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低压配电产品

Low-voltage power distribution products



Aoasis

浙江中奥电气有限公司
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绿色智造 共创未来 中奥!

Green and intelligent production, create the future together. Aoasis!





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成就 Success 创新 Innovation 诚信 Integrity 共赢 Win-Win





选型指南 Type selection guide

AOW	2000	3P	400A	F	AC230V	水平接线 Horizontal wiring
↓ 产品代号 Product code	↓ 壳架等级 Frame size	↓ 极数 Pole number	↓ 电流等级 Current class	↓ 安筋式代号 Installation code	↓ 控制回路电源电压代号 Code of control circuit source voltage	↓ 连接方式 Connection mode
万能式断路器 Conventional circuit breaker	2000 3200 6300	3P:三极 4P:四极 3P: three-pole 4P: four-pole	400A 630A 800A 1000A 1250A 1600A 2000A 2500A 2900A 3200A 3900A 4000A 5000A 6300A	D : 抽屉式 F : 固定式 D : drawout type F : fixed type	AC 230V AC 400V DC 220V DC 110V	水平接线 垂直接线 Horizontal wiring Vertical wiring

标配件与可选附件选型

Type selection of standard parts
and optional accessories

M型 M type	230V	230V	230V	6常开6常闭 6 NO 6 NC
↓ 控制器型号 Model of controller	↓ 分励脱扣器电压 Voltage of shunt release	↓ 释能电磁铁电压 Voltage of energy releasing electromagnet	↓ 电动操作机构电压 Voltage of electric operating mechanism	↓ 辅助触头 Auxiliary contact
AA型 2H型 3B2型3H型 AA type 2H type 3B2 type 3H type	AC 230V AC 400V DC 220V DC 110V	AC 230V AC 400V DC 220V DC 110V	AC 230V AC 400V DC 220V DC 110V	标准:6常开6常闭推荐 Standard : 6 NO 6 NC recommended

欠压保护 Undervoltage protection	机械联锁 Mechanical interlocking	分闸锁定 Opening locking	双电源联锁 Dual-power interlocking	附加 Accessories
<input type="checkbox"/> 欠电压脱扣器 <input type="checkbox"/> 欠电压瞬时脱扣器 <input type="checkbox"/> 欠电压延时脱扣器 : D1s D3s D5s <input type="checkbox"/> Undervoltage release <input type="checkbox"/> Undervoltage instantaneous release <input type="checkbox"/> Undervoltage time-delay release: D1s D3s D5s <input type="checkbox"/> AC 230V <input type="checkbox"/> AC 400V	<input type="checkbox"/> 水平联锁(钢缆联锁) <input type="checkbox"/> 垂直联锁(联杆联锁) <input type="checkbox"/> Horizontal interlocking (wirerope interlocking) <input type="checkbox"/> Vertical interlocking (wirerope interlocking)	<input type="checkbox"/> 一锁一钥匙 <input type="checkbox"/> 二锁一钥匙 <input type="checkbox"/> 三锁二钥匙 <input type="checkbox"/> 五锁三钥匙 <input type="checkbox"/> One lock one key <input type="checkbox"/> Two locks one key <input type="checkbox"/> Three locks two keys <input type="checkbox"/> Five locks three keys	<input type="checkbox"/> 智能水平联锁 <input type="checkbox"/> Intelligent horizontal interlocking	<input type="checkbox"/> 门框 <input type="checkbox"/> 相间隔板 <input type="checkbox"/> 相间隔离条 <input type="checkbox"/> Doorframe <input type="checkbox"/> Phase partition <input type="checkbox"/> Phase partition strip

选型举例 Example for model selection

AOW-2000/3P 400A F AC230V 固定式 3 极 400A 脉制回路电压值 (230V)
默认水平接线, 额定电压 400V, M 型控制器, 分励 230V, 电动操作机构
230V, 标准 6 开 6 闭触头。若需要其它附件, 订货时请依据上表添加。

AOW-2000/3P 400A F AC230V (fixed type 3-pole 400A voltage of control circuit (230V)
default horizontal wiring, rated voltage 400V, M type controller, shunt 230V, electric
operating mechanism 230V, standard 6 NO 6 NC contacts. Please specify according to
the above table if need other accessories.

