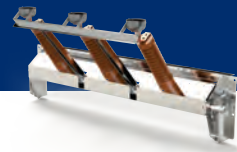
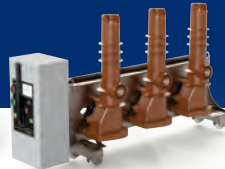




europa36

europa24

**SERIES AIR INSULATED METAL ENCLOSED
MODULAR SWITCHBOARDS & COMPONENTS**



Europower Enerji ve Otomasyon Teknolojileri San. Tic. A.Ş.



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ABOUT US

As a group, we carry out both turnkey contracting and the production and supply of a wide range of products and systems in all phases of electricity generation, transmission, distribution and control. With our engineering and production power, we continue to grow continuously with strategic steps since our establishment in 1999.

We offer the best services, products and solutions in every field of energy in our headquarters in Ankara, with our offices, factories with numerous indoor and outdoor production areas, our R&D center and test laboratory, with a total production area of over 200,000 m². With our engineers and staff working in our offices and facilities located in the Netherlands, Portugal, Macedonia, Iraq, Morocco, Algeria and Ukraine, we deliver our products and services to 80 countries on 5 continents, with our priority being Europe, the Middle East and Africa.

With more than 1600 personnel and over 160 experienced engineers in 8 countries, we are among the leading companies in our field, providing the most comprehensive engineering services in the energy sector from a single source in every field, from project development to design, from project management to supervision, from testing and commissioning services to technical training.

We are proud to be one of the largest companies in our country by entering the Fortune 500 Turkey list since 2018.





Mesut BAZ
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Domestic Trade Director

A. Gökhan ÖZTÜRK
Electrical - Electronics Engineer
Vice President
International Trade Director

M. Behiç HARMANLI
Electrical Engineer (M.Sc.)
President
Chairman of the Board

Ramin MALEK
Electrical - Electronics Engineer
Board Member
General Manager

BOARDMEMBERS





MANUFACTURING

From residential areas to heavy industrial zones, power plants to railway systems, building complexes to substations; you will find a Europower Enerji product that provides you **'the'** solution.

With the latest technology machinery, quality oriented manufacturing processes and well-trained manpower, Europower Enerji offers a wide range of HV, MV and LV products and systems to a large number of customers from many different industries in 80 countries all around the world.

All Europower Enerji products are manufactured according to international standards.



ENGINEERING

Know-how and engineering capabilities are top-priority in every activity of Europower Enerji. Over 160 qualified engineers from different branches and disciplines offer a wide range of engineering services - such as; project design, project management, automation & SCADA, commissioning, supervision, field tests and training.

Europower Enerji's qualified engineering team offers outstanding expertise and years of experience acquired from many successfully completed projects all around the world.



TESTING SERVICES

Equipped with a wide range of latest technology test equipment, Europower Enerji testing department offers calibrating, laboratory and field testing services for even the most complex electrical HV-MV-LV transmission, distribution and generation systems all around the world.

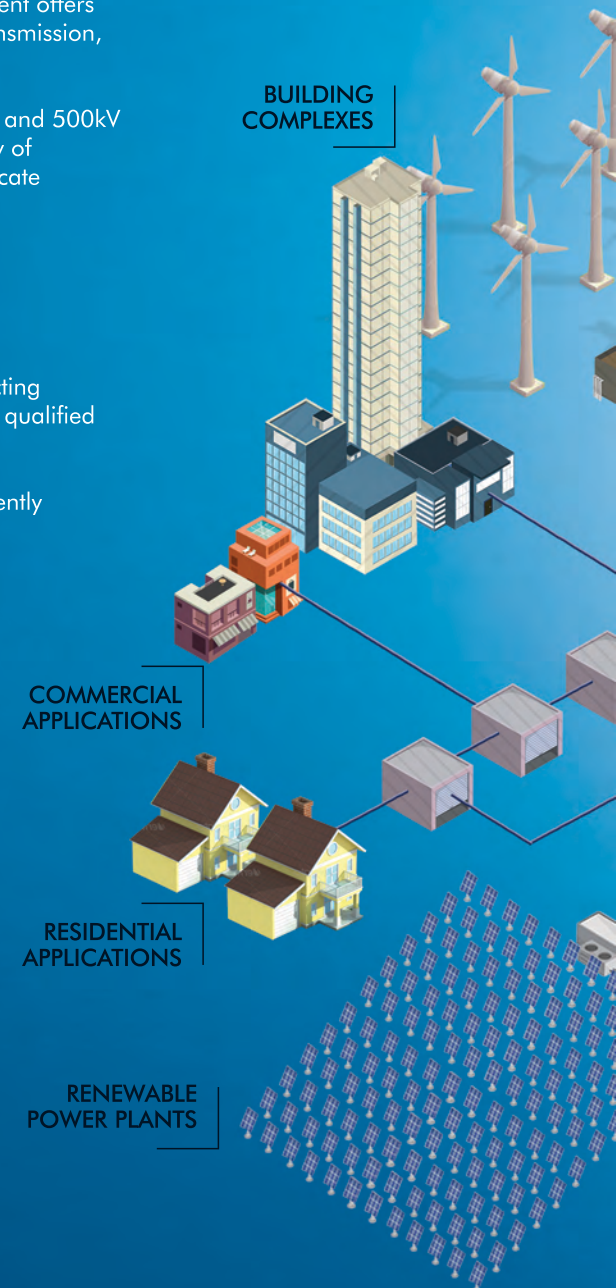
Also, routine tests and type-tests for equipment up to nominal voltage of 245kV (up to 1200kV BIL and 500kV at power frequency) are carried out in the internationally accredited high voltage testing laboratory of Europower Enerji, which is certified with the TS EN ISO/IEC - 17025:2012 quality assurance certificate by TÜRKAK - member of ILAC in Turkey. (Accreditation No: AB-0517-T)

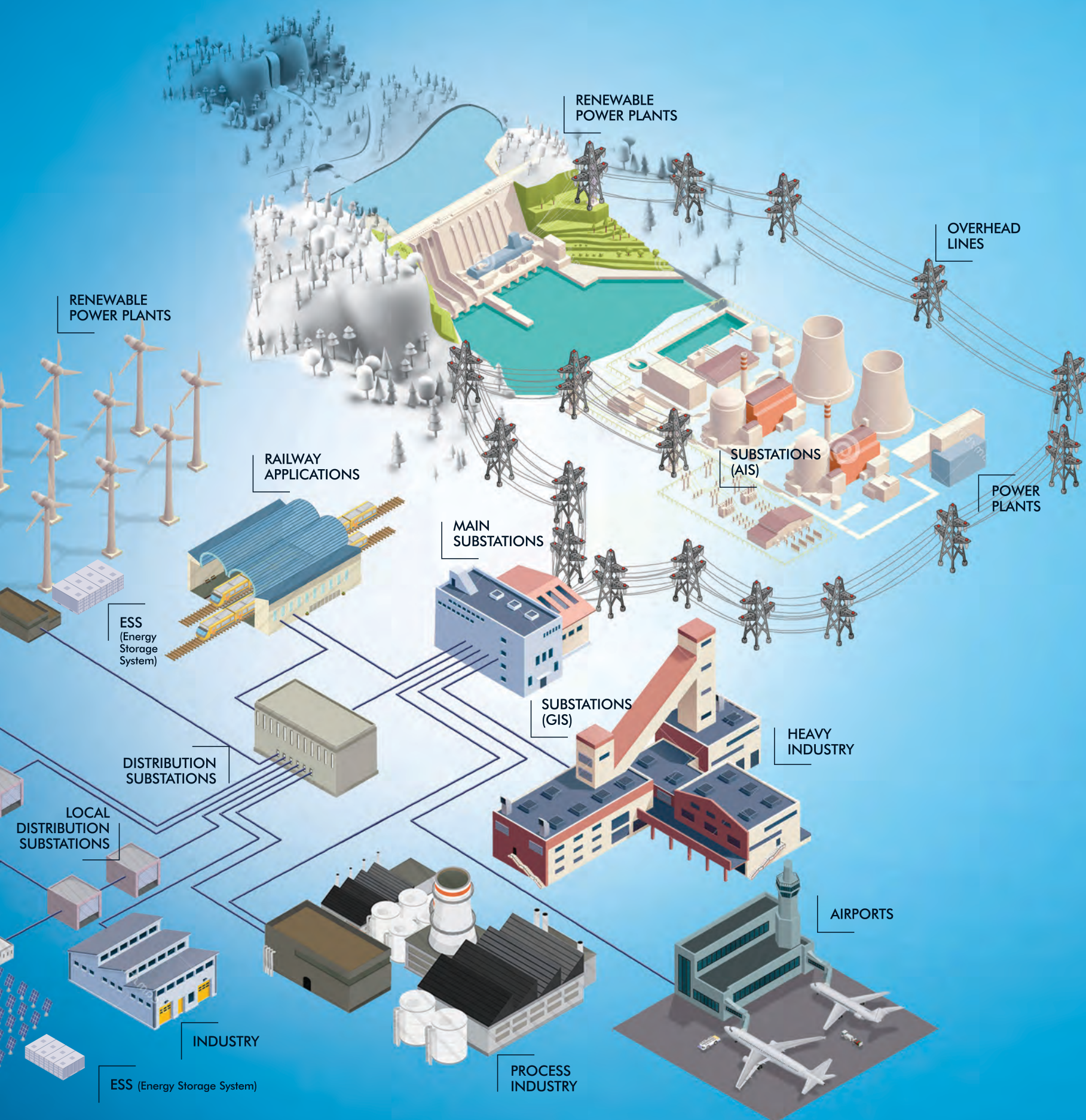


CONTRACTING

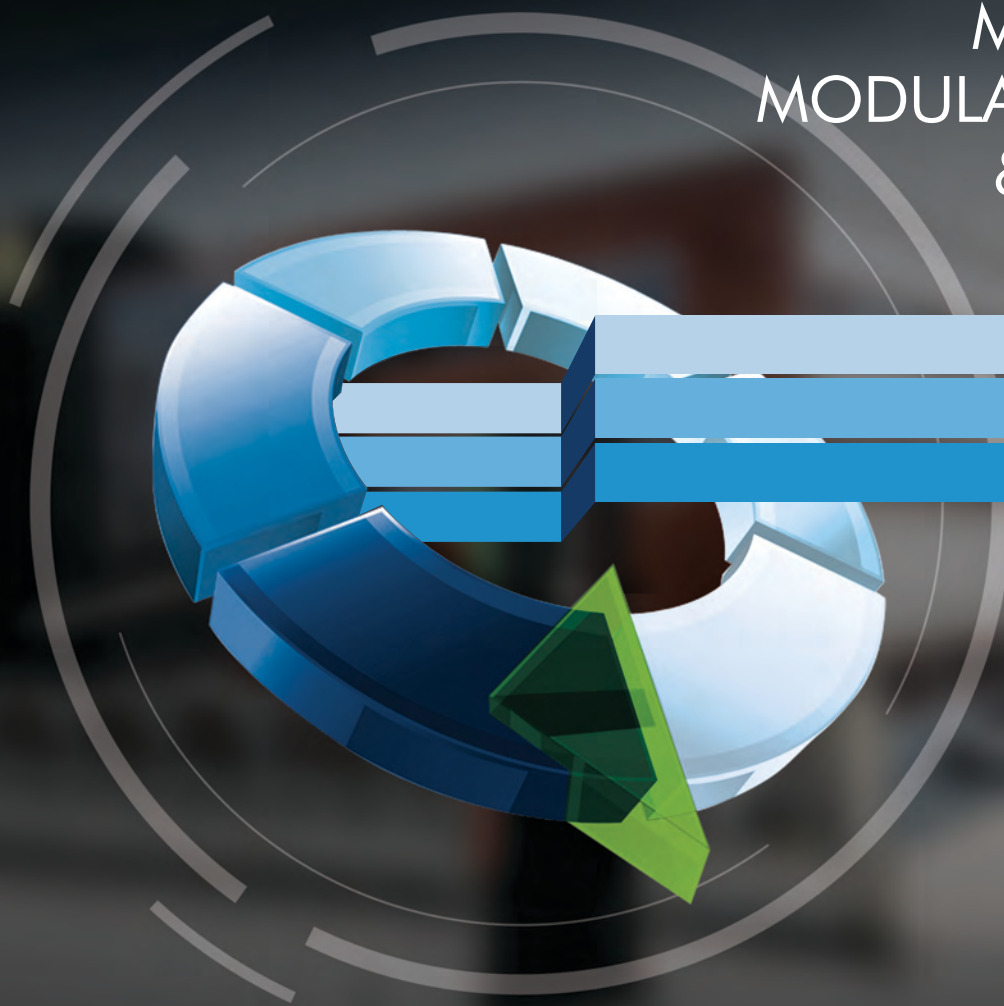
Europower Enerji and its group companies are experts on electrical and electromechanical contracting with an exceptional team of internationally experienced engineers, working in collaboration with a qualified construction workforce of well-trained technicians and workers.

Maintaining consistent and coordinated relationships with the customers, Europower Enerji consistently delivers high quality turn-key projects for high-profile clients in a wide variety of industries.





