

RDSW6

系列智能型万能式断路器

Series Intelligent Universal Circuit Breaker



1. Application

RDSW6 series intelligent type Air circuit breaker(Hereinafter referred to as circuit breaker), is applied to power distribution network of AC50Hz, rated operate voltage up to 400V or 690V, rated current from 200A to 6300A, and is mainly used to distribute power and protect circuit and power-supply equipment against damage of faults, such as overload, under-voltage, short-circuit, single-phase grounding. And Circuit breaker has insulation function, symbol: " —┘—" , and inputted inverted can be realized in the installation.

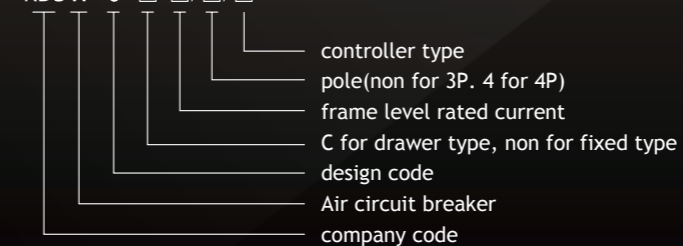
Circuit breaker is applied to power station, factory, mine(690V) and high-rise building, is generally installed at low-voltage distribute cabinet as main switch for general protecting, and it can operate as motor-protector under the condition of rated current below 1000A.

Circuit breaker has various intelligent protect function, can realize bidirectional communication between several breaker and central control computer by its Network communication technology to constitute intelligent Power supply and distribution system, realize Remote control function to satisfied the requirements of automatic system control.

Circuit breaker conforms the standard of IEC60947-2 and GB14048.2.

2. Model No.

RDSW 6 □-□/□/□



3. Normal operate condition

Ambient temperature: Max up to +40°C, Min to -5°C, the day average temperature shall not exceed +35°C

Note: 1. when the rated normal operate temperate cannot satisfy the actual operate temperature (Min value to -10°C or -25°C, or Max value exceed +40°C, Min value lower than -25°C it should be mentioned manufacturer to customize.

Altitude: up to 2000m.

Humidity: It shall not exceed 50% when it is at +40°C. And the higher humidity can be accepted at lower temperate, for instance, 90% is accepted when it is at +25°C., and the condensation which is caused by temperature change should be taken care at same time.

Pollution level: 3 level

Install type: Main circuit installation type is IV type, auxiliary circuit installation type is as same as main circuit(except undervoltage release coil, power-supply transformer primary coil), others is III type.

Using type: B type

Installation condition: it should be installed according to instruction, vertical plane tilt angle should not exceed 5°.

4. Main technical parameter

Specification	RDSW6-1000	RDSW6-2000	RDSW6-3200	RDSW6-4000	RDSW6-6300	
Frame level rated current In(A)	1000	2000	3200	4000	6300	
Rated current In(A)	200,400,630,800,1000	630,800,1000,1250,1600,2000	2000,2500,2900,3200	3200,3600,4000	4000,5000,6300	
Rated operate voltage Ue(V)	AC400,690 50Hz					
Rated insulation voltage Ui(V)	1000					
Rated impulse withstand voltage Uimp(kV)	12					
Pole	3,4(In=6300/3P)					
N-pole rated current In(A)	50%In,100%In					
Rated ultimate breaking capacity Icu(kA)(effective)	AC400V	42	80	80	120	
	AC690V	25	50	65	85	
Rated operate short-circuit breaking capacity Ics(kA)(effective)	AC400V	30	50	50	100	
	AC690V	20	40	65	75	
Rated short-circuit withstand current(1s)Icw(kA)(effective)	AC400V	30	50	65	85	
	AC690V	20	40	50	65	
Use type	B					
All breaking time(no-additional delay)	25~30					
Closing time(ms)	Max 70					
Electrical life	AC400V	6500	6500	3000	1500	500
	AC690V	3000	3000	1500	750	500
Mechanical life	Maintain free	15000	15000	10000	10000(3P)/5000(4P)	4000
	with maintain	30000	30000	20000	20000(3P)/10000(4)	8000



5. Main technical characteristics

Circuit breaker has two types of fixed type and drawer type. Fixed type circuit breaker: Put the fixed type circuit breaker body into special drawer seat. Circuit breaker body consisted of contact system, arc extinguishing system, operate mechanism, current transformer, intelligent type controller and auxiliary switch, secondary connector, under-voltage release, shunt release, etc. Drawer seat consisted of left and right side plates with rail, base and beam, etc. Contact system adopts one position contact system which has functions of main contact and arc contact in the different position of one contact. And it has new type arc resistant material to avoid the overheat because of breaking short-circuit current. And it also adopts Multiple parallel connection, to reduced electric repulsion force, to rising the electric stability of contact system.

