

## TGG2 Withdrawable Type Low Voltage Switchgear



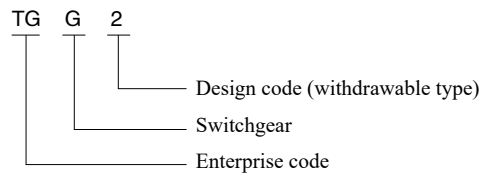
### 1 Overview

TGG2 withdrawable type low voltage switchgear is an advanced low-voltage switchgear developed by our company by reference with the foreign advanced low-voltage switchgear in order to meet the market demand and meet the needs of the development of the power industry. It is widely used in various low-voltage distribution systems in power plants, substations, industrial and mining enterprises, buildings, hotels, and municipal construction for electric energy conversion, distribution and control of the AC 50-60HZ power distribution system with rated operating voltage AC 660V and below.

Standards:

IEC61439-1:2011 Low-voltage switchgear and controlgear assemblies

### 2 Type Designation



### 3 Product Parameters

Name	Unit	Parameter
Rated operating voltage	V	AC380V
Rated insulation voltage	V	AC660V
Rated frequency	Hz	50Hz
Aux. circuit rated operating voltage	V	AC380, 220, DC220, 110
Main busbar rated current	A	630~6300
Main busbar rated shor time withstand current	kA	50/1S, 80/1S, 100/1S
Main busbar rated peak withstand current	kA	105, 176, 220
Branch busbar rated current	A	400~1600
Branch busbar rated short time withstand current	kA	50/1S
Branch busbar rated peak withstand current	kA	105
Polltion degree	/	3
Shell protection grade	/	IP30

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### 4 Working Environmental Conditions

- 4.1 Ambient temperature: The ambient air temperature is not higher than +40°C, and the mean temperature within one 24-hour period does not exceed +35°C. The lower limit of air temperature is -5°C.
- 4.2 For clean air, the relative humidity must not exceed 50% at a maximum temperature of +40°C. Higher relative humidity is allowed at lower temperatures. For example, the relative humidity is 90% at +20°C. However, it is considered that the moderate condensation may occur occasionally due to temperature changes.
- 4.3 Pollution degree: 3.
- 4.4 Altitude: Not exceed 2000m.
- 4.5 Installation: The inclination between the installation position and the vertical plane does not exceed 5°.
- 4.6 The transportation and storage temperature is -25°C ~+55°C, and it can be up to +70°C in a short time (no more than 24h).
- 4.7 The equipment should be installed in a place where there is no severe vibration and impact, and the electrical components are not corroded.

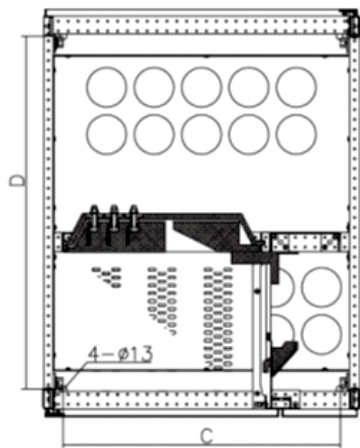
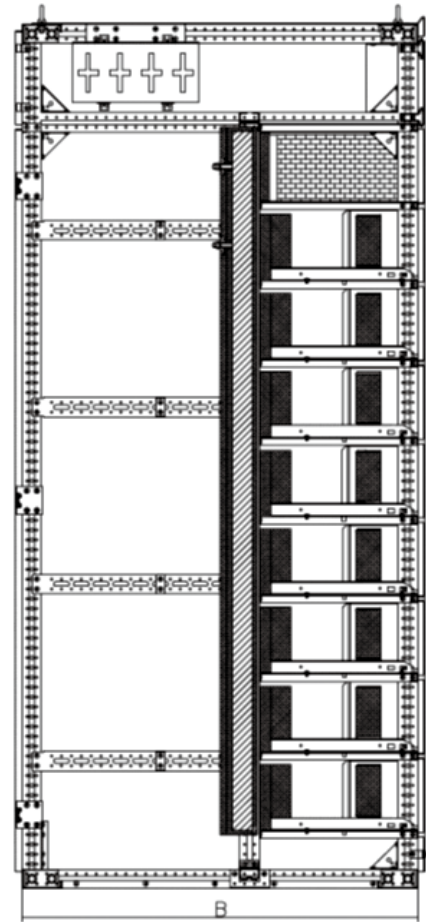
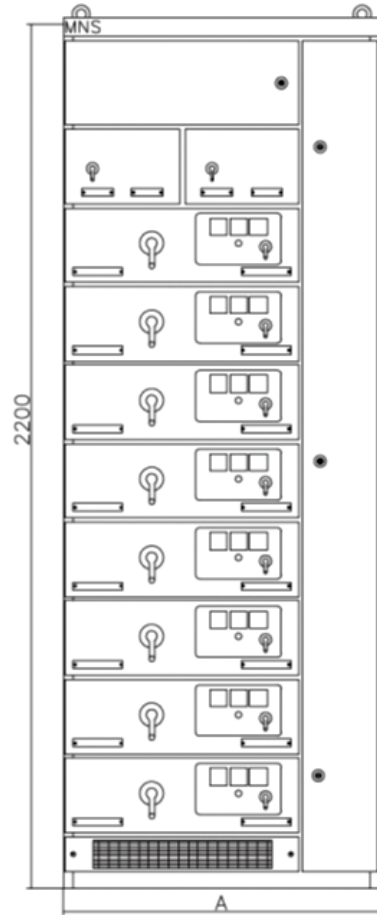
Note: When the working environment conditions are different from the above application environment, please contact the manufacturer.

