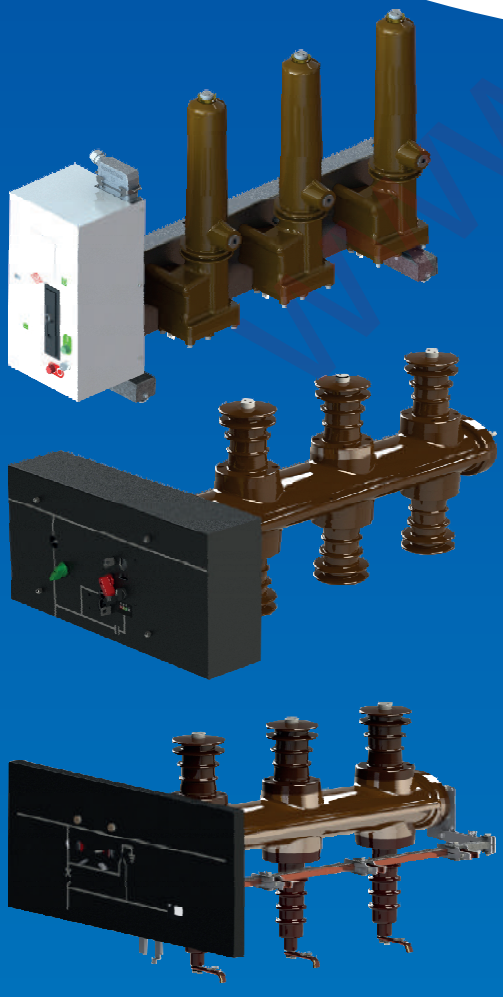
BATEL

ELEKTROMEKANİK

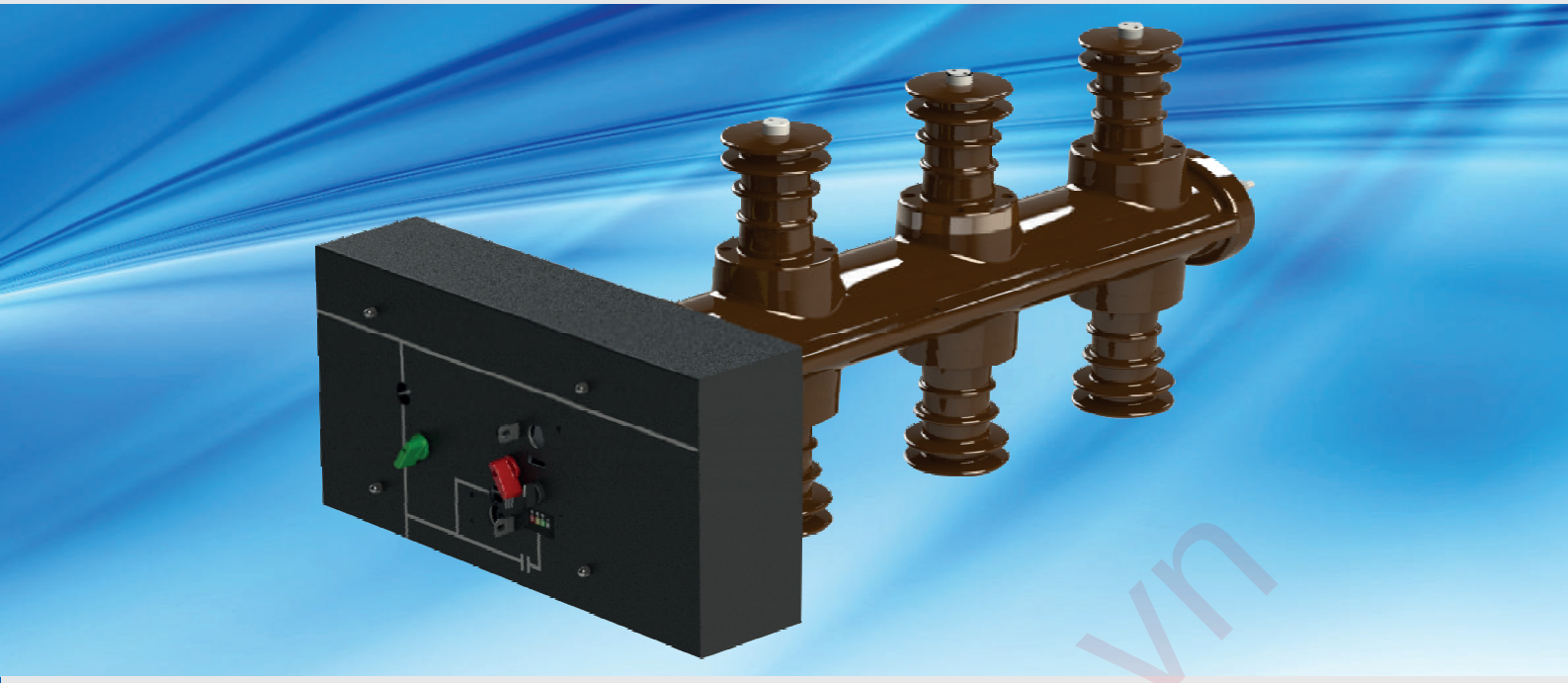
B M E

MEDIUM VOLTAGE MODULAR CUBICLES

UP TO 40.5 kV



SF6 GAS INSULATED LOAD BREAK SWITCH



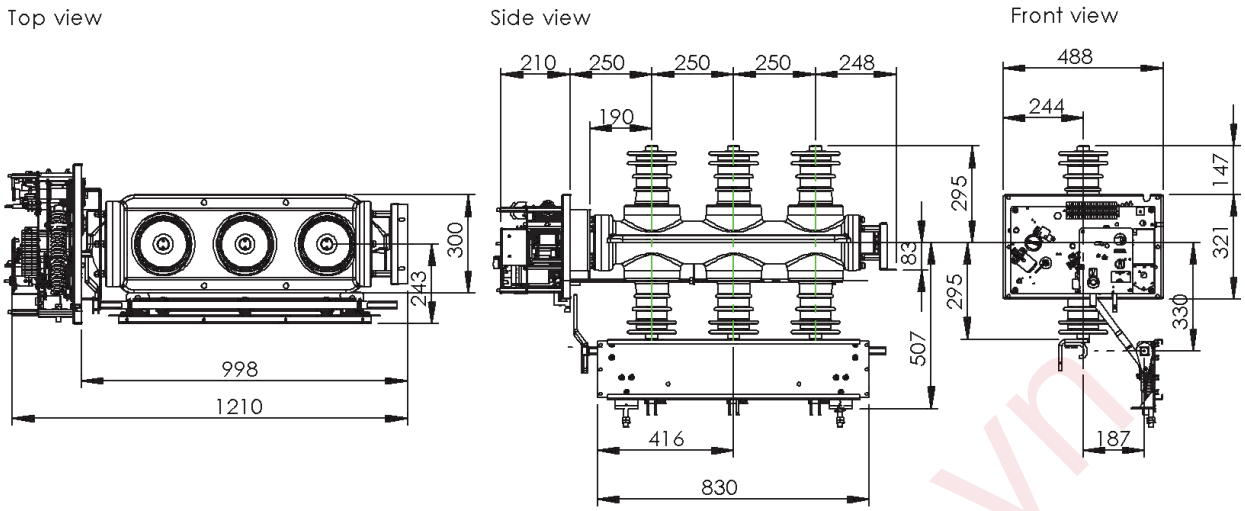
General Specifications

BYA type load break switches assure "switch-disconnector" specifications.

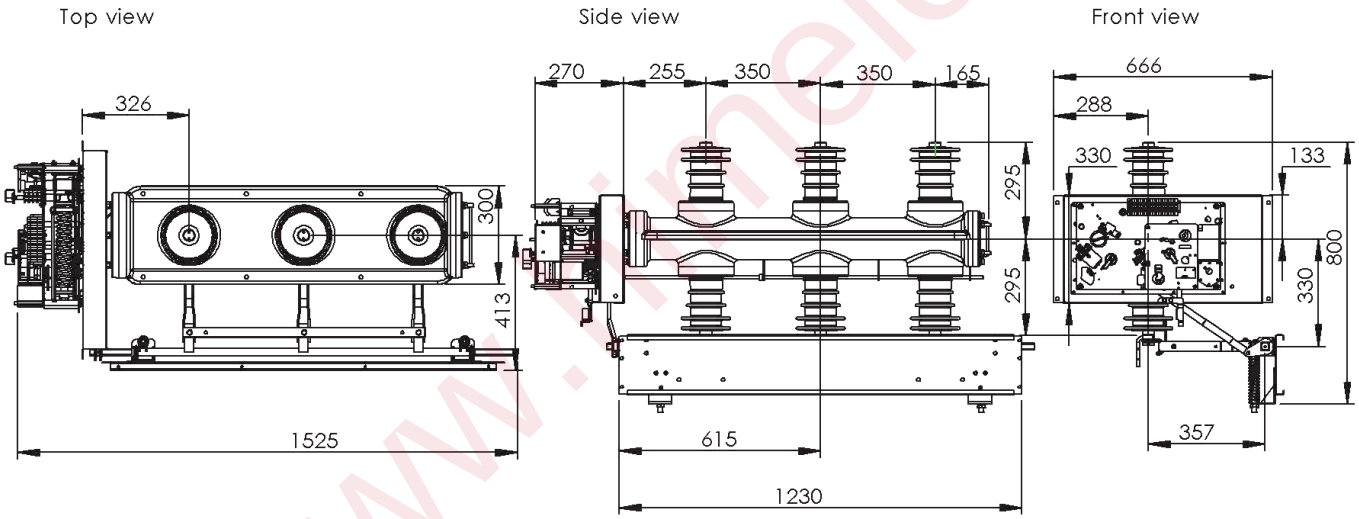
The main contacts of the switch in the epoxy resin enclosure which is filled with 1.5 bar SF6 gas and this sealed pressure system guaranteed for its life. **Sf6 Gas level could be indicated by a digital indicator. A pair of NO/NC auxiliary contact has been equipped for alarm and tripping for LBS once gas level goes down inside the housing.** The switch contacts can be in one of the two positions; closed / open. The earthing switch is outside of the enclosure, and its position clearly and sefely can be observed directly. Its operation is interlocked with the mechanism of the main contacts. It has independent operation for closing and opening. The safety of the gas filled enclosure is secured by the memrane system positioned at back side. Auxiliary contacts indicating the position of the main contacts and for the earthing switch are present. Operating mechanism can be charged