



EKA1-2000



EKA1-3200

### Type Selection Guide

EKA1	2000	3P	400A	F	AC230V	Horizontal wiring
↓	↓	↓	↓	↓	↓	↓
Product code	Frame size	Pole number	Current class	Installation code	Code of control circuit source voltage	Connection mode
Conventional circuit breaker	2000	3P: three-pole 4P: four-pole	400A	D: drawout type F: fixed type	AC230V	Horizontal wiring Vertical wiring
	3200		2500A		AC400V	
	6300		630A		DC220V	
			800A		DC110V	
			1000A			
			1250A			
			1600A			
			2000A			
			2500A			
			2900A			
			3200A			
			3900A			
			4000A			
			5000A			
			6300A			

### Type Selection of Standard Parts and Optional Accessories

M type	230V	230V	230V	6 NO 6 NC
↓	↓	↓	↓	↓
Model of controller	Voltage of shunt release	Voltage of energy releasing electromagnet	Voltage of electric operating mechanism	Auxiliary contact
AA type 2H type 3B2 type 3H type	AC230V AC400V DC220V DC110V	AC230V AC400V DC220V DC110V	AC230V AC400V DC220V DC110V	Standard: 6NO6NC recommended

Undervoltage protection	Mechanical interlocking	Opening locking	Dual-power interlocking	Accessories
<input type="checkbox"/> Undervoltage release <input type="checkbox"/> Undervoltage instantaneous release <input type="checkbox"/> Undervoltage time-delay release: D1s D3s D5s <input type="checkbox"/> AC230V <input type="checkbox"/> DC220V <input type="checkbox"/> AC400V <input type="checkbox"/> DC110V	<input type="checkbox"/> Horizontal interlocking (wirerope interlocking) <input type="checkbox"/> Vertical interlocking (wirerope interlocking)	<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"/> Intelligent horizontal interlocking	<input type="checkbox"/> Doorframe <input type="checkbox"/> Phase partition <input type="checkbox"/> Phase partition strip

Note: mark V in  if need the corresponding optional accessory

### Operating Characteristics

EKA1-2000/3P 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.

## Model Guide of Intelligent Controller

Configuration	Model			
	M	2H	3B2	3H
Protection functions	●	●	●	●
Overload long delay (L)	●	●	●	●
Short-circuit short delay (S)	●	●	●	●
Short-circuit instantaneous (I)	●	●	●	●
Ground fault (G)/alarm	●	●	●	●
Neutral line overcurrent protection (N)	○	●	●	●
Current unbalance protection	○	●	●	●
Load monitoring(Load) <sup>[1]</sup>	□	●	□	●
Making current protection (MCR) <sup>[2]</sup>	□	○	□	●
Out-of-limit tripping (HSIOC)	○	○	○	○
Leakage protection/alarm (R) <sup>[3]</sup>	—	□	□	□
Required current protection	—	—	—	●
Overvoltage/undervoltage protection	—	●	●	●
Voltage unbalance protection	—	●	●	●
Reverse power protection	—	—	—	●
Required power protection	—	—	—	●
Overfrequency/underfrequency protection	—	—	—	●
Phase-sequence protection	—	—	—	●
Measurement functions				
Real-time current value, maximum measured value	●	●	●	●
Required current measurement	—	—	—	●
Current harmonics, waveform measurement	—	—	—	●
Real-time voltage value, maximum measured value	—	●	●	●
Voltage harmonics, waveform measurement	—	—	—	●
Power / power factor measurement	—	—	●	●
Energy measurement	—	—	—	●
Required power measurement	—	—	—	●
Voltage frequency measurement	—	●	●	●
Hot melt measurement	—	●	●	●
Circuit breaker contact equivalent measurement	—	●	●	●
Auxiliary functions				
Long delay protection curve selection	○	●	●	●
Fault / alarm log (and query)	●	●	●	●
Test function	●	●	●	●
Self-test and alarm functions	●	●	●	●
Circuit breaker opening/closing (operation) records <sup>[2]</sup>	—	□	□	●
Protection parameter lockout	●	●	●	●
Zone interlocking (ZSI) function <sup>[4]</sup>	—	—	□	—
Communication function	—	●	□	●

● Standard configuration      ○ Auxiliary configuration      — No configuration  
 □ Functions that can be added to the standard configuration with appropriate hardware

Note:

[1]: Need to configure the relay module;

[2]: Need to configure microswitch for detecting opening/closing of circuit breaker;

[3]: Need to configure the leakage transformer (zero-sequence current transformer);

[4]: Need to configure the ZSI circuit module.