Arc extinguishing room is settled on every pole to Separate every pole from each other and insulated every pole from the other pole, the other part of circuit breaker and the operators. And arc extinguishing rooms are settled on the circuit breaker insulation basement, to increase the mechanical strength of arc extinguishing chamber wall for safety.

Manual and electric drive mechanism in the front of the breaker and operating mechanism adopts free tripping mechanism of five connecting rod, and designed as forms of energy storage.

In the operate process, the mechanism is at pre-storage position, as long as the circuit breaker received a closing command, circuit breaker immediately instantaneous closure. The release of pre-stored energy can be completed by manual release button or closing electromagnet.

The manual driving and electric driving mechanism are integrated together, and the energy storage shaft and the main shaft are connected through a concave and convex wedge for easy installation.

Drawer seat comprises the left and right side plates with the guide rail, base and crossbeams, The base is provided with the pushing mechanism and the position indicator, and the upper part of the drawer seat is provided with auxiliary circuit static isolation contact. The safety partition plate is arranged on the front of the bridge type main circuit contact. The operation of the circuit breaker body in the drawer seat has three positions.

"Connect" position: the main circuit and auxiliary circuit are both connected, at this time the isolation board open.

"Test" position: the main circuit break, the safety barrier is closed, only auxiliary circuit is connecting, and the necessary action test can be carried out.

"Separate" position: the main circuit and the auxiliary circuit are both disconnected, and the safety separator is closed.

6. Shape and installation dimension

RDSW6-1000 fixed type

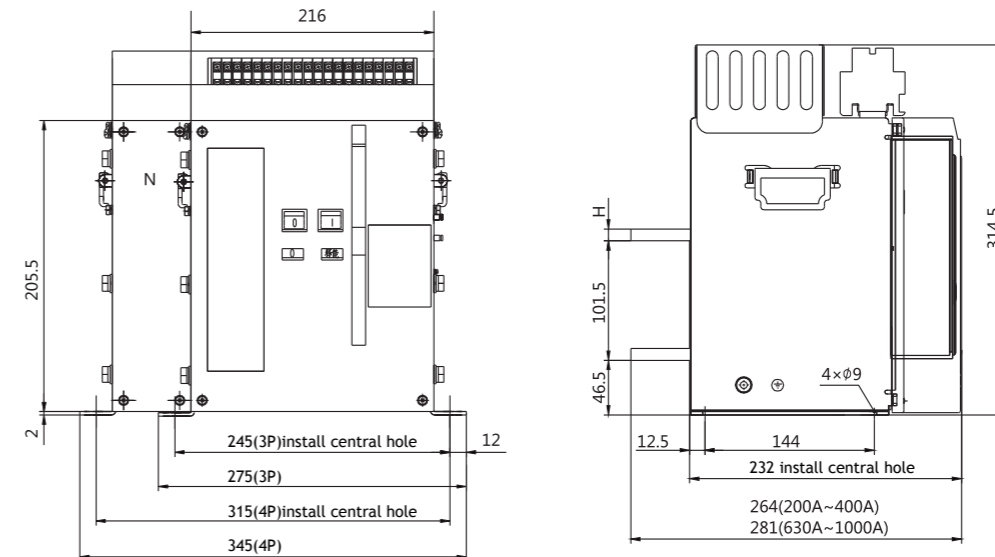
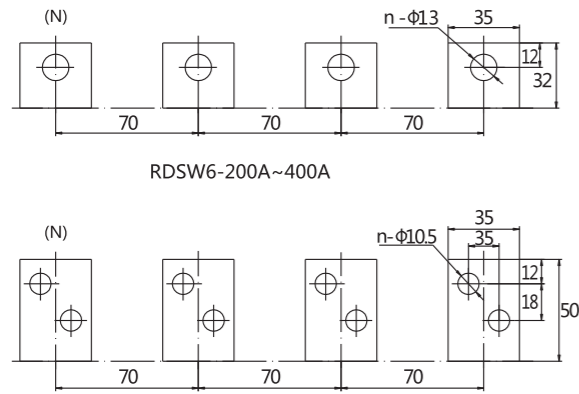