manually by lever or optionally by motor. Charged mechanism has storedenergy for closing and opening. Closing and opening functions can be done by the push-buttons or by the release coils. Fuse-trip system optionally can be equipped. Key type interlocks are possible.

TECHNICAL SPECIFICATIONS		12 kV	24 kV	38/40.5 kV
Rated voltage, kV		12	24	38/40.5
Rated power-frequency w thstand voltage 50Hz 1M n (kV r.m.s.)	To earth and between phases	28	50	95
	Across the solat ng d stance	32	60	105
Rated l ghtn ng mpulse w thstand voltage (peak value)	To earth and between phases	75	125	200
	Across the solat ng d stance	85	145	220
Rated current, A		630		
Short t me w thstand current, 1s, kA		16/20/25		
Short t me w thstand current, 1s, kA(Peak value)		40/50/62.5		
Break ng capac ty	Ma nly act ve load,A	630		
	Closed-loop c rcu ts,A	630		
	L ne-charg ng break ng current,A	10		
	Cables-charg ng break ng current,A	16		
	No load transformer,A	6,3		
Related Standard		IEC 62271-103, IEC 62271-105		
Electr cal endurance class		E3 (100 breaks)		
Mechan cal endurance class		M1 (1000 operations)		
Earth ng sw tch class		E2 (5 making)		
Amb ent temperature for work ng		- 5 / + 40		
Release co l and charg ng motor opt ons : Power supply		24V/48V/110V/220V DC, 220V AC		

