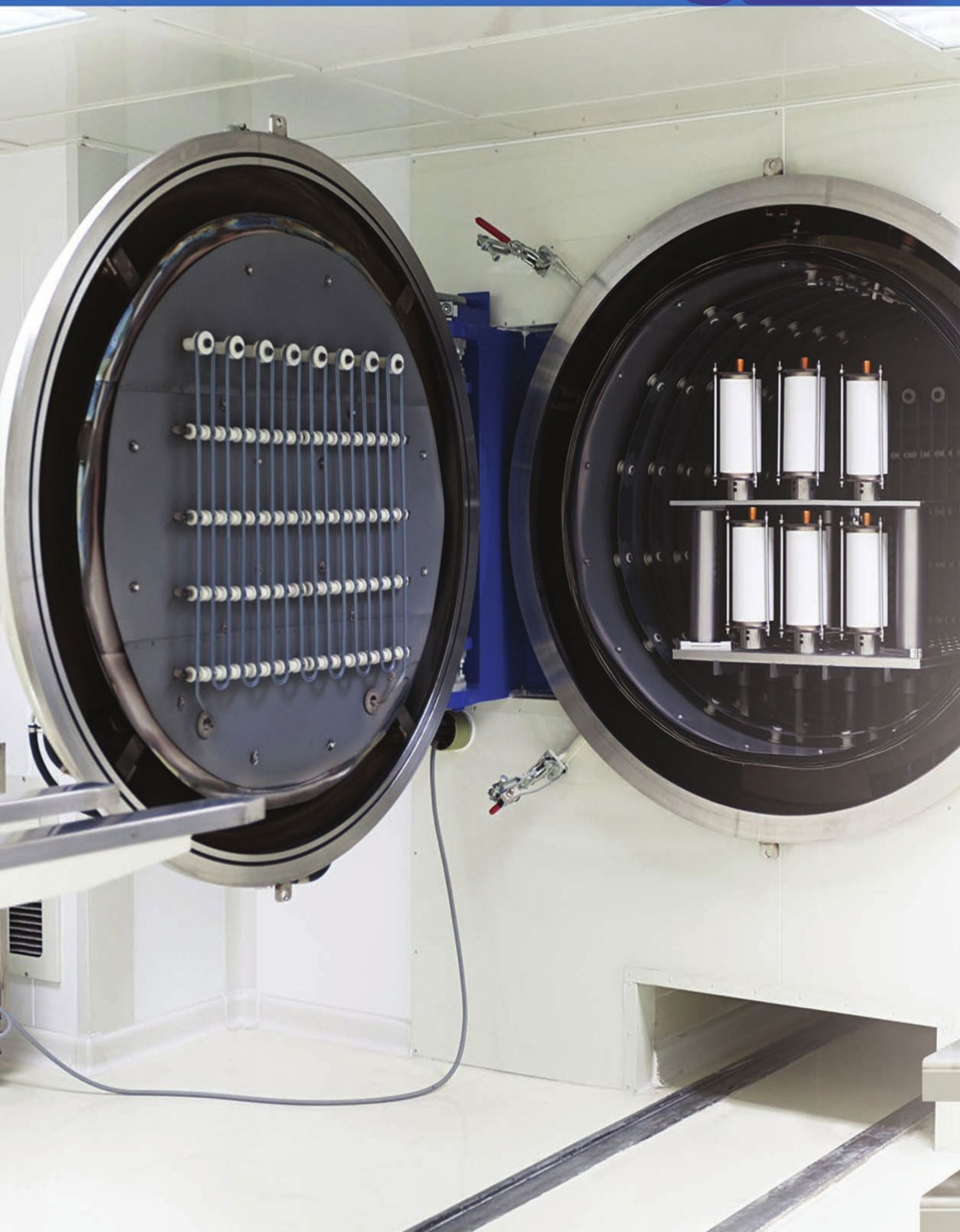
	Unit	Value
Rated Short Circuit Breaking Current	$I_{sc}$ (kA)	16
DC Component Percentage for Rated Short Circuit Breaking Current	%	42
Rated Short Circuit Making Current	$I_{ma}$ (kA)	40
Rated Duration of Short Circuit	sec	3
Rated Short Time Withstand Current	$I_k$ (kA)	16
Max. Contact Resistance at Minimum Closing Force	$\mu\Omega$	16





