⚠ Reserve the right to change the parameters without prior notice.

SAFE GREEN SMART

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MAXGE
Intelligence beyond vision

ACB

Air Circuit Breaker

Committed to becoming a world-class manufacturer of intelligent electric

https://www.maxge.com

COMPANY PROFILE

MAXGE Electric Technology Co., LTD was founded in 2006 with a registered capital of 50 million RMB. Its headquarter is located in Deqing County, Huzhou City, Zhejiang Province. It is a large-scale comprehensive high-tech enterprise integrating design, research and development, manufacturing, marketing and service.

Since its establishment, MAXGE has been professionally oriented and committed to the design and manufacturing of a series of products such as low voltage circuit breakers & controlgear for domestic, industrial protection and new energy power distribution, in order to meet user needs and provide high-quality solutions.

At present, MAXGE has won many honors such as National High-tech Enterprise, National Specialized and Sophisticated "Little Giant", Zhejiang Enterprise Technology Center, Zhejiang High-level Enterprise R&D Center, Zhejiang Export Brand and Zhejiang Digital Workshop.

In the process of production and operation,we have obtained ISO9001, ISO14001 and ISO45001 and obtained SGS certifications, and the testing center has won the national CNAS laboratory certification. The products have obtained CE, CB, VDE, KEMA, TUV, INTERTEK, BV, ASTA, EAC, INMETRO certifications with reliable quality, and are exported to more than 60 countries and regions such as the European Union, the South America, Middle East, Africa, and Southeast Asia. We have multiple branches in the United Kingdom, Spain, Netherlands and Hong Kong, and we are dedicated to providing high-quality products and services to global customers.

2006

The Company Was
Established In 2006

60+

We Provide Products To Over
60 Countries Around The World

Currently MAXGE has a R&D team of more than 100 personnel and nearly 1,000 employees, equipped with state of the art automatic production lines, CNAS affiliated laboratories and testing centers. MAXGE has obtained more than 100 invention and utility model patents, 10 software copyright, and participated in the formulation of national, industry and group standards.

There are over 133,000 square meters of Modern Intelligent Manufacturing Bases in Zhejiang Hangzhou, Huzhou and Anhui Wuhu.

The Huzhou factory covers an area of over 33,000 square meters, with a total investment of 500 million RMB. At present, there are 42 production lines in the automation workshops, among which the automatic assembly production line, semi-automatic assembly production line and automatic inspection line cover more than 90%.

CORPORATE EVENTS

Brand Establishment

•2006

In 2006,MAXGE Electric was established in Wenzhou and started the journey as a distributor of Schneider Electric PLC, VFD & valves mainly required in printing, packaging machinery & simultaneously engaged in the manufacturing and export of low-voltage electrical products, and expanded the export business.

In 2008, the board of directors decided to withdraw the distribution Schneider Electric products and meanwhile focused on its own R&D and production of low-voltage electrical products.

1.0

•2010

In 2010, MAXGE new factory was built in Mogan Mountain of Huzhou Hi-tech Industry Development Zone.

Thrive Period

•2011

In 2011,MAXGE began to independently design and develop the two final distribution series products of Sigma+ and Alpha+, and carried out inhouse mold manufacturing and component production,at the same time developed the first generation of SGM1 series molded case circuit breakers.

2.0

•2015

In 2013, to improve the management efficiency it fully introduced the ISO systems of ISO9001, ISO14001,ISO45001 and obtained SGS certifications.

After passing the strict test as per to IEC standards, the products have successfully obtained internationally recognised certifications such as VDE, KEMA, TUV, Intertek,SEMKO, ASTA, EAC, INMETRO, and CE.

In the MCB workshop, the lean production and automatic production mode were first implemented, and good results were achieved.

Transformation and Upgrading

•2016

In 2016,MAXGE began to comprehensively promote independent research and development innovation, start from product innovation, technological innovation to management innovation, and launched new Sigma+, Alpha+ series final distribution products and SGM3 series second-generation MCCB.

3.0

•2020

In 2018, MAXGE began to introduce the world-class ERP system-SAP system, and developed from a fully lean and automated production model to a digital and intelligent production model.

SAP

Comprehensive Transformation

•2021

Starting from 2021,the Wuhu production base has been expanded, and the domestic market has been vigorously developed.-MAXGE began to devote itself to building a new power system based on new energy, and determined the corporate mission of "making electricity safe, green and smart".

4.0

•2023 （2025）

In 2023, the green and low-carbon development model has been fully promoted internally, covering low-carbon design, low-carbon production, low-carbon services, etc., and the supply chain and value chain will be coordinated to comprehensively promote the transformation and upgrading of low-carbon environmental protection industries.

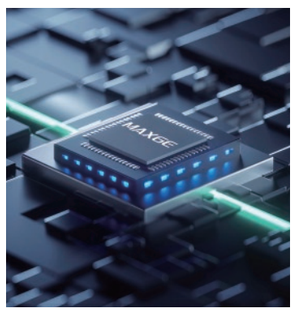
Green and Smart

•2026~

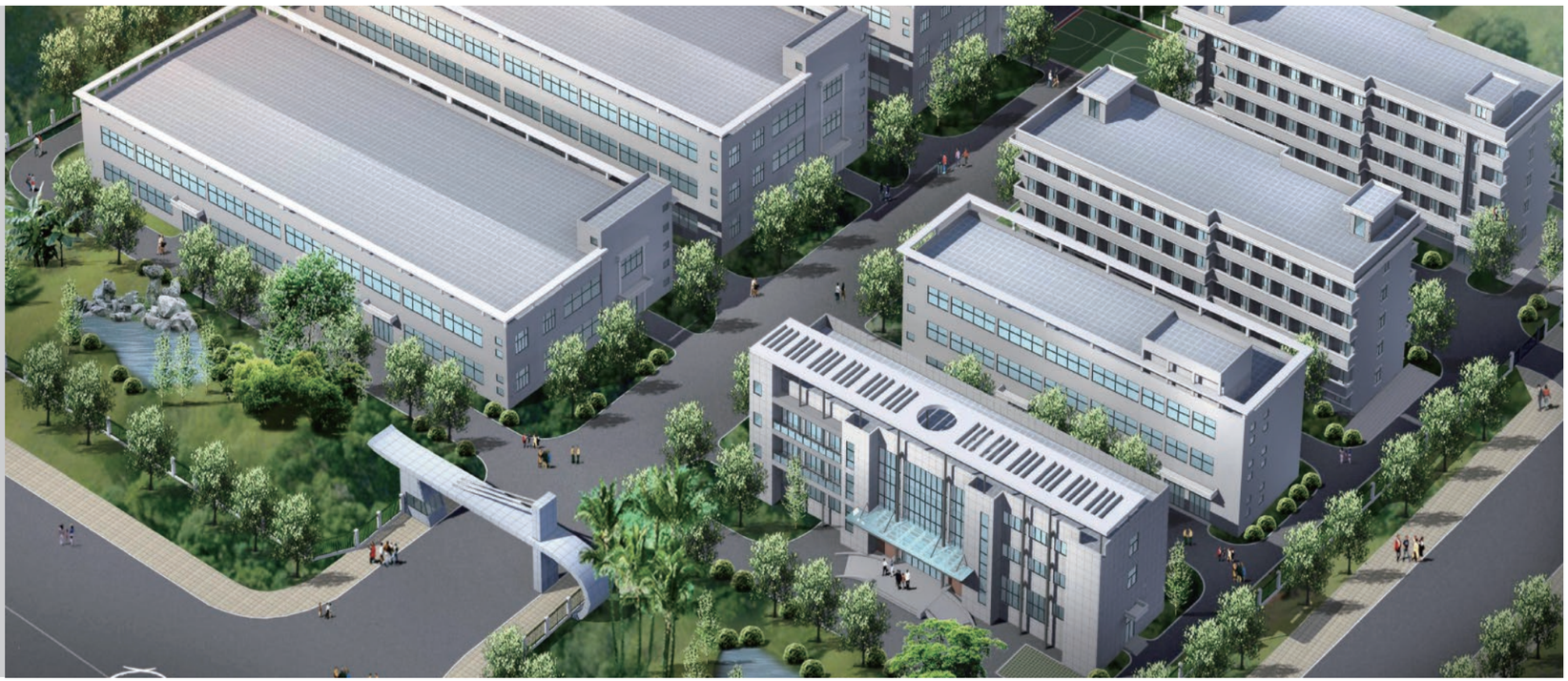
Based on the development concept of MADE IN CHINA 2025, MAXGE will realize intelligent control and management of electrical products by integrating advanced digital technology and Internet of Things technology,

5.0

Create a green and smart lifestyle, provide users with more diversified, intelligent and creative solutions, and promote the whole society towards the goal of green, intelligent and sustainable development.