Fig6 RDSW6-200A-1000A drawer type circuit breaker

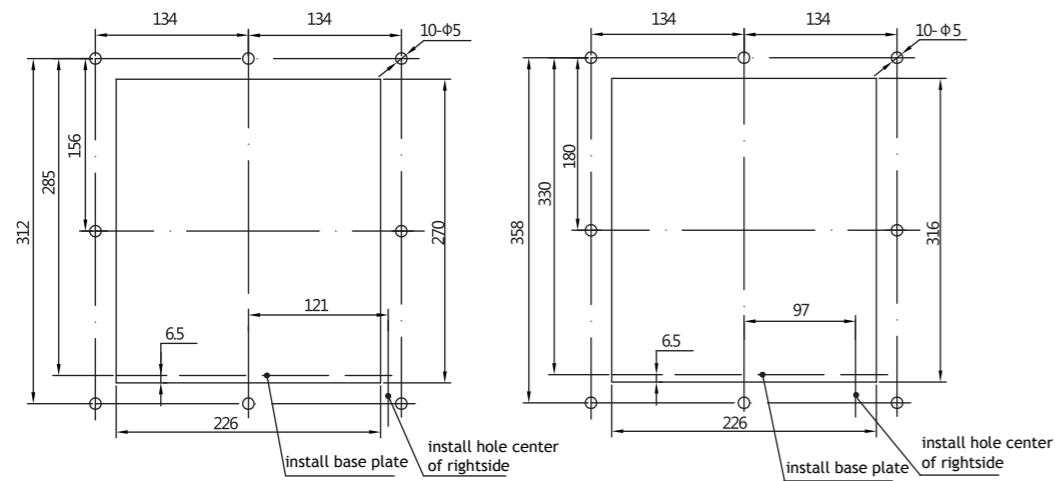


RDSW6-200A~400A

Rated current (A)	200, 400	630	800, 1000	Note
Busbar thickness H(mm)	6	8	10	
n	6	12	12	3P
	8	16	16	4P

