

# Metal Enclosed Switchgears



## SME Series

SME 12 | SME 24 | SME 36 | SME 40.5

Switching Life to  
**Infinity** 

**aktif**  
ELEKTROTEKNIK

# Metal Enclosed Switchgears

## SME Series

SME series Metal Enclosed Switchgears are switching and control cubicles manufactured up to 40.5kV, 1250 A, 25 kA.

SME series Metal Enclosed Switchgears are manufactured according to type tested design, successfully passed the electrical and mechanical tests such as IEC 62271-200 and seismic tests IEC62271-210, EN60068, IEEE693, GR-63 Core Zone4 standards in the international accredited laboratories of Europe. Aktif has ISO 9001, ISO 14001 and ISO 45001 quality certificates.

There are 2 types of SME series metal enclosed switchgear;

- **SME-O** fixed trolley circuit breaker,
- **SME-1** withdrawable trolley circuit breaker

### Features

- 3 segregated compartments
- Fixed or withdrawable type Vacuum or SF6 Gas Insulated Circuit Breaker providing fast and easy service
- SRS series air insulated rotary disconnectors option
- Modular design, which allows extension easily
- Proven reliability with unique design
- Special production option against corrosion for tropical environment conditions
- 5 years warranty option

### Safety

- Internal arc classification IAC AFL
- Classified LSC-2A, PI
- Safe mechanical and electrical interlock
- Continuity of earthing system
- 2 mm sheet steel construction
- Maximal operational safety with special hinged door design

Service Conditions		
Application Area		Indoor
Altitude		1000m
Ambient Temperature	Min.	-5°C
	Max.	40°C
	Average period of 24h	35°C
Humidity	Max. (period of 24h)	95%
	Max. (period of one month)	90%
Ambient Pollution		Light



### Color

- RAL 9003 for front cover
- RAL 7015 for side cover

### Application Areas

- Power Generation
- Energy Distribution Centers
- Transformer Substation
- Automotive Industry
- Renewable Power
- Industry
- Rolling Mills
- Pipelines
- Shipyards
- Mining
- Transportation

### Standards

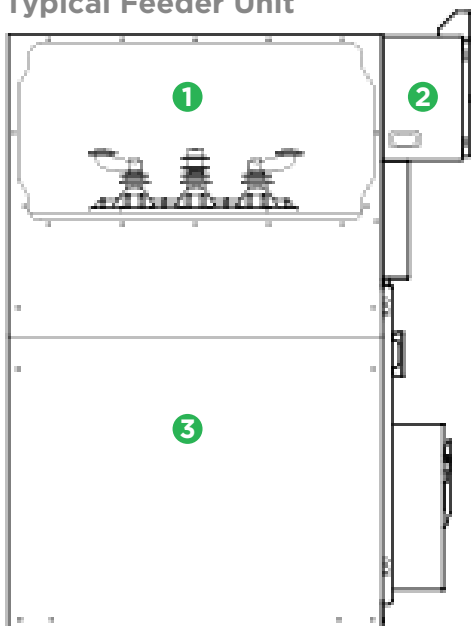
- IEC 62271-1
- IEC 62271-200
- IEC 62271-100
- IEC 62271-102
- IEC 62271-105
- IEC 61869-2
- IEC 61869-3
- IEC 60273
- IEC 60051
- IEC 60255
- IEC 62271-210
- EN 60068
- IEEE 693
- GR-63-Core-Zone 4