CORPORATE CULTURE



Brand Interpretation

- Chinese Name: Mei Gao
- Mei: Pursue Perfection
- Gao: Ascend To Virtue
- English Name: MAXGE
- MAX: Maximum
- GE: Global Electric

CULTURE

Core values
Customer Focused Altruism& Win–win
Truth–seeking& Innovation

Mission
Making Electricity Safe Green Smart

Brand Slogan
Intelligence beyond vision

Vision
long–term vision :
Committed to becoming a world–class manufacturer of intelligent electric

Short–term vision :
To make the best quality circuit breakers in China

Spirit
MAXGE respects striver and regards striver as hero encourages everyone to work as hard as anyone

Principle
Co–creation and Shared–benefits
Cooperation and Struggle
Devotion and Speciality
Dare to be responsible

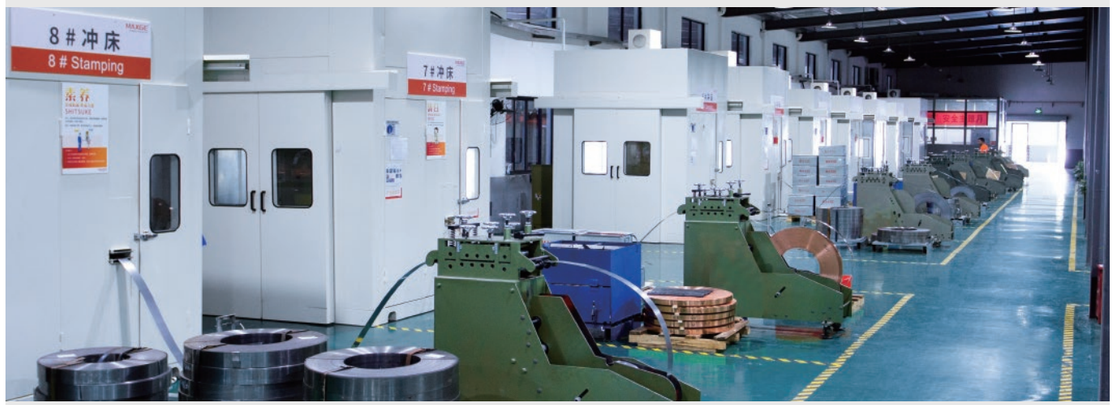
Policy
Keeping Our Original Aspiration Firmly in Mind
Manufacture with Concentration
Use with Assurance
Design with Ingenuity
Service with Heart

Innovation
Products Innovation
Technology Innovation
Service Innovation
Management Innovation
Marketing Innovation
Mode Innovation

SCALE CONFIGURATION

01 Mold & Tooling Workshop

Equipped with made in Switzerland GF AgieCharmilles, Japan Sodick wire cutting machine & EDM machine and Vertical milling CNC processing area.At present, it has achieved independent design,manufacturing and production of press tools & molds, with a comprehensive manufacturing capacity of more than 30 sets per month.Now the complete mold manufacturing process has been established, and an independent mold quality inspection group is equipped to realize the full inspection of the mold processing to ensure the precision and accuracy of mold.



02 Stamping Workshop

Equipped with high & medium speed stamping presses, and auxiliary equipment.The average punching speed can reach 100 to 300 strokes per minute, the highest punching speed can reach 500 strokes per minute, and the monthly production capacity of the workshop is to cater stamped parts for 5 millon MCB , 500K RCCB , 500K RCBO & 200K MCCB.

03 Spot Welding Workshop

Equipped with automatic coil winding machines, automatic braid compacting & cutting machines, automatic thermal and magnetic welding group assembly machines ,automatic armature assembly machines, automatic pad printing on handle and latch holder machines.The automation level is over 90%, and it is mainly responsible for the production of welding groups required by the finished product workshop.

Through the integrated technology of winding and welding, automatic welding production has been realized. Thermal assembly heat treatment process is adopted to improve first pass yield during thermal verification process.

04 Injection Molding Workshop

Equipped with 38 injection molding machines from 60 to 350 ton capacity, overhead cranes and auxiliary equipment such as automatic warpage prevention machines, mould temperature controllers, granulators. The automation level is over 90%, realizing an automatic and efficient production process.

Adopted centralised material feeding system to improve production efficiency and realize effective utilization of resources.

Smart humidifying room, use advanced humidification process to strengthen the mechanical properties of the product.

MAXGE adapts online CCD image detection unit though which critical parts of mechanism undergoes 100% inspection to ensure delatch free breakers. Through CCD image detection equipment, efficient, accurate and reliable image detection and analysis can be realized to ensure product quality.

05 ACB Automatic Testing Line

The product will go through the steps of manual assembly, contact parameters tests such as trip force, trip distance , ACB & cradle assembly by robot ,mechanical operation test unit to verify internal accessories and motor, current characteristic test unit , high voltage and loop resistance test unit, & appearance inspection by CCD device. Automation level has reached 80% and the monthly detection capacity has reached more than 1000 poles.

06 MCCB Automatic Workshop

It mainly produces Moulded Case Circuit Breaker such as thermal magnetic type, electronic type, and ELCB type, as well as Intelligent Air Circuit Breaker.
There are currently 8 automatic production lines & one manual line, and the monthly production capacity reaches 200,000 units.
It has realized the automatic assembly & inspection of the whole process,including contact parameters such as automatic open distance, overtravel, on–off, synchronicity, trip force, trip distance, loop resistance, lift force & routine tests such as magnetic, thermal, reliability & HV test. Test line also equipped with laser printing & final appearance inspection by CCD device. The automation level has reached to 80%.

07 MCB Automatic Workshop

It mainly produces Miniature Circuit Breakers. There are 11 automatic production lines and 4 U–shaped lean production lines. At present, the average monthly production capacity can reach about 5 million poles.
Equipped with automatic assembly, laser printing, riveting, Deltach test, terminal screw test, thermal calibration, cooling, thermal verification, automatic multi–pole assembly, magnetic test, on–off test and high voltage test, plasma arc cleaning, laser marking, pad printing, din clip fixing ,automatic packaging and other equipment, the automation level is over 90%.Through magnetic test, on–off test and high voltage test, to verify the response speed of the product and ensure that the power supply can be connected or disconnected stably. Adopt double–track automatic production line to improve production efficiency, add automatic tripping force measurement unit, conduct full inspection of products, and comprehensively monitor product quality.

08 RCCB Automatic Workshop

It mainly produces magnetic relay, electronic and electromagnetic Residual Current Circuit Breakers, plastic and metal type single–phase and three–phase Distribution Boxes, Photovoltaic Combiner Boxes and controlgear products.There are 4 automatic production lines and 4 U–shaped lean production lines. At present, the average monthly production capacity can reach about 400,000 poles.The key component of RCCB named magnetic relay is produced in a clean room of class one rating & temperature, humidity conditions are maintained within standard range.Equipped with magnetic relay workshop grinding machine, finished product workshop automatic demagnetization machine, automatic calibration bench, automatic on–off and HV test machine, magnetic relay automatic winding machine and other equipment, the detection automation level has reached 80%.

09 RCBO Automatic Workshop

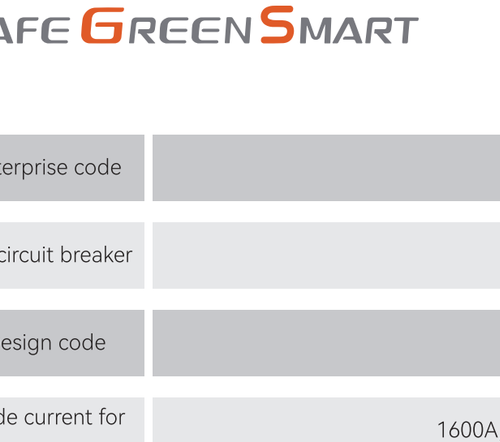
It mainly produces Residual Current Circuit Breaker with Over Current Protection with different variants such as 2P Electronic RCBO, DPN RCBO, 1P Electronic RCBO, multipole RCBO, electromagnetic type RCBO & Arc Fault Detection Device.There are 5 automatic production lines,2 semi–automatic production lines and 3 U–shaped lean assembly lines. At present, the average monthly production capacity can reach about 500,000 poles.Equipped with automatic riveting, Deltach test, terminal screw test, magnetic test, on–off test, high voltage test, leakage current detection, thermal calibration, cooling, thermal verification, plasma arc cleaning, laser marking, pad printing and automatic packaging and other equipment, the automation level is over 85%.

