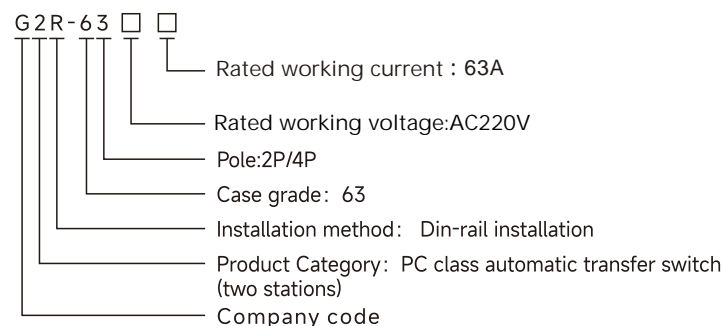


G2R Automatic transfer switch

G2R-63 automatic transfer switch is a PC class infrequent change-over switch, with two-station design (commonly used for A and standby for B), suitable for AC systems with AC 50-60Hz and rated current 6A-63A. The main function of the automatic transfer switch is when the main power (common power supply A) fails, the ATS will automatically switch to the backup power (Backup power supply B) to continue working (switching speed <50 milliseconds), which can effectively solve the troubles caused by power outages.

Product model and meaning



Working Conditions

The temperature range of the operating environment is -5°C~+40°C, and the average temperature within 24 hours shall be lower than +35°C, and the temperature range of the storage environment is -25°C~+55°C, which can be reached +70°C in a short time (within 24 hours). The altitude of the installation site should be lower than 2000m. The relative humidity at the installation site shall not exceed 50% when the ambient air temperature is +40°C. Higher relative humidity is possible at lower temperatures. For example: when the average minimum temperature of the wettest month is +20°C, the monthly average maximum relative humidity of that month can reach 90%. Appropriate measures should be taken to prevent condensation due to temperature changes. Pollution level 3 (conductive pollution, or dry non-conductive pollution becomes conductive due to condensation). ATS can be installed vertically or horizontally in the cabinet, if there are special installation requirements, contact us. The protection grade of ATS case is IP30. Overvoltage category Main circuit category III; control and auxiliary circuit category II.

Notes:

The input power supply must be connected in the correct phase sequence. ATS can share N lines but cannot use a 1p circuit breaker to independently control N lines and L lines. To switch the power supply, you need to operate N lines and L lines at the same time. Otherwise, product faults may occur.

Manual/automatic operation can ensure the opening and closing performance of electrical operation, but in manual operation, there is no guarantee due to the different opening/closing speeds of the operators. In manual operation, there's possible for excessive silver alloy loss. Therefore, the selector switch should only be pulled to the manual position after all power has been cut off for inspection and maintenance of the operating system and contact information.

Normally, pull the selector switch to the electric position. When manual operation is required, pull the selector switch to the manual position. After manual operation is complete, pull the selector switch from the manual position to the automatic position.

The dual power supply belongs to the emergency switching switch, and the switching speed and frequency should not be too high.

If testing is required, the switching time should not be less than a frequency of once every minute.

The dual power switch is equipped with a spring interlocking mechanism, and it is strictly prohibited for non-professionals to manually switch the switch when powered on. Incorrect operation can cause contact loss and reduce service life.

Installation

The installation and debugging of ATS should be carried out by professionals and personnel familiar with the switchgear, and corresponding protection and preventive measures must be considered during the work. The wiring method of the main circuit of the switch must ensure that the leads are not subjected to any pressure or strong force. Before installation and debugging, the switch should be checked for any damage or other harmful environmental effects. At the same time, any loose wire heads that may be caused during transportation should be checked to remove dirt, especially on the surface of insulation parts. These dirt may be caused by passing through packaging materials during transportation or during storage. When connecting the primary circuit, attention should be paid to ensuring that the phase sequence of the two power sources is consistent. When connecting the secondary circuit, strict adherence to the wiring diagram listed in this manual should be followed, and attention should be paid to controlling the voltage level of the power supply; The switch must be installed with good grounding. Considering personal safety and the speed of switch switching, the debugging handle is only for trial use. Users should not use the debugging handle to operate under load. When debugging, the switch should be operated with a handle first. If there are no abnormalities, the manual button should be used for electric operation. After there are no abnormalities, the official operation can be carried out.

Maintenance

Maintenance and inspection should be carried out by professionals.

