

AIR CIRCUIT BREAKERS

UEW6 series



INTRODUCTION



Sunban Industrial Park

Hongfa, (Shanghai Stock Exchange: 600885), founded in 1984, has been adhering to the enterprise spirit of “persevere for progress, strive for excellence”, and has built a complete industry system with complete categories and supporting facilities. At present, Hongfa has more than 30 subsidiaries and has established three districts of R & D and production bases. Its products cover various categories, such as medium and low voltage products, relays, high and low voltage switchgear, capacitors, precision parts and automation equipment.

Xiamen Hongfa Electrical Safety & Controls Co., Ltd. is a wholly-owned subsidiary of Hongfa, which specializes in R & D, design and manufacture medium and low voltage products. Its distribution apparatus, terminal apparatus, control apparatus and other products are widely used in real estate, electric power, new energy, industry, HVAC, transportation, information and other fields.

In the United States, Europe, Southeast Asia and other regions, Hongfa has established localized marketing and service networks with global market operation and technical service. Relying on professional and rigorous technical support, fast response and all-round service, safe and reliable product quality and high cost performance, Hongfa has reached business cooperation relationship with many global top 500 enterprises and other well-known enterprises, such as Enel, GE, Honeywell, Carrier, Trane, Johnson Controls, Danfoss, State Grid, China Southern Power Grid, CRRC, China Mobile, China Unicom, etc.



Donglin Industrial Park



Haicang Industrial Park



Zhongjiang Industrial Park



Zhangzhou Industrial Park



Zhoushan Industrial Park



Xi'an Factory

In terms of technology R & D and manufacturing, taking the national enterprise technology center as the platform, Hongfa has set up postdoctoral research workstation, academician and expert workstation. Now it has developed into a leading scientific research and production base in the industry. From product development, mold manufacturing, parts manufacturing, automated product assembly and online testing, Hongfa has successfully built an integrated whole industry chain of medium and low voltage products. In terms of product testing, Hongfa testing center has passed the certification of VDE, UL, CNAS and other international organizations, and has complete testing and analysis equipment for low-voltage products, such as 50kA ultimate short circuit test, 8kA electrical life test, 80kA characteristic test, mechanical simulation and testing system, electro-magnetic simulation and testing system.

Hongfa always adheres to the policy of "focused on the market, winning through quality", and has a completed quality assurance system. Its products have passed UL / CUL, VDE, CQC, CCC and other international safety certification. In the process of quality management, Hongfa actively implements the advanced quality concept, constantly improves the quality management system, continuously promotes the product process quality control and testing, strengthens the supply chain management, and is committed to providing each customer with high-quality products and creating greater value.

Advanced technology and strict quality control have created Hongfa's brand strength. Hongfa is willing to work hand in hand with global customers to share the convenience and well-being brought by science and technology.

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NOTE:

The contents and data in this catalogue are not binding. We reserve the right to modify the contents of this document on the basis of technical development of the products, without prior notice. The real order requirements and technical agreements shall prevail.

Production overview

Scope of Application

UEW6/UEW6HU/UEW6XU series Air Circuit Breakers are applicable in the power distribution network of AC50/60Hz, rated operational voltage of AC400V or AC690V or AC800V or AC1000V or AC1140V or AC1380V or AC1500V, rated current 200...4000A, and take the role of distributing power and protecting circuits and equipment from being damaged by overload, under voltage, short circuit and singlephase grounding, etc. The breakers with rated current below 1000A can also be used for the infrequent motor starting. The circuit breaker, with stable performance, precise protection capacity, can improve the reliability and power safety and avoid power failure.

Our low temperature type is specially designed for the power generation system and power distribution network with the requirements of low temperature environment and high reliability, such as wind power generation system.

Product Features

- Rated AC current: 200A~4000A
- Short circuit breaking capacity: 25kA...100kA
- Maximum rated operational voltage AC1500V
- 3 poles and 4 poles are available.
- Draw out and fixed type.
- Can be connected in reverse direction
- Various trip units available, providing different functions, with comprehensive protection.
- With isolation function
- Extensive environmental adaptability, which can meet the requirements of 5000m altitude and - 40 °C

Standards

	CCC	GB/T 14048.1, GB/T 14048.2
	CB	IEC60947-2
	TUV	EN60947-2 (UEW6-1600 aren' t compliant)
	CE	EN60947-2 (UEW6-1600 aren' t compliant)
	UKCA	BSEN60947-2

Product Structure

UEW6-1600 Front indication



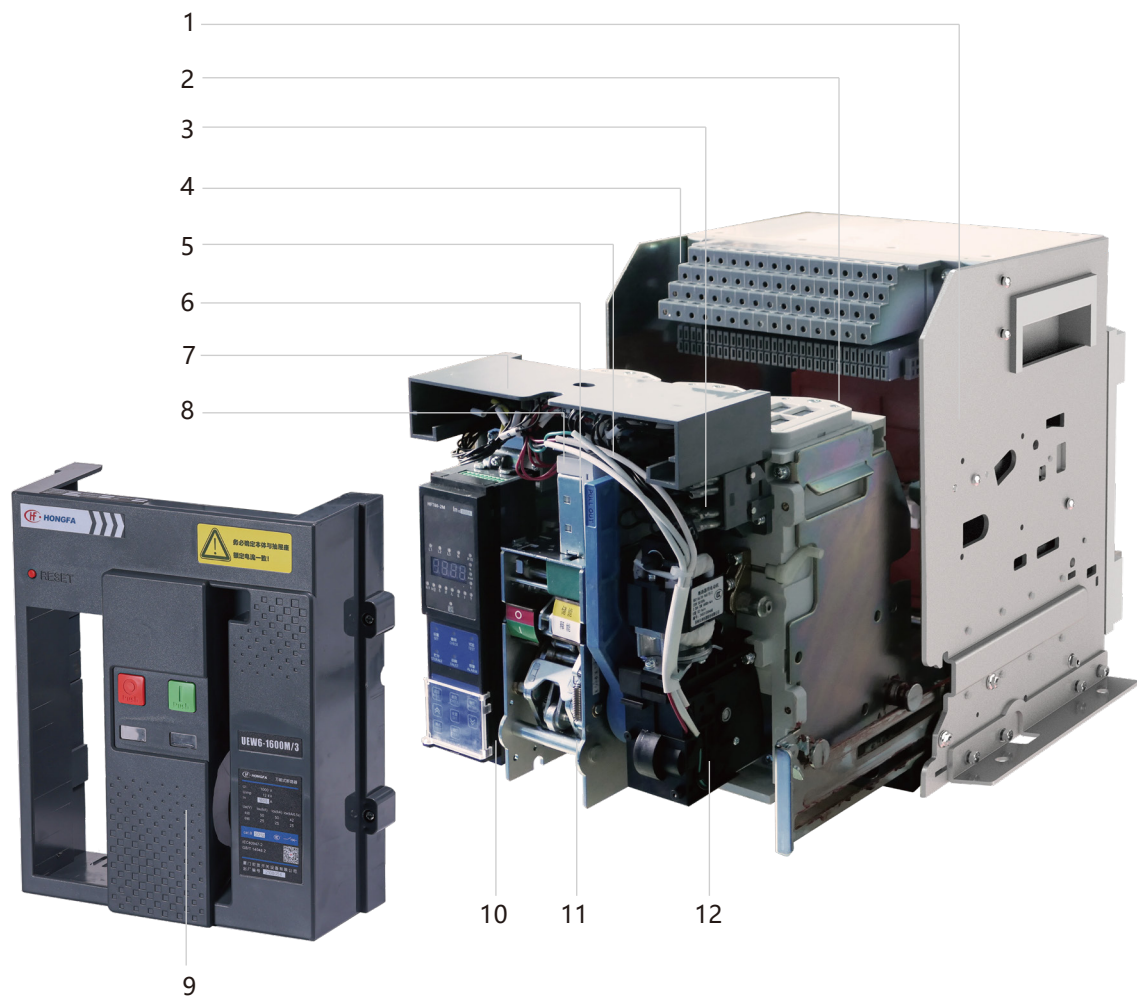
- 1.Cradle
- 2.Terminal Block
- 3.Fault Trip Reset Button
- 4.Charging handle
- 5.ON button (I)
- 6.OFF button(O)
- 7.Open (I) / Close (O) Indicator

- 8.Charged / Discharged indicator
- 9.Trip unit
- 10.Position Indicator
- 11.Crank Insertion Opening
- 12.Stop Release Button
- 13.Position Locking
- 14.Crank Storage Space

Production overview

Product Structure

UEW6-1600 Internal structure diagram



- | | |
|---------------------------|-----------------------------|
| 1. Cradle | 7. Terminal Block (movable) |
| 2. Safety shutters | 8. Undervoltage Trip Device |
| 3. Auxiliary contacts | 9. Front cover |
| 4. Terminal Block (fixed) | 10. Trip unit |
| 5. Shunt Trip | 11. Operating mechanism |
| 6. Closing coil | 12. Charing motor |

Product Structure

UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000 Front indication

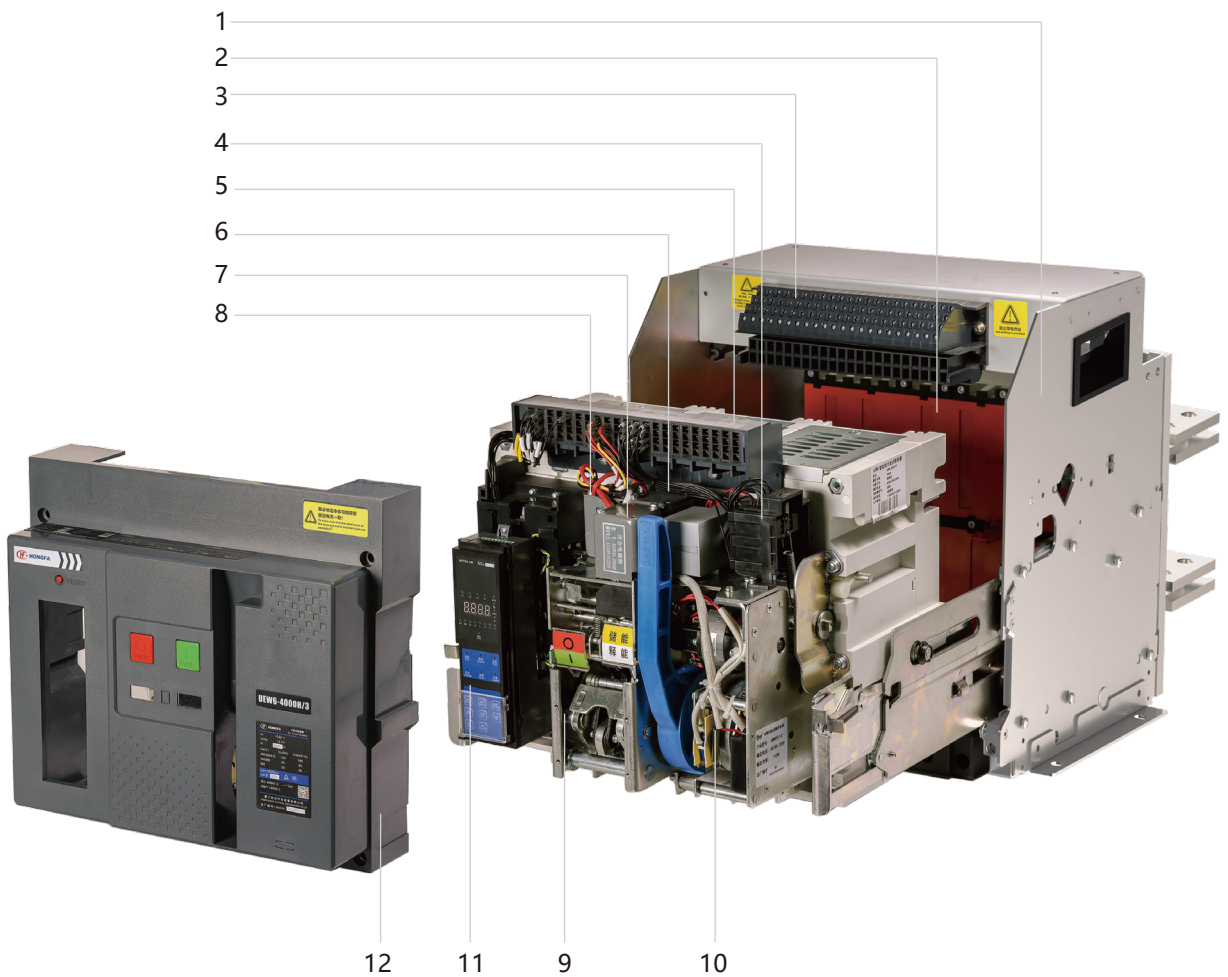


- | | |
|----------------------------------|----------------------------|
| 1.Cradle | 9.Trip unit |
| 2.Terminal Block | 10.Crank Storage Space |
| 3.ON button (I) | 11.Position Locking |
| 4.OFF button(O) | 12.Position Indicator |
| 5.Fault Trip Reset Button | 13.Crank Insertion Opening |
| 6.Charging handle | 14.Stop Release Button |
| 7.Open(I)/Close(O) Indicator | |
| 8.Charged / Discharged indicator | |

Production overview

Product Structure

UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000 internal structure diagram



- | | |
|----------------------------|----------------------------|
| 1.Cradle | 7.Closing coil |
| 2.Safety shutters | 8.Undervoltage Trip Device |
| 3.Terminal Block (fixed) | 9.Operation mechanism |
| 4.Auxiliary contacts | 10.Charging motor |
| 5.Terminal Block (movable) | 11.Trip unit |
| 6.Shunt Trip | 12.Front cover |

Standard Operation and Installation Conditions

-Ambient temperature is $-5^{\circ}\text{C} \sim +70^{\circ}\text{C}$, and the average value of 24h does not exceed $+35^{\circ}\text{C}$. If exceed 40°C , derating should be applied. The low temperature type can be used for the lowest ambient temperature of -40°C .

-Altitude of the installation place should not exceed 2500m, derating should be applied if the altitude above 5000.

-When the highest temperature is up to $+40^{\circ}\text{C}$, air relative humidity does not exceed 50%, and under low temperature, higher relative humidity is allowed, eg.90% for 20°C . Special measures should be taken for occasional gel by temperature change.

-Pollution degree: 3

-Protection degree:IP40 (The switch is installed in the switchgear and equipped with a door frame)

-Installation category of main circuit: IV

-Installation category of other auxiliary circuit and controlling circuit: III.

-Vertical inclination of circuit breaker should not exceed 5° .

-Circuit breaker should be installed in the place where there is no explosion, and it is not easy to corrode metals and eliminate the insulation.

-Storage condition: ambient temperature is $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$.

TECHNICAL PARAMETERS

Ordering Information

UE W 6 HU -4000 M / 1600 3 G 2M 1 1 1 E 1 1 1 -□□□□ -183

Manufacturer code:

Xiamen Hongfa Electrical
Safety & Control Co., Ltd

Product Code: Air Circuit Breaker

Design Serial Number

Voltage: null:below 800V
HU:1140V XU:1380/1500V

Frame Rating :

1600A 2000A 4000A

Breaking capacity:

M: standard breaking capacity

H: high breaking capacity

Rated Current : 200A 400A 630A 800A 1000A 1250A 1600A
2000A 2500A 3200A 4000A

Number of Poles : 3: 3P 4: 4P (UEW6HU/6XU have no 4P)

3N: 3P+N (3P with External neutral CT)

Installation type: C: Draw out G: Fixed type

Trip Unit type

2M: 2M **2H:** 2H **3M:** 3M **3H:** 3H

Control voltage: 1: AC220 2: AC380 3: DC110 4: DC220 5: DC24 6: DC125

Auxiliary Contacts:

1: 4 Changeover **2:** 6 Changeover **4:** 4NO+4NC **5:** 5NO+5NC

6: 6 NO + 6 N C **7:** 8 Changeover **8:** 8NO+8NC **9:** 5 Changeover

Wiring method:

1: Horizontal **2:** Vertical

3: Upper horizontal, lower vertical

4: Upper vertical, lower horizontal

Busbar Type:

E: Standard busbar **F:** Extended busbar (only available for 2000 frame and 3200A...4000A of 4000 fixed frame)

G: Special busbar

Ambient temperature:1: room temperature(-5°C-70°C) 2: Low temperature type (-40°C-70°C)

Under-voltage Trip Device **0:** under voltage Trip Device is not selected

1:AC220/AC230 instantaneous **2:**AC220/AC230 1s delay **3:**AC220/AC230 3s delay

4:AC220/AC230 5s delay **5:**AC380 instantaneous **6:**AC380 1s delay **7:**AC380 3s delay

8:AC380 5s delay

A : AC220/AC230 No voltage 1s **B :** AC220/AC230 No voltage 3s **C :** AC220/AC230 No voltage 5s

D : AC380 No voltage 1s **E :** AC380 No voltage 3s **F :** AC380 No voltage 5s

G : AC/DC110 instantaneous **H :** DC24 instantaneous **J :** DC220 1s delay

Door frame and interphase barrier

1: Door frame **2:** interphase barrier **3:** Door frame+interphase barrier

Accessory:

B : Pushbutton locking **C :** Remote Reset Switch **D :** Three position electrical Indicator **E :** Extension auxiliary contacts

F : One lock + one key **G :** Two locks + one key **H :** Three locks + two keys **I :** Five locks + three keys

J : Mechanical operation counter **L :** Ready to close switch

Characteristic number : 183 : New energy resources (UEW6-1600)

TECHNICAL PARAMETERS

Note :

1. The short description limit is 40 digits, and no blank is not allowed
2. Fill 0 if some item is not selected.
3. If some accessory is selected, the ' - ' is needed. If not selected, the ' - ' can be omitted.
4. Use the corresponding letter to indicate the selected accessory. Multiple accessories are allowed to select. For example : B refers to that the button lock is selected, and BD refers to that the pushbutton locking and three position electrical Indicator are selected.

Ordering example:

- 1、UEW6-4000H/25004C2M221E253-ABD: 4000A frame rating, high breaking capacity, rated current 2500A, four poles, draw out type, 2M trip unit, control voltage AC380/AC400, 6 changeover aux contacts, horizontal outgoing terminal, standard busbar, low temperature type, undervoltage AC380/AC400 instantaneous, with door frame +interphase barrier, door Interlock, pushbutton locking and three position electrical Indicator
- 2、UEW6-4000M/32003C3H111E112: 4000A frame rating, standard breaking capacity, rated current 3200A, three poles, Draw out type, 3H trip unit, control voltage AC220/AC230, 4 changeover aux contacts, horizontal outgoing terminal, standard busbar, normal temperature type, under-voltage AC220/AC230 instantaneous, interphase barrier)

Note: When the accessory is not selected, '-' and the subsequent fields are blank.

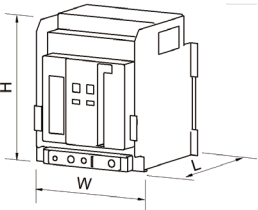
TECHNICAL PARAMETERS

Selection table

Frame size	Technical parameter	UEW6-1600	UEW6-2000	UEW6/UEW6HU/UEW6XU-4000
Breaking capacity	M	√	√	√
	H	√	√	√
Rated current	200	√	-	-
	400	√	-	-
	630	√	√	-
	800	√	√	-
	1000	√	√	√
	1250	√	√	√
	1600	√	√	√
	2000	-	√	√
	2500	-	-	√
	3200	-	-	√
	3600	-	-	√
	4000	-	-	√
Trip Unit type	2M, 2H	√	√	√
	3M, 3H	√	√	√
Auxiliary contacts	4NO+4NC/4 changeover	√	√	√
	5NO+5NC/5 changeover	√	-	-
	6NO+6NC/6 changeover	-	√	√
	8NO+8NC/8 changeover	-	√	√
Wiring method	Horizontal outgoing terminal (standard)	√	√	√
	Vertical outgoing terminal	√ (New energy resources)	-	√
	Upper horizontal and lower vertical	√ (New energy resources)	-	√
	Upper vertical and lower horizontal	√ (New energy resources)	-	√
Busbar	Standard busbar	√	√	√
	Extended busbar	-	√	√
Installation method	Draw out	√	√	√
	Fixed	√	√	√

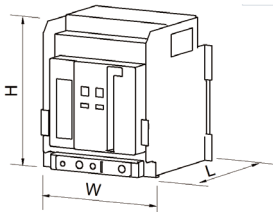
Note: 1. ' - ': without the function; 2. ' √ ': with the function.

UEW6-1600 main technical parameter

Model			UEW6-1600	
Frame Rating I_{nm} (A)			1600	
Rated current I_n (A)			200. 400. 630. 800. 1000. 1250. 1600	
Rated operational voltage U_e (V)			AC400. AC690	
Rated insulation voltage U_i (V)			AC1000	
Rated impulse withstand voltage U_{imp} (kV)			12	
Number of poles			3, 4, 3P+N	
Rated current of N pole I_n (A)			100% I_n	
Breaking capacity			M	H
Rated ultimate breaking capacity I_{cu} (kA) (effective value)	AC400V		50	65
	AC690V		25	55
Rated service breaking capacity (kA) (effective value)	AC400V		50	55
	AC690V		25	50
Rated short-circuit making capacity I_{cm} (kA) (peak value)	AC400V		105	143
	AC690V		52.5	121
Rated short-time withstand current I_{cw} (kA) /s (effective value)	AC400V		42/0.5s	42/1s
	AC690V		25/0.5s	42/1s
Breaking time (No additional delay) (ms)			< 30	
Closing time (ms)			Maximum 70	
Dielectric properties 50Hz			AC 2500V 1min	
Operational performance	Electrical life* (20cycle/h)	AC400V	8000 cycle	
		AC690V	3000 cycle	
	Electrical life* (20cycle/h)	Maintenance-free	15000 cycle	
		With maintenance	30000 cycle	
	Connection method		Horizontal connection, vertical connection Upper horizontal and lower vertical Upper vertical and lower horizontal	
	Installation method		Draw out, Fixed	
	Outline dimension WxHxL (mm)	Fixed 3P	263×320×241 / 264×320×242 (New energy resources)	
		Fixed 4P	338×320×241	
		Draw out 3P	317×353×368	
		Draw out 4P	392×353×368	

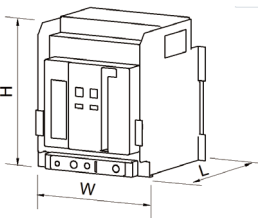
TECHNICAL PARAMETERS

UEW6-2000 main technical parameter

Model			UEW6-2000	
Frame Rating I_{nm} (A)			2000	
Rated current I_n (A)			630, 800, 1000, 1250, 1600, 2000	
Rated operational voltage U_e (V)			AC400, AC690, AC800	
Rated insulation voltage U_i (V)			AC1000	
Rated impulse withstand voltage U_{imp} (kV)			12	
Number of poles			3, 4, 3P+N	
Rated current of N pole I_n (A)			100% I_n	
Breaking capacity			M	H
Rated ultimate breaking capacity I_{cu} (kA) (effective value)	AC400V		80	85
	AC690V		50	65
	AC800V		40	--
Rated service breaking capacity I_{cs} (kA) (effective value)	AC400V		65	65
	AC690V		50	65
	AC800V		40	--
Rated short-circuit making capacity I_{cm} (kA) (peak value)	AC400V		176	187
	AC690V		105	143
	AC800V		84	--
Rated short-time withstand current I_{cw} (kA) /s (effective value)	AC400V		50/1s	65/1s
	AC690V		40/1s	65/1s
	AC800V		40/1s	--
Breaking time (No additional delay) (ms)			< 30	
Closing time (ms)			Maximum 70	
Dielectric properties 50Hz			AC 2500V 1min	
Operational performance	Electrical life *	AC400V	8000 cycle	
		AC690V	3000 cycle	
		AC800V	2400 cycle	
	Mechanical life	Maintenance-free	15000 cycle	
		With maintenance	30000 cycle	
	Connection method		Horizontal connection	
	Installation method		Draw out, Fixed	
	Outline dimension WxHxL (mm)	Fixed 3P	364×398×296	
		Fixed 4P	459×398×296	
		Draw out 3P	405×436×395	
Draw out 4P		500×436×395		

Note: According to the national standard, the term "life" indicates the expected number of operations completed before the electrical appliance is repaired or replaced.