智能控制器型谱
Model guide of intelligent controller

配置 Configuration	型号 Model			
	M	2H	3B2	3H
保护功能 Protection functions	●	●	●	●
过载长延时(L) Overload long delay (L)	●	●	●	●
短路短延时(S) Short-circuit short delay (S)	●	●	●	●
短路瞬时(I) Short-circuit instantaneous (I)	●	●	●	●
接地故障(G)/报警 Ground fault (G)/alarm	●	●	●	●
中性线过流保护(N) Neutral line overcurrent protection (N)	○	●	●	●
电流不平衡保护 Current unbalance protection	○	●	●	●
负载监控(Load) ⁽¹⁾ Load monitoring(Load) ⁽¹⁾	□	●	□	●
接通电流保护(MCR) ⁽²⁾ Making current protection (MCR) ⁽²⁾	□	○	□	●
越限跳闸(HSIOC) Out-of-limit tripping (HSIOC)	○	○	○	○
漏电保护/报警(R) ⁽³⁾ Leakage protection/alarm (R) ⁽³⁾	—	□	□	□
需用电流保护 Required current protection	—	—	—	●
过压/欠压保护 Overvoltage/undervoltage protection	—	●	●	●
电压不平衡保护 Voltage unbalance protection	—	●	●	●
逆功率保护 Reverse power protection	—	—	—	●
需用功率保护 Required power protection	—	—	—	●
过频/欠频保护 Overfrequency / underfrequency protection	—	—	—	●
相序保护 Phase-sequence protection	—			●
测量功能 Measurement functions				
电流实时值、最大测量值 Real-time current value, maximum measured value	●	●	●	●
需用电流测量 Required current measurement	—	—	—	●
电流谐波、波形测量 Current harmonics, waveform measurement	—	—	—	●
电压实时值、最大值测量 Real-time voltage value, maximum measured value	—	●	●	●
电压谐波、波形测量 Voltage harmonics, waveform measurement	—	—	—	●
功率/功率因数测量 Power / power factor measurement	—	—	●	●
电能计量 Energy measurement	—	—	—	●
需用功率测量 Required power measurement	—	—	—	●
电压频率测量 Voltage frequency measurement	—	●	●	●
热熔测量 Hot melt measurement	—	●	●	●
断路器触头当量测量 Circuit breaker contact equivalent measurement	—	●	●	●
辅助功能 Auxiliary functions				
长延时保护曲线选择 Long delay protection curve selection	○	●	●	●
故障/报警记录(及查询) Fault / alarm log (and query)	●	●	●	●
试验功能 Test function	●	●	●	●
自检&报警功能 Self-test and alarm functions	●	●	●	●
断路器分合闸(操作)次数记录 ⁽²⁾ Circuit breaker opening/closing (operation) records ⁽²⁾	—	□	□	●
保护参数锁定 Protection parameter lockout	●	●	●	●
区域联锁(ZSI)功能 ⁽⁴⁾ Zone interlocking (ZSI) function ⁽⁴⁾	—	—	□	
通信功能 Communication function	—	●	□	●

主要性能指标
Main performance indexes

		AOW-1000	AOW-1600	AOW-2000	AOW-2500	AOW-3200	AOW-4000	AOW-6300	
壳架等级额定电流Inm (A) Frame size rated current Inm (A)		1000	1600	2000	2500	3200	4000	6300	
极数 Pole number		3,4	3,4	3,4	3,4	3,4	3,4	3,4	3
额定电流In (A) Rated current In (A)		1000	200-800,1000 1250-1600	630-800, 1000-1600 2000	2500	2000-2500 2900-3200	3200-4000	4000-5000	6300
额定电压Ue (V) Rated voltage Ue (V)		400, 690	400, 690	400, 690	400, 690	400, 690	400, 690	400, 690	400, 690
绝缘电压Ui (V) Insulation voltage Ui (V)		1000	1000	1000	1000	1000	1000	1000	1000
冲击耐受电压Uiimp (V) Impulse withstand voltage Uiimp (V)		12000	12000	12000	12000	12000	12000	8000	8000
工频耐压U (V) Power frequency withstand voltage U (V)		—	—	Ac3500 50Hz	—	Ac3500 50Hz	—	Ac3500 50Hz	Ac3500 50Hz
N极额定电流IN (A) Rated current of N-pole IN (A)		—	—	50%In	—	50%In	—	50%In, 100%In	50%In, 100%In
极限分断能力Icu (kA) Ultimate breaking capacity Icu (kA)	AC400V	100	100	80	100	100	100	120	120
	AC690V	65	65	50	65	65	65	85	85
运行分断能力Ics (kA) Running breaking capacity Ics (kA)	AC400V	65	65	50	65	80	80	100	100
	AC690V	65	65	40	65	65	65	75	75
短路接通能力Icm (kA) Short-current making capacity Icm (kA)	AC400V	—	—	176	—	220	—	264	264
	AC690V	—	—	105	—	143	—	165	165
短时耐受电流 (1s) (有效值) Icw (kA) Short-time withstand current (1s) (RMS) Icw (kA)	AC400V	65	65	50	65	80	80	100	100
	AC690V	65	65	40	65	50	50	75	75
闭合时间 (ms) Closing time (ms)		—	—	70 (max)	—	70 (max)	—	70 (max)	70 (max)
操作性能 Operating performance	电气寿命 Electrical life	AC400V	—	—	6500	—	3000	—	500
		AC690V	—	—	3000	—	1500	—	500
	机械寿命 Mechanical life	免维修 Maintenance free	—	—	15000	—	10000	—	4000
		有维修 Maintenance required	—	—	30000	—	20000	—	8000
联接方式 Connection mode		—	—	水平, 垂直 Horizontal, vertical	—	水平, 垂直 Horizontal, vertical	—	水平 Horizontal	水平 Horizontal
外型尺寸 H(高)xW(宽)xL(厚) Overall dim. H (height) x W (width) x L (thickness)	固定式3P Fixed type 3P	—	—	402 x 362 x 323	—	402 x 422 x 323	—	—	—
	固定式4P Fixed type 4P	—	—	402 x 457 x 323	—	402 x 537 x 323	—	—	—
	抽屉式3P Drawout type 3P	—	—	432 x 375 x 421	—	432 x 435 x 421	—	432 x 813 x 494	432 x 928 x 494
	抽屉式4P Drawout type 4P	—	—	432 x 470 x 421	—	432 x 550 x 421	—	432 x 928 x 494	—