AIR INSULATED
METAL ENCLOSED
MODULAR SWITCHGEARS
& COMPONENTS





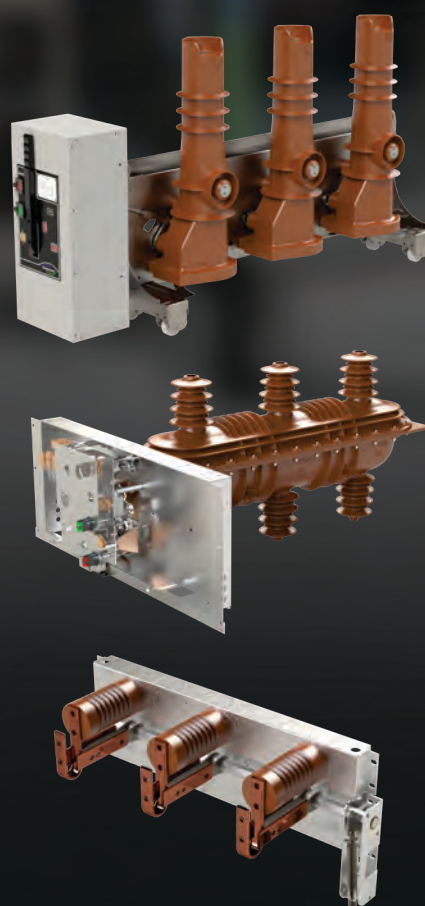
||| **euro24**
||| **euro36**

*INSULATORS
and BUSHINGS*



*MV SWITCHING
COMPONENTS*

||| **euroGAS SD36**
||| **euroGAS SD24**
||| **euroGAS D36**
||| **euroGAS D24**
||| **euroGAS CB36**
||| **euroGAS CB24**
||| **euroES24**
||| **euroES36**

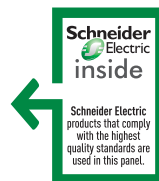




10

europower
enerji
inside

or

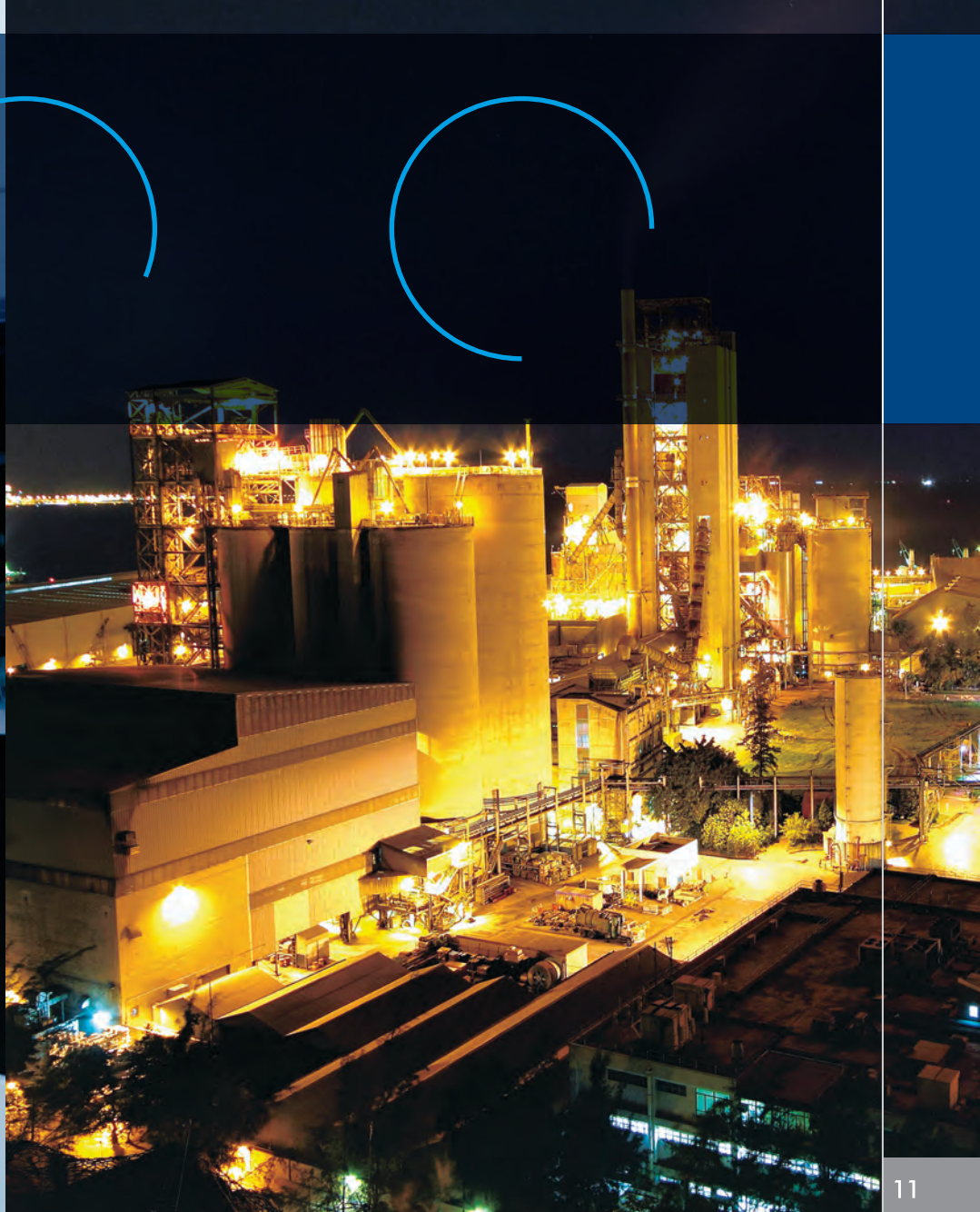


Euro24 and Euro36 series Metal Enclosed Modular Switchgears up to 36 kV produced in accordance with IEC 62271- 200 standards and type tests realized in international laboratories switching and control switchgears.

Euro36 and Euro24 air insulated Metal Enclosed Switchgears are designed for a high level of user safety and operational reliability. Euro36 and Euro24 switchgears protect your facilities and ensure the continuity of the electricity supply.

Euro36 and Euro24 switchgear series offer standard modular units including load break switches, disconnectors, fuses, circuit breakers and contactors with safe, easy to use and cost effective solutions.

- Approved by type tests performed in international laboratories up to 36kV, 1250A & 25kA
- Conform to IEC 62271-200 standards
- More than 20000 installed modular switchgears used in more than 40 countries
- Withdrawable circuit breakers, surge arresters, current & voltage transformers, capacitors, contactors and flexible design suitable for customization with many more components
- Excellent level of adaptation when integrating into existing or new installation
- Special configurations according to customer requests and specifications
- Ready for automation and control
- Short delivery time thanks to design advantages and state-of-the-art production facilities
- Internal arc with the durability provided by the side walls made of one piece of metalsheet
- Highest level of structural integrity in the case of front doors and interior arc manufactured with additional holders with safety in the foreground



Smart Euro36 and Euro24 switchgear series have the highest level of security for users with affordable costs, short delivery times, easy maintenance.

Euro36 and Euro24 switchgears, provides a high level of protection in case of a special designed.

All operations with the door closed and for the operator safe working conditions are provided.

Also, considering the general usage areas of the switchgears, designed smart locking mechanisms creates the perfect product for your distribution network.

In addition to the standard models, the Euro36 and Euro24 models with withdrawable circuit breakers are also designed with optimized prices, dimensions and performances to fit between the Euro36 and Euro24 Switchgear Series.



LOW VOLTAGE SECTION



WORKING MECHANISM SECTION



CABLE CONNECTION SECTION



Advantages of The Design :

- Suitable for different combinations & applications with its modular & compact structure
- Much stronger and more durable structure with solid side walls
- Structural integrity and maximum operational safety in case of internal arcs
- Unique lift type withdrawable circuit breaker switchgear option

SWITCHGEAR SECTIONS

MAIN BUSBAR SECTION



LOW VOLTAGE SECTION

When the control circuits of primary equipment are present and open, it is the section where the necessary measurements are made. Energized and not energized access is possible in the environment.

According to the switchgear feature, in the low voltage section, the equipments to be found are:

- Protection relays
- Measurement tools
- Thermostat
- Auxiliary relays, LV fuses, terminals
- Fault indicator assembly relay

WORKING MECHANISM SECTION

It is the section with IP3X protection degree, where load disconnecter, disconnecter, earthing switch operating mechanisms are located. Access is possible in an energetic and non-energetic environment.

Equipment to be found in the working mechanism section according to the switchgear's feature:

- Mimic diagram
- Maneuver instruction
- Sign plate
- Disconnecter, load disconnecter, earthing switch operating mechanisms and maneuver slots
- Load Break Motor and Reducer Set
- Lock assemblies
- Voltage indicator and phase sequence control socket
- Manometer gauge
- Fuse position indicator
- Padlock slots

CABLE CONNECTION SECTION

The MV XLPE cables incoming and outgoing from the switchgear are connected.

Access to this section only:

- When the disconnecter, load disconnecter in the switchgears are open,
- When the cable terminal earthing switch is closed and all conductive parts extending beyond the section possible when grounded.

The base of the section is covered with detachable metalsheets plates that allow cable entry.

Power cables, antimagnetic cable clamps and It can be fixed with cable glands.

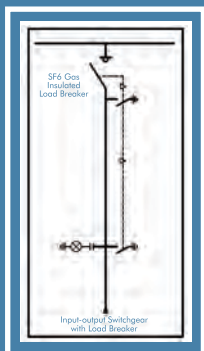
It will be located in the cable connection section according to the switchgear's feature equipment:

- Current transformer
- Voltage transformer
- Ground separator
- Surge Arrester
- YG insurance
- Fuse compound - fuse holder and fuse status indicator assembly
- Cable Connection assembly
- Fault indicator assembly current transformers

MAIN BUSBAR SECTION

It is the section where the main busbar terminals of disconnecter / switch-disconnector have main busbars (aluminum / copper) with cross sections suitable for the current carrying capacity of the switchgear assembled side by side in modular structure.

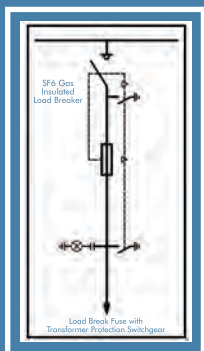
Access to the section will be possible by opening the cover on the switchgear.



- Input-Output Switchgear with load breaker
- Switchgears with rated current up to 630 A and short circuit resistance up to 20 kA, capable of switching under load

Euro24 & Euro36

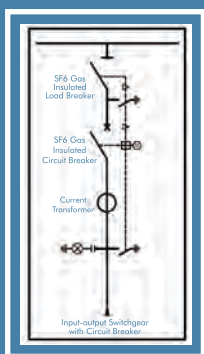
L



- Transformer Protection Switchgear with Fuse / Load Break Outgoing switchgear with Fuse
- Rated current 630 A and short circuit resistance up to 20 kA , HV Switching cells

Euro24 & Euro36

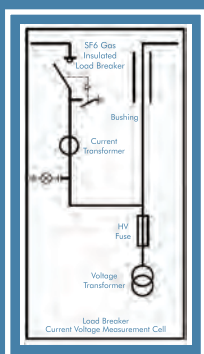
F



- Incoming Outgoing Switchgear with circuit breaker
- Rated current up to 1250 A and short circuit resistance switchgears up to 25 kA, capable of switching even under secondary protection and short circuit

Euro24 & Euro36

CB



- Current and Voltage Measurement Switchgear
- Rated current up to 630 A and short circuit resistance switchgears designed with Load Disconnecter for applications up to 20 kA and with a Disconnecter above these values, from which current and voltage information to be used in measurement devices such as secondary protection relays and meters

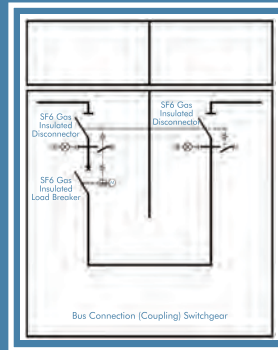
Euro24 & Euro36

CVM

STANDARD EURO24 & EURO36 SWITCHGEAR TYPES

Euro24 & Euro36

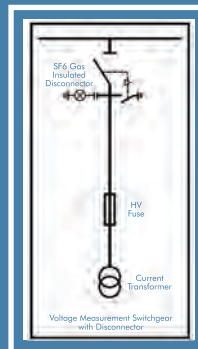
C



- Coupling and Bus Riser Switchgear
- Rated current up to 1250 A and short circuit resistance up to 25 kA, powered from different sources secondary protection of two busbars and the ability to switch even under short circuit combining the switchgears

Euro24 & Euro36

VM



- Voltage Measurement Switchgear
- Secondary protection relays with rated current up to 1250 A and short circuit resistance up to 25 kA, Cells from which voltage information is obtained to be used in measuring instruments such as voltmeters, analyzers, meters

Euro24 & Euro36

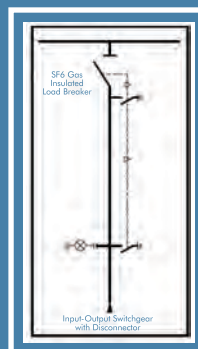
R



- Bus Riser Switchgear
- Rated current up to 1250 A and short circuit resistance Raising and connecting the busbars of the busbar division cells up to 25 kA to the other busbar that will continue and non-switching switchgears

Euro24 & Euro36

D



- Incoming Outgoing Switchgear with Disconnector
- Rated current up to 1250 A and short circuit resistance switchgears up to 25 kA that can switch when the system is not under load