Fig 7 RDSW6-1000 Air circuit breaker door hole-open and installation dimension

RDSW6-1000 drawer type shape and install dimension



Fix type 3P/4P
open size of doorframe and cabinet door

Drawer type 3P/4P
open size of doorframe and cabinet door

Fig 8 RDSW6-2000/3, 2000/4 Fixed type install and shape dimension

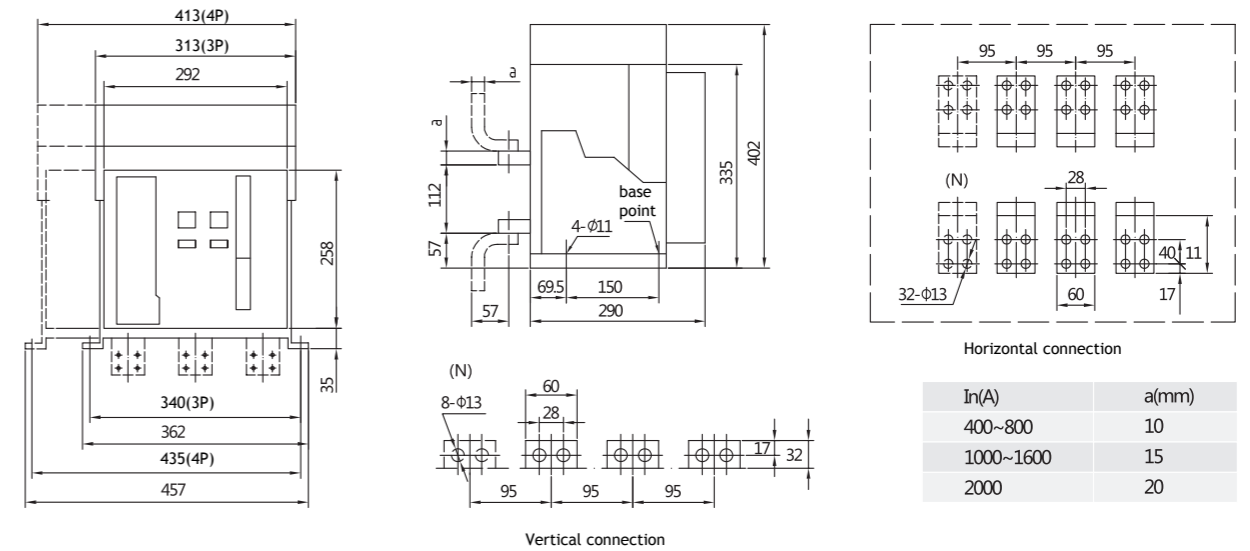