—表示无

— null

固定式断路器安装尺寸，外形尺寸见图 10、11

Installation dimension of fixed type circuit breaker, see Fig.10, 11 for overall dimension

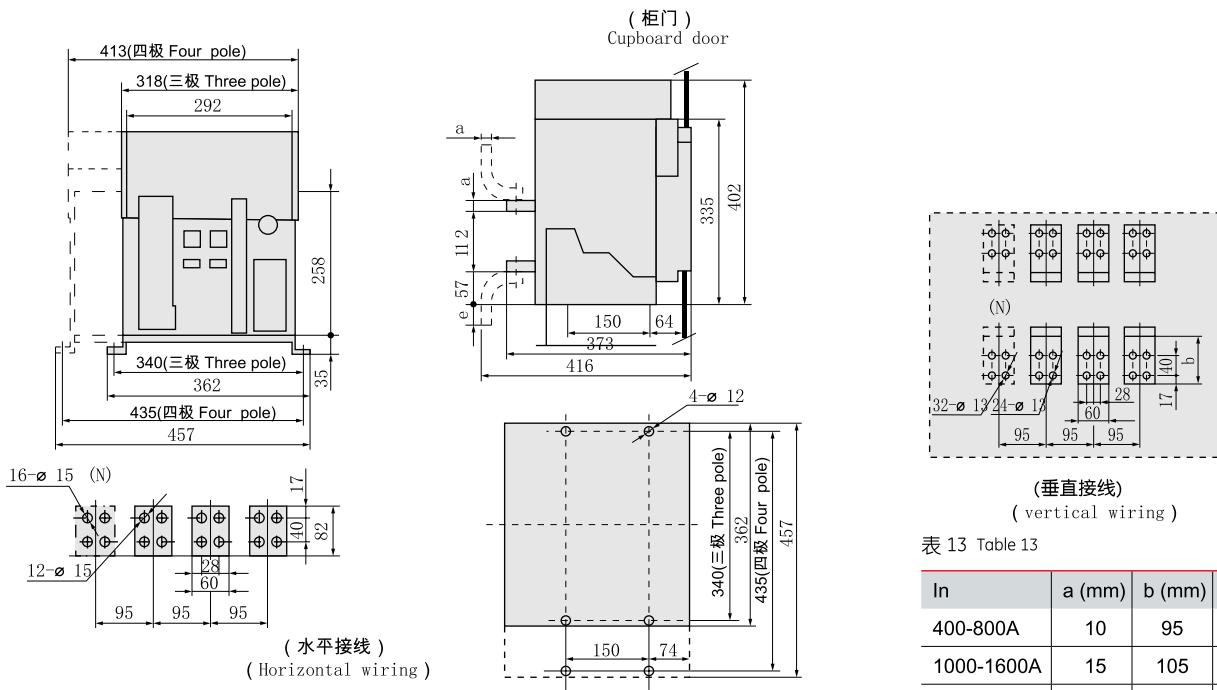


图 10 固定式断路器安装尺寸及外形尺寸 (AOW-2000、2000/4)
Fig.10 Outline and installation dimensions of fixed type circuit breaker (AOW-2000, 2000/4)