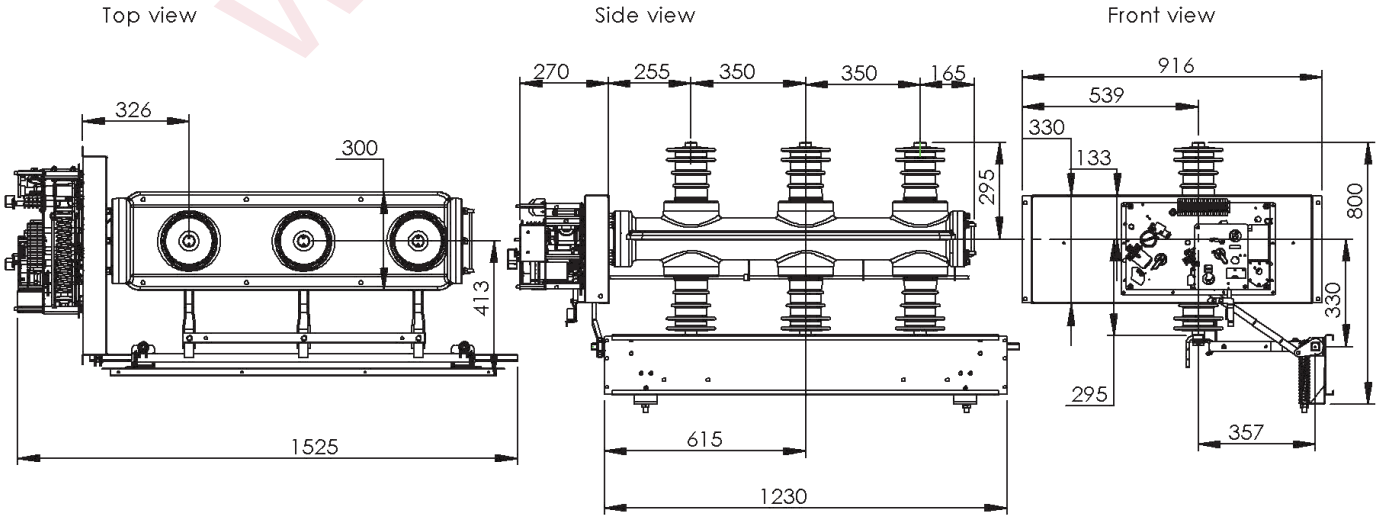
12-24 kV
630A LOAD BREAK SWITCH (width: 500mm)



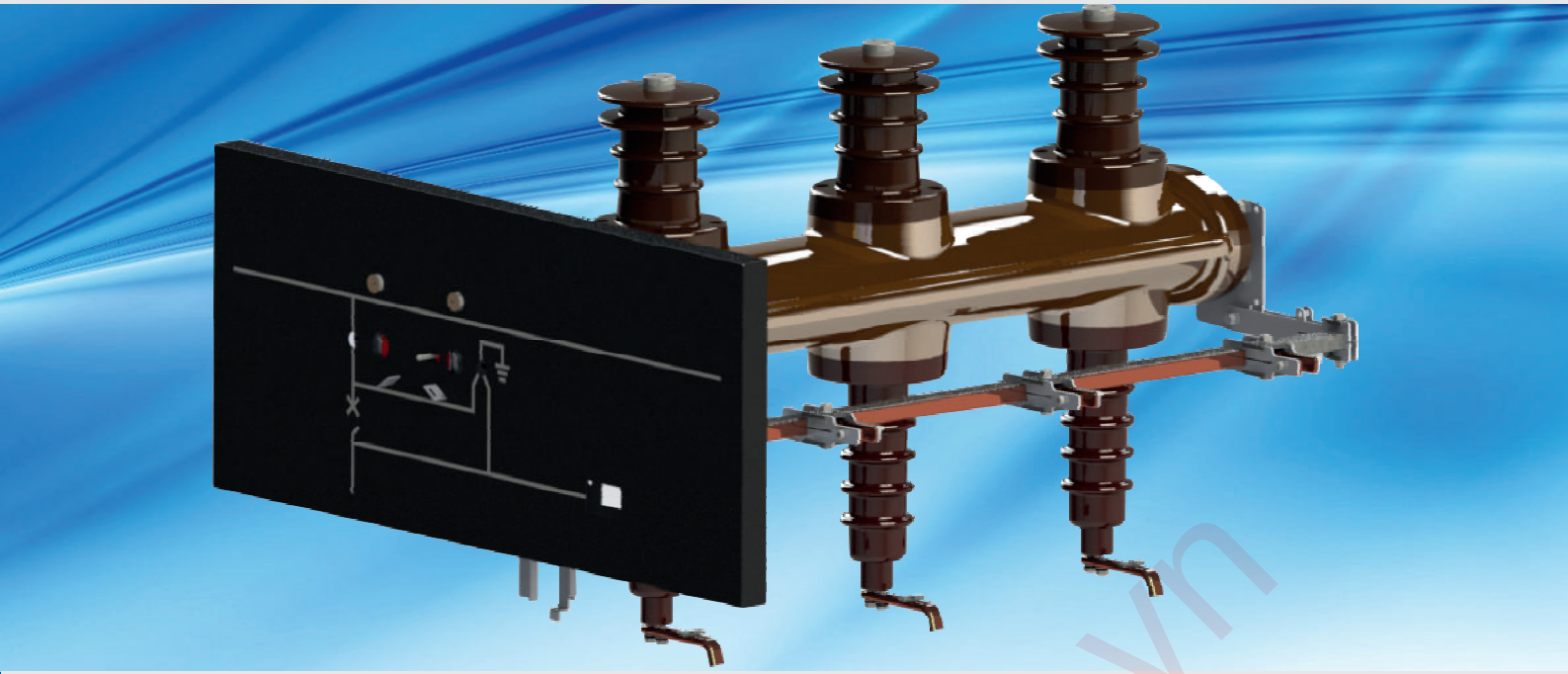
38/40.5 kV
630A LOAD BREAK SWITCH (width: 750mm)



38/40.5 kV
630A LOAD BREAK SWITCH (width: 1000mm)



SF6 GAS INSULATED DISCONNECTOR SWITCH



General Specifications

The main contacts of the disconnector are in the epoxy resin enclosure which is filled with 1.5 bar SF6 gas and this sealed pressure system guaranteed for its life.

Sf6 Gas level could be indicated by a digital indicator. A pair of NO/NC auxiliary contact has been equipped for alarm and tripping for DS once gas level goes down inside the housing.

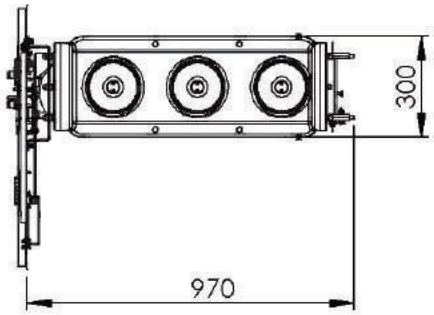
The disconnector contacts can be in one of the two positions; closed / open. The earthing switch is outside of the enclosure, and its position clearly and sefely can be observed directly. Its operation is interlocked with the mechanism of the main contacts.

