

SNC SERIES

Metal Clad Switchgears



- > up to 36 kV Rated Voltage
- > up to 2500 A Rated Current
- > up to 40 kA Rated Short Time Withstand Current
- > LSC-2B, PM, AFLR
- > In Conformity with IEC 62271 - 1, 100, 102, 200

SNC Series

Metal Clad Switchgears

SNC Series Metal Clad Switchgears are switching and control cabinets manufactured between 1kV to 36 kV in conformity with IEC 62271-200 standards.

SNC Series Metal Clad Switchgears are manufactured in compliance with successfully passed type tests performed in the accredited international laboratories in Europe according to IEC 62271-200 and other related standards.

Technical Features:

- > Rated Voltage : 3,6... 36 kV
- > Power Frequency Withstand Voltage : 10... 70 kV
- > Lighting Impulse Withstand Voltage : 40... 170 kV
- > Rated Frequency : 50 / 60 Hz
- > Rated Current : 630... 2500 A
- > Short Circuit Withstand Current : 16... 40 kA (3 s)
- > Internal Arc Current : 16... 40 kA (1 s)
- > Protection Class : IP4x / 2x



Product Advantages:

- > 3 mm sheet steel
- > LSC 2B loss of service continuity
- > PM partition class
- > AFLR internal arc classification
- > 4 or 5 separated and earthed accessible compartments
- > Internal arc test up to 40 kA
- > Electrical and mechanical safety interlocks not to allow operational faults
- > Quick and easy service with withdrawable Vacuum / SF6 CB
- > Quick and easy service with withdrawable voltage transformer (Option)
- > Modular design which allows to extension
- > Low maintenance cost
- > Seismic tested reliable design in compliance with IEC 62271-210, EN60068, IEEE 693, GR-63 Core Zone 4
- > Tropicalisation option
- > Segregated pressure relief channel

Applications:

- > Energy Transmission and Distribution Centres
- > Renewable Power Plants
- > Gas Power Plants
- > Transformer Substations
- > Cement Factories
- > Automotive Industry
- > Chemical Industry
- > Iron and Steel Industry
- > Rolling Mills
- > Pipelines
- > Electro Chemical Facilities
- > Shipyards
- > Emergency Situation and Stand-by Power Plants
- > Mining Industry
- > Railway Substations
- > Oil and Gas Industry

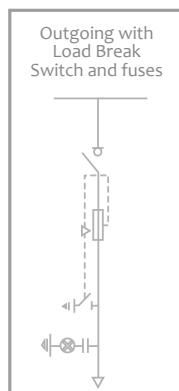
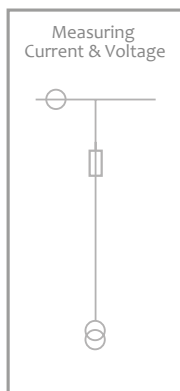
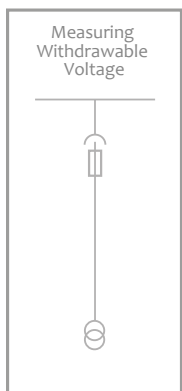
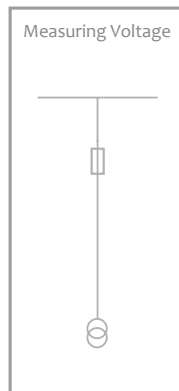
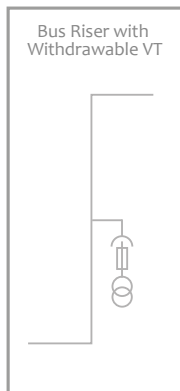
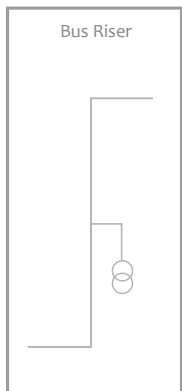
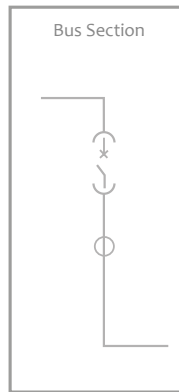
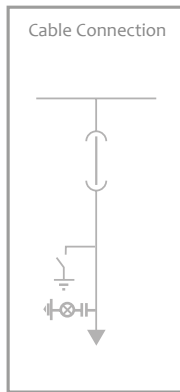
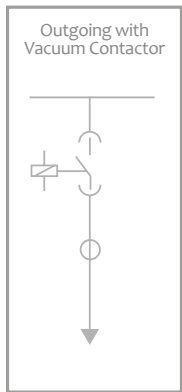
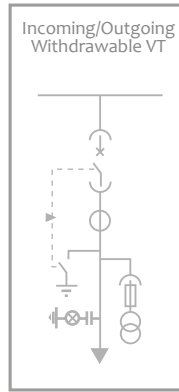
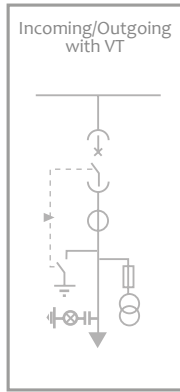
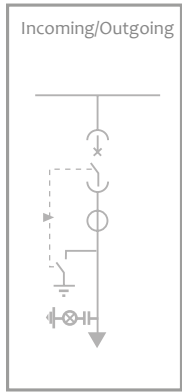
Technical Specifications

