Phoenix switch

" Service Excellence at Lightning Speed ! "

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About company

Our company specializes in Automatic Transfer Switch (ATS) with an extensive range spanning from **63A to 1600A**

Our ATS offerings are built on the foundation of four key pillars that define our commitment to customer satisfaction.

First ensuring **Proven Technologies** , we pride ourselves on providing **24/7 support,** that our clients receive continuous support whenever they need it.

Additionally, we offer a comprehensive **2-year warranty**, demonstrating our confidence in the durability and reliability of our products.

Our focus on being **cost-effective** ensures that our clients receive value for their investment. Transparency is another core principle, as we believe in open communication and clarity throughout our interactions with customers. These four pillars collectively contribute to the strength and reputation of our company in the ATS industry.

Product Features

● It adopted double complex contact/ horizontal pulling mechanism/micro motor energy pre storage and micro-computer control technology, basically come to Zero arc (no arcing chamber);

● Adopted reliable mechanical interlock and electric interlock, executive unit adopt independent load disconnect switch, it makes more reliable and safety;

● Adopt “Zero Position” technology, it can force to set to Zero Position under emergency situation (cutoff two way power supply, meet the fire linkage requirements;

● Load disconnect switch change over adopt singleness motor drive, switch over smooth and reliable, no noise, little impact;

● The driving motor have instant current across only under the load disconnect switch change over, stable working status no need to provide the working current, outstanding energy saving;

● Executive load disconnect switch have mechanical interlock, make sure the Normal power and Reserve Power working reliable and no interference;

● Distinct ON and OFF position indicator, padlock function etc., make reliable and safe isolation between power supply and loading.

● High security, high automatization, high reliability, working life more than 8000 times;

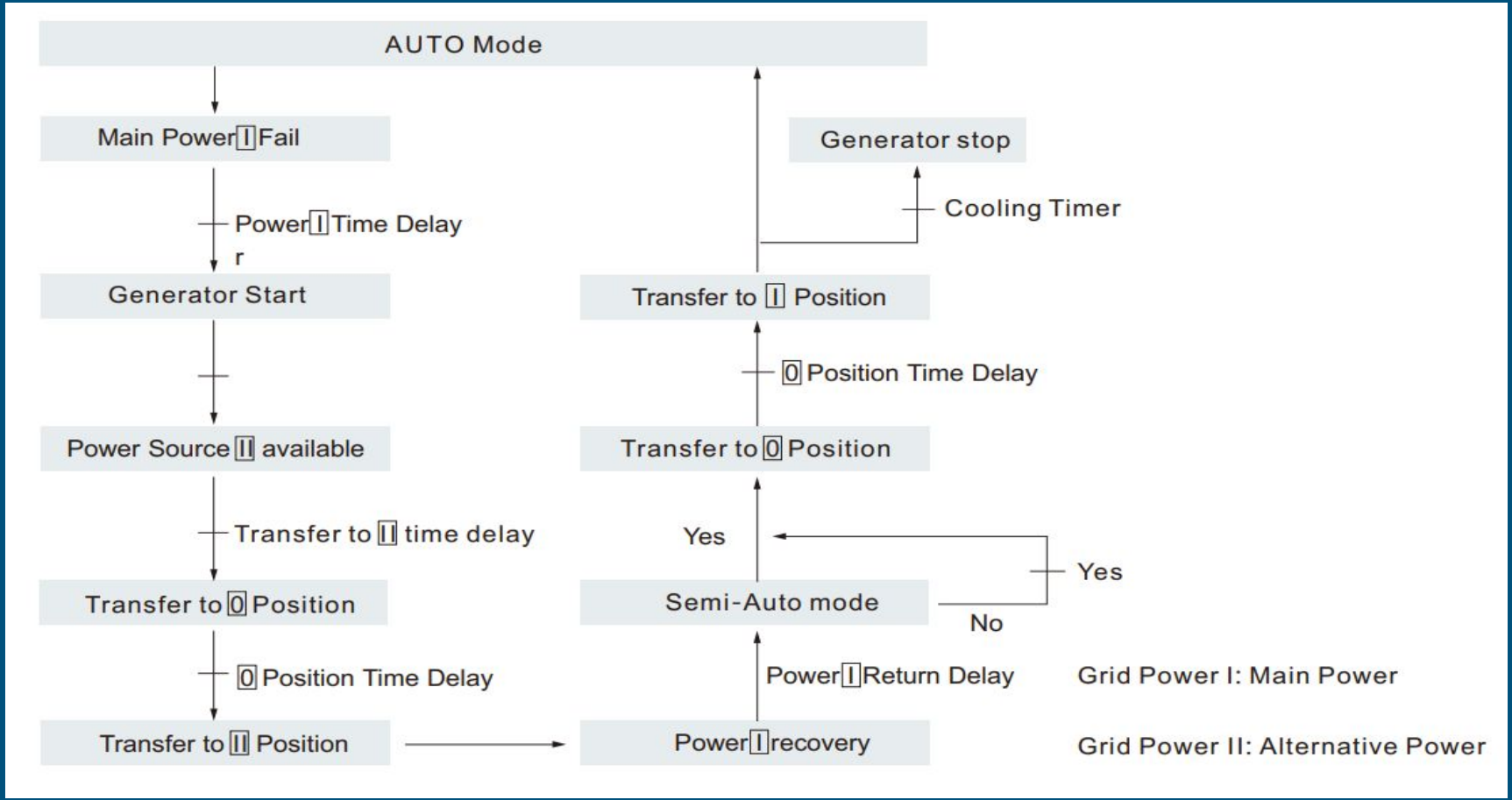
● Electromechanical integration design, accuracy change over, flexible, smoothly, adopt international advanced logical control technology, high anti-interference ability, no interference outward.

