



Gas Insulated Ring Main Unit

MGC 24/36 Series
Ring Main Unit (SF₆)



Technical Parameters

MGC-24kV/630A

Sr.No.	Description		Unit	Load Breake Switch (C-module)	Switch-Fuse Combinations (F-module)	Vacuum Circuit Breake (V-module)
1	Rated voltage (Ur)		kV	24	24	24
2	Rated frequency (fr)		Hz	60	60	60
3	Rated current (Ir)		A	630	See Note 1	630
4	Rated insulation level (Ud, Up)	Power freq. withstand V (phase-earth)	kV	Between phase and phase to earth	65	65
				Across isolating distance	79	79
				Auxiliary/control circuits	2	2
		Lightning impulse (phase-earth)		Between phase and phase to earth	125	125
				Across isolating distance	145	145
5	Rated short-time withstand current(Ik/Ik)		kA/s	20/4,25/4	—	20/4,25/4
6	Rated peak withstand curren! (Ip)		kA	50,63	—	50,63
7	Rated short-circuit making current		kA	50,63	see 2	50,63
8	Rated Short-circuit making current		kA	50,63	See Note 2	50,63
9	Rated transfer current		A	—	1400	—
10	Rated Active load breaking current		A	630	—	—
11	Rated Closed-loop breaking current		A	630	—	—
12	Rated Operating sequence		—			0–0.3s–CO–180s–CO
13	Mechanical endurance	LBS/CB Circuit Breakers	Ops	5000	5000	10000
		Disconnectors Earthing switches	Ops	3000	3000	3000
14	Circuit resistance		uΩ	≤150	≤400	≤150
15	SF6 gas pressure @20°C		MPa	0.04	0.04	0.04
16	Annual leakage rate		%	≤0.01	≤0.01	≤0.01
17	Insulating gas / Protection		—	SF6; IP2XC/IP67/IP41 IK10	SF6; IP2XC/IP67/IP41 IK10	SF6; IP2XC/IP67/IP41 IK10
18	Degree of protection	Compartment	—	IP41/IK10	IP41/IK10	IP41/IK10
		Gas tank	—	IP67	IP67	IP67
		Enclosure	—	IP41/IK10	IP41/IK10	IP41/IK10
19	IAC classification		—	AFLR 25 kA/1 s	AFLR 25 kA/1 s	AFLR 25 kA/1 s

"Determined by the current rating of the fuse-link
"Limited by high voltage fuse-links

