# **HATS**



## 1. Application

HATS series automatic transfer switch is one new ATS of our company developed by themicrocomputer control technology . This series ATS is settled AM2 circuit breaker as the execu-tive element, and along with the mechanotrons, the new control mechanism with electrome-chanical 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 automaticentry 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 drived 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:

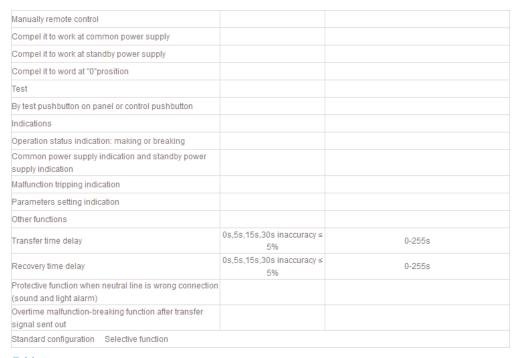
- 1. The breaking capacity of the control protecting fuse is 50kA, which increases the distribution safety.
- 2. There is interlock between manual and automatic operation, this can avoid the manual operation on the automatic operation.
- 3. When the executive handle of circuit breaker is broken, the contact is felted or the load is in problem(overload, short circuit), the ATS do not transfer, the 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

| Contriler  | 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  |                                     |  |



# ELECAL





#### 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.