

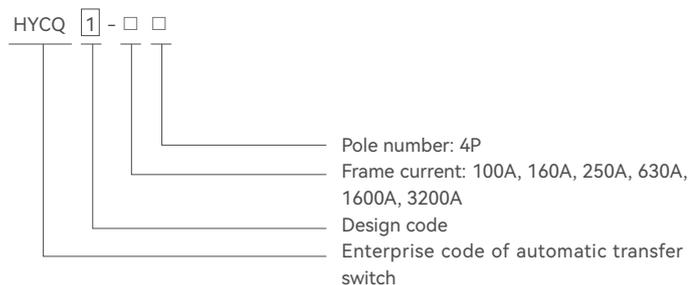


## HYCQ1 Automatic Transfer Switches

### Product features

- ◆ Installation performance is good.
- ◆ Using double-row composite contacts, horizontal pull mechanism, permanent magnet synchronous motor pre-storage and microelectronic control technology, it basically achieves zero arcing (without arc extinguishing cover).
- ◆ Adopt reliable mechanical interlock and electrical interlock.
- ◆ Using zero-crossing technology, it can be forced to zero in an emergency (cut off two power supplies at the same time), with obvious on-off indication, padlock and other functions, and reliably realize the isolation between the power supply and the load.
- ◆ High reliability, with a service life of more than 8,000 times.
- ◆ Integrated design, switch conversion is accurate, flexible and smooth.
- ◆ Good electromagnetic compatibility, strong anti-interference ability, no external interference.
- ◆ High degree of automation.
- ◆ The switch has multiple input/output interfaces, which is convenient for remote PLC control and system automation.
- ◆ Switch work without any external control components.
- ◆ Beautiful appearance, small size and light weight, the logic control board manages the motor directly installed in the switch with different logic, and the operation of the gearbox ensures the switch position.

## Models description



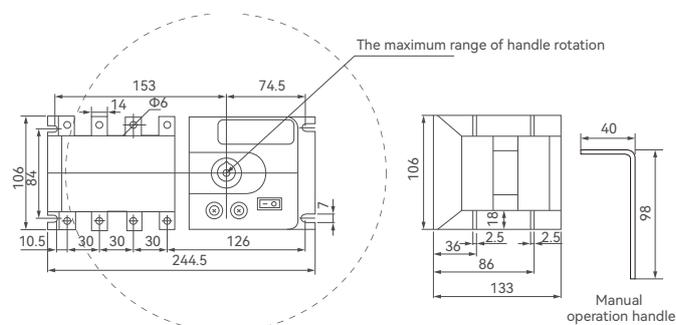
## Conditions of Use

- ◆ Ambient air temperature:  $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$ .
- ◆ The altitude of the installation site shall not exceed 2000m.
- ◆ The pollution level is 3.
- ◆ The installation category is Class III.
- ◆ The main circuit usage categories are AC31B, AC33B, AC35B, AC33iB, and AC-33iB.
- ◆ Installation conditions: The switch body can be installed vertically or horizontally.

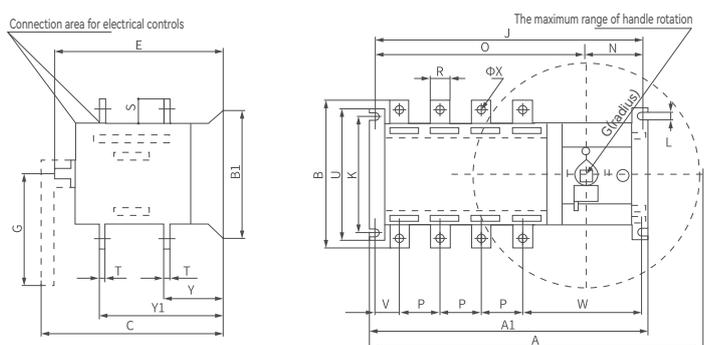
## The main technical parameters

| Conventional heating current I <sub>th</sub>        | 20A     | 40A     | 63A     | 80A     | 100A | 125A | 160A | 250A | 400A | 630A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A |      |  |
|---|---------|---------|---------|---------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|--|
| Rated insulation voltage U <sub>i</sub>             | 800V    |         |         |         |      |      |      |      | 800V |      |      |       |       |       |       |       |       |      |  |
| Rated impulse withstand voltage U <sub>imp</sub>    | 8kV     |         |         |         |      |      |      |      | 12kV |      |      |       |       |       |       |       |       |      |  |
| Rated working voltage U <sub>e</sub>                | AC400V  |         |         |         |      |      |      |      |      |      |      |       |       |       |       |       |       |      |  |
| Rated working current I <sub>e</sub>                | AC-66A  | 20      | 40      | 63      | 80   | 100  | 125  | 160  | 250  | 400  | 630  | 800   | 1000  | 1250  | 1600  | 2000  | 2500  | 3200 |  |
| Rated short - time withstand current I <sub>e</sub> | 7kV     |         |         |         | 5kA  |      |      |      | 10kA | 20kA | 26kA |       |       | 50kV  |       |       | 55kA  |      |  |
| Conversion time                                     | ≤ 5S    |         |         |         |      |      |      |      |      |      |      |       |       |       |       |       |       |      |  |
| Control supply voltage                              | AC220V  |         |         |         |      |      |      |      |      |      |      |       |       |       |       |       |       |      |  |
| Weight ( kg )                                       | 7.0/3.5 | 7.2/3.5 | 7.2/3.5 | 7.2/3.5 | 7.5  | 7.5  | 8.8  | 9    | 16.5 | 17   | 32   | 36    | 40    | 49    | 95    | 98    | 125   |      |  |