Enterprise code	MG
Air circuit breaker	W
Design code	6
Grade current for case	1600A,2000A,2500A,4000A,7500A
Number of pole	3P,4P

MG	W	6	-	□	/	□

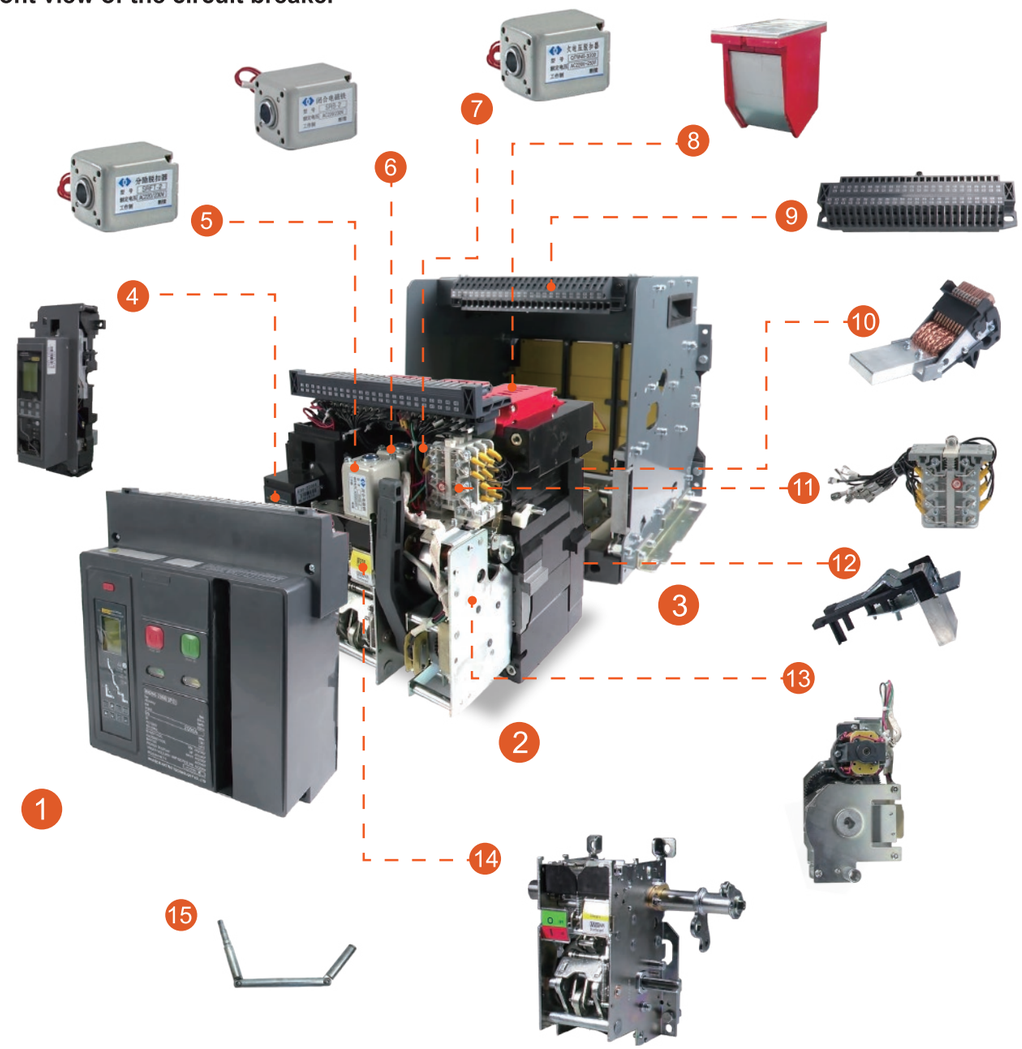
Synopsis Of Structure

■ Front view of the circuit breaker



Reset button/Fault tripping indication
Breaking button
Closing button
Manual energy storage
Energy storage/Energy release indication
Breaking and closing indication
Face
Unlock button
Nameplate
Handle drive position
Three position indication
Handle storage position
Intelligent controller

■ Front view of the circuit breaker



DRAW-OUT CIRCUIT BREAKER

1 Face	2 Body	3 Drawer base	4 Intelligent controller	5 Shunt release
6 Closing electromagnet	7 Under-voltage release	8 Arc Chamber	9 Secondary terminals	10 Moving contact
11 Auxiliary switch	12 Fixed contact	13 Electric Operating Mechanism	14 Energy Storage Mechanism	15 Handle crank

Intelligent Controller

Characteristics			MGA6-2M	MGA6-3M	MGA6-3H
	Picture of product				
Rated current	Frame 1600	200,400,630,800,1000,1250,1600	O	O	O
	Frame 2000	630,800,1000,1250,1600,2000	O	O	O
	Frame 3200	2000,2500,3200	O	O	O
	Frame 4000	3200,3600,4000	O	O	O
	Frame 7500	5000,6300,7500	O	O	O
Auxiliary power supply voltage	220V AC		O	O	O
	380V AC		O	O	O
	90-300V DC		O	O	O
	50VAC (70V DC) ~480V AC (650V DC)		O	O	O
	AC200-AC450 universal use		O	O	O
	24V DC		O	O	O
	48V DC		O	O	O
	Other voltage can be customized		O	O	O
Human-computer interface	Display	LED current column	—	—	—
		Nixie+LED	√	—	—
		Segment LCD	—	—	—
	Operation	Chinese dot-matrix LCD+LED	—	√	√
		Button	√	√	√
		Rotary switch + button	—	—	—
	Language:Chinese/button		√	√	√
Communication functions	Modbus-RTU		—	—	√
	Profibus-DP		—	—	O
	HPLC (DL/T 645)		—	—	O
	wifi		—	—	O
	Device NET		—	—	O
	CAN		—	—	O
	Ethernet		—	—	O
	Profi NET		—	—	O
	IEC61850		—	—	O
	Bluetooth		—	—	O
	4G-LTE		—	—	O
Protection functions	Overload Long time delay (Ir) (Multiple curves are available)		√	√	√
	Short-circuit short time delay (Isd)		√	√	√
	Short-circuit instantaneous (Ii)		√	√	√
	Current unbalance protection		√	√	√
	Ground fault protection (Ig)	Residual ground fault protection / Zero sequence ground-fault protection	√	√	√
		Residual ground fault protection by default			
	Residual current protection (I△n)		O	O	O
	Neutral line overcurrent protection (3P+N, 4P)		O	O	O
	Overload pre-alarm		—	√	√
	Making Current Release (MCR)		O	√	√
	Out-of-limit tripping protection (HSISC)		O	√	√
	Overvoltage protection (Off by default)		—	√	√

Intelligent Controller

Characteristics			MGA6-2M	MGA6-3M	MGA6-3H
Protection functions	Undervoltage protection (Off by default)		—	√	√
	Voltage unbalance protection (Off by default)		—	√	√
	Overfrequency protection (Off by default)		—	√	√
	Underfrequency protection (Off by default)		—	√	√
	Phase-sequence protection (Off by default)		—	√	√
	Reverse power protection (Off by default)		—	√	√
	Required current protection (Off by default)		—	√	√
	Load monitoring		√	√	√
	Zone interlocking		O	O	O
	Voltage-checking protection		—	O	O
	Overload reopening		—	O	O
	Generatrix/contact temperature protection		—	O	O
	Time-phased required current protection		—	—	—
	Thermal memory		√	√	√
	Payment (payment reminder) management		—	O	O
Measurement functions	Current	Three-phase current, maximum of instantaneous value, unbalance rate	√	√	√
		Ground/leakage current	√	√	√
		Neutral current	O	O	O
	Voltage: Line voltage, Phase voltage,average voltage, unbalance rate		—	√	√
	Frequency		—	√	√
	Power: active power		—	√	√
	Power: reactive power, apparent power		—	√	√
	Power factor		—	√	√
	Electrical energy: active electrical energy, reactive electrical energy, apparent electrical energy		—	√	√
	Phase-sequence		—	√	√
	Waveform capture		—	√	√
	Harmonic measurement		—	O	O
	System clock		—	√	√
	Long time delay heat capacity		—	√	√
Maintenance functions	Self-test function: overtemperature of controller, memory fault, A/D sampling		√	√	√
	Test function		√	√	√
	Button lock function		—	√	√
	Replacement with electricity		—	—	—
	Remote reset		O	O	O
	I/O faultily tripping function		O	O	O
	Contact wear rate		—	√	√
	Historic records	Tripping records	√ 10 times	√ 10 times	√ 10 times
		Alarm records	—	√ 10 times	√ 10 times
		Replacement records	—	√ 10 times	√ 10 times
Contact output	Quad programmble contact output		O	O	√
Data interface	Hand-held programmer interface		O	—	—