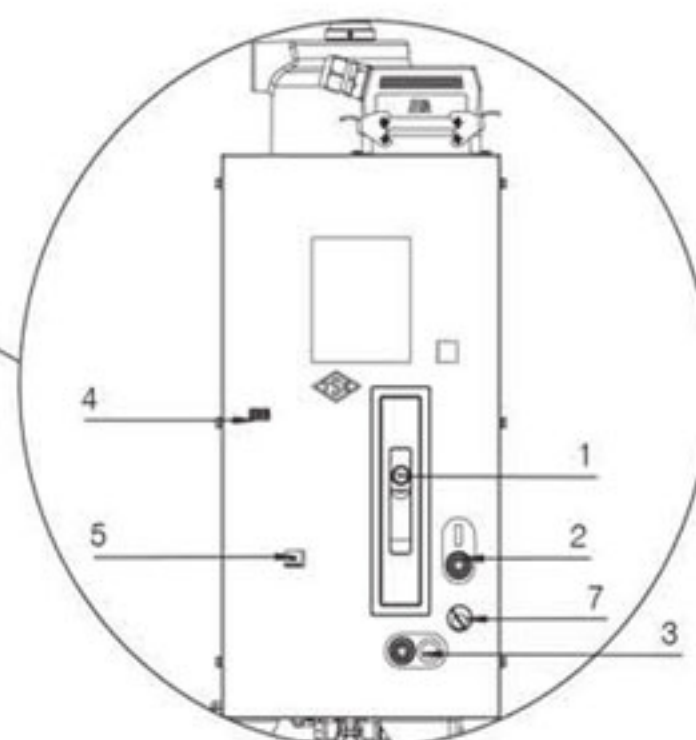
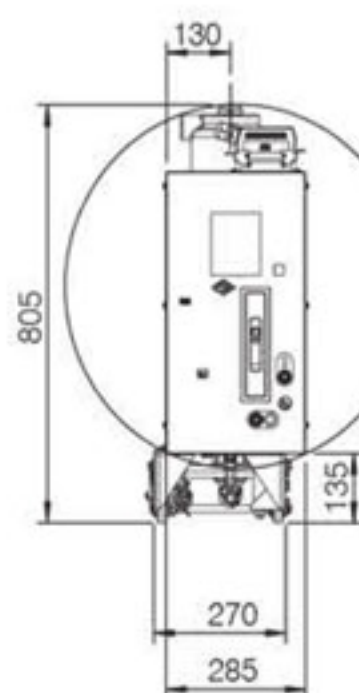
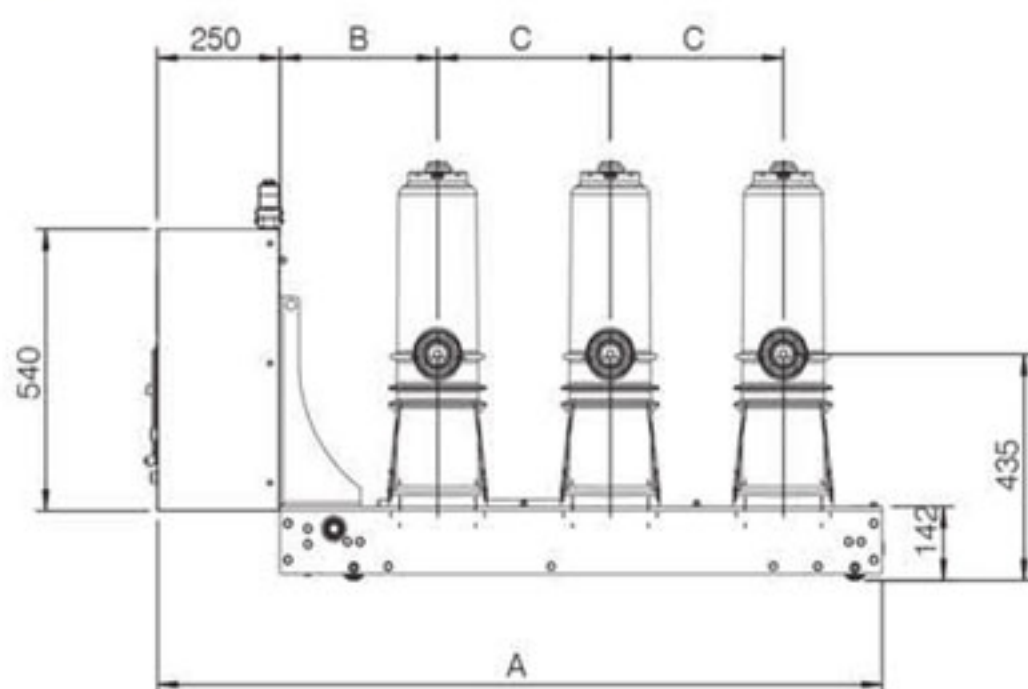
# BVI TYPE VACUUM INTERRUPTERS