Main Performance Indexes					
		EKA1-2000	EKA1-3200	EKA1-6300	
Frame size rated current Inm (A)		2000	3200	6300	
Pole number		3,4	3,4	3,4	3
Rated current In (A)		400, 630, 800,1000 1250,1600,2000	2000, 2500 2900, 3200	4000, 5000	6300
Rated voltage Ue (V)		400, 690	400,690	400, 690	400,690
Insulation voltage Ui (V)		1000	1000	1000	1000
Impulse withstand voltage Uimp (V)		12000	12000	8000	8000
Power frequency withstand voltage U (V)		AC3500 50HZ	AC3500 50HZ	AC3500 50HZ	AC3500 50HZ
Rated current of N-pole IN (A)		50%In	50%In	50%In,100%In	50%In,100%In
Ultimate breaking capacity Icu (kA)	AC400V	80	100	120	120
	AC690V	50	65	85	85
Running breaking capacity Ics (kA)	AC400V	50	80	100	100
	AC690V	40	65	75	75
Short-current making capacity Icm (kA)	AC400V	176	220	264	264
	AC690V	105	143	165	165
Short-time withstand current(1s)(RMS) Icw (kA)	AC400V	50	80	100	100
	AC690V	40	50	75	75
Closing time (ms)		70 (max)	70 (max)	70 (max)	70 (max)
Operating performance	AC400V	6500	3000	500	500
	AC690V	3000	1500	500	500
	Maintenance free	15000	10000	4000	4000
	Maintenance required	30000	20000	8000	8000
Connection mode		Horizontal vertical	Horizontal vertical	Horizontal	Horizontal
Overall dim. H(height)×W(width) ×L(thickness)	Fixed type 3P	402 x 362 x 323	402 x 422 x 323	—	—
	Fixed type 4P	402 x 457 x 323	402 x 537 x 323	—	—
	Drawout type 3P	432 x 375 x 421	432 x 435 x 421	432 x 813 x 494	432 x 928 x 494
	Drawout type 4P	432 x 470 x 421	432 x 550 x 421	432 x 928 x 494	—

— null

**Overall and Mounting Dimensions**

Outline and installation dimensions of fixed type circuit breaker, see Fig.10, 11

