

# 4PRO

## ATS-63A-4P-RSC

### AUTOMATIC TRANSFER SWITCH



## DESCRIPTION

The ATS-63A-RSC changeover switch is designed to automatically transfer load circuits from main power source to reserve source in a wide variety of 1-3 phase applications.

## FEATURES

- 1-3 phase 4 pole operation;
- Auto and Manual/Remote mode switch;
- Electric motor gear activated switching;
- 3 position switch handle ("I"- "0"- "II");
- Generator start/stop remote control outputs;
- External ATS/AMF controller remote control inputs;
- Built-in mechanical and electrical interlocking;
- High reliability and low power consumption due to fixed positions of the change-over mechanism energized during switching process only;

## TECHNICAL SPECIFICATIONS

- Rated Operating Voltage:
  - 230/400V(2-3 phase);
  - 230V (single phase);
  - 120/208V(3 phase);
  - 120/240V (2 phase).
- Voltage frequency: 50/60Hz.
- Switching poles: 4
- Rated operating current: up to 63A per device pole;
- Phase current: up to 63A
- Control voltage: 175-265VAC
- Working temperature range: от -5°C до +45°C
- Humidity: up to 50%
- Power loss: not more than 5W;
- Switching time: 3-4 sec
- Category: CB
- Weight: 1.4 kg

## INPUTS AND OUTPUTS

- Normal source inputs: R, S, T, N;
- Reserve source inputs: R, S, T, N;
- Load circuit outputs: R, S, T, N;
- Generator start/stop remote control outputs;
- External ATS/AMF controller remote control inputs.

## INSTALLATION

The device must be installed in a power control cabinet. The device frame must be grounded.

In case if the unit is used in single- or two-phase application, it is important to have the control input pairs marked as "1" and "N") connected to active Normal- and Reserve source phases according to the connection diagrams below. Otherwise, the device will not switch automatically.

## OPERATION

Device monitors normal ("I") and reserve ("II") source phase voltages (internally connected to the "5" and "N" terminal pairs).

### AUTO MODE:

In case if there is the normal source phase voltage, the device connects the load circuits to the normal power source inputs.

If the normal source phase voltage is lost, the device comes to a waiting mode keeping the load circuits connected to the normal power source inputs.

In case if there is the reserve source phase voltage (while normal source phase voltage is absent), the device connects the load circuits to the reserve power source inputs.

If the reserve phase voltage is lost, the device comes to a waiting mode keeping the load circuits connected to the reserve power source inputs.

In case if the normal source phase voltage is recovered, the device connects the load circuits to the normal power source inputs independently on having the reserve phase voltage or not.

Normal power source inputs always have the priority.

### MANUAL/REMOTE MODE

In this mode, device could be switched manually using the removable handle or via their remote control inputs connected to external ATS/AMF controller relay outputs.

## TROUBLESHOOTING

If the load circuits are not powered while having the active power supply inputs energized, it may be caused by the overload protection. To solve this failure, please turn the auto mode switch to the OFF position, then check your load circuits and phase sequence. After the overload problem is solved, rotate the manual switch handle on both sides subsequently to re-activate the connection. Then turn the auto mode switch to the ON position again.

In case if the device does switch automatically, please check these items:

- the automatic mode switch (should be the ON position);
- voltage between the device control inputs (1 and N);
- normal and reserve control input fuses .

## PRECAUTIONS

Hazardous voltages. Risk of electric shock.

The device power and control terminals are connected to high voltages and can cause an electric shock when incorrectly installed.