**3Z ELEKTRIK**  
www.3zelektrik.com





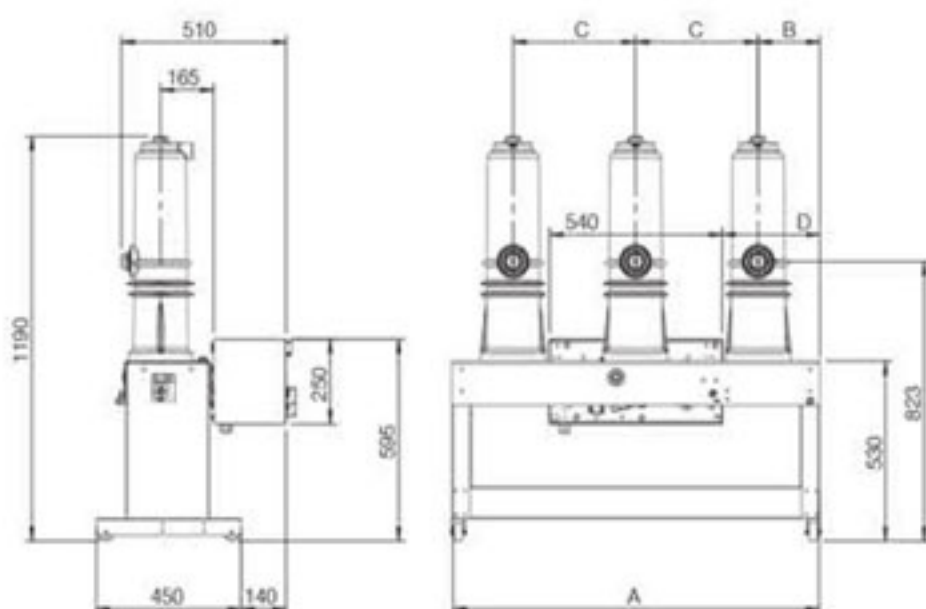
## BVK 12 - 24 - 36 kV



1. Charging arm
2. Closing button
3. Opening button
4. Counter
5. Position indicator
6. Spring indicator
7. Mechanical lock

### Lateral Type

Rated Voltage (kV)	Dimensions (mm)			Weight (kg)
	A	B	C	
12 - 17,5	1050	220	200	110
24	1180	250	250	115
36	1470	320	350	120



### Frontal Type

Rated Voltage (kV)	Dimensions (mm)				Weight (kg)
	A	B	C	D	
12 - 17,5	840	190	250	170	115
24	940	190	280	200	120
36	1040	190	380	300	125

### Technical Characteristics

Rated voltage	kV	24	36
Powe frequency withstand voltage 50 Hz, 1 min	kV rms	50	70
Lightning impulse withstand voltage 1.2/50 $\mu$ s	kV peak	125	170
Rated frequency	Hz	50	50
Rated current	A	630/1250	630/1250
Short circuit breaking current	kA	16/20/25	16/20/25
Short time withstand current	kA, 3s	16/20/25	16/20/25
Short circuit making current	kA peak	40/50/62,5	40/50/62,5
Operating sequence	0 - 0.3 s - CO - 15 s - CO		
Related Standard	IEC 62271-100		
Electrical endurance class	E1 ( E2 for non-reclosing )		
Mechanical endurance class	M1 ( 2000 operations)		
Capacitive current switching class	C2		
Ambient temperature for working	$^{\circ}$ C	- 15 / + 40	

Release coil and charging motor options :  
Power supply

24 V DC - 48 V DC - 110 V DC - 220 V AC