

# High and Low Voltage Switchgear

## Power Distribution & Control Equipment

Logo & Packaging Customization

Parameter & Drawing Design Customization



Optimized Performance



High Efficiency



SUPERIOR SAFETY



Smart Monitoring



Maintenance Free



### Overview

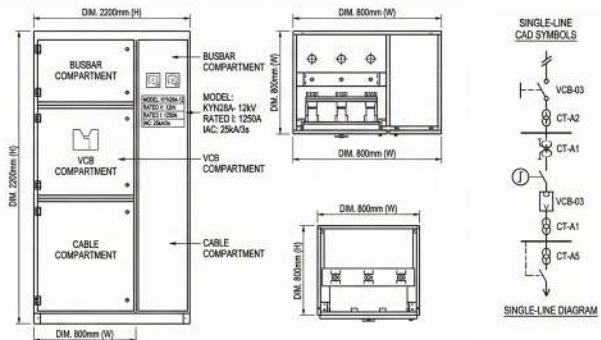
**Modular & Scalable Design:** Standardized modular compartments ensure flexible configuration and easy future expansion, significantly reducing installation time and overall project costs.

**Arc-Proof & Superior Safety:** Engineered with robust metallic partitions and an independent pressure relief channel. Features comprehensive mechanical and electrical interlocks to guarantee maximum safety for operating personnel.

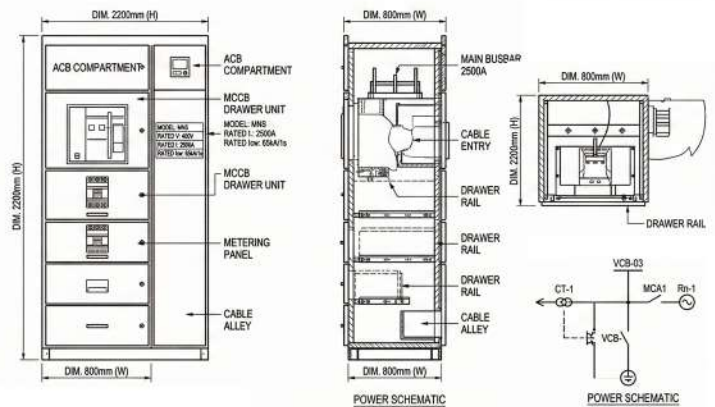
**Reliable Power Continuity:** Utilizes premium Al-Zn coated steel sheets for the enclosure. Designed for optimal heat dissipation and high short-time withstand current capabilities, ensuring uninterrupted operation under heavy loads.

### Outline Drawing

#### HIGH VOLTAGE (HV) SWITCHGEAR (KYN28A-12)



#### LOW VOLTAGE (LV) SWITCHGEAR (MNS Series)



### Application



#### Industrial Plants & Substations

Heavy-Duty Power Distribution

#### Renewable Energy Power Plants

Integration with Solar and Wind Grids



#### Data Centers & Commercial Buildings

Reliable and Continuous Power Supply

### Accessories / Components



Vacuum Circuit Breaker



Air Circuit Breaker



Intelligent Protection Relay



Current & Voltage Transformers



Containerized Substation

## Technical Parameters

### HV Switchgear Technical Parameters

| No. | Model & Series  | Rated Voltage (kV) | Rated Current (A) | Short-time Withstand Current (kA/3s) | Peak Withstand Current (kA) | Enclosure Protection | Dimensions (WxDxH mm) |
|-----|-----------------|--------------------|-------------------|--------------------------------------|-----------------------------|----------------------|-----------------------|
| 1   | APEX-HV-630     | 12                 | 630               | 25                                   | 63                          | IP4X                 | 800x1500x2300         |
| 2   | APEX-HV-1250    | 12                 | 1250              | 31.5                                 | 80                          | IP4X                 | 800x1500x2300         |
| 3   | APEX-HV-2000    | 12                 | 2000              | 31.5                                 | 80                          | IP4X                 | 1000x1500x2300        |
| 4   | APEX-HV-3150    | 12                 | 3150              | 40                                   | 100                         | IP4X                 | 1000x1600x2300        |
| 5   | APEX-HV-24-1250 | 24                 | 1250              | 25                                   | 63                          | IP4X                 | 1000x1800x2300        |
| 6   | APEX-HV-40-1250 | 40.5               | 1250              | 31.5                                 | 80                          | IP4X                 | 1200x2000x2400        |