SWITCHGEAR FEATURES

GENERAL FEATURES

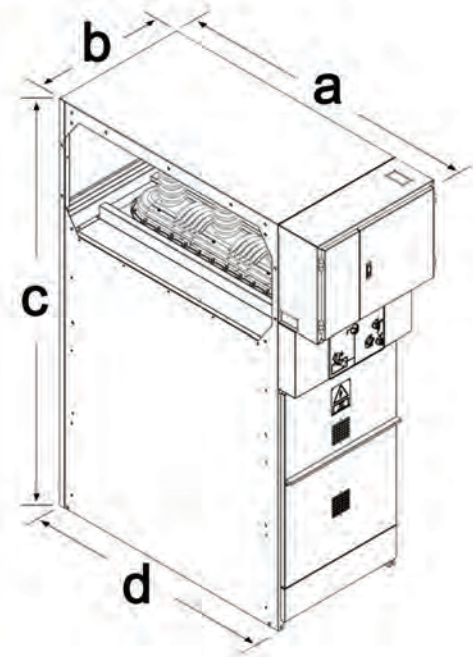
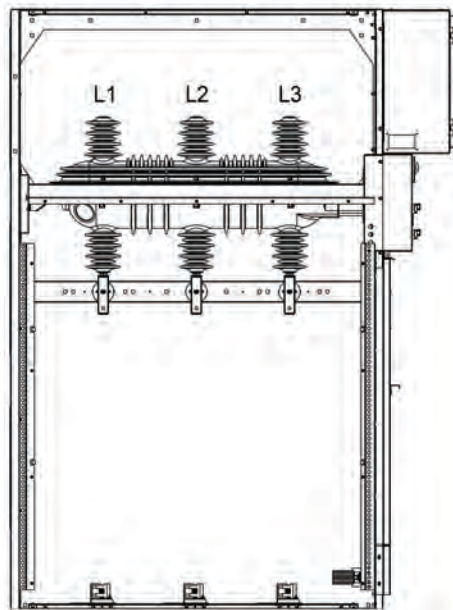
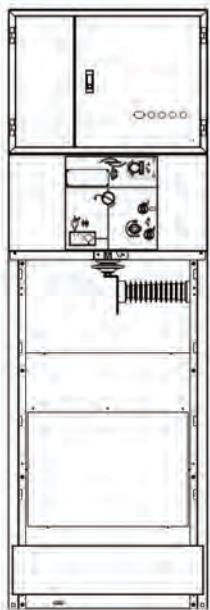
CELL DESCRIPTION		EURO36	EURO24
TECHNICAL SPECIFICATIONS	Manufacturer's Name	EUROPOWER	EUROPOWER
	Rated Frequency (Hz)	50-60	50-60
	Place of Use	Indoor	Indoor
	Elevation	1500 mt	1500 mt
	Ambient Temperature (C)		
	Least	-5	-5
	Most	40	40
	MV Equipment Rated Voltage (kV)	36	24
	Lightning Impulse Withstand Voltage		
	Phase Earth and Phase-Phase (kV-peak)	170	125
	Separation Range (kV-peak)	195	145
	Network Frequency Withstand Voltage for 1 Minute		
	Phase Earth and Phase-Phase (kV-effective)	70	50
	Separation Range (kV-effective)	80	60
	For Auxiliary Equipment (kV-effective)	2	2
	Auxiliary Service Supply Voltage of MV Equipment (DC)	24-48-110-220VDC or 110-220VAC	24-48-110-220VDC or 110-220VAC
	Rated Normal Bus Current (A)	630/1250	630/1250
	Rated Short Dev. Withstand Current (kA-effective)	16 -20 -25 kA (1 second)	16 - 20 - 25 kA (1 second)
	Short Circuit Time (s)	1 s	1 s
	Rated Peak Withstand Current (kA-effective)	40 - 50 - 62,5 kA-peak	40 - 50 - 62,5 kA-peak
	Internal Arc Resistance (kA-effective)	16 -20 -25 kA (1 second)	16 -20 -25 kA (1 second)
	Largest Temperature Increases	IEC 62271-200 and IEC60694	IEC 62271-200 and IEC60694
	Degree of Protection		
	Enclosure	IP3X	IP3X
	Partitions	IP3X	IP3X
	Sheet Thickness (min.) mm	2	2
	Busbars		
	Busbar Material	Copper	Copper
	Main Busbar Shape and Section for 630A (mm ²)	40x6- Copper	30x8- Copper
	Main Busbar Shape and Section for 1250A (mm ²)	60x10- Copper	60x10- Copper
	Bare / Insulated	Insulated	Insulated
	Enclosure		
	Material	Pre-Galvanised Metal Sheet	Pre-Galvanised Metal Sheet
	Thickness (mm)	2mm	2mm
	Casing Painting Method	Electrostatic powder paint	Electrostatic powder paint
	Paint Coating Thickness (micron)	65 +/- 15	65 +/- 15
	Galvanized Coating Thickness (g/mm ²)	275	275
	Internal Arc Resistance Class	AFL	AFL
	Service Continuity Loss Category	LSC2A-PI	LSC2A-PI

EURO36 - L

EURO24 - L



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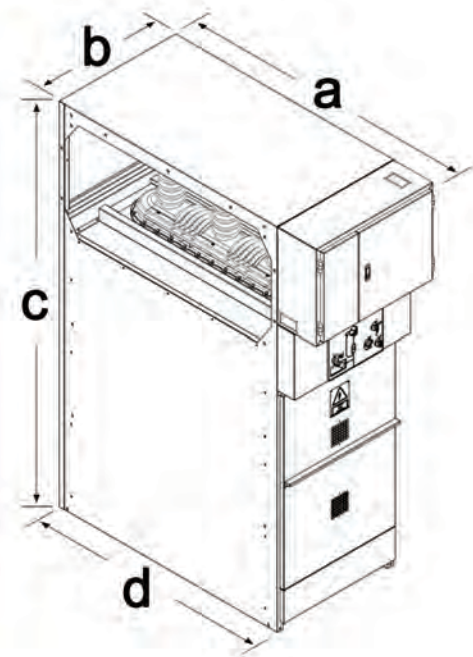
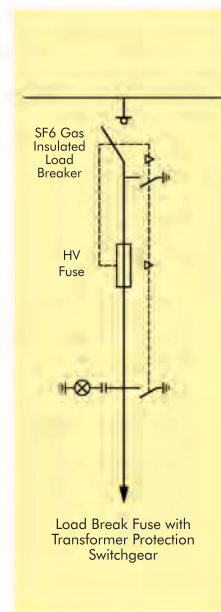
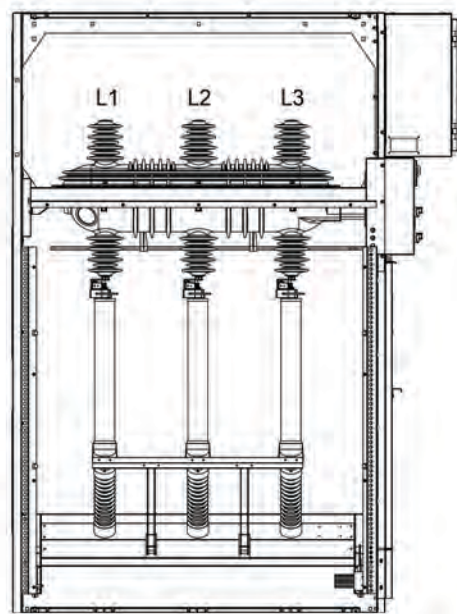
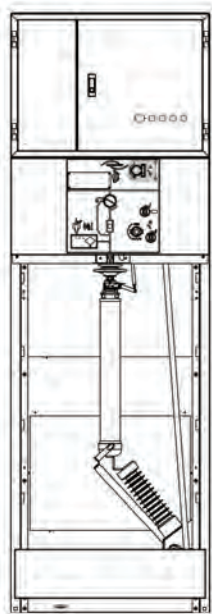
SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-L	Input - Output Switchgear with Load Breaker	345	1680	750	2250	1400
24/630-1250/16-25 EURO24-L	Input - Output Switchgear with Load Breaker	210	1200	500	1900	900

INPUT - OUTPUT SWITCHGEAR with LOAD BREAKER

CELL DESCRIPTION		EURO36 - L	EURO24 - L
TECHNICAL SPECIFICATIONS	Load Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS SD 36	EUROPOWER - EUROGAS SD 24
	Applied Standard	IEC 62271-103	IEC 62271-103
	Load Breaker Type	E3 Class, M1 Class, General Purpose	E3 Class, M1 Class, General Purpose
	Rated Voltage (kV)	36	24
	Rated Normal Current (A)	630	630
	Rated Short-Term Withstand Current (kA-effective)	16-20	16-20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40-50	40-50
	Rated Active Load Weighted Breaking Current (A)	630	630
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Load Breaker Winding Engine	Optional	Optional
	Grounding Disconnecter		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	16-20	16-20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40-50	40-50
	Auxiliary Service Supply Voltage (DC)	24-48-110-220VDC or 110-220VAC	24-48-110-220VDC or 110-220VAC
	Main Busbar Current (A)	630 or 1250 A (optional)	630 or 1250 A (optional)
	Dimensions (mm)		
	Width (mm)	750	500
	Depth (mm)	1400	900
	Height (mm)	2200	1900

EURO36 - F

EURO24 - F



SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-F	Fused Transformer Protection Cell with Load Breaker	385	1680	750	2250	1400
24/630-1250/16-25 EURO24-F	Fused Transformer Protection Cell with Load Breaker	230	1200	500	1900	900

FUSED TRANSFORMER PROTECTION CELL WITH LOAD BREAKER

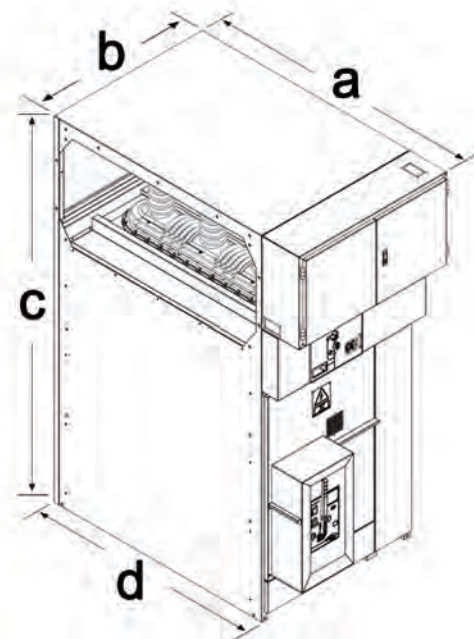
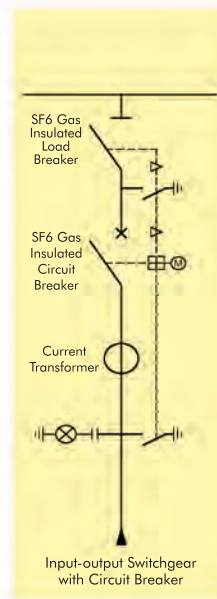
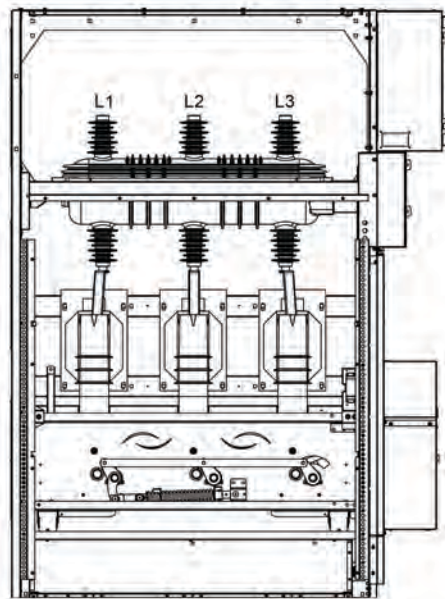
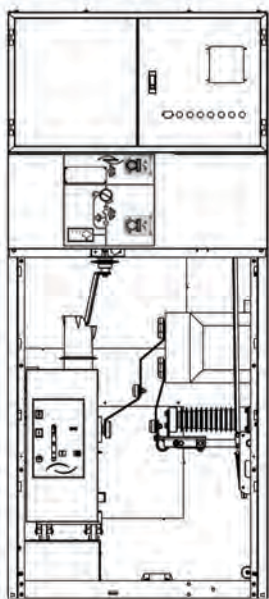
CELL DESCRIPTION		EURO36 - F	EURO24 - F
TECHNICAL SPECIFICATIONS	Load Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS SD 36	EUROPOWER - EUROGAS SD 24
	Applied Standard	IEC 62271-103	IEC 62271-103
	Load Breaker Type	E3 Class, M1 Class, General Purpose	E3 Class, M1 Class, General Purpose
	Rated Voltage (kV)	36	24
	Rated Normal Current (A)	630	630
	Rated Short-Term Withstand Current (kA-effective)	16-20	16-20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40-50	40-50
	Rated Active Load Weighted Breaking Current (A)	630	630
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Load Breaker Winding Engine	Optional	Optional
	HV Fuse		
	Applied Standard	IEC 60282-1 and IEC 60787	IEC 60282-1 and IEC 60787
	Rated Voltage (kV)	36	24
	Rated Frequency (Hz)	50-60	50-60
	Rated Current (A)	According to Transformer Power Suitable for BUSINESS OWNER Projects	According to Transformer Power Suitable for BUSINESS OWNER Projects
	Power Consumption at Rated Current (W)	-	-
	Rated Breaking Current (kA)	16	16
	Rated Minimum Breaking Current (A) (for backup class fuses)	According to Transformer Power Suitable for BUSINESS OWNER Projects	According to Transformer Power Suitable for BUSINESS OWNER Projects
	Grounding Disconnecter		
	Above the Fuses		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	SF6 Insulated/Air Insulated	SF6 Gas Insulated	SF6 Gas Insulated
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	16-20	16-20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40-50	40-50
	Below the Fuses		
	Manufacturer's Name and Type Mark	EUROPOWER_ES	EUROPOWER_ES
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	1	1
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	2,5	2,5
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250 A (optional)	630 or 1250 A (optional)
	Dimensions (mm)		
	Width (mm)	750	500
	Depth (mm)	1400	900
	Height (mm)	2200	1900

EURO36 - CB

EURO24 - CB



22



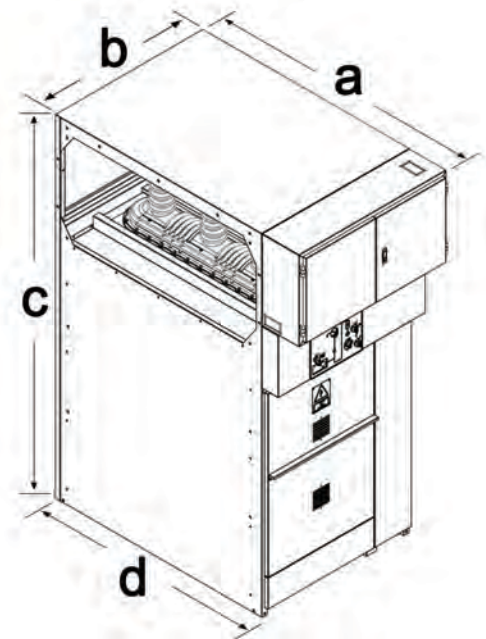
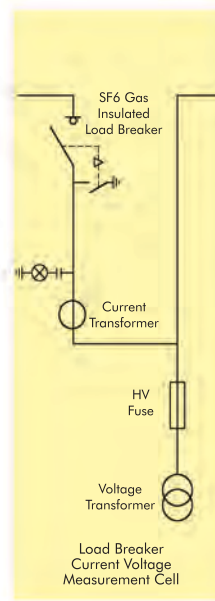
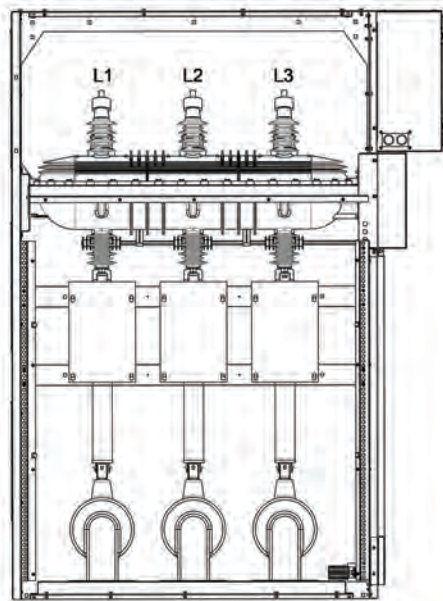
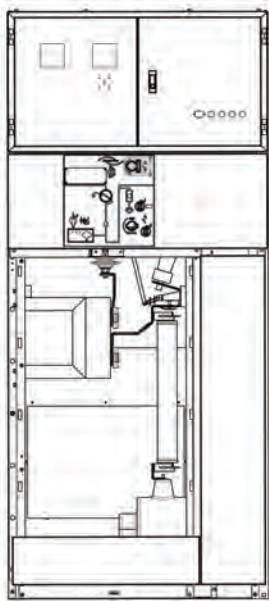
SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-CB	Input - Output Switchgear with Breaker	490-750	1680	1000	2250	1400
24/630-1250/16-25 EURO24-CB	Input - Output Switchgear with Breaker	375-535	1200	750	1900	900

