

1. Application

HATS series automatic transfer switch is one new ATS of our company developed by microcomputer control technology. This series ATS is settled AM2 circuit breaker as the executive element, and along with the mechanism, the new control mechanism with electromechanical double interlock, which is especially applied in the important places not allowed poweroff. To meet actual demand, three different operation methods are available such as automatic entry automatic reset, automatic entry non automatic reset and commutative standby. The device conforms to IEC60947-6-1. The whole series have past CCC certification.

2. Environment conditions for operation

Temperature condition: -5~+55; relative humidity < 95% at 55.
Elevation: altitude of installation place shall not exceed 2000m.
Pollution grade: grade III.

3. Structure

Three available operation methods

1. Automatically entry and automatically reset.
2. Automatically entry and non automatically reset
3. Commutative standby

Three steady operating positions

1. The grid power supply is making, the standby power supply is breaking.
 2. The grid power supply is breaking, the standby power supply is making.
 3. The grid power supply is breaking, the standby power supply is breaking.
- Compact size, single structure, beautiful outlook, 12.5~630A available, convenient operation and long operating life, 3P, 4P can be supplied.

The transfer is driven by single motor, single structure, reliable transfer, no noise and small wallop.

The device is with electromechanical interlock protection, which can ensure the two power supplies working normally, no disturbance.

The device can be along with load automatic transfer, on urgent situation, it can be transferred by handle.

Advantages comparative to other products:

1. The breaking capacity of the control protecting fuse is 50kA, which increases the distribution safety.
2. There is interlock between manual and automatic operation, this can avoid the manual operation on the automatic operation.
3. When the executive handle of circuit breaker is broken, the contact is felted or the load is in problem (overload, short circuit), the ATS do not transfer, this is called the real electromechanical interlock.
4. The wrong wire connection indication can be supplied. When the phase wire and zero wire is connected wrong, the sound-photo device will alarm, it ensures the reliability.



4. Function of controller in HATS automatic transfer switch

Controller	Type A (built-in)	Type B (panel)
Operational voltage	AC230V	AC230V
Frequency	50/60Hz	50/60Hz
Three operational positions		
Common power supply making		
Standby power supply making		
Both common power supply and standby power supply breaking		
Automatic operation		
Manual remote control		
Handle operation		
Automatic operation		
To monitor common power supply and automatic transfer	Check phase lacking, voltage losing	Check phase lacking, undervoltage, overvoltage and voltage losing
To monitor standby power supply and automatic transfer		Check phase lacking, undervoltage, overvoltage and voltage losing
To control generator		
Fire fighting linkage		
Automatic entry automatic reset		
Automatic entry non automatic reset		
Commutative standby		



Manually remote control		
Compel it to work at common power supply		
Compel it to work at standby power supply		
Compel it to word at "0"prositon		
Test		
By test pushbutton on panel or control pushbutton		
Indications		
Operation status indication: making or breaking		
Common power supply indication and standby power supply indication		
Malfunction tripping indication		
Parameters setting indication		
Other functions		
Transfer time delay	0s,5s,15s,30s inaccuracy ≤ 5%	0-255s
Recovery time delay	0s,5s,15s,30s inaccuracy ≤ 5%	0-255s
Protective function when neutral line is wrong connection (sound and light alarm)		
Overtime malfunction-breaking function after transfer signal sent out		
Standard configuration Selective function		

5.Note:

- 1.If operational voltage is the same as power voltage, the common power supply and standby power supply can supply power directly. If not ,it must use equivalent isolation transformer.
- 2.Under the situation of handle operation, if the control of electrical manipulating device is open, automatic controlling function will be invalid.
- 3.On conditions both common power supply and standby power supply are normal, if common power supply is malfunction and automatically transfer to standby power supply (transfer time delay adjustable), when the common power supply returns to normal, it will automatically return(return time delay adjustable).
4. Under the situation both common power supply and standby power supply are normal and common power supply is working, if common power supply is malfunction and automatically transfer to standby power supply. Controller will stop transferring. Even if common power supply return to normal, switch will not return. Please press reset pushbutton, controller returns to normal.
- 5.Under the situation both common power supply and standby power supply are normal, to get through electricity(or reset), the common power supply will work prior. If the working power has some malfunction during operation and automatically transfer to another power supply(type B switching transfer time delay adjustable), both power supply will have the same priority and will be standby power supply of each other.