

KYN61-40.5 Removable AC Metal-clad Switchgear

Summary

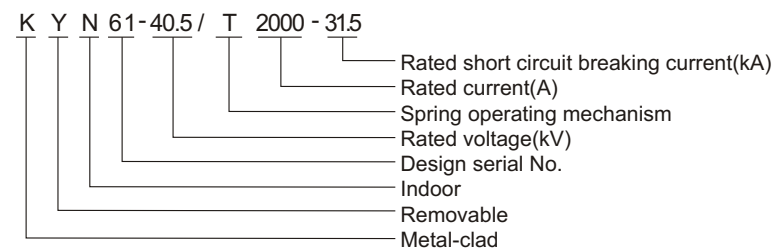
KYN61-40.5 removable AC metal-clad switchgear (short for switchgear as below) applies to 40.5kV, 3 phase, AC and 50/60Hz electrical power network for receiving and distributing power energy and also for control, monitor and protection. It is applicable in general power system and occasions with frequent operation. The product conforms to GB3906: 3~35kV AC Metal Enclosed Switchgear, IEC60694 & GB/T11022: The common technical clauses of HV Switchgear and controlgear Standard, DL/T404-1997: Order Technical term of Indoor AC HV Switchgear and IEC62271-200 1~52kV AC Metal Enclosed Switchgear and controlgear standard.



Ambient condition

1. Ambient temperature: -10°C~40°C, daily average: ≤35°C;
2. Altitude: ≤1000m;
3. Relative humidity: daily average ≤95%, monthly average ≤90%;
4. Earthquake intensity: ≤8 degree;
5. Applicable occasions should be free from corrosives, inflammables and vapour.

Model



Product feature

The switchgear is an assembly unit and the circuit breaker adopts handcart floor model. It owns simply change and well exchange after equipping with advanced composite insulation vacuum circuit breaker. Lead screw nut propulsion mechanism is installed in the handcart frame for preventing from fault operating and damaging propulsion mechanism, the handcart can be remove easily; All of the operation steps can be carried out at closing condition; It is compulsory locking among main switch, handcart and panel door to meet five protection; wide space for connecting several cable in cable cubicle. Earthing switch is used in earthing and loop short circuit, protection degree of enclosure is IP3X, IP2X under opening condition.

Technical specification

No.	Item	Unit	Data
1	Rated voltage	kV	40.5
2	Rated current	A	630, 1250, 1600, 2000, 2500
3	Rated frequency	Hz	50/60
4	Rated short circuit breaking current	kA	25, 31.5
5	4s rated short time withstand current	kA	25, 31.5
6	Rated short circuit making current (peak)	kA	63, 80
7	Rated peak withstand current(peak)	kA	63, 80
8	Insulation level	Rated lightning impulse withstand voltage	kV 185(across open contacts: 215)
		Main circuit 1min P.F withstand voltage	kV 95(across open contacts: 110)
		Auxiliary circuit 1min P.F. withstand voltage	kV 2
9	Outline dimension(W × D × H)	mm	1400(1200) × 2800 × 2600
10	Protection degree		IP3X(compartment IP2X)

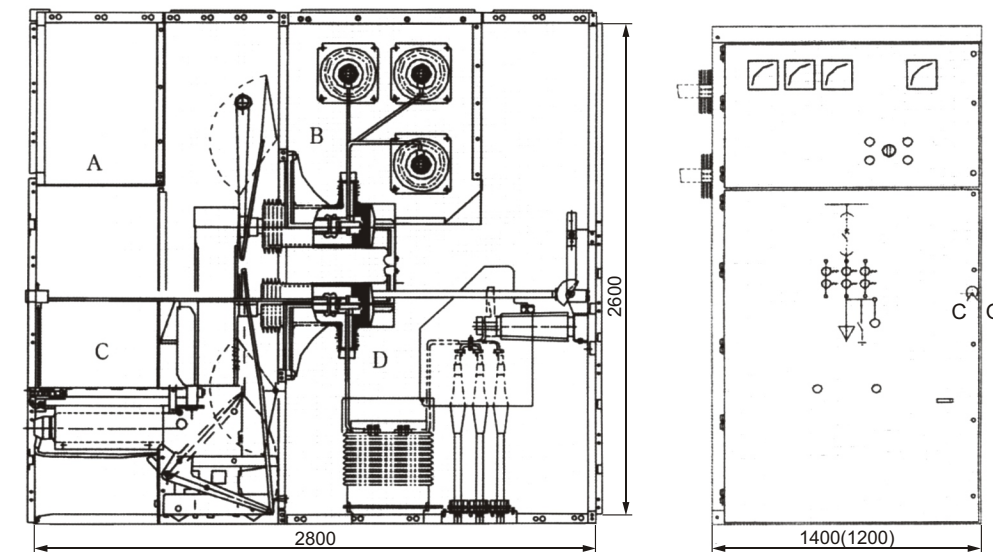
ZN85-40.5 VCB Primary Technical Parameters

No.	Item	Unit	Data
1	Rated voltage	kV	40.5
2	1min power frequency withstand voltage(virtual value)	kV	95
3	Lightning impulse withstand voltage (peak)	kV	185
4	Rated frequency	Hz	50/60
5	Rated current	A	630, 1250, 1600, 2000, 2500
6	Rated short time withstand current	kA	25, 31.5
7	Rated peak withstand current	kA	63, 80
8	Rated short circuit continuous time	s	4
9	Rated short circuit breaking current	kA	25, 31.5
10	Rated short circuit making current	kA	63,80
11	Rated operation sequence		O-0.3s-CO-180s-CO
12	Breaking time	ms	≤80
13	Rated short circuit breaking current breaking times	Times	20
14	Single capacitor breaking current	A	630
15	Back to back capacitor bank breaking current	A	400
16	Rated operating voltage	V	AC/DC 110/220
17	Mechanical life	Times	10000

Structure feature

The switchgear divides into enclosure and handcart, the enclosure is made of aluminium-zinc plated steel sheet after processed by CNC machine and multi-bending, then is assembled with bolts. So it has strong mechanical strength and can guarantee the neatness and good appearance. It consist of relay compartment, handcart compartment, cable degree is IP2X when CB handcart is on opening and testing position.

The switchgear is metal-clad removable, main circuit adopts composite insulation processing, emergency spreading to other parts. CT and earthing switch are mounted in cable compartment and busbar compartment. The protection degree of enclosure is IP3X, the protection and large space for several cables. The structural design of new completely insulated VCB or SF6 CB and spring operating mechanism is integrated console model with such excellence of well exchange and simply change.



KYN61-40.5 Structure Drawing