The safety of the gas filled enclosure is secured by the memrane system positioned at back side. Auxiliary contacts indicating the position of the main contacts and for the earthing switch are present. Key type interlocks are possible.

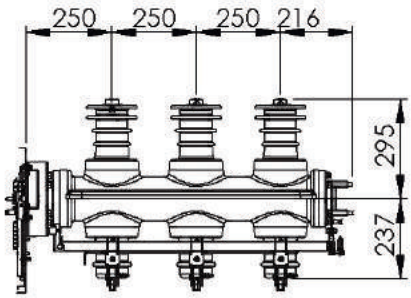
TECHNICAL SPECIFICATIONS		12 kV	24 kV	38/40.5 kV
Rated voltage, kV		12	24	38/40.5
Rated power-frequency w thstand voltage 50Hz 1M n (kV r.m.s.)	To earth and between phases	28	50	95
	Across the solat ng d stance	32	60	105
Rated l ghtn ng mpulse w thstand voltage (peak value)	To earth and between phases	75	125	200
	Across the solat ng d stance	85	145	220
Rated current, A		630/1250		
Short t me w thstand current, 1s, kA		16/20/25		
Related Standard		IEC 62271-102		
Mechan cal endurance class		M2 (2000 operat ons)		
Amb ent temperature for work ng		- 5 / + 40		
Release coil and charging motor options : Power supply		24V/48V/110V/220V DC, 220V AC		

12-24 kV
630A DISCONNECTOR SWITCH

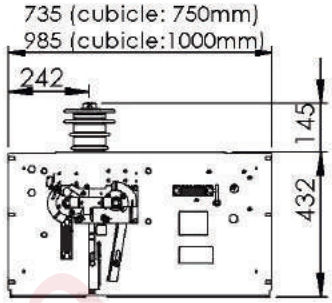
Top view



Side view

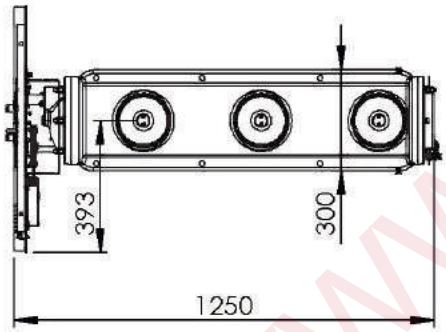


Front view

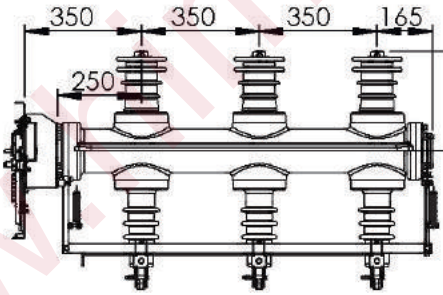


38/40.5 kV
630A DISCONNECTOR SWITCH (width: 750mm)

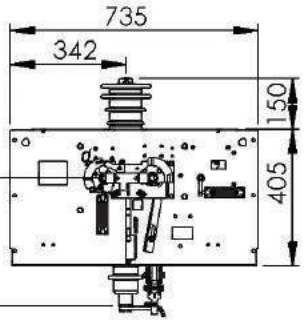
Top view



Side view

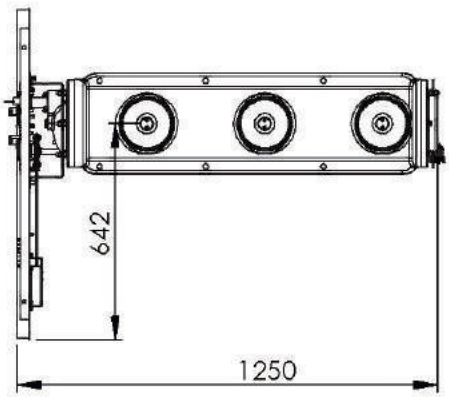


Front view

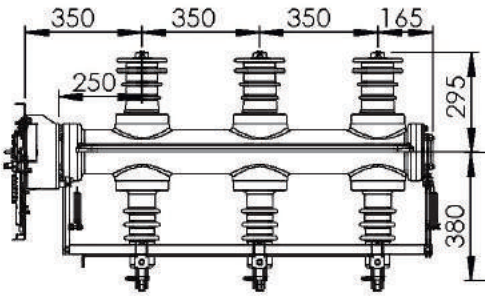


38/40.5 kV
630A DISCONNECTOR SWITCH (width: 1000mm)