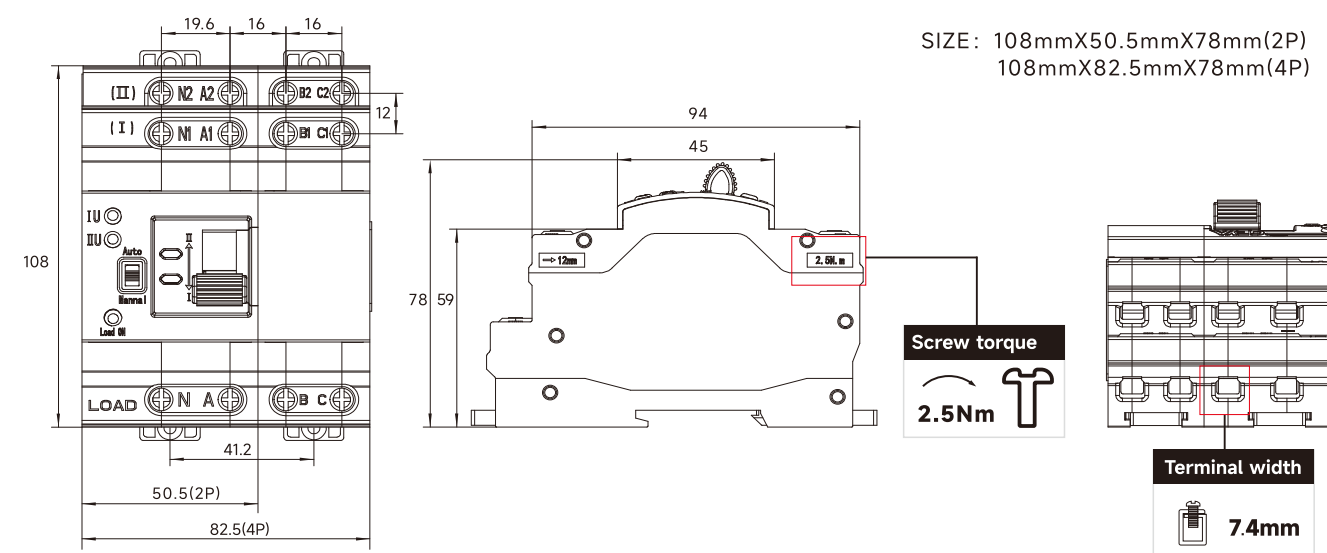
In order to ensure the good performance of the ATS, the first maintenance and inspection should be carried out within 6 months after use. Then do the maintenance and inspection at least once a year. In harsh installation conditions, the frequency of maintenance and inspection should be increased.

If the maintenance and inspection items fail, please remove the dust. b: Please check whether the electrical contact parts are deformed and damaged, and clean the surface. c: metal particles and burnt around it. Rust, acidification and dust on the contact surfaces can cause poor contact, so do some manual work and measure the necessary contact resistance. d: If the ATS is wet or left unused for a long time, please dry it before turning on the power. After removing the dust, use a 500V megohmmeter to measure the insulation resistance of the normal power supply and the AC power supply. The load side and two poles, including the insulation resistance, when using live parts and metal plates, the insulation resistance should not be less than 10MQ.

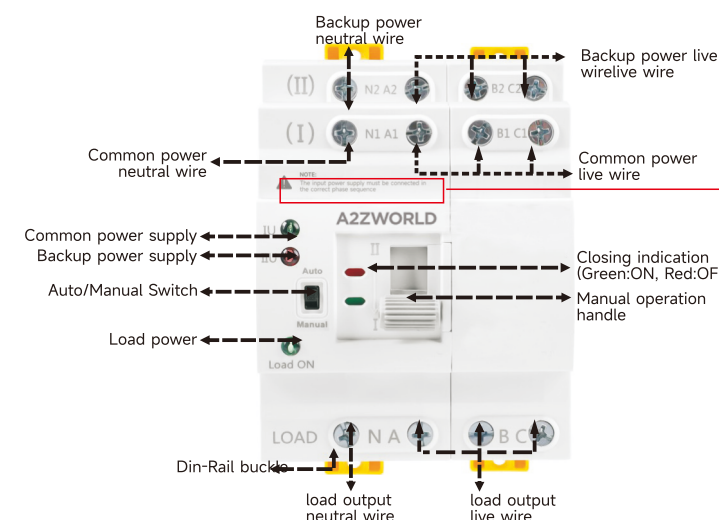
Technical Specification

Rated operating current Ie(A)	63A
Rated insulation voltage UI	690V
Rated impulse withstand voltage Uimp	8kV
Rated working voltage Ue	AC220V/AC400V
Rated frequency	50/60Hz
Class	PC class: can be switched on and loaded without generating short-circuit current
Pole number	2P 4P
Rated short-circuit current Iq	5kA
Short circuit protection device (fuse)	RT16-00-63A
Rated impulse withstand voltage	8kV
Control circuit	Rated control voltage Us: AC220V/110V, 50/60Hz Normal working conditions: 85%Us-110%Us You must use an inverter with a power output of at least 3000W (please use a sine wave. Severe electromagnetic interference may cause the product to malfunction.)
Overvoltage/undervoltage protection range (return to normal 30s)	220V/50Hz undervoltage value: 175V Recovery value: 190V Overvoltage value: 270V Recovery value: 250V (± 5V) 110V/50Hz undervoltage value: 85V Recovery value: 90V Overvoltage value: 140V Recovery value: 135 (± 5V)
Mechanical life	≥8000 times
Electrical life	≥1500 times
Usage category	AC-31B

Size



Wiring instructions



NOTE:
The input power supply must be connected in the correct phase sequence

Common power supply

When the power supply is abnormal (under voltage or over voltage state) Flashing indicator light

Backup power supply

When the power supply is abnormal (under voltage or over voltage state) Flashing indicator light