Fig 9 RDSW6-3200/3, 3200/4 Fixed type install and shape dimension

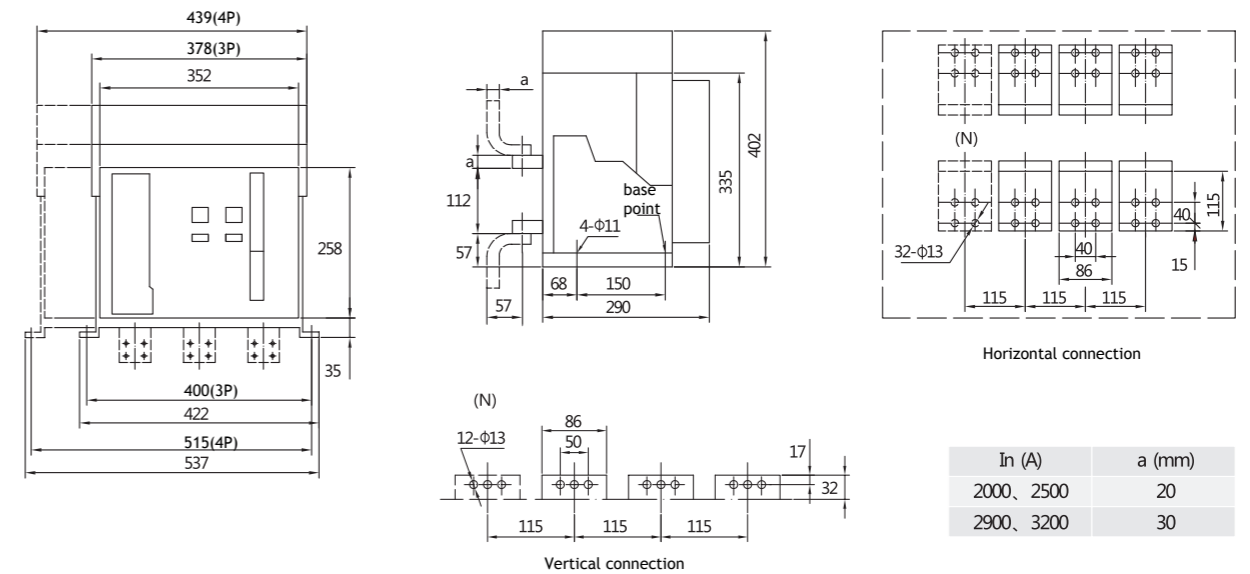


Fig10 RDSW6-2000/3、2000/4 drawer type install and shape dimension

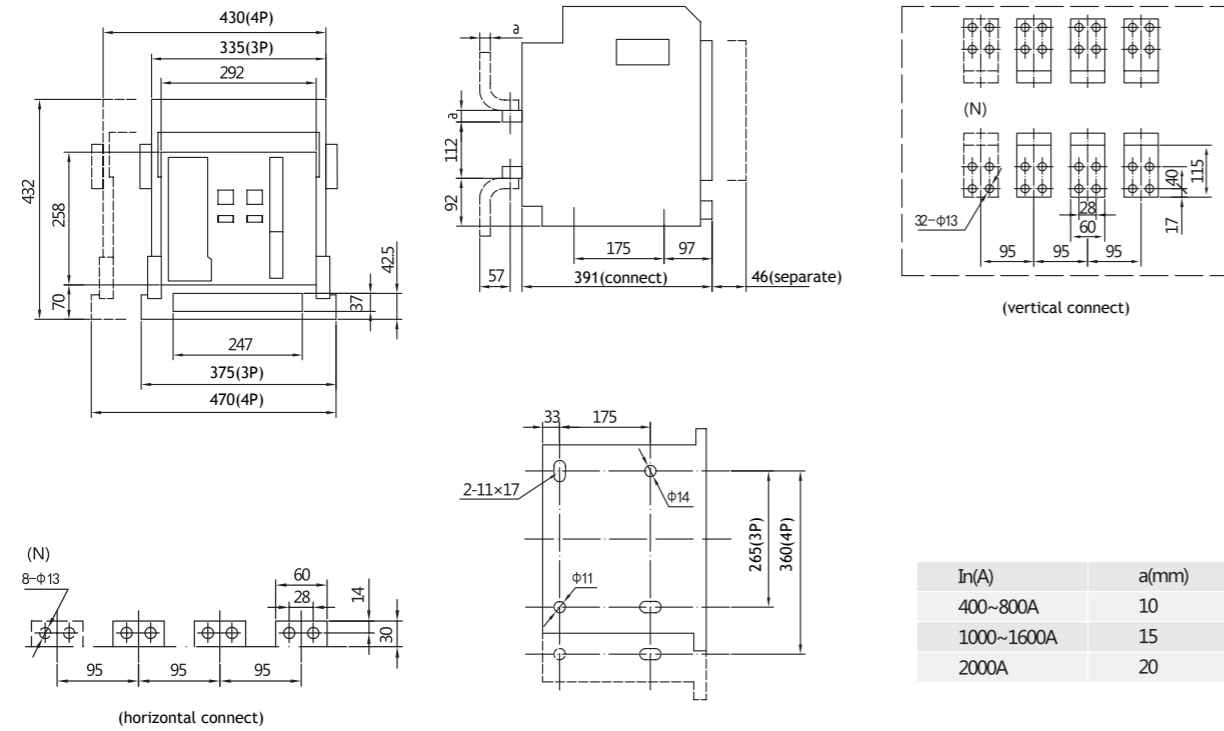


Fig11 RDSW6-3200/3、3200/4 drawer type install and shape dimension

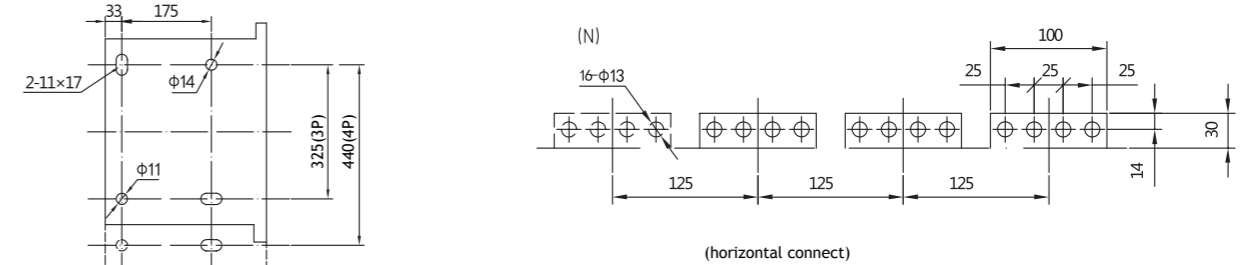
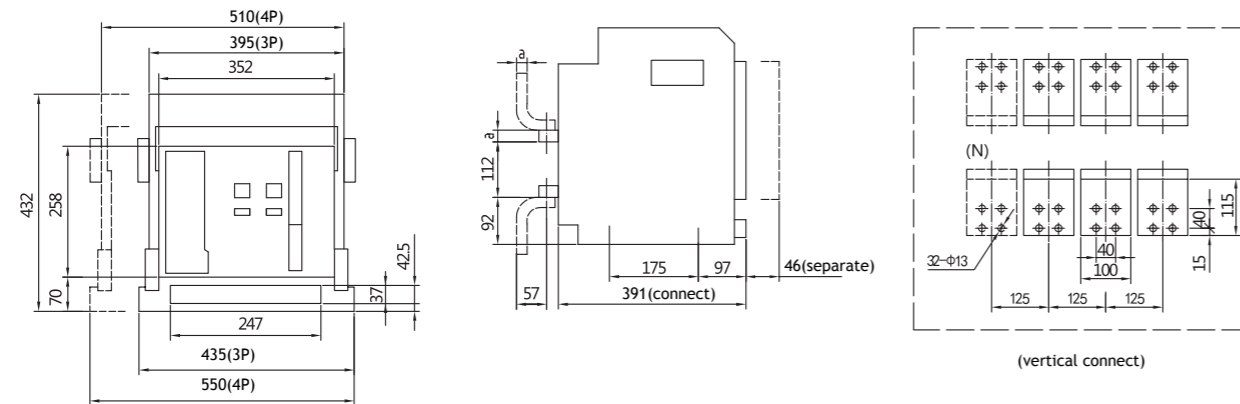