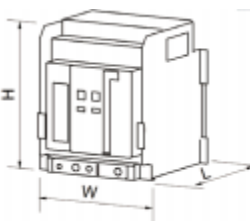
UEW6-4000 main technical parameter

Model		UEW6-4000	
Frame Rating I_{nm} (A)		4000	
Rated current I_n (A)		1000, 1250, 1600, 2000, 2500, 3200, 4000	
Rated operational voltage U_e (V)		AC400, AC690, AC800	
Rated insulation voltage U_i (V)		AC1250	
Rated impulse withstand voltage U_{imp} (kV)		12	
Number of poles		3, 4, 3P+N	
Rated current of N pole I_n (A)		100% I_n	
Breaking capacity		M	H
Rated ultimate breaking capacity I_{cu} (kA) (effective value)	AC400V	100	100
	AC690V	75	85
	AC800V	50	50
Rated service breaking capacity I_{cs} (kA) (effective value)	AC400V	100	100
	AC690V	75	85
	AC800V	50	50
Rated short-circuit making capacity I_{cm} (kA) (peak value)	AC400V	220	220
	AC690V	165	187
	AC800V	110	110
Rated short-time withstand current I_{cw} (kA) /s (effective value)	AC400V	85/1s	100/1s
	AC690V	75/1s	85/1s
	AC800V	50/1s	50/1s
Breaking time (No additional delay) (ms)		< 30	
Closing time (ms)		Maximum 70	
Dielectric properties 50Hz		AC 2500V 1min	
Operational performance	Electrical life *	AC400V	4000 cycle
		AC690V	2000 cycle
		AC800V	1000 cycle
	Mechanical life	Maintenance-free	10000 cycle
		With maintenance	20000 cycle
	Connection method		Horizontal connection, vertical connection
	Installation method		Draw out, Fixed
	Outline dimension WxHxL (mm)	Fixed 3P	426×401×296.5
		Fixed 4P	541×401×296.5
		Draw out 3P	474×446×405
		Draw out 4P	589×446×405

Note: According to the national standard, the term "life" indicates the expected number of operations completed before the electrical appliance is repaired or replaced.

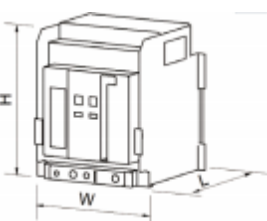
TECHNICAL PARAMETERS

UEW6HU-4000 main technical parameter

Model		UEW6HU-4000	
Frame Rating I_{nm} (A)		4000	
Rated current I_n (A)		1000, 1250, 1600, 2000, 2500, 3200, 4000	
Rated operational voltage U_e (V)		AC800, AC1000, AC1140	
Rated insulation voltage U_i (V)		AC1250	
Rated impulse withstand voltage U_{imp} (KV)		12	
Number of poles		3P	
Rated current of N pole I_n (A)		100% I_n	
Breaking capacity		M	H
Rated ultimate breaking capacity I_{cu} (kA) (effective value)	AC800V	65	75
	AC1000V	65	75
	AC1140V	65	75
Rated service breaking capacity I_{cs} (kA) (effective value)	AC800V	65	75
	AC1000V	65	75
	AC1140V	65	75
Rated short-circuit making capacity I_{cm} (kA) (peak value)	AC800V	143	165
	AC1000V	143	165
	AC1140V	143	165
Rated short-time withstand current I_{cw} (kA/s) (effective value)	AC800V	65/1s	75/1s
	AC1000V	65/1s	75/1s
	AC1140V	65/1s	75/1s
Breaking time (No additional delay) (ms)		<30	
Closing time (ms)		Maximum 70	
Dielectric properties 50Hz		AC 2500V 1min	
Operational performance	Electrical life *	AC800V	1000 cycle
		AC1000V	500 cycle
		AC1140V	500 cycle
	Mechanical life *	Maintenance-free	10000 cycle
		With maintenance	20000 cycle
	Connection method		Horizontal connection, vertical connection
	Installation method		Draw out, Fixed
	Outline dimension WxHxL (mm)	Fixed 3P	426 × 401 × 296.5
		Fixed 4P	--
		Draw out 3P	474 × 446 × 405
		Draw out 4P	--

Note: According to the national standard, the term "life" indicates the expected number of operations completed before the electrical appliance is repaired or replaced.

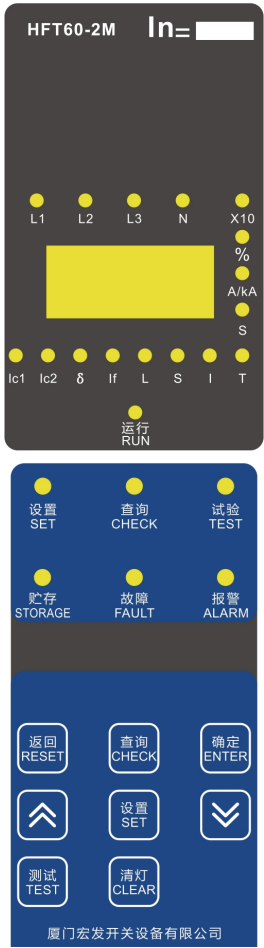
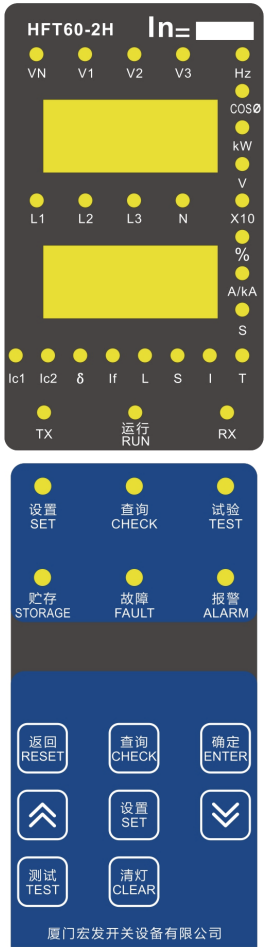
UEW6XU-4000 main technical parameter

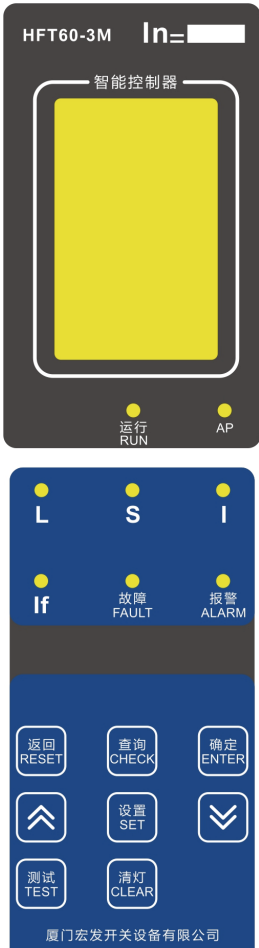
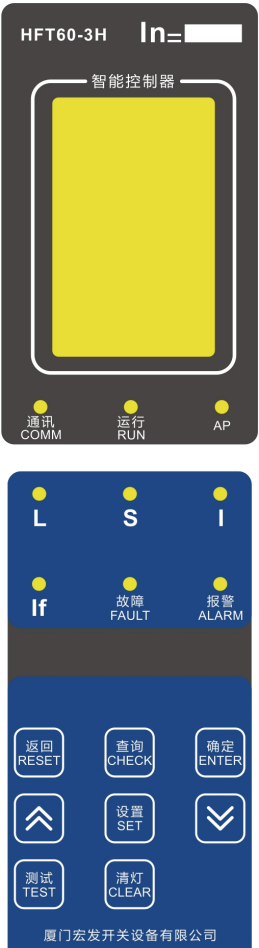
Model		UEW6XU-4000	
Frame Rating I_{nm} (A)		4000	
Rated current I_n (A)		1000, 1250, 1600, 2000, 2500, 3200, 4000	
Rated operational voltage U_e (V)		AC1140, AC1380, AC1500	
Rated insulation voltage U_i (V)		AC1800	
Rated impulse withstand voltage U_{imp} (KV)		18	
Number of poles		3P	
Rated current of N pole I_n (A)		100% I_n	
Breaking capacity		M	H
Rated ultimate breaking capacity I_{cu} (kA) (effective value)	AC1140V	65	75
	AC1380V	50	65
	AC1500V	40	50
Rated service breaking capacity I_{cs} (kA) (effective value)	AC1140V	65	75
	AC1380V	50	65
	AC1500V	40	50
Rated short-circuit making capacity I_{cm} (kA) (peak value)	AC1140V	143	165
	AC1380V	105	143
	AC1500V	84	105
Rated short-time withstand current I_{cw} (kA /s) (effective value)	AC1140V	65/1s	75/1s
	AC1380V	50/1s	65/1s
	AC1500V	40/1s	50/1s
Breaking time (No additional delay) (ms)		<30	
Closing time (ms)		Maximum 70	
Dielectric properties 50Hz		AC 3600V 1min	
Operational performance	Electrical life *	AC1140V	500 cycle
		AC1380V	500 cycle
		AC1500V	500 cycle
	Mechanical life *	Maintenancefree	10000 cycle
		With maintenance	20000 cycle
	Connection method		Horizontal connection, vertical connection
	Installation method		Draw out, Fixed
	Outline dimension WxHxL (mm)	Fixed 3P	426 × 401 × 296.5
		Fixed 4P	--
		Draw out 3P	474 × 446 × 405
	Draw out 4P		--

Note: According to the national standard, the term "life" indicates the expected number of operations completed before the electrical appliance is repaired or replaced.

TECHNICAL PARAMETERS

UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000 trip unit introduction

Model	HFT60-2M	HFT60-2H
Appearance		
Introduction	The digital display adopts the key-type setting mode, and the protection parameters are set accurately. Main protection functions: Overload long time delay Short circuit short time delay Short circuit instantaneous Grounding protection Current unbalance protection	The digital display adopts the key-type setting mode, and the protection parameters are set accurately. With communication function. Main protection functions: Overload long time delay Short circuit short time delay Short circuit instantaneous Grounding protection Current unbalance protection

Model	HFT60-3M	HFT60-3H
Appearance		
Introduction	LCD display, adopting key-type setting mode, comprehensive protection and complete auxiliary functions Main protection functions: Overload long time delay Short circuit short time delay Short circuit instantaneous Grounding protection Current unbalance protection	LCD display, adopting key-type setting mode, comprehensive protection and complete auxiliary functions. With communication function. Main protection functions: Overload long time delay Short circuit short time delay Short circuit instantaneous Grounding protection Current unbalance protection

TECHNICAL PARAMETERS

Trip unit function

Protection		HFT60-2		HFT60-3	
		2M	2H	3M	3H
Protection	Overload long time delay protection	●	●	●	●
	Short circuit short time delay protection	●	●	●	●
	Instantaneous short circuit protection	●	●	●	●
	Grounding protection (differential type)	●	●	●	●
	Current unbalance protection	●	●	●	●
	MCR and HSISC protection	○	○	○	○
	Voltage unbalance protection	-	-	○	○
	Neutral line protection	●	●	●	●
	Undervoltage protection	-	-	○	○
	Overvoltage protection	-	-	○	○
	Residual current protection	○	○	○	○
	Overfrequency protection	-	-	○	○
	Underfrequency protection	-	-	○	○
	Inverse power protection	-	-	○	○
	Phase sequence protection	-	-	○	○
	Current demand value protection	-	-	○	○
	Thermal memory function	●	●	●	●
Measurement	Current measurement	●	●	●	●
	Voltage measurement	○	●	○	○
	Power measurement	○	●	○	○
	Frequency measurement	○	●	○	○
	Electric energy measurement	○	●	○	○
	Phase sequence measurement	-	-	○	○
	Harmonic wave measurement	-	-	○	○
	Required value	-	-	○	○
Maintenance	Contact wear rate	●	●	●	●
	Number of operations	●	●	●	●
	Fault status indication	●	●	●	●
	Fault checking	●	●	●	●
	Self-diagnosis function	●	●	●	●
	Local clock	-	-	●	●
	Historic peak record	-	-	●	●
	Fault record: 8 tripping records and 8 alarm records;	-	-	●	●
	Tripping test	●	●	●	●
Others	Communication function	-	●	-	●
	Remote reset module	○	○	○	○
	Signalling contact unit	○	●	○	●

Trip unit function

Note:

- basic function, ○ Optional function, - without the function
- The Signalling contact unit provides 4 contact signal outputs. Function configurable as follows (specific functions vary according to different trip unit) :

Fault trip, self-diagnosis alarm, load monitoring I, load monitoring II, overload pre-alarm, overload protection trip, short delay protection trip, instantaneous protection trip, grounding/residual current protection trip, grounding alarm, current unbalance protection trip, neutral phase protection trip, undervoltage fault trip, overvoltage fault trip, voltage unbalance protection trip, Underfrequency protection tripping, Overfrequency protection tripping, inverse power protection trip, area interlocking, closing, opening, grounding interlocking, short circuit interlocking

3M / 3H trip unit additional function code as follows :

D	U	UD	P	PD	H	HD
Required value measurement (current)	Voltage measurement	Required value measurement (current)	Voltage measurement	Required value measurement (current,frequency)	Voltage measurement	Required value measurement (current, frequency)
Required value protection	Voltage unbalance rate measurement	Voltage measurement	Frequency measurement	Voltage measurement	Frequency measurement	Voltage measurement
	Voltage unbalance protection	Voltage unbalance rate measurement	Voltage unbalance rate measurement	Voltage unbalance rate measurement	Voltage unbalance rate measurement	Voltage unbalance rate measurement
	Frequency measurement	Voltage unbalance protection	Voltage unbalance protection	Voltage unbalance protection	Voltage unbalance protection	Voltage unbalance protection
	Phase sequence detection	Frequency measurement	Phase sequence detection	Frequency measurement	Phase sequence detection	Frequency measurement
	Overvoltage protection	Phase sequence detection	Overvoltage protection	Phase sequence detection	Overvoltage protection	Phase sequence detection
	Undervoltage protection	Required value protection	Undervoltage protection	Required value protection	Undervoltage protection	Required value protection
	Overfrequency rate protection	Overvoltage protection	Overfrequency rate protection	Overvoltage protection	Overfrequency rate protection	Overvoltage protection
	Underfrequency rate protection	Undervoltage protection	Underfrequency rate protection	Undervoltage protection	Underfrequency rate protection	Undervoltage protection
	Phase sequence protection	Overfrequency rate protection	Phase sequence protection	Overfrequency rate protection	Phase sequence protection	Overfrequency rate protection
		Underfrequency rate protection	Power measurement	Underfrequency rate protection	Power measurement	Underfrequency rate protection
		Phase sequence protection	Power factor measurement	Phase sequence protection	Power factor measurement	Phase sequence protection
			Electric energy measurement	Power measurement	Electric energy measurement	Power measurement
			Inverse power protection	Power factor measurement	Inverse power protection	Power factor measurement
				Electric energy measurement	Harmonic wave measurement	Electric energy measurement
				Inverse power protection		Inverse power protection
						Harmonic wave measurement

TECHNICAL PARAMETERS

Protection parameters of 2M/2H trip unit

Overload long time delay														
Setting current I _{r1} (Tolerance±10%)			(0.4 ~ 1.0) ×I _n +OFF (step: 1A)											
Operation time (Tolerance±15%) $Tr = \frac{K}{(N^2 - 1)}$	Current		Operation time											
	≤1.05I _r		Not trip within 2 hours											
	> 1.2I _r		Trip within 1 hour											
	Setting time t _r (coefficient K in brackets)													
	1.5 I _r	8 (10)	12.8 (16)	19.2 (24)	32 (40)	48 (60)	64 (80)	80 (100)	108 (135)					
		144 (180)	224 (280)	320 (400)	480 (600)	640 (800)	800 (1000)	960 (1200)	1040 (1300)					
	2.0I _r	3.32 (10)	5.32 (16)	8.00 (24)	13.32 (40)	20 (60)	26.66 (80)	33.30 (100)	45 (135)					
		60 (180)	93.32 (280)	133 (400)	200 (600)	266 (800)	333 (1000)	400 (1200)	433 (1300)					
	7.2I _r	0.19 (10)	0.32 (16)	10.47 (24)	10.79 (40)	1.7 (60)	1.57 (80)	1.97 (100)	2.66 (135)					
		3.54 (180)	5.51 (280)	7.87 (400)	11.8 (600)	15.7 (800)	19.7 (1000)	23.6 (1200)	25.6 (1300)					
Note: N=I/I _r (I is the actual fault current, I _r is the setting value of overload current) , when the setting time displayed by the trip unit is the actual operation time I=2I _r , with the increase of current I, the operation time will be shortened accordingly, which can be calculated according to the formula														
Thermal memory			30min+OFF (can be cleared after power off)											
Short circuit short time delay														
Setting current I _{r2} (Tolerance±10%)			(1.5 ~ 15) × I _r + OFF (step: 1A)											
Setting time t _s (s) (Tolerance±15%)			0.1 ~ 1s (step: 0.1s)											
Inverse limit operation time			The curve is the same as that of overload long time delay,and the speed is 10 times of that of overload long time delay The time calculated by the delay curve formula divided by 10 is the short delay inverse delay time.											
Thermal memory			30min+OFF (can be cleared after power off)											
Note: When both inverse time limit and definite time limit protection are enabled, the setting value of inverse time limit current must be less than the setting value of definite time limit current, otherwise the inverse time limit function will automatically fail, and the actual delay time is not less than the setting time of definite time limit														
Short circuit instantaneous														
Setting current I _{r3} (Tolerance±10%)			I _n ~ 50kA+OFF (I _n < 3200A) I _n ~ 70kA+OFF (I _n =3200A) I _n ~ 100kA+OFF (I _n > 3200A)											
Tripping time			Within 30ms											
Grounding protection														
Setting current I _r (Tolerance±10%)			(0.2 ~ 1) ×I _n +OFF (Minimum 100A)											
Definite time limit setting time t _g (s) (Tolerance±15%)			0.1 ~ 1s+OFF (step 0.1s OFF mean alarm and not trip)											
Inverse time shear coefficient C _r			1.5 ~ 6+OFF (step 0.1s OFF means inverse time limit is off)											
Inverse time limit operation time			Formula t=t _g × C _r × I _g /I t - delay time t _g - set delay time C _r - shear coefficient I _g –setting operation current I -ground current. When the multiple of fault current (I/I _f) is less than C _r , the operation characteristic is inverse time limit characteristic;when the multiple of fault current is greater than or equal to C _r ,the operation character istic is definite time limit characteristic.											
Residual current protection														
Setting current I _g (Tolerance10%)			0.5A~30A+OFF (step = 0.1A)											
Setting time t _g (Tolerance10%)			Instantaneous	0.06	0.08	0.17	0.25	0.33	0.42	0.5	0.58	0.67	0.75	0.83

Protection parameters of 2M/2H trip unit

Fault current multiple	Maximum breaking time (s)											
I _f	0.04	0.36	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
2I _f	0.04	0.18	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5
5I _f ...10I _f	0.04	0.072	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.s9	1
Neutral pole protection												
Setting current I _n (Tolerance±10%)	(0.5, 1) ×I _n +OFF											
Operation time	Same as that of overload long time delay											
current unbalance protection												
Unbalance rate δ setting range	(40% ~ 100%) +OFF											
Time of delay	0.1 ~ 1s+OFF (step 0.1s OFF means alarm and not trip)											
Load monitor	Method 1, method 2											
Method 1												
Method 1 unloading current	(0.2~1) I _n +OFF (OFF means escaping, minimum100A)											
Setting time (inverse time limit, the operation characteristic same as that of overload long time delay)	Same as the time setting table of overload long time delay											
Load 2 unloading current	(0.2~1) I _n +OFF (OFF means escaping, minimum100A)											
Setting time (inverse time limit, the operation characteristic same as that of overload long time delay)	Same as the time setting table of overload long time delay											
Method 2												
Load 1 unloading current	(0.2~1) I _n +OFF (OFF means escaping, minimum100A)											
Setting time (inverse time limit, the operation characteristic same as that of overload long time delay)	Same as the time setting table of overload long time delay											
Load 1 Return current	(0.2~1) I _n +OFF (OFF means escaping, minimum100A)											
Return time	Fixed 60s											

