

BOXED ATS SYSTEM USER MANUAL

1. PRODUCT INSTALLATION / INSTRUCTION

ATS systems are designed for when there is a drop or loss of incoming mains power, ATS panels designed to automatically start and stop a generator for emergency backup power supply.

When mains power supply is low or lost the generator will start in 2-6 seconds and then supply power to consumer unit or switch. When mains incoming power supply returns the ATS panel will automatically transfer back to incoming supply mains power supply and then stop the generator within approx. 15 seconds.

1.1 This system uses SCM core and digital technics to control and manage the automatic working system.

1.2 Easy installation and operation

1.3 Automatic working with no maintenance required. If transfer panel has a fault it will register a 'GREEN' fault light on the panel and indicate user/engineer to inspect and re-set. Don't worry about incoming mains supply and generator power supply LED on at the same time this is normal when changing over.

1.4 There is a battery charger inside the ATS panel, this will ensure when your generator isn't running that the battery will charge thoroughly.

2. OPERATION STEPS

Use the ATS input cable (Supplied) to connect the ATS panel to the generator control panel. Turn the ignition switch on the front panel of the generator to the 'OFF' position for diesel generators and the 'ON' position for petrol generators.

2.1 Automatic position setup

Press AUTO button, the indicator LED light 'AUTO' will illuminate, ATS system is now set and in automatic mode.

2.2 ATS system working

When the ATS panel works automatically, if there is drop or loss in incoming mains power the ATS system will automatically open air damper control and start the generator in approx. 3 seconds, the generator will run for 5-6 seconds longer to start and will apply load to the ATS panel and then consumer unit.

2.3 ATS panel will attempt starting or the generator 3 times.

WARNING: When generator cannot start successfully within 3 attempts the indicator light "FAULT" will illuminate. You will need to reset the ATS panel to remove the 'GREEN' fault light.

2.3 Generator Stop

If the generator fails to start after 3 attempts

Mains power supply lost-, generator start 3 seconds first time -> Start unsuccessfully and wait 3 seconds - generator start 4 seconds second time -, Start

unsuccessfully and wait further 5 seconds -> generator start 5 seconds third time - Start

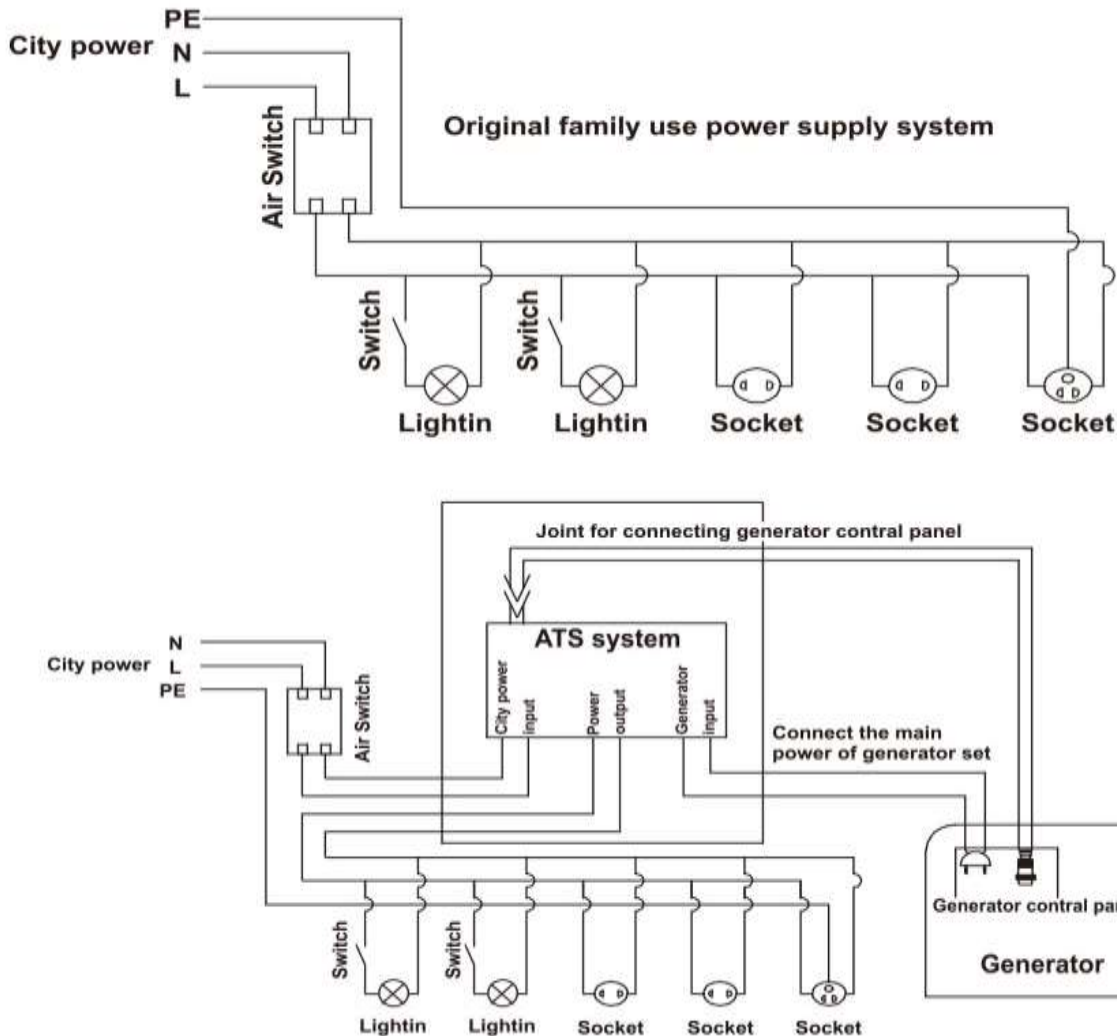
When mains power supply returns ATS panel will transfer load to incoming mains supply and generator will stop running approx. 15 seconds later.