Fig12 RDSW6-4000 drawer type install and shape dimension

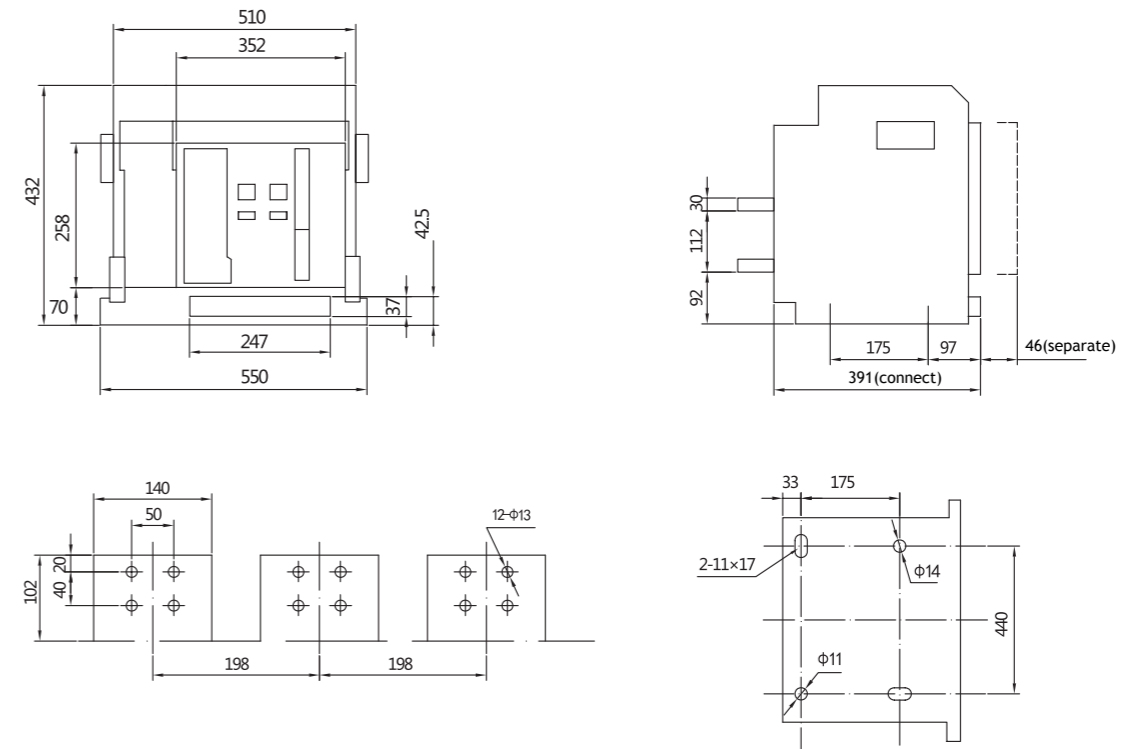


Fig 13 RDSW6-4000/4P drawer install and shape dimension

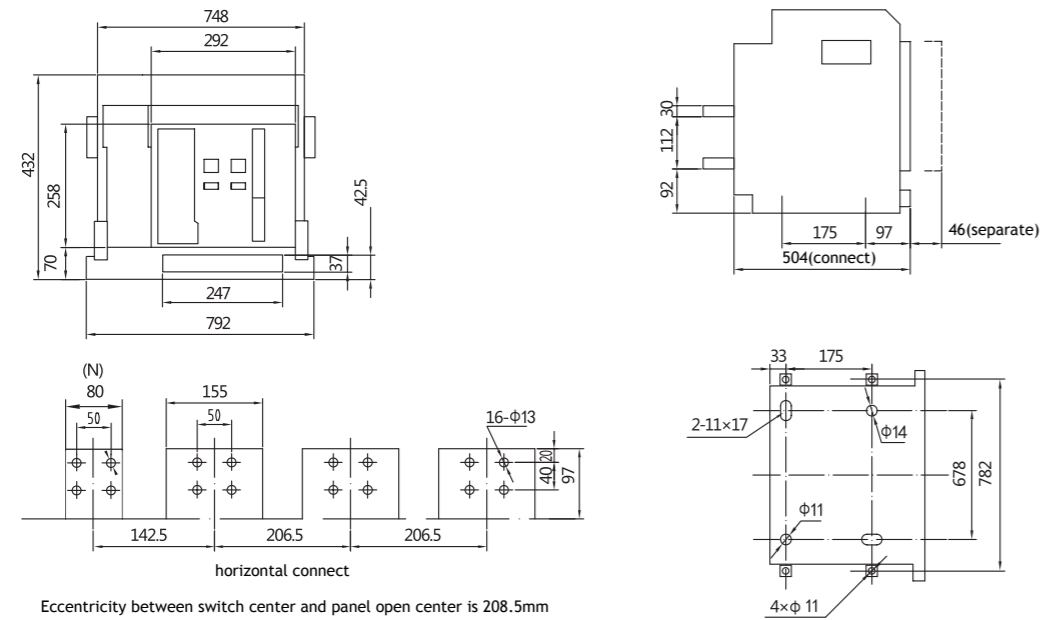


Fig14 RDSW6-6300/3P (In=4000A,5000A)drawer