

General

The dual power automatic switch is a newly developed miniature household power switch, which is mainly used to test whether the main power supply or standby power supply is normal. When the normal power supply is abnormal, the standby power supply starts to work immediately, which ensures the continuity, reliability and safety of power supply. This product is specially designed for household rail installation and is specially used for Pz30 distribution box.

The dual power automatic switch is suitable for emergency power supply systems with 50 or 60 Hz and rated 400V AC. ATS has the characteristics of solid structure, reliable conversion, convenient installation and maintenance and long service life. It is widely used in various occasions where power failure cannot be sustained, and can be operated by electricity or manually. ATS is composed of TSE and controller.

According to IEC 60947-6-1, Part 6-1; multifunctional equipment and switchgear is formulated, it can be seen that ATS is the most qualified low-voltage switchgear and control device.

General

IEC60647-6(1999)/GB14048.11-2002 "low voltage switchgear and control equipment multifunctional no.1:automatic transfer switches"

Control device: built in controller

Product structure: no power off, guide rail type, high current, small volume, two-stage type, simple structure, ATS integration

Features: fast switching speed, low failure rate, convenient maintenance and reliable performance

Wiring mode: front plate wiring

Conversion mode: power grid to power grid, power grid to generator, photovoltaic to urban power, automatic switching and self recovery

Product frame: 100

Product current: 10, 16, 20, 25, 32, 40, 50, 63, 80, 100A

Product classification: direct load type

Pole No.: 2, 3, 4

Standard: GB/T14048.11

A T S E: PC class

Switching time: 0.008s/8ms

Normal operation time and installation conditions

Ambient air temperature

The maximum temperature shall not exceed 40° C the minimum temperature shall not be lower than -5° C, and the average temperature within 24 hours shall not be higher than 35° C.

Altitude

The altitude of the installation site should not be higher than 2000m.

Atmospheric conditions

When the maximum temperature reaches 40° C, the relative humidity of the installation site should not exceed 50%; when the temperature is the minimum temperature -5° C, the relative humidity is higher, for example, the temperature is 25° C, and the relative humidity is 90%. Due to the temperature change, special measures should be taken to deal with the occasional condensation on the surface of the product.

Pollution grade

The pollution grade of ATS conforms to grade 3 specified in GB/T14048.11.

Installation category

The installation type of ATS conforms to the category specified in GB/T14048.11.

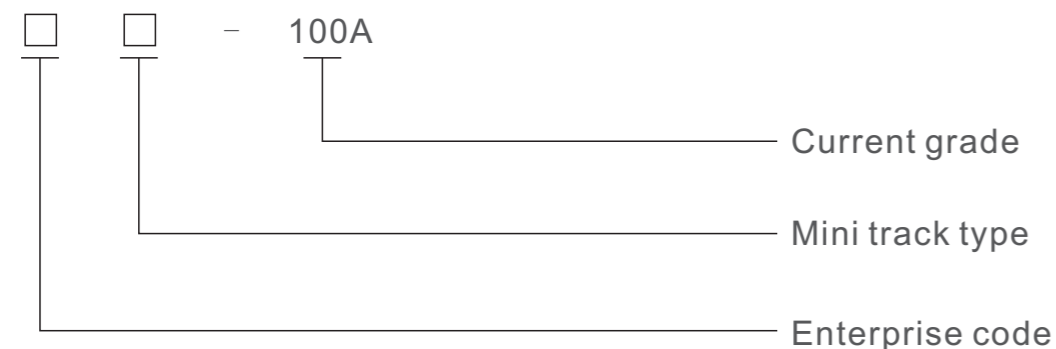
Installation conditions

ATS can be installed vertically in control cabinet or distribution cabinet. Make sure the installation distance meets the requirements in Figure 8.