2.5 Automatic air damper control

If generator have air damper control to start, ATS panel will automatically open and close it before generator starts and stops.

3. Battery maintenance

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



2.4 Manual Start

If you don't need ATS panel to work automatically you can use the 'MANUAL' feature by pressing switch to manual mode.

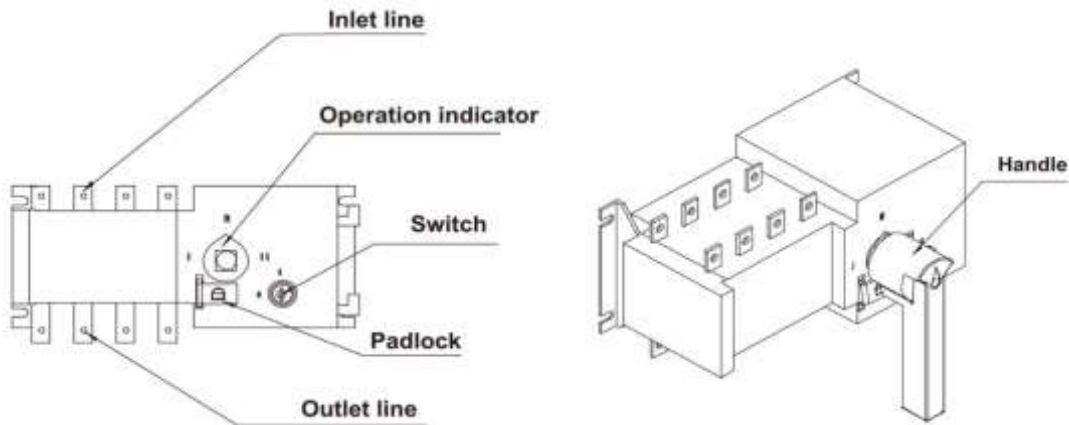
Manual Mode:

1. Switch: Control internal wiring power. If switch is turned to the position 'I' ATS panel is turned 'ON' and will start generator automatically if incoming power drops or is lost. If switch is in the position 'O' ATS panel is turned OFF and no power from either incoming or generator.
2. Manual mode: Turn safety key (Supplied) first to manual position on switch and then turn handle to 'II' to activate manual generator supply mode. **WARNING** Whilst in manual mode you DO NOT try use auto mode without first turning the safety key back to auto position.
3. Manual handle: Before using manual handle, **WARNING** mains power supply needs to be turned to position 'OFF'. **DO NOT** try to change switch from auto to manual without first isolating incoming supply.
4. Padlock: Maintenance only. Turn the switch & handle to position "O" then lift up the padlock. When the padlock is in place internal wiring power isolated, switch and manual handle will now not work.

