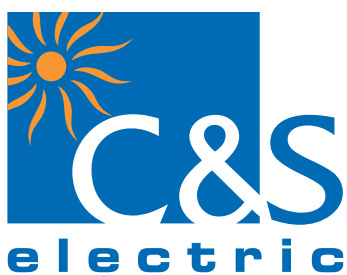


We touch your **electricity** everyday!



Switchgear | Vacuum Circuit Breakers | RMUs



Medium Voltage Switchgear
For Primary and Secondary Distribution



C&S Electric Ltd.

- 3.6kV to 36kV Air Insulated Switchgear
- 12kV & 24kV SF6 Insulated Ring Main Units

Medium Voltage Switchgear products are manufactured in state-of-the-art production facility at Greater Noida in National Capital Region.

MV Switchgear products find use in growing market for Medium Voltage Switchgear in India, both for primary and secondary distribution segments. Primary distribution switchgear are used in power plants and heavy industries likewise, secondary distribution switchgear are used in light industries and distribution network of power utilities and real estate projects.

It would be worthwhile to state that we are one of the leading suppliers of 11kV & 22kV Ring Main Units to various power utilities in India and are contributing in big way to strengthen the power distribution network in various states in India.

Switchgear for Primary Distribution



12kV & 24kV Air Insulated Switchgear with Draw-Out Vacuum Circuit Breaker



12kV & 24kV Vacuum Circuit Breaker



36kV Air Insulated Switchgear with Draw-Out Vacuum Circuit Breaker



36kV Vacuum Circuit Breaker

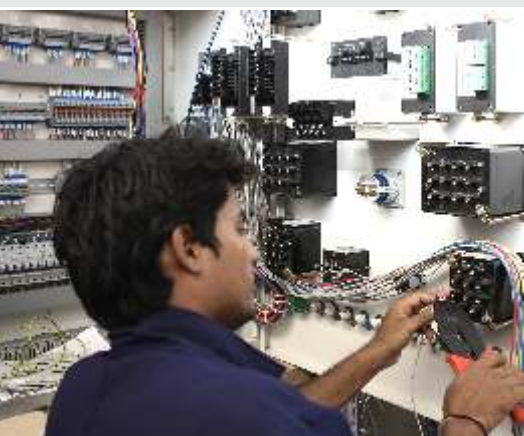
Switchgear for Secondary Distribution



SF6 Insulated Indoor Ring Main Unit



SF6 Insulated Outdoor Ring Main Unit





Switchgear for Primary Distribution



12kV & 24kV Air Insulated Switchgear with Draw-Out Vacuum Circuit Breaker: CSA12 / CSA24

General characteristics

- Modular construction
- Extensible
- Small installation area
- Easy to operate
- Operated exclusively from the front
- Internal arc resistant
- Equipped with vacuum circuit breaker with increased mechanical and electrical life
- Several optional equipment available
- Reduced maintenance and increased reliability
- Racking-In and racking-out of MV breaker behind arc-proof doors

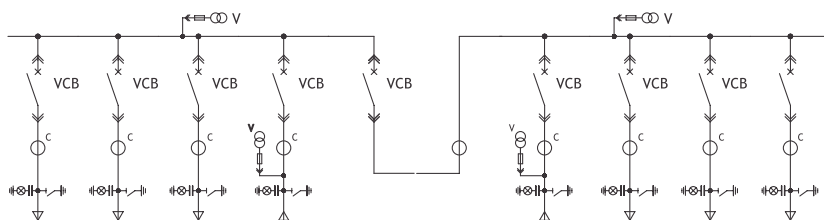
Technical data

Electrical Data

Rated voltage	kV	12/17.5*	24
Insulation level - lightning impulse (1.2 / 50 μs) - power frequency (50Hz / 1 min)	kVp	75/95*	125
	kVrms	28/38*	50
Rated frequency	Hz	50/60*	50/60*
Rated current	A	630 to 3150	630 to 1600
Breaking current	kArms	25/40	25
Making current	kAp	63/100	63
Rated short-time current	kArms	25 for 3s/40 for 3s	25 for 3s
Mechanical characteristics			
Protection degree		IP4X (others on request)	
Standard colour		RAL 7035 (others on request)	
Normal service conditions			
Ambient temperature	°C	basic: -5..+40	option: -10..+55
Dimensions			
Height	mm	2150	2350
Depth	mm	1560	1700
Width			
Upto 1250A, 25kA	mm	600	800
1600A, 25kA	mm	750	800
Upto 1250A, 40kA	mm	750	N/A
2000A, 2500A, 25kA & 40kA	mm	850	N/A
3150A, 25kA & 40kA	mm	1000	N/A

*on request

Typical functions





Switchgear for Primary Distribution



36kV Air Insulated Switchgear with Draw-Out Vacuum Circuit Breaker: CSA36

General characteristics

- Modular construction
- Extensible
- Small installation area
- Easy to operate
- Operated exclusively from the front
- Internal arc resistant
- Equipped with vacuum circuit breaker with increased mechanical and electrical life
- Several optional equipment available
- Reduced maintenance and increased reliability
- Racking-In and racking-out of MV breaker behind arc-proof doors