Distribution Apparatus

YCQ4E/YCQ4R PC type Automatic Transfer Switch

Model and meaning

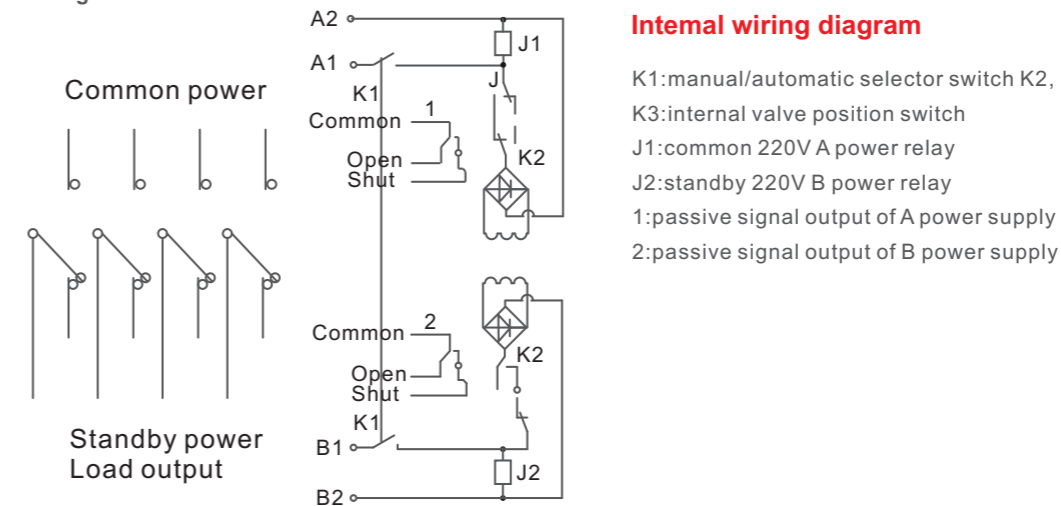


| Specification | 100A | | |
|---------------------------------------|--|-----|--------|
| Rated current Ie(A) | 16,20,25,32,40,50,63,80,100 | | |
| Insulation voltage Ui | AC690V,50Hz | | |
| Rated voltage Ue | AC400V,50Hz | | |
| Classification | PC class:can be manufactured withstood without short circuit current | | |
| Utilization category | AC-33iB | | AC-31B |
| Pole No. | 2P | 3P | 4P |
| Weight(kg) | 1.7 | 2.1 | 2.6 |
| Electrical | Life: 2000 times; Manual operation: 5000 times | | |
| Rated short circuit current Iq | 50kA | | |
| Short circuit protection device(fuse) | RT16-00-63A | | |
| Rated impulse withstand voltage | 8kV | | |
| Control circuit | Rated control voltage Us:AC220/50Hz Normal working conditions: 85-110%Us | | |
| Auxiliary circuit | 2 relays,each with two sets of contact converter contact capacity:AC200V/50Hz Ie=5y | | |
| Conversion time of contactor | < 50ms | | |
| Operation conversion time | < 50ms | | |
| Return conversion time | < 50ms | | |
| Power off time | < 50ms | | |