TECHNICAL PARAMETERS

Protection parameters of 3M/3H trip unit

overload long time delay									
Setting current I_{r1} (Tolerance $\pm 10\%$)		$(0.4 \sim 1.0) \times I_n + \text{OFF}$ (step: 1A)							
Operation time (Tolerance $\pm 15\%$) The trip unit factory default curve is curve 3	Current	Operation time							
	$\leq 1.05I_r$	No trip within 2 hours							
	$> 1.2I_r$	Trip within 1 hour							
	Curve type	Setting time t_r (Coefficient K in the bracket)							
	Standard inverse time limit $T=K / (N^{0.02}-1)$	0.61 (0.005)	0.98 (1.0)	1.47 (0.012)	2.46 (0.02)	3.68 (0.03)	4.91 (0.04)	6.14 (0.05)	8.29 (0.0075)
		11.1 (0.09)	17.2 (0.14)	24.6 (0.2)	36.8 (0.3)	49.1 (0.4)	61.4 (0.5)	73.7 (0.6)	86 (0.7)
	Fast inverse time limit $T=K / (N-1)$	2 (1)	3.2 (1.6)	4.8 (2.4)	8 (4)	12 (6)	16 (8)	20 (10)	27 (13.5)
		36 (18)	56 (28)	80 (40)	120 (60)	160 (80)	200 (100)	240 (120)	280 (140)
	Super fast inverse time limit (general purpose) $T=K / (N^2-1)$	8 (10)	12.8 (16)	19.2 (24)	32 (40)	48 (60)	64 (80)	80 (100)	108 (135)
		144 (180)	224 (280)	320 (400)	480 (600)	640 (800)	800 (1000)	960 (1200)	1040 (1300)
Super fast inverse time limit (Motorprotection) $T= (K/1.15) \times \log [N^2(N^2-1.15)]$	6.22 (10)	9.96 (16)	14.9 (24)	24.9 (40)	37.3 (60)	49.8 (80)	62.2 (100)	84 (135)	
	112 (180)	174 (280)	249 (400)	373 (600)	498 (800)	622 (1000)	747 (1200)	871 (1300)	
Compatible with high voltage fuse $T=K / (N^4-1)$	2.46 (10)	3.94 (16)	5.9 (24)	9.85 (40)	14.8 (60)	19.7 (80)	24.6 (100)	33.2 (1300)	
	44.3 (180)	69.8 (280)	98.5 (400)	147 (600)	197 (800)	246 (1000)	295 (1200)	344 (1300)	
Universal inverse time limit $T= (1.5/N)^2 \times K$	15 (15)	30 (30)	60 (60)	120 (120)	240 (240)	360 (360)	480 (480)	600 (600)	
	720 (720)	840 (840)	960 (960)						
Note: $N=I/I_r$ (I is the actual fault current, I_r is the setting value of overload current) When the setting time displayed by the trip unit $I=1.5I_r$, the actual operation time will be shortened with the increase of the current I accordingly, which can be calculated according to the formula.									
Thermal memory		30min+OFF (can be cleared after power off)							
Short circuit short time delay									
Setting current I_s (Tolerance $\pm 10\%$)		$(1.5 \sim 15) \times I_r + \text{OFF}$ (Step 1A)							
Definite time list setting time t_s (s) (Tolerance $\pm 15\%$)		0.1 ~ 0.4s (step 0.1s)							
Inverse time limit operation time		The curve is the same as that of the overload long time delay, and the curve speed is 10 times faster than that of the overload long time delay curve, The time calculated by the delay curve formula divided by 10 is the short delay inverse delay time							
Thermal memory		30min+OFF (can be cleared after power off)							
Note: When both inverse time limit and definite time limit protection are enabled, the setting value of inverse time limit current must be less than the setting value of definite time limit current, otherwise the inverse time limit function will automatically fail, and the actual delay time is not less than the setting time of definite time limit.									
Short circuit instantaneous									
Setting current I_{r3} (Tolerance $\pm 10\%$)		$(1 \sim 20) \times I_n + \text{OFF}$ (Step 1A)							
Tripping time		Within 30ms							
Grounding protedion									
Setting current I_f (Tolerance $\pm 10\%$)		$(0.2 \sim 1) \times I_n + \text{OFF}$ (minimum 100A)							

Protection parameters of 3M/3H trip unit

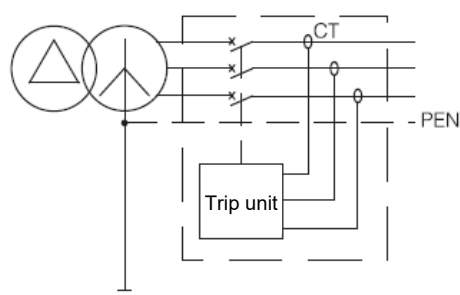
Definite time limit setting time t_g (s) (Tolerance $\pm 15\%$)	0.1 ~ 1s (step.0.1s)												
Inverse time shear coefficient C_r	1.5 ~ 6+OFF (step.0.1s OFF means inverse time limit off)												
Inverse time limit operation time	Formula $t = t_g \times C_r \times I_g/I$ t - delay time t_g - set delay time C_r - shear coefficient I_g – setting operation current I - ground current. When the multiple of fault current (I/I_r) is less than C_r , the operation characteristic is inverse time limit characteristic; when the multiple of fault current is greater than or equal to C_r , the operation characteristic is definite time limit characteristic.												
Grounding alarm (Grounding alarm protection and grounding protection are independent and have their own parameter setting respectively and can exist at the same time)													
Alarm operation setting value	Current (0.2 ~ 1) $\times I_n$ +OFF												
	Time 0.1 ~ 1s (step 0.1s)												
Alarm end setting value	Current (0.2 ~ 1) $\times I_n$												
	Time 0.1 ~ 1s (step 0.1s)												
residual current protection													
Setting current I_g (Tolerance10%)	0.5A~30A+OFF (step 为 0.1A)												
Setting time t_g (Tolerance10%)	Instantaneous	0.06	0.08	0.17	0.25	0.33	0.42	0.5	0.58	0.67	0.75	0.83	
Fault current multiple	Maximum breaking time (s)												
I_r	0.04	0.36	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	
2 I_r	0.04	0.18	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	
5 I_r ~10 I_r	0.04	0.072	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	
Neutral pole protection													
Setting current I_n (Tolerance $\pm 10\%$)	(0.5, 1) $\times I_n$ +OFF												
Operation time	The same as overload long time delay												
current unbalance protection													
protection setting value	5% ~ 60%												
Time delay time	0.1 ~ 40s (step 0.1s)												
Protection return setting value	5% ~ start value%					This setting is only available when the mode is alarm							
Tripping time	10 ~ 200s (step 0.1s)												
Operation	Trip, alarm, OFF												
Load monitor	1. Current method 1 2. Current method 2 3. Power method 1 4. Power method 2 5. OFF												
Unloading I operation setting value	0.2~1.0 I_r (current method 1/2)												
	200~10000kW (power method 1/2)												
Unloading I operation delay	20%~80%tr (current method 1/2)												
	10~3600s (power method 1/2)												
Unloading II operation setting value	0.2~1.0 I_r (current method1) , 0.2 I_r ~undloading value (current method 2)												
	200~10000kW (power method 1) , 100~undloading value (power method 2)												
Unloading II operation delay	20%~80%tr (Current method 1) , 10~600s (current method 2)												
	10~3600s (power method 1/2)												

TECHNICAL PARAMETERS

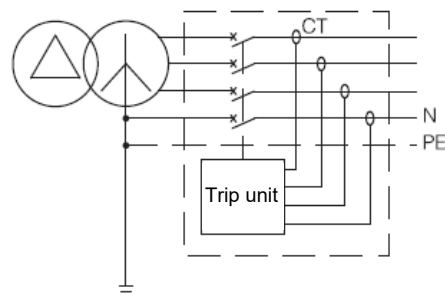
Protection parameters of 3M/3H trip unit

Voltage unbalance protection		
Protection setting value	2%~30%	
Setting time	0.2~60s	
protection return setting value	2%~start value	This setting value is only available when the mode is "Alarm"
Setting time	0.2~60s	
Mode	Alarm/Trip/OFF	
Undervoltage protection		
Protection setting value	100V~return value	
Setting time	0.2~60s	
protection return setting value	Start value~1200V	This setting value is only available when the mode is "Alarm"
Setting time	0.2~60s	
Mode	Alarm/Trip/OFF	
Overvoltage protection		
Protection setting value	Return value~1200V	
Setting time	0.2~60s	
Protection return setting value	100V~return value	
Setting time	0.2~60s	
Mode	Alarm/Trip/OFF	
Low frequency protection		
Protection setting value	45Hz~return value	
Setting time	0.2~5s	
Protection return setting value	Start value~65Hz	This setting value is only available when the mode is "Alarm"
Setting time	0.2~36s	
Mode	Alarm/Trip/OFF	
High frequency protection		
Protection return setting value	return value~65Hz	
Setting time	0.2~5s	
Protection return setting value	45Hz~return value	This setting value is only available when the mode is "Alarm"
Setting time	0.2~36s	
Mode	Alarm/Trip/OFF	

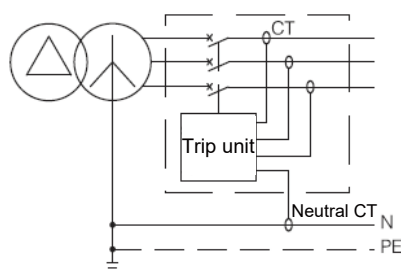
Grounding protection detection schematic diagram



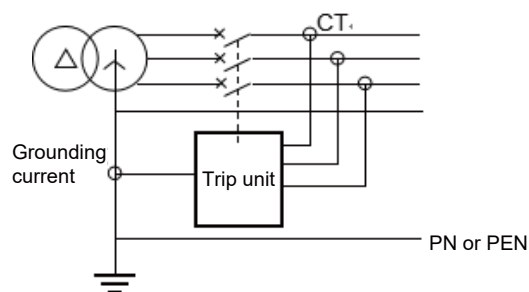
3PT (Differential type)



4PT (Differential type)



TN (Differential type)



W (Low current type)

Note:

1. For 3P circuit breaker, differential grounding protection has two modes: 3P and 3P+N, as shown in the figure above, TN-C system adopts 3P mode, and TN-S system recommends to use 3P+N mode (with external neutral CT) .

Factory setting value (if there is no special requirement, the factory setting value of the product is as follows)

Overload long time delay	Current setting value I_{r1}	I_n
	Time setting value t_1	433s (2M, 2H) / 960s (3M, 3H)
Short circuit short time delay	Current setting value I_{r2}	$3I_n$
	Time setting value t_2	0.2s
Short circuit Instantaneous	Current setting value I_{r3}	$6I_n$
Grounding protection	Current setting value I_{r4}	$0.8I_n$ or 1200A (select the smaller one)
	Time setting value t_4	0.4s

Derating coefficient

Ambient temperature derating coefficient (current derating coefficient)

Ambient temperature		+40°C	+45°C	+50°C	+55°C	+60°C	+70°C
UEW6-1600	200A...1250A	1	1	1	1	1	1
	1600A	1	1	1	1	1	0.95
UEW6-2000	630A...1250A	1	1	1	1	1	1
	1600A	1	1	1	1	1	0.95
	2000A	1	1	1	1	1	0.89
UEW6/UEW6H U/UEW6XU- 4000	1000A...3200A	1	1	1	1	1	1
	4000A	1	1	1	1	0.96	0.86

Derating for altitude (voltage)

Altitude (m)		2000	3000	4000	5000
Rated impulse withstand voltage (V)	UEW6XU-4000	18	18	18	18
	Other	12	12	12	12
Power frequency withstand voltage (V)		3500	3500	3150	2500
Maximum rated operational voltage (V)	690V	690	690	690	690
	800V	800	800	800	700
	1000V	1000	1000	1000	870
	1140V	1140	1140	1140	990
	1380V	1380	1380	1380	1200
	1500V	1500	1500	1500	1300

Derating for altitude (current derating coefficient)

Altitude (m)		2000	3000	4000	5000
UEW6-1600	200A...1000A	1	1	1	1
	1250A...1600A	1	1	0.97	0.87
UEW6-2000	630A...1600A	1	1	1	1
	2000A	1	1	0.97	0.87
UEW6/UEW6HU/UE W6XU-4000	1000A...3200A	1	1	1	1
	4000A	1	0.93	0.88	0.82

Accessory

Accessory parameter

Shunt Trip (standard) UEW6-1600

	Rated operational voltage (V)	AC/DC220	AC380	DC110	DC24	DC125
	Instantaneous current (A)	2.2	1.5	1.5	8.2	1.7
	Operation voltage (V)	(0.7...1.1) U _e				
	Breaking time (ms)	30 max				

Shunt Trip (standard) UEW6 -2000,UEW6/ UEW6HU/UEW6XU-4000

	Rated operational voltage (V)	AC220	AC380	DC110	DC220	DC24
	Instantaneous current (A)	2.2	2.5	5.5	2.5	12.2
	Operation voltage (V)	(0.7...1.1) U _e				
	Breaking time (ms)	Not greater than 30ms				

Closing coil (standard) UEW6-1600

	Rated operational voltage (V)	AC/DC220	AC380	DC110	DC24	DC125
	Instantaneous current (A)	2.2	1.5	1.5	8.2	1.7
	Operation voltage (V)	(0.85...1.1) U _e				
	Closing time (ms)	70 max				

Closing coil (standard) UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000

	Rated operational voltage (V)	AC220	AC380	DC110	DC220	DC24
	Instantaneous current (A)	2.2	2.5	5.5	2.5	12.2
	Operation voltage (V)	(0.85...1.1) U _e				
	Closing time (ms)	Not greater than 70ms				

Accessory

Accessory parameter

Undervoltage Trip Device (optional) UEW6-1600



Rated operational voltage (V)	AC/DC220	AC380	DC110	DC24	DC125
Instantaneous current (A)	2.3	1.12	6	12	1.8
Steady current (mA)	16	8	22	100	10
Operation voltage (V)	(0.35...0.7) U _e				
Reliable closing voltage	(0.85...1.1) U _e				
Reliable non-closing voltage	≤0.35 U _e				
Delay time	Instantaneous, 1s, 3s, 5s				
Note:When the voltage is lower than 0.35 U _e ,the delay-type Undervoltage Trip Device will trip instantaneously.If power failure delay is required. No-voltage Trip Device shall be selected.					

Undervoltage Trip Device (optional) UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000



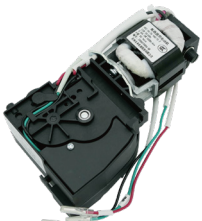
Rated operational voltage (V)	AC110	AC220	AC380	DC110	DC24
Instantaneous current (A)	2.1	2.1	1.3	2.5	10
Steady current (mA)	90	21	21	90	250
Operation voltage (V)	(0.35...0.7) U _e				
Reliable closing voltage	(0.85...1.1) U _e				
Reliable non-closing voltage	≤0.35 U _e				
Delay time	Instantaneous, 1s, 3s, 5s				

Note:When the voltage is lower than 0.35 U_e,the delay-type Undervoltage Trip Device will trip instantaneously.If power failure delay is required, No-voltage Trip Device shall be selected.

No-voltage Trip Device (optional) UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000

	Rated operational voltage (V)	AC110	AC220	AC380	DC110	DC24
	Instantaneous current (A)	0.95	0.46	0.68	1.18	5.8
	Steady current (mA)	30	21	21	15	255
	Operation voltage (V)	(0...0.7) U _e				
	Reliable closing voltage	(0.85...1.1) U _e				
	Reliable non-closing voltage	≤0.35 U _e				
	Delay time	1s, 3s, 5s				

Charging motor (standard) UEW6-1600

	Rated operational voltage (V)	AC/DC220	AC380	DC110	DC24	DC125
	Working current (A)	0.8	0.7	2.8	7	1.3
	Starting current (A)	2.8	1.7	9.1	28	7
	Operation voltage (V)	$(0.85 \sim 1.1) U_e$				

Accessory

Accessory parameter

Charging motor (standard) UEW6-2000

	Rated operational voltage (V)	AC220	AC380	DC110	DC220	DC24
	Working current (A)	1.1	0.6	2.3	1.1	10
	Starting current (A)	3.8	2.6	7.2	4.5	20
	Operation voltage (V)	(0.85...1.1) U _e				

Charging motor (standard) UEW6/UEW6HU/UEW6XU-4000

	Rated operational voltage (V)	AC220	AC380	DC110	DC220
	Working current (A)	1.5	1	3.3	1.5
	Starting current (A)	8.3	5.5	9.8	6.3
	Operation voltage (V)	(0.85...1.1) U _e			

Auxiliary contact (standard) UEW6-1600

	Conventional thermal current (A)	I _{th} =16A
	Rated insulation voltage (V)	U _i =400V
	Volume(U _e /I _e)	AC-12: 380V/16A DC-12: 250V/5A AC-13: 400V/3A DC-13: 220V/1.2A
	Minimum switching capacity	24V 0.1A

Auxiliary contact (standard) UEW6-2000

	Conventional thermal current (A)	I _{th} =16A
	Rated insulation voltage (V)	U _i =400V
	Volume(U _e /I _e)	AC-12: 380V/16A DC-12: 250V/5A AC-13: 400V/3A DC-13: 220V/1.2A
	Minimum switching capacity	24V 0.1A

Accessory

Accessory parameter

Auxiliary contact (standard) UEW6/UEW6HU/UEW6XU-4000

	Conventional thermal current (A)	I _{th} =16A	
	Rated insulation voltage (V)	U _i =400V	
	Volume(U _e /I _e)	AC-12: 400V/10A	DC-12: 250V/1A
		AC-15: 400V/2A	DC-13: 220V/0.3A
Minimum switching capacity		24V 0.1A	

Power module(standard)

	Input voltage (V)	AC220	AC380	DC110	DC220
	Out voltage (V)	DC24			

T201 relay module(optional)

	Operational voltage	DC24V	
	Contact number	3	
	Contact volume	AC250V,10A	DC28V,10A
	When the trip unit DO output signal is used to control the opening and closing of the circuit breaker or the load capacity is large, it needs to be controlled after the ST201 relay module is converted.		

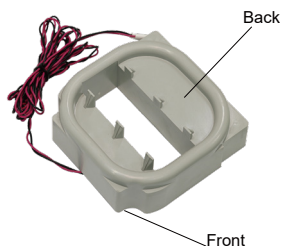
Position electrical Indicator(optional)

	Contact number	One for racked-in/test isolated/racked-out positions respectively	
	Contact volume	AC380V,2A	DC250V,0.3A

Accessory

Accessory parameter

External neutral CT(optional)



Inner hole dimension: 60x20 (UEW6-1600/2000) 80x30 (UEW6/UEW6HU/UEW6XU-4000)
Note: The above is the standard dimension. Please contact us if special dimension needed.

The distance between the installation point and the circuit breaker shall not exceed 2m.
When the circuit breaker is connected with the upper coming terminal, the front side of the external CT should be facing away from the neutral line grounding side;
When the circuit breaker is connected with the lower incoming terminal line, the front of the external CT shall face the neutral line grounding side during installation.

Residual current CT(optional)



Inner hole dimension: 280X120 370X120
390X120 420X120 500X120

If residual current protection is needed, residual current should be selected

Key Interlock(optional)



Lock the breaker at the opening position to ensure that it cannot be closed

One lock and one key: one switch is equipped with one lock and one key
Two locks and one key: two switches are equipped with two identical locks and one key
Three locks and two keys: three switches are equipped with three identical locks and two keys
Five locks and three keys: five switches are equipped with five identical locks and three keys
Five locks and three keys (three incoming lines and two busbar coupler) : special five locks and three keys, used for three incoming lines and two bus coupler system

Operation counter (optional)



Record the opening and closing operation cycles of the circuit breaker

Accessory

Accessory parameter

Pushbutton locking (optional)

	The opening and closing button on the cover can be locked to prevent mis-operation
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Door frame (optional)

	Installed on the opening of the cabinet door to guarantee IP40.
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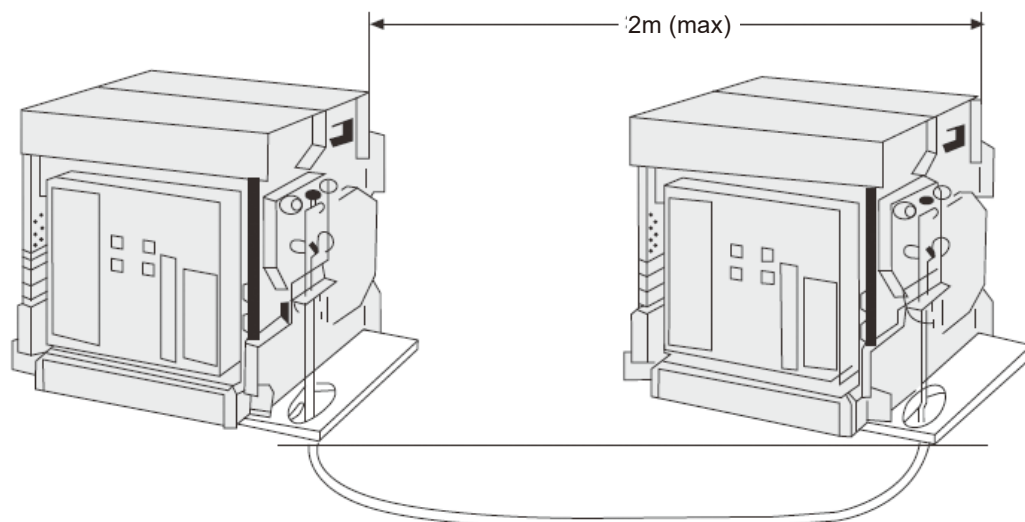
Interphase barrier (optional)

	Installed between each phase of the busbar to increase the insulation strength between each phase and prevent short circuit between the phases of the busbar.
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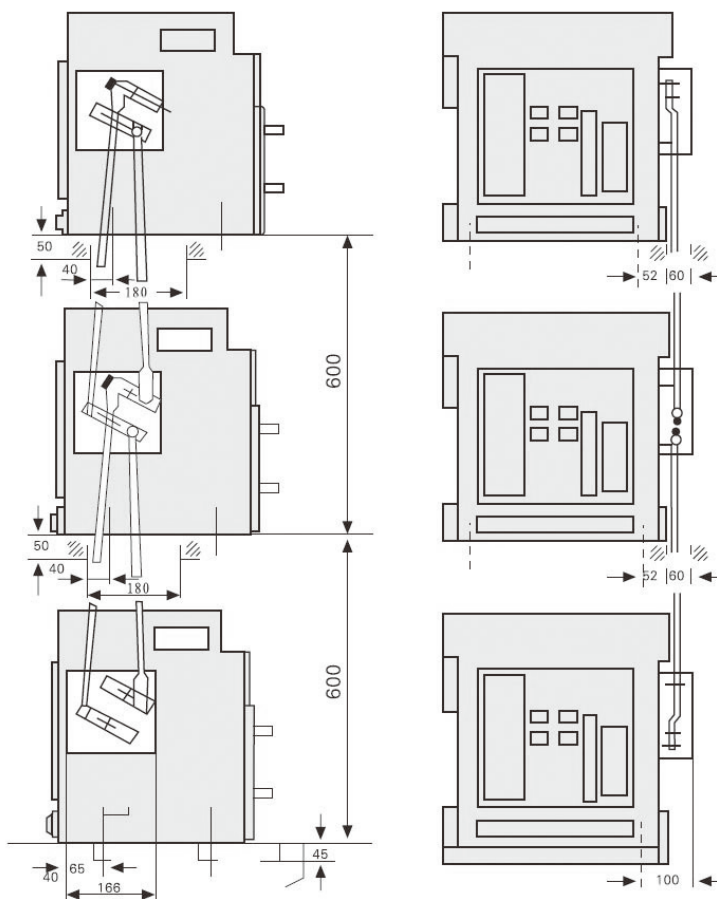
Accessory

Mechanical interlock

Wirerope interlock, used for horizontal or vertical installation of two breakers



Steel lever interlock, used for vertical installation of two or three circuit breakers



Note: Three circuit breakers with interlock can provide two types of connection: two closed and one open, or two open and one closed.

