

Secondary power distribution

HUSD18
HUSD18 series duplicate power supply automatic transfer switch

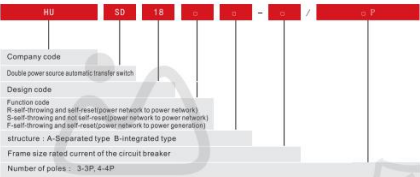


1. Application range

The automatic transfer switch is applied to the duplicate power supply system of AC 50Hz, rated voltage single phase 230V or three phase four wire 400V, rated current up to 800A. It can also be used in the unattended distribution room to realize the automatic transfer between two power supplies. When there is any fault with one line of power supply, the device will automatically transfer to the other line within several seconds, which ensures the timely power supply of important locations (residential area, hospital, shopping mall, etc.).

The product accords with GB/T 14048.11, IEC 60947-6-1.

2. Model and meaning



3. Normal Working Conditions

- 3.1 Ambient temperature: -5°C ~ +40°C. The average temperature in 24 hours does not exceed +35.
- 3.2 Altitude: not exceed 2000m.
- 3.3 Humidity: The air relative humidity under the highest temperature +40°C cannot surpass 50%; Under the lowest temperature has a higher relative humidity, the wettest month's average lowest temperature cannot surpass +25°C, and the average relative humidity cannot exceed 90%.
- 3.4 Class of pollution: 3.
- 3.5 No conductive dust and corrosive gas which may destroy metal and insulation.
- 3.6 The two power lines connect to the upper end of the conversion device, with the load end connects to the lower end. Reverse connection is not allowed.
- 3.7 No obvious impact in mounting position.

4. Major Technical Parameters

Model	Rated current (A) rated operating voltage (kV)	Rated operating voltage (kV)	I _{cm} / I _{cn} (kA)	Working time (s) per power supply	Mechanical life	
HUSD18-63/2P	6, 10, 16, 20, 25, 32, 40, 50, 63	Single-phase AC230	10/7.5	3~14000	10000	
HUSD18-63/3P		Three-phase four-line AC400				
HUSD18-125/2P		Single-phase AC230				15/7.5
HUSD18-125/3P		Three-phase four-line AC400				

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6. Structure and function

6.1 Structure

The device consists of the body and automatic controller. The body consists of two circuit breakers from HJ18 series, electric operating mechanism and so on, the microcomputer control system is used as the core of the automatic controller. With advanced anti-jamming performance, reliable capacity, and big liquid crystal display, it can offer the user a good human-machine dialogue interface.

6.2 Function

6.2.1 According to the voltage value of each phase of the double source supply, the device can control the automatic changeover between two circuit breakers. If any phase appears over-voltage, under-voltage or out-of-phase, the controller will make the device work to transfer the circuit to reverse power supply after setting delay.

6.2.2 Display function

The normal source (code N) is connected with the left circuit breaker (code Q1), and the stand-by source (code R) is connected with the right one (code Q2). The controller panel displays "NA, NB, NC, RA, RB, RC" under normal condition, when it appears fault or abnormal situation of any phase (over-voltage, under-voltage or out-of-phase), the corresponding character will light.

The information such as the delay time of two-way power supply transfer, whether the stand-by source power again is shown on the LCD.

6.2.3 The transfer delay of two-way power supply is adjustable in the range of 1s-30s. The control function is optional between self-throwing and self-reset and self-throwing and not self-reset.

6.2.4 Two circuit breakers have electrical and mechanical interlocking functions to ensure that it is impossible to close simultaneously.

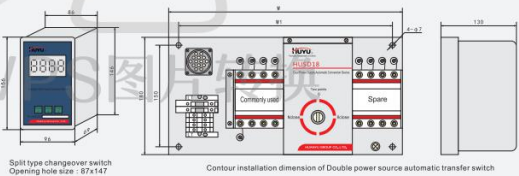
6.2.5 Warning function

6.2.5.1 When power appears fault or abnormal situation, the controller will alarm during the transfer time of the two circuit breakers. After finishing the transfer, the alarm will stop.

6.2.5.2 When the circuit breaker (Q1 or Q2) trips because of over-load, short-circuit and other reasons, the controller will alarm. After pressing Double-point key, the alarm will stop and the opened circuit breaker close again.

7. Contour and installation

Split type changeover switch Opening hole size : 87x147



Contour installation dimension of Double power source automatic transfer switch

Model	B	B1	L	L1	H	Φ
HUSD18A-63/2P	310	280	180	150	130	7
HUSD18A-63/3P	310	280	180	150	130	
HUSD18A-63/4P	340	310	180	150	130	
HUSD18A-125/2P	360	330	180	150	130	
HUSD18A-125/3P	360	330	180	150	130	
HUSD18A-125/4P	420	390	180	150	130	

Installation dimension of integrated type

Model	B	B1	L	L1	H	Φ
HUSD18B-63/2P	410	380	180	150	130	7
HUSD18B-63/3P	410	380	180	150	130	
HUSD18B-63/4P	440	410	180	150	130	
HUSD18B-125/2P	460	430	180	150	130	
HUSD18B-125/3P	460	430	180	150	130	
HUSD18B-125/4P	520	490	180	150	130	

8. Opening information

Example: If you order on double power source automatic transfer switch, self-throwing and self-reset (power network to power network), separated type, frame size rated current 125A, rated current 100A, 4 poles, 10 pieces, you can write it as HUSD18FA-125-4P 100A 6pcs.