Distribution Apparatus

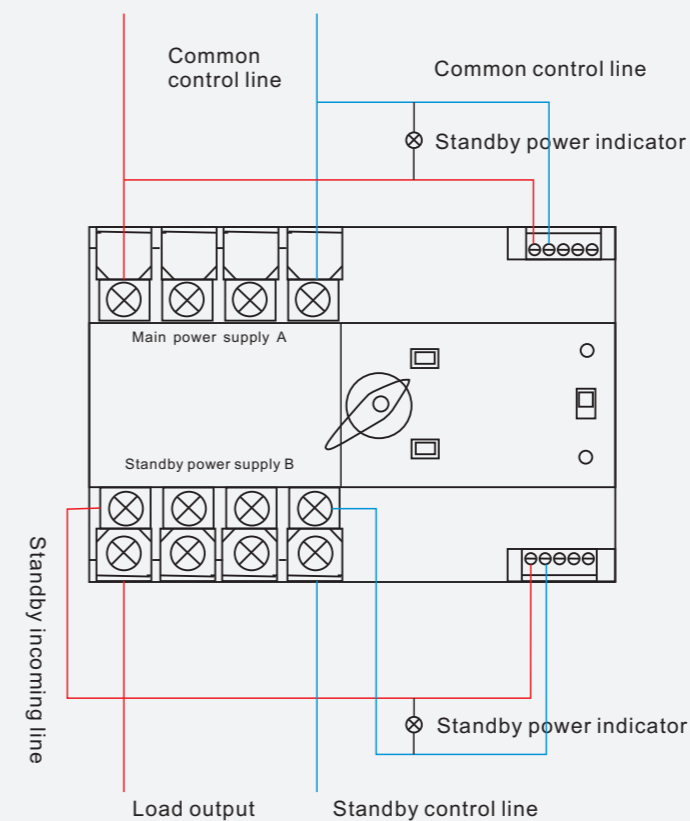
YCQ4E/YCQ4R PC type Automatic Transfer Switch