ATS Switch:

1. When handle & switch turned to position 'O' it will turn off both city power and standby power.
2. Operation indicator: showing the electric power state. "I" Incoming Supply, "O" is Double power OFF and isolated, "II" is Generator supply.

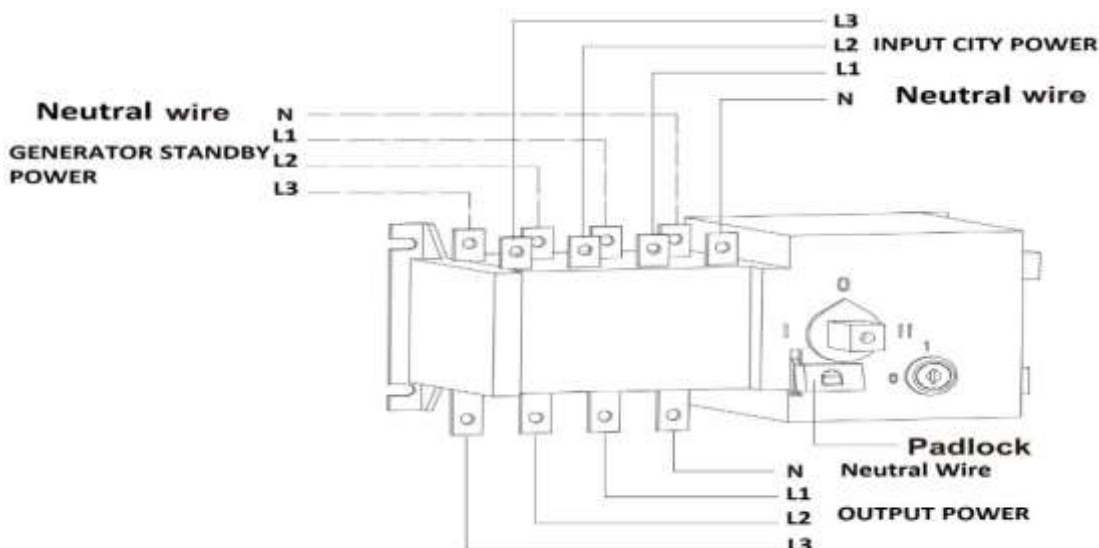
6. **WARNING:** If the generator fails to start after 3 attempts Mains power supply lost-, generator start 3 seconds first time -> Start unsuccessfully and wait 5 seconds - generator start 4 seconds second time -, Start



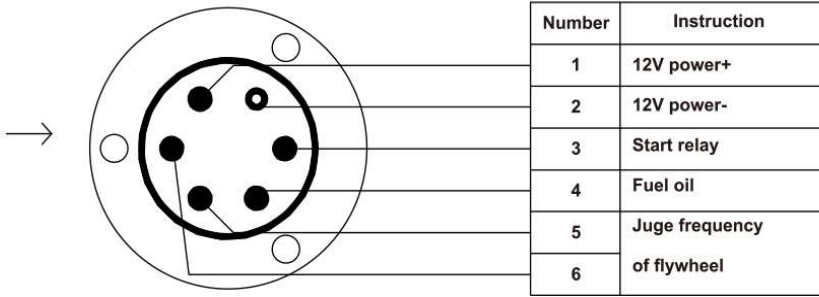
ATS Mode

- 6.1 ATS power must be equal or smaller than load power required.
- 6.2 Recommended you install a AIR-BREAKER to protect ATS system when connecting mains power cable to ATS panel
- 6.3 Operator MUST turn ignition key to 'OFF' position on the generator front panel to enable the generator to AUTO stop & start.
- 6.4 Before using the ATS panel in automatic mode you should run the generator with the ATS panel turned off.
- 6.5 Please run generator successfully at "OFF" position first, then you can use "AUTO" for working automatically.
- 6.6 Please turn air-breaker switch to "ON" position when ATS system is in use. (If installed)
- 6.7 Only qualified electrician can open panel for inspection and repair, **DANGER** High Voltage
- 6.8 Press 'AUTO' button on the front panel, Mains incoming supply should be illuminated