## HYCQ1-100 Outline Installation dimensions

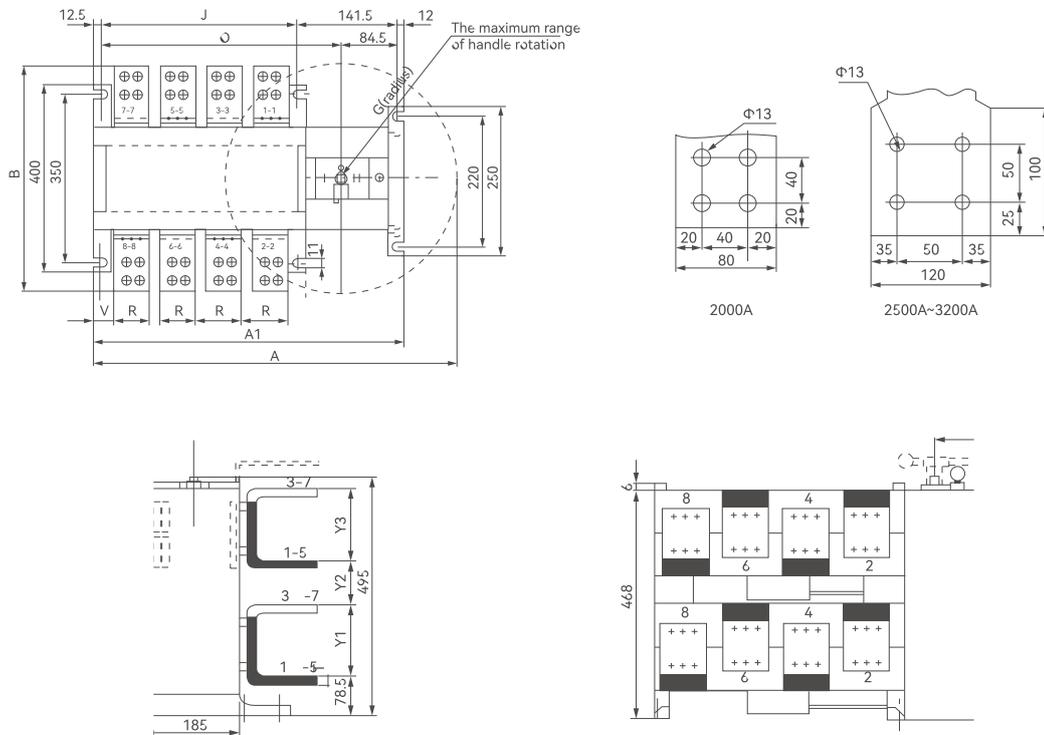


## HYCQ1 -125~1600 Outline Installation dimensions



| Specification | A    | A1  | B   | B1  | C   | E   | G   | J   | K      | L  | N     | O   | P   | R  | S  | T   | U   | V    | W     | ΦX | Y   | Y1  | K1    |
|---------------|------|-----|-----|-----|-----|-----|-----|-----|--------|----|-------|-----|-----|----|----|-----|-----|------|-------|----|-----|-----|-------|
| 160A/4        | 358  | 320 | 150 | 134 | 190 | 157 | 144 | 305 | 78/108 | 7  | 100   | 211 | 36  | 20 | 25 | 3.5 | 134 | 33.5 | 160   | 9  | 58  | 122 | 80/50 |
| 250A/4        | 422  | 381 | 186 | 134 | 210 | 180 | 144 | 365 | 78/108 | 7  | 98    | 270 | 50  | 25 | 30 | 3.5 | 134 | 47   | 164   | 11 | 61  | 144 | 80/50 |
| 400A/4        | 520  | 445 | 240 | 208 | 333 | 266 | 192 | 422 | 176    | 11 | 113.5 | 315 | 65  | 32 | 40 | 5   | 208 | 31   | 193   | 11 | 83  | 193 |       |
| 630A/4        | 520  | 445 | 260 | 208 | 333 | 266 | 192 | 422 | 176    | 11 | 113.5 | 315 | 65  | 40 | 50 | 6   | 208 | 31   | 193   | 13 | 84  | 194 |       |
| 800A/4        | 1007 | 633 | 340 | 250 | 370 | 321 | 470 | 609 | 220    | 11 | 85    | 524 | 120 | 80 | 70 | 8   | 220 | 60.5 | 188.5 | 13 | 110 | 258 |       |
| 1000A/4       | 1007 | 633 | 340 | 250 | 370 | 321 | 470 | 609 | 220    | 11 | 85    | 524 | 120 | 80 | 70 | 8   | 220 | 60.5 | 188.5 | 13 | 110 | 258 |       |
| 1250A/4       | 1007 | 633 | 340 | 250 | 370 | 321 | 470 | 609 | 200    | 11 | 85    | 524 | 120 | 80 | 70 | 8   | 220 | 60.5 | 188.5 | 13 | 110 | 258 |       |
| 1600A/4       | 1007 | 633 | 340 | 250 | 370 | 321 | 470 | 609 | 200    | 11 | 85    | 524 | 120 | 80 | 80 | 12  | 220 | 60.5 | 188.5 | 13 | 114 | 262 |       |