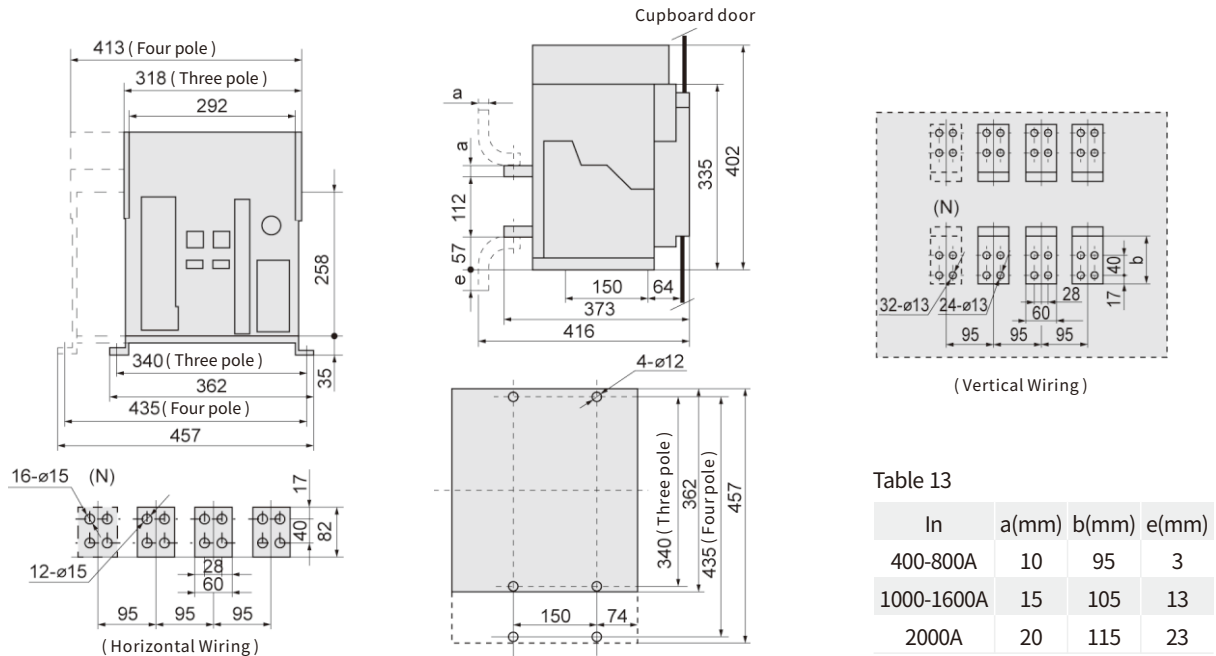


Fig.10 Outline and installation dimensions of fixed type circuit breaker (EKA1-2000, 2000/4)

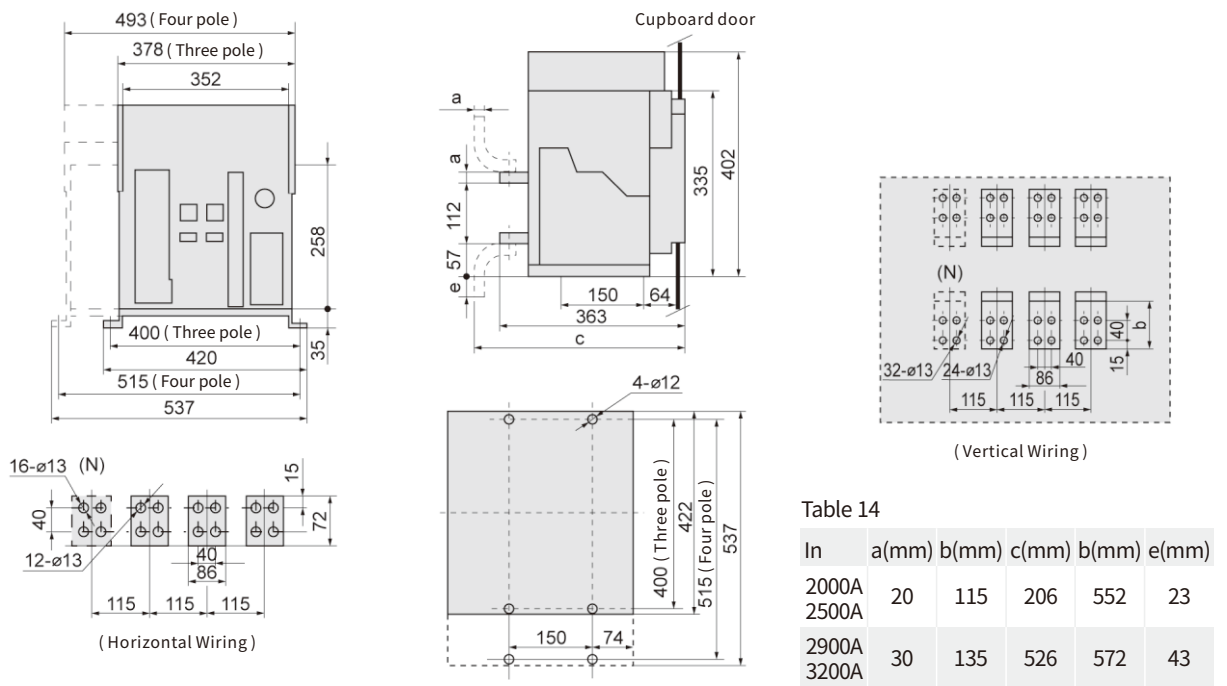


Fig.11 Outline and installation dimensions of fixed type circuit breakers (EKA1-3200, 3200/4)