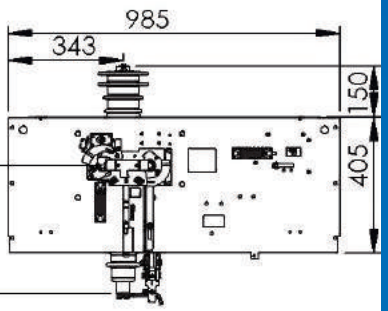
Top view



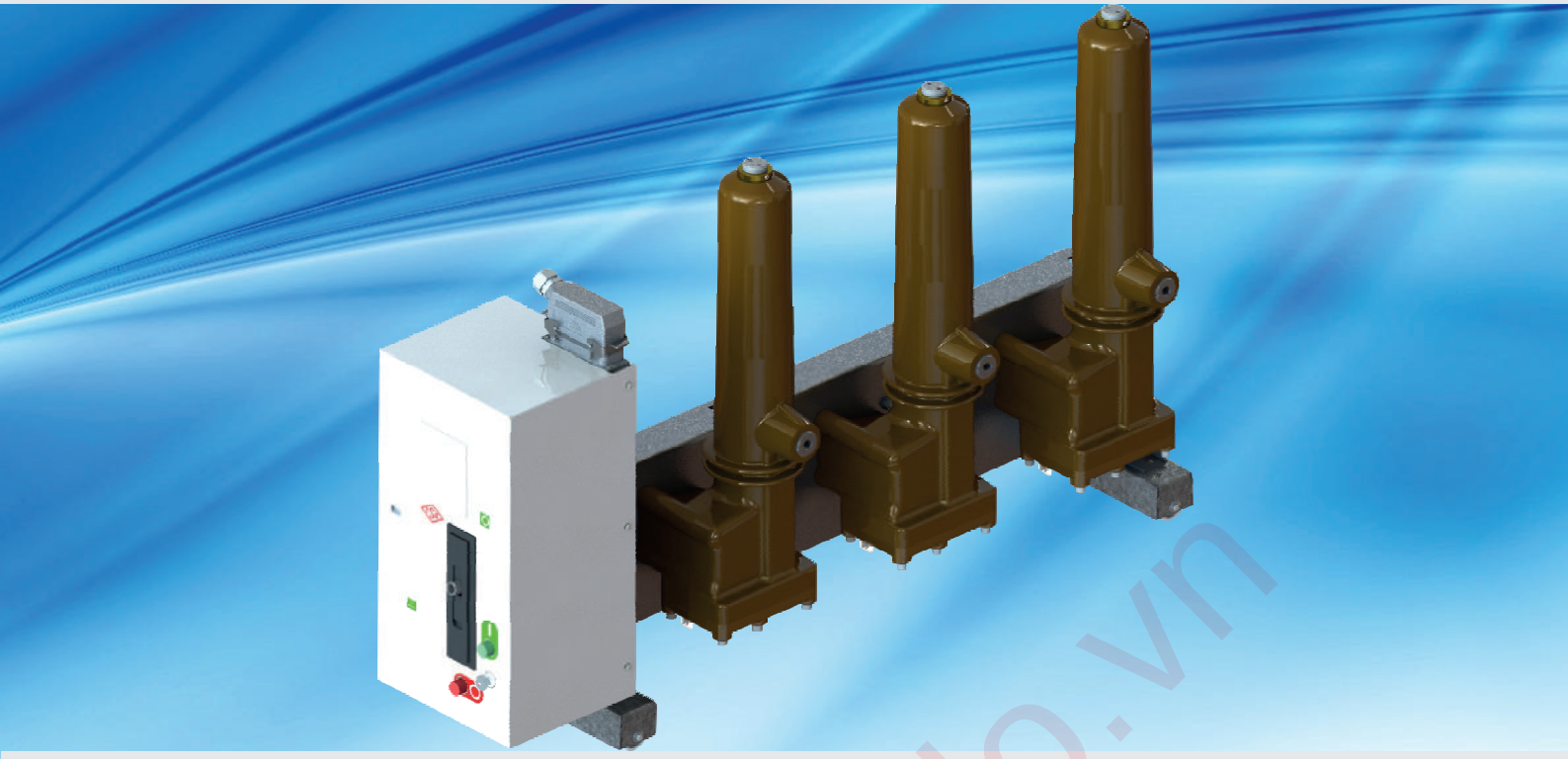
Side view



Front view



SF6 GAS INSULATED CIRCUIT BREAKER



General Specifications

BGK type SF6 circuit breakers guarantees high level of safety and reliability basicly due to applied SF6 arc quenching technic and BATEL's experience in medium and high voltage switchgear production more then 35 years.

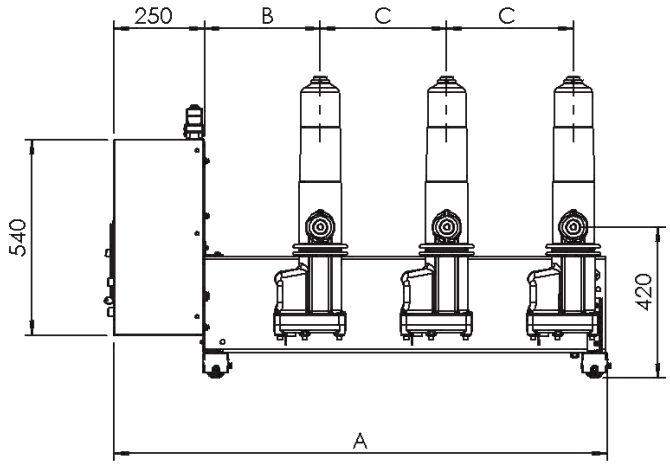
By these means BGK circuit breakers provide high level continuity and availability for the electricity distribution systems.

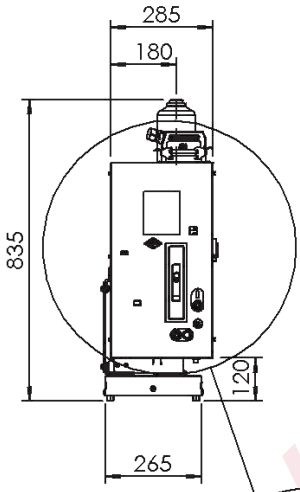
These specs also obtain longer operational endurance and less maintenance. 3 seperate poles have epoxy resin insulated enclosure which are filled with SF6 gas and this sealed pressure system guaranteed for its life.

The safety of the gas filled pole enclosure is secured by the memrane 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.

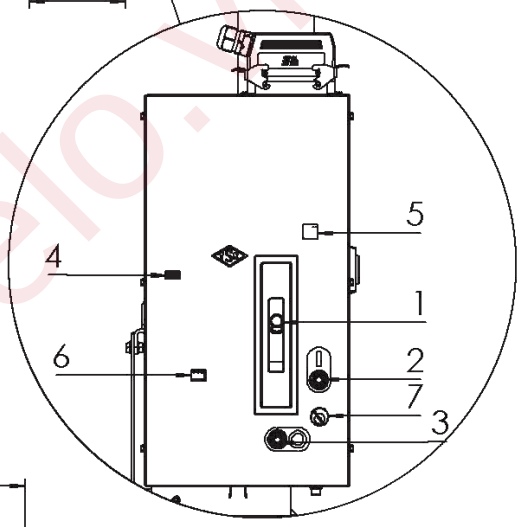
BGK circuit breakers have both frontal mechanism and lateral mechanism versions. 4NO + 4 NC or 6 NO + 6 NC OPEN / CLOSED position auxiliary contacts can be selected optionally.

