

# ATS OPERATING MANUAL

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**SAVE THESE INSTRUCTIONS**  
Important Safety Instructions

# 5KW Diesel Generator

## ATS Operation Instruction

### 1.Summary

ATS products mainly applies as a standby power supply. Its functions when external power network blacks out, and the controller engages the Gen-set automatically in 2-6 seconds and continues to supply power for the user's loads. When the external power source recovers, the controller stops the Gen-set and switches the user's loads to external power network.

The gen-set adopt single-chip computer as the core of control system, using digital to manitor the state of gen-sets and achieve the whole process of generator automated working. Mainly used in radar units, posts, camps, posts and telecommunications, finance, hospitals and the user who need power supply quickly after power failure.

### 2.ATS operation steps

#### 2.1. LED indicator description

- ① **HOUSE NET** indicator lamp (Red) ——City power input
- ② **GENERATOR** indicator lamp (Green) ——Generating output
- ③ **AUTO** indicator lamp (Green) ——Auto transfer button
- ④ **FAILURE** indicator lamp (Red) ——Start failure in three times;  
stop by low fuel or others

#### 2.2.Operating steps

##### (1) **AUTO setting**

Pressing **AUTO** button, and **AUTO** indicator lamp is lighting,now the ATS operating system at the state of automatic inspection .

##### (2) **Running**

When the ATS is running, the default of supply power is used by city power (**HOUSE NET** indicator lamp is lighting). If the city power system fail to supply power, **HOUSE NET** indicator lamp go out, ATS will start the generator in 2 seconds.After start successful and wram up 5 seconds, ATS automatically switch to generator

supply power, and the **GENERATOR** indicator lamp is lighting; If city power restore to supply power over 10 seconds, **HOUSE NET** indicator lamp is lighting, ATS automatically switch to city power supply, the generator will stop after 5 seconds at the state of no-load. **GENERATOR** indicator lamp go out.

**(3) Ternary cycle start protection**

If the generator start failure because of low temperature or other reasons, the ATS control system will take a ternary cycle start protection. The generator will first start in 3 seconds, If fail to start first will enter the second start after 5 seconds, If fail again will enter the third start after 5 seconds, If three time all fail to start, the generator will not start again, and **FAILURE** indicator lamp is lighting. If need to cancel fault alarm, please press the **Auto transfer button** to close.

**(4) Generator shutting**

If city power restore to supply power over 10 seconds, **HOUSE NET** indicator lamp is lighting, ATS automatically switch to city power supply, the generator will stop after 5 seconds at the state of no-load. **GENERATOR** indicator lamp go out. At the state of **AUTO** mode, if need generator stop, please put the switch to **MANUAL**, the generator will stop at once.