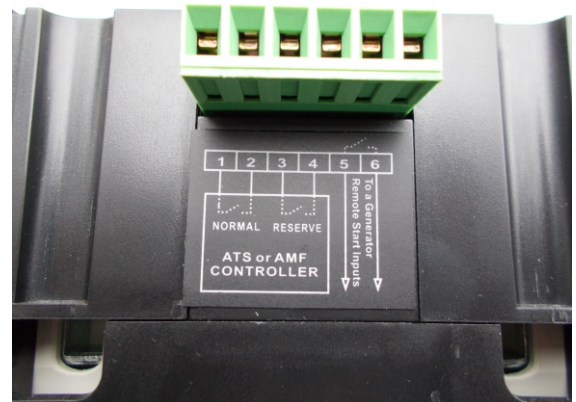
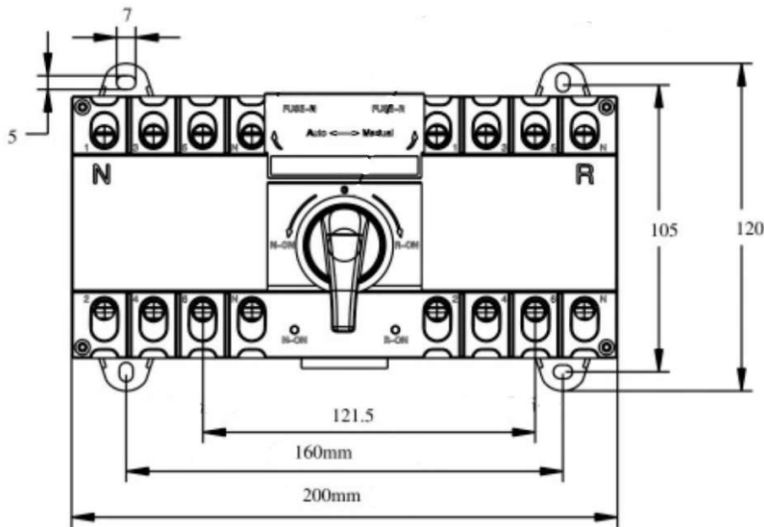
Do not touch any live wires or related wire contacts.

## OPERATIONAL LOGIC

AUTO MODE	STATE #1	STATE #2	STATE #3	STATE #4
Normal Power Source	ACTIVE	ACTIVE	NOT ACTIVE	NOT ACTIVE
Reserve Source Availability	NOT ACTIVE	ACTIVE	ACTIVE	NOT ACTIVE
Load is switched to	Normal Source	Normal Source	Reserve Source	Last position
Genset Remote Outputs (4,5) start output	Open	Open	Closed	Closed

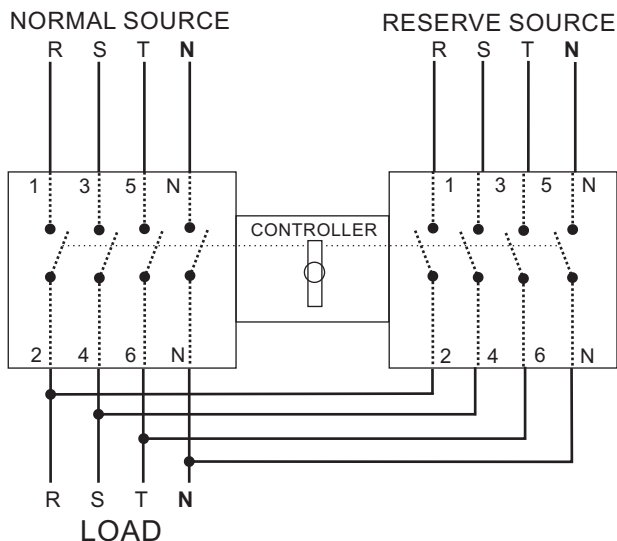
MANUAL/REMOTE MODE	STATE #1	STATE #2	STATE #3	STATE #4
Normal Power Source Remove input pair (6,7)	CLOSED	CLOSED	OPEN	OPEN
Reserve Power Source Remove input pair (8,9)	OPEN	CLOSED	CLOSED	OPEN
Load is switched to	Normal Source	Normal Source	Reserve Source	Last position
Genset Remote Outputs (4,5) start output	Open	Open	Closed	Closed

