

# **ATS & Distribution Cabinet**



#### **Overall**

Along with the development of the society, the people have exigent request to the power supply. Our company according to the user's actual need and developed intellectualized dual power ATS. This product strongly anti-jamming, works stable and reliable, not only switch between two groups power, but also examine to two groups three-phase four voltages. When any phase voltage exceptionally, can automatically switch the unusual power to the normal power or sends out alarm. **Suited area** 

# The ATS suited to the double power supply system of AC50/60Hz,rated voltage under 600V,rated current under 2000A. It can realize between the prime power (N) and the standby power (R) automatic switch (also may establish for manual switch). This product with communication serial port, may realize the long-distance control, causes the user to realize nobody duty transformer substation. This product is suitable to the important place which does not permit the power cut low voltage switch cabinet.

<u>ATS Product</u> Factory Conforms to the standard ISO9001,ISO14001,ISO45001,CE - IEC60947-1 General rules; - IEC60947-6-1(1998) (ATS);IEC61434-1-2 (Cabinet)

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- IEC947.2; GB14048.11-2002;

## MODEL 600/630A (Standard)

Cabinet Dimension (mm)	: W 1106 x L 626 x H 1606	
Rate Power	: 630 A 400VAC , 280Kw/350KVA control input 220/240 VAC 50Hz	
Operating function	: Auto and Manual	

Note : Cabinet Structures FC code designed (fully weather proof)

- Designed to be large size is floor stand type , suitable for electric power and made of metal material anti-rust properties with a thickness plate of 1.6 mm and 2 layers electrostatic coating paint.

- An insulating barrier between the installation layers of the equipment inside the cabinet and the cable entry / exit way

- The cooling fan installed inside the cabinet when request outdoor type and IP67./ Weather proof provided for Model code FC ( fully weather proof )

Components provided ;

▲ Base of <u>WintPower ATS</u> **Model WSQ630**/4Pole is 630A rated , ATS Switch Double throw

Solenoid Operation option 3 Poles Icu 35KA (50KA option)

- A special type of contact is silver-coated metal with high durability ,It's close an instant without electric spark inside

- Inside there is a strong mechanic contact locking arm, it will automatically lock immediately when the Close/Open transferred.

- The ATS switch consists of 3 positions operating, the direction that is used to control the source of power supply SI, SO, SII, Auto / Manual function can selected.

▲ 2 x MCCB Toggle drive Circuit Breaker 630A , For S I source from Main normal supply and SII for source from Generator ,Base of Model 630 A 3Poles , Icu 35KA 380/400VAC 50 HZ , Isc (1s.) 35KA

▲ 1 x set AC Surge Protection 80KA type 1+2 or Type 2 (DC Surge option)

A 3Phase indicator lamp for Source I and 3 Phase indicator Lamp for source II

### ATS SERIES OF DOUBLE THROW CONTACT (Solenoid Drive) Model WSQ 630, Rate Category AC-33B

#### **Structure and function**





#### Structure

\* The ATS is made up of controller and equipment, between the separate units should be connected with leased line, the line can not surpass 2 m.

\* The equipment is made up of special positive, contrary high speed breaker, Good one ATS, Surge

protection ,mechanical interlocking,the aviation inserts,connection ports and so on. All of these parts are

installed in a plate

\* This intelligent system (working voltage 400VAC,50/60HZ) with mechanical electricity dual interlock

protection, provided the safe、reliable guarantee for you.

\* When Controller fail it can use the manual function operate selection source supply load

\* Single Coil Solenoid design for high speed transfer switch in very fast operation less than 100 msec. Transfer time its compact type

\* Electric Operated with Mechanical held interlocking ,Contact switches is electrical control at the time transfer and locking position after transfer completed.

\* 3 position of the main switch body operating are **SI** for normal source , **SO** for isolate both source (Independently separated both side and mechanism locked itself) , **SII** for emergency generator source in the selection of applications that have clearly marked .It can be configure to work AUTO ,Manual and remote command

\* Special type of Main and Arcing contact are made of silver composition plated copper, features are highly durable and low electrostatic arcing, it has the ability to clean the contact surface by itself.

\* The composites dynamic us used, a spring high energy storage and very high strong material ,instantaneous release operating mechanism is adopt for instantly/making and braking and obvious onoff position display is equip, Thus realizing reliable isolate between the power source and the load.

\* High reliability , Acculturate, flexible and smooth in switching transfer and long in service life up more than 8,000 times (Endurance tested :Electric 5,000/Mechanic 8,000 Cycles as IEC 60947-6-1)

#### Function

The auto controller inspects the two voltages at the same time. When the voltage 115% higher than rated voltage, then judging it over voltage; when it 60%-80% lower than rated voltage, then judging it owe voltage. The PC will judge the results and dispose it, send out shut break, off break, generate electricity, uninstall, alarm, etc. The above results display on control panel which may connect with PC through serial port in order to user to find out the reason. The intelligent controller can divide into three types: Auto Gen/Auto Main suited between electricity network; Auto Gen/Auto Main suited between electricity networks and generate electricity.

\* Auto Gen/Auto Main (R) suited between electricity networks

The electrify initialization default the supplier is prime power, when the voltage of prime power (N) occurs unconventionality, after off break and time delay ,prime power (N) automatic changes to zero position, after again shut break and time delay ,the automatic changes to standby power (R), the delay time may establish 0-30 second

\* Auto Gen/Auto Manual suited between electricity networks

Controller inspects and changes the prime power and standby power. The initialization default the supplier is prime power, when the voltage of prime power (N) occurs unconventionality(Any phase of supply voltage occurs over voltage, owe voltage, lacks of phase), after off break and time delay ,prime power (N) automatic changes to zero position, after again shut break and time delay ,the automatic changes to standby power (R),

#### **Operation Environment**

\* The surrounding temperature is not higher than +40°C or lower than -10°C

\* Installation place: The altitude above sea level should not be higher than 2000m.

\* Contaminated grade ,Grade:3. Have any explosively surrounding, any corrosive metal and ruinous gas, liquid, electric dust which may destroy insulation.

\* atmosphere condition: The air relative humidity does not surpass 50% when the highest temperature is +40°C, under the low temperature not to allow to have a higher relative humidity. The wettest month average temperature does not surpass for +25°C, this month biggest average relative humidity not to surpass 90%.

\* If the condition mentioned above cant be satisfied, please discuss with manufacturer.

#### Model Category (Rate Voltage 380/400VAC 50Hz)

\*Isc (KA)- Short circuit peak current , IEC 60947-6-1

No.	Model	Shell frame (Amp)	Туре	Silver Knife Contact	lcu (KA)	Transfer time(ms)	*lsc (1s) KA	Voltage Un (VAC)
1	ATS-250	250A	WSQ-250A 3P	Y	35	<60	25	440
2	ATS-400	400A	WSQ-400A 3P	Y	35	<60	25	440
3	ATS-630	630A	WSQ-630A 3P	Y	35	<100	35	600
4	ATS-800	800A	WSQ-800A 3P	Y	50	<130	50	600
5	ATS-1250	1250A	WSQ-1250A 3P	Y	50	<600	50	600
5	ATS-1600	1600A	WSQ-1600A 3P	Y	50	<1000	80	600
11	ATS-2000	2000A	WSQ-2000A 3P	Y	75	<1200	80	1000
12	ATS-2500	2500A	WSQ-2500A 3P	Y	75	<1600	80	1000
13	ATS-3200	3200A	WSQ-3200A 3P	Y	75	<2000	100	1200



Silver composition plate knife contact and terminal

WINTPOWER OEM Product