表 13 Table 13

In	a (mm)	b (mm)	e (mm)
400-800A	10	95	38
1000-1600A	15	105	48
2000A	20	115	58

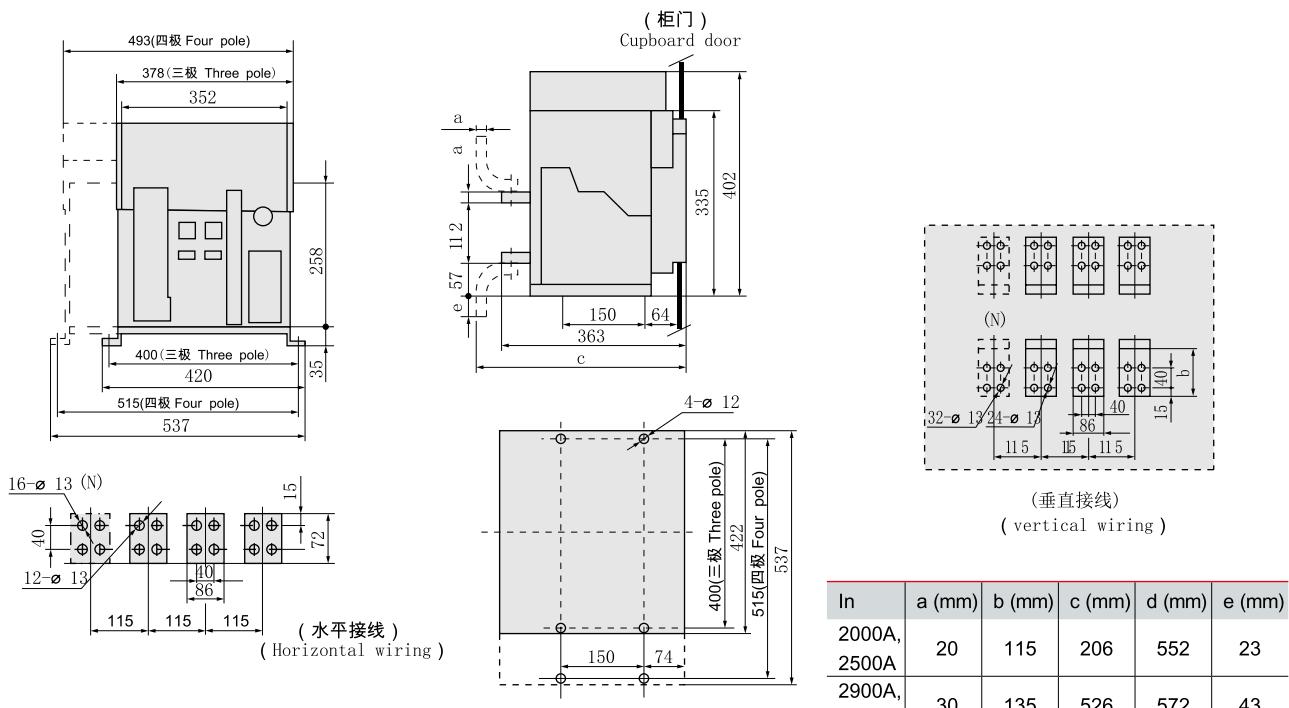


图 11 固定式断路器安装尺寸及外形尺寸 (AOW-3200、3200/4)
Fig.11 Outline and installation dimensions of fixed type circuit breakers (AOW-3200, 3200/4)

In	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)
2000A, 2500A	20	115	206	552	23
2900A, 3200A	30	135	526	572	43

外形及安装尺寸

Overall and Installation Dimensions

抽屉式断路器安装尺寸，外形尺寸见图 12、13、14、15、16、17、18
 Outline and installation dimensions of drawout type circuit breaker, see Fig.12, 13, 14, 15, 16, 17 and 18

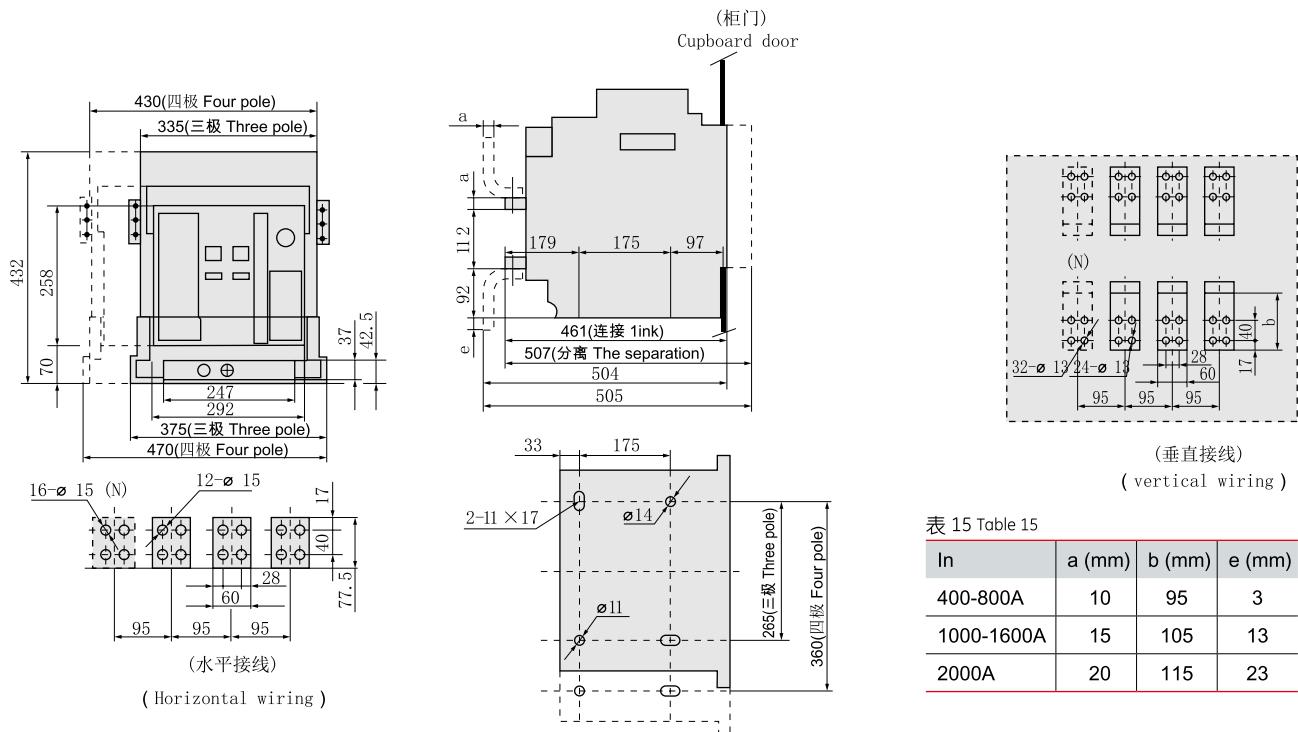


图 12 抽屉式断路器安装尺寸及外形尺寸 (AOW-2000、2000/4)
 Fig.12 Outline and installation dimensions of drawout type circuit breaker (AOW-2000, 2000/4)