Notice: “√” means basic function; “O” means optional function; “ ”means no such function

Ratings And Specifications

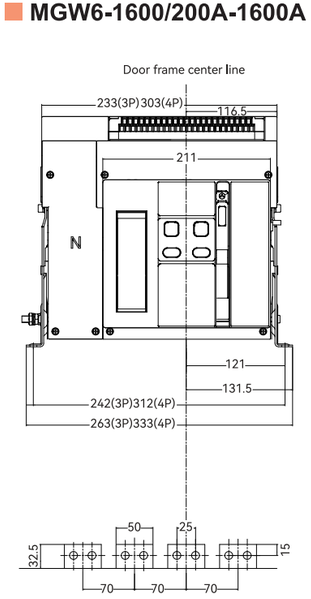
Characteristics			MGW6-1600	MGW6-2000	MGW6-3200
Frame size rated current Inm(A)			1600	2000	3200
Number of poles			3,4		
Rated current In(A)			200,400,630,800, 1000,1250,1600	630,800,1000, 1250,1600,2000	2000,2500,3200
Rated voltage Ue(V)			50/60Hz AC 380V, 400V, 415V, 440V		
Insulation voltage Ui(V)			1000V		
Impulse withstand voltage Uimp(V)			12		
Rated current of N-pole In(A)			50%/100%In		
Ultimate breaking capacity Icu(kA)	380/400/415		65	80	85
Operation breaking capacity Ics(kA)	380/400/415		65	65	85
Short-time withstand current (1s)RMS)Icw(kA)	380/400/415		50	65	85
Max total tripping time(ms) without time delay			12-18		
Closing time(ms)			60(max)		
Closing time(ms)	Electrical life		8000	8000	7000
	Mechanical life	Maintenance free	15000	15000	10000
		Maintenance required	30000	30000	20000
Connection mode			Horizontal		
Overall dimension H(height)XW(width)XL(thickness)		Fixed type 3P	310X263X199	402X366X298	402X428X297
		Fixed type 4P	310X333X199	402X461X298	402X543X297
		Drawout type 3P	345X275X297	433X405X389	433X466X396
		Drawout type 4P	345X345X297	433X500X390	433X581X396

Ratings And Specifications

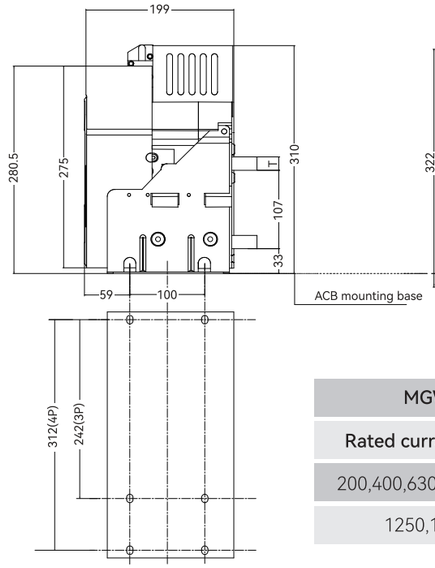
Characteristics			MGW6-4000	MGW6-7500
Frame size rated current Inm(A)			4000	7500
Number of poles			3,4	
Rated current In(A)			3200,3600,4000	5000,6300,7500
Rated voltage Ue(V)			50/60Hz AC 380V, 400V, 415V, 440V	
Insulation voltage Ui(V)			1000V	
Impulse withstand voltage Uimp(V)			12	
Rated current of N-pole In(A)			50%/100%In	
Ultimate breaking capacity Icu(kA)	380/400/415		100	135
Operation breaking capacity Ics(kA)	380/400/415		100	135
Short-time withstand current (1s)RMS)Icw(kA)	380/400/415		100	135
Max total tripping time(ms) without time delay			12-18	
Closing time(ms)			60(max)	
Closing time(ms)	Electrical life		6000	1500
	Mechanical life	Maintenance free	10000	3000
		Maintenance required	20000	10000
Connection mode			Horizontal,Vertical	Horizontal
Overall dimension H(height)XW(width)XL(thickness)		Fixed type 3P	390X422X311	435X905X291
		Fixed type 4P	390X537X311	435X1019X291
		Drawout type 3P	430X475X414.5	480X878X395
		Drawout type 4P	430X827.5X414.5	480X993X395

Overall And Mounting Dimensions MGW6–1600

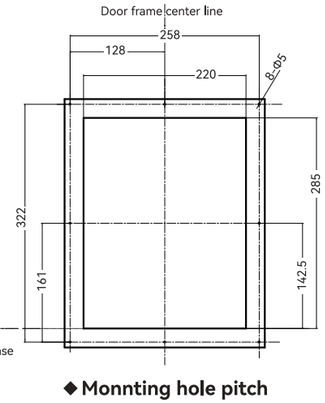
MGW6-1600/200A-1600A ACB Fixed Type



◆ Horizontal wiring



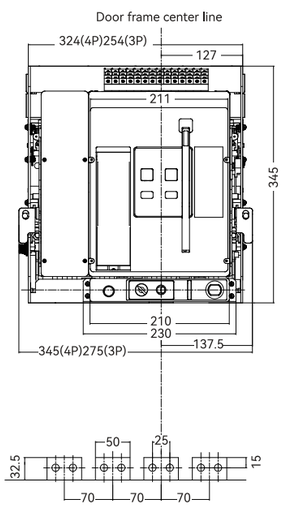
◆ Monnting Dimensions



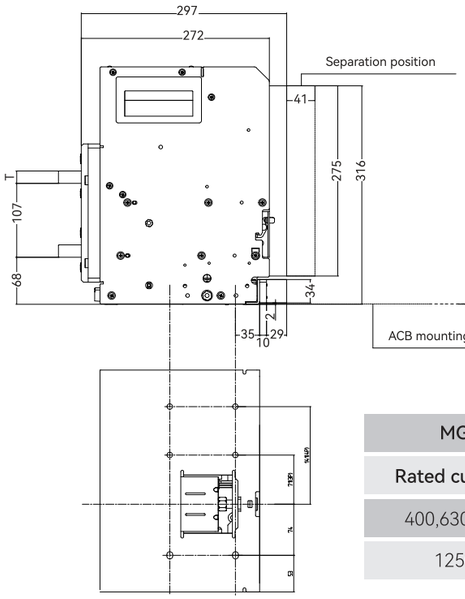
◆ Monnting hole pitch

MGW6-1600 ACB Fixed type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
200,400,630,800,1000	10
1250,1600	18

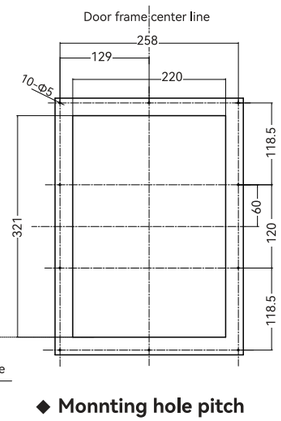
MGW6-1600/200A-1600A ACB Drawout Type



◆ Horizontal wiring



◆ Monnting Dimensions

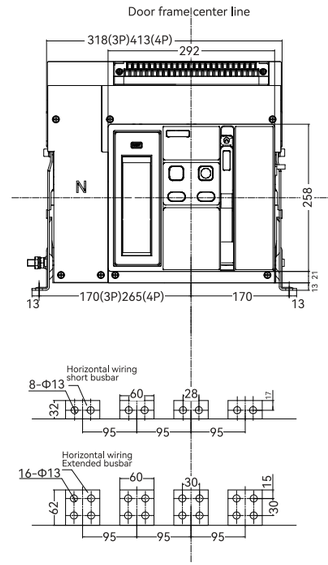


◆ Monnting hole pitch

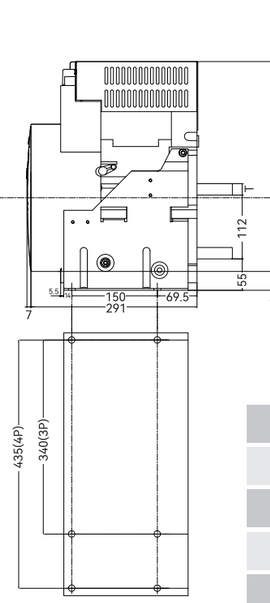
MGW6-1600 ACB Drawout type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
400,630,800,1000	10
1250,1600	18

