



# GCK Low-Voltage Withdrawable Switchgear



<b>Model:</b>	GCK
<b>OEM and ODM Services:</b>	Available
<b>Enclosure:</b>	PINEELE standard
<b>Brand:</b>	PINEELE
<b>Form:</b>	All- packaged Type
<b>Scope of Application:</b>	Suitable for industrial power distribution, voltage stabilization, and transformer protection. Widely used in commercial buildings, manufacturing plants, and utility substations.
<b>Reviewed By:</b>	Zheng Ji, Senior Electrical Engineer at PINEELE 18+ years of experience in HV switchgear design & testing.
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# LOW-VOLTAGE WITHDRAWABLE SWITCHGEAR



## 1. Product Overview

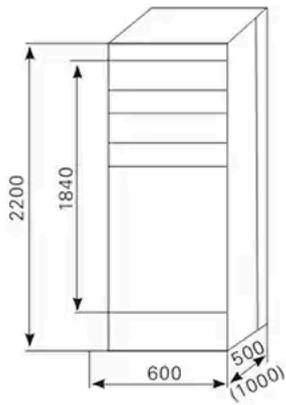
The GCK Low-Voltage Withdrawable Switchgear is a state-of-the-art power distribution system widely used in **power plants, metallurgical steel rolling, petrochemical industries, light industry, ports, buildings, and hotels**. It is designed for **AC three-phase four-wire or five-wire systems**, operating at voltages of 380V and 660V, with a frequency of 50Hz, and a rated current of up to 5000A.

This switchgear complies with **national and international standards**, undergoing **comprehensive type testing and CCC certification**, ensuring **high safety, reliability, and modular design flexibility**.

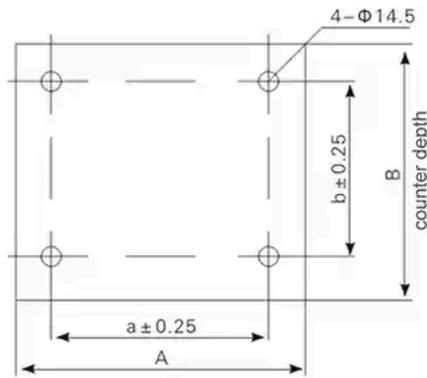
## 2. Compliance Standards

The GCK switchgear meets the following standards:

- ✓ GB 7251.1-2005 – Low-voltage switchgear (National Standard)
- ✓ IEC 60439.1-1992 – Low-voltage switchgear and controlgear (International Standard)



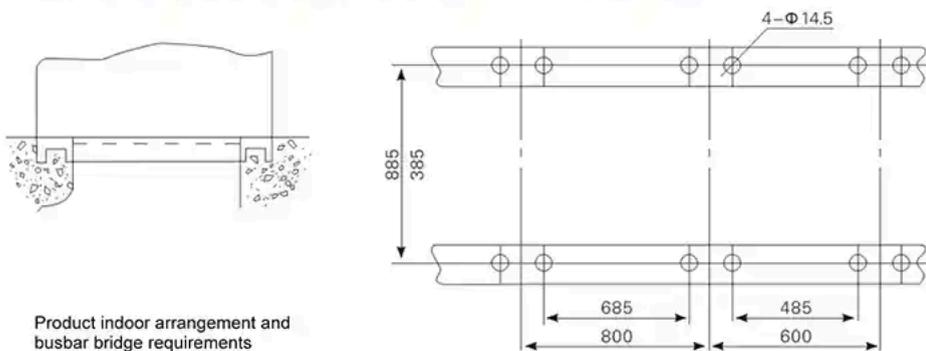
External dimensions of the MCC cabinet for off-wall mounting



## Mounting Dimensions and Mounting Holes

Counter width(A)	Counter depth(B)	Mounting dimensions (a)	Mounting hole distance (b)
800	500	685	385
600	800	485	685
600	1000	485	885
800	800	685	685
800	1000	685	885
1000	800	885	685
1000	1000	885	885

## Schematic diagram of product installation base



Product indoor arrangement and busbar bridge requirements

Note: The company can provide various forms of busbar bridge according to user requirements

## Key Technical Parameters

SPECIFICATION	VALUE
Rated Insulation Voltage	660V / 1000V
Rated Operating Voltage	400V / 660V
Auxiliary Circuit Voltage	AC 380V / 220V, DC 110V / 220V
Busbar Rated Current	1000A – 5000A
Short-Time Withstand Current (1s)	50kA, 80kA
Peak Withstand Current	105kA, 140kA, 176kA
Branch Busbar Rated Current	630A – 1600A
Protection Level	IP30, IP40
Busbar System	Three-phase four-wire / five-wire
Operation Mode	Local, Remote, Automatic

### 3. Key Features

#### 3.1 High Safety and Reliability

**Independent compartmentalization:** The cabinet is divided into a **busbar room**, **functional unit room**, and **cable room**, preventing the spread of electrical faults.

