

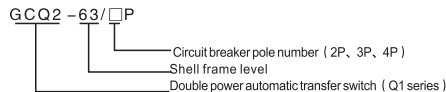
Warning: (Do not violate the rules, or you will be at your own risk.)

1. Non-professionals are prohibited from installing, operating and maintaining the product.
2. The load capacity shall not exceed the rated capacity of the automatic transfer switch, otherwise it will lead to the ATS tripping or burning, and seriously it will endanger personal safety. When the ATS makes changeover or power off due to a fault (over load or short circuit), it must check out the causes and troubleshoot the fault. After that, the conversion can be carried out, first transferring the ATS to the circuit without fault and then switching back. Avoid casually operating with the handle to damage the ATS.
3. The zero line (N) shall not be wrongly connected to the phase line, and the input phase sequence of two power sources shall be the same. Otherwise, the product will burn down. When the selected product is 3-pole ATS, the zero line (N) of common and standby power supply should be connected to the corresponding terminals, otherwise the ATS cannot work normally or will burn out.
4. When doing the frequency withstand voltage test, it cannot make the test on the controller to avoid the damage of internal wiring.
5. Do not install the automatic transfer switch near the high-current electric wires or electromagnetic devices. Avoid the magnetic field interference. Do not install it in a place that is inflammable, explosive, wet, direct-sunlight, high-temperature, vibration, impact and so on, otherwise it will shorten the service life or lead to the product burning and exploding.
6. The product shall not be installed in the place where there is conductive dust or metallic line intrudes. Otherwise, it will damage the product or cause the mechanical failure.
7. The protective grounding of the ATS body shall be reliable to ensure safety.
8. Manual operation of the handle is prohibited when the transfer switch is in the state of automatic rotation control.
9. It is strictly prohibited to operate the ATS with wet hands, otherwise it may cause an accident.
10. It is strictly prohibited to disassemble the product without permission, otherwise you will be at your own risk.

1、 Scope of application

ATO-GCQ2 series double power automatic transfer switch (ATS) is suitable for power supply system of AC 50Hz/60Hz, rated working voltage 230V/400V, rated working current below 63A. Two loop of power sources can be switched according to the requirements. The product has overload, short circuit protection function, and also has the function of output closing signal. It is especially suitable for the lighting circuit in the office buildings, shopping malls, banks, hospitals, high-rate buildings and other places where the power cannot be off for a long time. The product meets the standard GB/T14048.11.

2、 Model and its meaning



3. Normal working conditions and installation conditions

1. The altitude of the installation site shall not exceed 2000m.
2. The upper limit of ambient air temperature is no more than 40 C , and the average of ambient temperature for 24 hours is no more than + 35 C ; the lower limit is not lower than - 5 C .
3. The atmospheric relative humidity is no less than 50% at the ambient temperature of + 40 C . At lower temperatures, a higher humidity is allowable but it should take into account the condensation producing on the surface of the product with the change of temperature.
4. No explosive or hazard medium, and no corrosive gas and dust to damage the insulation of the ATS.
5. No significant shaking, impact or vibration.