● Have main power ON, backup power OFF; main power OFF, backup power ON; main and backup power OFF; three working mode (I-o-II);

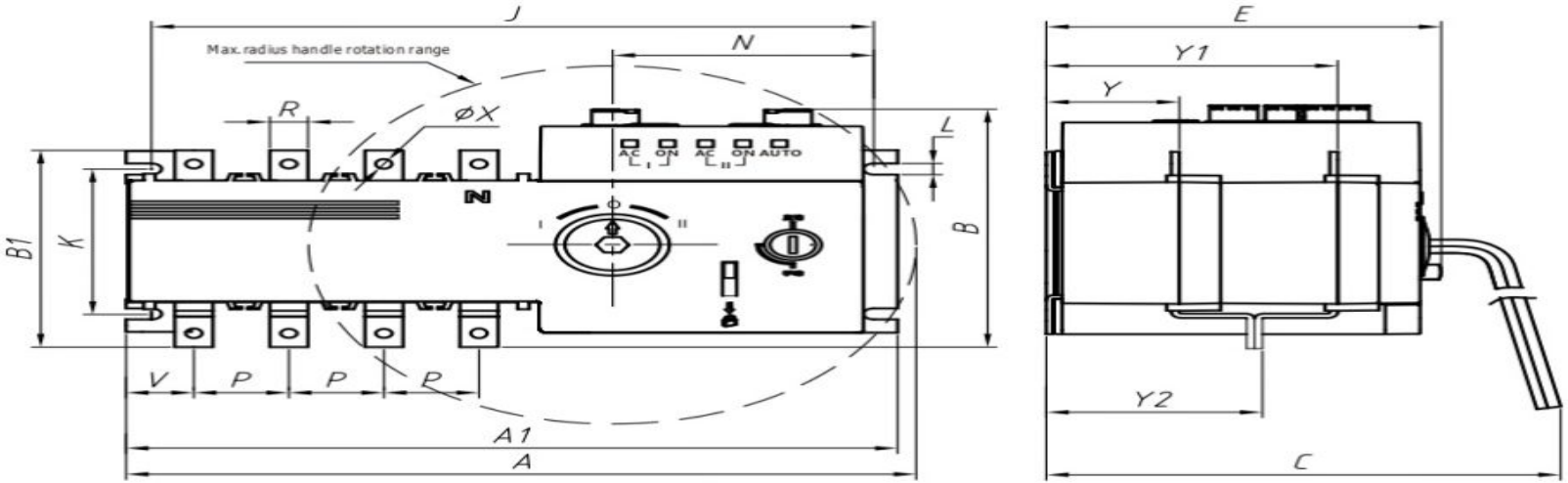
● Easy installation, control circuit adopt plug type terminal connection;