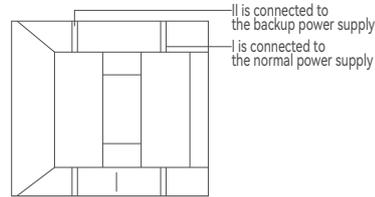
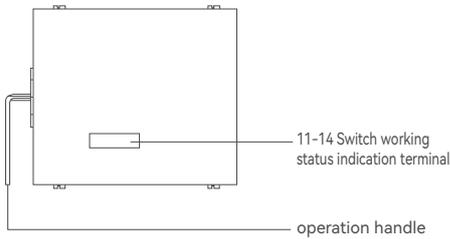
### HYCQ1-2000A~3200A Outline Installation dimensions



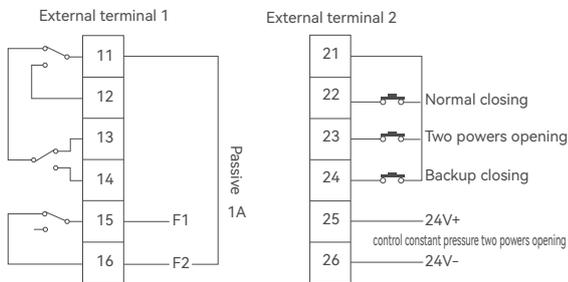
| Specification | Overall size |     |     |     |   |     |   | switch installation |   |   |   |     | Terminals |     |     |    |   |    |   |   |     |    |     |
|---------------|--------------|-----|-----|-----|---|-----|---|---------------------|---|---|---|-----|-----------|-----|-----|----|---|----|---|---|-----|----|-----|
|               | A            | A1  | B   | C   | E | G   | H | J                   | K | L | N | O   | P         | R   | S   | T  | U | V  | W | X | Y1  | Y2 | Y3  |
| 2000A         | 1007         | 633 | 455 | 556 |   | 470 |   | 467                 |   |   |   | 524 |           | 80  | 80  | 15 |   | 33 |   |   | 147 | 84 | 147 |
| 2500A         | 1007         | 633 | 455 | 556 |   | 470 |   | 467                 |   |   |   | 524 |           | 120 | 112 | 15 |   | 13 |   |   | 152 | 79 | 152 |
| 3200A         | 1007         | 633 | 505 | 556 |   | 470 |   | 467                 |   |   |   | 524 |           | 120 | 112 | 15 |   | 13 |   |   | 152 | 79 | 152 |

## HYCQ1-100 wiring diagram

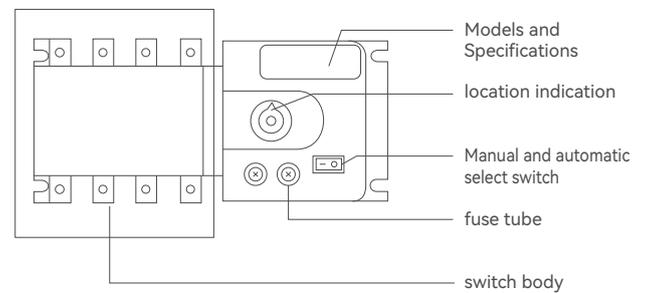
### ◆ Typical Wiring



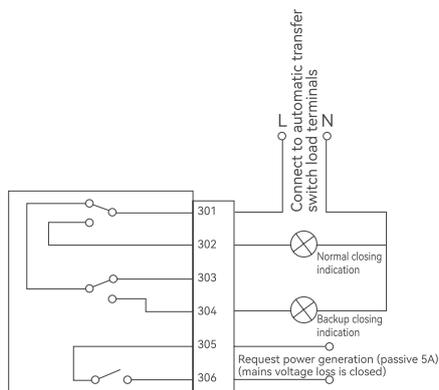
### ◆ Secondary terminal wiring diagram



### ◆ Switch Structure Description



## HYCQ1-125~3200A basic secondary wiring diagram



## HYCQ1-125~3200A fire control type secondary wiring diagram