INPUT - OUTPUT SWITCHGEAR with BREAKER

CELL DESCRIPTION		EURO36 - CB	EURO24 - CB
TECHNICAL SPECIFICATIONS	Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS D 36	EUROPOWER - EUROGAS D 24
	Applied Standard	IEC 62271-102	IEC 62271-102
	Breaker Type	M0	M0
	Rated Voltage (kV)	36	24
	RAted Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 -25	16 - 20 -25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Grounding Disconnectors		
	Above The Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	SF6 Insulated/Air Insulated	SF6 Gas Insulated	SF6 Gas Insulated
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E0	M0,E0
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
	Below The Breaker		
	Applied Standard	EUROPOWER_ES	EUROPOWER_ES
	Manufacturer's Name	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
TECHNICAL SPECIFICATIONS	Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS CB 36	EUROPOWER - EUROGAS CB 24
	Applied Standard	IEC 62271-100	IEC 62271-100
	Type	M1,E1	M1,E1
	Type of Breaker (SF6 Gas/Vacuum)	SF6 Gas	SF6 Gas
	Rated Voltage (kV)	36	24
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short Circuit (Isc) Breaking Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	3	3
	Rated Short Circuit Making Current (kA-peak)	2.5 x Isc	2.5 x Isc
	Rated On-Off Operations Sequence - Cut-Off Time (ms) - Close-Off Time (ms)	A-0.3s-KA-3 min.-KA-Max. 80-Max. 120	A-0.3s-KA-3 min.-KA-Max. 80-Max. 120
	Inter-Pole Phase Mismatch On (ms) - Off (ms)	max. 5 - max. 5	max. 5 - max. 5
	Working Mechanism Type	Engine - Spring	Engine - Spring
	Spring Winding Engine Voltage (V)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Closing Coil Voltage (V)	24 - 48 - 110 - 220V DC	24 - 48 - 110 - 220V DC
	Trip Coil Voltage (V)	24 - 48 - 110 - 220V DC	24 - 48 - 110 - 220V DC
	Number of Spare Auxiliary Contacts (open contact - closed contact)	2+2	2+2
	Auxiliary Contact Current Carrying Capacity Continuous (A)	10	10
	Relay	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Current Transformer		
	Applied Standard	TS EN 61869-2	TS EN 61869-2
	Insulation Type	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Characteristics	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Glass Transition Temperature of Epoxy Resin Material	105	105
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250	630 or 1250
TECHNICAL SPECIFICATIONS	Dimensions (mm)		
	Width (mm)	1000	750
	Depth(mm)	1400	900
	Height (mm)	2200	1900

EURO36 - CVM

EURO24 - CVM



SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-CVM	Current - Voltage Measuring Cell with Load Breaker	635	1680	1000	2250	1400
24/630-1250/16-25 EURO24-CVM	Current - Voltage Measuring Cell with Load Breaker	450	1200	750	1900	900

CURRENT - VOLTAGE MEASURING CELL with LOAD BREAKER

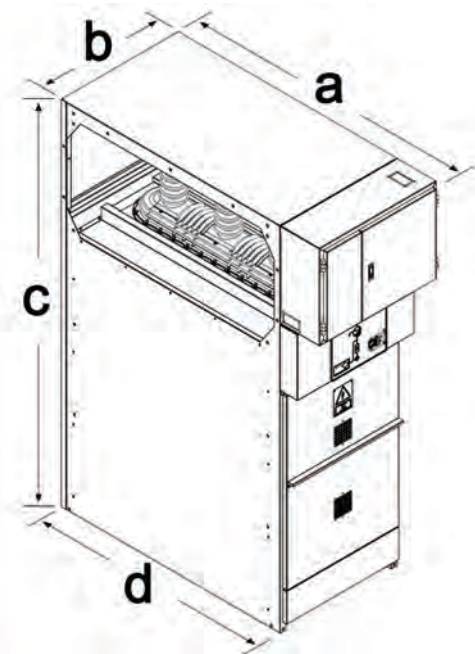
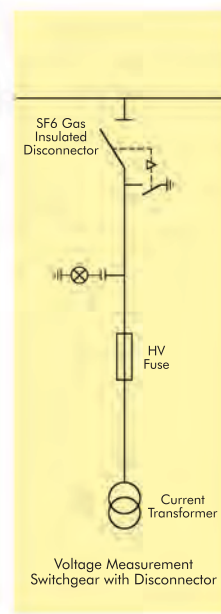
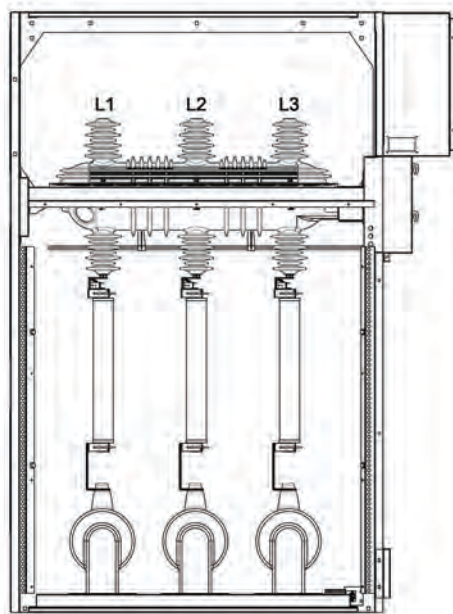
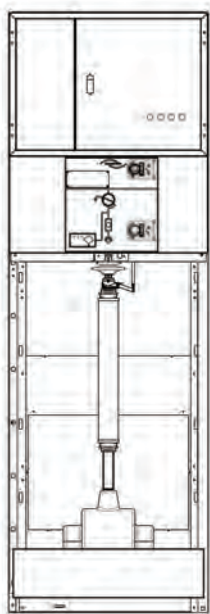
CELL DESCRIPTION		EURO36 - CVM	EURO24 - CVM
TECHNICAL SPECIFICATIONS	Load Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS SD 36	EUROPOWER - EUROGAS SD 24
	Applied Standard	IEC 62271-103	IEC 62271-103
	Load Breaker Type	E3 Class, M1 Class, General Purpose	E3 Class, M1 Class, General Purpose
	Rated Voltage (kV)	36	24
	Rated Normal Current (A)	630	630
	Rated Short-Term Withstand Current (kA-effective)	16 - 20	16 - 20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50	40 - 50
	Rated Active Load Weighted Breaking Current (A)	630	630
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Load Breaker Winding Engine	Available	Available
	Grounding Disconnectors		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	16 - 20	16 - 20
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40-50	40-50
	HV Fuses		
	Applied Standard	IEC 60282-1	IEC 60282-1
	Rated Voltage (kV)	36	24
	Rated Current (A)	2	2
	Rated Frequency (Hz)	50	50
	Voltmeter	Yes	Yes
	Voltmeter Commutator (7 positions)	Yes	Yes
	Meter (X/5A 100V three-phase combi)	Yes	Yes
	Voltage Transformer		
	Applied Standard	TS EN 61869-3	TS EN 61869-3
	Insulation Type	Epoxy Resin	Epoxy Resin
	Characteristics	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Glass Transition Temperature of Epoxy Resin Material	105	105
	Current Transformer		
	Applied Standard	TS EN 61869-2	TS EN 61869-2
	Insulation Type	Epoxy Resin	Epoxy Resin
	Characteristics	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250 A (optional)	630 or 1250 A (optional)
	Dimensions (mm)		
	Width (mm)	1000	750
	Depth (mm)	1400	900
	Height (mm)	2200	1900

EURO36 - VM

EURO24 - VM



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SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-VM	Voltage Measurement Switchgear with Breaker	475	1680	750	2250	1400
24/630-1250/16-25 EURO24-VM	Voltage Measurement Switchgear with Breaker	320	1200	500	1900	900

VOLTAGE MEASURMENT SWITCHGEAR with BREAKER

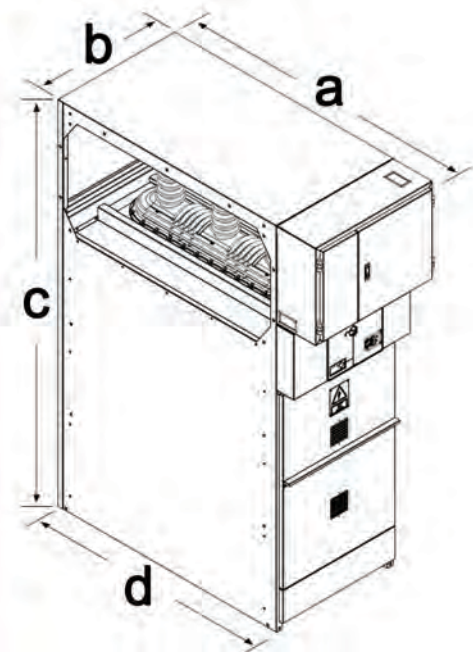
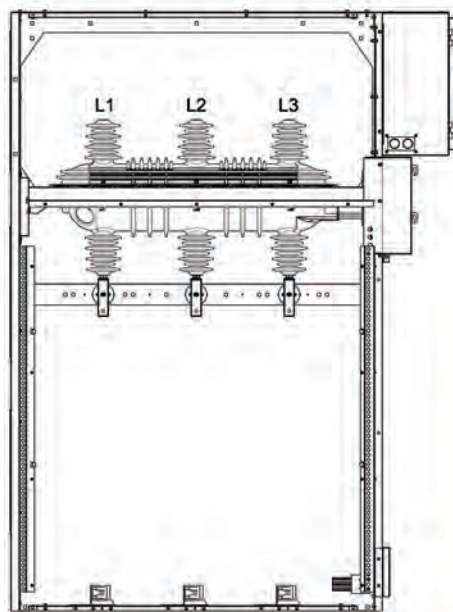
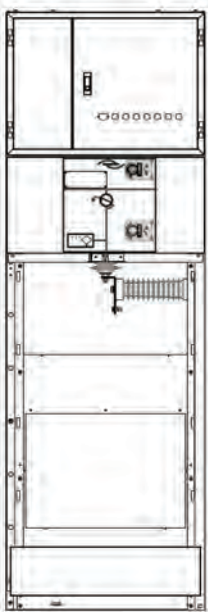
CELL DESCRIPTION		EURO36 - VM	EURO24 - VM
TECHNICAL SPECIFICATIONS	Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Breaker Type	M0	M0
	Rated Voltage (kV)	36	24
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16 - 25	16 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50	40 - 50
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment (SF6 gas)	SF6 Gas	SF6 Gas
	Grounding Disconnectors		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E0	M0,E0
	Rated Short-Term Withstand Current (kA-effective)	16 - 25	16 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50	40 - 50
	HV Fuse		
	Applied Standard	IEC 60282-1 and IEC 60787	IEC 60282-1 and IEC 60787
	Rated Voltage (kV)	36	24
	Rated Frequency (Hz)	50 - 60	50 - 60
	Rated Current (A)	According to Transformer Power Suitable for BUSINESS OWNER Projects	According to Transformer Power Suitable for BUSINESS OWNER Projects
	Rated Breaking Current (kA)	16	16
	Rated Minimum Breaking Current (A) (for back-up class fuses)	2	2
	Voltmeter	Yes	Yes
	Voltmeter Commutator (7 positions)	Yes	Yes
	Voltage Transformer		
	Applied Standard	TS EN 61869-3	TS EN 61869-3
	Insulation Type	Epoxy Resin	Epoxy Resin
	Characteristics	Suitable for BUSINESS OWNER Projects	Suitable for BUSINESS OWNER Projects
	Glass Transition Temperature of Epoxy Resin Material	105	105
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250 A (optional)	630 or 1250 A (optional)
	Dimensions (mm)		
	Width (mm)	750	500
	Depth (mm)	1400	900
	Height (mm)	2200	1700

EURO36 - D

EURO24 - D



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SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-D	Input Switchgear with Breaker	355	1680	750	2250	1400
24/630-1250/16-25 EURO24-D	Input Switchgear with Breaker	210	1200	500	1900	900

INPUT SWITCHGEAR with BREAKER

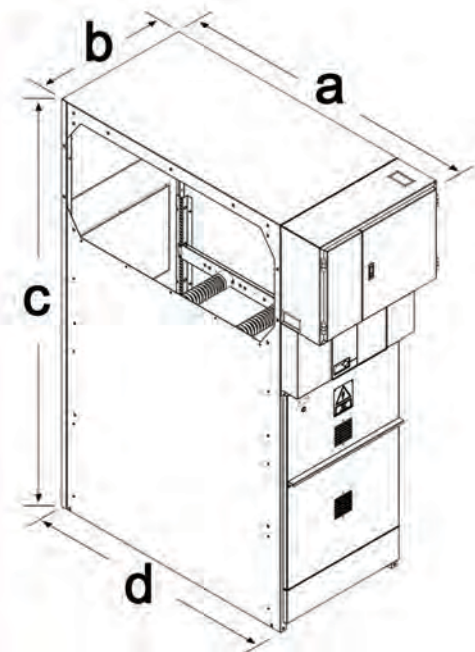
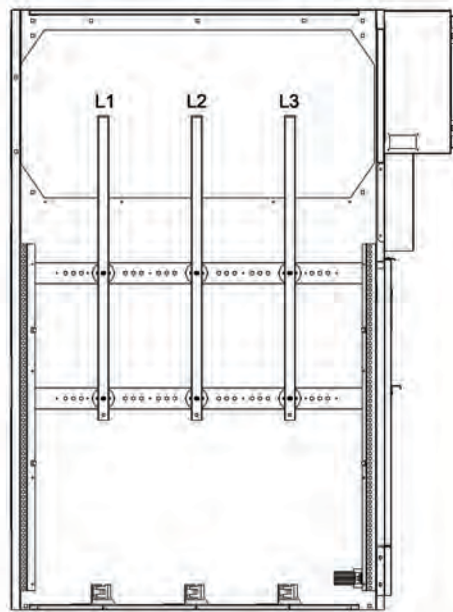
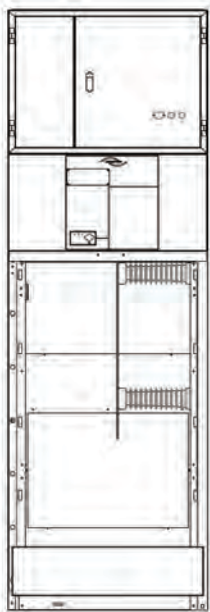
CELL DESCRPTION		EURO36 - D	EURO24 - D
TECHNICAL SPECIFICATIONS	Manufacturer's Name and Type Mark Breaker	EUROPOWER	EUROPOWER
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Breaker Type	M1	M1
	Rated Voltage (kV)	36	24
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16 - 25	16 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50	40 - 50
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment (SF6 gas)	SF6 Gas	SF6 Gas
	Grounding Disconnectors		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Type	M0,E2	M0,E2
	Rated Short-Term Withstand Current (kA-effective)	16 - 25	16 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50	40 - 50
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250	630 or 1250
	Dimensions (mm)		
	Width (mm)	750	500
	Depth (mm)	1400	900
	Height (mm)	2200	1900