**Overall and Mounting Dimensions**

Outline and installation dimensions of drawout type circuit breaker, see Fig.12, 13, 14, 15, 16, 17 and 18

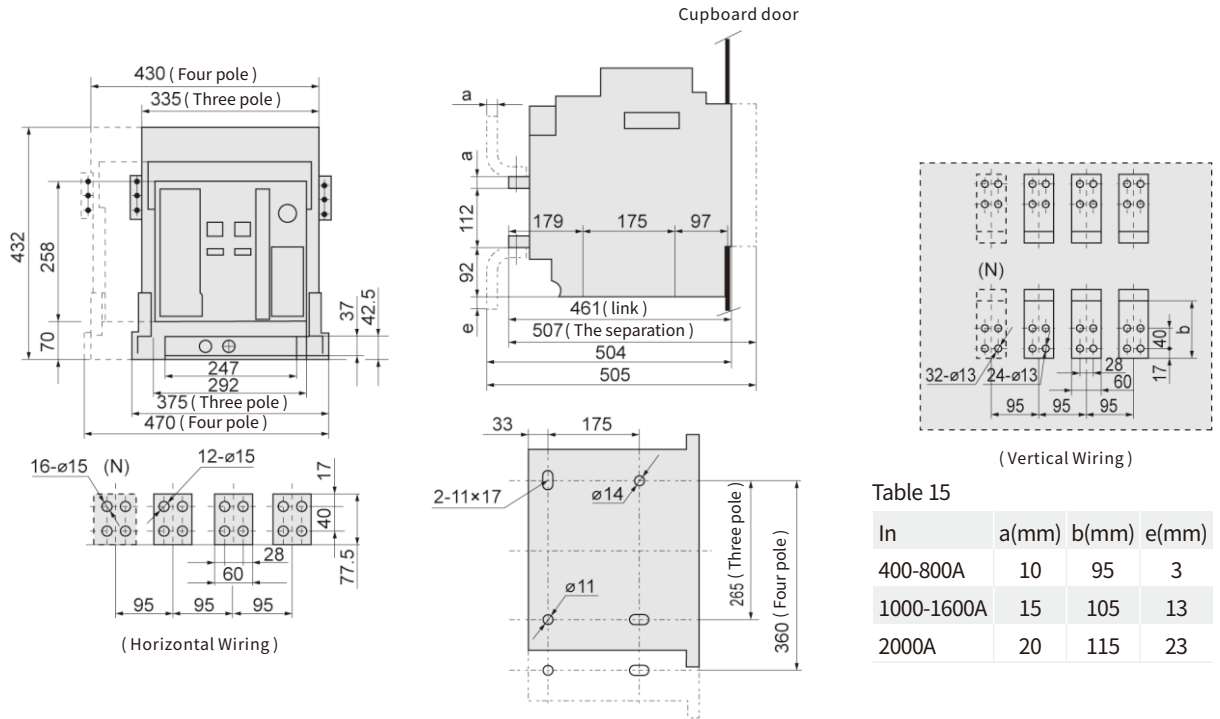


Fig.12 Outline and installation dimensions of drawout type circuit breaker (EKA1-2000, 2000/4)