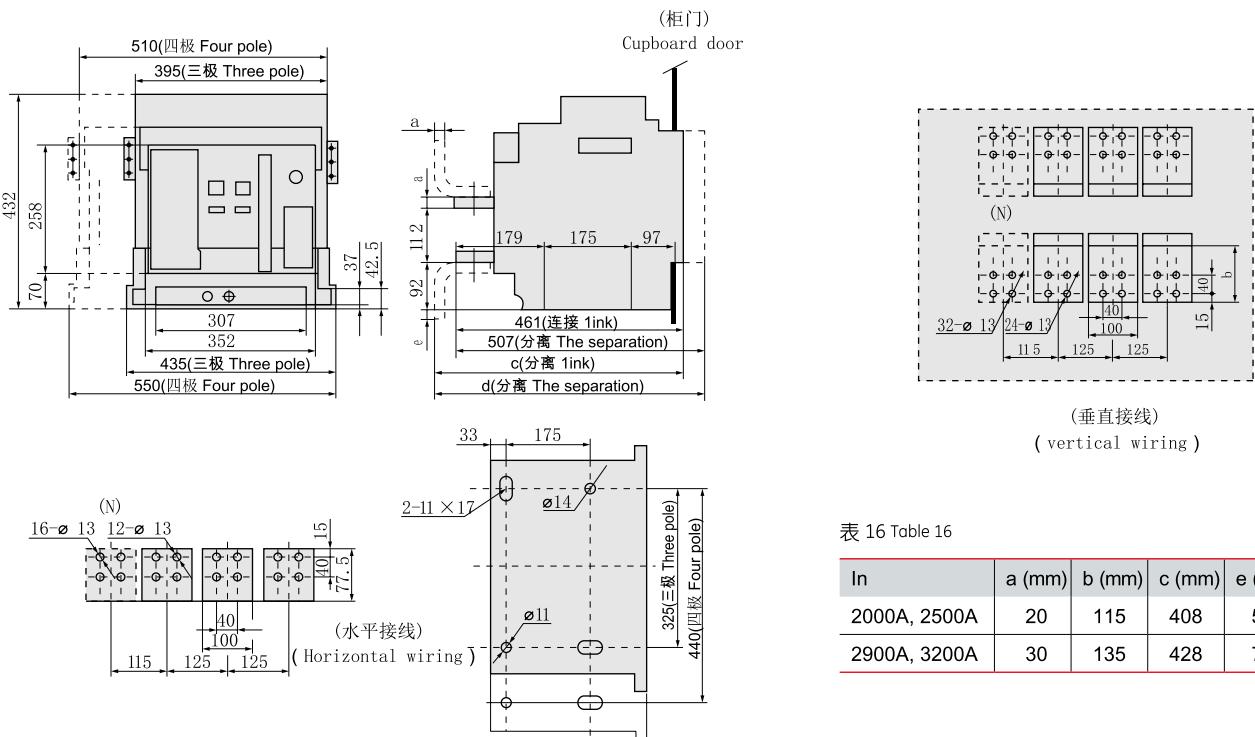


图 13 抽屉式断路器安装尺寸及外形尺寸 (AOW-3200、3200/4)
 Fig.13 Outline and installation dimensions of drawout type circuit breaker (AOW -3200, 3200/4)