### 5 Product Features

- 5.1 The TGG2 low-voltage withdrawable type switchgear frame is of the combined structure, and the basic skeleton is assembled with C-shaped steel. All structural parts of the cabinet frame are subject to the galvanization treatment, and are connected to firmly form a basic frame through self-tap lock screws or 8.8 grade hex bolts to form the entire switchgear together with the changed doors, baffle, mounting brackets and busbar function units corresponding to the plan. The internal dimensions of switchgear, the dimensions of parts, and the dimensions of compartment are changed according to the modularization (E=25mm).
- 5.2 Each cabinet of the TGG2 low-voltage withdrawable type switchgear is divided into three chambers, namely the horizontal busbar chamber (at the back of the cabinet or the upper part of the cabinet), the small drawer chamber (in the front of the cabinet), and the cable room (in the lower part of the cabinet or at the right side of the front of the cabinet). The chamber is separated by steel plates or high-strength flame-retardant plastic functional plates, and the metal plates with ventilation holes are used as baffle between the drawers on the upper and lower layers to effectively prevent accidents of the switching element due to flashover occurred or the short circuit of the busbar and other line.
- 5.3 TGG2 low-voltage withdrawable type switchgear structure is designed to meet the requirements of various inlet and outlet schemes: top inlet and top outlet, top inlet and bottom outlet, bottom outlet and top inlet, and bottom inlet and bottom outlet.
- 5.4 Compact design: Accommodate more functional units in a smaller space.
- 5.5 The structural parts feature with strong universality and flexible assembly, with E=25mm as the modulus, and the structure and withdrawable unit can be combined arbitrarily to meet the needs of system design.
- 5.6 The busbar is protected by high-strength flame-retardant plastic functional board with high-insulation strength and has anti-fault arc performance to ensure safe and reliable operation and maintenance.
- 5.7 The mechanical interlocking mechanism of drawers of various sizes meets the standard regulations, and has three obvious positions of Connect, Test and Disconnect, safe and reliable.
- 5.8 With standard module design, the standard units such as protection, operation, conversion, control, regulation, measurement, and indication units can be formed, and they can be assembled arbitrarily according to the requirements.
- 5.9 The use of high-strength flame-retardant engineering plastics effectively improves the protection and safety performance.
- 5.10 With high universalization and standardization, it ensures convenient assembly and reliable and guaranteed quality.

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### 6 Outline Dimensions and Installation Foundation



Installation dimensions and mounting hole see table below Unit (mm)

Size A	Size B	Size C	Size D
600	800	500	700
	1000	500	900
800	800	700	700
	1000	700	900
1000	800	900	700
	1000	900	900

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### 7 Ordering Notice

- 7.1 Main circuit plan diagram or single-line system diagram;
- 7.2 Auxiliary circuit principle or wiring diagram;
- 7.3 Model, specification and quantity of electrical components of switchgear;
- 7.4 Layout and distribution room floor plans;
- 7.5 The use of switchgear under special environmental conditions is specified when ordering;
- 7.6 For special requirements, please contact our company and the relevant technical agreements are signed.