ATS system

Description and usage

The ATS system can realize the transfer switching between two power supplies to ensure the reliability of power supply. The ATS system is composed of ACBs, automatic transfer trip unit, control cable, mechanical interlock, transfer connection terminal and other accessories. The whole series of ACB can be used in ATS system.

Controller characteristics

- Suitable for automatic transfer switching of two power supplies: "grid-grid" and "grid-generator"
- Automatic transfer switching mode: automatic change and automatic recovery, automatic change without automatic
- Real-time monitoring of two three-phase voltages, accurate judgment and automatic switching off abnormal voltage (voltage loss, phase loss) in the circuit
- With automatic and manual switching mode. In the manual state, the switch can be forced to close and open
- With fire alarm function
- Can be remote controlled

Product composition

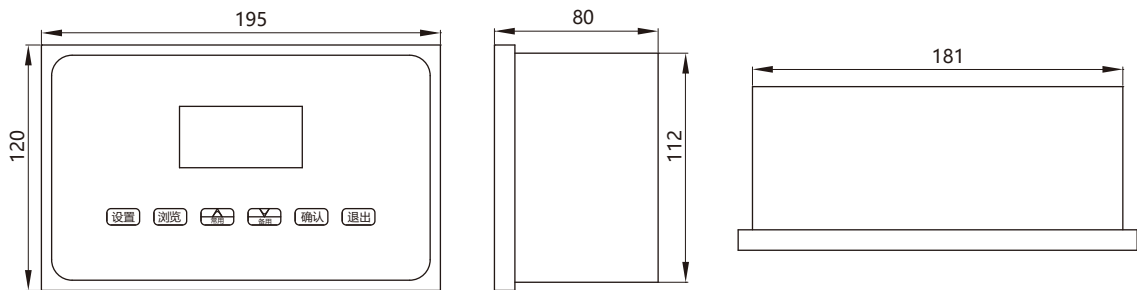
Mechanical interlocking + two circuit breakers +controller



Installation and wiring

Overall dimension and installation dimension

The recommended opening dimension on the panel of the switchboard is 183mm (width)×113mm (height). The overall dimensions are shown in the figure.



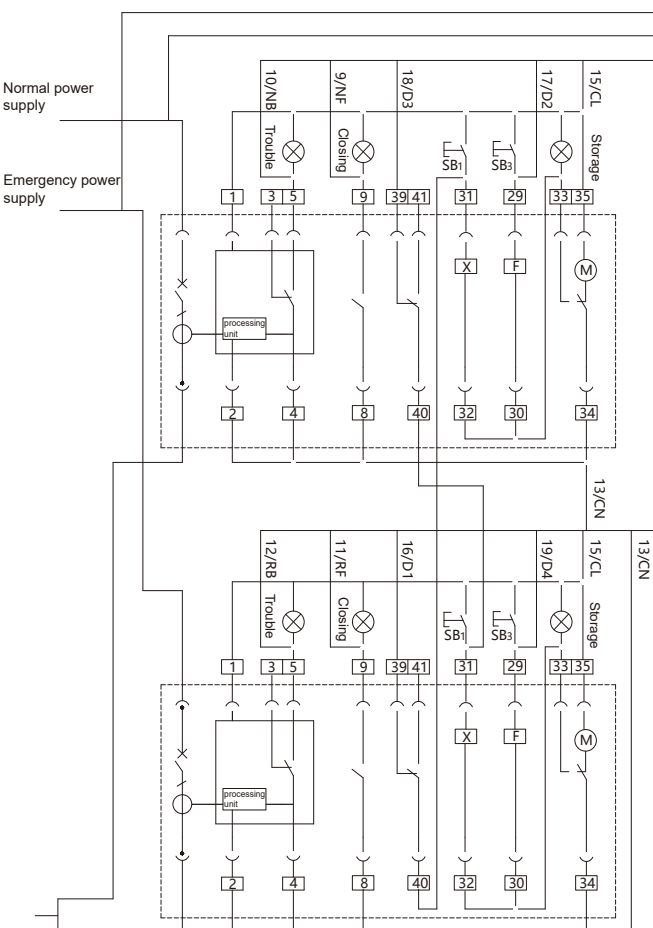
Note: Dual power one coupler automatic switching system solution can be provided to realize the automatic switching of three circuit breakers units, and the specific can consult the manufacturer.

ATS system

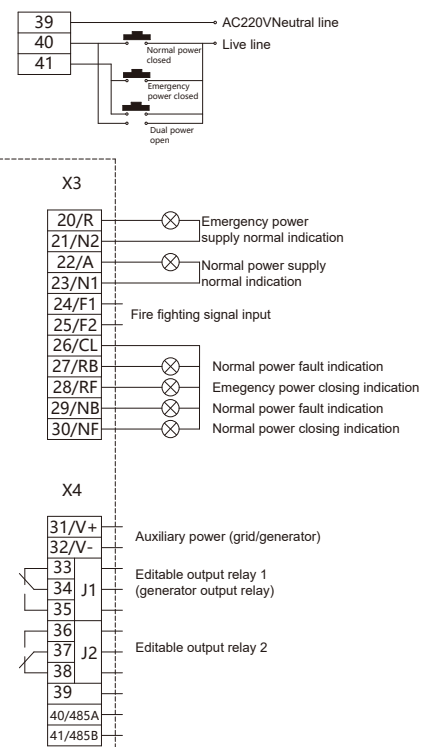
Installation and wiring

Electrical schematic diagram of frame-type automatic power conversion system

Circuit diagram of ACB-type ATS system (Take UEW6 -2000,UEW6/ UEW6HU/UEW6XU -4000, 4 changeover, 6 changeover and 8 changeover for example. If the breaker is of other models, the circuit diagram may be different. If necessary, contact the manufacturer)



Remote control wiring diagram



Installation and wiring

Connection terminal description			
NO.	Connection terminal description	NO.	Connection terminal description
1/T	Emergency power supply Phase C	16/D1	Normal power supply close
2/S	Emergency power supply Phase B	17/D2	Normal power supply open
3/R	Emergency power supply Phase A	18/D3	Emergency power supply close
4/N2	Emergency power supply Phase N	19/D4	Emergency power supply open
5/N1	Normal power supply Phase N	20, 21	Emergency power supply indication
6/C	Normal power supply Phase C	22, 23	Normal power supply indication
7/B	Normal power supply Phase B	24, 25	Fire protection signal input
8/A	Normal power supply Phase A	26, 27	Emergency power supply fault trip indication
9/NF	Normal power supply closing detection	26, 28	Emergency power supply closing indication
10/NB	Normal power supply fault detection	26, 29	Normal power supply fault indication
11/RF	Emergency power supply closing detection	26, 30	Normal power supply closing indication
12/RB	Emergency power supply fault detection	31, 32	Generation control auxiliary (grid-generator)
13/CN	AC220/AC230 power supply common neutral line	33, 34, 35	Generator control output relay
14/CN	AC220/AC230 power supply common neutral line	36, 37, 38	Editable output relay 2
15/CL	AC220/AC230 power supply common live line	39, 40, 41	Remote control input signal

Note:

1 X-Closing coil, F-Shunt trip, M-Charging motor.

2 The operational voltage of trip unit, Shunt trip, Closing coil and Charging motor of ACB is AC220/AC230.

3 For the "grid-generator" system, the trip unit shall be provided with auxiliary power supply, with the power supply voltage of DC24V and the power not less than 10W.

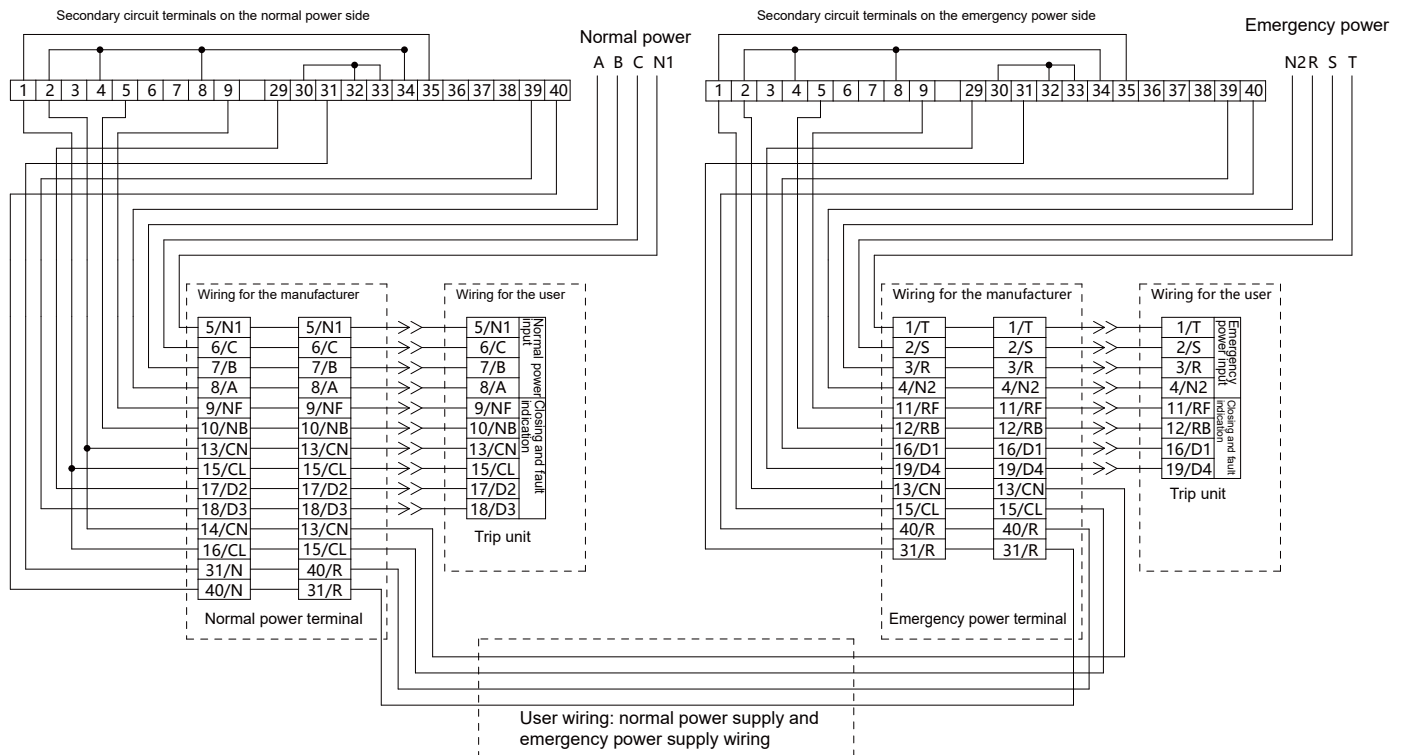
4 The input signal of remote control and fire protection is constant voltage. The voltage can be DC/AC220/AC230 or DC/AC24V, and the default is DC/AC24V.

ATS system

Installation and wiring

Circuit diagram of ACB-type ATS system

(Take UEW6-2000 ~ 4000, 4 changeover, 6 changeover and 8 changeover for example. If the breaker is of other models, the circuit diagram may be different. If necessary, contact the manufacturer.

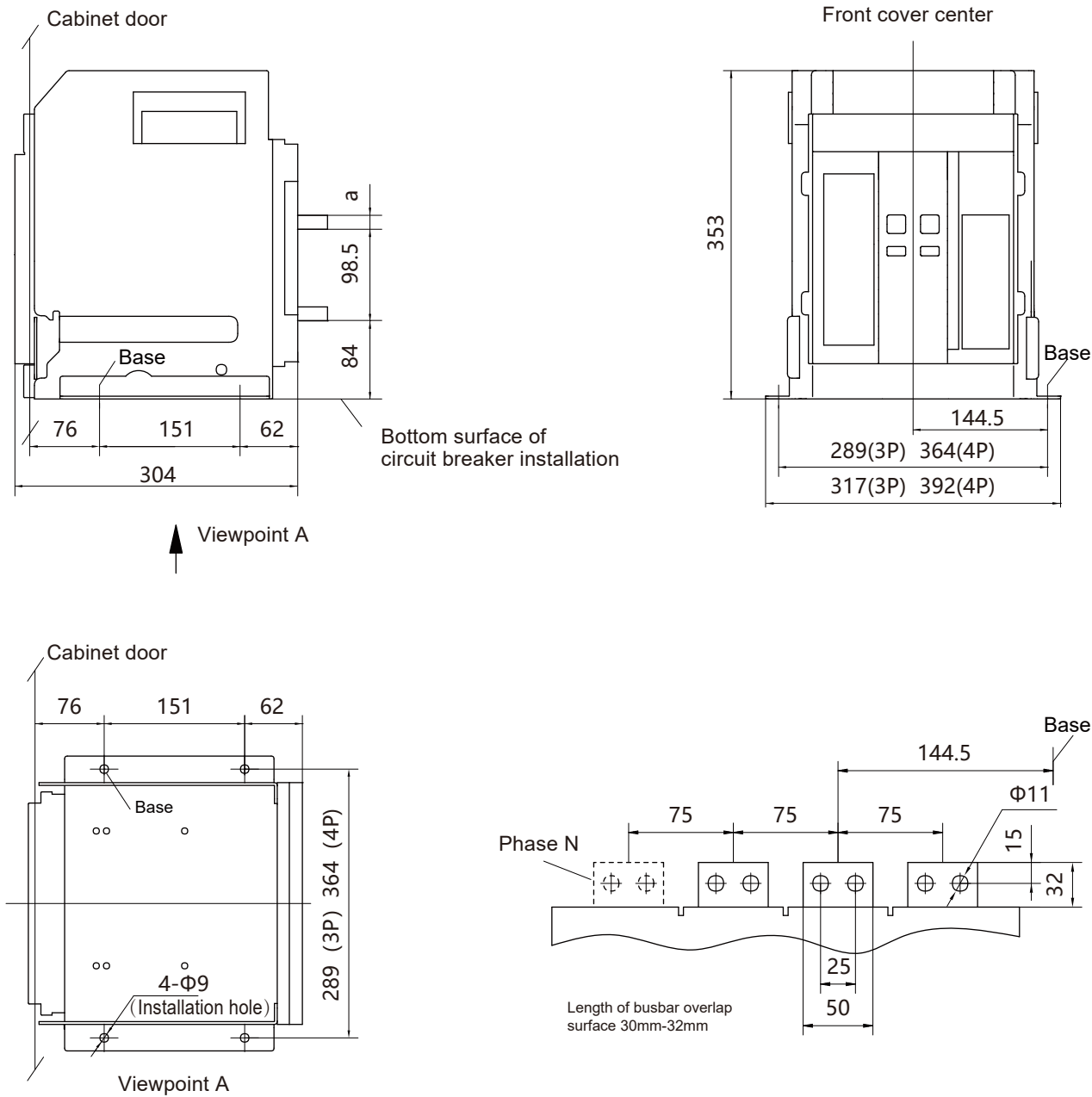


Note: The connection of the secondary circuit terminal and the conversion terminal of the normal power and standby power side are by the manufacturer.

Wiring method and overall dimension

UEW6-1600

Draw out 3P, 4P



UEW6-1600

I_n (A)	a(mm)
200-630	5
800-1250	10
1600	15

Cabinet door

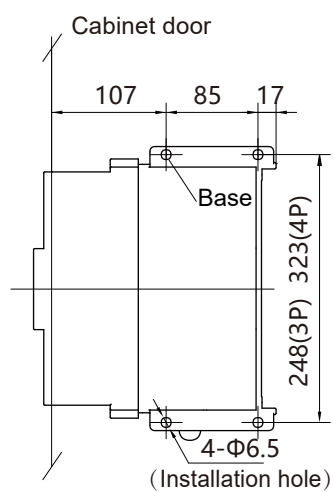
Base

107 85 17 224

50.5 98.5 a

Bottom surface of circuit breaker installation

Front view diagram of the device. The overall height is 319.5. The overall width is 248(3P) and 323(4P). The width of the base is 263(3P) and 338(4P). The width of the central panel is 124. The label "Front cover center" points to the top center. The label "Base" points to the bottom right corner.



Technical drawing of a 3-phase busbar assembly. The drawing shows three busbars mounted on a base, with dimensions and labels indicating the assembly details.

Dimensions and Labels:

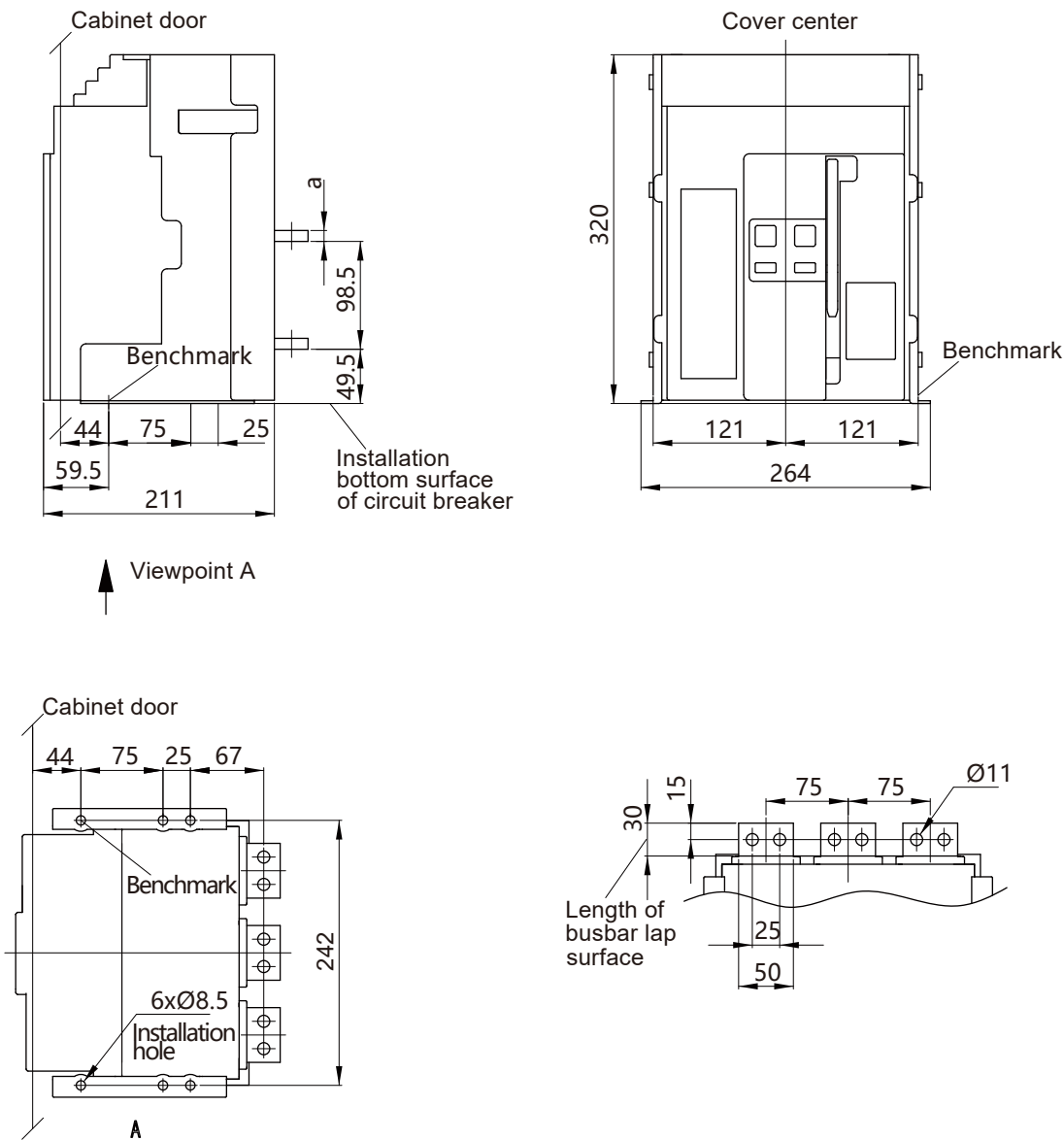
- Base:** The mounting surface for the busbars.
- Phase N:** The neutral phase, indicated by a dashed box.
- 124:** Dimension from the base to the top of the busbar.
- 75:** Dimension from the center of the busbar to the center of the next busbar.
- 15:** Dimension from the base to the bottom of the busbar.
- 305:** Dimension from the base to the top of the busbar.
- 17:** Dimension from the base to the bottom of the busbar.
- 57:** Dimension from the center of the busbar to the center of the next busbar.
- 25:** Dimension from the center of the busbar to the center of the next busbar.
- 50:** Dimension from the center of the busbar to the center of the next busbar.
- Length of busbar overlap surface 28.5mm-30.5mm:** Dimension indicating the overlap length.
- Maximum width of busbar overlap:** Dimension indicating the maximum width of the overlap.
- Ø11:** Dimension indicating the diameter of the busbar.