## CONTROLS AND DIMENSIONS

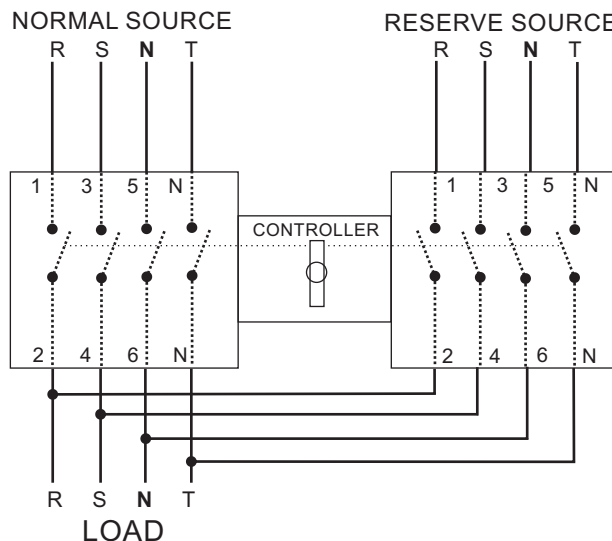


# CONNECTION DIAGRAMS

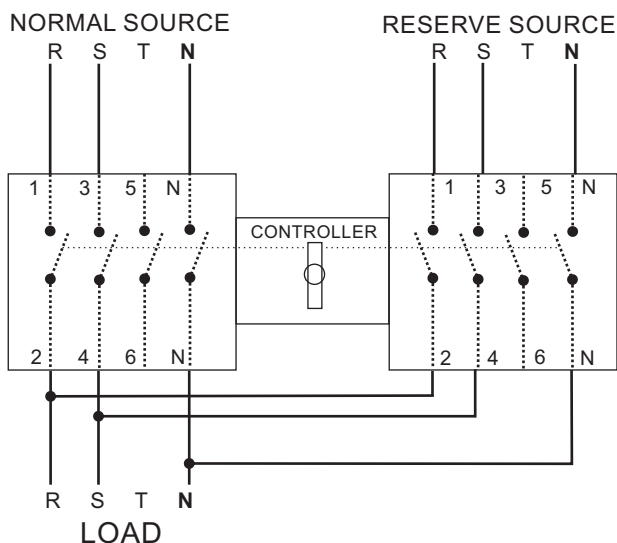
## 230/400 VAC 3 PHASE CONNECTION



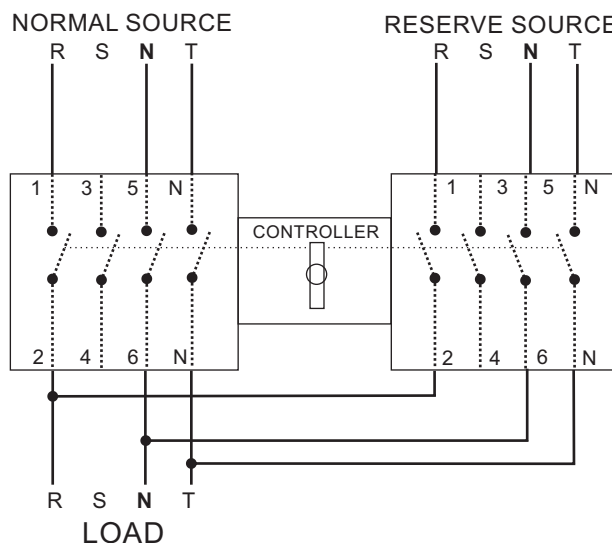
## 120/208 VAC 3 PHASE CONNECTION



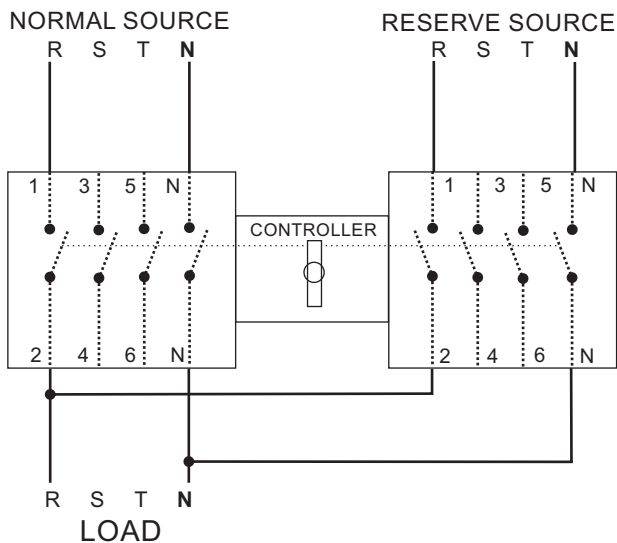
## 230/400 VAC 2 PHASE CONNECTION



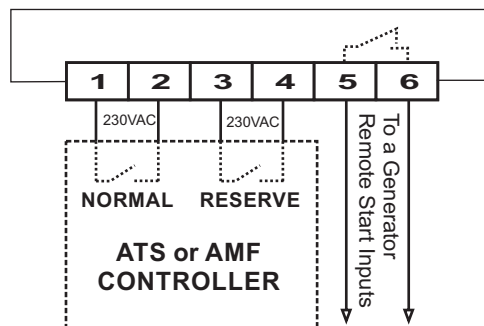
## 120/240 VAC 2 PHASE CONNECTION



## 230 or 240 VAC SINGLE PHASE CONNECTION



## CONTROL INPUTS / OUTPUTS



R, S, T - SOURCE PHASE WIRES  
N - SOURCE PHASE NEUTRAL WIRES