

Standard\_ IEC60947-6-1, IEC60947-3

Automatic Transfer Switch

## Overview

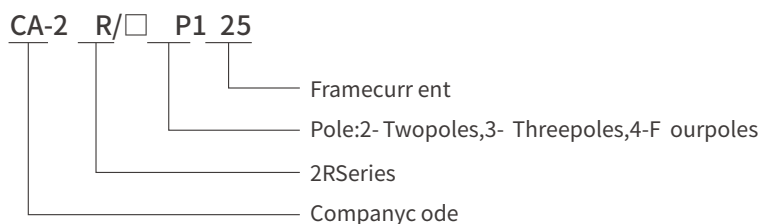
The CA2R dual power automatic transfer switches, a newly developed and innovative solution for household power transfer. These switches are designed to test the normal and standby power supply, ensuring that backup power is readily available in case of any abnormalities. Specifically designed for rail-noise power distribution boxes, this product is perfect for households looking for a reliable and safe power supply.

CA2R automatic transfer switches are suitable for emergency power systems 400v, 125A with AC rated current of 50V or 60Hz compact structure, reliable conversion, easy installation, and maintenance. long life. It is widely used in various occasions where continuous power failure is not allowed. It can be operated electrically or manually by ATS, and the controller.

This product complies with the requirements of Low-voltage Switch Gear and Control Gear, as specified by IEC60947-6-1 and IEC60947-3 for functional equipment and transfer switch equipment. Choose the EK2R dual power automatic transfer switches for uninterrupted power supply and peace of mind.



## Product Model and Classification



## Technical Data

Rated current Ie	16,20,25,32,40,50,63,80,100,125A
Insulation voltage Ui	AC690V
Rated voltage Ue	2P: AC230; 3P, 4P: AC400V
Class	PC class: can be switched on and loaded without generating short-circuit current
Use category	AC-33iB
Life	Electrical: 2000 times; Mechanical: 5000 times
Rated condition short-circuit current Iq	50kA
SCP (fuse)	RT16-00-63A
Rated impulse withstand voltage	8kV
Control circuit	Rated control voltage Ue: AC220V, 50Hz; Correct working condition 85% Ue ~ 110% Ue
Auxiliary circuit	AC220V/AC110V 50/60Hz
Contact transfer time	<50ms
Operating transfer time	<50ms
Return transfer time	<50ms
Off-time	<50ms
Temperature range	-5°C ~ +40°C average temperature not more than 35°C in 24 hours

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## Contour Dimensions and Installation Dimensions

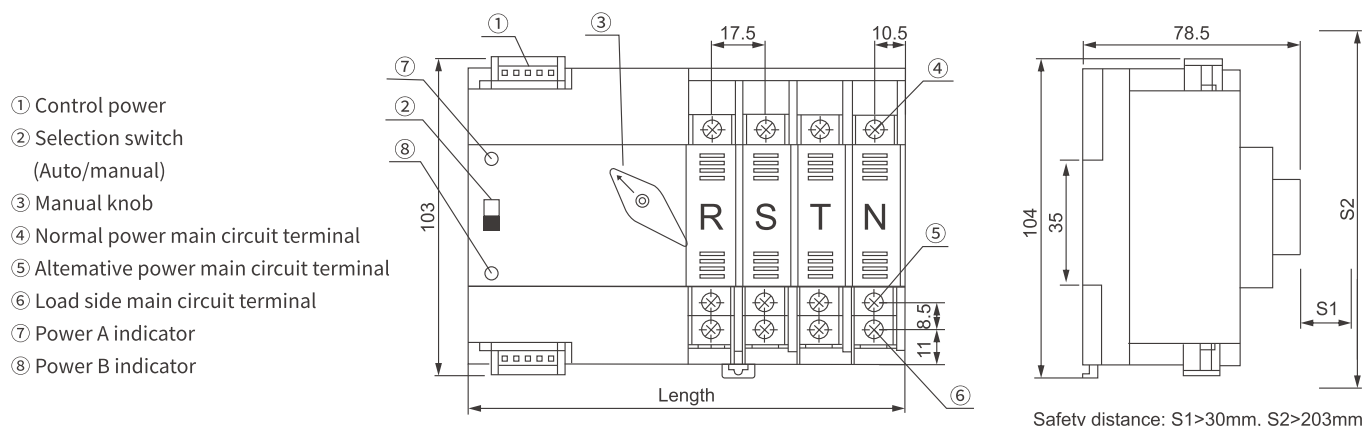


Table dimensions

Pole numbers	2P	3P	4P
Length	107.5	125	142.5

## Panel Description

Normal type:  
Source A: City power  
Source B: Backup power

**Note:**  
For solar type, the backup power must be connected to the city power.

Solar type:  
Source A: PV (AC power by inverter)  
Source B: Must be connected to the city power

