

Low Voltage Switchgear **MNS** Low-voltage Switchgear Panel, Withdrawable Type

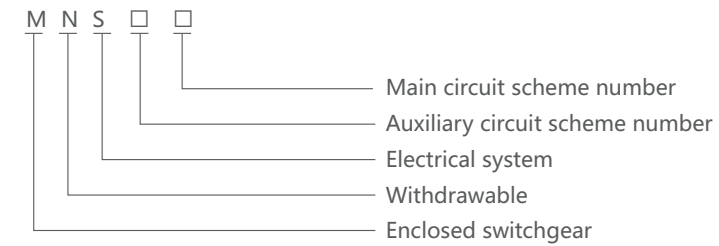
- ❖ MNS low-voltage withdrawable switchgear is suitable for power systems with an AC 50Hz and a rated working voltage of 400V. It is mainly used for energy conversion, distribution, and control of distribution equipment.
- ❖ Mainly suitable for airports, power stations, transportation and energy, industrial and mining enterprises, residential communities, and other places.
- ❖ Standard: IEC439

General

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Selection

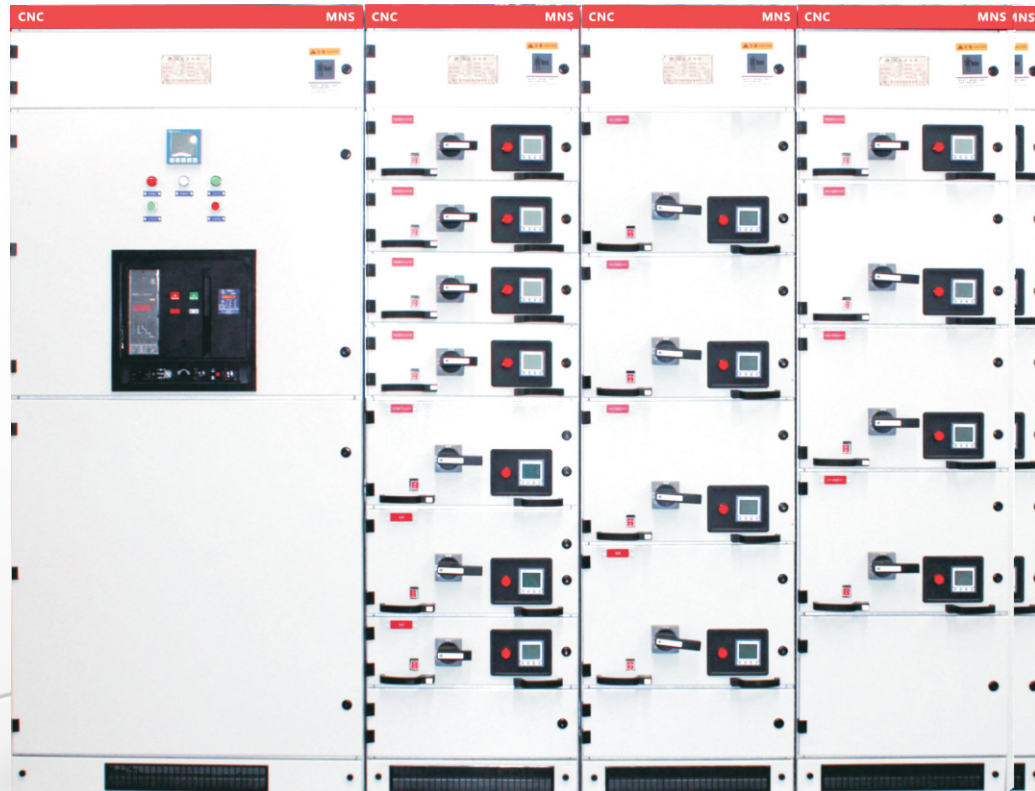


Operating conditions

1. Installation Site: Indoor;
2. Altitude: No more than 2000m.
3. Earthquake Intensity: No more than 8 degrees.
4. Ambient Temperature: No more than +40°C and no less than -15°C. Average temperature is no more than +35°C within 24 hours.
5. Relative Humidity: the average daily value is no more than 95%, the average monthly value is no more than 90%.
6. Installation locations: without fire, explosion danger, serious pollution, chemical corrosion and violent vibration.

Features

1. The operation and control handle of the drawer are combined into one, simplifying the operation while retaining the mechanical interlocking function. This overcomes the drawbacks of complex operation and susceptibility to damage in traditional MNS cabinets due to possible misoperation.
2. The MCC units are available in various combinations, compact in structure, and the cabinet can share back-to-back arrangement of busbars. Each cabinet can accommodate up to 36 circuits.
3. The cabinet can be arranged back-to-back or against the wall, saving installation space.
4. Standard components are used throughout, making it convenient for engineering designers.
5. The entire series is standardized, with strong structural versatility and flexible assembly.
6. A single cabinet can accommodate more units and can be freely combined into different types, such as fixed partition type and drawer type. Drawer units of the same specifications can be easily interchanged.
7. Stable combination performance and good grounding continuity.
8. High continuity and reliability of equipment operation.
9. The product has passed earthquake resistance, salt spray, and EMC electromagnetic compatibility tests, ensuring safe and reliable operation.



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Technical data

No.	Content	Unit	Value	
1	Rated Operating Voltage	V	400	
2	Rated Insulation voltage	V	690	
3	Rated Frequency	Hz	50/60	
4	Main Bus-Bar	Rated Current	A	≤6300
		Rated Short-time Withstand Current	kA	≤100
		Rated Peak Withstand Current	kA	≤220
5	Distribution Bus	Rated Current	A	≤1300
		Rated Short-time Withstand Current	kA	≤50
		Rated Peak Withstand Current	kA	≤105
6	Frequency Withstand Voltage in 1min of Aux Control Loop	kV	1.89	
7	Rated Impulse Withstand voltage	kV	8	
8	Protection Degree	IP	IP40	
9	Electrical Clearance	mm	≥10	
10	Creepage Distance	mm	≥12.5	
11	Overvoltage Level	-	III/IV	
12	Pollution Degree	-	3	

Switchgear type

Power Center Cabinet

It adopts fixed installation withdrawable switches with various high-breaking capacity ranging from 630A to 630A, featuring advanced and intelligent circuit breakers.

Drawer type

Assembled with drawers of different sizes, each circuit's main switch adopts high-breaking capacity plastic case circuit breakers or load switches with rotary-type fuse.

Fixed type:

MCC cabinet (Motor Control Center cabinet) functional units are assembled using plug-in plastic case circuit breakers, offering distinct breaking points and advantages such as enhanced safety and reliability.

Drawer/Fixed type:

There are five standard sizes, all based on a height of 8E (200mm).

8E/4: Assemble 4 drawer units in an 8E height space.

8E/2: Assemble 2 drawer units in an 8E height space.

8E: Assemble 1 drawer unit in an 8E height space.

16E: Assemble 1 drawer unit in a 16E (400mm) height space.

24E: Assemble 1 drawer unit in a 24E (600mm) height space.

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Five types of drawer units can be assembled in a single cabinet or as a mixed assembly. The maximum number of fixed units for a single assembly in a cabinet is shown in Table 1

	8E/4	8E/2	8E	16E	24E
Maximum number of units	26	18	9	4	3



8E/4



8E/2



8E



16E



24E

Overall and mounting dimensions(mm) s of the cabinet