## Technical Specifications

Descriptions			SME 12	SME 24	SME 36	SME 40.5
Rated voltage (rms)		kV	12	24	36	40.5
Operating voltage (rms)		kV	12	24	36	38.5
Power frequency withstand voltage 50 Hz, 1 min (rms) between phases and phase-ground		kV	28	50	70	90
Lightning impulse withstand voltage 1.2/50 ms (peak) between phases and phase - ground		kV	75	125	170	190
Rated frequency		Hz	50/60			
Rated (rms) current	Busbars	A	630/1250	630/1250	630/1250	630/1250
	CB & Disconnecter	A	630/1250	630/1250	630/1250	630/1250
	Load Break Switch	A	630	630	630	630
	Vacuum Contactor	A	400	400	-	-
	(for capacitive load)	A	250	200	-	-
Rated short time withstand (rms) current	CB & Disconnecter	kA	16/25	16/25	16/25 kA	16/20 kA
	Load Break Switch	kA	16/20	16/20	16/20	16/20
	Vacuum Contactor	kA	8	8	-	-
Rated short circuit withstand time		s	1	1	1	1
Rated short time withstand (peak) current	CB & Disconnecter	kA	40/63	40/63	40/63	40/50
	Load Break Switch	kA	40/50	40/50	40/50	40/50
	Vacuum Contactor	kA	-	-	-	-
Internal arc fault	Current	kA	25	25	25	25
	Duration	s	1	1	1	1
Earthing switch	Rated short time withstand current	kA	16/25	16/25	16/25	16/25
	Short circuit withstand time	s	1	1	1	1

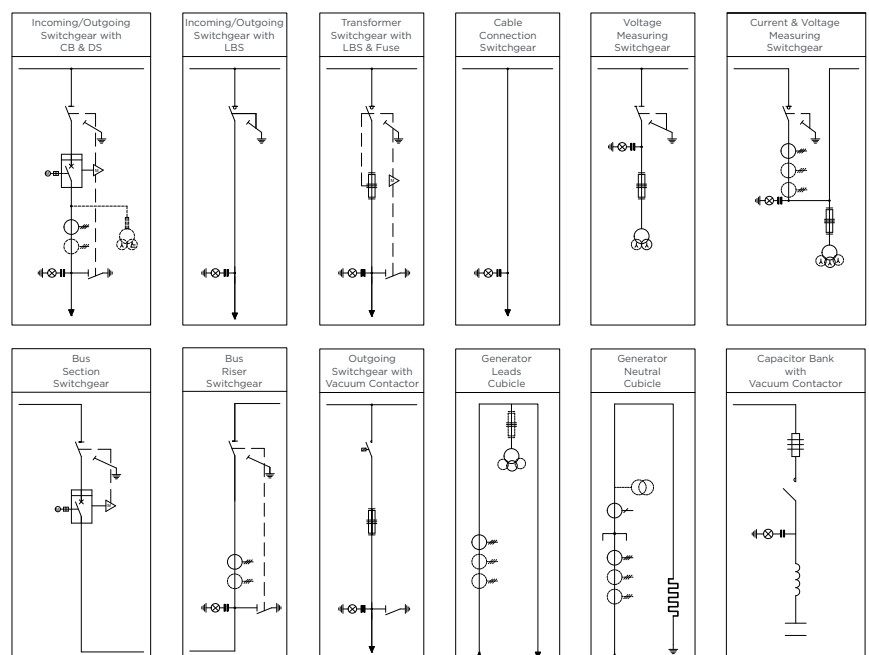
Voltage	Current	Type	Width	Depth	Height
12 kV	≤ 630 A	with LBS	375 mm	900 mm	2000 mm
	≤ 1250 A	with CB Measuring	750 mm		
24 kV	≤ 630 A	with LBS	375 mm	940 mm	2000 mm
	≤ 1250 A	with CB Measuring	750 mm		
36/40.5 kV	≤ 630 A	with LBS	750 mm	1400 mm	2250 mm
	≤ 1250 A	with CB Measuring	1000 mm		

## Typical Feeder Unit



- 1 - Busbar Compartment
- 2 - Low Voltage Compartment
- 3 - Switching Compartment

## Single Line Diagram of Typical Units (SME-O)



Examples in single line diagrams belong to SME-O. Circuit breakers for SME-1 are withdrawable type.



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