Overall And Mounting Dimensions MGW6–2000

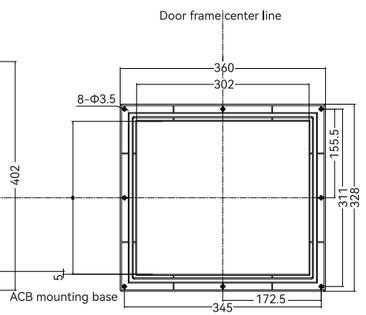
MGW6-2000/630A-2000A ACB Fixed Type



◆ Horizontal wiring



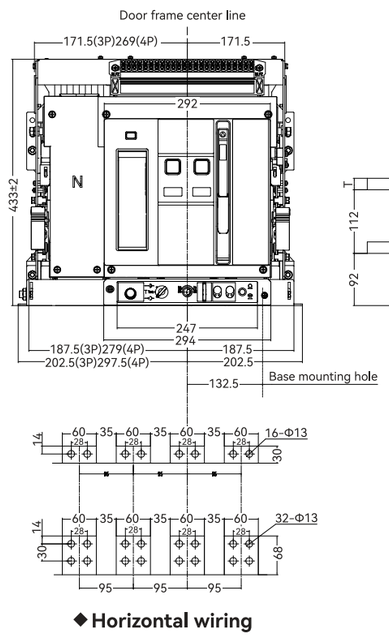
◆ Monnting Dimensions



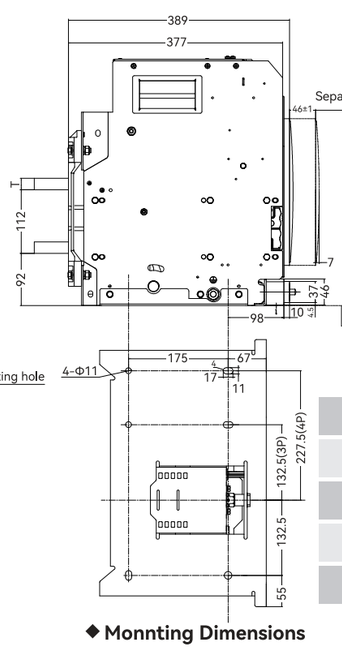
◆ Monnting hole pitch

MGW6-2000 ACB Fixed type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
630,800	10
1000,1250,1600	15
2000	20

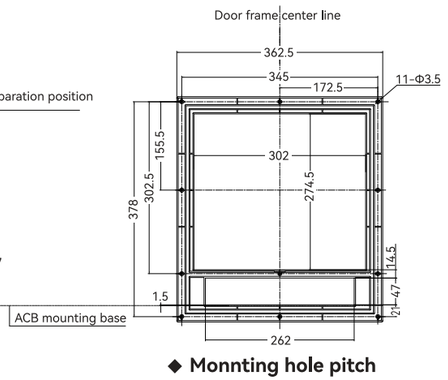
MGW6-2000/630A-2000A ACB Drawout Type



◆ Horizontal wiring



◆ Monnting Dimensions

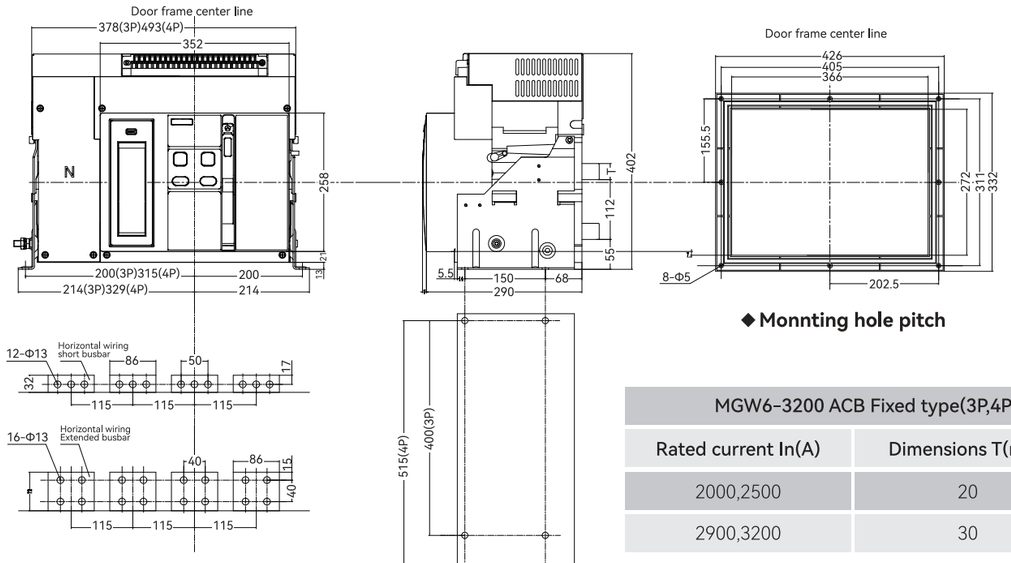


◆ Monnting hole pitch

MGW6-2000 ACB Drawout type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
400,630,800,1000	10
1000,1250,1600	15
2000	20

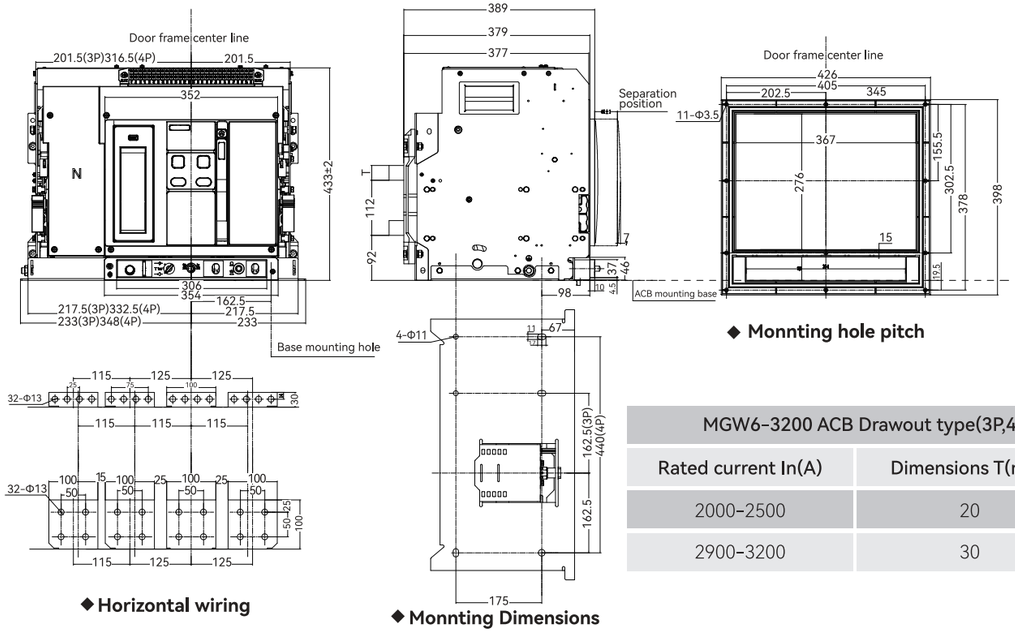
Overall And Mounting Dimensions MGW6–3200

MGW6-3200/2000A-3200A ACB Fixed Type



MGW6-3200 ACB Fixed type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
2000,2500	20
2900,3200	30

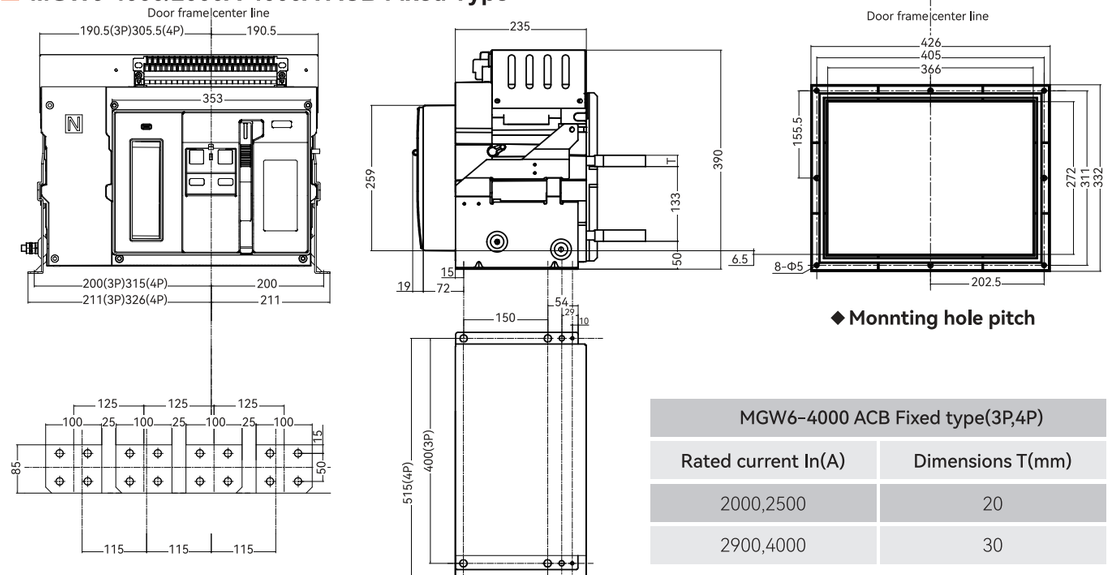
MGW6-3200/2000A-3200A ACB Drawout Type



MGW6-3200 ACB Drawout type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
2000-2500	20
2900-3200	30

