

**Dual Function ATS Switch - 125A 4-Pole** 



Please ensure that you read this manual in full before using your machine and follow the maintenance and operation instructions carefully.

### **OPERATING INSTRUCTIONS**

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#### 1. Overview

Mini dual power automatic transfer switch, suitable for dual power supply systems with AC 50Hz, rated working voltage 230-400V, and rated working current below 125A. Selective conversion between two power sources can be performed as needed.

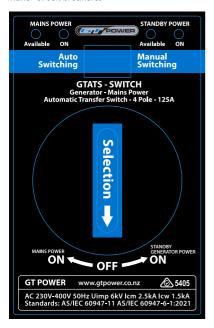
The product has overload and short circuit functions, as well as the ability to output closing signals. Especially suitable for lighting circuits in office buildings, shopping malls, banks, high-rise buildings etc. The product meets the standard: EN/AS/NZS60947-6:2021.

When the switch is in the 'Auto Switching' position, the switch will automatically switch to standby generator power when mains power loss is detected.

Please Note: 'Manual Switching' of the selection switch is only allowed when the upper switch is in the 'Manual Switching' position.

When in the 'Manual Switching' position, the power supply can be switched manually from mains to generator supply by moving the selection switch from 'Mains Power ON' position to the 'Standby Generator Power ON' position.

Please Note: There will be some resistance from the switch, because it is manually activating "break before make" circuit breakers.



#### 2. Product Features

- Strong resistance to interference and high accuracy.
- Complete protection functions, with overload and short circuit protection.
- Small size, high breaking speed, short flying arc, compact structure, and aesthetically pleasing design.
- Quiet operation, energy-saving design, easy installation and operation, stable performance.

#### 3. Operational Conditions

- The ambient air temperature, with an upper limit not exceeding +40 degrees Celsius, a lower limit not exceeding -5 degrees Celsius, and a 24-hour average not exceeding +35 degrees Celsius
- Installation location, with an altitude not exceeding 2000m
- Atmospheric conditions: The relative humidity of the atmosphere does not exceed 50% when the surrounding air temperature is 40 degrees Celsius. At lower temperatures, there can be higher humidity. When the monthly average lowest temperature of the wettest month is +25 degrees Celsius, the maximum average humidity is 90%. Special measure should be taken considering the condensation on the product surface caused by temperature changes.
- Pollution level: Level 2
- Installation environment: There is no strong vibration or impact at the operating location, no harmful gases that corrode metals or damage insulation, no severe dust, no conductive particles or explosive hazardous substances, and no strong electromagnetic field interference.

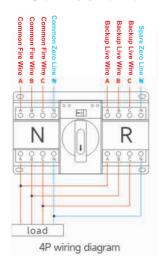


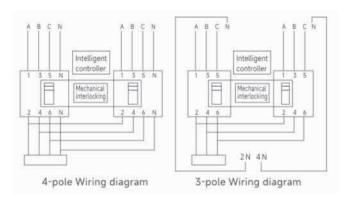
#### 5. Performance

- a. The ATS conversion switch is a complete set of two miniature circuit breakers combined with an electric motor and a mechanical rotating device and is detected by a microprocessor controller on both power sources. When an abnormal circuit occurs, the controller makes a logical judgment on the detection results and drives the operating mechanism to open or close according to the controller's instructions, thereby ensuring safe and reliable power supply to the load.
- b. Rated short-circuit breaking capacity: 5KA
- c. Rated short-circuit making capacity: 7.65KA
- d. Conversion time: 3s
- e. The control voltage of the transfer switch is AC230V
- f. The mechanical lifespan of the transfer switch (between common and backup) is 3000 times, and the electrical lifespan is 1500 times.
- g. Rated insulation voltage: U=500V
- h. Rated working current: 125A

Utilisation Category	Connection and breaking capacity conditions							
	I/Ie	U/Ue	Cos4	Power on time (s)	Cycle time (min)	Number of operation cycles		
AC 33	6.0	1.05	0.5	0.05	I/Ie	l/le		

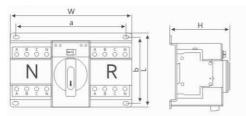
#### 6. Connection and Installation







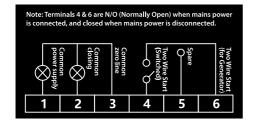
#### 7. Appearance and Installation Dimensions



Model	External Dimension	ons		Installation Dimensions	
	W	L	Н	Α	b
4P	220	135	120	200	122

## 8. 2 Wire Start Terminal Wiring (for Generator Auto Start)

- Terminals 4-6 provide N/O circuit when mains power is ON, and closed circuit when mains power is OFF (to start generator).
- Terminals 1-3 provide 230V for external control circuit/relay requirements.



#### 9. Safety Warnings

- It is strictly prohibited to operate the selector manually without putting the switch in manual mode.
- b. If the circuit breaker is 3-pole, the neutral wire must be connected to the neutral terminal of the transfer switch.
- Carefully and thoroughly read all operating procedures and strictly adhere to them to avoid causing series consequences.
- d. Please do not operate improperly, as it may cause serious damage to product and equipment.
- e. Non-professionals are prohibited from operating and repairing, as this may result in electric shock hazards or product damage.
- f. It cannot be directly installed in places that are flammable, explosive, humid, exposed to direct sunlight, high temperature, vibration, impact etc, otherwise, it will shorten the service life or cause the product to burn or explode.

Congratulations on your new GT POWER product. We are proud to have you as our customer and will strive to provide you with the best service and reliability in the industry. This product is backed by our extensive warranty and service network. To locate your nearest distributor or service agency visit www.euroquip. co.nz or email us at customerservice@euroquip.co.nz.