TECHNICAL SPECIFICATIONS	12 kV	17,5 kV	24 kV	38/40.5 kV
Rated voltage, kV	12	17,5	24	38/40.5
Rated current, A	630/1250			
Rated power frequency test voltage, kV	28	38	50	95
Rated frequency, Hz	50			
Rated mpulse test voltage, kV peak	75	95	125	200
Rated short-c rcu t break ng current, kA	16/20/25			
Short t me w thstand current, 3s, (Ik)kA	16/20/25			
Rated short-c rcu t mak ng current, kA peak	40/50/62,5			
Operat ng sequence	O - 0.3 s - CO - 3 m n -CO			
Electr cal endurance class	E1 (E2 for non-reclos ng)			
Mechan cal endurance class	M1 (2000 operat ons)			
Temperature range, °C	-5 /+40			
Capac t ve current sw tch ng class	C2			
Aux l ary power supply, V AC/DC	24V/48V/110V/220V DC, 220V AC			

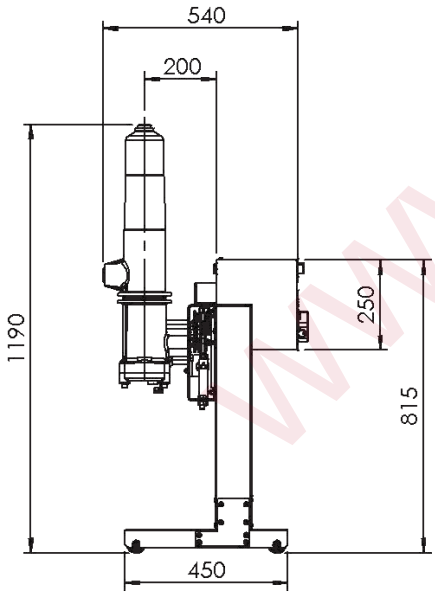


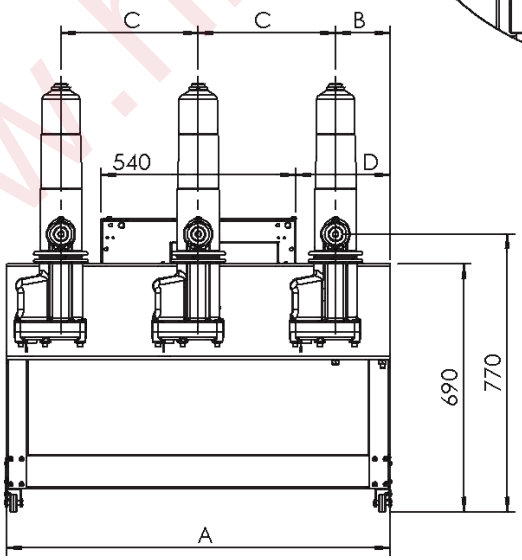


Lateral Type				
Rated Voltage (kV)	Dimensions (mm)			Weight (kg)
	A	B	C	
12-17,5	974	210	210	103
24	1094	250	250	104
38/40.5	1370	320	350	105



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





Frontal Type					
Rated Voltage (kV)	Dimensions (mm)				Weight (kg)
	A	B	C	D	
12-17,5	750	125	220	125	103
24	860	150	280	160	104
38/40.5	1060	150	380	260	105

VACUUM CIRCUIT BREAKER

General Specifications

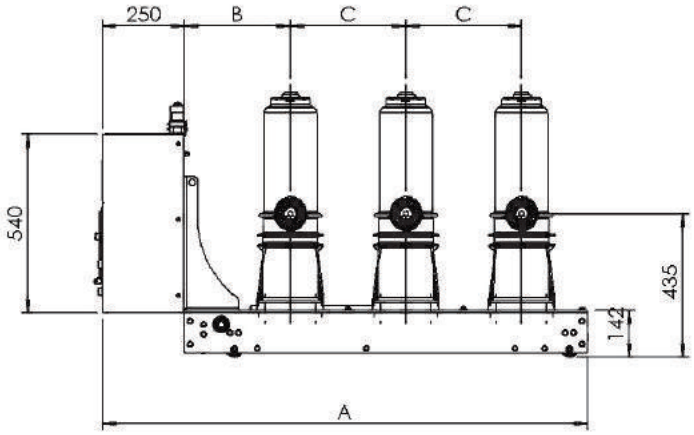
Vacuum Interruption technique with BATEL's inhouse make BVI type vacuum interrupters,

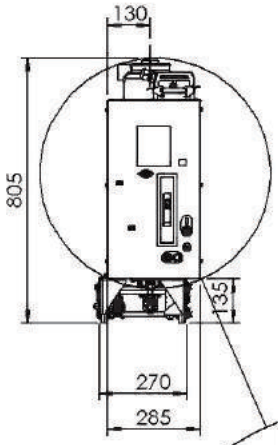
- Limited switching energy
- Lateral and frontal version
- Compact design
- Sealed for life vacuum interrupters
- 10.000 operations without maintanece
- High environmental compatibility

BVK type circuit breakers guarantees high level of safety and reliability basicly due to BATEL's experience in medium and high voltage switchgear production more then 35 years. By these means BVK circuit breakers provide high level continuity and availability for the electricity distribution systems.

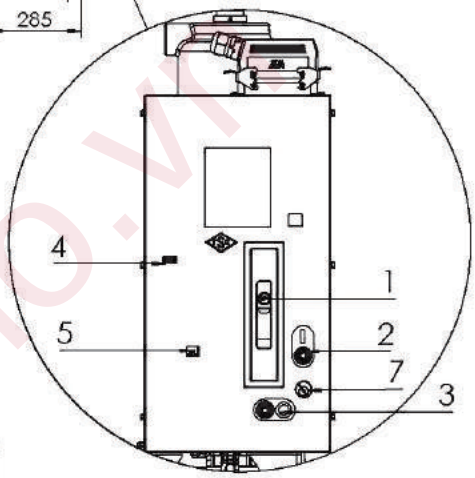
These spects also obtain longer operational endurance and less maintenance. 3 seperate poles have epoxy resin insulated housing which contains the vacuum interrupter and terminals. Operating mechanism can be charged manually by lever or by motor. Charged mechanism has stored energy for closing and opening. 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. 4NO + 4 NC or 6 NO + 6 NC OPEN / CLOSED position auxiliary contacts can be selected optionally.