type install and shape dimension

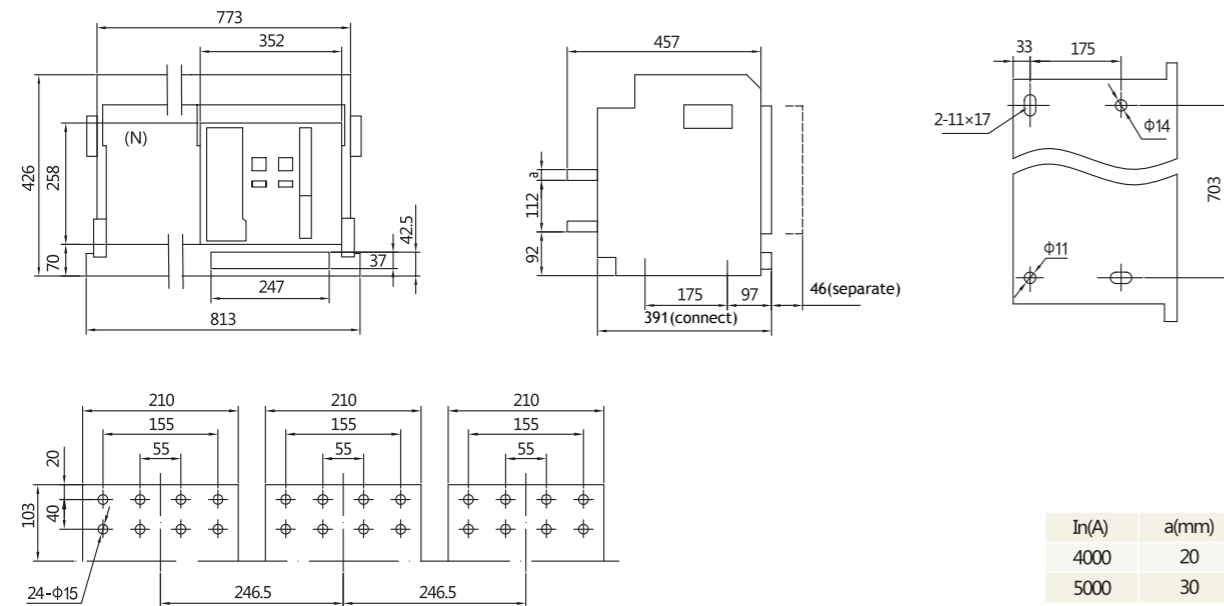


Fig15 RDSW6-6300/4P (In=4000A, 5000A)drawer type install and shape dimension

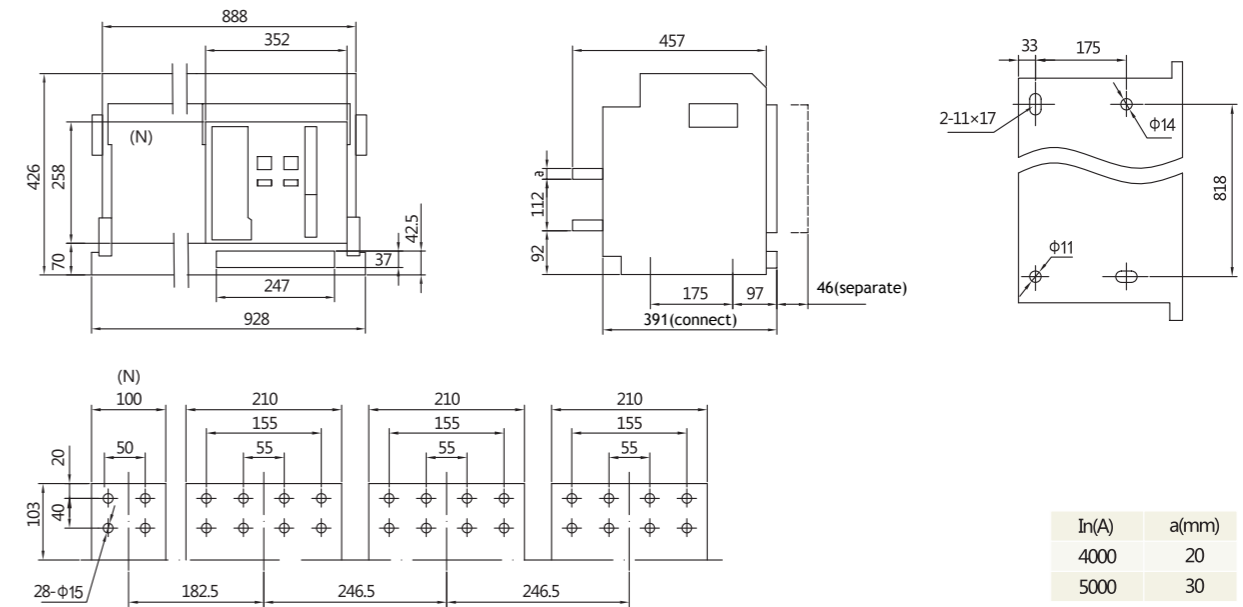
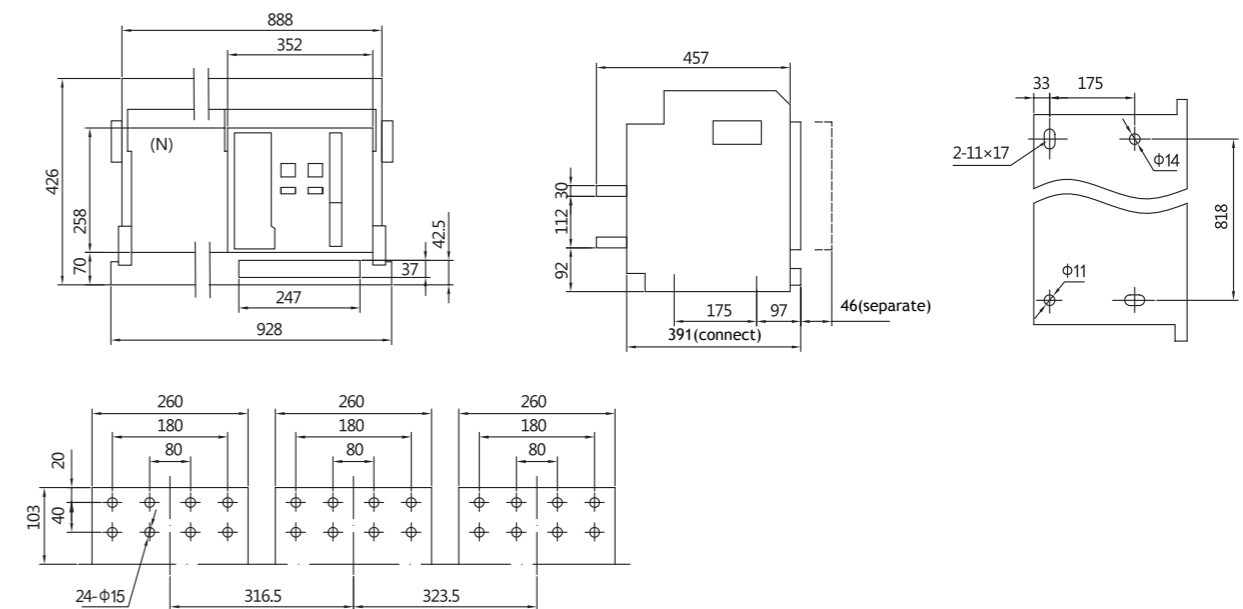