In (A)	a(mm)
200-630	5
800-1250	10
1600	15

Wiring method and overall dimension

UEW6-1600

Fixed 3P Horizontal busbar (New energy resources)

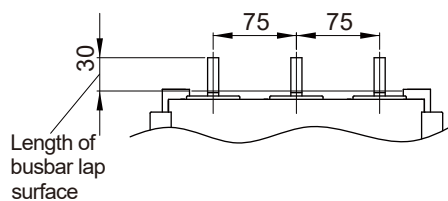
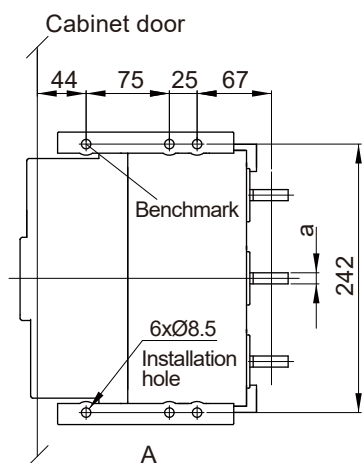
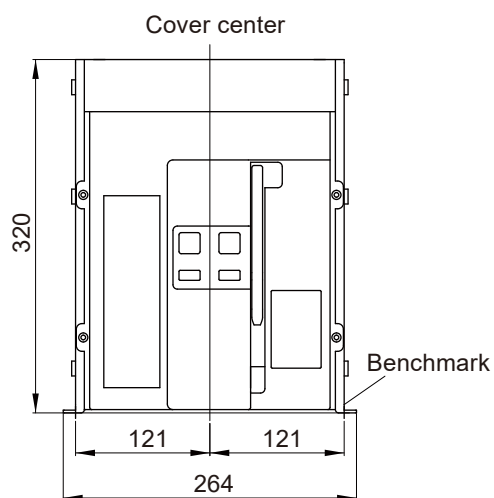
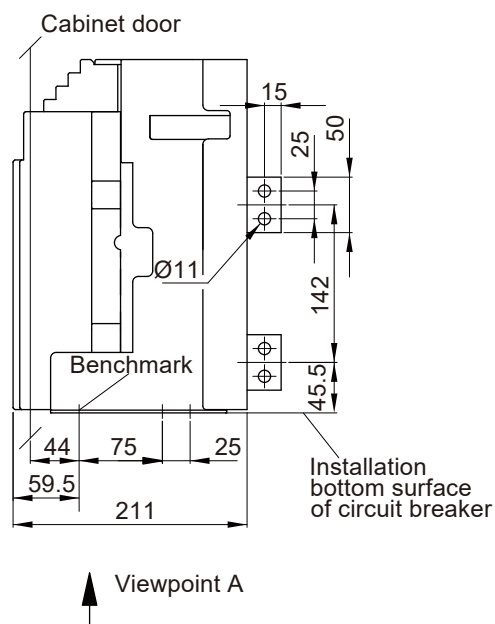


UEW6-1600

I_n (A)	a(mm)
200...1000	5
1250...1600	10

UEW6-1600

Fixed 3P Vertical busbar (New energy resources)



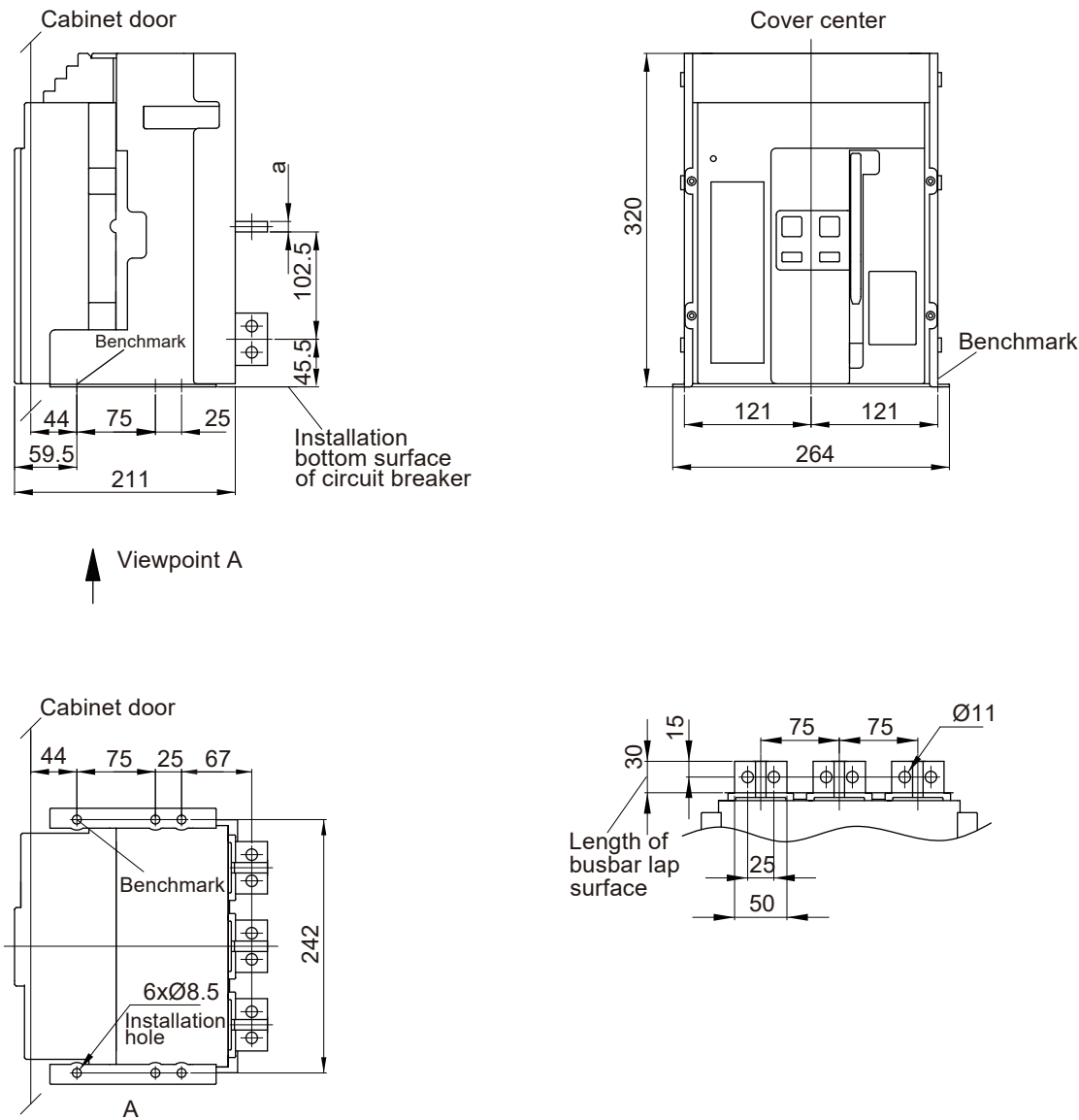
UEW6-1600

I_n (A)	a (mm)
200...1000	5
1250...1600	10

Wiring method and overall dimension

UEW6-1600

Fixed 3P Upper vertical busbar and lower horizontal busbar (New energy resources)

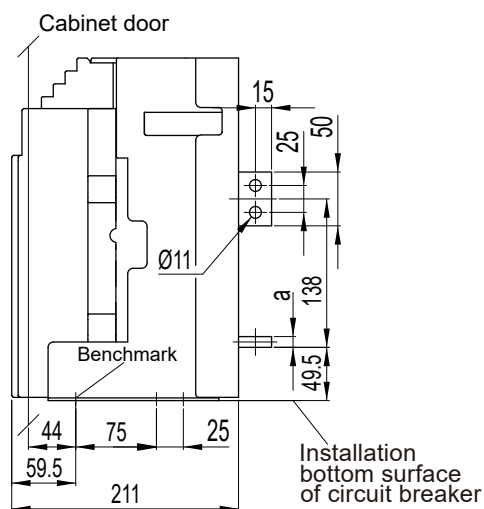


UEW6-1600

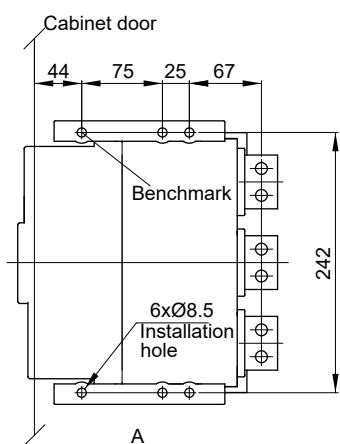
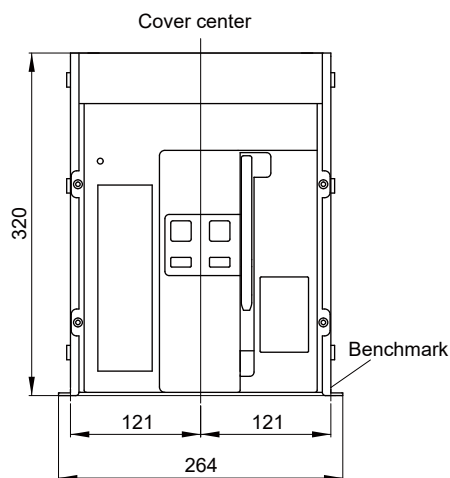
I_n (A)	a(mm)
200...1000	5
1250...1600	10

UEW6-1600

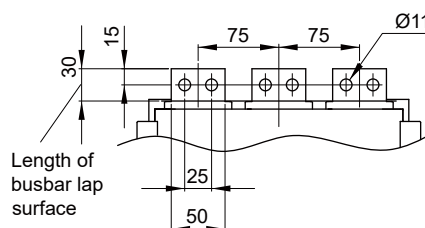
Fixed 3P Upper vertical busbar and lower horizontal busbar (New energy resources)