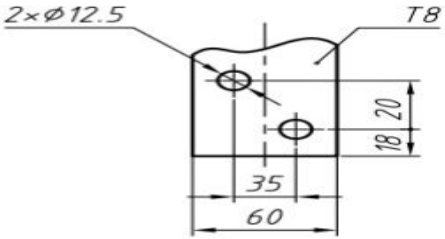
● Four operating functions: Emergency manual, motor remote control, emergency OFF under auto control status, auto control operation

ATS working flow

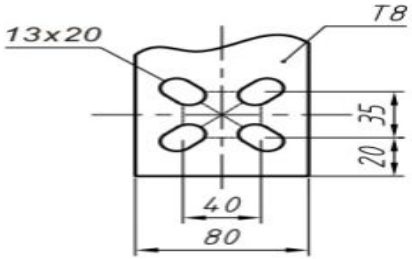


ATS Dimension

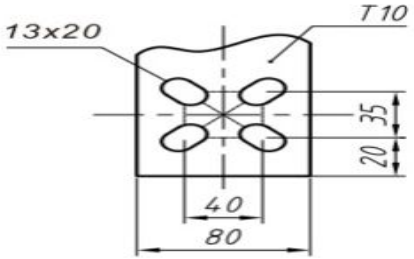




800–1000A



1250A



1600A

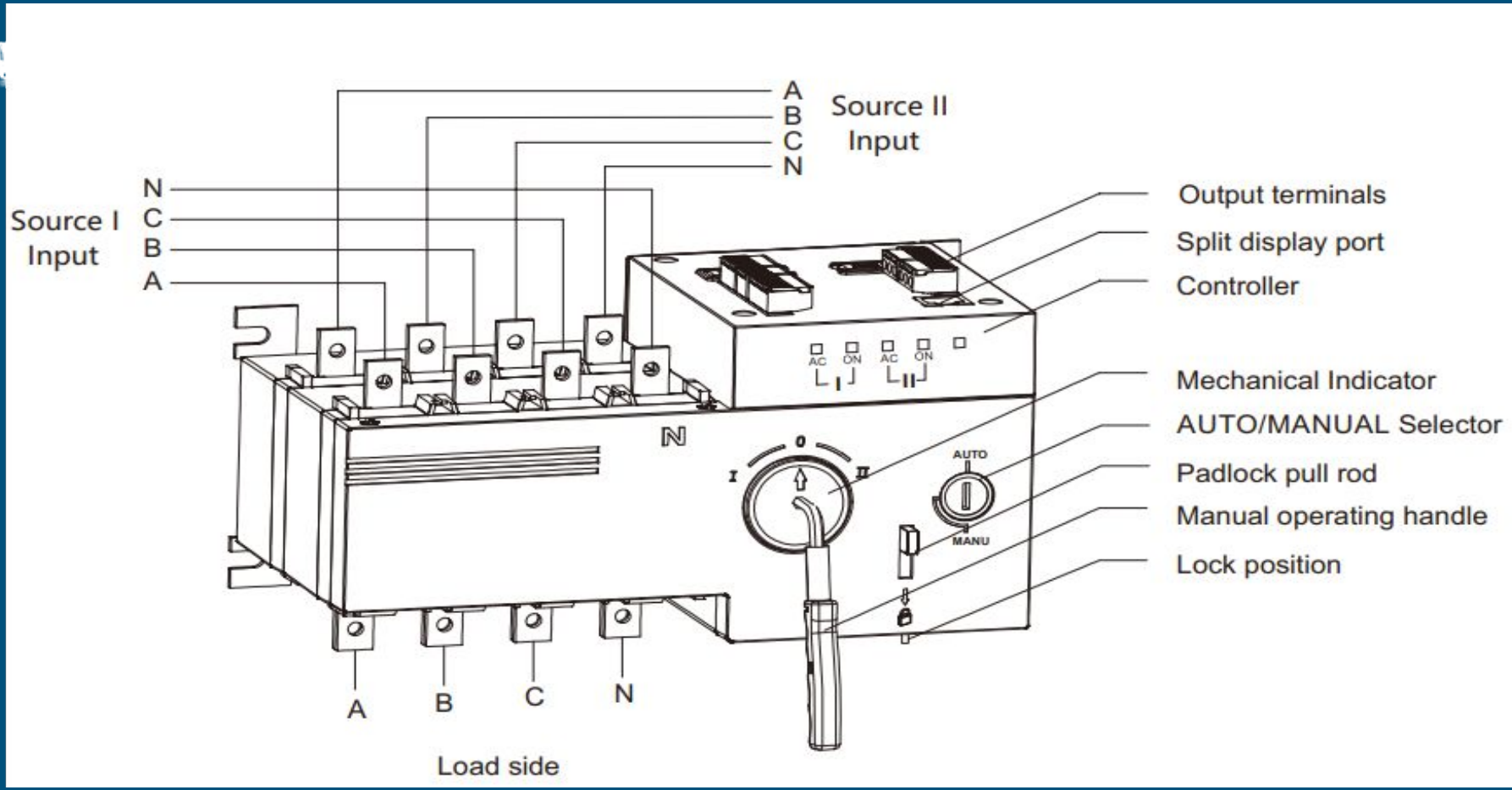
ATS Dimensions

SPEC.	Outline Dimensions (mm)						Mounting Dimensions (mm)										
In	A	A1	B	B1	C	E	J	K	L	N	P	R	V	ΦX	Y	Y1	Y2
125A	330	244	135	115	165	125	228	85	6.5	83	30	12	21	6.5	41.5	91.5	66..5
160A	374	301	175	140	200	150	285	102	7	94	36	20	31	8.5	55.5	125.5	92.5
250A	436	373	200	178	250	198	344	108	6.5	99	50	24	37	11	72	157	116
630A	502	433	265	260	295	244	416	180	9	101	65	40	47.5	12	83	193	140
1600A	1050	636	345	337	373	320	612	220	11	83.5	120	80	71	13	109	241	196