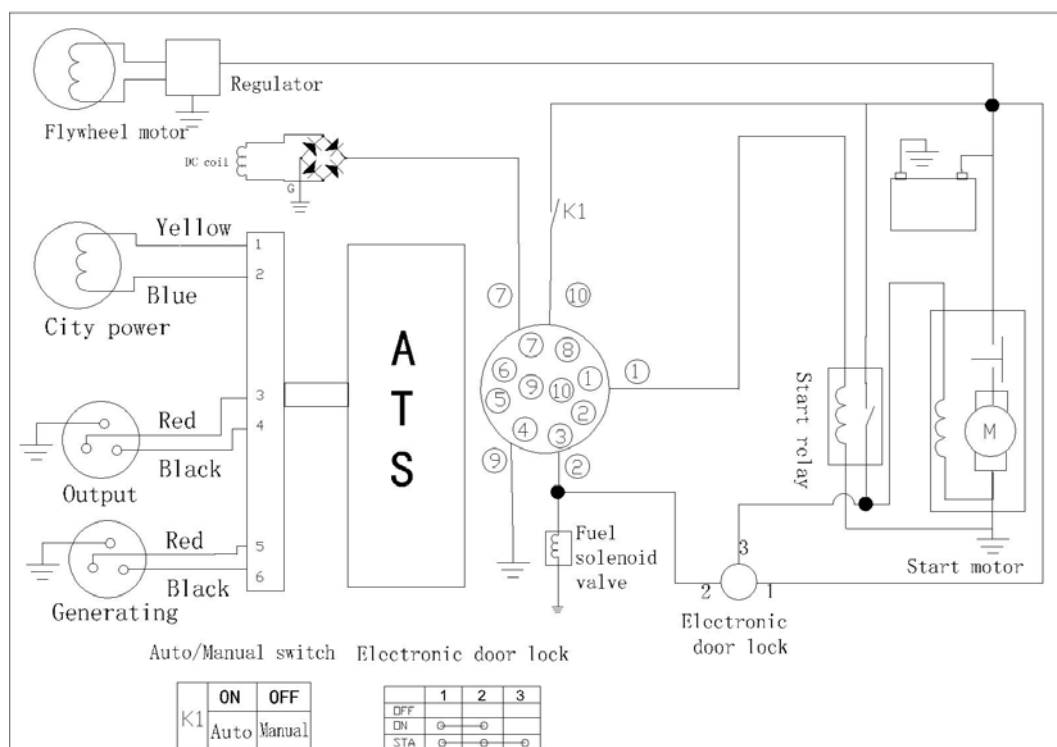
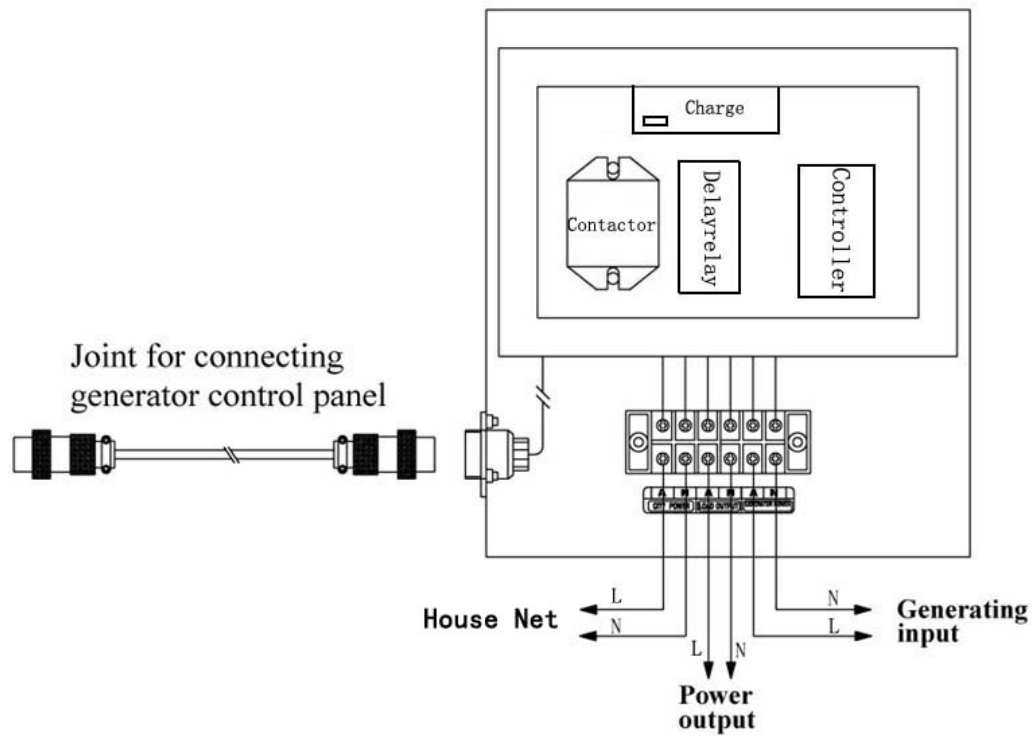
**(5) MANUAL**

If not need **AUTO** function, please put the switch to **MANUAL**.

### **3. Battery maintenance equipment**

In the inside of the battery with constant current and floating devices, in the state of city power (Voltage 90 ~ 250V), the organizations may charge the constant-current on the battery (charge current 2A), when the battery is fully charged, the charge is controlled by constant-current charge switch into floating charging to compensate for the loss of power to ensure that the batteries have sufficient power unit can be activated at any time.

### Single-phase wiring



## 5.Cautions

- (1) Please according the power,voltage and other parameters to choose ATS model before operation;
- (2) ATS output must be sure not to connect with city power directly.
- (3) Please use AUTO function in the normal manual state.
- (4) Note to put the "ELECTRONIC DOOR LOCK" in "OFF" on the contorl panel.
- (5) Note to put the "Air break Switch" in "ON" on the control panel.
- (6) Equipment must be placed in the ventilation, drying, to avoid high temperature, high humidity or easy vulnerable to shaking areas.
- (7) Risk of electrical shock.Do not remove cover.Refer servicing to qualified service personnel.