C-NC: Generator start signal contact

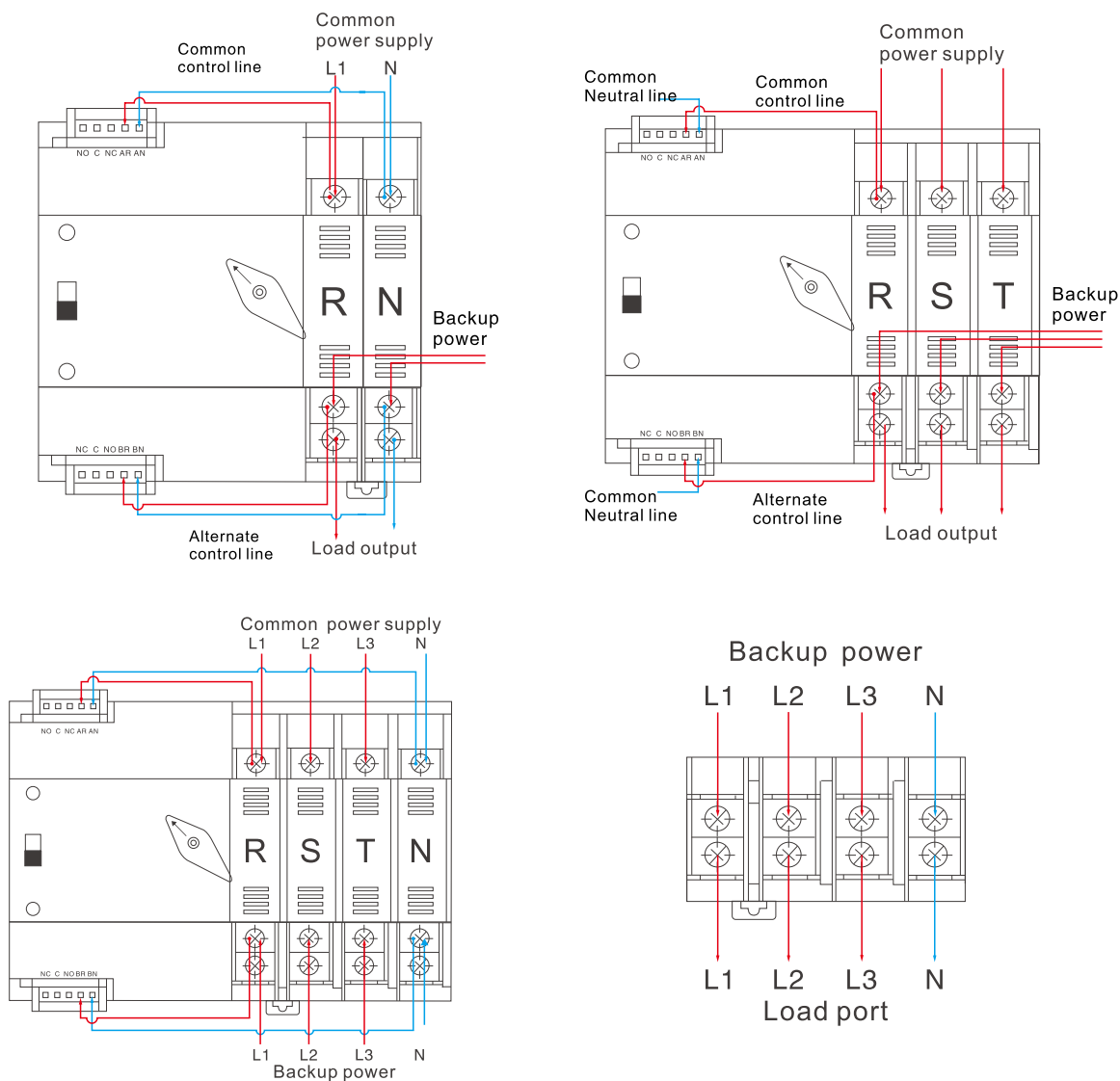
Rated control voltage Us: AC220~230V;  
If the product is using under the condition of voltage less than 190V, it will burn.  
Rated control voltage Us: AC110V;  
If the product is using under the condition of voltage less than 95V, it will burn.

Suggestion: It is best to add over-voltage and under-voltage protectors of the circuit.

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## Wiring Diagram of Controller



- (Must be connected) Take zero line and fire line from the common control incoming line to connect AR (live wire) / AN (neutral line);
- (Must be connected) Take zero line and fire line from the backup control incoming line to connect BR (live wire) / BN (neutral line);
- The power indication signal is passive output, and the generator signal is taken (common) and (normally closed);
- Connect the load end at the lower end of the (standby power supply side), Stepped wiring;
- There is an isolation board on the load. When wiring, first remove the isolation board. connect the load and then install the isolation board (it is recommended to connect the load first, then connect the backup power supply).

**Note:** Normal type wiring same as solar type. For solar type, the backup power must be connected to the city power.