

ACB

Air Circuit Breaker



Committed to becoming a world-class manufacturer of intelligent electric

<https://www.maxge.com>

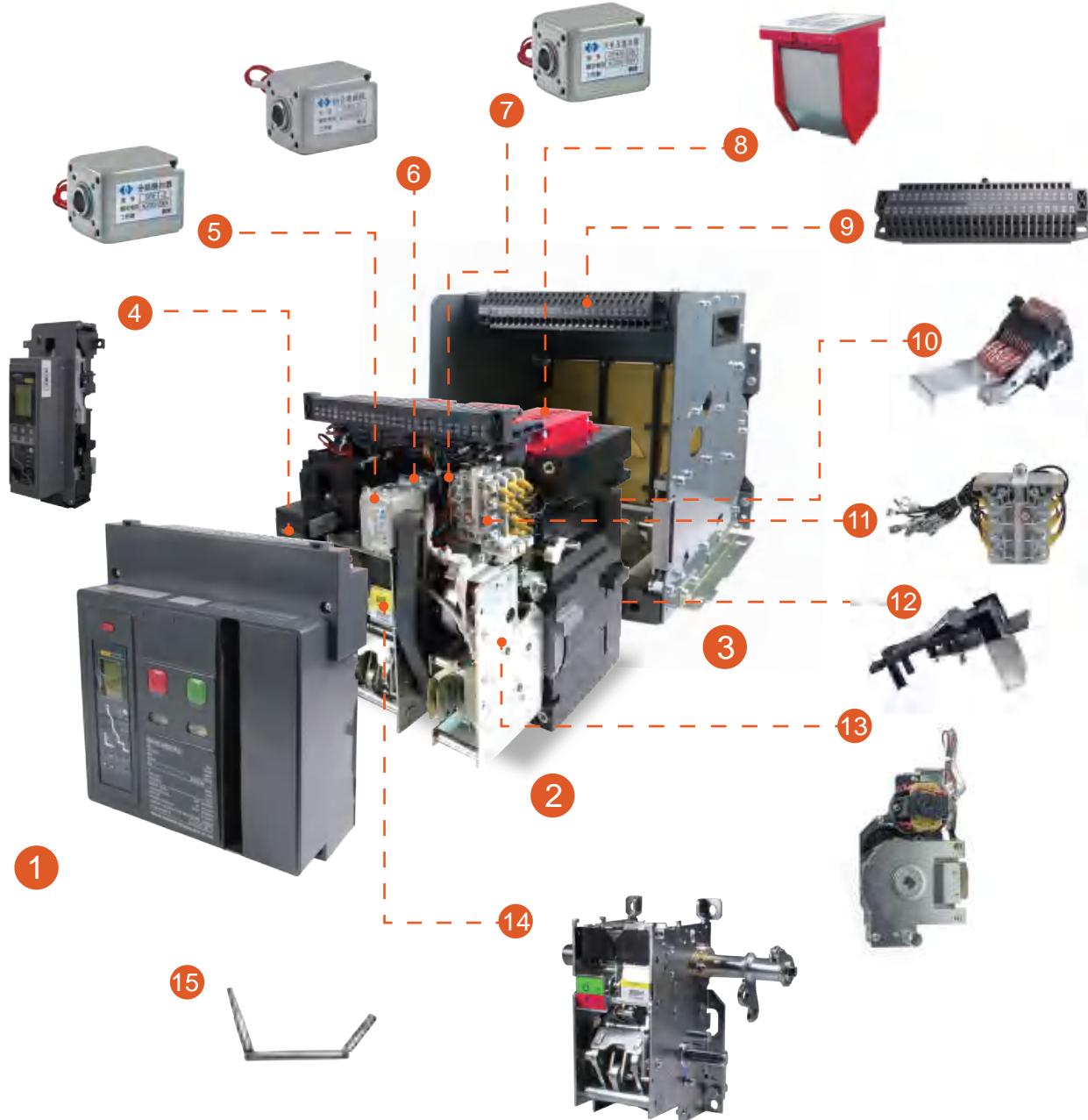
Enterprise code	MG					
Air circuit breaker	W					
Design code	6					
Frame Size	1600A,2000A,3200A,4000A,6300A,7500A					
Number of pole	3P,4P					
MG	W	6	-	<input type="checkbox"/>	/	<input type="checkbox"/>

Synopsis Of Structure

■ External Structure



■ Internal Structure



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
	Frame 2000	630,800,1000,1250,1600,2000	O	O
	Frame 3200	1600,2000,2500,2900,3000,3200	O	O
	Frame 4000	2000,2500,2900,3000,3200,3600,4000	O	O
	Frame 6300	4000,5000,6300	O	O
	Frame 7500	5000,6300,7500	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		—	○
	HPLC (DL/T 645)		—	○
	wifi		—	○
	Device NET		—	○
	CAN		—	○
	Ethernet		—	○
	Profi NET		—	○
	IEC61850		—	○
	Bluetooth		—	○
	4G-LTE		—	○
Protection functions	Overload Long time delay (I _r) (Multiple curves are available)		✓	✓
	Short-circuit short time delay (I _{sd})		✓	✓
	Short-circuit instantaneous (I _i)		✓	✓
	Current unbalance protection		✓	✓
	Ground fault protection (I _g)	Residual ground fault protection	Residual ground fault protection by default	✓
		Zero sequence ground-fault protection		✓
	Residual current protection (I _{Δn})		O	O
	Neutral line overcurrent protection (3P+N, 4P)		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
	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
	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
	I/O faultily tripping function		O	O
	Contact wear rate		—	✓
	Historic records	Tripping records	✓ 10 times	✓ 10 times
		Alarm records	—	✓ 10 times
		Replacement records	—	✓ 10 times
Contact output	Quad programmable 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