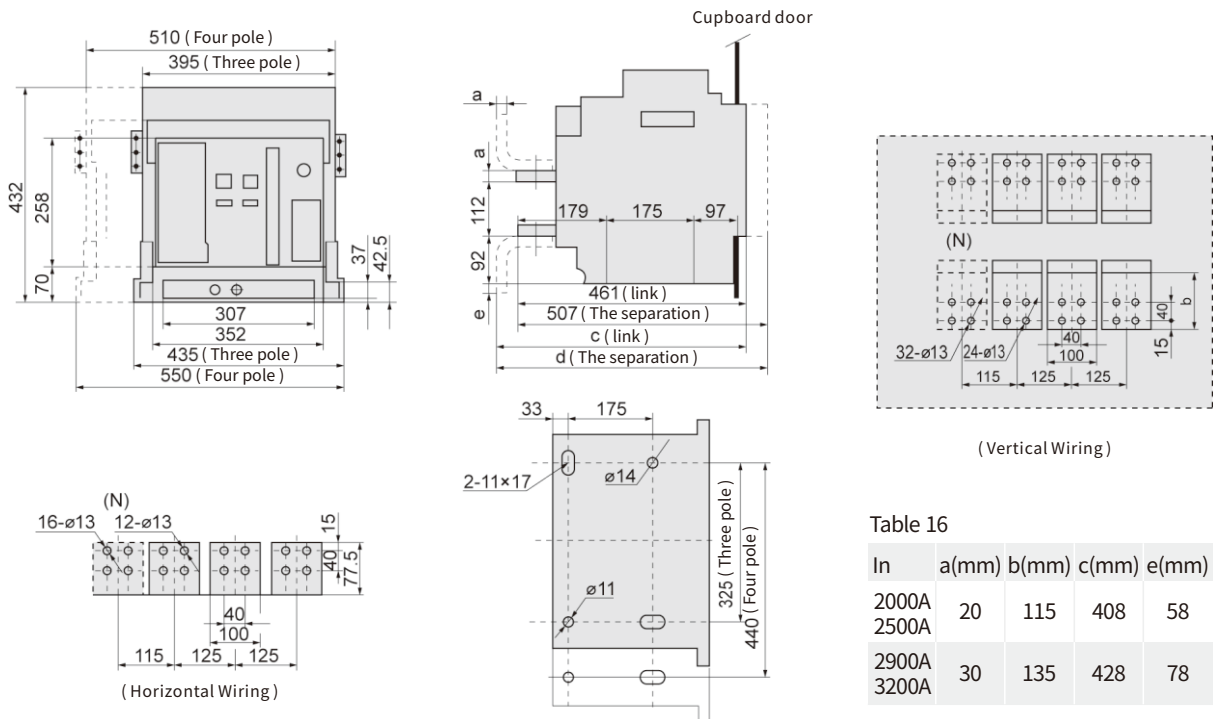


Fig.13 Outline and installation dimensions of drawout type circuit breaker (EKA1-3200, 3200/4)