EURO36 - R

EURO24 - R



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SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
36/630-1250/16-25 EURO36-R	Cable Connection Switchgear	385	a	b	c	d
24/630-1250/16-25 EURO24-R	Cable Connection Switchgear	110	1680	750	2250	1400
			1200	500	1900	900

CABLE CONNECTION SWITCHGEAR

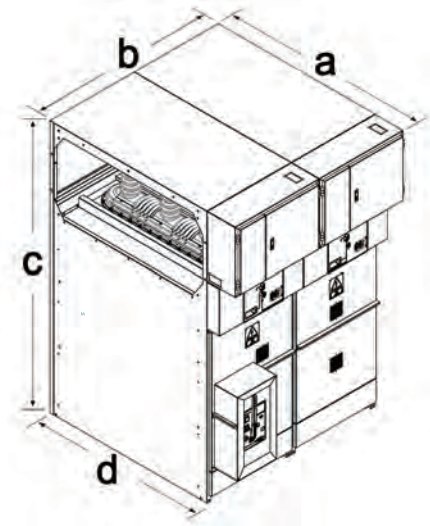
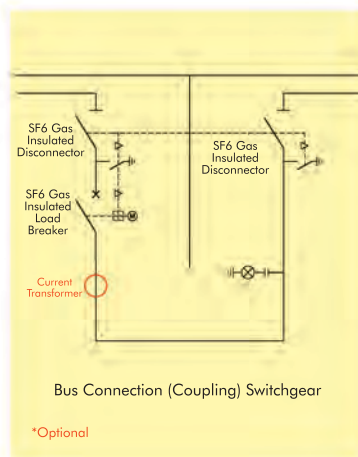
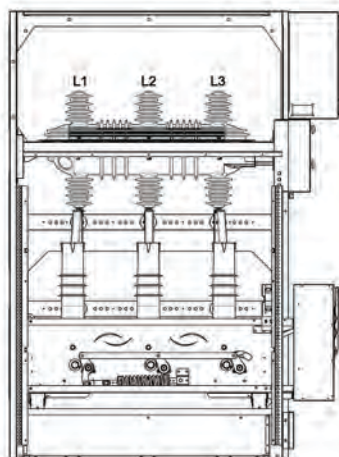
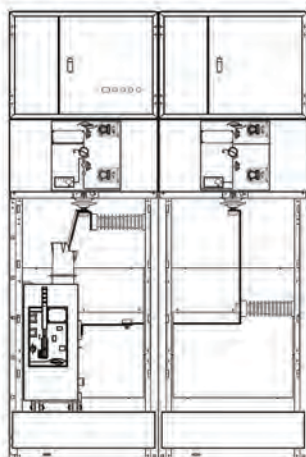
PRODUCT CODE		EURO36 - R	EURO24 - R
TECH. SPEC.	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Auxiliary Service Supply Voltage (DC) of MV Equipment	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250	630 or 1250
	Dimensions (mm)		
	Width (mm)	750	500
	Depth (mm)	1400	900
	Height (mm)	2200	1900

EURO36 - C

EURO24 - C



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SWITCHGEAR TYPE	SWITCHGEAR DEFINITION	WEIGHT (kg)	DIMENSIONS			
			a	b	c	d
36/630-1250/16-25 EURO36-C	Bar Connecting Coupling Switchgear with Breaker	825	1680	750+750	2250	1400
24/630-1250/16-25 EURO24-C	Bar Connection Coupling Cell with Breaker (2 breakers)	660	1200	750+500	1900	900

BAR CONNECTING COUPLING SWITCHGEAR with BREAKER

CELL DESCRIPTION		EURO36 - C	EURO24 - C
TECHNICAL SPECIFICATIONS	Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	Breaker Type	M0	M0
	Rated Voltage (kV)	36	24
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment (SF6 gas)	SF6 Gas	SF6 Gas
	Grounding Disconnectors		
	Above The Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER	EUROPOWER
	Applied Standard	IEC 62271-102	IEC 62271-102
	SF6 Insulated/Air Insulated	SF6 Gas Insulated	SF6 Gas Insulated
	Type	M0, E0	M0, E0
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
	Below The Breaker		
	Applied Standard	EUROPOWER_ES	EUROPOWER_ES
	Manufacturer's Name	IEC 62271-102	IEC 62271-102
	Type	M0, E2	M0, E2
	Rated Short-Term Withstand Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand (short circuit shutdown) Current (kA-peak)	40 - 50 - 62,5	40 - 50 - 62,5
TECHNICAL SPECIFICATIONS	Breaker		
	Manufacturer's Name and Type Mark	EUROPOWER - EUROGAS CB 36	EUROPOWER - EUROGAS CB 24
	Applied Standard	IEC 62271-100	IEC 62271-100
	Type	M1, E1	M1, E1
	Type of Breaker (SF6 gas/vacuum)	SF6 Gas	SF6 Gas
	Rated Voltage (kV)	36	24
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short Circuit (Isc) Breaking Current (kA-effective)	16 - 20 - 25	16 - 20 - 25
	Short Circuit Time (s)	3	3
	Rated Short Circuit Making Current (kA-peak)	2.5 x Isc	2.5 x Isc
	Rated On-Off Operations Sequence - Cut-Off Time (ms) - Close-Off Time (ms)	A-0.3s-KA-3 dak-KA - max. 80 - max. 120	A-0.3s-KA-3 dak-KA - max. 80 - max. 120
	Inter-Pole Phase Mismatch On (ms) - Off (ms)	max. 5 - max. 5	max. 5 - max. 5
	Working Mechanism Type	Engine - Spring	Engine - Spring
	Spring Winding Engine Voltage (V)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Closing Coil Voltage (V)	24 - 48 - 110 - 220V DC	24 - 48 - 110 - 220V DC
	Trip Coil Voltage (V)	24 - 48 - 110 - 220V DC	24 - 48 - 110 - 220V DC
	Number of Spare Auxiliary Contacts (open contact - closed contact)	2+2	2+2
	Auxiliary Contact Current Carrying Capacity Continuous (A)	10	10
	Auxiliary Service Supply Voltage (DC)	24-48-110-220V DC or 110-220V AC	24-48-110-220V DC or 110-220V AC
	Main Busbar Current (A)	630 or 1250	630 or 1250
	Dimensions (mm)		
	Width (mm)	1500	1250
	Depth (mm)	1400	900
	Height (mm)	2200	1900

Europower Enerji has the necessary production facilities and infrastructure for epoxy to be used in the cells and other components it manufactures. Europower Enerji produces the epoxy products needed with minimum waste and maximum quality conditions with its fully automatic facility developed with the latest technology.

In this sense, Europower Enerji, which acts as a supplier for many domestic and foreign manufacturers, also provides professional service and consultancy on the establishment of epoxy production facilities. Europower Enerji, which designed and implemented its own facility according to its needs, with an innovative and improvable approach, improves day by day by reflecting this knowledge on the most efficient and optimum production methods.

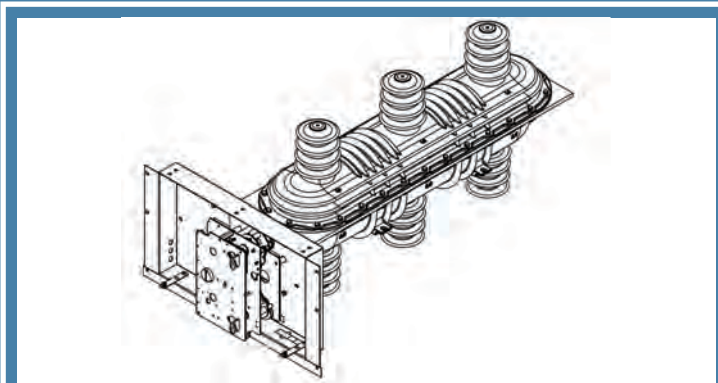


MV SWITCHING COMPONENTS

MV SWITCHING COMPONENT TYPES

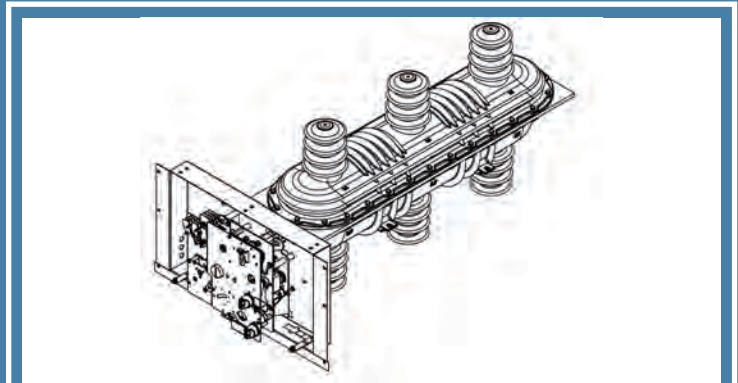
EuroGas D24 & EuroGas D36

- Internal SF6 Gas Insulated Disconnectors
- Up to 36 kV rated voltage
- Up to 1250 A rated current
- Up to 25 kA short circuit withstand
- Components that can switch when the line is unloaded



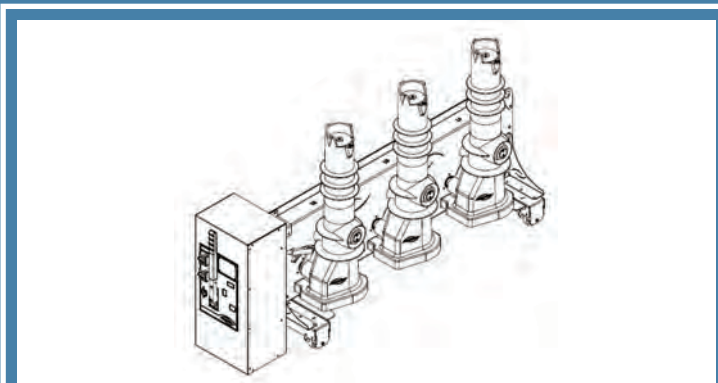
EuroGas SD24 & EuroGas SD36

- Internal SF6 Gas Insulated Disconnectors
- Up to 36 kV rated voltage
- Up to 630 A rated current
- Up to 20 kA short circuit withstand
- Components that can switch when the line is unloaded



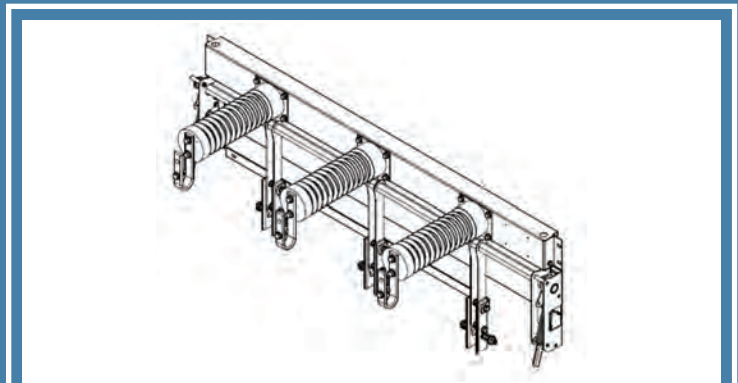
EuroGas CB24 & EuroGas CB36

- Internal SF6 Gas Insulated Disconnectors
- Up to 36 kV rated voltage
- Up to 1250 A rated current
- Up to 25 kA short circuit withstand
- Components capable of switching even under secondary protection and short circuit



EuroGas ES24 & EuroGas ES36

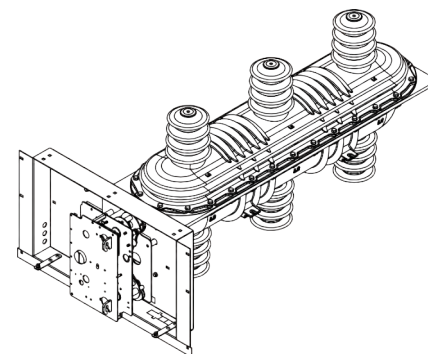
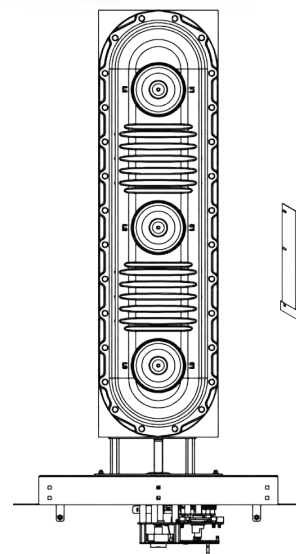
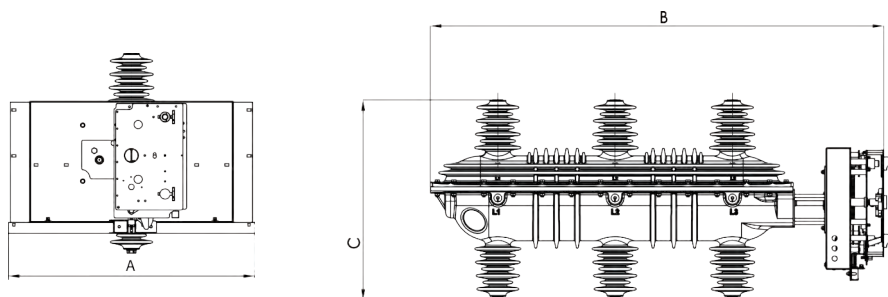
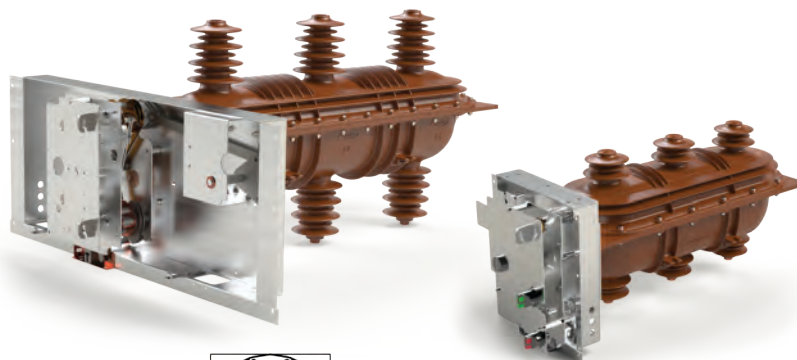
- Internal SF6 Gas Insulated Ground Blades
- Up to 36 kV rated voltage
- Up to 25 kA short circuit withstand
- Components that can discharge the load remaining on the line to the ground