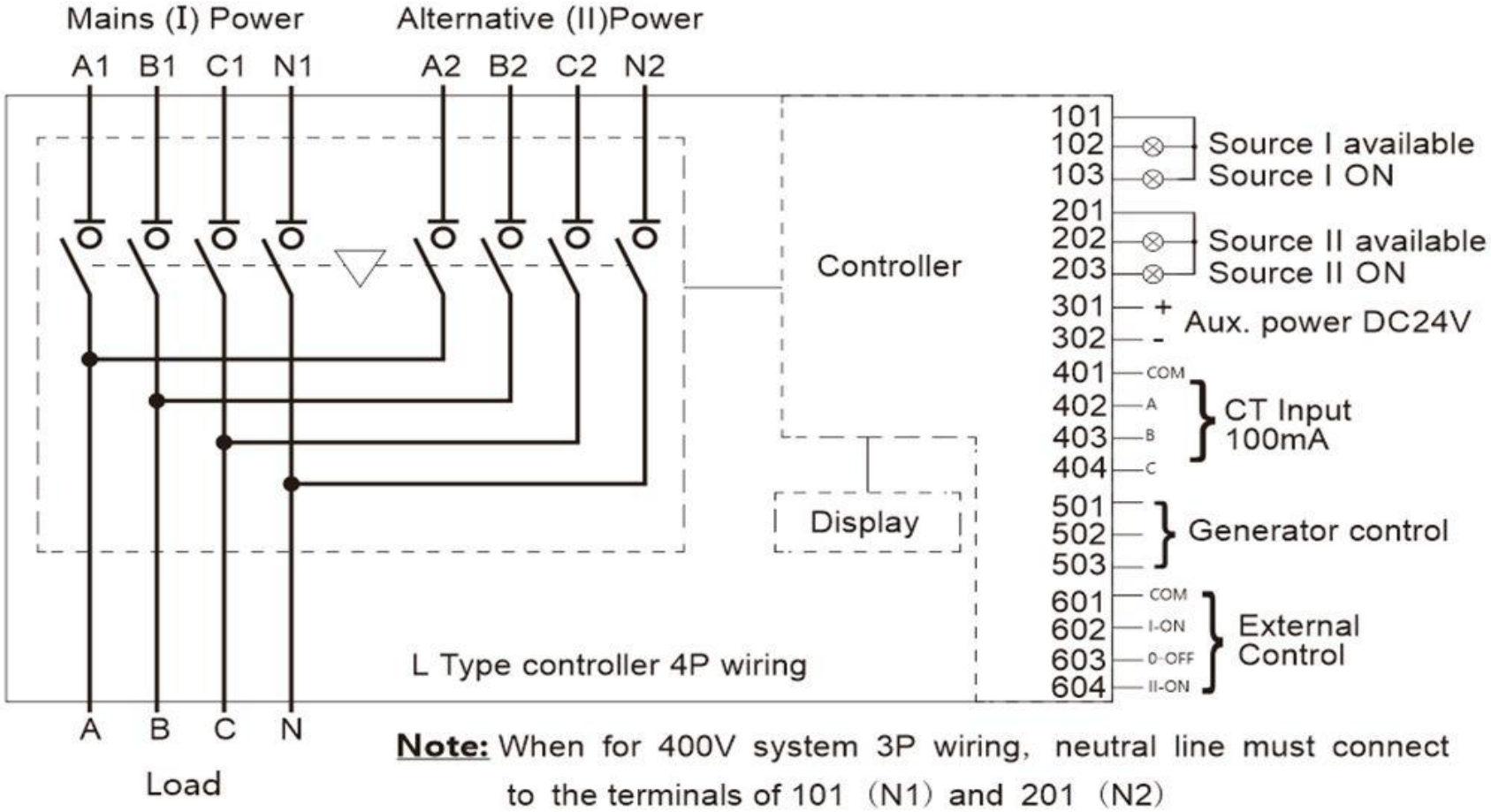
Automatic Transfer Switch Electrical and Mechanical Characteristic

Rated thermal current Ith	125A			160A		250A		630A			1600A								
Rated Insulation Voltage Ui(V)	690																		
Rated Impulse Withstand Volt. Uimp (kV)	8																		
Rated Operational Current Ie (A)	63	100	125	125	160	200	250	315	400	630	800	1000	1250	1600					
Rated short-circuit Making Capacity Icm (kA) Peak	8			17		17		26			55								
Rated Limit short -circuit current Iq(kA)	120																		
Transfer Time	1.7			2.3		3.1		2.1			2.6								
Contact transfer time	0.7			1		1.2		0.8			1								
Weight (kg) 3Poles	3.8			5.8		9.8		20.6			50			58.6			59		
Weight (kg) 4Poles	4			6.1		10.7		22			54			60.7			61		
Utilization Category	AC-33iB (GB) AC-32B (IEC)																		