Overall and Mounting Dimensions

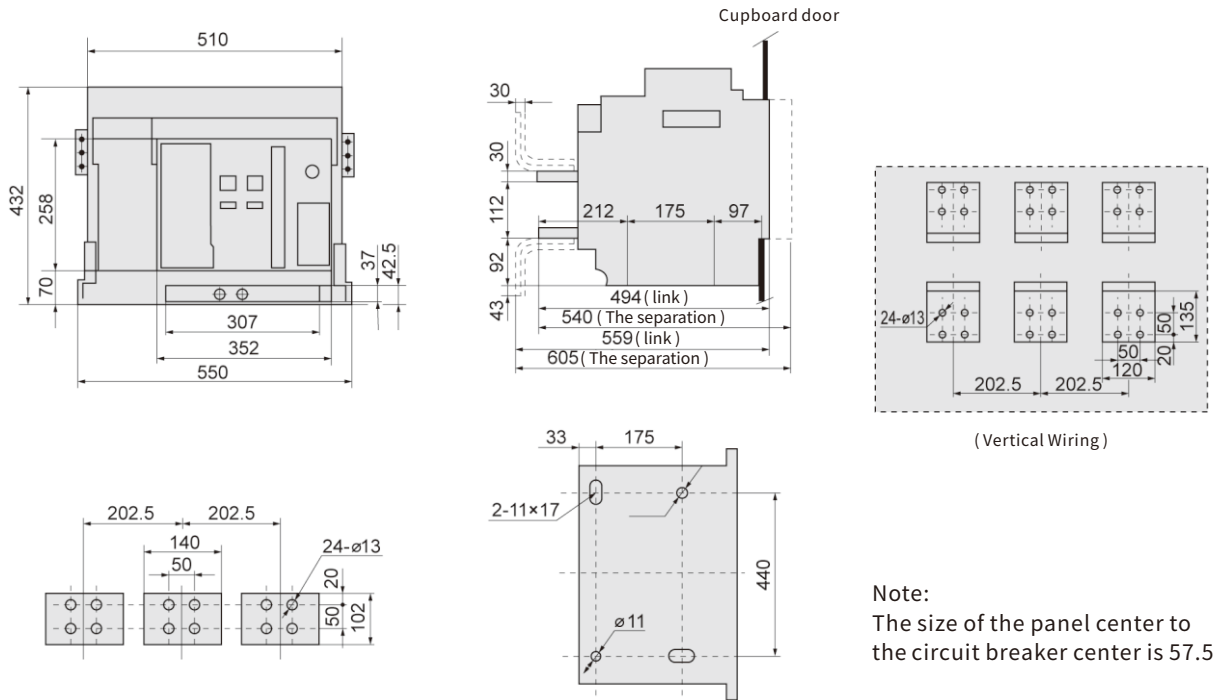


Fig. 14 Outline and installation dimensions of drawout type circuit breaker (EKA1-4000)

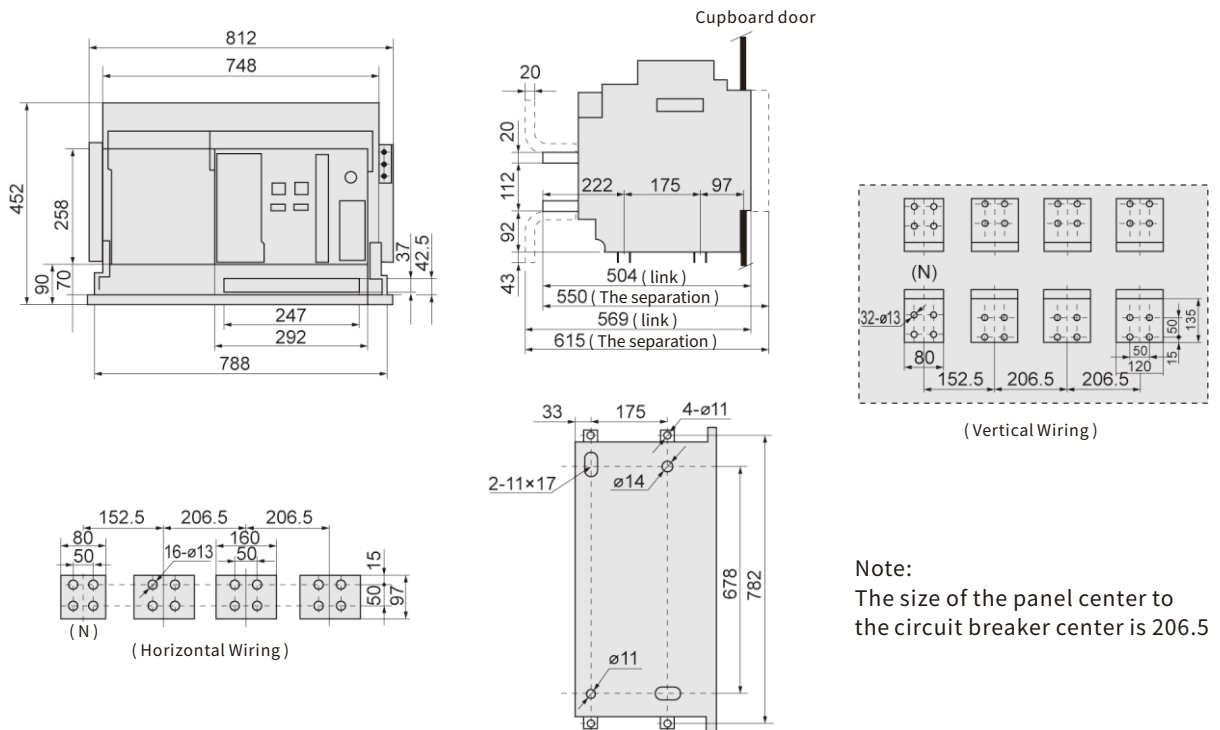


Fig.15 Outline and installation dimensions of drawout type circuit breaker (EKA1-4000/4)

