

## KYH1-27.5 Removable AC Railway Metal-clad Switchgear

### Summary

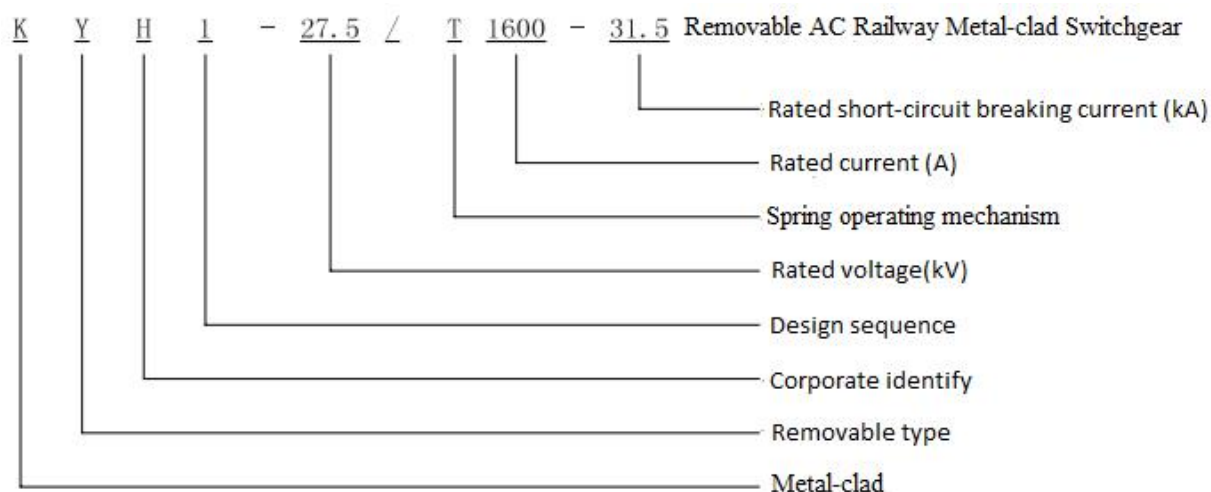
The switchgear is suitable for the power supply system of electrified railway traction substation, switch substation and partition booth of 27.5kV and 50Hz. It is used for the control and protection of electric circuit.. The switchgear conforms to TB/T 2010 《Technical Specification for 27.5kV AC Electrified Railway Switchgear》, IEC60298 《AC Metal Enclosed Switchgear & Control Equipment with Rated Voltage above 52kV and below 1kV》, IEC60694 《Common Technical Requirements Standards for High Voltage Switchgear & Control Equipment》, GB3906 《3.6kV ~40.5kV AC Metal Enclosed Switchgear & Control Equipment》 and DL404 《Technical Requirements for Indoor AC High Voltage Switchgear》, etc.. And have perfect and reliable prevent wrong operation function.



### Ambient Condition

- 1 Environmental air temperature:  $-15^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ; and the average value measured in 24h is not more than  $35^{\circ}\text{C}$ ;
- 2 Altitude  $\leq 1000\text{m}$ ;
- 3 Humidity condition: the average value of relative humidity measured in 24h is not more than 95%; the average value of water vapor pressure measured in 24h is not more than 2.2kPa. Monthly average value  $\leq 90\%$ ; the average monthly water vapor pressure is not more than 1.8kPa;
- 4 Installation site: without fire risk, explosion hazard, heavy pollution, chemical corrosion and violent vibration. Vertical bank is not more than  $5^{\circ}$ .

### Model



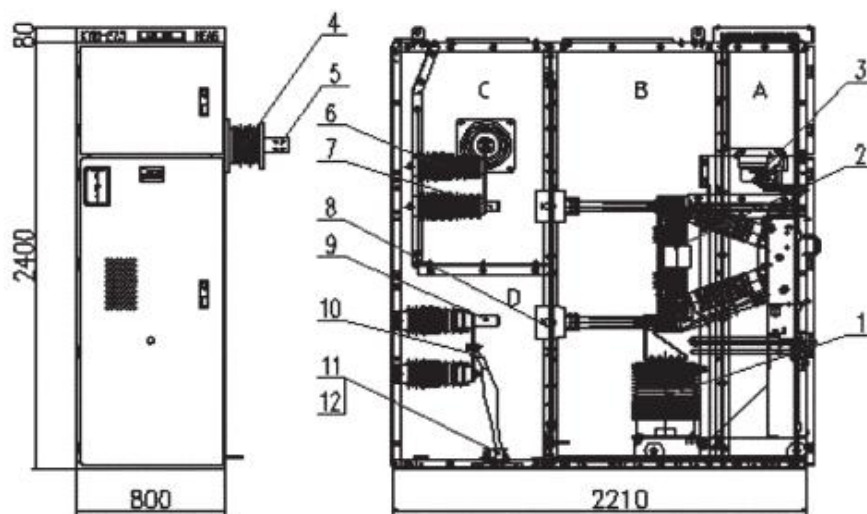
## Technical Parameters

No.	Item		Unit	Data
1	Rated voltage		kV	27.5
2	Rated current		A	1600
3	Rated frequency		Hz	50
4	Rated insulation level	Rated power frequency withstand voltage (phase to ground)	kV	95
		Rated power frequency withstand voltage ( isolating fracture )		118
		Rated lightning impulse withstand voltage (phase to ground )		185
		Rated lightning impulse withstand voltage (isolating fracture)		215
5	Rated short circuit breaking current		kA	31.5
6	Rated short circuit making current (peak)		kA	80
7	Main loop resistance		$\mu \Omega$	$\leq 150$ (without CT)
8	Rated short-time withstand current & Duration	Main loop	kA	31.5/4
		Earthing loop	kA	31.5/2
9	Rated peak withstand current	Main loop	kA/s	80
		Earthing loop		80
10	Voltage of auxiliary control loop	Rated voltage	V	DC:110, 220/AC:220, 380
		1min P.F. Withstand Voltage		2000
11	Protection grade			Enclosure IP4X, compartment IP2X
12	Loss category for running continuity			LSC2B-PI
13	IAC Class			AFLR

## Main Feature

1. The equipment is composed of a fixed body and the movable part (the handcart) two parts. According to the electrical equipment, the function of body separated into four different functional units, respectively for the CB compartment, busbar compartment, cable compartment and the instrument compartment.
2. The enclosure is completely formed by Al-Zn coated steel plate after multiple bending processed by CNC machine, then is assembled with the bolts, which has strong mechanical strength and effectively ensure the neatness and good appearance.。
3. The door is painted by electrostatic spraying and has strong anti-impact and corrosion proof ability.
4. The product has the advantages of anti-misoperation device, interlocking device, grounding device and pressure-releasing device.

## Basic Structure



A.LV instrument compartment

B. CB compartment

C. Busbar compartment

D. Cable compartment

1.CT    2.Vacuum CB    3.Aviation socket    4.Busbar bushing    5.Main busbar assembly

6. Insulator    7.The upper contact arm    8. Contact box    9. The lower contact arm

10.Earthing busbar assembly    11. Cable clamp    12. The tower sealing ring