Descriptions		SNC 12	SNC 24	SNC 36
Rated Voltage	kV	12	24	36
Rated Insulation Voltage	kV	12	24	36
Rated Power Frequency Withstand Voltage	kV	28	50	70
Rated Lightning Impulse Withstand Voltage	kV	75	125	170
Switchgear Insulation		Air		
Circuit Breaker Insulation		Vacuum / SF6		
Loss of Service Continuity		2B		
Partition Class		PM		
Internal Arc Classification		AFLR		
Withdrawal Units		Withdrawable CB and Opt. VT		
Rated Frequency	Hz	50/60		
Rated Short Time Withstand Current	kA	up to 40		up to 31,5
Short Time Withstand Duration	s	3		
Internal Arc Withstand Current	kA	up to 40		up to 31,5
Internal Arc Withstand Duration	s	1		
Rated Main Busbar Current	A	up to 2500		
Rated Feeder Current	A	up to 2500		
Protection Class (When doors are closed)		IP4X		
Protection Class (Between compartments)		IP2X		
Color		RAL 9003		
Related Standard		IEC 62271-200		

Dimensions																	
Model	Description	Isc (Max)	Type	Current (Max)	Dimensions (mm) (W x D x H)												
					12 kV			24 kV			36 kV						
SNC /1	Air Insulated Metal Clad Switchgear with withdrawable Circuit Breaker, Front Access	25 kA / 3s	VCB	1250 A	650	1400	2450	800	1750	2570	1100	2350	2820				
				2500 A	1000			1000									
		31,5 kA / 3s		1250 A	650			---						---	---	---	---
		40 kA / 3s		2500	1000			---						---	---	---	---
				1250 A	800			---						---	---	---	---
		2500 A		1000	---			---						---	---	---	
	/2	Air Insulated Metal Clad Switchgear with both withdrawable Circuit Breaker and Voltage transformer, Rear Access	25 kA / 3s	VCB	1250 A	650	1750	2450	800	1750	2570	1100	2350	2820			
					2500 A	1000			1000								
31,5 kA / 3s			1250 A		650	---			---						---	---	---
40 kA / 3s			2500		1000	---			---						---	---	---
	1250 A	800	---	---	---	---	---										
2500 A	1000	---	---	---	---	---											

Note: Above dimensions are designed for vacuum circuit breakers. Please ask dimensions for SF6 circuit breaker.

SNC Series Switchgear Types



► Incoming/Outgoing Switchgear

is the switchgear for incoming and outgoing from the distribution busbar with rated current up to 2500A and short circuit current up to 40 kA which allows to switch operation during short circuit.

► Outgoing Switchgear with Vacuum Contactor

is the switchgear used where frequent switching operation is required with rated voltage up to 24 kV and rated current up to 400 A.

► Cable Connection Switchgear

is the switchgear with rated current up to 2500 A and short circuit current up to 40 kA and the incoming distribution connection realized by busbar

► Bus Section Switchgear

is the switchgear with rated current up to 2500 A and short circuit current up to 40 kA where the dividing of the main busbar is needed and allows to switching operation during short circuit.

► Bus Riser Switchgear

is the switchgear used for the purpose of rising the busbar connections to the other busbar level which is divided by the Bus section switchgear, with rated current up to 2500 A and short circuit current up to 40 kA.

► Bus Voltage Measuring Switchgear

is the switchgear used for obtaining voltage information for the measurement and protection purposes in the metal clad busbar with rated current up to 2500 A and short circuit current up to 40 kA with the help of secondary protection relays and measurement devices like voltmeter, power analysers, electricity meters...

► Current & Voltage Measuring Switchgear

is the switchgear used for obtaining current information for the measurement and protection purposes in the metal clad busbar with rated current up to 2500 A and short circuit current up to 40 kA with the help of secondary protection relays and measurement devices like ammeter, power analysers, electricity meters.

► Outgoing Switchgear with Load Break Switch and Fuse

is the switchgear used for the purpose of rising the busbar connections to the other busbar level which is divided by the Bus section switchgear, with rated current up to 2500 A and short circuit current up to 40 kA.



Compartments

Metal Clad Switchgears consist of 5 compartments segregated compartments as follow:

- a- Switching Compartment
- b- Low Voltage Compartment
- c- Busbar Compartment
- d- Cable Compartment
- e- Withdrawable VT Compartment (option)

a- Switching Compartment

Switching compartment includes following equipment:

- > Switching device (Vacuum/SF6 CB, vacuum contactor, fuse)
- > Withdrawer unit
- > Automatic shutters for busbar and cable connections
- > Mechanical interlocks between CB, withdrawer, shutters and compartment door.

b- Low Voltage Compartment

Low voltage compartment includes all secondary circuits, protection, measurement, control, monitoring, communication devices

c- Busbar Compartment

Busbar compartment includes;

- > Electrolytic copper busbars
- > Epoxy resin post insulators

d- Cable Compartment

Cable compartment includes following equipment;

- > Instrument transformers
- > Surge arrestor
- > Earthing switch
- > Capacitive voltage divider
- > Cable gland and fittings



e- Withdrawable VT Compartment (Option)

VT compartments includes following equipment ;

- > Voltage transformers
- > Withdrawer unit
- > MV Fuses for VT protection

The provided mechanical interlocks:

- > Between disconnecter / withdrawer / truck and earthing disconnecter
- > Between disconnecter / withdrawer / truck and circuit breaker
- > Between disconnecter / withdrawer / truck and CB compartment door
- > Between circuit breaker and withdrawer's position
- > Accessibility to cable compartment with special tool / lock
- > Between shutter and CB withdrawer / truck (with padlock)





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