

# BOXED ATS SYSTEM USER MANUAL

## 1. PRODUCT INSTRUCTION

ATS system is designed for mains power supply off and starts generator for emergency power supply on.

When mains power supply off, the generator will start in 2-6 seconds, and then supply power to load. When mains power supply on, the ATS system will automatically transfer switch to main power supply, and then stop the generator in 2-6 seconds.

1.1 This system use SCM core and digital technics to control and manager automatic working system.

1.2 Easy installation and operation

1.3 Automatic working without people inspection. When transfer broken the system will remain error record, and indicate engineer to inspect and re-setup. Don't worry about mains power supply and generator power supply action same time.

1.4 There is a battery charger inside, and charge the battery of generator automatically.

## 2. OPERATION STEPS

Use the cable to connect the ATS box to the generator control panel, and switch the electric door lock to "OFF" position. (Only for diesel generator, for gasoline generator please switch to "ON" position)

### 2.1 Automatic portion setup

Press AUTO button, the indicator light AUTO will be on, ATS system works automatically.

### 2.2 ATS system working

When the ATS system works automatically, if mains power supply off, ATS system will automatically open air damper control and start the generator in 2 seconds, and wait the generator run 5 seconds, system will switch load to generator power supply.

### 2.3 ATS system start 3 times

When generator can not start well, ATS system will start generator circularly 3 times as below

Mains power supply off → generator start 3 seconds first time → start unsuccessfully and wait 5 seconds → generator start 4 seconds second time → start unsuccessfully and wait 5 seconds → generator start 5 seconds third time

NOTICE: When generator can not start successfully in 3 times, the indicator light "FAULT" will be on.

### 2.4 Generator stop

When mains power supply on again, ATS system will transfer load to mains power supply, and generator will stop after running 5 seconds without load.

### 2.5 Manual start

If you don't need ATS system to work automatically, please put the switch to "MANUAL" position.

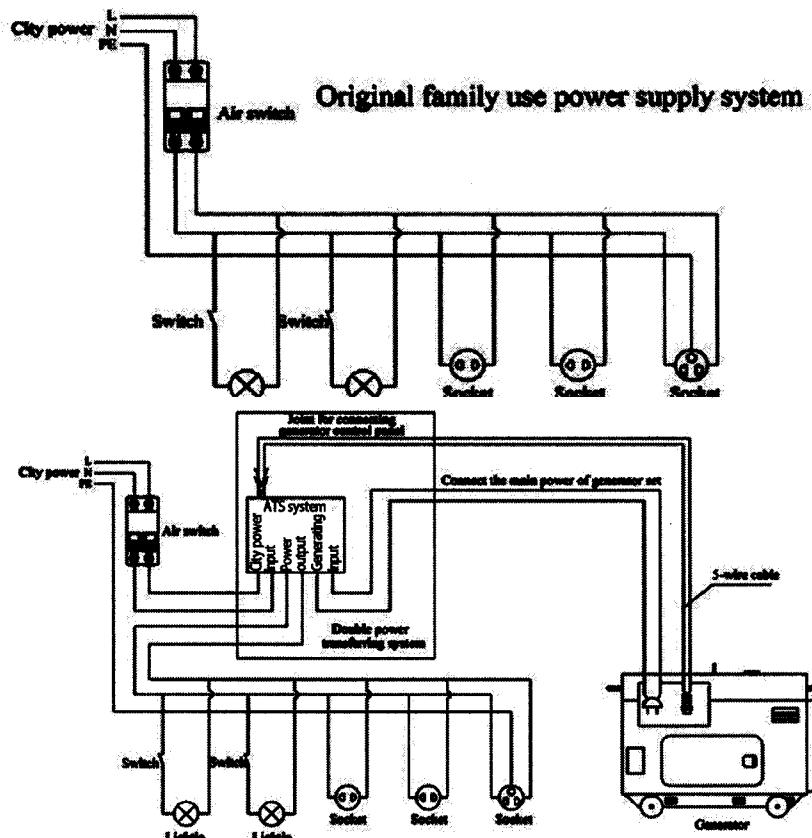
### 2.6 Automatic air damper control

If generator have air damper control, when generator start, ATS system will automatically open it and close it after generator start successfully.