TECHNICAL SPECIFICATIONS	24 kV	38/40.5 kV
Rated voltage, kV	24	38/40.5
Rated current, A	630/1250	
Rated power frequency test voltage, kV	50	95
Rated frequency, Hz	50	
Rated mpulse test voltage, kV peak	125	200
Rated short-c rcu t break ng current, kA	16/20/25	
Short t me w thstand current, 3s, (Ik)kA	16/20/25	
Rated short-c rcu t mak ng current, kA peak	40/50/62,5	
Operat ng sequence	O - 0.3 s - CO - 3 m n -CO	
Electr cal endurance class	E1 (E2 for non-reclos ng)	
Mechan cal endurance class	M1 (2000 operat ons)	
Temperature range, °C	-5 /+40	
Capac t ve current sw tch ng class	C2	
Aux l ary power supply, V AC/DC	24V/48V/110V/220V DC, 220V AC	

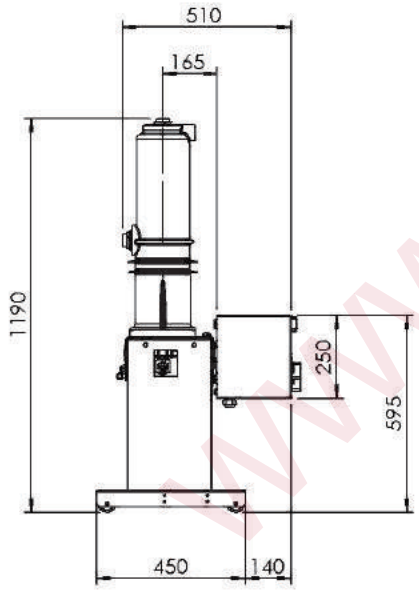


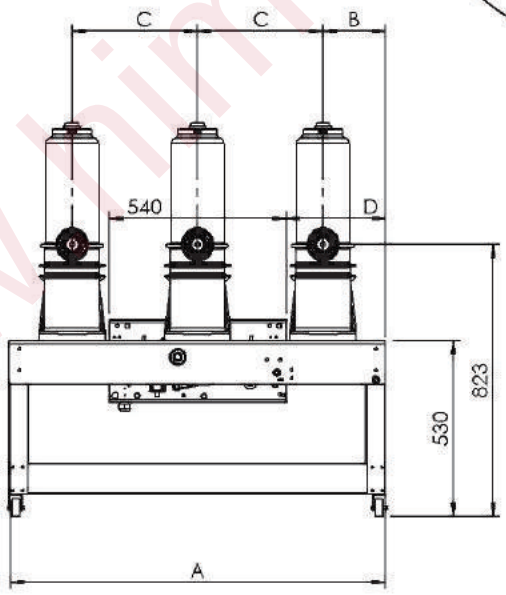


Lateral Type				
Rated Voltage (kV)	Dimensions (mm)			Weight (kg)
	A	B	C	
12-17,5	1050	220	200	107
24	1180	250	250	109
38/40.5	1470	320	350	111



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





Frontal Type					
Rated Voltage (kV)	Dimensions (mm)				Weight (kg)
	A	B	C	D	
12-17,5	840	190	250	170	114
24	940	190	280	200	116
38/40.5	1140	190	380	300	118

BVK-SF3-RESİM2 BURAYA YAPIŞTIRILACAK

açıklamalar buraya yapıştırılacak

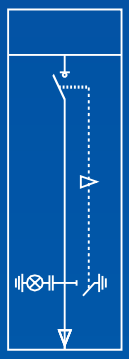
CUBICLE DEFINE

BME Serial Cubicles with Metal Cover are air-insulated modular cells that can be used at mid-voltage distribution plants up to 40.5 kV. BME Serial Cubicle types, as per using charateristics, are as mentioned below.

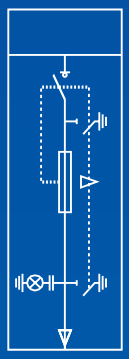
Cubicle Name	Cubicle Type	Outline Dimensions H * D * W (mm)	
		12/24 kV	38/40.5 kV
Inlet - Outlet Cubicle With Load Break Switch	BME - 01	1900*1000*500	2250*1400*750
Load Break Switch + Fuse Combined (Transformer Protection) Cubicle	BME - 02	1900*1000*500	2250*1400*750
Votage Measurement Cubicle	BME - 03	1900*1000*500	2250*1400*750
Inlet - Outlet Cubicle With Circuit Breaker	BME - 04	1900*1000*750	2250*1400*1000
Bar Connecting (Busbar Coupling) Cubicle	BME - 05	1900*1000*1000	2250*1400*1500
Inlet - Outlet Cubicle With Disconnetor Switch	BME - 06	1900*1000*500	2250*1400*750
Cable Connection Cubicle	BME - 07	1900*1000*500	2250*1400*750
Current - Voltage Measurment Cubicle With Load Break Switch	BME - 08	1900*1000*750	2250*1400*1000
Busbar Rising Cubicle	BME - 09	1900*1000*500	2250*1400*750
Current Measure Busbar Raising Cubicle	BME - 10	1900*1000*500	2250*1400*750
Current Measurement Cubicle	BME - 11	1900*1000*500	2250*1400*750
Busbar Seperated Switchgear With Circuit Breaker (Side Exit)	BME - 12	1900*1000*750	2250*1400*1000
Busbar Seperated Switchgear With Load Break Switch (Side Exit)	BME - 13	1900*1000*750	2250*1400*1000
Coupling With Load Break Switch	BME - 14	1900*1000*750	2250*1400*1000
Current - Voltage Measurement Cubicle With Disconnector Switch	BME - 15	1900*1000*750	2250*1400*1000
Parafudur Cubicle	BME - 16	1900*1000*500	2250*1400*750

BME SERIES MODULER METAL ENCLOSED CUBICLES

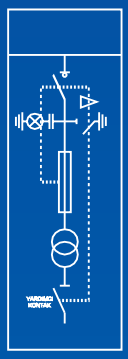
BME-01
Inlet-Outlet Cubicle With Load Break Switch



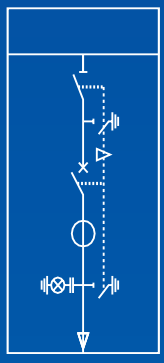
BME-02
LBS+Fuse Combination (Transformer Protection) Cubicle



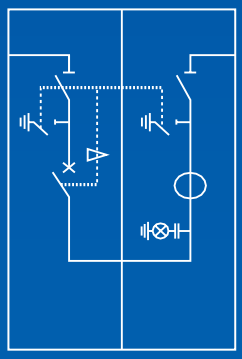
BME-03
Voltage Measurement Cubicle



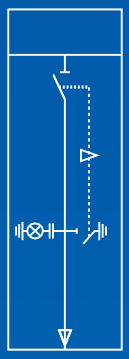
BME-04
Inlet-Outlet Cubicle With Circuit Breaker