Wiring Diagram



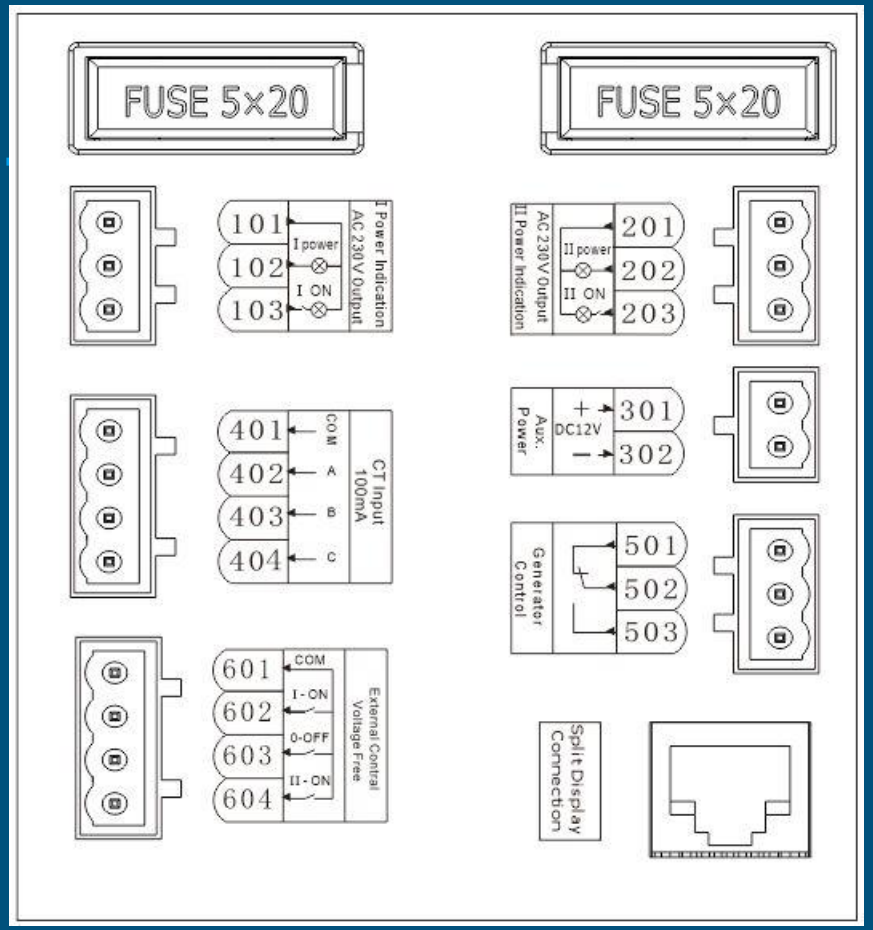
ATS Control and Operation



Function Characteristic

- Control Voltage: AC230V 50/60Hz
- Aux. power supply : DC 12V & 24V Voltage
- measure range : 40-300V
- Power Consumption ≤10W
- Working Position (I-O-II)Three working position
- Operating Mode Manual, Auto, Remote
- Display Mode LCD Display
- Transfer Mode
- Under-volt. Protection 160-200V Adjustable
- Over-volt. Protection 240-300V Adjustable
- Over/under Frequency 40Hz - 60Hz Adjustable
- Transfer Delay 3-180s Adjustable (by defult 10s)
- Recovery Delay 3-180s Adjustable (by defult 10s)
- Phase Monitor (A,B,C)Three phase monitoring
- Generator Control Yes(One set relay dry contact)
- RS485 Communication Optional
- Installation Mode Integrated (No display)/ Split (with display) optional

Terminal details



101-103 : I Power external Indicator signal output (Active AC230V 0.5A)

101—Indicator common null line and 3P null line input

102—I power indicator signal output 103—I power ON signal output

201~203:II power external indicator signal (Active AC230V/0.5A)

201—Indicator common null line and 3P null line input

202—II power indicator signal output 203—II power ON signal output

301~302 aux. power DC24V input

301--DC24V “+” input 302– DC24V “-” input

401~404 : External Control Terminal

401--- Common Point; 402--- I-ON; 403--- 0-OFF; 404--- II-ON;

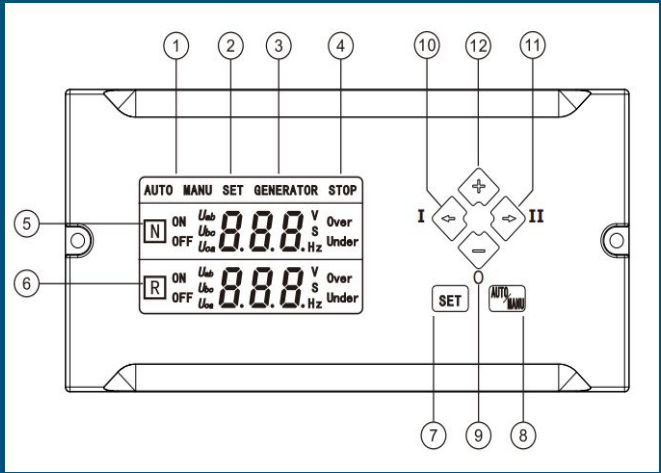
501-503 : Switch Failure Alarm Terminals