Overall and Mounting Dimensions

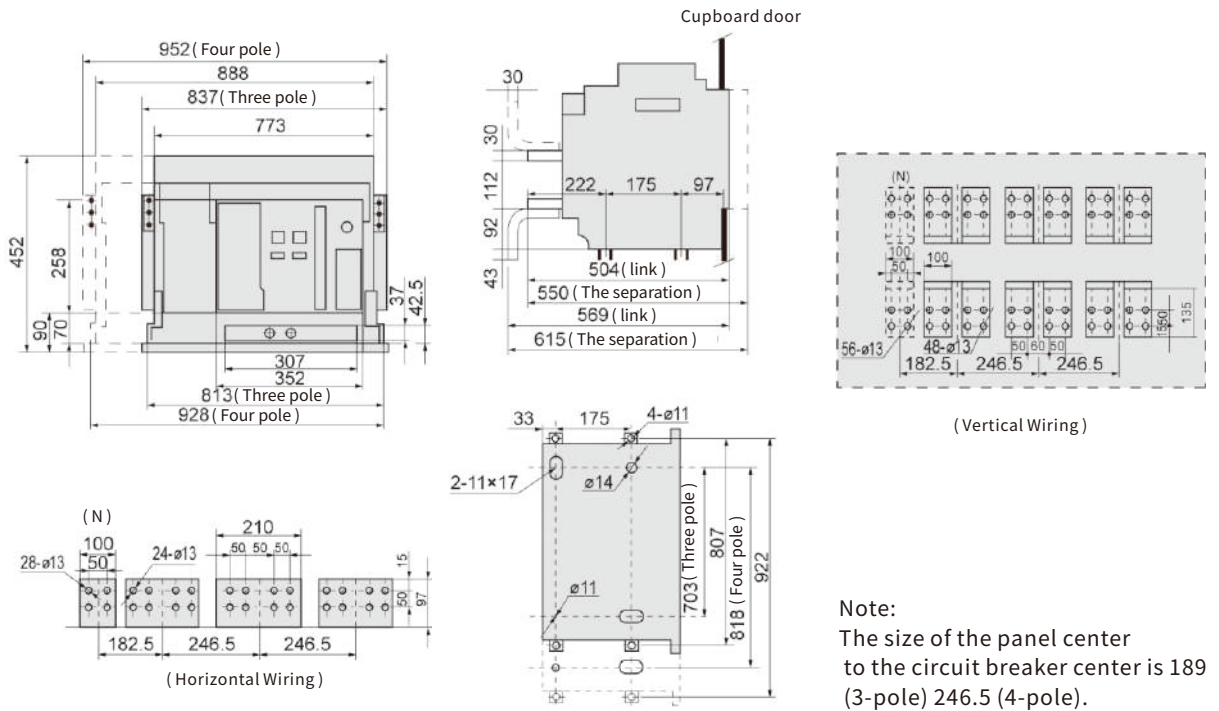


Fig.16 Outline and installation dimensions of drawout type circuit breaker (EKA1-6300, 6300/4 In=4000, 5000)