**Advanced short-circuit withstand capacity**, with busbars designed to handle **up to 176kA peak current**.

#### 3.2 Modular and Scalable Design

**Customizable configurations** for power distribution and motor control applications.

Each **Motor Control Center (MCC)** cabinet can accommodate **up to 9 1-unit drawers** or **18 1/2-unit drawers**.

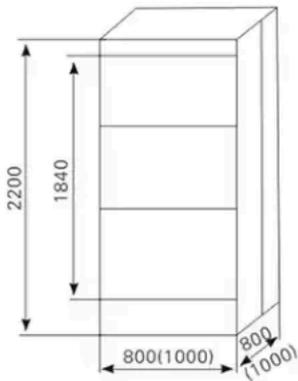
#### 3.3 Intelligent Control System

Supports **manual, remote, and automatic operation**, enabling seamless integration into **smart power distribution networks**.

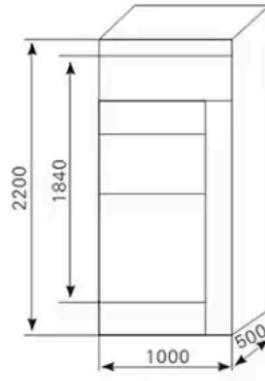
#### Main technical parameters of the switchgear

Rated operating frequency (Hz)		50
Rated operating voltage (V)		380,660
Rated insulation voltage (V)		660
Rated working current (V)	Horizontal busbar	630-3150
	Vertical Busbar	600
Rated short-time withstand current	Horizontal Busbar	80kA (rms)/sec
	Vertical Busbar	50kA (rms)/sec
Rated peak withstand current	Horizontal Busbar	176kA/0.1s
	Vertical Busbar	110kA/0.1s
Main circuit connector (A)		200,400
Auxiliary circuit connector (A)		10
Industrial frequency withstand voltage/min (V)		2500
Protection grade		IP40
Operation mode		In situ, far away, automatic

#### Overall Dimensions Mounting Dimensions



PC cabinet external dimensions



External dimensions of MCC cabinets mounted against the wall

#### 3.4 Robust Drawer Unit Design

**Drawer locking mechanism** prevents accidental withdrawal when the main switch is closed.

**Rotary propulsion system** ensures smooth drawer operation with **three-position interlocking** (Connected, Test, Isolated).

**Main circuit plug-in and auxiliary circuit plug-in** for easy maintenance.

### 4. Installation and Usage Guidelines

#### 4.1 Pre-Installation Checklist

Inspect packaging integrity and verify all accessories.  
Store units in a dry, ventilated environment before installation.

## 4.2 Installation Guidelines

Follow the provided **installation schematics and diagrams**.  
Ensure **proper grounding and cable routing** to prevent operational hazards.  
Leave sufficient clearance for **ventilation and maintenance**.

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## 5. Applications

The GCK switchgear is widely applied in various industries, including:

- ✓ Power plants, substations, and industrial automation systems
- ✓ Steel, chemical, and petrochemical industries
- ✓ Commercial buildings, airports, and large infrastructure projects
- ✓ Renewable energy projects (solar and wind power integration)

Due to its high adaptability, modular design guide, and advanced safety features, the GCK switchgear is a preferred choice for modern power distribution and motor control systems.

## 6. Conclusion

The GCK Low-Voltage Withdrawable Switchgear delivers exceptional reliability, flexibility, and safety in low-voltage power distribution applications. With its modular design, advanced safety mechanisms, and compliance with international standards, it is ideal for high-performance industrial and commercial power systems.

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### Related products



Low Voltage Switchgear Panel



GCK Low Voltage Switchgear – Withdrawable Type Voltage Switchgear for Power Control & Distribution



JXF Low Voltage Power Distribution and Control Enclosure



XL-21 New Type Power Distribution Cabinet



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