501--Alarm signal NO point 502--Alarm signal common point 503--Alarm signal NC point

601~604: I/II power fail alarm terminal

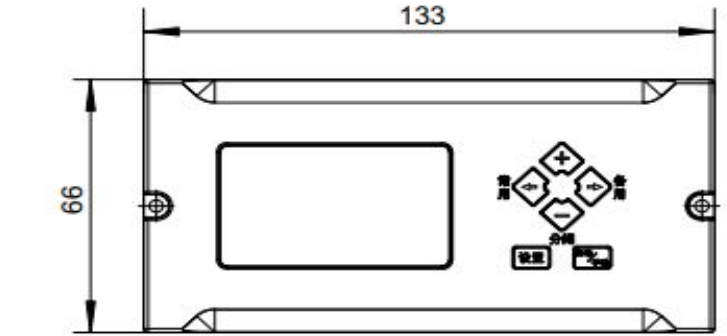
601~602-- I power fail alarm 603~604--II power fail alarm

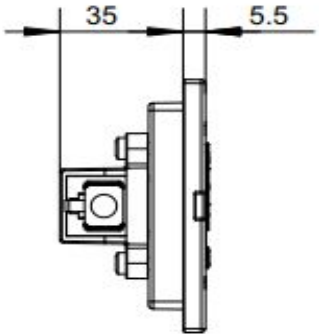
Display:

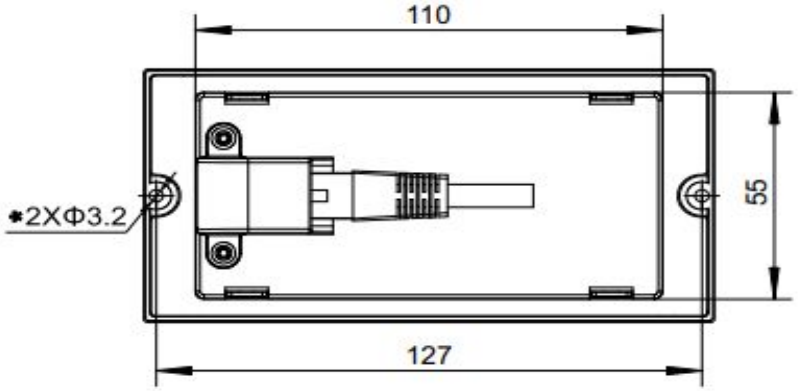


1. Auto、Manual working mode indicate;
2. Setting status indicate;
3. Generator start signal indicate;
4. ATS stop indicate (Such as Fire-linkage start);
5. I Power status data indication zone: Under working mode: display I power voltage data and transfer delay time, Under setting mode:display setting item code;
6. II power status data indication zone: Under working mode: display II power voltage data and recovery delay time, Under setting mode: display setting item code;
7. “SET“ Setting button: press this button will enter into controller setting menu;
8. “AUTO/MANU“Auto/Manual transfer mode selection button: under working status it used to select the Auto and Manual transfer mode, under the setting status it used as save and exit function
9. 0-OFF button: under manual control mode if any one of the two power is available, push this button will change to 0-OFF position; under setting status it is used for data decrease button.
10. Transfer to I power button: under manual mode and I power good, push this button ATS will transfer to I power position; Under setting mode, it used for shift button to up page setting item;
11. Transfer to II power button: under manual mode and II power good, push this button ATS will transfer to II power side; Under setting mode, it used for shift button to down page setting item;
12. button: under sett