BME-05
Bar Connection (Busbar Coupling) Cubicle

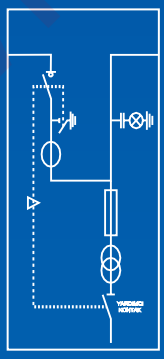


BME-06
Inlet-Outlet Cubicle With Disconnector Switch

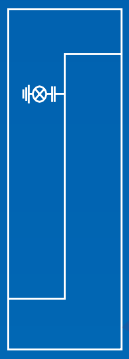


BME-07
Cable Connection Cubicle

BME-08
Current & Voltage Measurement Cubicle With LBS

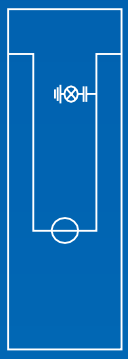


BME-09
Busbar Rising Cubicle

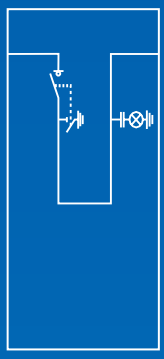


BME-10
Current Measure Busbar Rising Cubicle

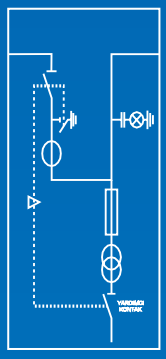
BME-11
Current Measurement Cubicle



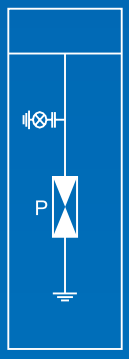
BME-14
Coupling With Load Break Switch



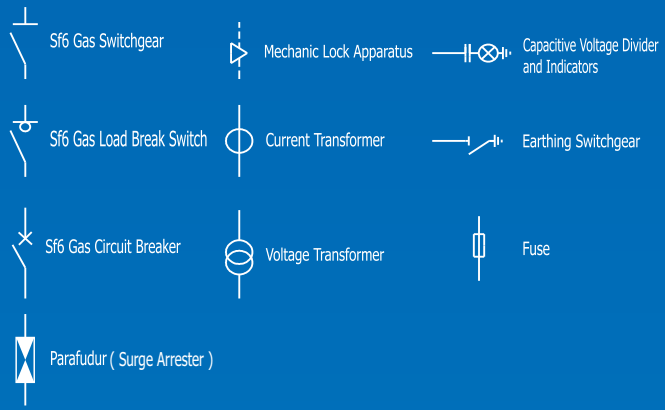
BME-15
Current & Voltage Measurement Cubicle With DS



BME-16
Parafudur Cubicle



SYMBOLS



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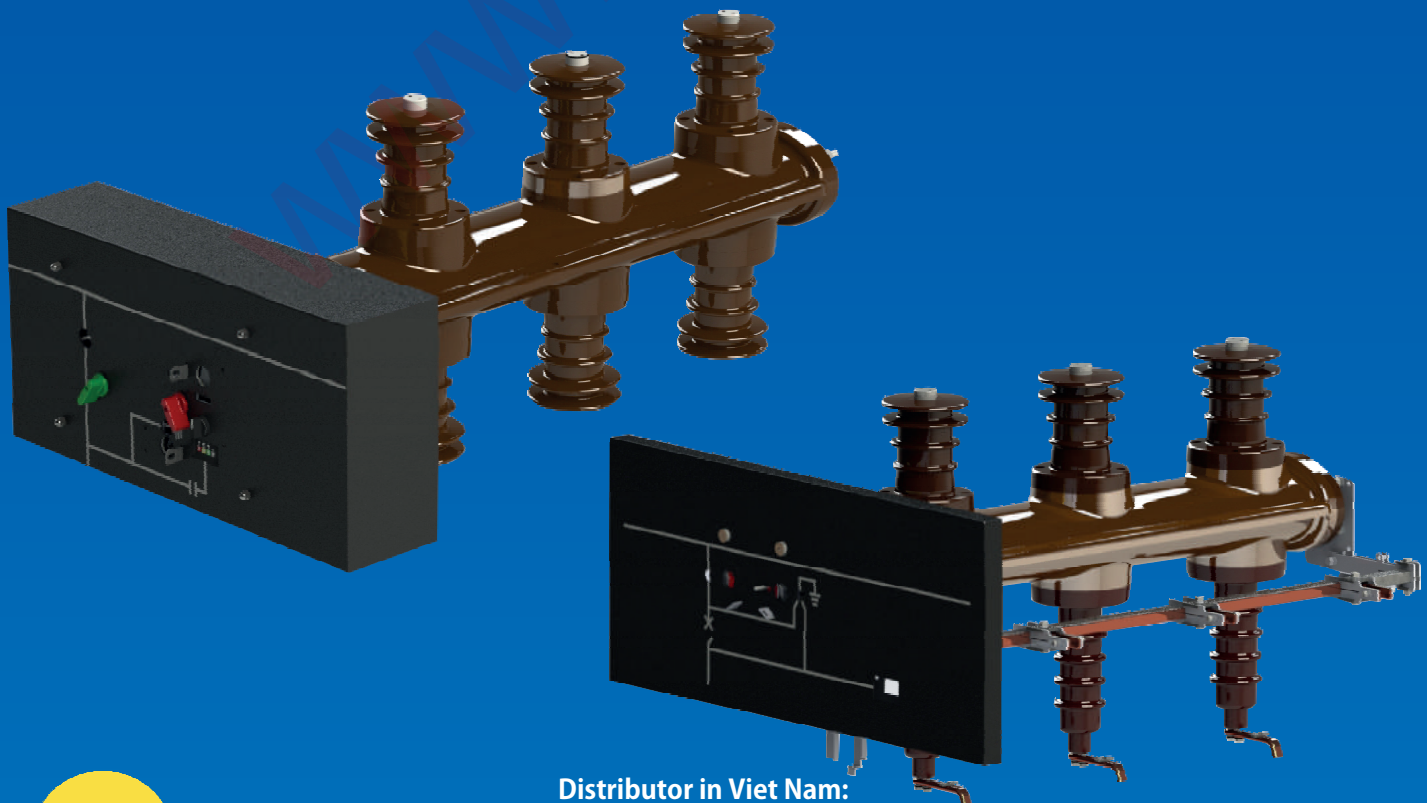

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