

## KYN96-12 (AMS) Metal-clad Switchgear

### Summary

KYN96-12(AMS) model metal enclosed switchgear is developed by Xi'An HV Apparatus Research Institute. The complete type test have been approved at National Center for Quality Supervision & Testing of HV Apparatus, and provide integrated control and protection measurement for electric power plant, motor, power transformer, capacitor and distribution circuit etc.

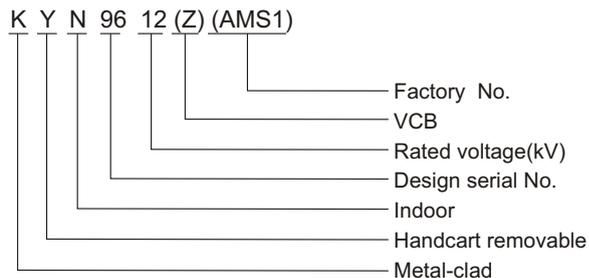
The rated voltage is 12kV, rated current is 630~3150A. AMS is equipped with VHY1-12 or VS1-12 circuit breaker, AMS is a indoor equipment used in distribution station such as industrial enterprise, high building, airport, harbour, and bus station etc. It conforms to IEC62271-200 & GB3906 3~35kV AC Metal Enclosed Switchgear, DL/T404 The Order Technical Terms of Indoor AC HV Switchgear and VDE, IEC standards.



### Ambient condition

1. Ambient temperature: -15°C~40°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 inflammable, explosives severe vibration.

### Model



### Structure feature

#### 1. High reliability

HV compartment and LV compartment are separated to limit the emergency at local part. Selection of rapidly closed earthing switch, busbar is wrapped by shrinkable material. Section of high reliability VHY1-12 or VS1-12 circuit breaker and designed with working position, testing position and drawout position. Operate to circuit breaker and earthing switch normally when the door is closed.

#### 2. High security

The switchgear has many kinds of protective measures, such as mechanical interlock and five protection. Prevent from pulling and pushing hand cart with load and closing the earthing switch with electricity, prevent from making circuit breaking on occasion of opening and closing, prevent from entering into live isolation. Equipped with fixed position and interlock device at working and testing position inner panel, the circuit breaker is able to remove only on open position. The earthing switch adopts manual operation with open-closed position indicator. Install mechanical interlock on link rod of operation mechanism, to interlock with circuit breaker and cable compartment door, additional of equipping with locking electromagnet. Adopt metal safety shutter to keep security even if draw out circuit breaker. Protective grade is IP 4X, there is a window on the plate of circuit breaker and cable compartment.

#### 3. High adaptability

The cable compartment is able to contain two pairs of cables. It can be equipped with standard CT, relay and meters.

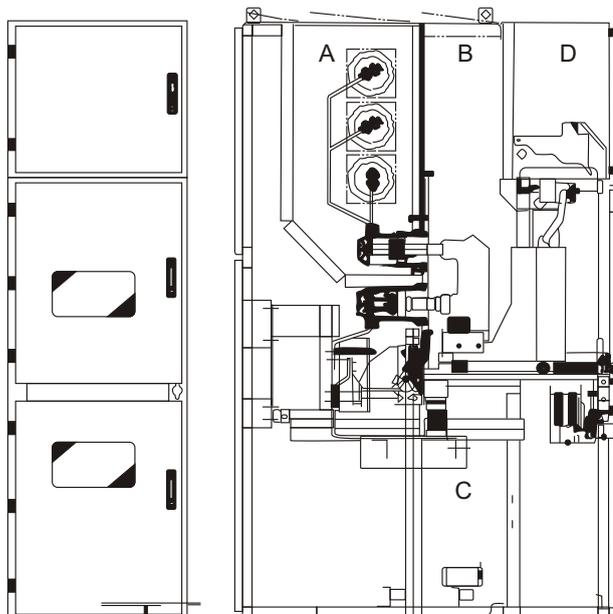
## Technical specification

| Item                               |   | Unit        | Data                              |
|------------------------------------|---|-------------|-----------------------------------|
| Rated voltage                      |   | kV          | 12                                |
| Rated frequency                    |   | Hz          | 50                                |
| Rated insulation level             | 1min power frequency withstand voltage    | kV          | 42                                |
|                                    | Lightning impulse withstand voltage(peak) | kV          | 75                                |
| Main busbar rated current          |   | A           | 630,1250/1600,2000/2500,3150      |
| Branch busbar rated current        |   | A           | 630,1250,1600,2000,2500,3150      |
| 4S thermal-stable current          |   | kA          | 20,25,31.5,40                     |
| Rated dynamic stable current(peak) |   | kA          | 50,63,80,100                      |
| Main circuit resistance            |   | $\mu\Omega$ | $\leq 140$                        |
| Protection degree                  |   |             | Enclosure: IP4X,Compartment: IP2X |

## Outline dimension

|        |   |    |          |
|--------|---|----|----------|
| Height |   | mm | 2250     |
| Width  | Branch busbar rated current below 1250A | mm | 650      |
|        | Thermal stable current below 31.5kA     |    | 800      |
|        | Branch busbar rated current below 1600A | mm | 800      |
|        | Thermal stable current below 40 kA      |    |          |
|        | Branch busbar rated current below 1600A |    |          |
|        | Thermal stable current below 31.5 kA    |    |          |
|        | Branch busbar rated current below 2000A |    | 1000     |
| Depth  |   | mm | 1400     |
| Weight |   | kg | 800~1200 |

## Structure drawing



KYN96(AMS) Structure drawing  
 A.Busbar compartment  
 B.Circuit breaker compartment  
 C.Cable compartment  
 D.LV compartment