Fig.1



Controller wiring diagram of 100E

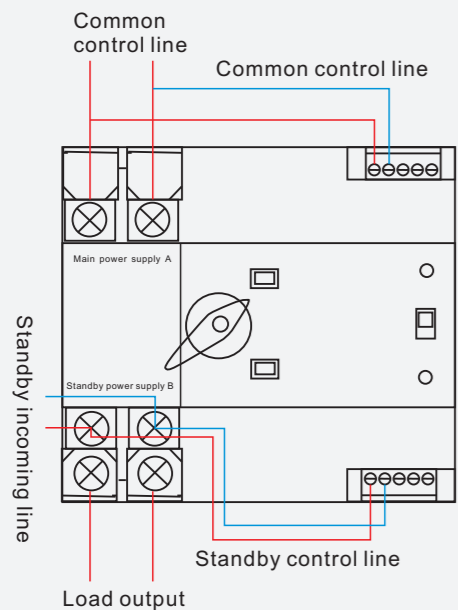
Fig.2



YCQ4E/YCQ4R PC type Automatic Transfer Switch

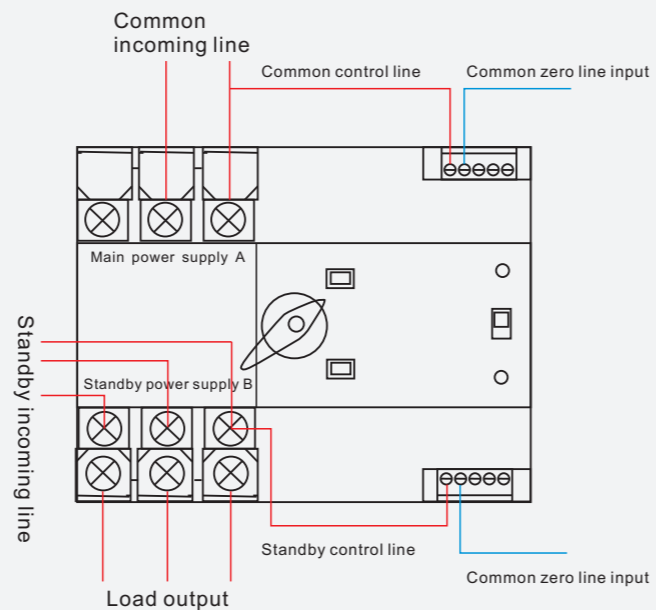
100/2P wiring diagram of 100E

Fig.3



100/3P wiring diagram of 100E

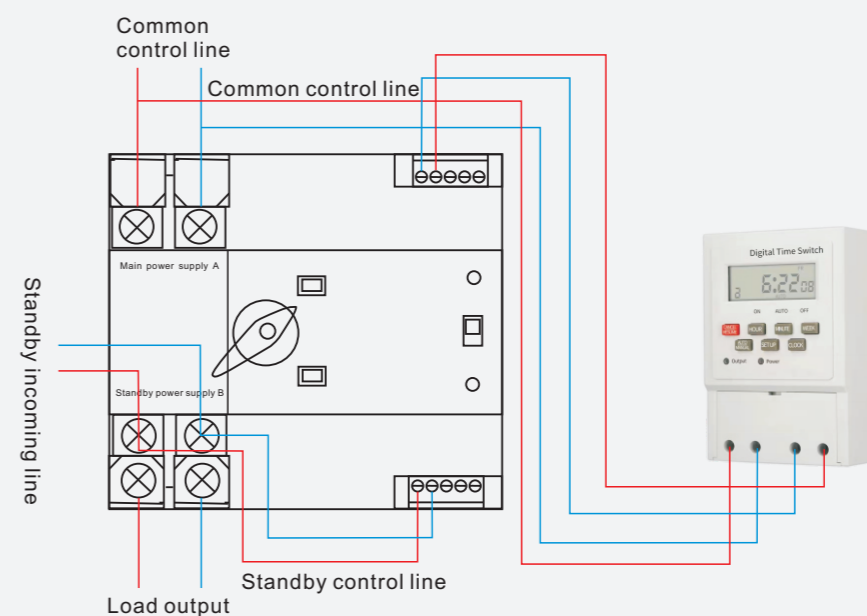
Fig.4



YCQ4E/YCQ4R PC type Automatic Transfer Switch

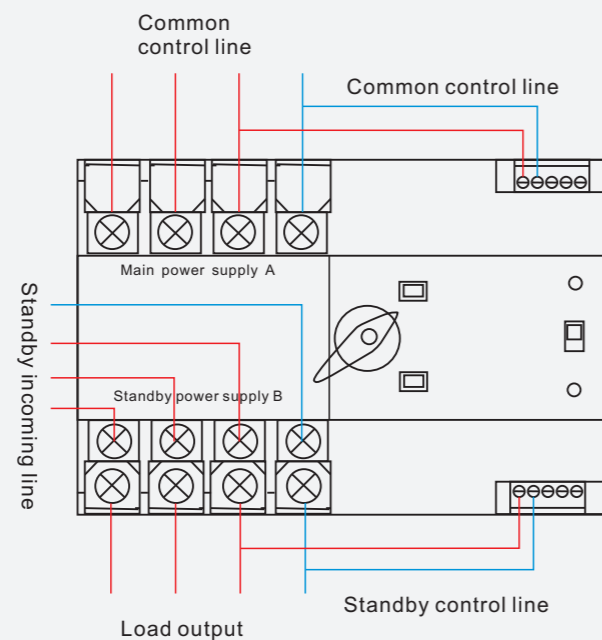
Timing switching connection mode of 100E