### LV Switchgear Technical Parameters

| No. | Model & Series | Rated Operational Voltage (V) | Main Busbar Rated Current (A) | Short-circuit Breaking Capacity (kA) | Insulation Voltage (V) | Protection Degree | Standard Configuration |
|-----|----------------|-------------------------------|-------------------------------|--------------------------------------|------------------------|-------------------|------------------------|
| 1   | APEX-LV-800    | 400/690                       | 800                           | 30                                   | 1000                   | IP3X/4X           | Fixed / Withdrawable   |
| 2   | APEX-LV-1250   | 400/690                       | 1250                          | 50                                   | 1000                   | IP3X/4X           | Fixed / Withdrawable   |
| 3   | APEX-LV-1600   | 400/690                       | 1600                          | 50                                   | 1000                   | IP3X/4X           | Withdrawable           |
| 4   | APEX-LV-2500   | 400/690                       | 2500                          | 65                                   | 1000                   | IP3X/4X           | Withdrawable           |
| 5   | APEX-LV-3200   | 400/690                       | 3200                          | 80                                   | 1000                   | IP3X/4X           | Withdrawable           |
| 6   | APEX-LV-4000   | 400/690                       | 4000                          | 100                                  | 1000                   | IP3X/4X           | Withdrawable           |

- Enclosure Construction: Fabricated from 2.0mm high-quality Al-Zn coated steel sheets. The frame is CNC-machined and assembled with high-strength rivets, ensuring exceptional rigidity and corrosion resistance for 30+ years of service.

#### Enclosure & Material:

- Precision-engineered with 2.0mm Al-Zn coated steel. High mechanical strength and superior anti-corrosion for harsh environments.

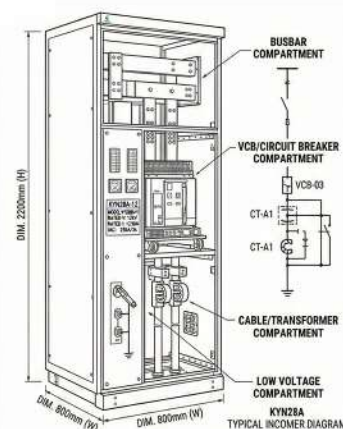
#### Safety Features:

- Integrated "Five-Prevention" mechanical interlocks. Independent pressure relief channels for internal arc fault protection.

#### Factory Routine Tests:

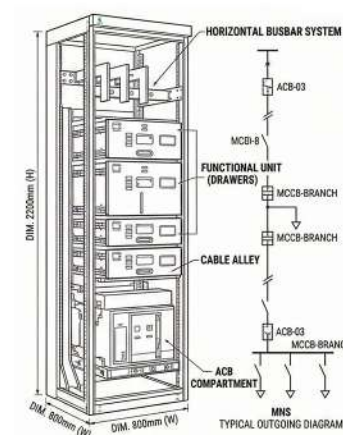
- Power-frequency voltage withstand.
- Main circuit resistance measurement.
- Mechanical operation & interlock verification.

### HV SWITCHGEAR INTERNAL CROSS-SECTION & DIAGRAM (MNS/GCS TYPE)



#### Advanced Compartmentalization

Our HV units feature fully segregated metallic compartments, ensuring that a fault in one section does not affect others. The integrated "Five-Prevention" mechanical interlock prevents all operational errors, guaranteeing operator safety.



#### Modular & Scalable Design

The LV series adopts a high-density modular drawer system. All units are hot-swappable, allowing for rapid maintenance or configuration changes without total system downtime. High-purity T2 copper busbars ensure minimal heat loss.

## Integrated Outdoor Solutions

### Factory Routine Tests:

- A modular, climate-controlled enclosure designed for rapid deployment in renewable energy sites and industrial hubs. Features high IP protection and complete internal integration of HV/LV switchgear.

### Containerized Substation

- Robust ISO-standard container solutions engineered for harsh outdoor environments. Highly mobile and factory-tested to ensure plug-and-play operation on-site.

#### Prefabricated Cabin Substation



#### Containerized Substation



#### Containerized Substation



#### Compact Substation



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