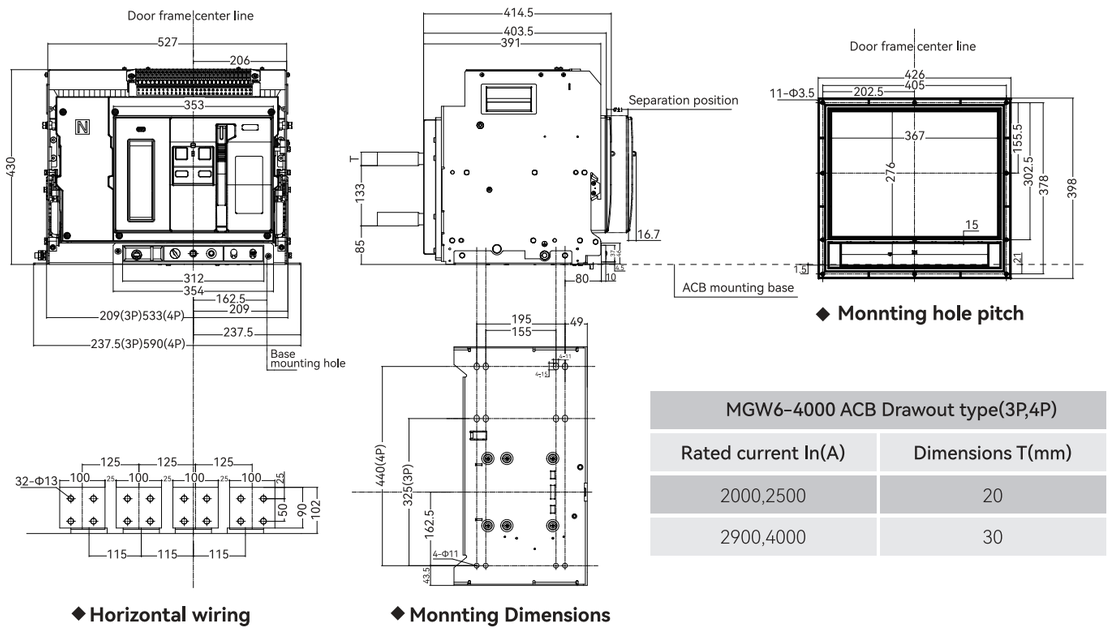
Overall And Mounting Dimensions MGW6–4000

MGW6-4000/2000A-4000A ACB Fixed Type



MGW6-4000 ACB Fixed type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
2000,2500	20
2900,4000	30

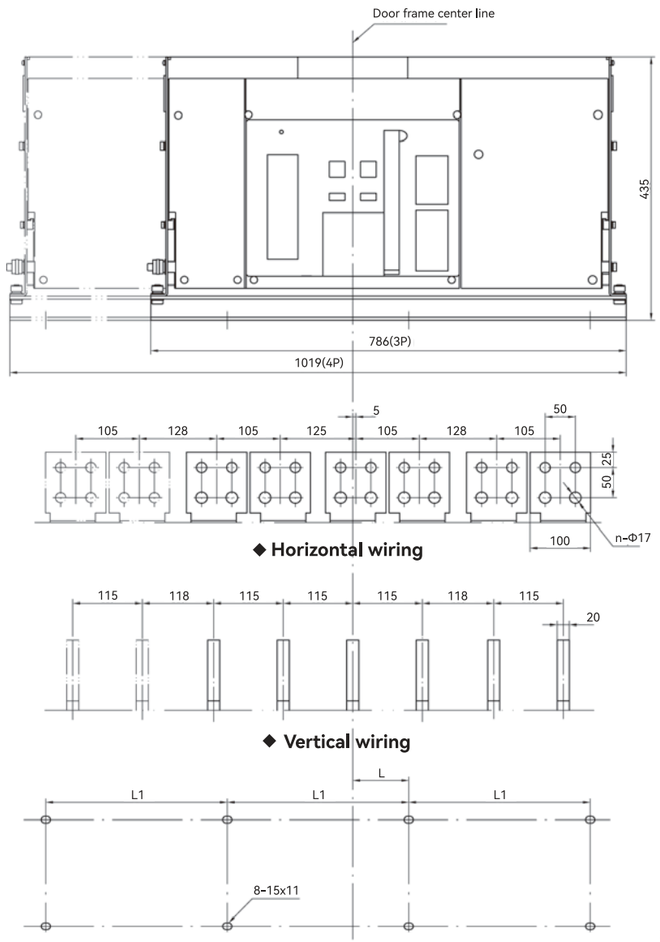
MGW6-4000/2000A-4000A ACB Drawout Type

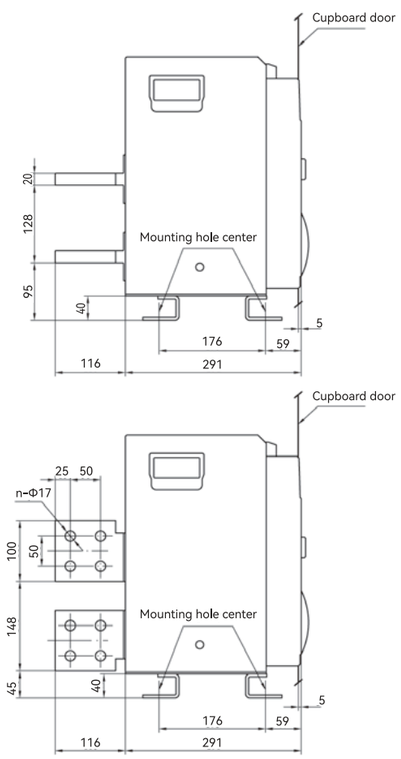


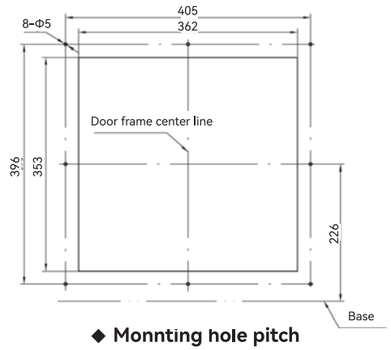
MGW6-4000 ACB Drawout type(3P,4P)	
Rated current In(A)	Dimensions T(mm)
2000,2500	20
2900,4000	30