Fig.6



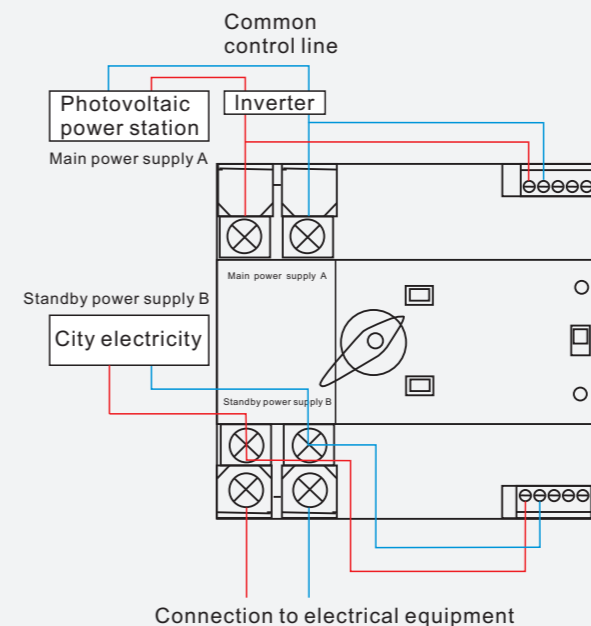
100/4P wiring diagram of 100E

Fig.5



Special connection mode of photovoltaic inverter of 100E

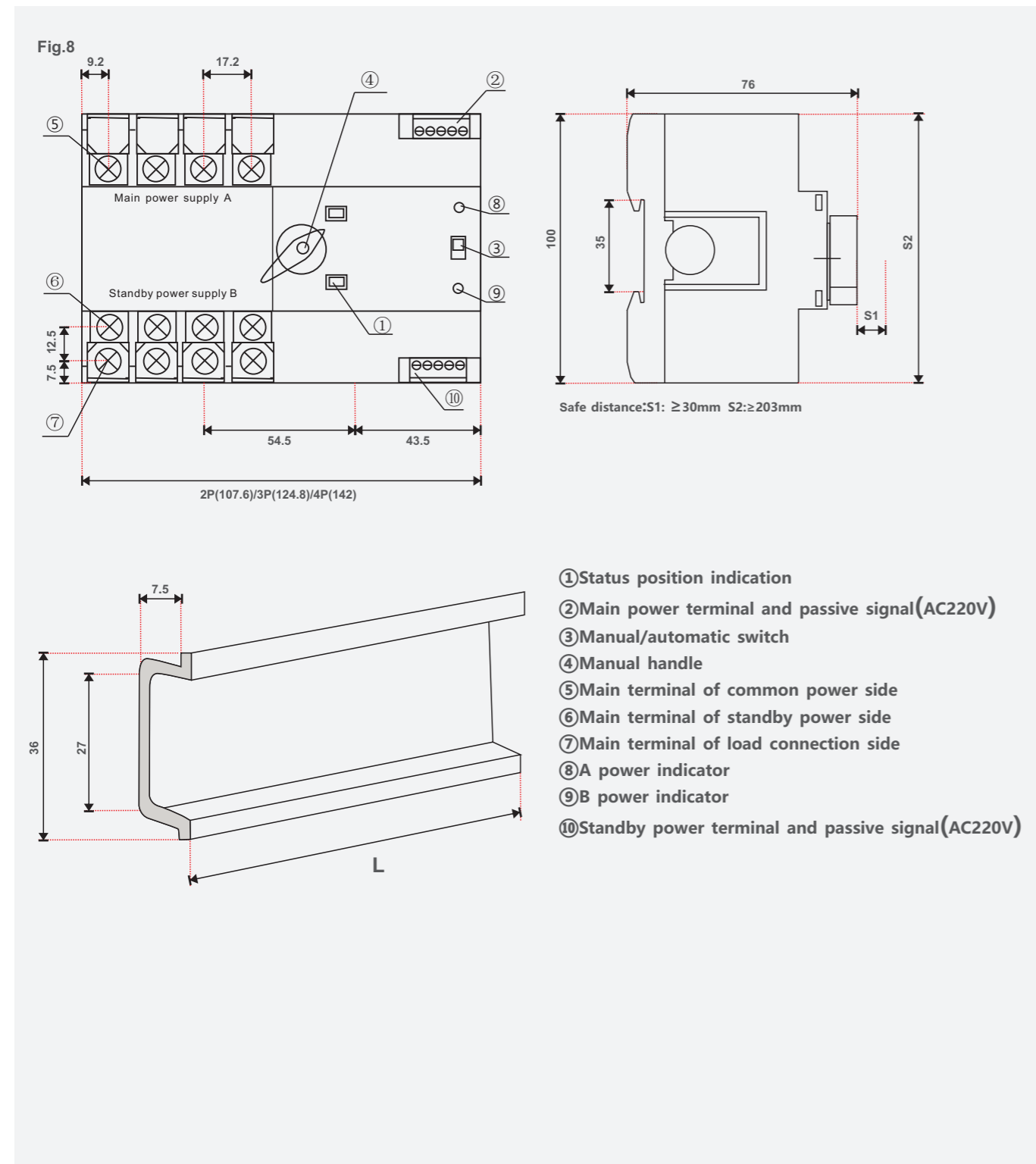