Viewpoint A



A



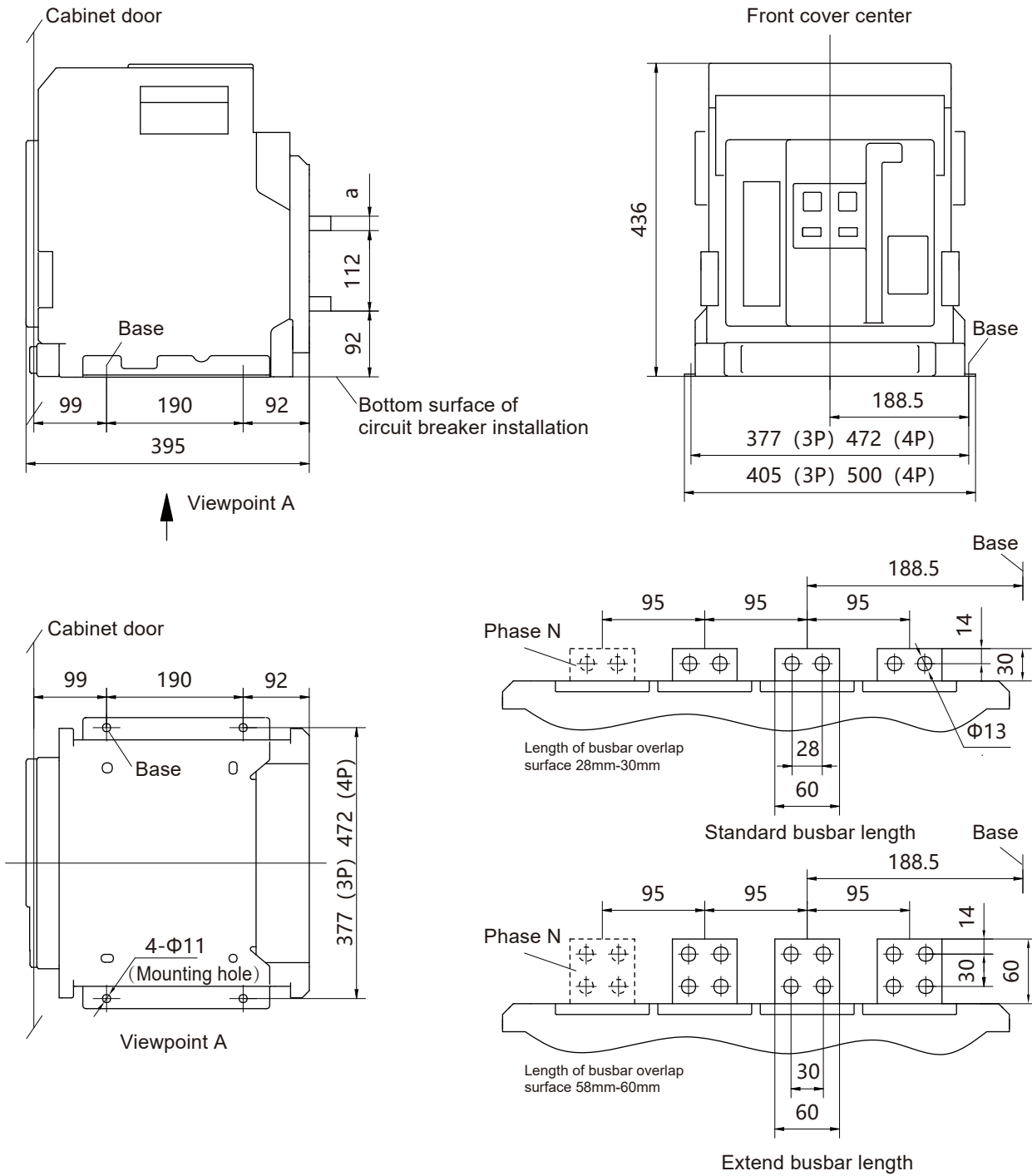
UEW6-1600

I_n (A)	a(mm)
200...1000	5
1250...1600	10

Wiring method and overall dimension

UEW6-2000

Draw out 3P, 4P

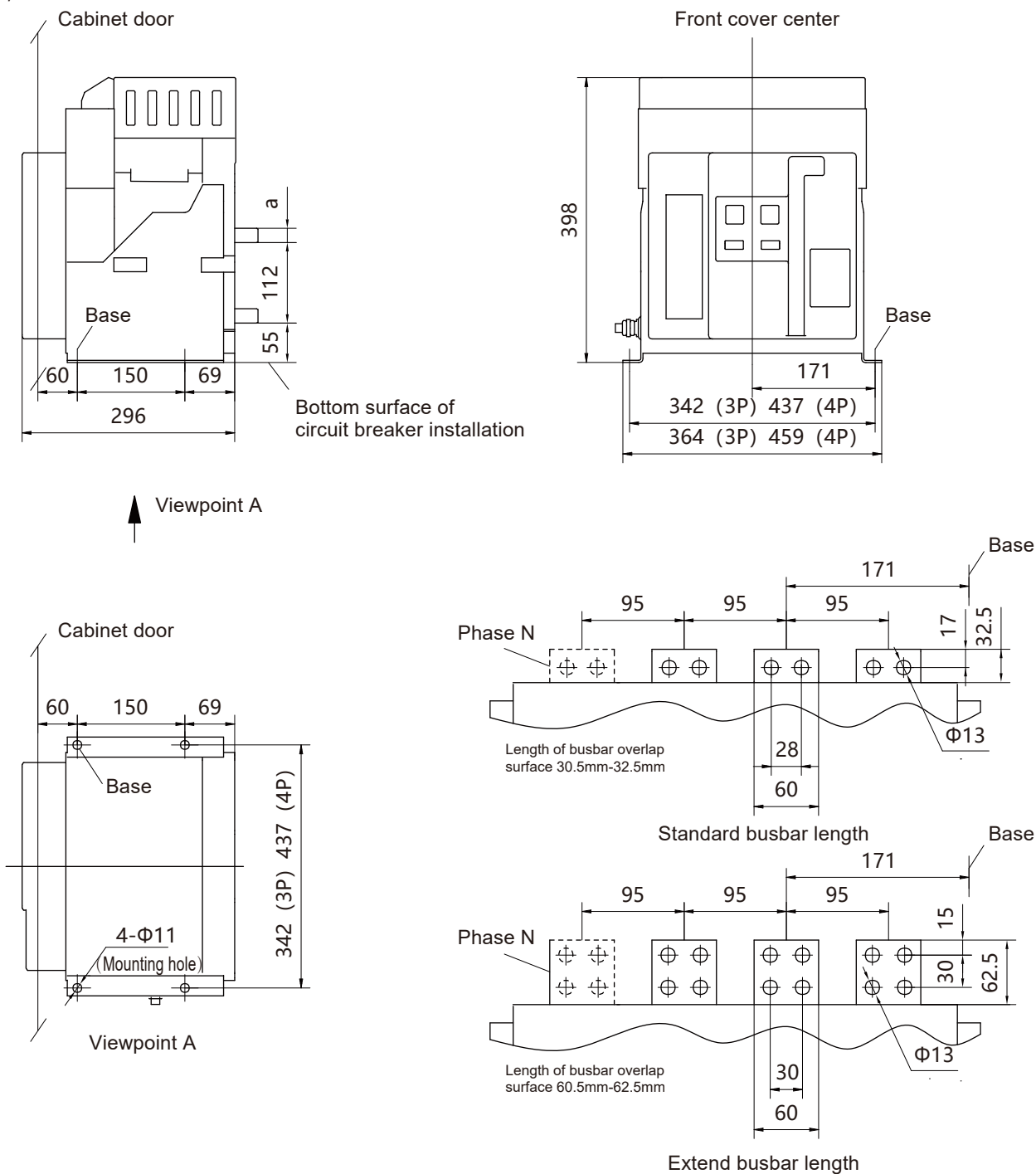


UEW6-2000

I_n (A)	a(mm)
630-800	10
1000-1600	15
2000	20

UEW6-2000

Fixed 3P, 4P



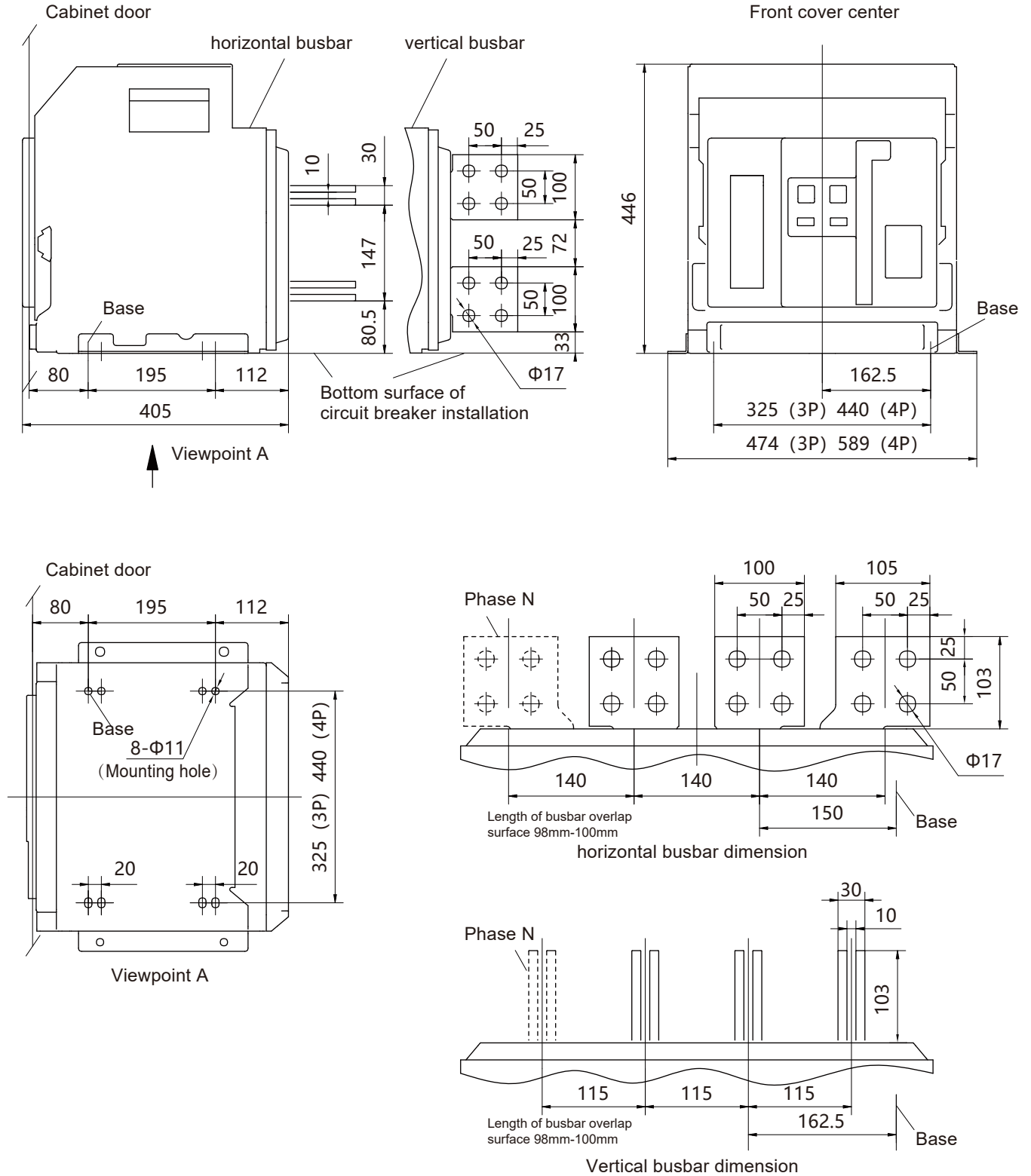
UEW6-2000

I_n (A)	a(mm)
630-800	10
1000-1600	15
2000	20

Wiring method and overall dimension

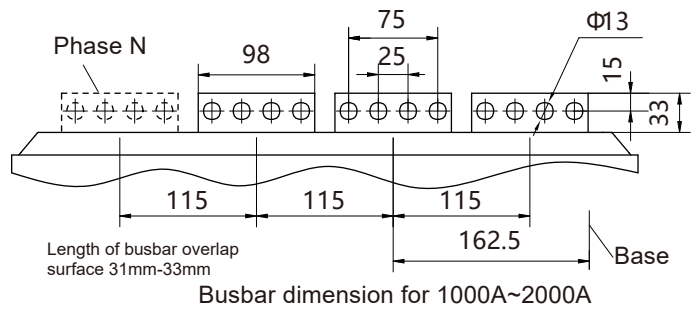
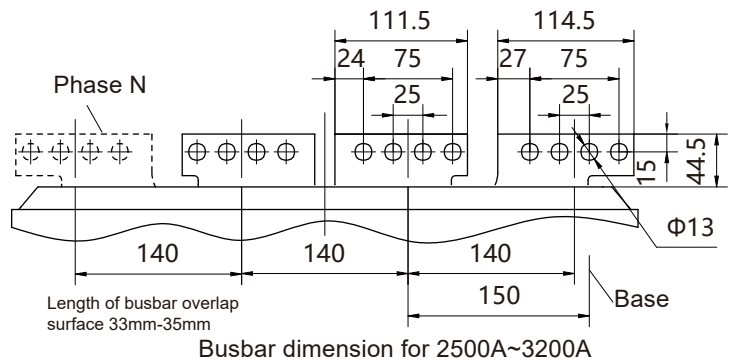
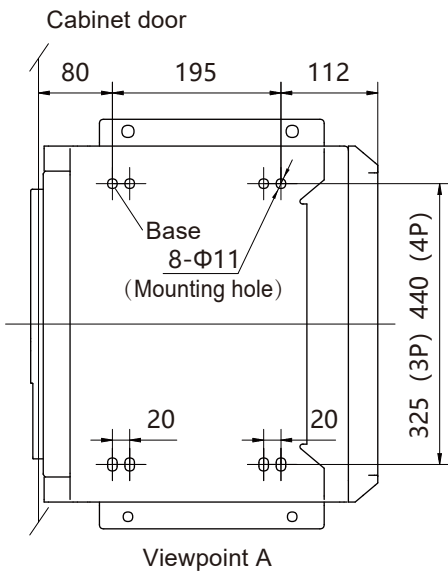
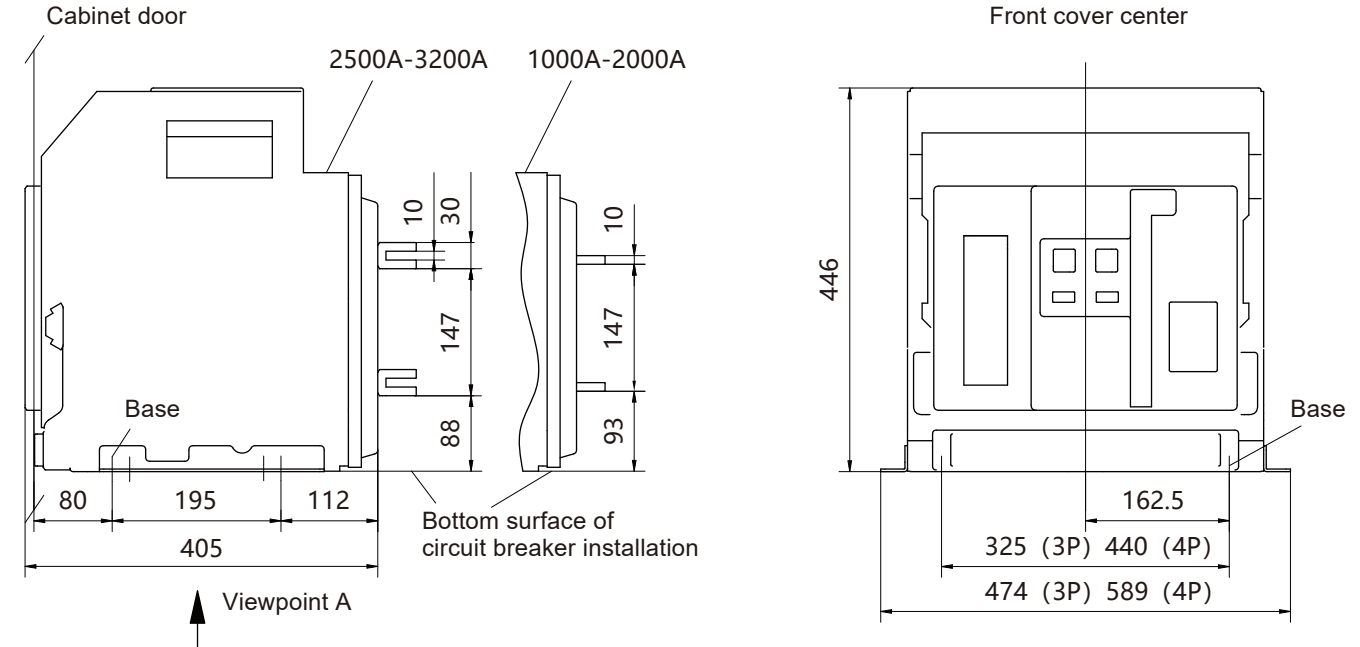
UEW6/UEW6HU/UEW6XU-4000 (4000A)

Draw out 3P, 4P (UEW6HU/ UEW6XU have no 4P)



UEW6/UEW6HU/UEW6XU-4000 (1000A...3200A)

Draw out 3P, 4P (UEW6HU/6XU have no 4P)

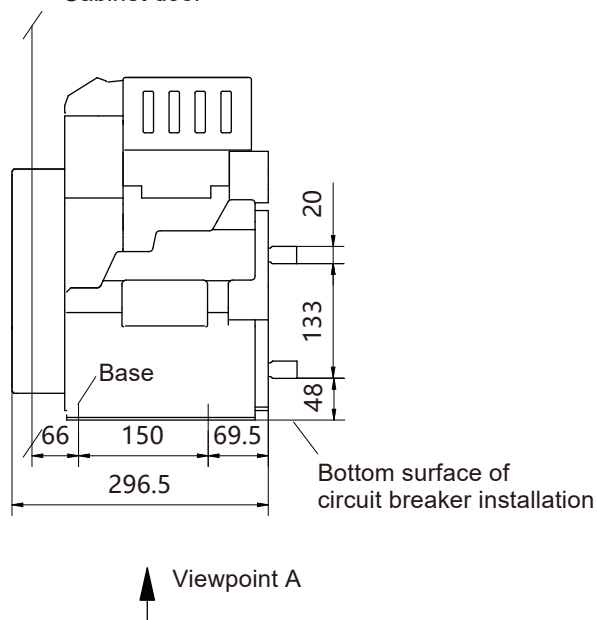


Wiring method and overall dimension

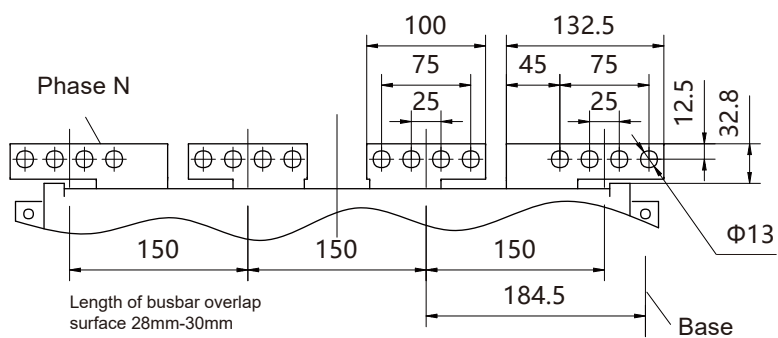
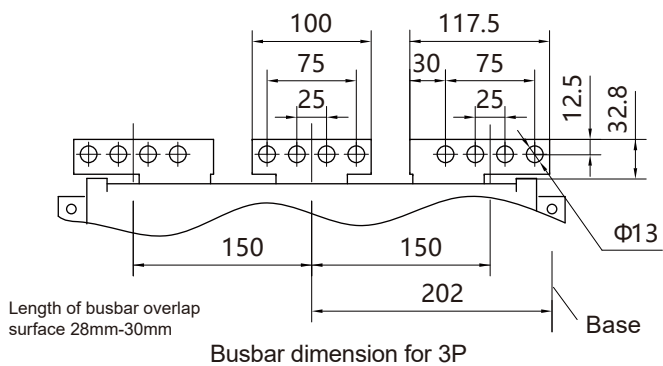
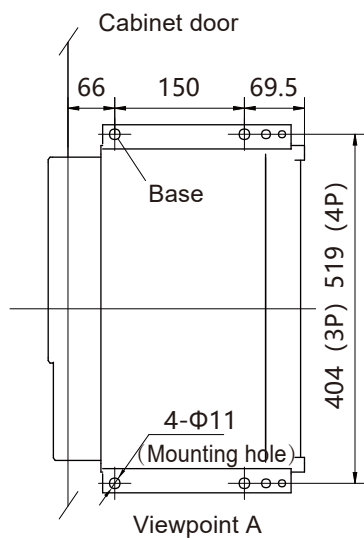
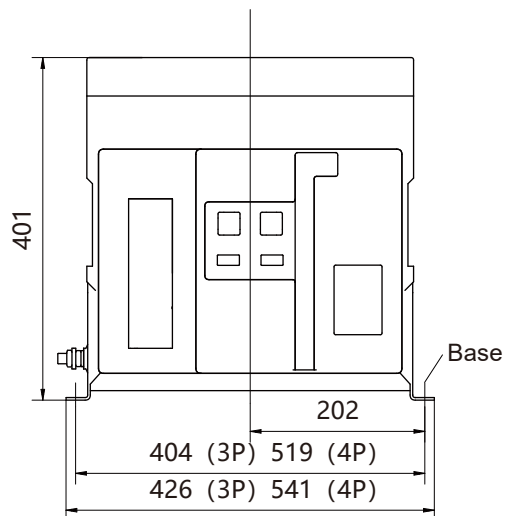
UEW6/UEW6HU/UEW6XU-4000 (3200A...4000A standard horizontal busbar)

Fixed 3P, 4P (UEW6HU/6XU have no 4P)

Cabinet door



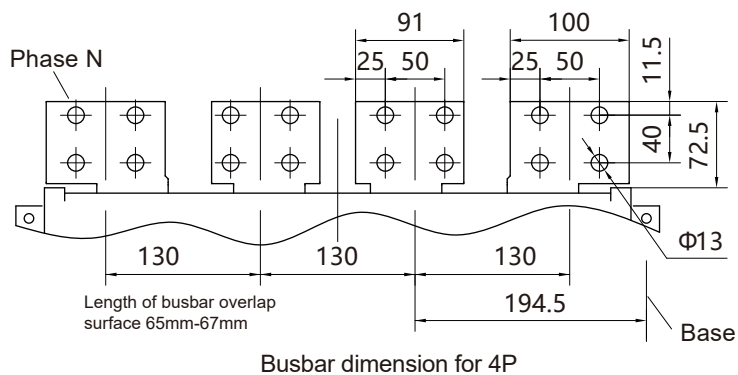
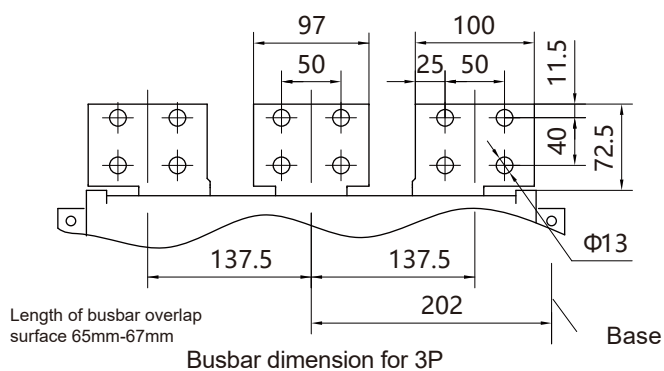
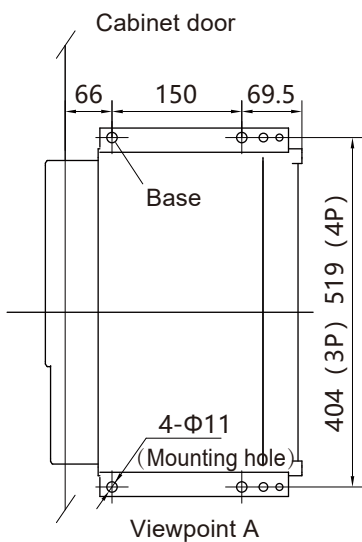
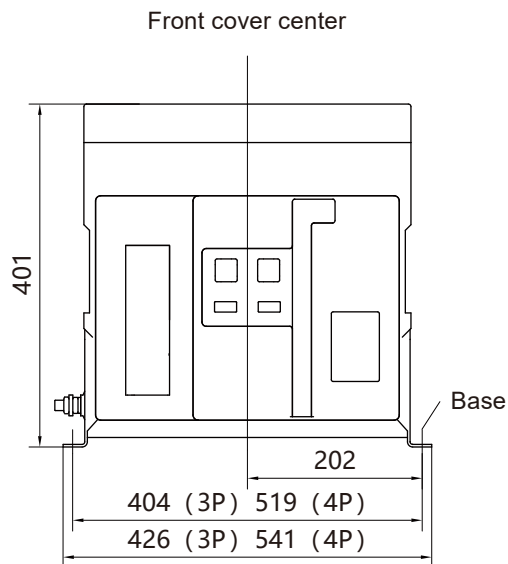
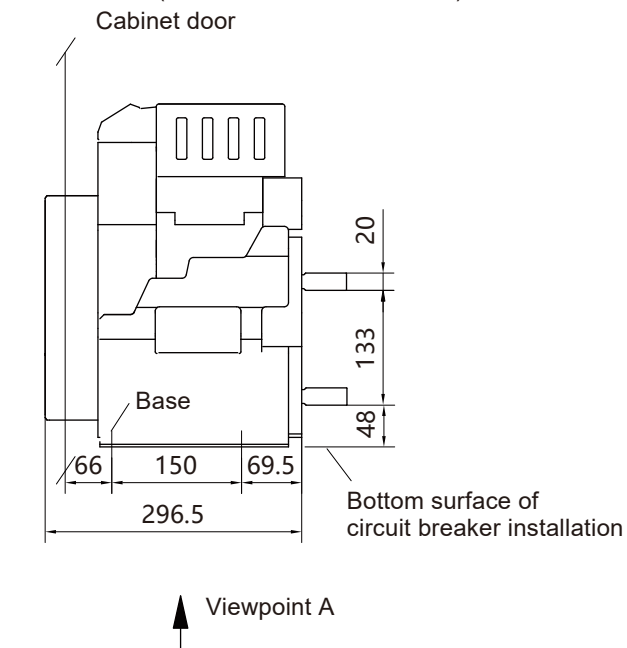
Front cover center



Busbar dimension for 4P (note: phase segregation cannot be installed in this scheme. If it is necessary to install the phase segregation, the extended busbar should be selected)

UEW6/UEW6HU/UEW6XU-4000 (3200A...4000A extended horizontal busbar)

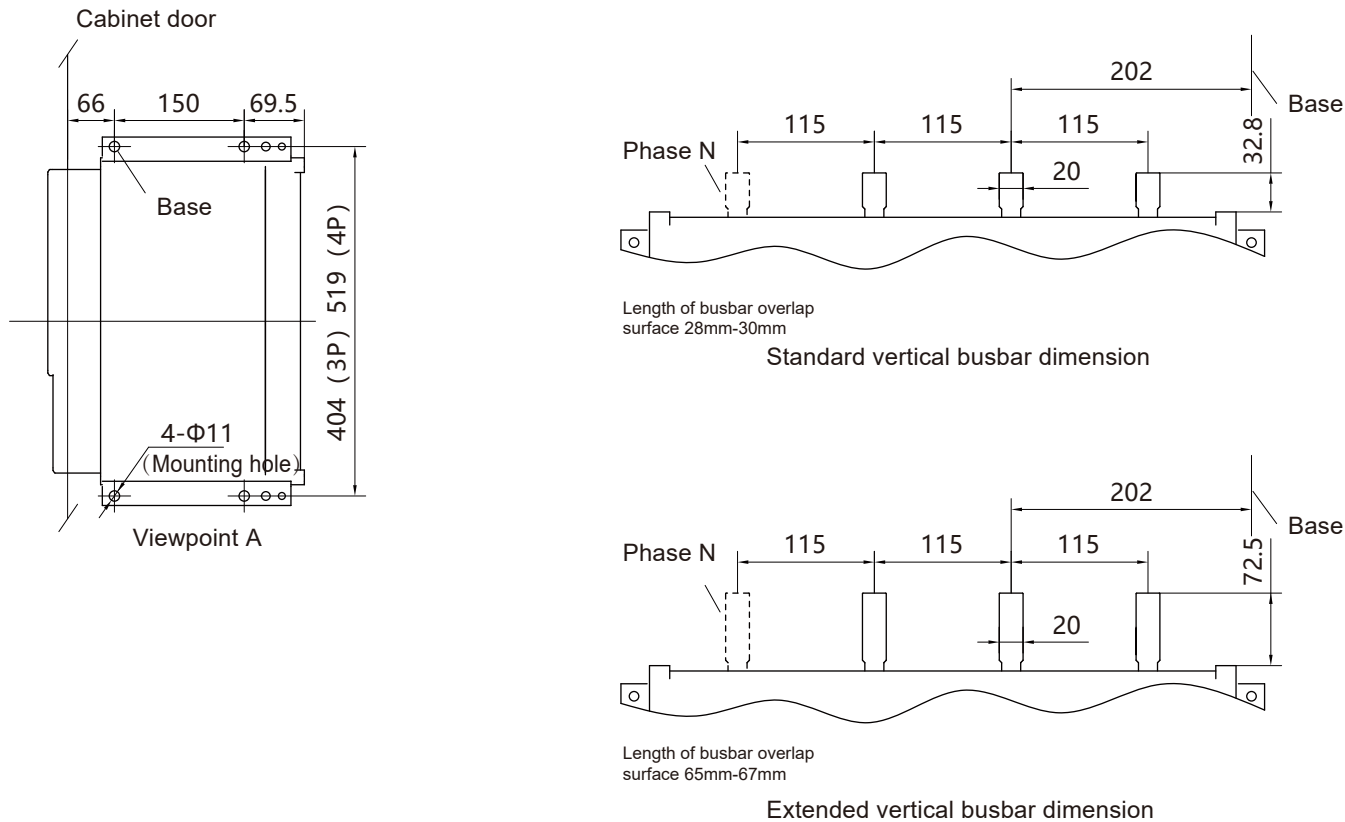
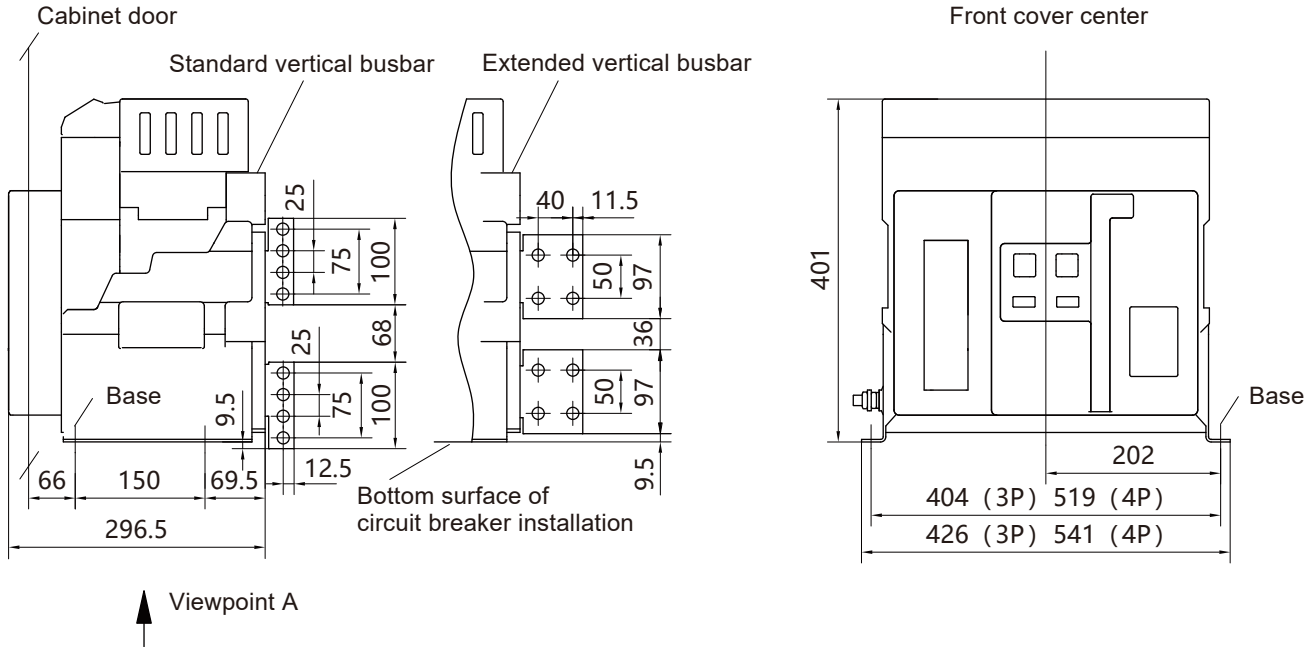
Fixed 3P, 4P (UEW6HU/6XU have no 4P)



Wiring method and overall dimension

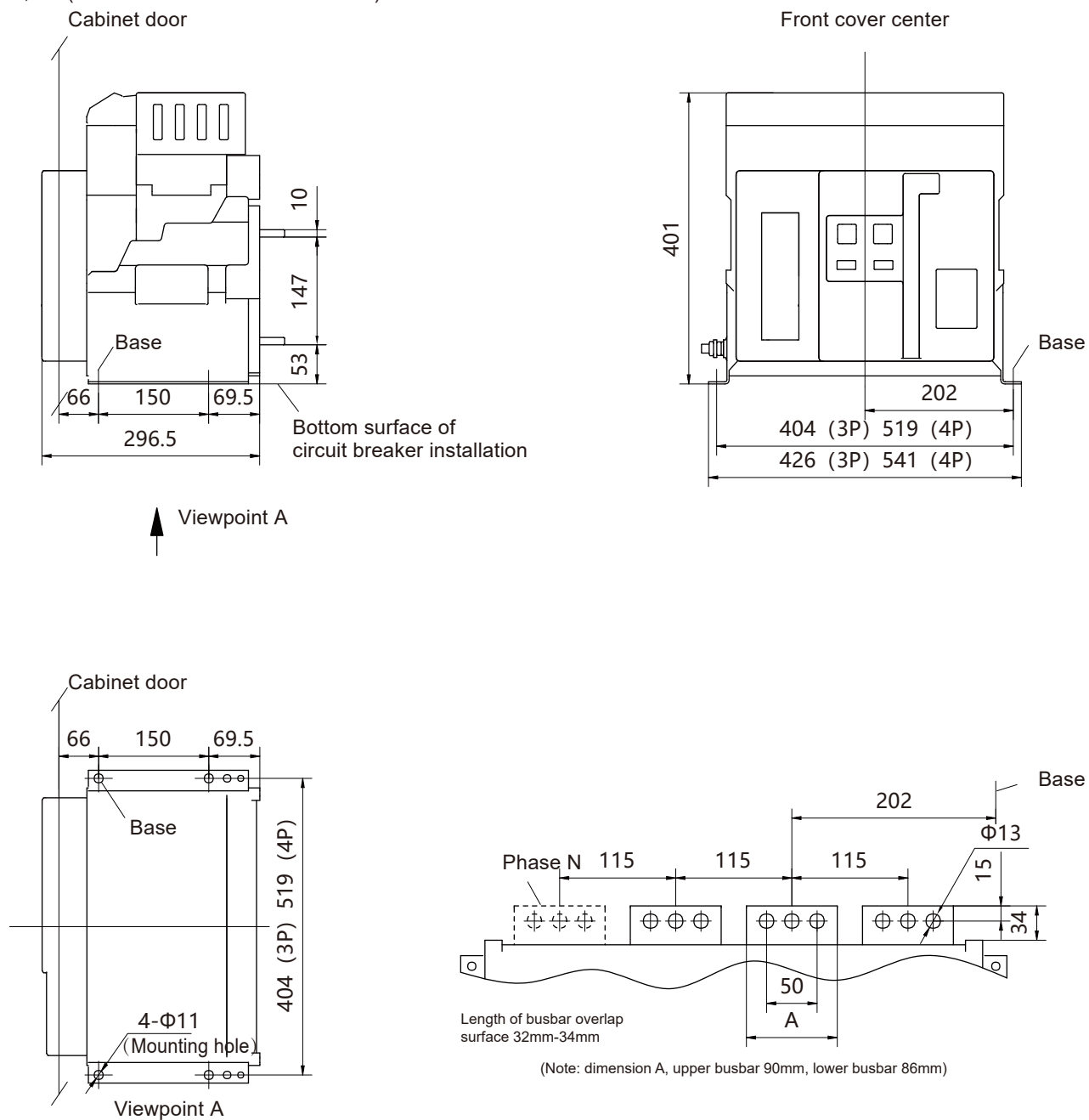
UEW6/UEW6HU/UEW6XU-4000 (3200A...4000A vertical busbar)