Overall And Mounting Dimensions MGW6–7500

MGW6-7500/4000A-6300A Fixed Type



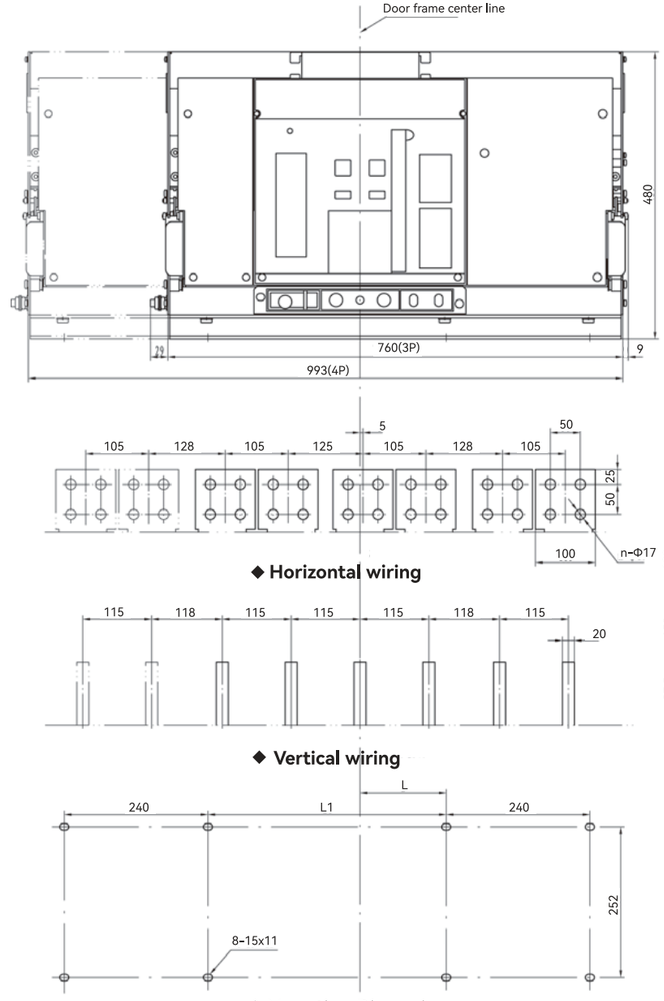


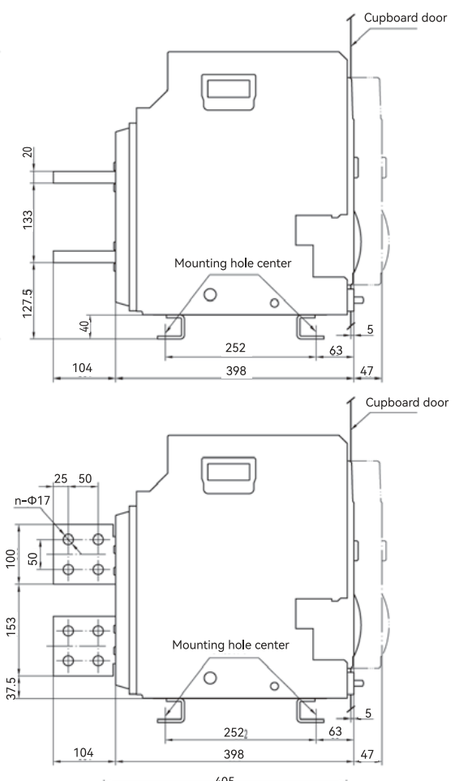


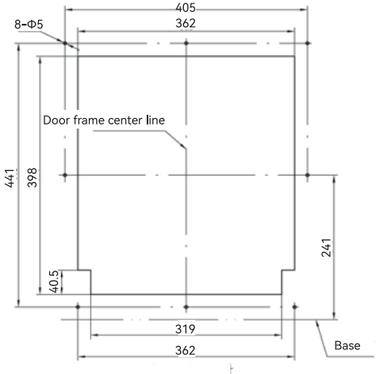
Specification	L	L1	n
3P	179	240	48
4P	92.5	300	64