Fig.7



Distribution Apparatus

YCQ4E/YCQ4R PC type Automatic Transfer Switch

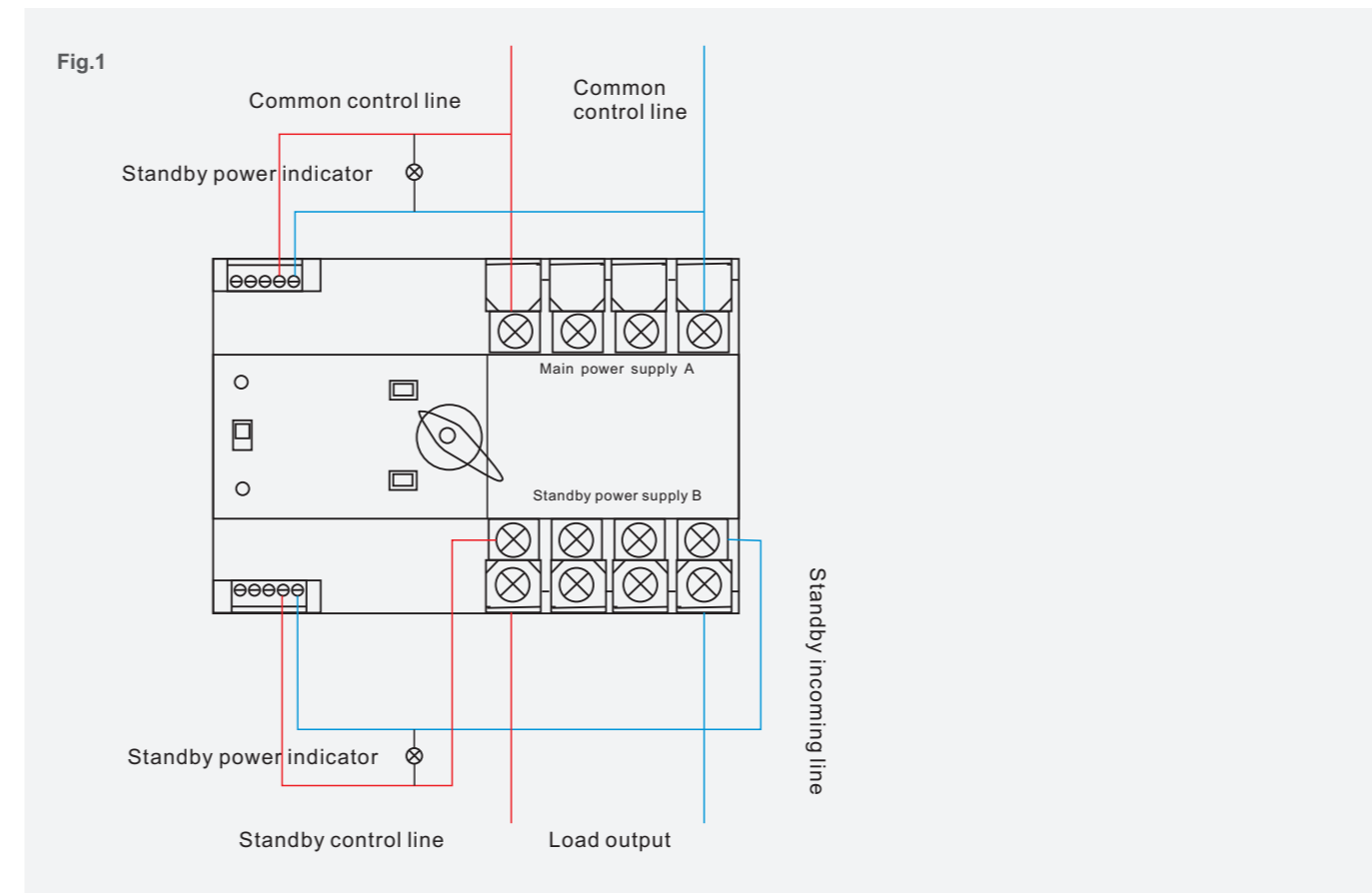
Overall and installation dimension of 100E