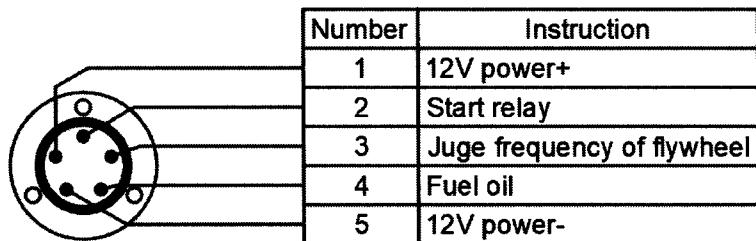
## 3. Battery maintenance

ATS system will charge the battery automatically, the charge current is 2A.

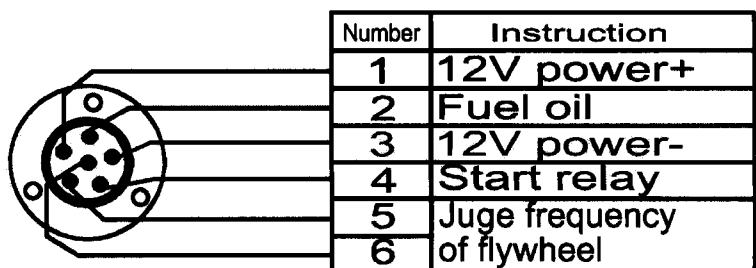
## 4. ATS access to power system diagram



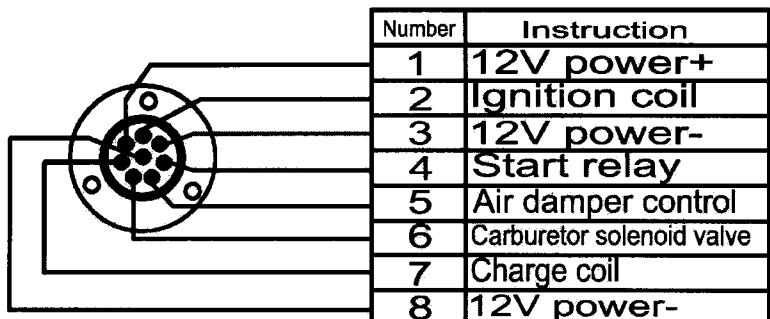
## 5. Circular connector wiring



(3KW-15KW) Diesel six cores cable



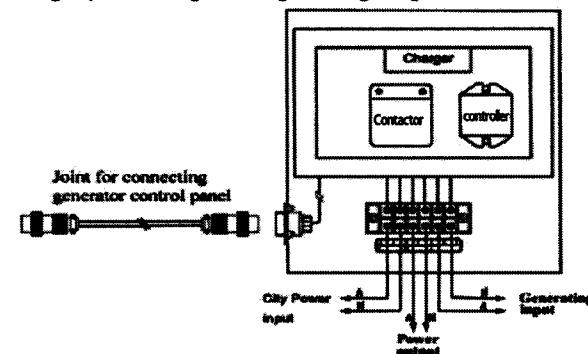
(3KW-10KW) Gasoline eight cores cable



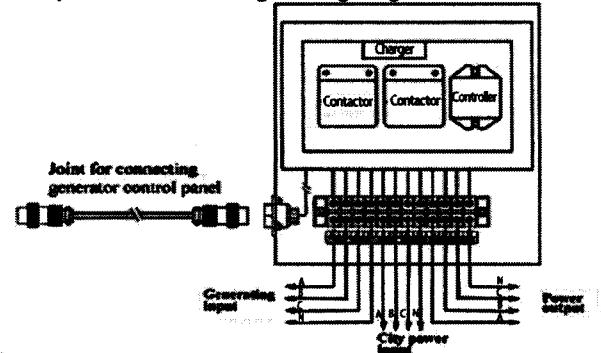
(3KW-10KW) Gasoline eight cores cable

## 6. Wiring diagram

### 6-1 Single-phase.single voltage wiring diagram:



### 6-2 Three-phase.Double voltage wiring diagram:



## 7. Notice

- 1 ATS power must be bigger than load power.
- 2 Must add a AIR-BREAKER to protect ATS system,when you connect mains power cable to ATS box.
- 3 Must switch the electric door lock to "OFF" position.(Only for diesel generator,for gasoline generator please switch to "ON" position)
- 4 Please run generator successfully at "OFF" position first,then you can use "AUTO" for working automatically.
- 5 Please turn air-breaker switch to "ON" position when use ATS system.
- 6 Only electrician can open box for inspection and repair,there is high voltage danger.