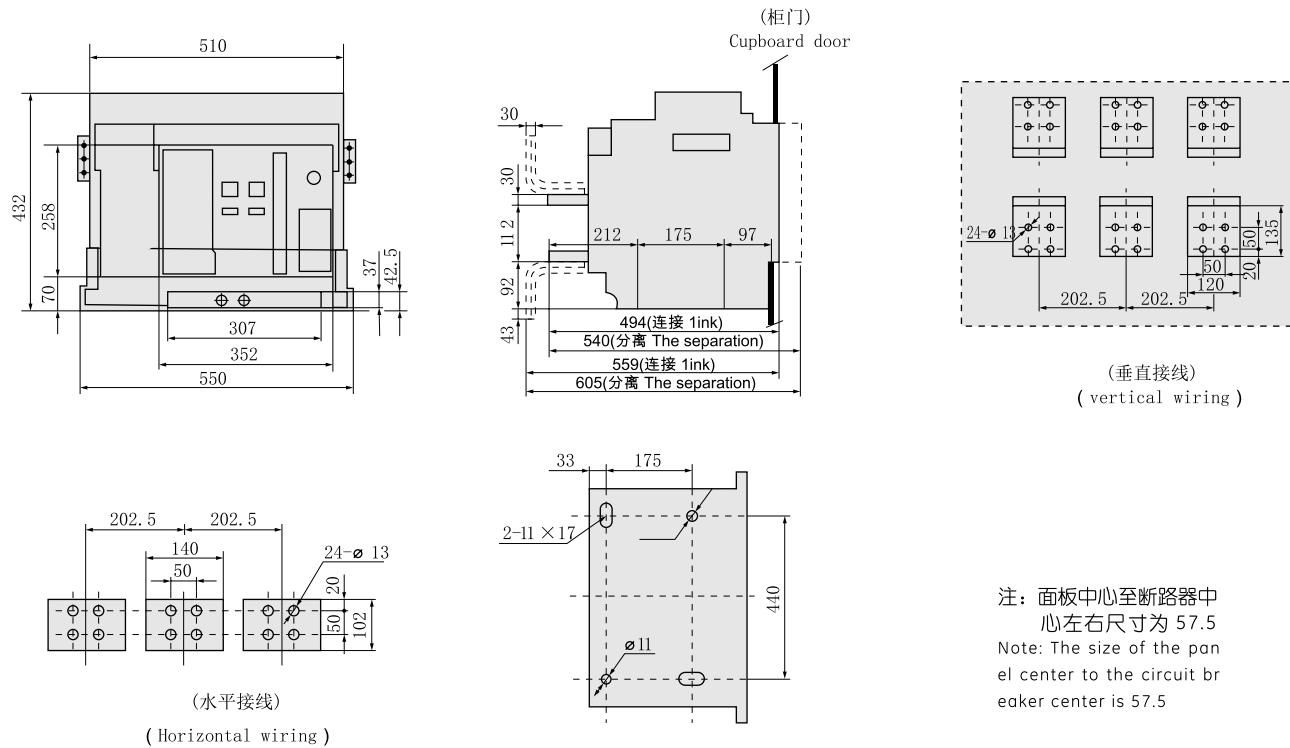


图 14 抽屉式断路器安装尺寸及外形尺寸 (STW6-4000)

Fig. 14 Outline and installation dimensions of drawout type circuit breaker (BCW9-4000)