Distribution Apparatus

YCQ4E/YCQ4R PC type Automatic Transfer Switch

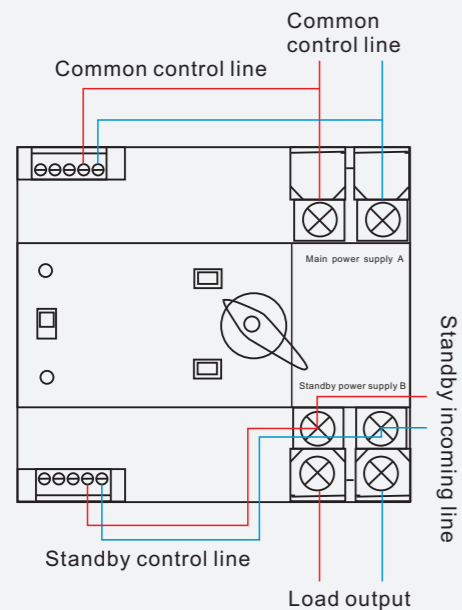
Controller wiring diagram of 100R



YCQ4E/YCQ4R PC type Automatic Transfer Switch

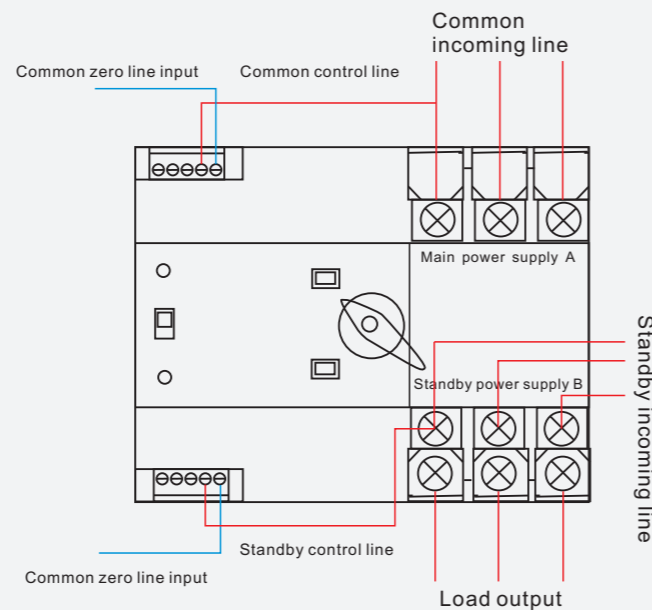
100/2P wiring diagram of 100R

Fig.2



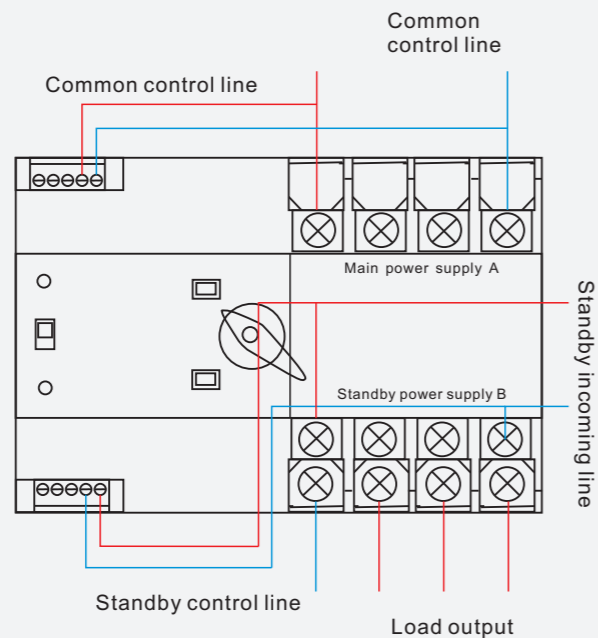
100/3P wiring diagram of 100R

Fig.3



100/4P wiring diagram of 100R

