AMQ2 Dual Power Automatic Transfer Switch

AMQ2-100-4P

AMQ2-100-4P-D1

1. Application

ATS series automatic transfer switch is one new ATS of our company developed by the microcomputer control technology . This series ATS is settled AM2 circuit breaker as the executive element, and along with the mechanotrons, the new control mechanism with electromechanical double interlock, which is especially applied in the important places not allowed power off. 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. Type and meaning

Standard product Non-standard product

ATS □—□/□CB□—□

- □: X: with fire protection linkage function
- Operation methods: R: automatic entry automatic reset; S: automatic entry non automatic reset; I: commutative standby
- CB: CB type ATS, with short circuit, overload protection
- Switching poles: 3P, 4P
- Current Grade: 100, 160, 250, 400, 630
- Controller model: A type, B type, No controller no mark

Note: To the nonstandard products, the specific type of fire protection signal should be noted. Without note, the default be considered DC24V.

4. Main features

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.

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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.

5. Function of controller in ATS automatic transfer switch

Contrller	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” prosition		◆
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

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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.

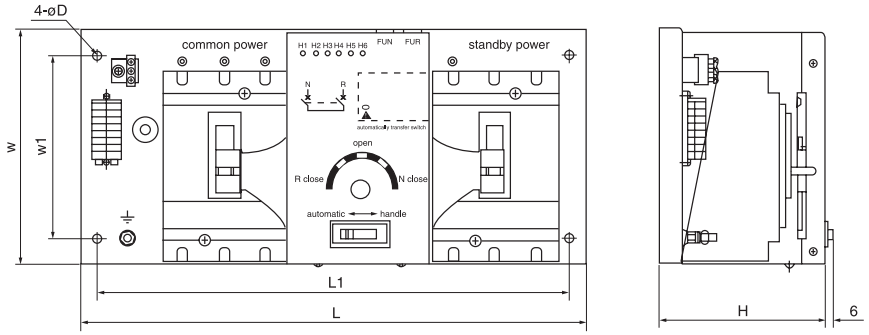
2. Under the situation of handle operation, if the control of electrical manipulating device is open, automatic controlling function will be invalid.

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).

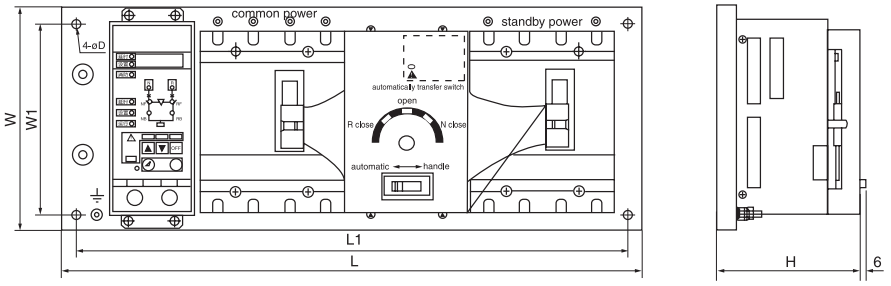
4. Under the situation both common power supply and standby power supply are normal and common power supply is working, if common power supply is malfunction and automatically transfer to standby power supply. Controller will stop transferring. Even if common power supply return to normal, switch will 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.

6. Outline and installation dimension



ATSA-100-250



ATSB-100~630

Type	Outline dimensions(mm)			Installation dimensions(mm)		
	L(3P/4P)	W(3P/4P)	H(3P/4P)	L1(3P/4P)	W1(3P/4P)	H1(3P/4P)
ATSA-100	430/500	200	140	400/470	155	6.5
ATSA-160	430/500	200	140	400/470	155	6.5
ATSA-250	430/500	200	140	400/470	155	6.5
ATSB-100	500/570	200	140	470/540	170	6.5
ATSB-160	500/570	200	140	470/540	170	6.5
ATSB-250	500/570	200	140	470/540	170	6.5
ATSB-400	620/710	275	190	590/680	245	9
ATSB-630	620/710	275	190	590/680	245	9

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