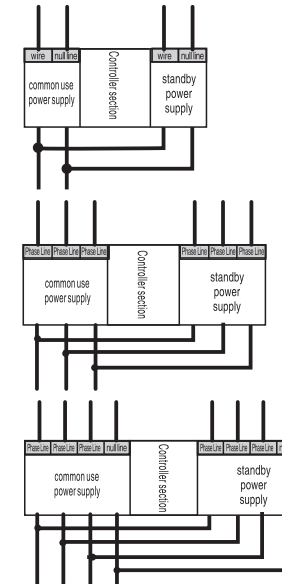
4、 Structure and working principle

1. Dual power automatic transfer switch are mainly composed of two miniature circuit breaker, motor, controller and mechanical rotating device. The switch has 3 operation positions for user's choice: common-used power supply (N) ON, dual power OFF (manual operation), standby power supply (R) ON.
2. High-breaking micro circuit breaker is adopted, with circuit breaker capacity and characteristics.
3. ATS has advantages of simple structure and practical function, easy operation, no noise, small impact, long service life.
4. It has electrical and mechanical double interlock function to ensure that the two power sources cannot be supplied at the same time.
5. Working principle: Dual power automatic transfer switch uses the controller to detect two circuits of power supply. When one power supply is abnormal, the controller makes a logical judgment for the detected result and send an instruction to drive the operating mechanism opening or closing, to ensure safe and reliable power supply to the load.

5、 Important technical parameters

ATSlevel	CBlevel	Electrical life	1500time
Using the categories	AC-33IB	Mechanical life	6000time
Rated operating voltage	AC230V/400V	Rated short-circuit capacity	7.5KA
Rated working current	6A ~63A	Rated short-circuit breaking capacity	5KA
Rated operating frequency	50Hz/60Hz	Switching action time	≤3S(Do not adjust)
Motor control voltage	AC230V	Rated impact withstand voltage	8KV
Rated insulation voltage	AC690V	Conform to the standard	GB/T14048.11

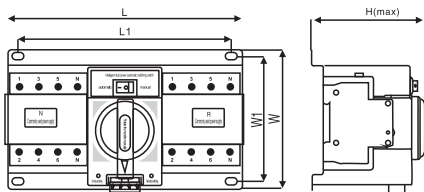
6、 Wiring instructions



The wiring diagram is shown on the left and 2P/3P/4P ATS main part wiring is shown from top to bottom. Other specific matters needing attention are as follows:

1. Do not reversely connect the neutral line (null line) and live line (phase line).
2. Other terminals are closing signal feedback wiring terminals, output power voltage 220V AC. Do not touch with your hands or short circuited. Please wire it according to the instruction near the terminals.
3. For 3-Pole ATS, it must connect the neutral lines of common power supply and standby power supply to the corresponding terminals respectively. Otherwise, the ATS cannot be automatically switched.
4. Do not flip the handle when the ATS is in automatic mode.
5. The signal feedback terminals can be selected to connect or not by user.

7、 Dimensions and installation dimensions



Product Model	Shape Size (mm)			Installation Dimensions (mm)		
	L	W	H	L1	W1	hole
GCQ2-63/2P	150	137	118	128	122	M6
GCQ2-63/3P	185	137	118	165	122	M6
GCQ2-63/4P	220	137	118	196	122	M6

8. Notes on Orders

1. Product name, model specification and quantity.
2. If you have special installation conditions or sites, please provide the relevant technical information with our company to make further discussion.

9、 Warranty and after-sales service

This product is guaranteed for twelve months from the date of production

(whichever date is specified on the product). However, the warranty is invalid in the following cases:

1. After the quality control department of the company investigated, it found that the use of the product does not meet the requirements or the actual use of the product does not conform to the industrial conditions.
2. The procedures of the return of the product is inconsistent with the above. When returning the product, it must provide a valid description of failure.
3. Earthquake, fire, abnormal voltage, other natural disasters and other reasons.
4. Self-disassemble or modify the product and improper maintenance.



ATO

Conform to the standard GB/T 14048.11-2016

GCQ2 SERIES

Dual Power Automatic Transfer Switch

OPERATING INSTRUCTIONS

(in case of any conflict between the content and the material object, the material object shall prevail)

Before installing and using the product, please read the product manual in detail and keep it properly.

100%attention:Focusing every process, pursuing perfection!
 100 quality: Achieve the perfect in quality by avoiding the shortcoming!
 100%service: Your satisfaction is our biggest wish!
 100% brand: To become the first brand of national electrical industry!

Any questions, please contact us...

>>> Email: sales@ato.com
 >>> Phone: +1 800-585-1519
 >>> Website: www.ato.com