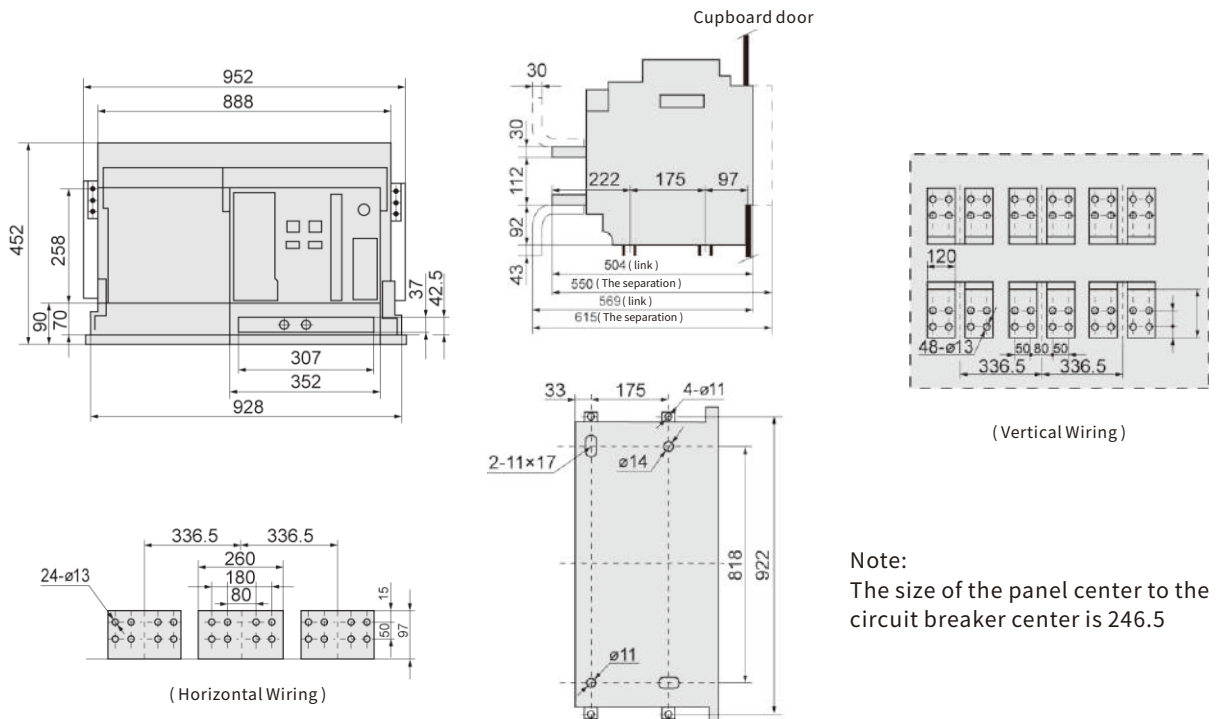
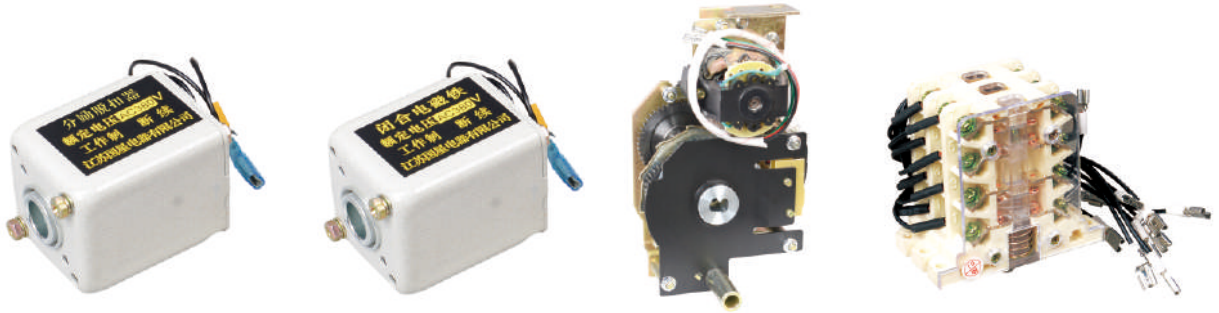


Fig.17 Outline and installation dimensions of drawout type circuit breaker (EKA1-6300 In=6300A)

## Accessories

Standard Accessories



Item	Function	Us
Shunt release	Let the circuit breaker disconnect reliably and remotely at circuit voltage (70%-110%)Us	
Closing coil	Let the circuit breaker switch on reliably and remotely in energy storing state at circuit voltage (85%-110%)Us	
Motor	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.	AC230V AC400V DC220V DC110V
Auxiliary switch	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.	

Electric Accessories



Item			
Undervoltage release self-suction type	Rated operating voltage	AC230V 50Hz	AC4000V 50Hz
	Operating voltage value	(35%~70%) Ue	
	Voltage value ensures closing	(85%~110%) Ue	
	Voltage value ensures non closing	≤35%Ue	
	Power loss	24VA	
	Actuation time of release, undervoltage instantaneous release	Instantaneous	
Undervoltage release self-suction type	Rated operating voltage Ue	AC230V 50Hz	AC400V 50Hz
	Operating voltage value	(35% -70%)Ue	
	Voltage value ensures closing	(85%~110%)Ue	
	Voltage value ensures non closing	≤35%Ue	
	Power loss	24VA	
	Actuation time of release	Undervoltage instantaneous release	Instantaneous
Undervoltage time-delay release		Delay time 1s, 3s, 5s; if the voltage restores to 85% Ue within 1/2 delay time, the circuit breaker will not be disconnected.	