MV INTERNAL DISCONNECTORS

EuroGas D24 & EuroGas D36

- Components that cannot be turned on and off under load, but are used to de-energize the part of the system that follows it in the direction of energy flow.
- Compact, reliable, smart and proven design
- Many options and accessory possibilities
- Compliant with international IEC 62271-102 and IEC 62271-100 standards



DISCONNECTOR TYPE	A (mm)	B (mm)	C (mm)
EuroGas D36	733	1354	598
EuroGas D24	492	937	419

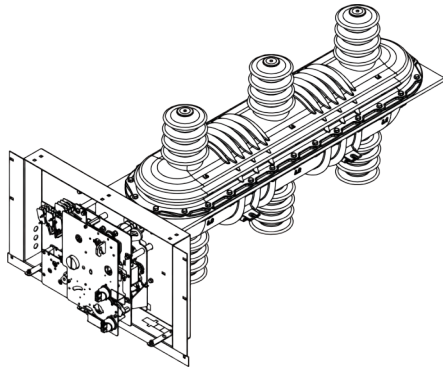
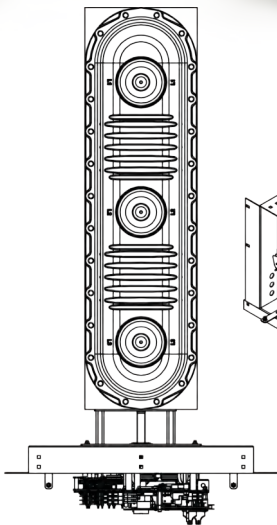
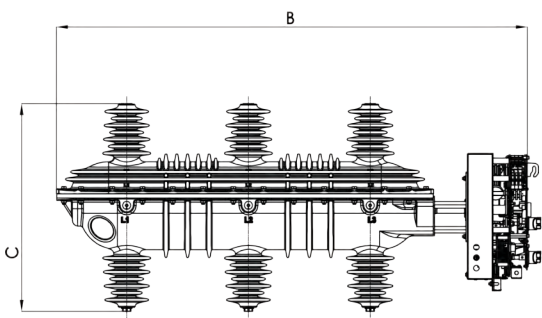
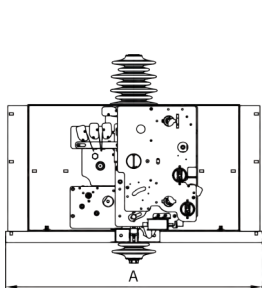
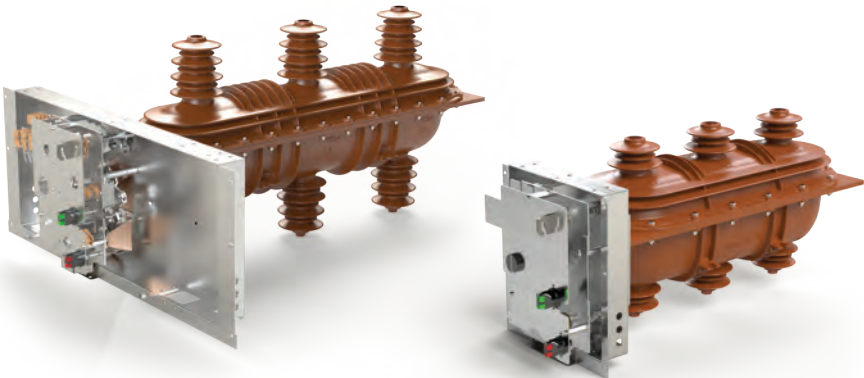
DISCONNECTOR TYPE		EuroGas D24	EuroGas D36
TECHNICAL SPECS	Applied Standard	IEC 62271-102	IEC 62271-102
	Disconnecter Type	M0	M0
	Rated Voltage (kV)	up to 24	24-36
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16, 20 or 25	16, 20 or 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand Current (kA-peak)	40, 50 or 62,5	40, 50 or 62,5
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Sealing Class	Sealed System	Sealed System
	Expected Life	30 years	30 years
	Rated Filling Pressure (bar)	2,5 (Absolute)	2,5 (Absolute)
	Minimum Working Pressure (bar)	2,5 (Absolute)	2,5 (Absolute)

MV SWITCHING COMPONENTS

MV INTERNAL LOAD BREAK SWITCHES

EuroGas SD24 & EuroGas SD36

- Components used for switching on and off under load
- Compact, reliable, smart and proven design
- Many options and accessory possibilities
- Compliant with international IEC 62271-100 standards



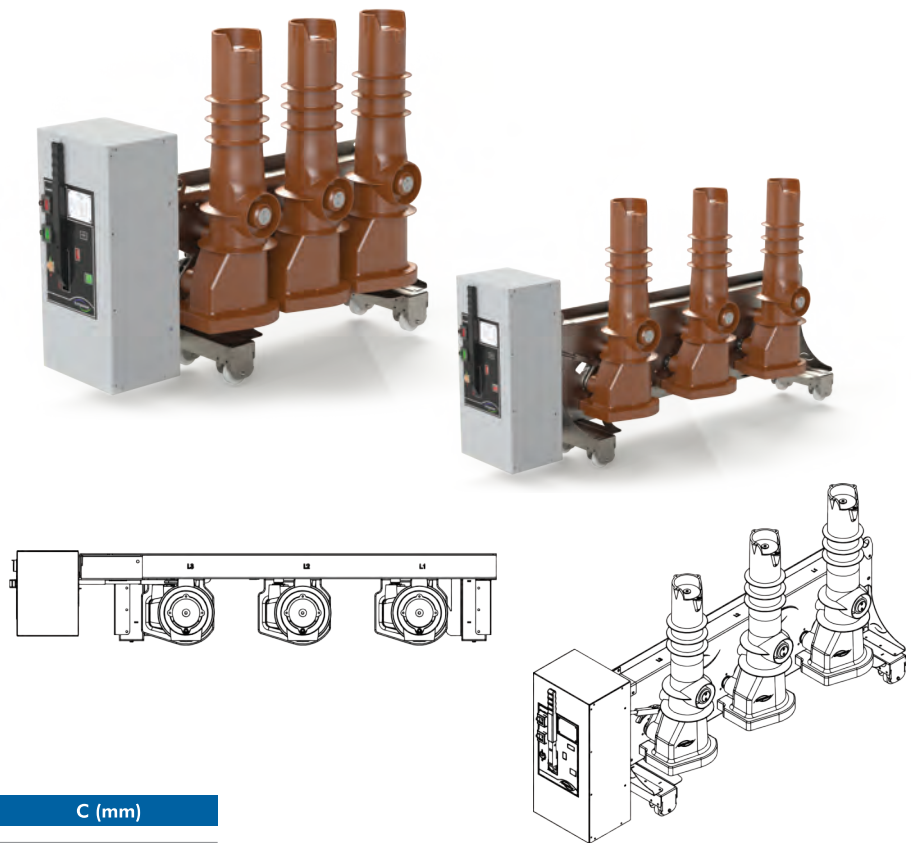
BREAKER TYPE	A (mm)	B (mm)	C (mm)
EuroGas SD36	733	1354	598
EuroGas SD24	492	937	429

LOAD BREAKER TYPE		EuroGas SD24	EuroGas SD36
TECHNICAL SPECS	Applied Standard	IEC 62271-103	IEC 62271-103
	Load Breaker Type	M1	M1
	Rated Voltage (kV)	up to 24	24 - 36
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Short-Term Withstand Current (kA-effective)	16, 20 or 25	16, 20 or 25
	Short Circuit Time (s)	1	1
	Rated Peak Withstand Current (kA-peak)	40, 50 or 62,5	40, 50 or 62,5
	Number of Poles and Positions	3 Poles, 3 Positions	3 Poles, 3 Positions
	Insulation Environment	SF6 Gas	SF6 Gas
	Sealing Class	Sealed System	Sealed System
	Expected Life	30 years	30 years
	Rated Filling Pressure (bar)	2,5 (Absolute)	2,5 (Absolute)
	Minimum Working Pressure (bar)	2,5 (Absolute)	2,5 (Absolute)
	Load Breaker Winding Engine	Available (Optional)	Available (Optional)

MV INTERNAL CIRCUIT BREAKERS

EuroGas CB24 & EuroGas CB36

- Components used for secondary protection and switching on and off even under short circuit
- Compact, reliable, smart and proven design
- Many options and accessory possibilities
- Compliant with international IEC 62271-100 standards



BREAKER TYPE	A (mm)	B (mm)	C (mm)
EuroGas CB36	304	1561	860
EuroGas CB24	209	1107	859

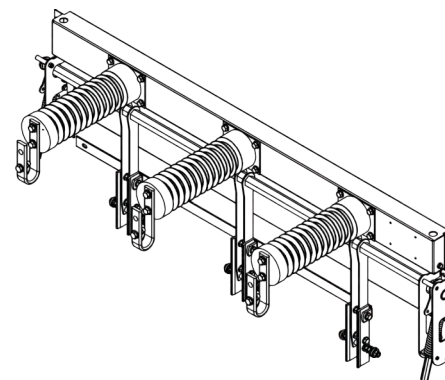
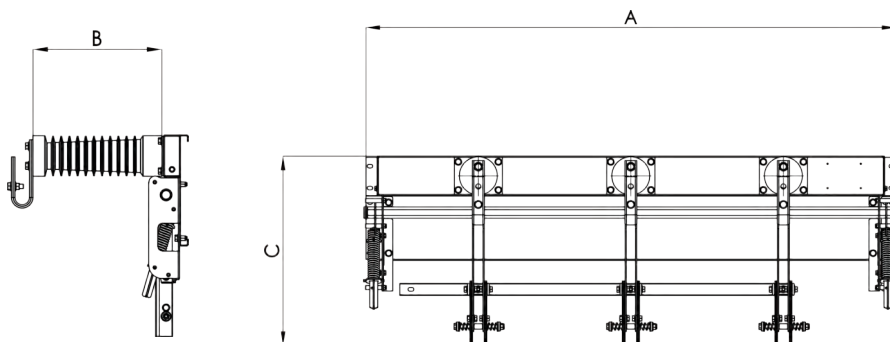
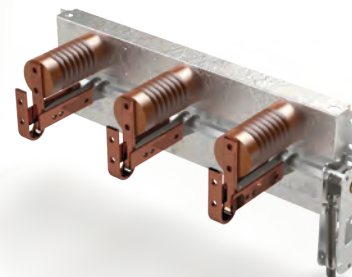
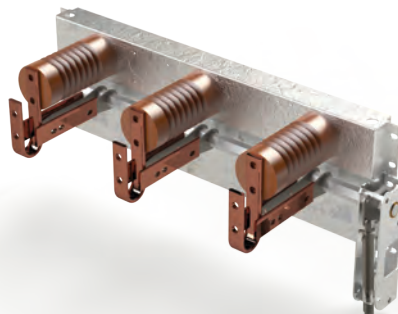
MV SWITCHING COMPONENTS

	BREAKER TYPE	EuroGas CB24	EuroGas CB36
TECHNICAL SPECIFICATIONS	Applied Standards	IEC 62271-100	IEC 62271-100
	Breaker Type	M1	M1
	Insulation Environment	SF6 Gas	SF6 Gas
	Rated Voltage (kV)	up to 24	24 - 36
	Rated Current (A)	630 or 1250	630 or 1250
	Rated Breaker Recovery Voltage		
	Uc (kV)	62	62
	t3 (Microsecond)	109	109
	td (Microsecond)	16	16
	Rated Short Term Withstand Current (kA-effective)	16, 20 or 25	16, 20 or 25
	Short Circuit Time (s)	3	3
	Rated Peak Withstand Current (kA-peak)	40, 50 or 62,5	40, 50 or 62,5
	Rated Breaking Current in Phase Mismatch (kA-effective)	4	4
	Idle Cable Rated Breaking Current (A)	50	50
	Small Inductive Current Rated Cutting Value (A)	0 - 20	0 - 20
	Highest Overvoltage Occurring in Interrupting the Currents Specified Above	2.5 pu	2.5 pu
	Rated On-Off Operations Sequence	A-0.3s-kA-3 min-kA	A-0.3s-kA-3 min-kA
	Break Time (ms)	max. 80	max. 80
	Closing Time (ms)	max. 120	max. 120
	Inter-Pole Phase Mismatch - Switch On (ms)	max. 5	max. 5
	Inter-Pole Phase Mismatch - Switch Off (ms)	max. 5	max. 5
	Working Mechanism Type	Engine - Spring	Engine - Spring
	Spring Winding Engine Voltage (V)	110/220/24V DC or 220V AC	110/220/24V DC or 220V AC
	Spring Winding Engine Power (W)	390	390
	Spring Winding Time (s)	15	15
	Closing Coil Voltage (V)	110/220/24V DC or 220V AC	110/220/24V DC or 220V AC
	Power (W)	65	65
	Trip Coil Voltage (V)	110/220/24V DC or 220V AC	110/220/24V DC or 220V AC
	Power (W)	65	65
	Number of Spare Auxiliary Contacts (Open Contact - Closed Contact)	2+2	2+2
	Auxiliary Contact Current Carrying Capacity Continuous (A)	10	10
	SF6 Insulated Circuit Breakers		
	Sealing Class	Sealed System	Sealed System
	Expected Life	30 years	30 years
	Rated Filling (relative) Pressure (bar)	2 (Absolute)	2 (Absolute)
	Minimum Working (relative) Pressure (bar)	1 (Absolute)	1 (Absolute)
	Number of Cuts to Be Performed without Maintenance		
	At Rated Short Circuit Current	5	5
	At 50% Rated Short Circuit Current	15	15
	At Rated Continuous Operating Current	2000	2000
	Number of No-Load Opening and Closing without Requiring Maintenance	2000	2000