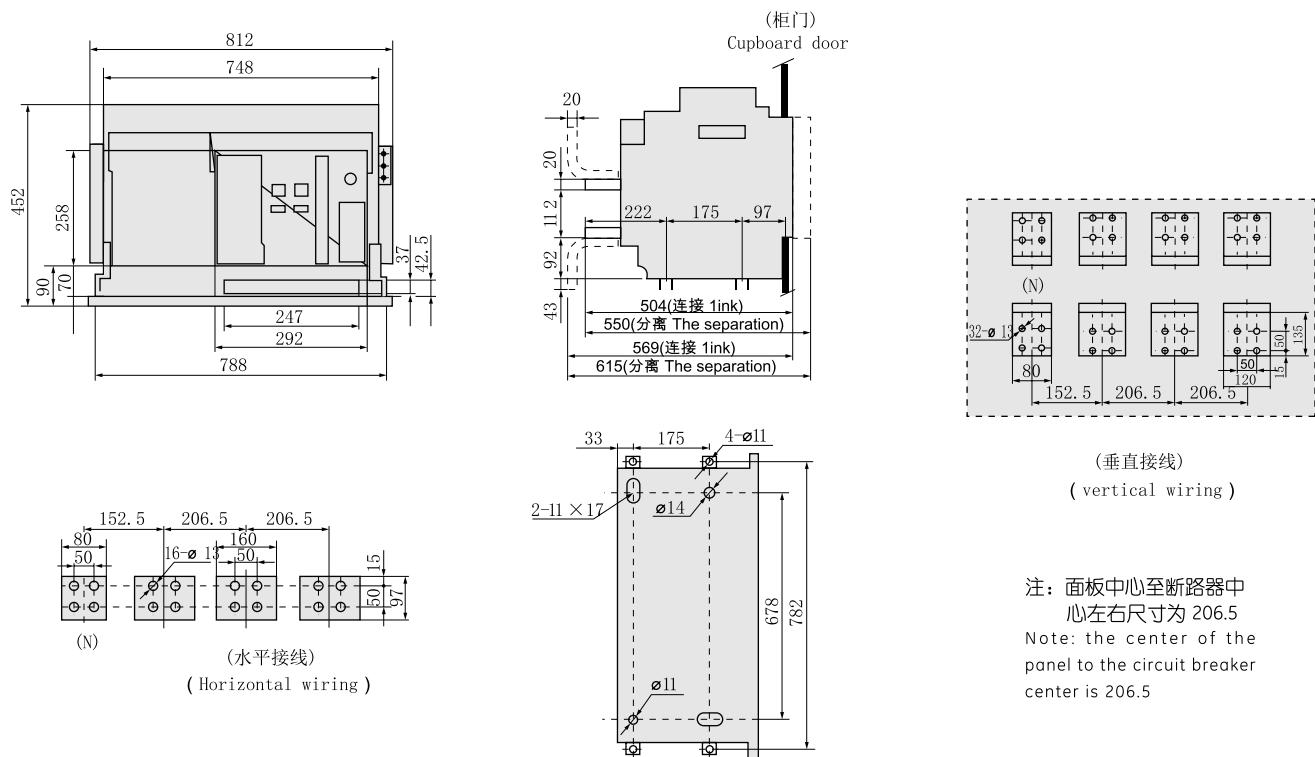
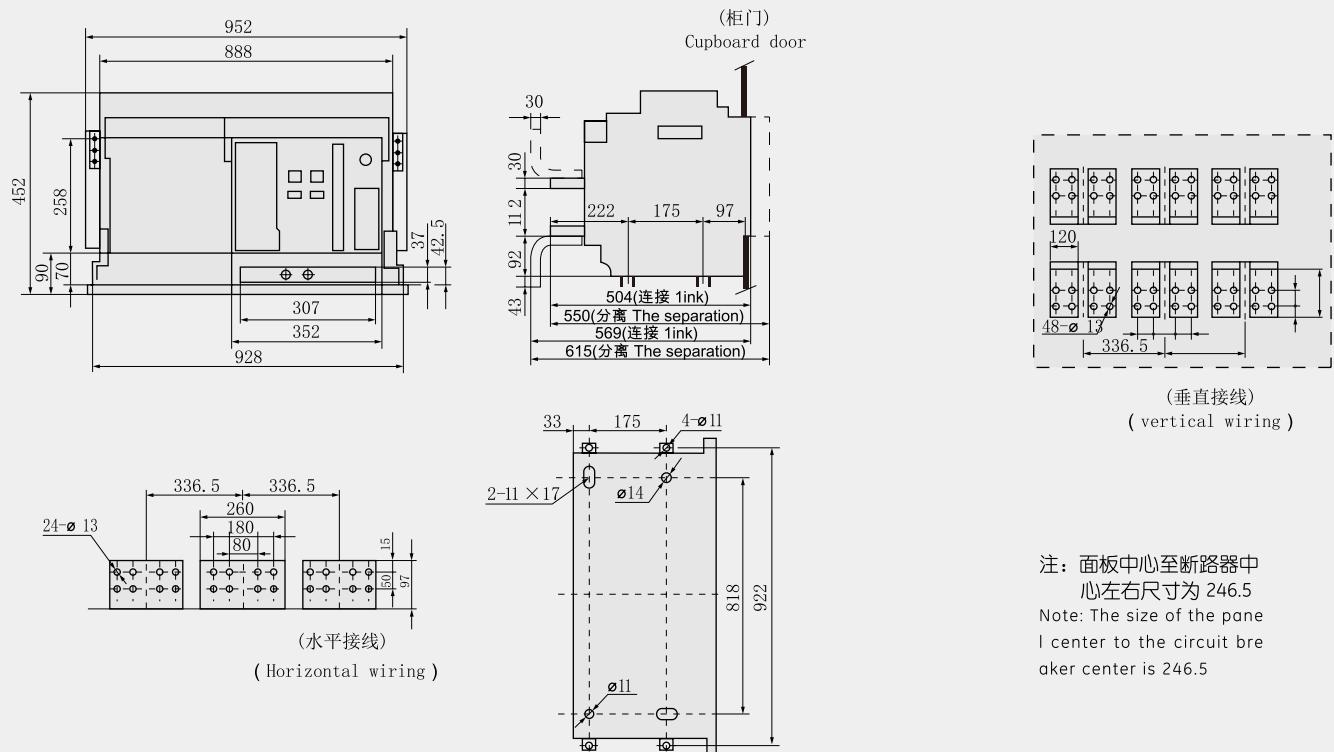
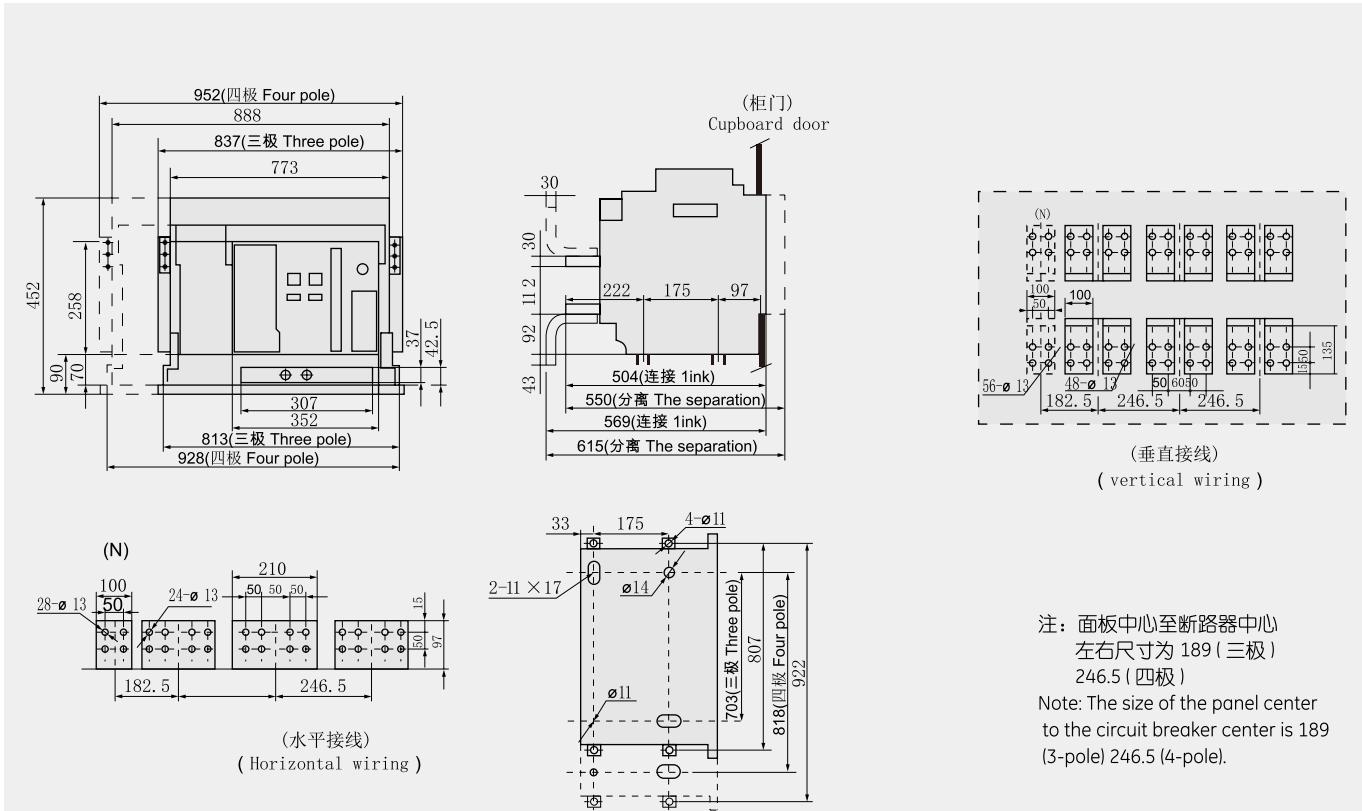