Fig16 RDSW6-6300/3P (In=6300A)drawer type install and shape dimension



Order Notice(please file number into , and file / into)

Name	Quantity	Date
Model No.	RDSW6-	
Pole	<input type="checkbox"/> 3P <input type="checkbox"/> 4P	
Rated voltage	<input type="checkbox"/> AC400V <input type="checkbox"/> AC690V	
Rated current	In= <input type="text"/> A N pole rated current IN <input type="checkbox"/> 50%In <input type="checkbox"/> 100%In	
Connect	Fixed type <input type="checkbox"/> horizontal <input type="checkbox"/> vertical	
	Drawer type <input type="checkbox"/> horizontal <input type="checkbox"/> vertical	
Intelligent controller	Use type <input type="checkbox"/> L type(electronic type) <input type="checkbox"/> M type(standard) <input type="checkbox"/> H type(communicate type)	
	Basic function	<input type="checkbox"/> current light indicate function <input type="checkbox"/> overload long-delay protection Ir1 <input type="text"/> t1 <input type="text"/> <input type="checkbox"/> Test function alarm and fault section <input type="checkbox"/> current digital indicate function <input type="checkbox"/> short-circuit short-delay protection Ir2 <input type="text"/> t2 <input type="text"/> <input type="checkbox"/> short-circuit instantaneous Ir3 <input type="text"/> <input type="checkbox"/> thermal simulation function MCR function <input type="checkbox"/> current-voltage digital indicate and communicate function
	Select function	<input type="checkbox"/> ground fault protect Ir4 <input type="text"/> t4 <input type="text"/> <input type="checkbox"/> self-diagnosis function <input type="checkbox"/> contact wear indicate function <input type="checkbox"/> fault memory function <input type="checkbox"/> voltage digital indicate function <input type="checkbox"/> Load monitor function <input type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2
	Controller voltage	<input type="checkbox"/> AC230V <input type="checkbox"/> AC400V <input type="checkbox"/> DC220V <input type="checkbox"/> DC110V
	Necessary accessory	Shunt release <input type="checkbox"/> AC230V <input type="checkbox"/> AC400V <input type="checkbox"/> DC220V <input type="checkbox"/> DC110V Close electromagnet <input type="checkbox"/> AC230V <input type="checkbox"/> AC400V <input type="checkbox"/> DC220V <input type="checkbox"/> DC110V Electric operate mechanism <input type="checkbox"/> AC230V <input type="checkbox"/> AC400V <input type="checkbox"/> DC220V <input type="checkbox"/> DC110V Auxiliary switch Normal type <input type="checkbox"/> 4 sets transfer contact Special type <input type="checkbox"/> 4-NO and 4-NC <input type="checkbox"/> 6-NO and 2-NC <input type="checkbox"/> 2-NO and 6-NC <input type="checkbox"/> 3-NO and 3-NC
select accessory	<input type="checkbox"/> Under voltage release <input type="checkbox"/> AC230V <input type="checkbox"/> AC400V <input type="checkbox"/> Undervoltage instantaneous release <input type="checkbox"/> Undervoltage delay release <input type="checkbox"/> 0.5s <input type="checkbox"/> 1s <input type="checkbox"/> 2s <input type="checkbox"/> 3s	
	<input type="checkbox"/> Mechanism interlock	<input type="checkbox"/> 1-circuit breaker <input type="checkbox"/> 1-lock 1-key <input type="checkbox"/> 2-circuit breaker <input type="checkbox"/> cable interlock <input type="checkbox"/> link-rod interlock <input type="checkbox"/> 2-lock 1key <input type="checkbox"/> 3-circuit breaker <input type="checkbox"/> link-rod interlock mode1 <input type="checkbox"/> link-rod interlock mode2 <input type="checkbox"/> link-rod interlock mode3 <input type="checkbox"/> 3-lock 2-key
	<input type="checkbox"/> External neutral line N current transformer <input type="checkbox"/> Drawer seat position electrical indicate device <input type="checkbox"/> Push-Botton lock the device	
note	The special technology requirement is not meet above specification, please consult with us.	