MV INTERNAL EARTHING SWITCH

Euro ES24 & Euro ES36

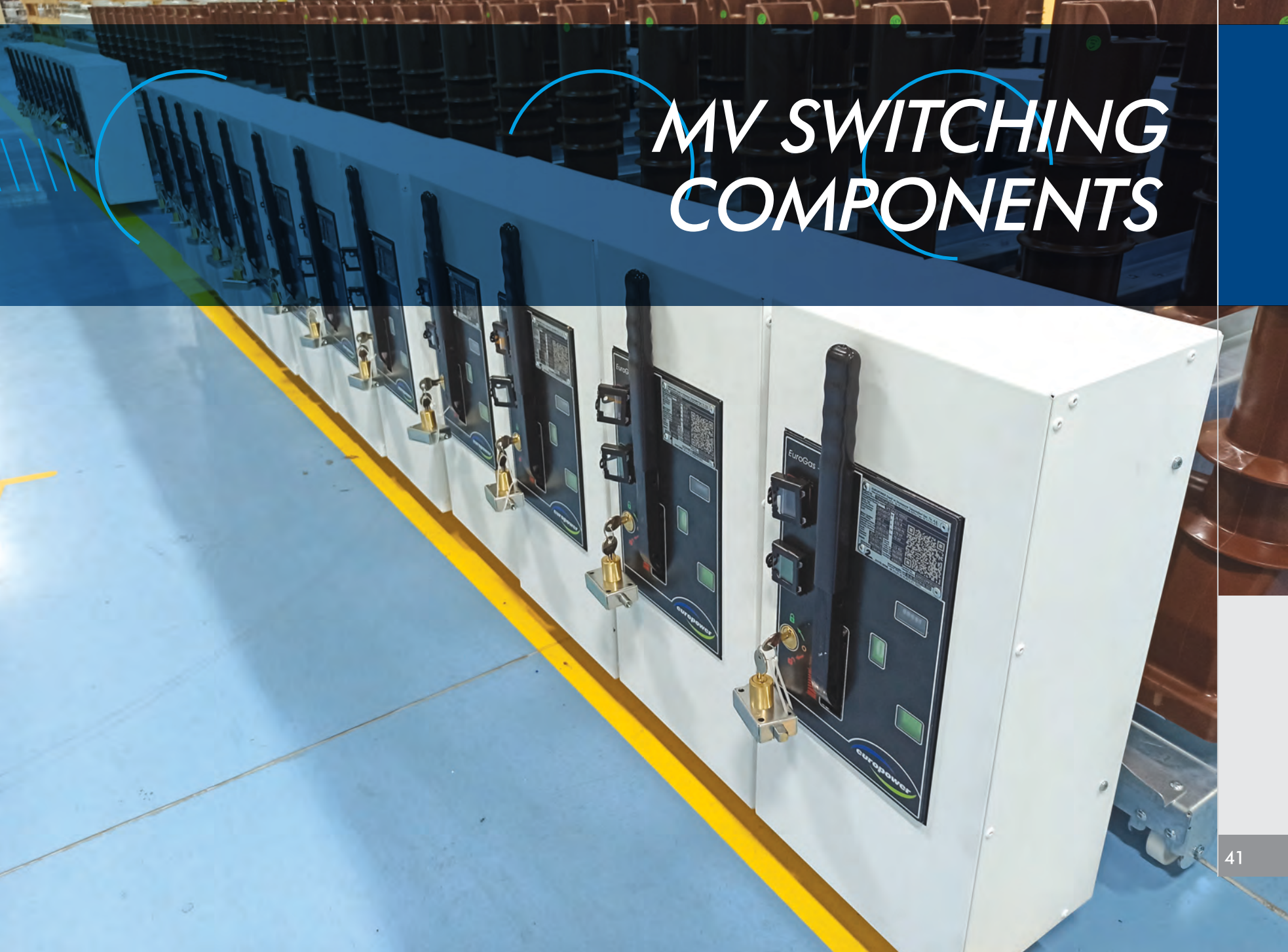
- Components used to discharge the load remaining on the line to the ground
- Compact, reliable, smart and proven design
- Many options and accessory possibilities
- Compliant with international IEC 62271-102 standards



GROUNDING BLADE MODEL	A (mm)	B (mm)	C (mm)
EuroGas ES36	1320	300	471
EuroGas ES24	795	335	287

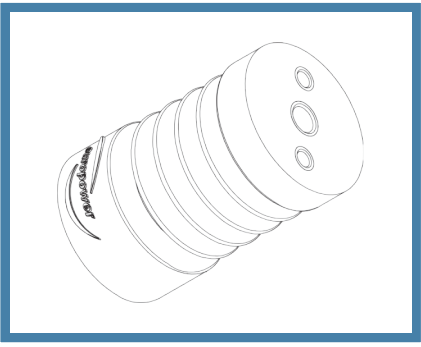
LOAD BREAKER TYPE		EuroGas ES24	EuroGas ES36
TECH. SPECS	Applied Standards	IEC 62271-102	IEC 62271-102
	Type	MO, E2	MO, E2
	Rated Voltage (kV)	up to 24	24 - 36
	Rated Short-term Withstand Current (kA-effective)	16, 20 or 25	16, 20 or 25
	Short Circuit Time (s)	1	1
Rated Peak Withstand (short circuit shutdown) Current (kA-peak)		16, 20 or 25	40, 50 or 62,5

MV SWITCHING COMPONENTS



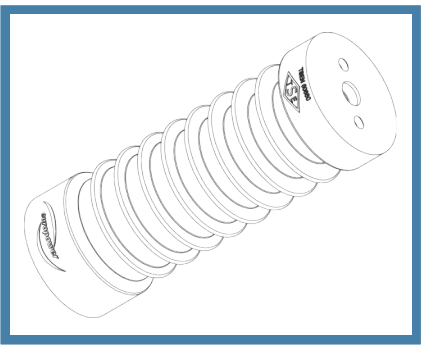
41





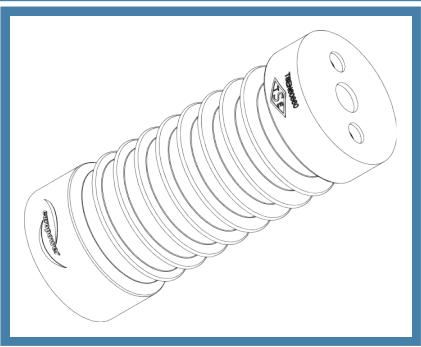
- Internal Type Epoxy Resin Casting Post Insulator
- 12 kV, Mechanical Break Load: 10000 Newton

10N1000 CAPACITIVE POST INSULATOR



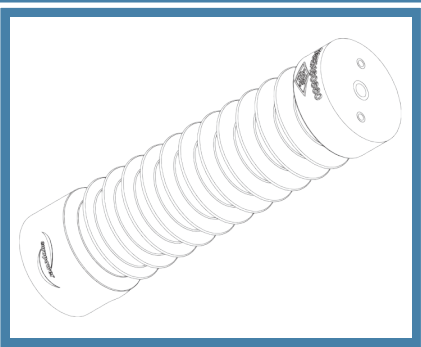
- Internal Type Epoxy Resin Casting Post Insulator
- 24 kV, Mechanical Break Load: 5000 Newton

20N500 CAPACITIVE POST INSULATOR



- Internal Type Epoxy Resin Casting Post Insulator
- 24 kV, Mechanical Break Load: 10000 Newton

20N1000 CAPACITIVE POST INSULATOR

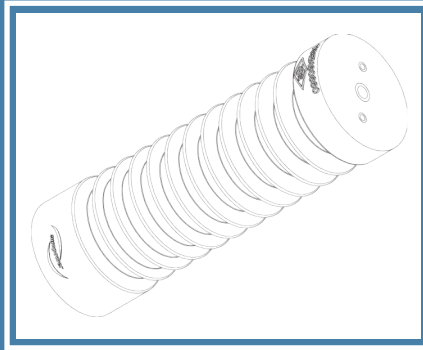


- Internal Type Epoxy Resin Casting Post Insulator
- 36 kV, Mechanical Break Load: 5000 Newton

30N500 CAPACITIVE POST INSULATOR

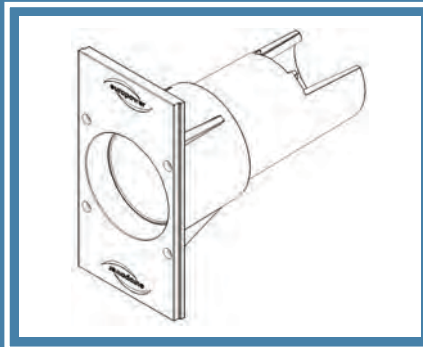
INSULATOR & BUSHING TYPES

30N1000 CAPACITIVE POST INSULATOR



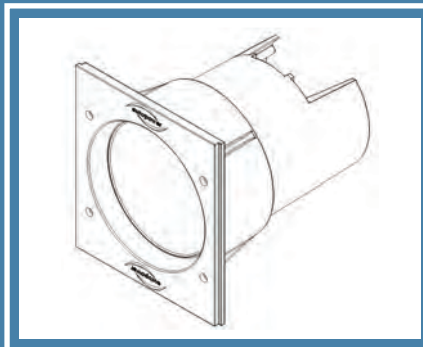
- Internal Type Epoxy Resin Casting Post Insulator
- 12 kV, Mechanical Break Load: 10000 Newton

12 KV WALL BUSHING



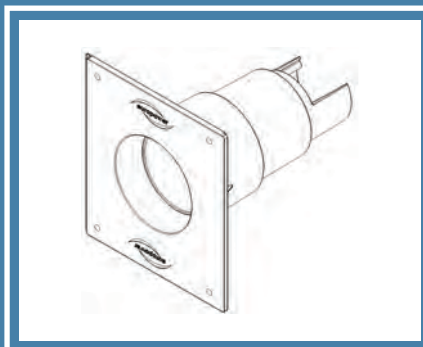
- Internal Type Epoxy Resin Casting
- 12 kV

24 KV WALL BUSHING

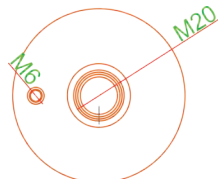
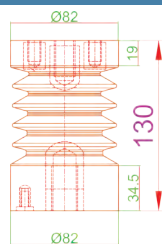
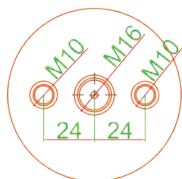


- Internal Type Epoxy Resin Casting
- 24 kV

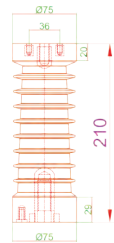
36 KV WALL BUSHING



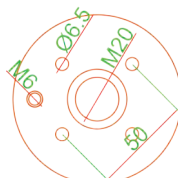
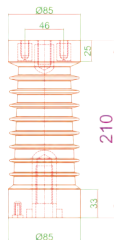
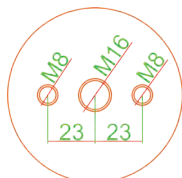
- Internal Type Epoxy Resin Casting
- 36 kV



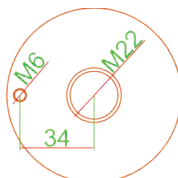
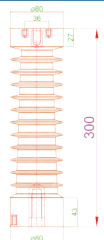
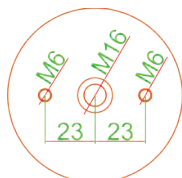
**10N1000 CAPACITIVE
POST INSULATOR**



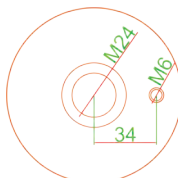
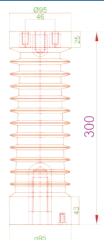
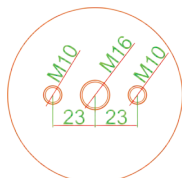
**20N500 CAPACITIVE
POST INSULATOR**



**20N1000 CAPACITIVE
POST INSULATOR**



**30N500 CAPACITIVE
POST INSULATOR**



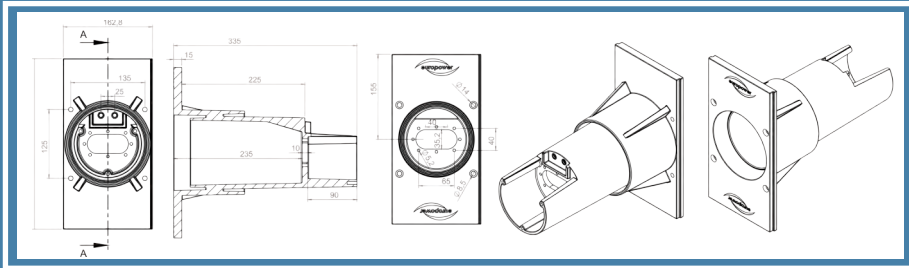
**30N1000 CAPACITIVE
POST INSULATOR**

INSULATOR & BUSHING TYPES

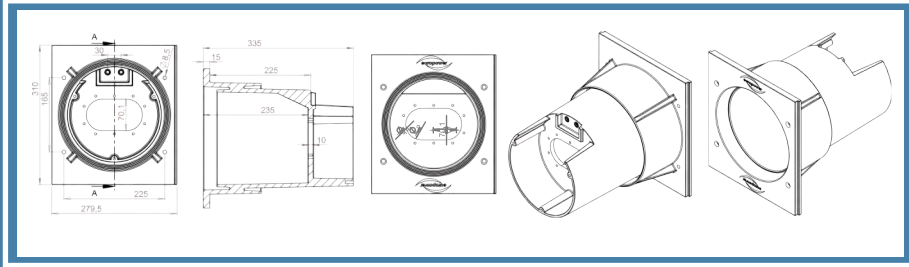
POST INSULATOR

TECHNICAL SPECIFICATIONS	MATERIAL TYPE	10N1000	20N500	20N1000	30N500	30N1000
	Applied Standards	IEC 60660-IEC 60273	IEC 60660-IEC 60273	IEC 60660-IEC 60273	IEC 60660-IEC 60273	IEC 60660-IEC 60273
	Insulator Type	Post	Post	Post	Post	Post
	Internal - External	Internal	Internal	Internal	Internal	Internal
	Insulation Material	Epoxy Resin	Epoxy Resin	Epoxy Resin	Epoxy Resin	Epoxy Resin
	Rated Frequency	50	50	50	50	50
	Rated Voltage (kV)	12	24	24	36	36
	Highest Operating Voltage (kV)	12	24	24	36	36
	Nominal Insulation Level (kV)					
	Line Frequency Withstand Voltage - Internal Types (kV-rms)	38	50	50	70	70
	Lightning Impulse Withstand Voltage (kV-peak)	75	125	125	170	170
	Mechanical Breaking Load (kgf)	≥1000	≥600	≥1000	≥600	≥1000
	Biggest Difference Between Deflections Corresponding to Loads of 20% and 50% of the Mechanical Breaking Load	<5 mm	<5 mm	<5 mm	<5 mm	<5 mm
	Minimum Nominal Specific Surface Leakage Path Length					
	Internal Types (mm/kV)	>12 mm/kV	>12 mm/kV	>12 mm/kV	>12 mm/kV	>12 mm/kV
	Insulator Height (mm)	130	210	210	300	300
	Maximum Nominal Outer Diameter (mm)	82	75	85	80	95
	Net Weight (kg)	0,9	1,1	1,6	1,95	2,67
	Gross Weight (kg)	1,02	1,23	1,73	1,87	2,9