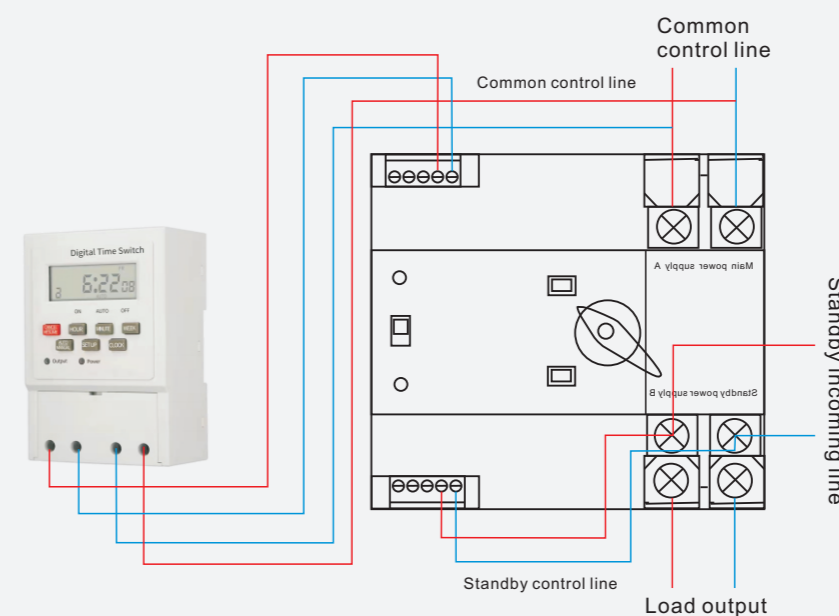
Fig.4



YCQ4E/YCQ4R PC type Automatic Transfer Switch

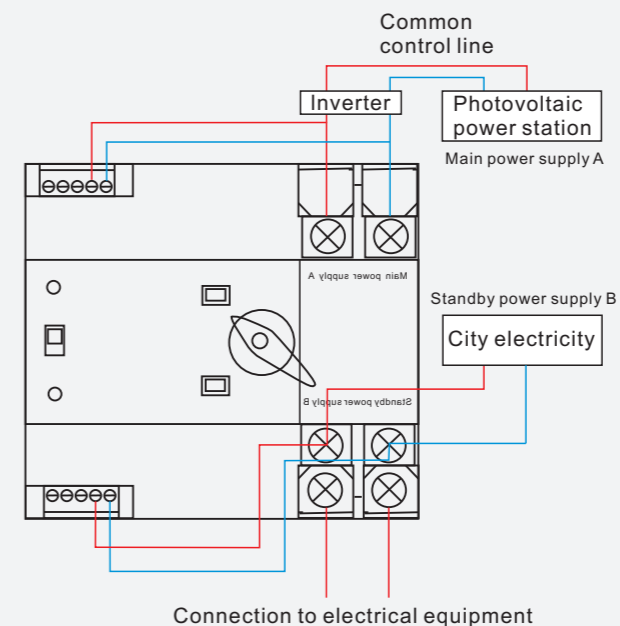
Timing switching connection mode of 100R

Fig.5



Special connection mode of photovoltaic inverter of 100R

Fig.6



Distribution Apparatus

YCQ4E/YCQ4R PC type Automatic Transfer Switch

Overall and installation dimension of 100R