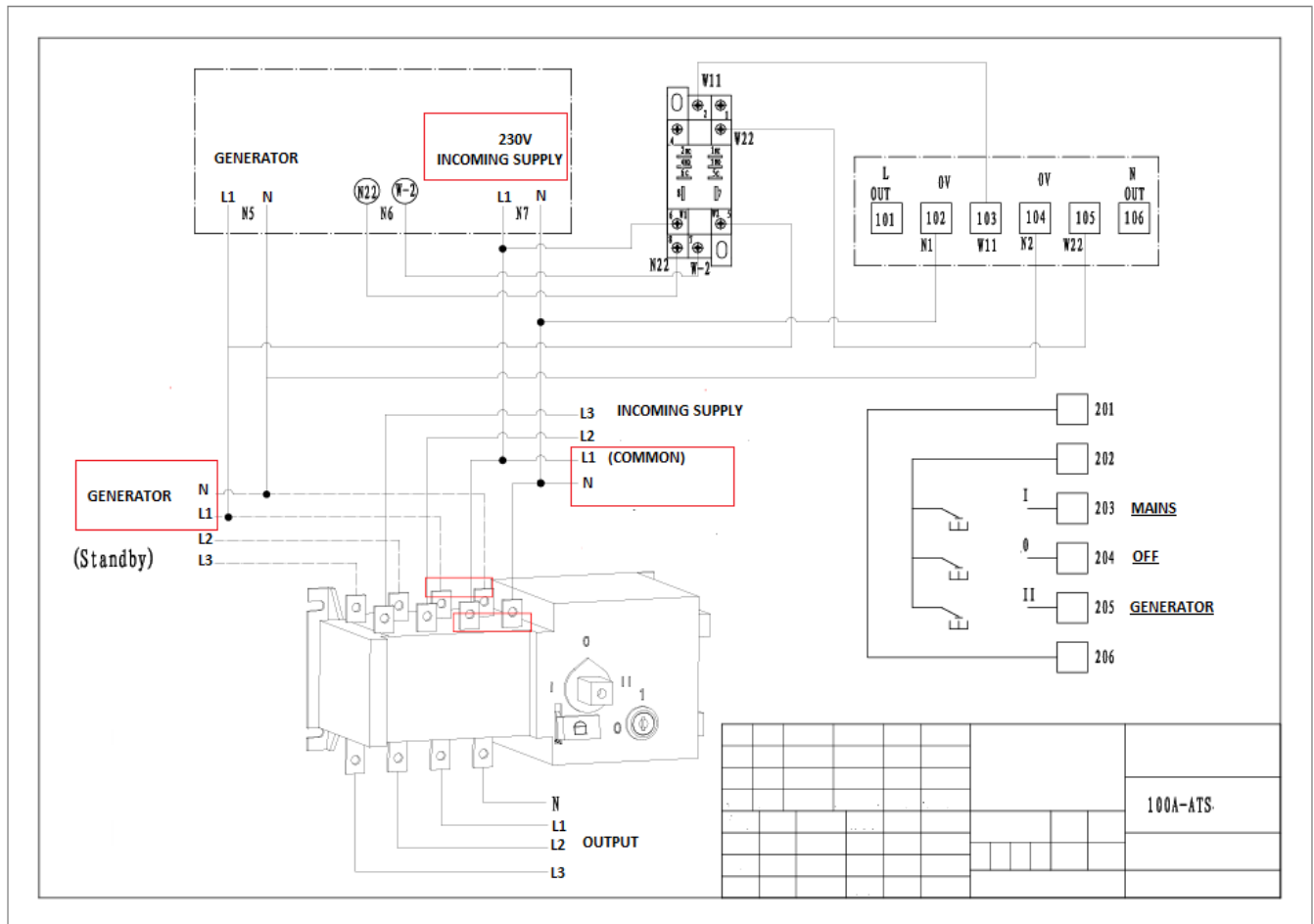
Wiring Diagram 415v 3 Phase



ATS Port Configuration



Wiring Diagram For both 3 Phase & Single Phase



Connecting up 230v Single Phase

Using 'neutral' and 'L1' (Common) connect up incoming and output as indicated in the above illustration. No other wires should be connected otherwise the ATS switch will not work.

Earthing.

All earthing should be to the casing, if terminal isn't already provided a suitable earth bolt needs to be installed.