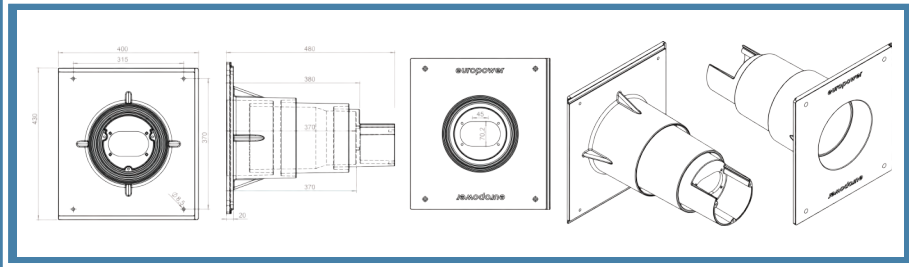
12 KV WALL BUSHING



24 KV WALL BUSHING



36 KV WALL BUSHING





External installation steps that must be performed during field installation of Medium Voltage Switchgears are listed below.

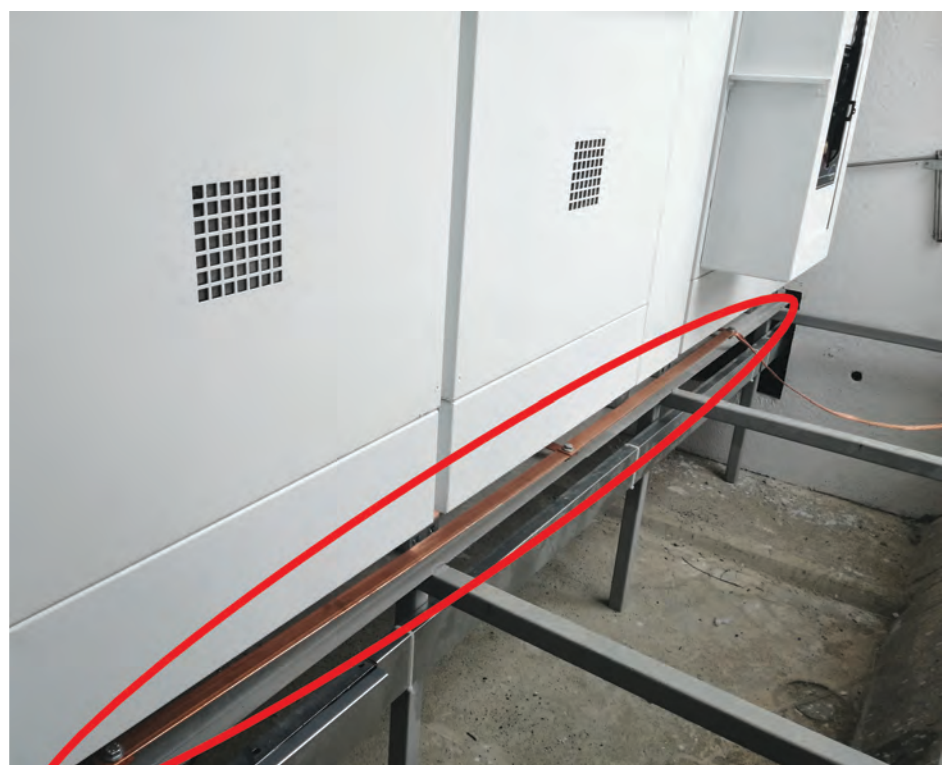
Main Busbar Installation

Copper Busbar Installation: Depending on single busbar or double busbar status, 6 (six) M8x25 or M8x30 bolts in the fastener bag are used.

Aluminum Busbar Mounting: Depending on single busbar or double busbar status, 6 (six) M8x40 or M8x55 bolts in the fastener bag are used.

Installation of Grounding Collectors

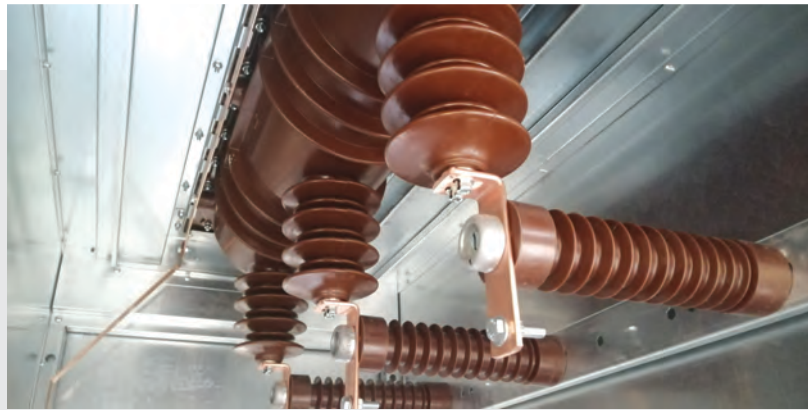
The copper coming out of the front of the cell and the copper coming out of the front of the neighboring cell are combined with 2 (two) M10x25 flanged bolts & nuts in the fastener bag, using the interconnect copper.



INSTALLATION METHODS

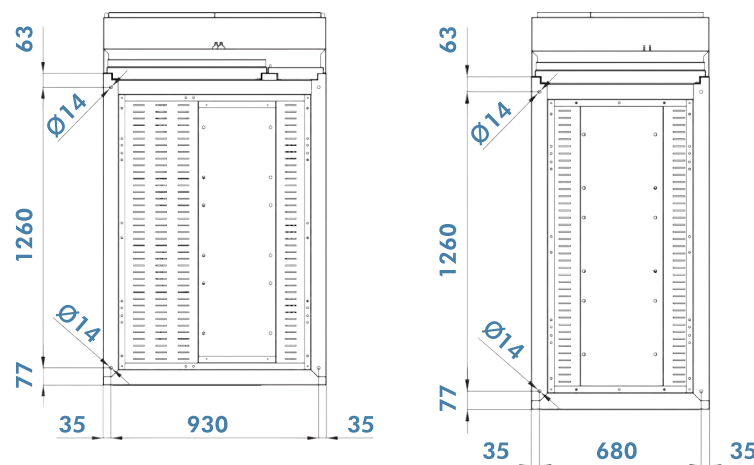
Connection of Medium Voltage Cables

Cable diameter can be maximum 1x240mm² MV XLPE. The connection elements are on the phases, and when cable connections are made, the rearmost L1 phase connection should be made first, then L2, L3 connections should be made respectively. After MV XLPE cables are passed through the cable bellows, they are fixed to the cable support point on the base sheet with M8x100 bolts. The cable ground is then connected to the ground collector of the cell. This process is carried out separately for all phases.

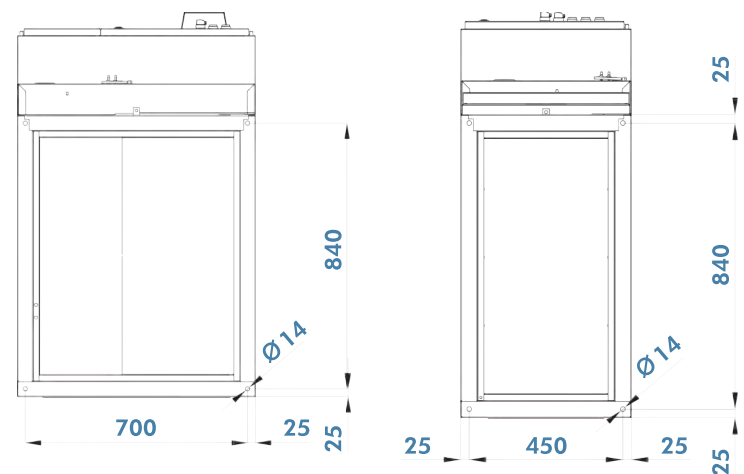


Fixing the Cells to the Ground : The cell is fixed to the ground using metric 10 bolts according to the details below.

36 kV MODULAR SWITCHGEARS

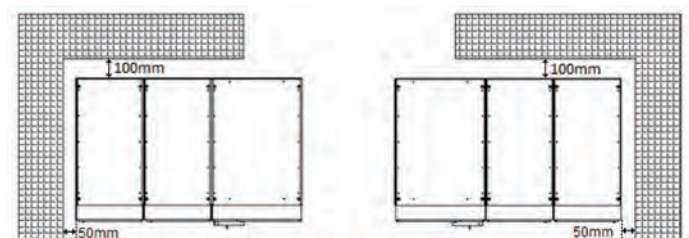


24 kV MODULAR SWITCHGEARS



Placement of Cells in the Building

During the installation of modular cells, the distances shown below should be observed depending on the place of use. If placements are not made in accordance with these distances, the operator may be harmed in case of internal arc failure that may occur in modular cells.





WHEREVER YOU NEED ENERGY WE ARE THERE



48

Power Plants

- Solar Power Plants
- Wind Power Plants
- Hydroelectric Power Plants
- Coal-Fired Power Plants
- Waste to Energy Plants
- Combined Cycle Power Plants
- Nuclear Power Plants

Railway Systems

- Train Stations
- Railway Lines

Distribution Systems

- Air Insulated Transformer Substations
- Gas Insulated Transformer Substations

Transmission Systems

- Primary Delivery Systems
- Secondary Transmission Systems

Industrial Electrical Systems

- Electrical Switching
- Measurement, Protection, Automation
- Electrical Energy Quality

Superstructure Electrical Works

- Qualified Private Buildings
- Airports
- Hospitals
- Residence
- Shopping mall
- Mass Housing

Infrastructure Electrical Works

- High, Medium and Low Voltage Electrical Infrastructure Systems

and much more...

APPLICATION AREAS





**BREAK SWITCH,
LOAD BREAK SWITCH
ON-OFF METER APPLICATION**



**TULIP CLUSTER DRAWER TYPE
BREAKER APPLICATION**

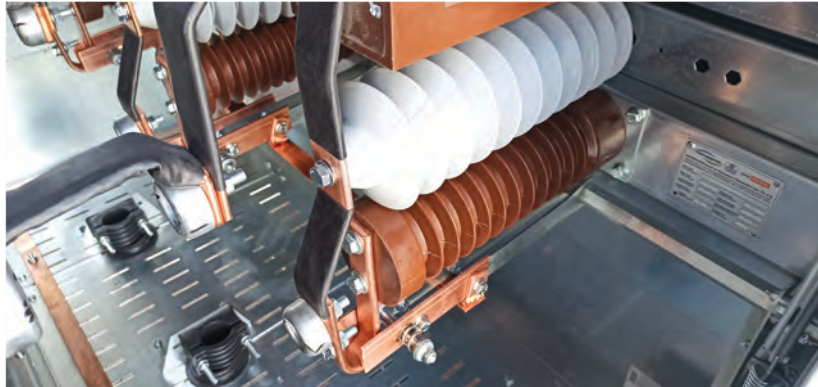


**MANOMETER APPLICATION for
BREAK SWITCHES &
LOAD BREAK SWITCHES**



**SURGE PROTECTION
APPLICATION at MAIN BUSBAR**

OPTIONAL ACCESSORIES



**SURGE PROTECTION
APPLICATION at CALBE VAULT**



FUSE BLOWN SET



**INNOVATIVE DESIGNS
IN ACCORDANCE WITH
CUSTOMER DEMANDS**

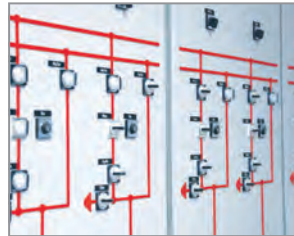
- DOUBLE POST CURRENT TRANSFORMER
- AUTOPRODUCTER SWITCHGEAR
- AND MANY MORE OPTIONAL APPLICATIONS



5 CONTINENTS 80 COUNTRIES

WHEREVER YOU NEED ENERGY WE ARE THERE

WE ARE FULLY READY



LV PANELS

(from TEDAS switchboards type 4b-withdrawable, up to 6400A-100kA)

CONTROL - COMMAND - SCADA PANELS (up to 420kV)

ENERGY and INDUSTRIAL SCADA SYSTEMS



METAL SHEET and CONCRETE KIOSKS

MODULAR ENCLOSED SWITCHGEARS

(up to 12, 24, 36, 40,5kV 25kA)

METAL CLAD SWITCHGEARS

(up to 12, 24, 36, 40,5kV)
(up to 3150A 40kA)



HV CIRCUIT BREAKERS - HV DISCONNECTORS (up to 420kV)

SF6 GAS VACUUM CIRCUIT BREAKER and LOAD BREAK SWITCH (up to 36 kA)

SOLAR CONSTRUCTION SYSTEMS

PV MODULES



EURO SUNJUNIOR

POWER TRANSFORMER

INSTRUMENT TRANSFORMERS

MV INSTRUMENT TRANSFORMERS

ENERGY STORAGE SYSTEMS



MV PRIMARY and SECONDARY GIS (RMU)

MV DISTRIBUTION TRANSFORMERS



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PRODUCTION



GROUP ACTIVITIES



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info@europowersolar.com



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018
ISO/IEC 27001:2022

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