Fixed 3P, 4P (UEW6HU/6XU have no 4P)



UEW6/UEW6HU/UEW6XU-4000 (1000A...2500A)

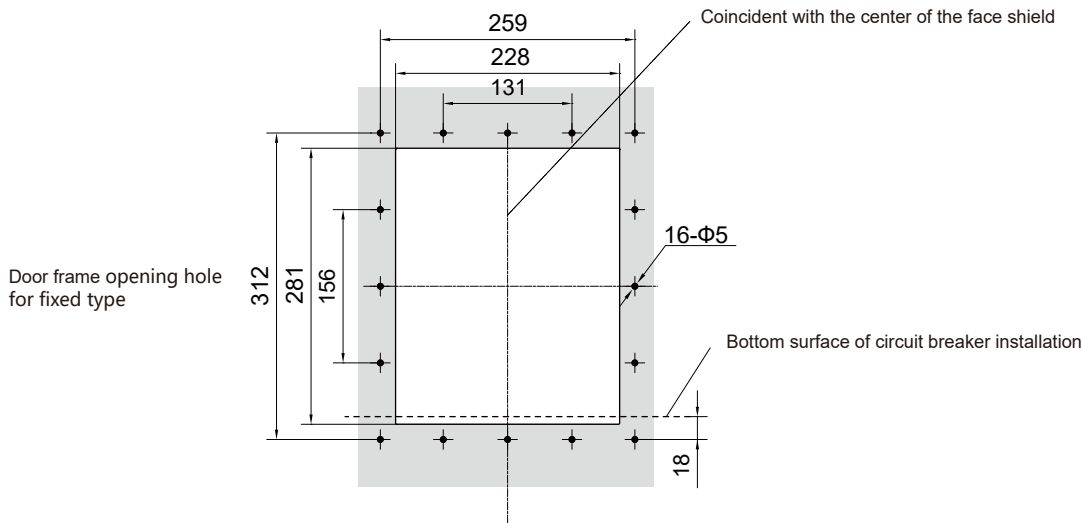
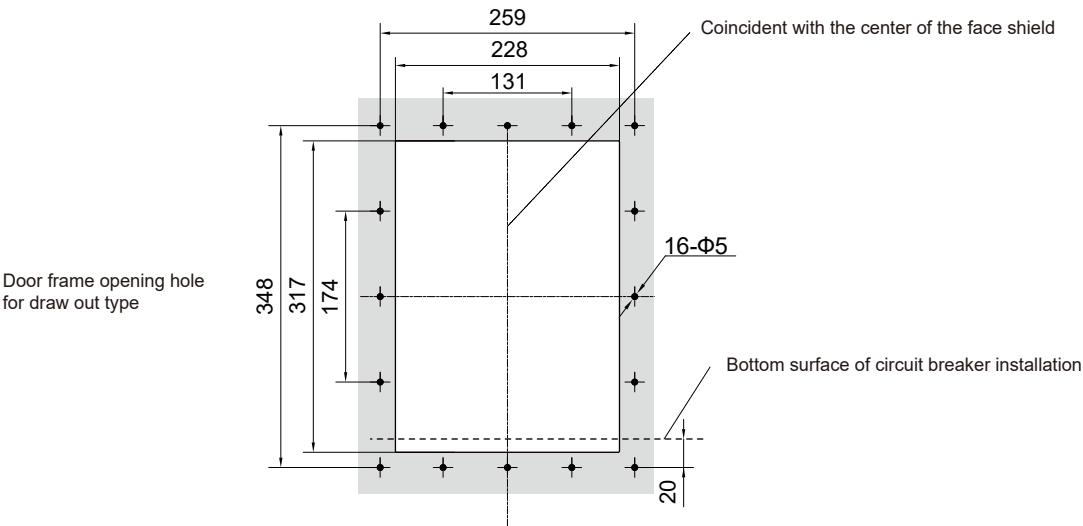
Fixed 3P, 4P (UEW6HU/ UEW6XU have no 4P)



Frame opening dimension

UEW6-1600

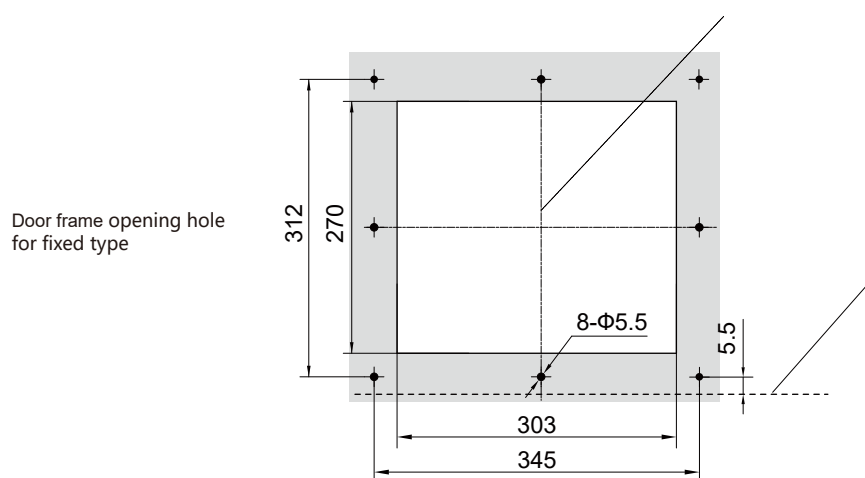
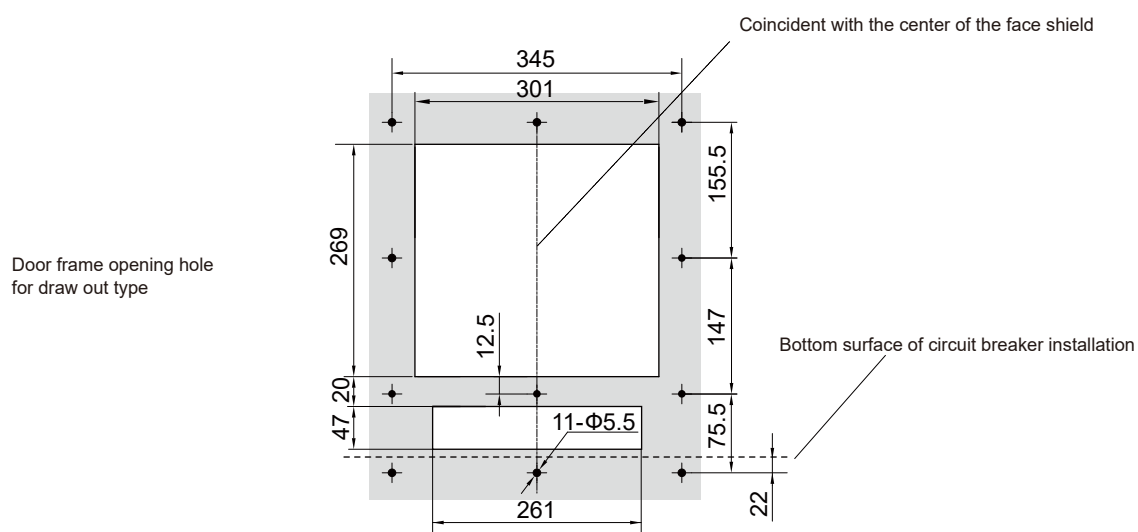
UEW6-1600 (3P、4P)



Frame opening dimension

UEW6-2000

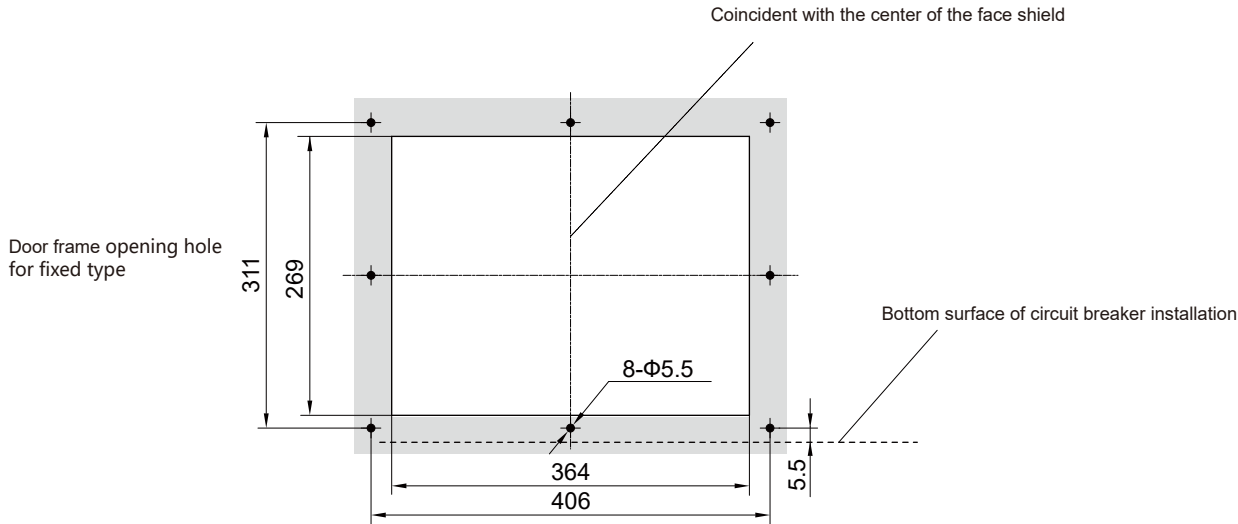
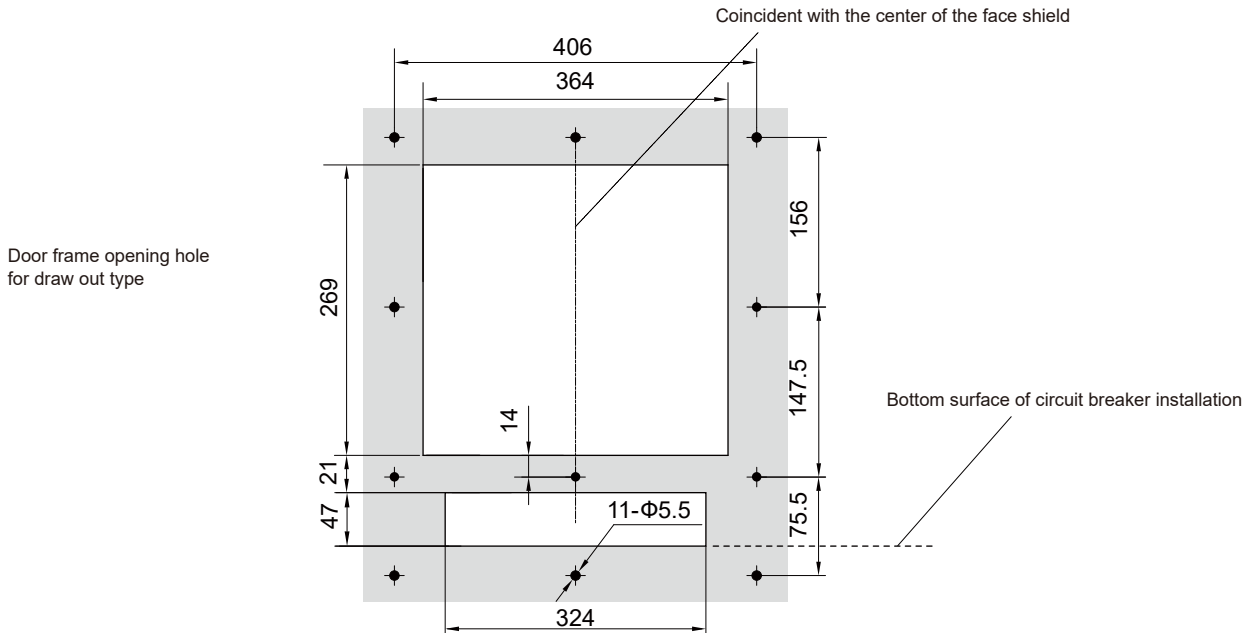
UEW6-2000 (3P, 4P)



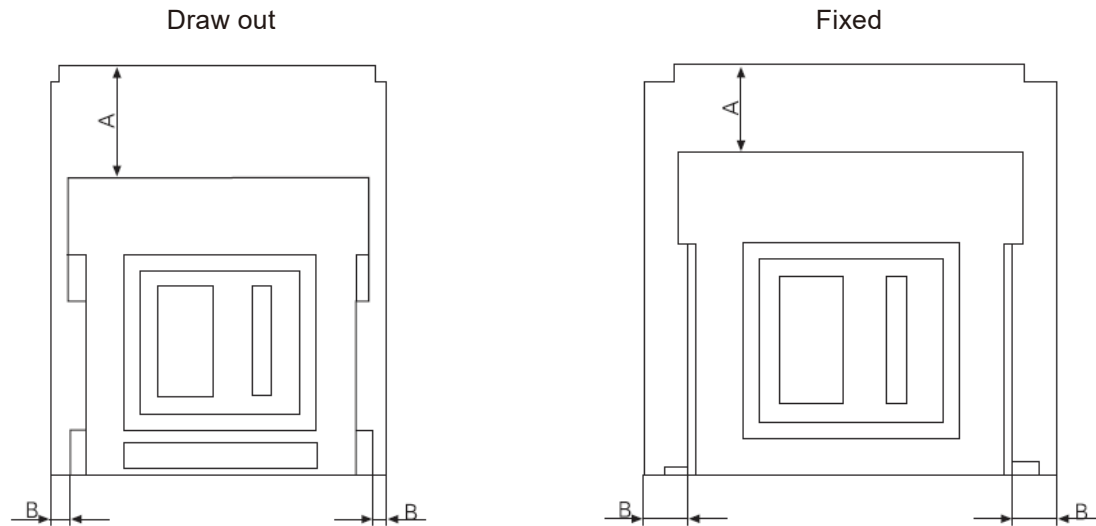
Frame opening dimension

UEW6/UEW6HU/UEW6XU-4000

UEW6-4000(3P,4P) UEW6HU/6XU-4000(3P)



Installation safety distance of circuit breaker

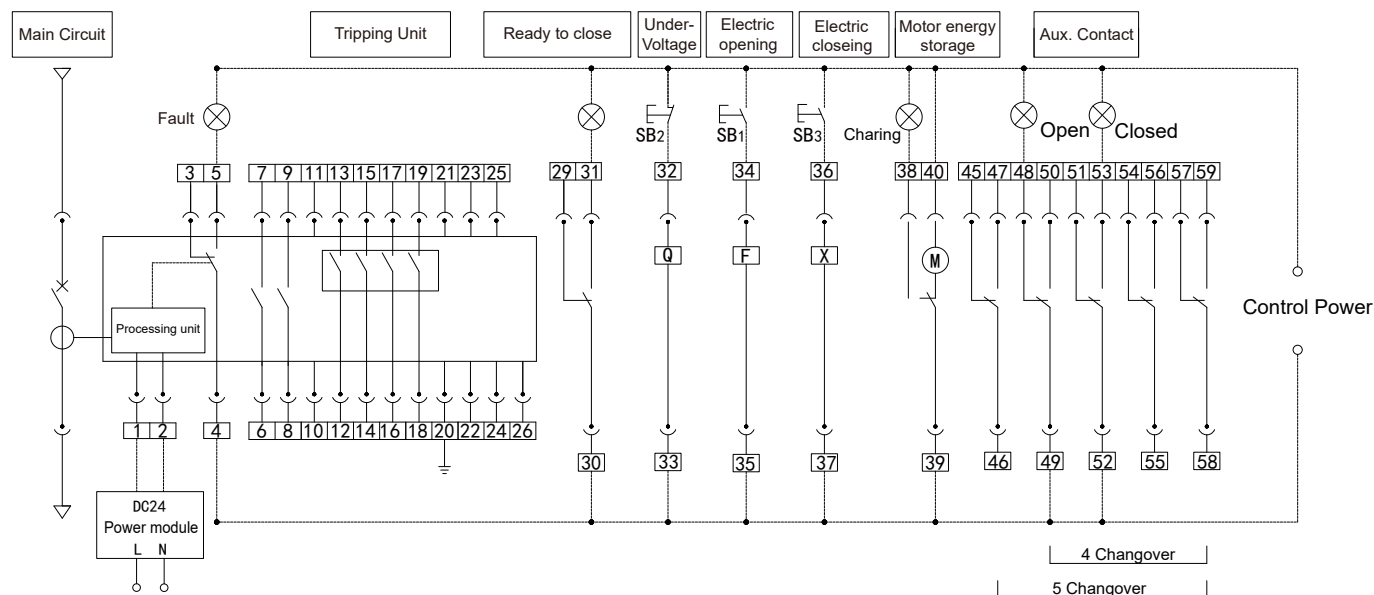


Minimum distance between circuit breaker and switchboard wall or live parts

	To insulation (mm)		To metal (mm)	
	A	B	A	B
Draw out	0	0	60	60
Fixed	0	0	60	60

Wiring diagram

UEW6-1600 Secondary circuit wiring diagram



SB1 Shunt button (Prepared by user)

SB2 Undervoltage Trip Device button (Prepared by user)

SB3 Closing coil button (Prepared by user)

F Shunt trip

M Charging motor

Q Undervoltage Trip Device

X Closing coil

Terminal number description:

1# 2#: Working power supply of release (The power module must be connected)

3# 4# 5# : Fault tripping Signalling output

6# 7# 、 8# 9#: Two sets of circuit breaker status auxiliary contacts

10# 11# : Communication terminal

12#13#, 14#15#, 16#17#, 18#19#:

DO1, DO2, DO3, DO4 Signalling contact output

20#: Grounding for trip unit protection

21# ...24#: Voltage sampling, in sequence N, A, B, C

25# 26#: External neutral CT

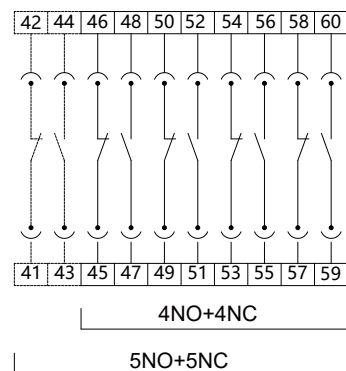
32# 33#: Undervoltage Trip Device

34# 35#: Shunt trip

36# 37#: Closing coil

38# 39# 40#: Charing motor

Auxiliary contact (4NO+4NC/5NO+5NC)



Wiring diagram

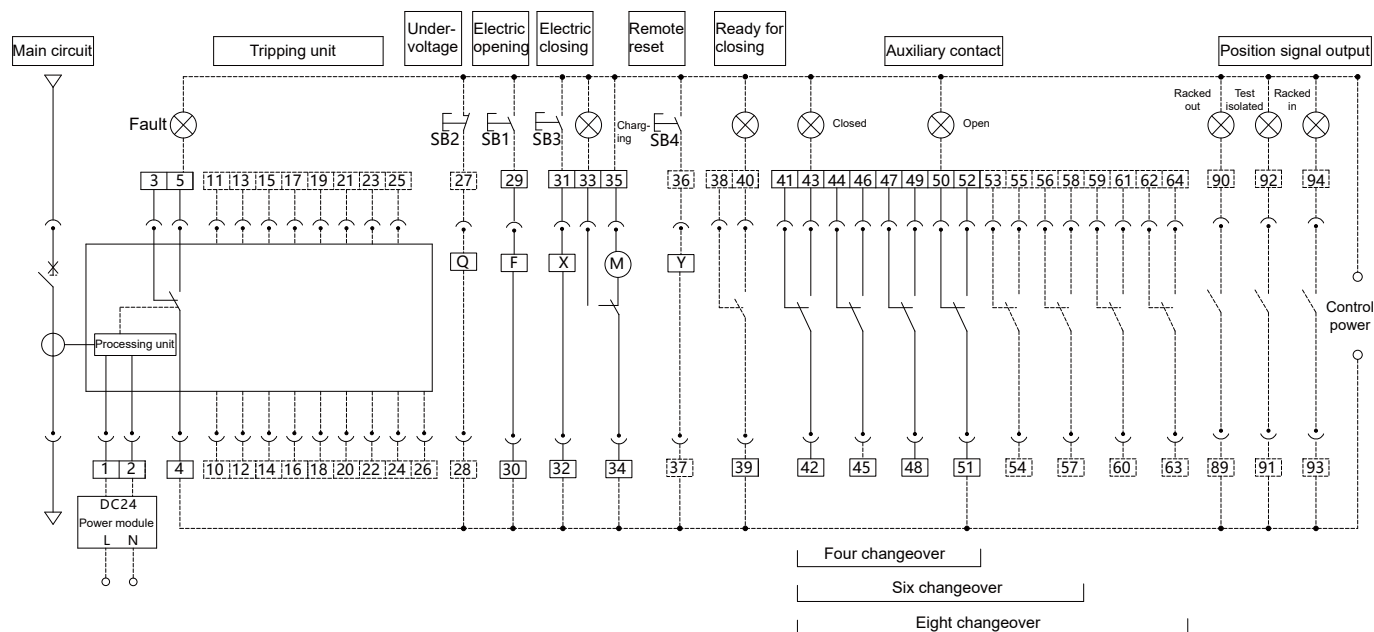
UEW6-1600 Secondary circuit wiring diagram

Note:

1. Terminal 1# 2# can't be directly connected to DC220v / 380V and DC110v / 220V power supply. It is necessary to convert voltage into DC24V through power module to supply power to the controller.