Technical Parameters

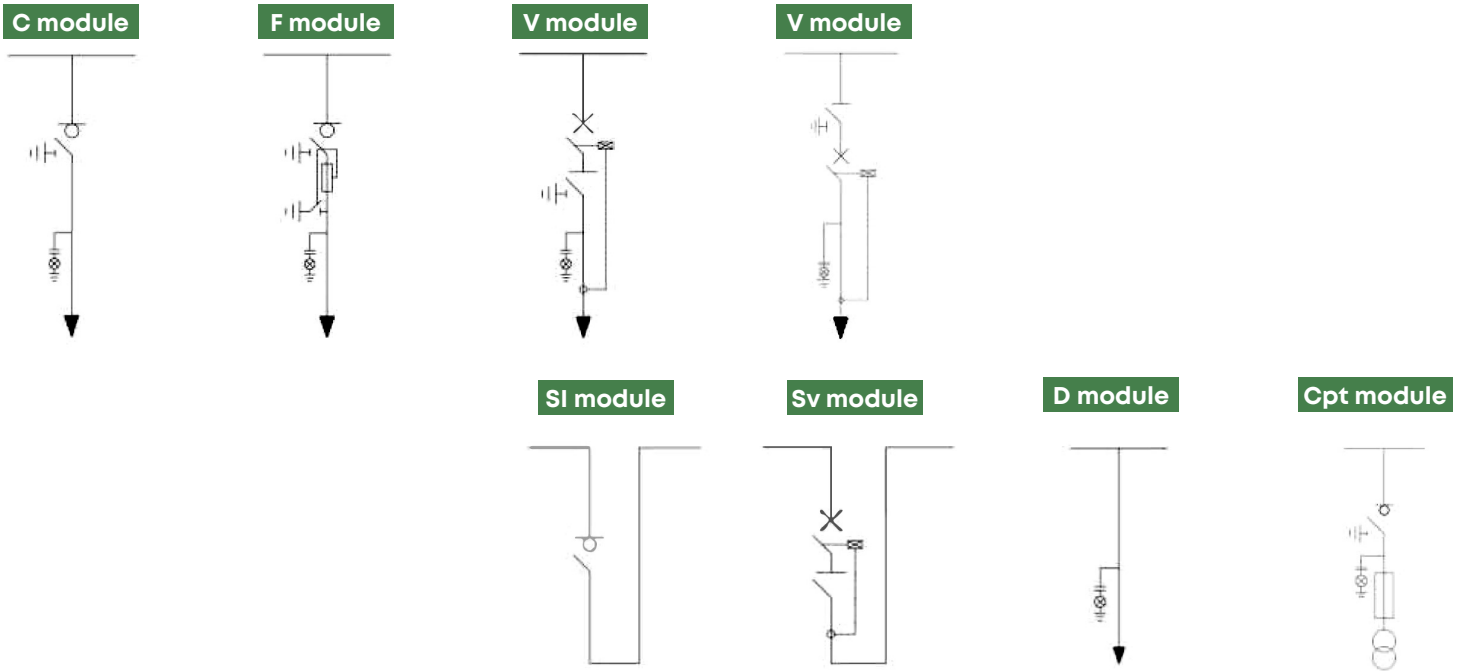
MGC-36kV

Sr.No.		Description		Unit	Load Breake Switch (C-module)	Switch-Fuse Combinations (F-module)	Vacuum Circuit Breake (V-module)
1	Rated voltage (Ur)			kV	36	36	36
2	Rated frequency (fr)			Hz	60	60	60
3	Rated current (Ir)			A	630	See 1	630
4	Rated insulation level	Power frequency withstand voltage (Umin)	Common value	kV	95	95	95
			Across isolating distance	kV	118	118	118
			Control and auxiliariyc ircui	kV	2	2	2
		Lightning impulse withstand voltage	Common value	kV	185	185	185
			Across isolating distance	kV	215	215	215
5	Rated short-time withstand current(Ik/Ik)			kA/s	25/3	—	25/3
6	Rated peak withstand currenl (Ip)			kA	63	—	63
7	Rated short-circuit making current			kA	—	See 1	25(E2)
8	Rated Short-circuit making current			kA	63	See 1	63
9	Rated transfer current			A	—	1000	—
10	Mainly active load current			A	630 (E2)	—	—
11	Closed-loop distribution circuit current			A	630	—	—
12	Rated Operating sequence			/	—	—	0–0.3s–CO–180s–CO
13	Mechanical endurance	LBS/CB Circuit Breakers		Ops	5000	5000	10000
		Disconnectors Earthing switches		Ops	3000	3000	3000
14	Circuit resistance			uΩ	≤150	≤400	≤150
15	Rated pressure of Sf6 gas (relative pressure at 20'C)			MPa	0.04	0.04	0.04
16	Annual leakage rate			%	≤0.01	≤0.01	≤0.01
17	Insulating gas			—	SF6	SF6	SF6
18	Degree of protection	Compartment (IP code)		—	IP2X	IP2X	IP2X
		Tank (IP code)		—	IP67	IP67	IP67
		Switchgear (IP code)		—	IP4X	IP4X	IP4X
		Switchgear(IK code)		—	IK10	IK10	IK10

"Determined by the current rating of the fuse-link

Basic Modular

Configuration



Remarks: The combination of basic units can be combined to form a common tank on demand, which can achieve up to 6 units and common tank to meet the personalized customization needs of customers.

Installation dimension drawing

The switchgear depth for the 12kV is 750mm, the switchgear height is 1450 mm (without LV compartment), and the option height of the LV compartment is 200mm, 360mm, and 470mm.

Common tank module No.	1	2	3	4	5	6
Gastank Netwidth	325	65	975	1300	1625	1950

Note: The total width of the switchgear is determined by the panel according to the user plan.

Applicable Standards

IEC 62271-100 :2012 High-voltage switchgear and controlgear-Part 100:

Alternating-current circuit-breakers

IEC 62271-105 High-voltage switchgear and controlgear-Part 105:

Alternating current switch-fuse combinations

IEC 62271-102 High-voltage switchgear and controlgear-Part 102:

Alternating current disconnectors and earthing switches

IEC 62271-103 High-voltage switchgear and controlgear-Part 103:

Switches for rated voltages above 1 kV and up to and including 52 kV

IEC 62271-200: 2011 High-voltage switchgear and controlgear-Part 200:

AC metal-enclosed switchgear and controlgear for rated voltage above 1 kV and up to and including 52 kV

IEC 62271-1: 2007 High-voltage switchgear and controlgear-Part 1:

Common specifications



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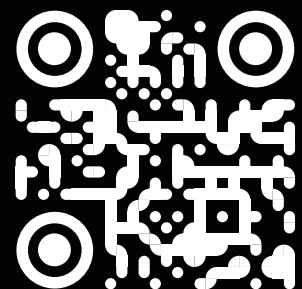
MGC 24/36 Series Ring Main Unit (SF6)

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