图 15 抽屉式断路器安装尺寸及外形尺寸 (AOW-4000/4)

Fig. 15 Outline and installation dimensions of drawout type circuit breaker (AOW-4000/4)



附件表 Accessory table



名称 Item	功能 Function	Us
分励脱扣器 Shunt release	用于在电路电压(70%-110%)Us 远距离断路器可靠断开 Let the circuit breaker disconnect reliably and remotely at circuit voltage (70%-110%)Us	AC 230V AC 400V DC 220V DC110V
闭合电磁铁 Closing coil	用于在电路电压(85%-110%)Us断路器在储能状态下可使断路器远距离可靠合闸 Let the circuit breaker switch on reliably and remotely in energy storing state at circuit voltage (85%-110%)Us	AC 230V AC 400V DC 220V DC110V
电动机 Motor	用于在电路电压(85%-110%)Us与操作机构传动联接使操作机构储能，为断路器合闸做准备当操作机构储能后，电动操作机构通过微动开关使电机断电停止 Let the operating mechanism store energy at circuit voltage (85%-110%)Us to prepare for closing of circuit breaker. When the operating mechanism is energy stored, the motor will be stopped through microswitch.	AC 230V AC 400V DC 220V DC110V
辅助开关 Auxiliary switch	用于转换断路器合闸 分闸状态，同时是分励脱扣器闭合电磁铁短时通电工作的保障和通断切换，约定发热电流6A额定控制容量Pe交流为300VA, DC为60W，标准形式6常开6常闭 Change over the ON and OFF state of circuit breaker, also guarantee short-time power on working and on/off switching of closing coil of shunt release, conventional thermal current 6A, rated control capacity Pe is AC 300VA, DC 60W, standard type 6 NO 6 NC.	AC 230V AC 400V DC 220V DC110V

电器附件
Electric accessories



名称 Item		
欠压脱扣器助吸式 Undervoltage release self-suction type	额定工作电压Ue Rated operating voltage	AC230V 50Hz AC400V 50Hz
	动作电压值 Operating voltage value	(35%~70%) Ue
	保证合闸电压值 Voltage value ensures closing	(85%~110%) Ue
	保证不能合闸电压值 Voltage value ensures non closing	≤35%Ue
	功耗 Power loss	24VA
	脱扣器动作时间欠电压瞬时脱扣器 Actuation time of release, undervoltage instantaneous release	瞬时 Instantaneous
欠压脱扣器自吸式 Undervoltage release self-suction type	额定工作电压Ue Rated operating voltage Ue	AC230V 50Hz AC400V 50Hz
	动作电压值 Operating voltage value	(35% -70%)Ue
	保证合闸电压值 Voltage value ensures closing	(85%~110%)Ue
	保证不能合闸电压值 Voltage value ensures non closing	≤35%Ue
	功耗 Power loss	24VA
	脱扣器动作时间欠 Actuation time of release	电压瞬时脱扣器 Undervoltage instantaneous release
		瞬时 Instantaneous
		欠电压延时脱扣器 Undervoltage time-delay release
		延时 1s, 3s, 5s 在1/2延时时间内电源电压恢复到85%Ue时断路器不断 Delay time 1s, 3s, 5s; if the voltage restores to 85% Ue within 1/2 delay time, the circuit breaker will not be disconnected. 断