Overall And Mounting Dimensions MGW6–7500

MGW6-7500/4000A-6300A Drawout Type



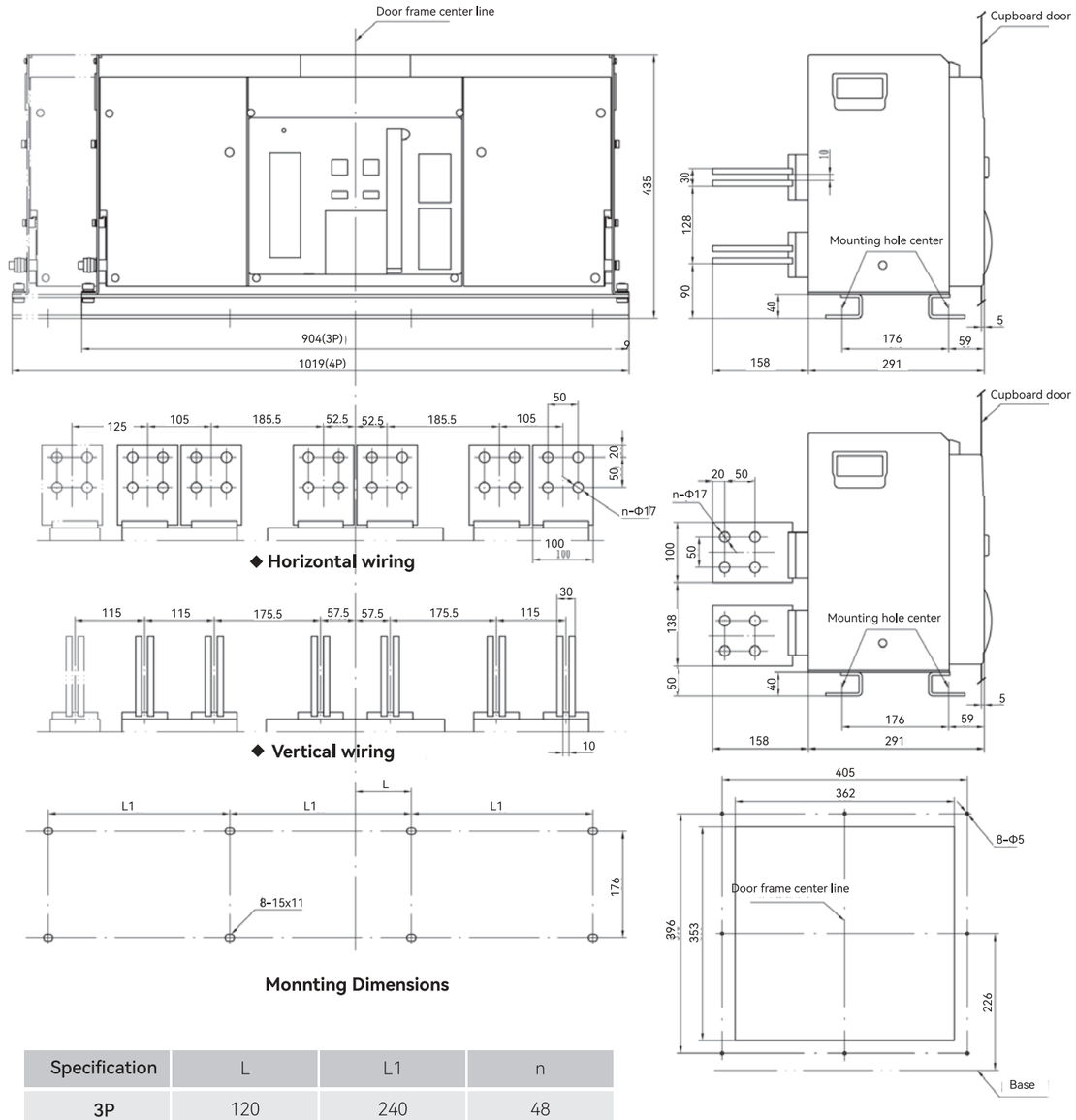




Specification	L	L1	n
3P	154.5	197	48
4P	144	398	64

Overall And Mounting Dimensions MGW6–7500

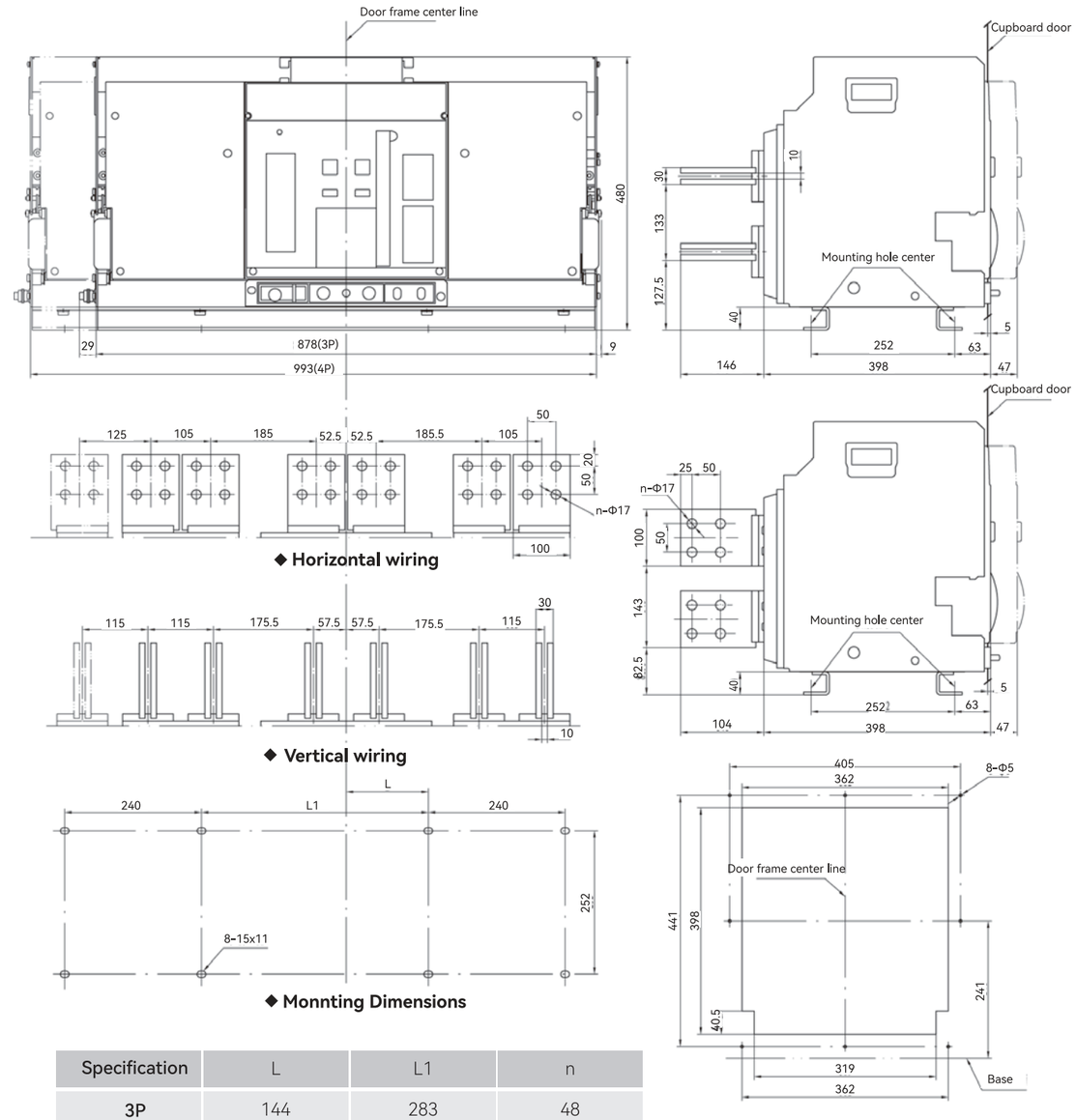
MGW6-7500/6300A Fixed Type



Specification	L	L1	n
3P	120	240	48
4P	92.5	300	56

Overall And Mounting Dimensions MGW6–7500

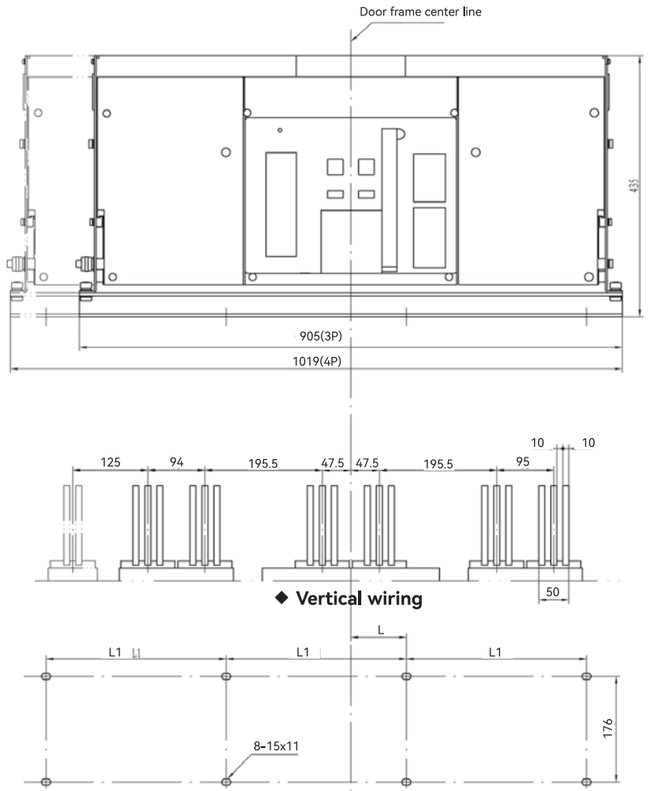
MGW6-7500/6300A Drawout Type



Specification	L	L1	n
3P	144	283	48
4P	144	398	56

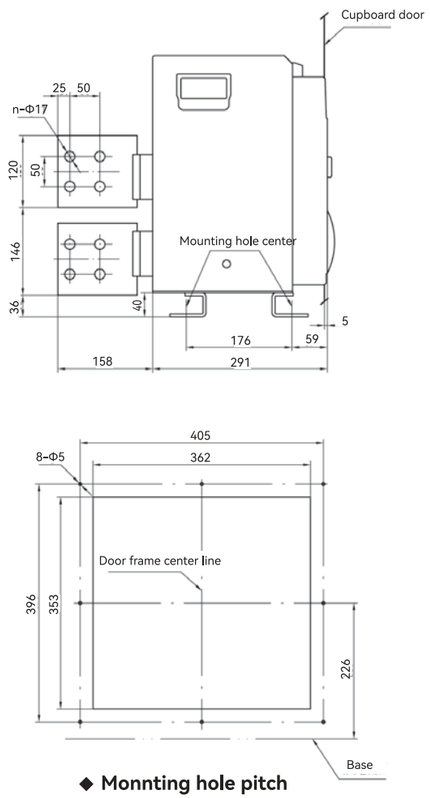
Overall And Mounting Dimensions MGW6–7500

MGW6-7500/7500A Fixed Type



◆ Vertical wiring

■ Monnting Dimensions

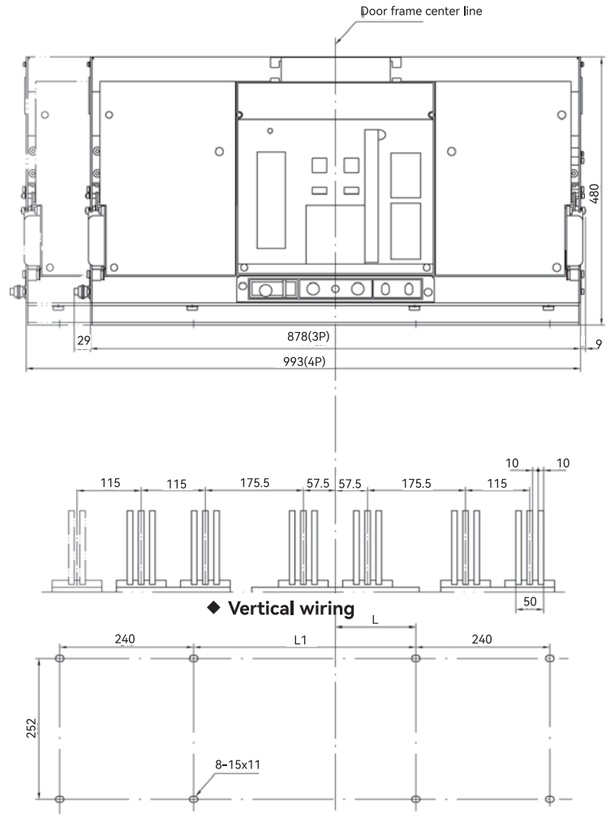


◆ Monnting hole pitch

Specification	L	L1	n
3P	120	240	48
4P	92.5	300	56

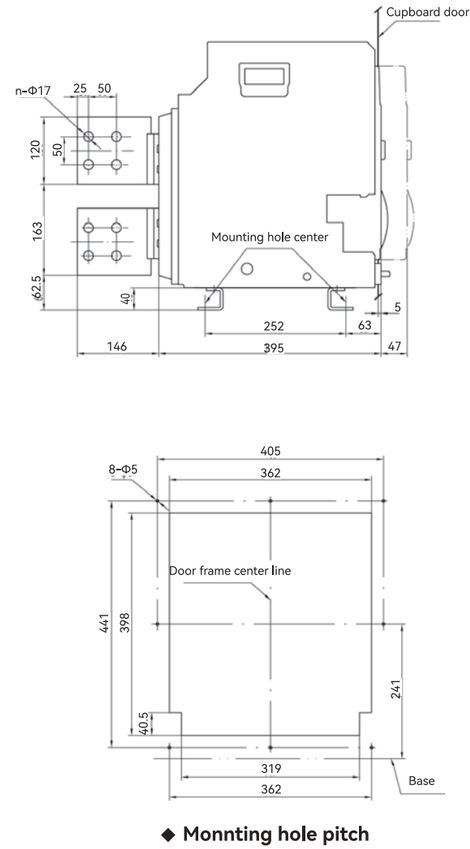
Overall And Mounting Dimensions MGW6–7500

MGW6-7500/7500A Drawout Type



◆ Vertical wiring

■ Monnting Dimensions



◆ Monnting hole pitch

Specification	L	L1	n
3P	144	283	48
4P	144	398	56