Wiring diagram

UEW6-2000...4000, UEW6HU/6XU-4000 Secondary circuit wiring diagram



SB1 trip button (prepared by the users)

SB2 undervoltage button (prepared by the users)

SB3 closing button (prepared by the users)

SB4 reset button (prepared by the users)

F Shunt trip

M Charing motor

Q undervoltagetrip device or undervoltage trip device delay

X Closing coil

Y remote reset release

Terminal description:

1# 2#: Working power supply of release

(The power module must be connected)

3# 4# 5#: fault tripping Signalling output

6# 7# 、 8# 9#: Two sets of circuit breaker status auxiliary contacts

10# 11# : communication terminal

12#13#, 14#15#, 16#17#, 18#19#: in sequence are

DO1, DO2, DO3, DO4 Signalling contact output

20#: grounding for trip unit protection

21#~24#: voltage sampling, N, A, B, C in sequence

25# 26#: connected to external neutral CT

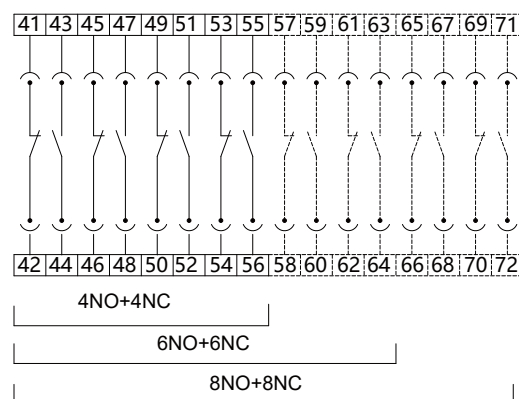
27# 28#: undervoltage trip device

29# 30#: Shunt trip

31# 32#: Closing coil

33# 34# 35#: Charing motor

Auxiliary contact (4NO+4NC/6NO+6NC/8NO+8NC)



Note:

1. Terminal 1 # 2 # can not be directly connected to DC220V/380V and DC110V/220V power supply. It is necessary to convert the voltage to DC24V through the power module.
2. UEW6-2000 product auxiliary points can only provide 6 changeover and 6NO+6NC at most.

Busbar for the breakers

Frame Rating	Rated current (A)	Busbar specification	
		Number	Dimension (mm×mm)
UEW6-1600	200...400	1	50×5
	600...800	2	50×5
	1000	3	50×5
	1250...1600	2	50×10
UEW6-2000	630...1000	2	60×5
	1250	3	60×5
	1600	2	60×10
	2000	3	60×10
UEW6-4000 UEW6HU-4000 UEW6XU-4000	1000	1	100×5
	1250	2	100×5
	1600	2	100×5
	2000	3	100×5
	2500	4	100×5
	3200	4	100×10
	4000	5	100×10

Note: The specifications of the busbar in the table are based on the standard temperature rise test, which can only be used for reference, and cannot replace the actual requirement or temperature rise test. Due to the diversity of the conditions of circuit breaker applications, different solutions in practice must be tested and verified. In the actual use of experimental verification, it is required that the overall temperature of the circuit breaker outgoing terminal under the maximum rated continuous operating current should not exceed 120 °C

Screw and torque requirements for product installation

1. Tightening torque of secondary circuit screw is 0.3N.m...0.7N.m
2. Specifications and torque requirements for the installation bolts of circuit breaker and busbar

	Bolt installation of the product		Bolt installation of the product	
Product specification	Bolt specification	Recommended tightening torque	Bolt specification	Recommended tightening torque
UEW6-1600 Draw out	M8	24 N.m	M10	37.5 N.m
UEW6-1600 Fixed	M6	5 N.m	M10	37.5 N.m
UEW6-2000 Draw out/Fixed	M10	37.5 N.m	M12	70 N.m
UEW6/UEW6HU/UEW6XU-4000 Draw out 4000A	M10	37.5 N.m	M16	120 N.m
UEW6/UEW6HU/UEW6XU-4000 Other specifications	M10	37.5 N.m	M12	70 N.m

Ordering instruction

UEW6-1600

Customer			Quantity		Date	
Application type	☐ Industrial ☐ Building ☐ Grid ☐ PV ☐ Wind power ☐ Others					
Model	☐ UEW6-1600 Rated voltage: AC690V					
Breaking capacity	☐ M: standard breaking capacity ☐ H: high breaking capacity					
Rated current	☐ 200A ☐ 400A ☐ 630A ☐ 800A ☐ 1000A ☐ 1250A ☐ 1600A					
poles	☐ 3P ☐ 4P ☐ 3P+N		Installation method	☐ Draw out ☐ Fixed		
Trip Unit	Model	Main function (Standard supply)			Optional function (module)	
	☐ 2M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function			☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement	
	☐ 2H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T(differential type) ☐ TN(differential type 3P+N) 3. Voltage measurement 4. Current unbalance protection 5. Various status and value display 6. Self diagnostic function 7. Signalling contact function			☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT)	
	☐ 3M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function			☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD	
	☐ 2H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T(differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function 6. Signalling contact function			☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD	
	Frequency	☐ 50Hz ☐ 60Hz				
	Remark	Voltage measurement function has a maximum measurement voltage level of 690V, if there is a greater demand for voltage measurement, it is necessary to consult the manufacturer for confirmation.				
Standard accessory	Trip unit power supply	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125 Note: All input power supplies to Trip unit are actually DC24V, if you select another voltage level, a power module is standard. The power module converts the voltage to DC24V and then supplies power to Trip unit.				
	Shunt Trip	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Closing coil	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Charging motor	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Auxiliary contact	☐ 4 changeover (standard) ☐ 4NO+4NC ☐ 5NO+5NC ☐ 5 changeover				
Wiring method		Horizontal				
Busbar type		Standard busbar				
Ambient temperature		☐ Normal temperature (-5℃~70℃) ☐ Low temperature (-40℃~70℃) (Suitable for 2M and 2H type Trip Unit)				
Optional accessories	☐ Undervoltage Trip Device	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125 ☐ Undervoltage instantaneous trip ☐ Undervoltage time delay trip (delay time needs to be selected) ☐ 1s ☐ 3s ☐ 5s Note: When the voltage is lower than 35% Ue, the undervoltage time delay release will operate instantaneously.				
	☐ Door Frame ☐ Interphase barrier					
	☐ Button lock ☐ Position electrical Indicator ☐ Extension auxiliary contacts (6NO+6NC) ☐ Mechanical counter ☐ Ready to Close Switch ☐ Residual current CT (Inner hole dimension: ☐ 120×280 ☐ 120×370) ☐ one key one lock ☐ two keys one lock ☐ three locks two keys ☐ five keys three locks (for three-incoming and two-busbar system) Note: Except for one lock and one key, please remark which circuit breakers share one lock.					
	☐ Mechanical interlock	☐ Wire rope interlocking (horizontal or vertical installation) ☐ Lever interlock (vertical installation)				
	☐ ATS system (including ATS controller and mechanical interlock)	☐ Grid - Grid ☐ Grid - Generator (only automatic change and automatic recovery mode available) ☐ Automatic change and automatic recovery ☐ Automatic change without automatic recovery Note: Except for one lock and one key, please remark which circuit breakers share one lock.				

Ordering instruction

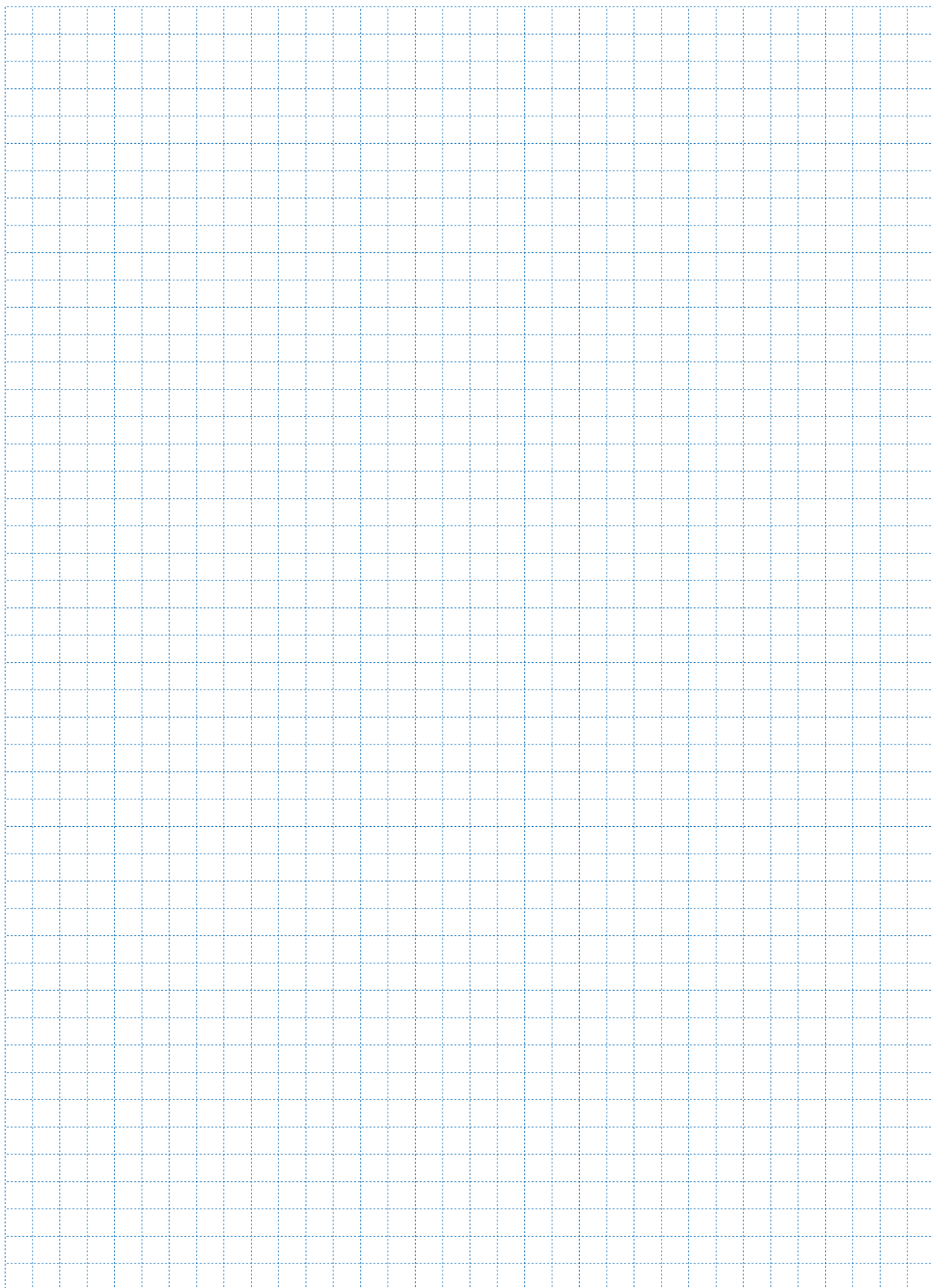
UEW6-1600 (New energy resources)

Customer			Quantity		Date	
Application type	☐ Industrial ☐ Building ☐ Grid ☐ PV ☐ Wind power ☐ Others					
Model	☐ UEW6-1600 (New energy resources) Rated voltage: AC690V					
Breaking capacity	☐ M: standard breaking capacity ☐ H: high breaking capacity					
Rated current	☐ 200A ☐ 400A ☐ 630A ☐ 800A ☐ 1000A ☐ 1250A ☐ 1600A					
poles	☐ 3P ☐ 3P+N		Installation method	☐ Fixed		
Trip Unit	Model	Main function (Standard supply)				Optional function (module)
	☐ 2M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function				☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement
	☐ 2H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T(differential type) ☐ TN(differential type 3P+N) 3. Voltage measurement 4. Current unbalance protection 5. Various status and value display 6. Self diagnostic function 7. Signalling contact function				☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT)
	☐ 3M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function				☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD
	☐ 2H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T(differential type) ☐ TN(differential type 3P+N) 3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function 6. Signalling contact function				☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD
	Frequency	☐ 50Hz ☐ 60Hz				
	Remark	Voltage measurement function has a maximum measurement voltage level of 690V, if there is a greater demand for voltage measurement, it is necessary to consult the manufacturer for confirmation.				
Standard accessory	Trip unit power supply	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125 Note: All input power supplies to Trip unit are actually DC24V, if you select another voltage level, a power module is standard. The power module converts the voltage to DC24V and then supplies power to Trip unit.				
	Shunt Trip	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Closing coil	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Charging motor	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
	Auxiliary contact	☐ 4 changeover (standard) ☐ 4NO+4NC ☐ 5NO+5NC ☐ 5 changeover				
Wiring method		☐ Horizontal ☐ Vertical ☐ Upper horizontal and lower vertical ☐ Upper vertical and lower horizontal				
Busbar type		Standard busbar				
Ambient temperature		☐ Normal temperature (-5℃~70℃) ☐ Low temperature (-40℃~70℃) (Suitable for 2M and 2H type Trip Unit)				
Optional accessories	☐ Undervoltage Trip Device	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 ☐ DC125				
		☐ Undervoltage instantaneous trip ☐ Undervoltage time delay trip (delay time needs to be selected) ☐ 1s ☐ 3s ☐ 5s Note: When the voltage is lower than 35% Ue, the undervoltage time delay release will operate instantaneously.				
		☐ Door Frame ☐ Interphase barrier				
	☐ Button lock ☐ Mechanical counter ☐ Ready to Close Switch ☐ Residual current CT (Inner hole dimension: ☐ 120×280 ☐ 120×370) ☐ one key one lock ☐ two keys one lock ☐ three locks two keys ☐ five keys three locks (for three-incoming and two-busbar system) Note: Except for one lock and one key, please remark which circuit breakers share one lock.					

UEW6-2000~4000						
Customer				Quantity	Date	
Application type	☐ Industrial ☐ Building ☐ Grid ☐ PV ☐ Wind power ☐ Others					
Model	☐ UEW6-2000 ☐ UEW6-4000			Rated current		
☐ Draw out ☐ 3 pole ☐ AC380 (400) V ☐ Low temperature type ☐ Fixed ☐ 4 poles ☐ AC660 (690) V ☐ High breaking capacity type						
Connection ☐ Standard horizontal busbar ☐ Extended horizontal busbar (only for UEW6-2000 fixed type,UEW6 -4000 fixed type) ☐ Standard vertical busbar(only for UEW6 -4000/3200...4000A fixed type, UEW6 -4000/4000A draw out type) ☐ Extended vertical busbar(only for UEW6 -4000/3200...4000A fixed type)						
Frequency ☐ 50Hz ☐ 60Hz						
Trip Unit	Model	Main function (Standard supply)		Optional function (module)		
	☐ 2M	1.Overload long time delay, short circuit short time delay, Instantaneous 2.Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3.Current unbalance protection 4.Various status and value display 5. Self diagnostic function ☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement ☐ Remote reset module		
	☐ 2H (communication type)	1.Overload long time delay, short circuit short time delay, Instantaneous 2.Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N) 3. Voltage measurement		4. Current unbalance protection 5.Various status and value display 6. Self diagnostic function 7. Signalling contact function ☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) ☐ Remote reset module ☐ Relay module		
	☐ 3M	1.Overload long time delay, short circuit short time delay, Instantaneous 2.Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3. Current unbalance protection 4.Various status and value display 5. Self diagnostic function ☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Remote reset module Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD		
	☐ 3H (communication type)	1.Overload long time delay, short circuit short time delay, Instantaneous 2.Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3. Current unbalance protection 4.Various status and value display 5. Self diagnostic function 6. Signalling contact function ☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) ☐ Relay module ☐ Remote reset module Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD		
	Remark	Voltage measurement function has a maximum measurement voltage level of 690V,if there is a greater demand for voltage measurement,it is necessary to consult the manufacturer for confirmation.				
Standard accessory	Trip unit power supply	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24 Note:All input power supplies to Trip unit are actually DC24V,if you select another voltage level,a power module is standard.The power module converts the voltage to DC24V and then supplies power to Trip unit.				
	Shunt Trip	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24				
	Closing coil	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24				
	Charging motor	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 ☐ DC24				
	Auxiliary contact	☐ 4 changeover (standard) ☐ 6 changeover ☐ 8 changeover (only for UEW6-4000 frame) ☐ 4NO+4NC ☐ 6NO+6NC ☐ 8NO+8NC (only for UEW6-4000 frame)				
Optional accessories	☐ Undervoltage Trip Device	☐ DC110 ☐ AC220 ☐ AC380 ☐ AC110 ☐ DC24 ☐ Undervoltage instantaneous trip ☐ Undervoltage time delay trip (delay time needs to be selected) ☐ No-voltage time delay trip (delay time needs to be selected) ☐ 1S ☐ 3S ☐ 5S Note: When the voltage is lower than 35% Ue, the undervoltage time delay release will operate instantaneously. If delayed tripping is required, please select No-voltage time delay trip .				
	☐ Mechanical interlock	☐ Wire rope interlocking (horizontal or vertical installation) ☐ Lever interlock (vertical installation)				
	☐ ATS system (including ATS controller and mechanical interlock)	☐ Grid - Grid ☐ Grid - Generator (only automatic change and automatic recovery mode available) Note: When the user selects the ATS trip unit, the voltage level of the Shunt trip,Closing coil and other accessories can only select AC220V		☐ Automatic change and automatic recovery ☐ Automatic change without automatic recovery		
	☐ External neutral transformer (TN type grounding protection shall be selected for three-pole circuit breaker)					
	☐ Residual current CT (should select grounding protection for type W)	☐ Residual current CT				
	☐ Position electrical Indicator ☐ Pushbutton locking ☐ Mechanical operation counter					
	☐ one key one lock ☐ two keys one lock ☐ three locks two keys ☐ five keys three locks ☐ five keys three locks (for three-incoming and two-busbar system) Note: Except for one lock and one key, please remark which circuit breakers share one lock.					
	☐ Door Frame ☐ Interphase barrier (UEW6 -4000/3200...4000A fixed type with standard horizontal busbar not optional) Note: High breaking capacity type standard with Interphase barrier.					

Ordering instruction

UEW6HU/UEW6XU-4000					
Customer				Quantity	Date
Application type	☐ Industrial ☐ Building ☐ Grid ☐ PV ☐ Wind power ☐ Others				
Model	☐ UEW6HU-4000 ☐ UEW6XU-4000			Rated current	
☐ Draw out ☐ 3 poles ☐ AC800V ☐ AC1140V ☐ AC1500V ☐ Low temperature type ☐ Fixed ☐ AC1000V ☐ AC1380V ☐ High breaking capacity type					
Connection ☐ Standard horizontal busbar ☐ Extended horizontal busbar (only for UEW6HU/UEW6XU-4000 fixed type) ☐ Standard vertical busbar(only for UEW6HU/UEW6XU-4000/3200...4000A fixed type, UEW6HU/UEW6XU-4000/4000A draw out type) ☐ Extended vertical busbar(only for UEW6HU/UEW6XU-4000/3200...4000A fixed type)					
Frequency ☐ 50Hz ☐ 60Hz					
Trip Unit	Model	Main function (Standard supply)		Optional function (module)	
	☐ 2M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function ☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Voltage measurement ☐ Remote reset module	
	☐ 2H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N) 3. Voltage measurement		4. Current unbalance protection 5. Various status and value display 6. Self diagnostic function 7. Signalling contact function ☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) ☐ Remote reset module ☐ Relay module	
	☐ 3M	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function ☐ MCR and HSISC protection ☐ Signalling contact function ☐ Residual current protection (should select residual current CT) ☐ Remote reset module Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD	
	☐ 3H (communication type)	1. Overload long time delay, short circuit short time delay, Instantaneous 2. Grounding protection ☐ T (differential type) ☐ TN (differential type 3P+N)		3. Current unbalance protection 4. Various status and value display 5. Self diagnostic function 6. Signalling contact function ☐ MCR and HSISC protection ☐ Residual current protection (should select residual current CT) ☐ Relay module ☐ Remote reset module Select ☐ D ☐ U ☐ UD ☐ P ☐ PD ☐ H ☐ HD	
Remark		Voltage measurement function has a maximum measurement voltage level of 690V, if there is a greater demand for voltage measurement, it is necessary to consult the manufacturer for confirmation.			
Standard accessory	Trip unit power supply	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220 Note: All input power supplies to Trip unit are actually DC24V, if you select another voltage level, a power module is standard. The power module converts the voltage to DC24V and then supplies power to Trip unit.			
	Shunt Trip	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220			
	Closing coil	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220			
	Charging motor	☐ AC220 ☐ AC380 ☐ DC110 ☐ DC220			
	Auxiliary contact	☐ 4 changeover (standard) ☐ 6 changeover ☐ 8 changeover ☐ 4NO+4NC ☐ 6NO+6NC ☐ 8NO+8NC			
Optional accessories	☐ Undervoltage Trip Device	☐ DC110 ☐ AC220 ☐ AC380 ☐ AC110 ☐ Undervoltage instantaneous trip ☐ Undervoltage time delay trip (delay time needs to be selected) ☐ No-voltage time delay trip (delay time needs to be selected) ☐ 1S ☐ 3S ☐ 5S Note: When the voltage is lower than 35% Ue, the undervoltage time delay release will operate instantaneously. If delayed tripping is required, please select No-voltage time delay trip.			
	☐ Mechanical interlock	☐ Wire rope interlocking (horizontal or vertical installation) ☐ Lever interlock (vertical installation)			
	☐ ATS system (including ATS controller and mechanical interlock)	☐ Grid - Grid ☐ Grid - Generator (only automatic change and automatic recovery mode available)		☐ Automatic change and automatic recovery ☐ Automatic change without automatic recovery	
	Note: When the user selects the ATS trip unit, the voltage level of the Shunt trip, Closing coil and other accessories can only select AC220V				
	☐ External neutral transformer (TN type grounding protection shall be selected for three-pole circuit breaker)				
	☐ Residual current CT (should select grounding protection for type W) ☐ Residual current CT				
	☐ Position electrical Indicator ☐ Pushbutton locking ☐ Mechanical operation counter				
	☐ one key one lock ☐ two keys one lock ☐ three locks two keys ☐ five keys three locks ☐ five keys three locks (for three-incoming and two-busbar system)				
	Note: Except for one lock and one key, please remark which circuit breakers share one lock. ☐ Door Frame ☐ Interphase barrier (UEW6-4000/3200...4000A fixed type with standard horizontal busbar not optional) Note: High breaking capacity type standard with Interphase barrier.				



For more information, pls click the website:

www.hongfa.com



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