Technical data

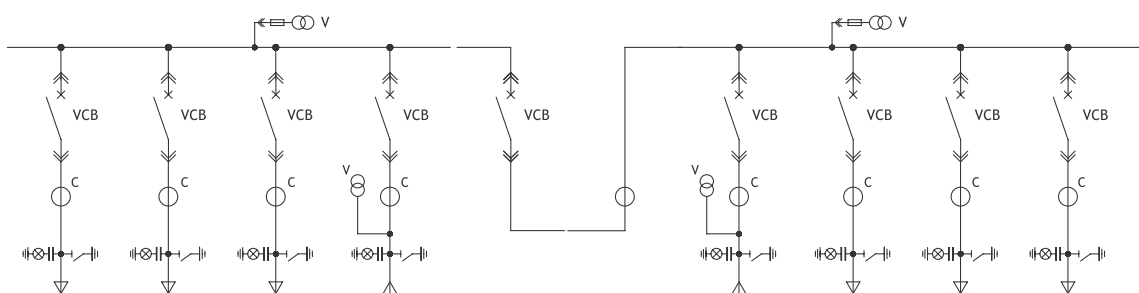
Electrical Data

Rated voltage	kV	36
Insulation level		
- lightning impulse (1.2/50 μ s)	kVp	170
- power frequency (50 Hz/1 min)	kVrms	70
Rated frequency	Hz	50/60*
Rated current	A	630 to 1600
Rated breaking current	kArms	25
Rated making current	kAp	63
Rated short-time current	kArms	25 for 3s
Mechanical characteristics		
Protection degree		IP4X (others on request)
Standard colors		RAL 7035 (others on request)
Normal service conditions		
Ambient temperature	°C	basic: -5 .. +40 option: -10 .. +55
Dimensions		
Height	mm	2250
Depth	mm	2570
Width	mm	1200

*on request



Typical functions





Switchgear for Secondary Distribution



Indoor Ring Main Unit: CSG I

General characteristics

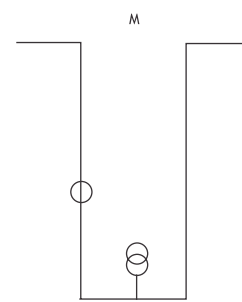
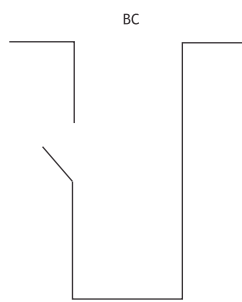
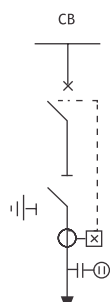
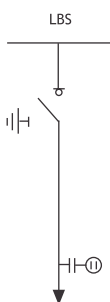
- SF6 insulated compact switchgear
- Equipped with SF6 switch disconnecter
- Equipped with vacuum circuit breaker
- Developed according to international standard IEC 62271-200
- Resistant to environmental conditions
- Modular or compact versions
- Internal arc resistant
- SCADA compatible motorised unit, on request
- Stainless steel tank



Technical data

Electrical Data				
Rated voltage	kV	12	17.5	24
Insulation level				
- lightning impulse (1.2/50 μ s)	kVp	75	95	125
- power frequency (50 Hz/1 min)	kVrms	28	38	50
Rated current	A	630	630	630
Rated short-time current	kArms	21 for 3s	21 for 3s	16 for 3s
Short circuit making current	kAp	52.5	52.5	40
Ambient temperature	$^{\circ}$ C	basic:-5..+40 options:-10.. +55		
Dimensions (2LBS+1CB)				
Height	mm	1470		
Width	mm	1190		
Depth	mm	727		

Typical functions





Switchgear for Secondary Distribution



Outdoor Ring Main Unit: CSG O

General characteristics

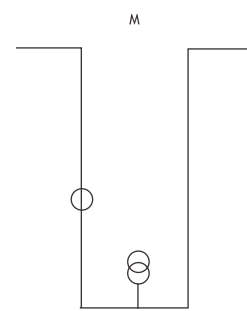
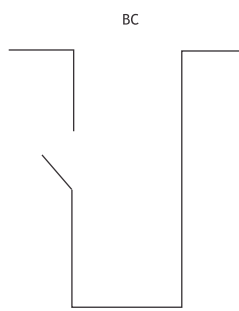
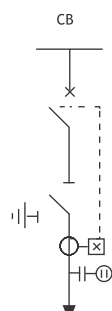
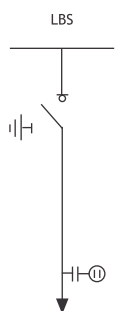
- SF6 insulated compact switchgear
- Equipped with SF6 switch disconnecter
- Equipped with vacuum circuit breaker
- Developed according to international standard IEC 62271-200
- Resistant to environmental conditions
- Modular or compact versions
- Internal arc resistant
- SCADA compatible motorised unit, on request
- Stainless steel tank



Technical data

Electrical Data			
Rated voltage	kV	12	17.5
Insulation level			
- lightning impulse (1.2/50 µs)	kVp	75	95
- power frequency (50 Hz/1 min)	kVrms	28	38
Rated current	A	630	630
Rated short-time current	kArms	21 for 3s	21 for 3s
Short circuit making current	kAp	52.5	52.5
Ambient temperature	°C	basic:-5..+40 options:-10.. +55	
Dimensions (2LBS+1CB)			
Height	mm	1755	
Width	mm	840	
Depth	mm	1125	

Typical functions





Installations



11kV Outdoor RMU



11kV Indoor VCB Panel



22kV Indoor VCB Panel



22kV Indoor RMU



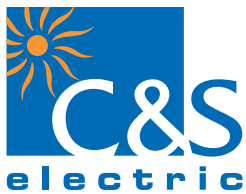
11kV Motorised Outdoor RMU with PT



33kV Indoor VCB Panel



Medium Voltage Switchgear Plant at Greater Noida



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