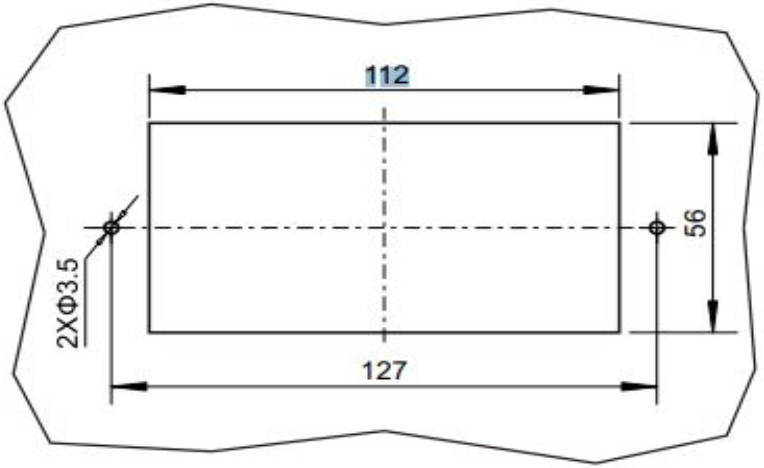
LCD Display outline dimensions and split mounting hole-cut size





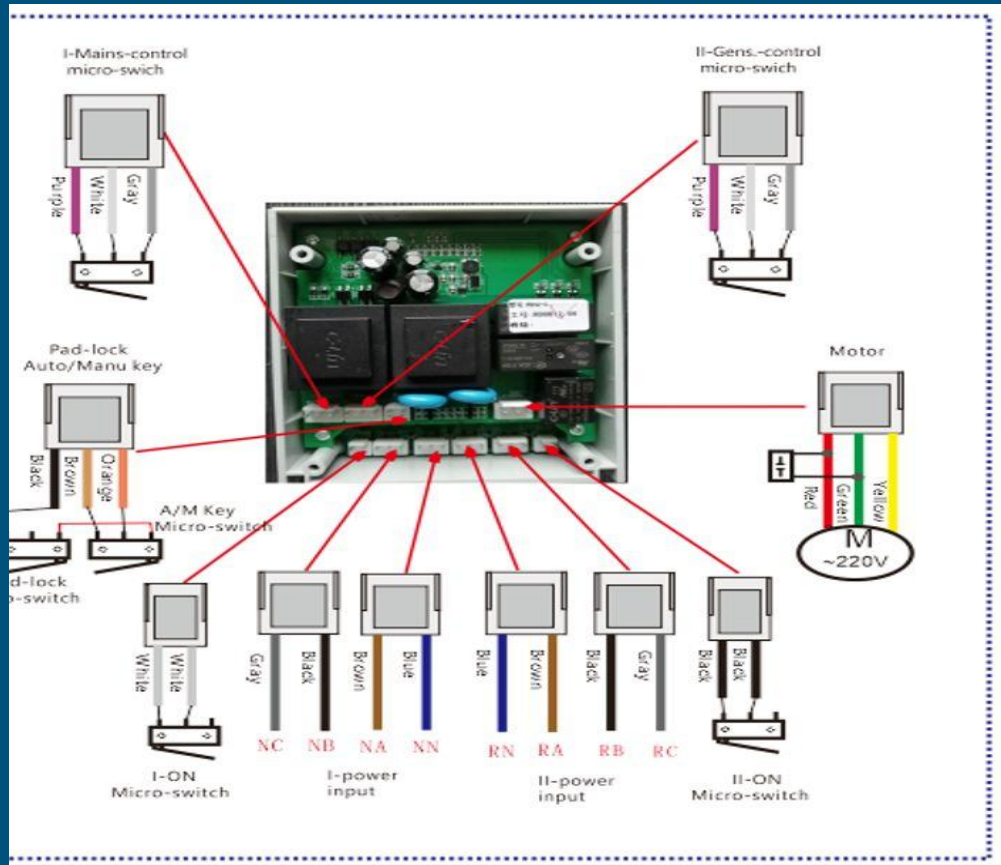


overall dimensions



Hole-cut size

Who to change RYBN ?



L1: Brown L2: Black L3: Gray N: Blue

"I" - power input :
1)NC : Gray : R phase > NN: Blue :N Phase
2)NB: Black : Y phase > NC : Gray : R phase
3)NA:Brown : B phase > NB: Black : Y phase
4)NN: Blue : N Phase > NA:Brown : B phase

"II" - power input :

5)RN: Blue : N phase > RA: Brown : B Phase
6)RA: Brown: B phase > RB : Black : Y phase
7)RB: Black : Y phase > RC : Gray : phase
8)RC: Gray : R Phase > RN : Blue: N phase