

## Product Overview



RDWQ2 series intelligent universal circuit breaker dual power automatic transfer switch, suitable for AC 50/60Hz. Dual power supply system with rated operating voltage 690V and rated operating current 400A to 6300A. When the common power supply fails, the switch can be automatically converted with the standby power supply or generator to ensure the reliability and safety of the power supply, and can also be selectively converted between the two power supplies according to the needs of the load.

The switch is composed of intelligent universal circuit breaker and intelligent controller of the switch. The product has overload, short circuit, short delay, ground fault, three-phase unbalance, load monitoring, undervoltage, overvoltage, phase loss, frequency and other protection functions. Can be widely used in electric power, post and telecommunications, petroleum, coal, metallurgy, railway, municipal, intelligent building and other industries, departments of power supply system. Products comply with: IEC60947-6-1, GB/T 14048.11 and GB/T 14048.2 standards.

## Selection Guide

RDQWQ2	2000	3P	2000	Insertion	Vertical	AC220V
Model	Frame current	Poles	Rated current	Circuit breaker type	Installation mode	Control loop voltage
Dual power automatic transfer switch	1000 2000 3200 4000 6300	3P:3P 4P:4P	1000:200 400 630 800; 2000:630 800 1000 1250 1600 2000; 3200:2500 3150 3200 4000:3200 3500 4000 6300:4000 5000 6300	Plug-in: Circuit breaker is drawer type  Fixed type: The circuit breaker is fixed type	Horizontal installation: not indicated by default;  Vertical installation: indicate vertical.	AC220V is the operating voltage of the undervoltage coil, the closing coil and the opening coil.

## Normal Operating Conditions

- Surrounding air temperature: The upper limit value of the surrounding air temperature shall not exceed +40 °C, the lower limit value shall not exceed -5 °C, and the average value within 24 hours shall not exceed +35 °C
- Altitude: The altitude of the installation site shall not exceed 2000m.
- Humidity: The relative humidity of the atmosphere does not exceed 50% when the surrounding air temperature is +40 °C, at lower temperatures. Can have high humidity; The monthly average minimum temperature in the wettest month is +25 °C, and the average maximum relative humidity is 90%. Considering the condensation on the product surface due to humidity changes, special measures should be taken.
- Pollution level: Level III.  
The operation site shall be free of strong vibration and impact, corrosive metal and harmful gas damaging insulation, serious dust, conductive particles, explosive Dangerous goods and strong electromagnetic interference.

# RDWQ2 Series Dual Power Automatic Switch

## Performance and Characteristics

The rated current of the transfer switch is set according to the intelligent universal circuit breaker, (400A~6300A).

The transfer switch is converted by two intelligent universal circuit breakers, which can be installed up and down according to user requirements. It can also be installed left and right, equipped with different types of mechanical interlocks to ensure the safe and reliable operation of the transfer switch.

Suitable for automatic conversion of two circuits of mains power, two circuits of power generation, or one circuit of mains power and one circuit of power generation.

With a microprocessor as the core, LCD with backlight Chinese display, easy to touch button operation.

Accurately collect and display parameters such as two-way three-phase voltage, three-phase current, frequency and power (special transformer is required); The power supply mode can be set to one (common priority), two (backup) priority, or no priority.

Equipped with generator starting function.

When one of the switches fails to close. If the other voltage is normal. Then it will automatically switch to another path.

Equipped with automatic manual state transition, in manual mode, the switch can be forced to close and open.

Use a second level password to prevent unprofessional personnel from operating.

Trial operation of the motor set; Equipped with switch reclosing function to prevent instantaneous power outage of switches with undervoltage tripping. Equipped with a power outage re tripping function to solve the problem of abnormal closing and opening when the switching operation mechanism and switch position are inconsistent; The closing and opening outputs are all pulse (up to 10 seconds) outputs. After the switch conversion is completed, the output is automatically cut off.

There is a switch conversion delay (i.e. the dwell time in the middle position), and the delay time can be set.

Two N-pole (zero line) separation design.

Simultaneously equipped with industry standard RS-232C and RS-485 communication interfaces, using ModBus communication protocol to achieve dual power conversion. Remote control, telemetry, and remote signaling functions.

Allow users to set their parameters on site or in the monitoring center, without losing them in the event of system power failure; Equipped with real-time calendar and clock.

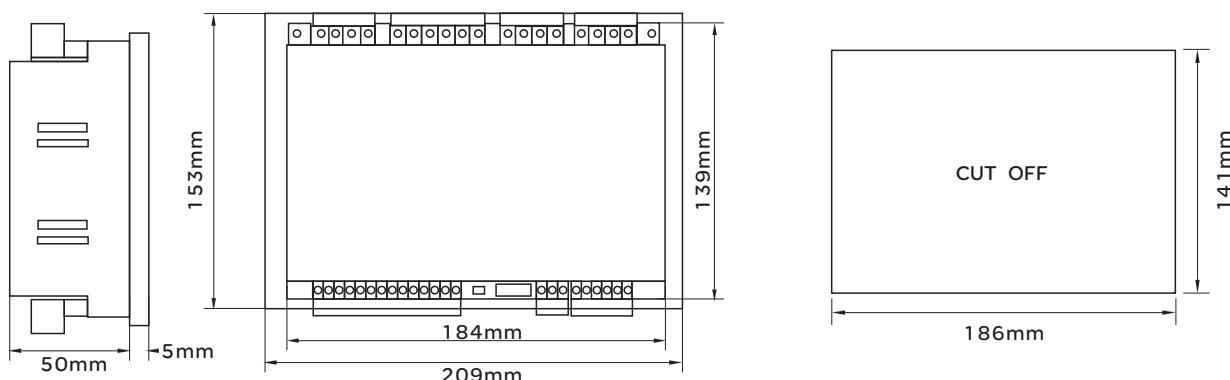
40 sets of historical records can be saved in a loop and queried.

The controller can be powered by direct current (9-35V) or with white one or two A-pole and N-pole voltages.

Modular structure design, flame-retardant ABS plastic shell, embedded installation method, plug-in terminal blocks, very convenient installation and maintenance.

## Installation Diagram

The installation of the transfer switch is carried out according to the installation conditions of the RDWQ2 intelligent universal circuit breaker. The two circuit breakers can be arranged up and down, or left and right. The appearance and installation hole size of the intelligent controller are shown in the figure



Controller Dimensions

Opening Size of Controller