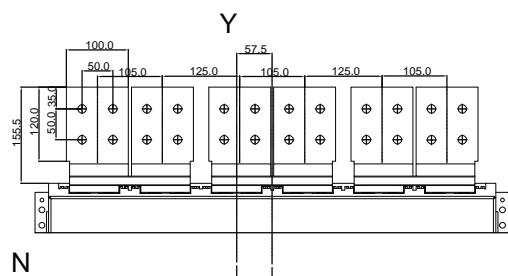
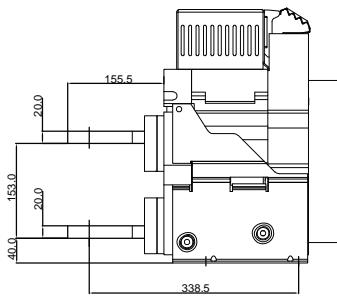
Frame Size		
Characteristics	MGW6-6300	
Frame size rated current In(A)	6300	
Number of poles	3,4	
Rated current In(A)	4000,5000,6300	
Rated voltage Ue(V)	50/60Hz AC 380V, 400V, 415V, 440V	
Insulation voltage Ui(V)	1000V	
Impulse withstand voltage Uimp(V)	12	
Rated current of N-pole In(A)	50%/100%In	
Ultimate breaking capacity Icu(kA)	380/400/415/440	135/150
Operation breaking capacity Ics(kA)	380/400/415/440	135/150
Short-time withstand current (1s) RMS Icw(kA)	380/400/415/440	135/150
Max total tripping time(ms) without time delay	12-18	
Closing time(ms)	60(max)	
Characteristics	MGW6-6300	
Mechanical life	Electrical life	
	Maintenance free	2500
	Maintenance required	10000
Connection mode	4000,5000A Horizontal,Vertical	
	6300A Vertical	
Overall dimension H(height)XW(width)XL(thickness)	Fixed type 3P	409.5X767X295
	Fixed type 4P	409.5X997X295
	Drawout type 3P	497X757X398
	Drawout type 4P	497X987X398

MGW6 Series

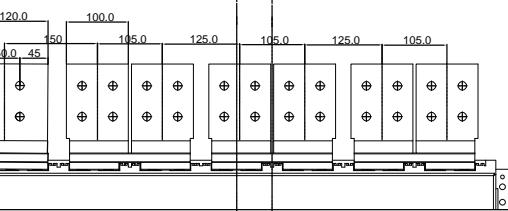
Overall and Mounting Dimensions

■ MGW6-6300/3 Poles-4 Poles ACB Fixed Type

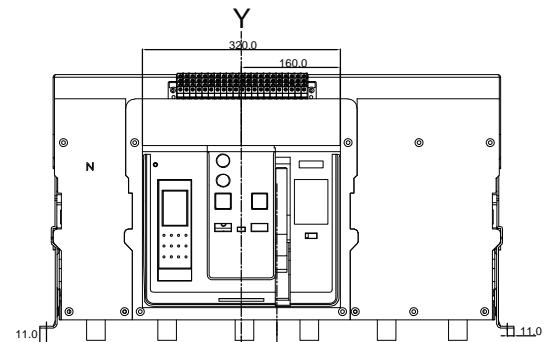
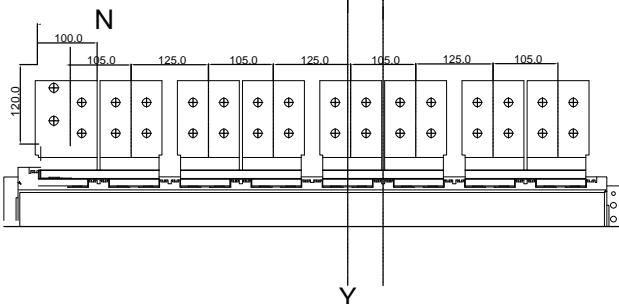
Y is the centre of the operating panel



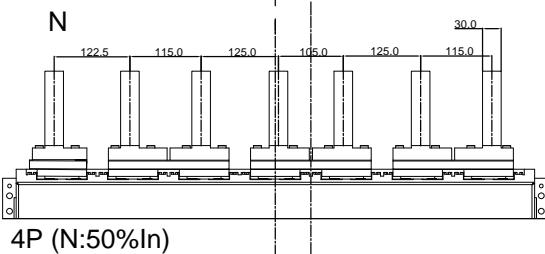
N



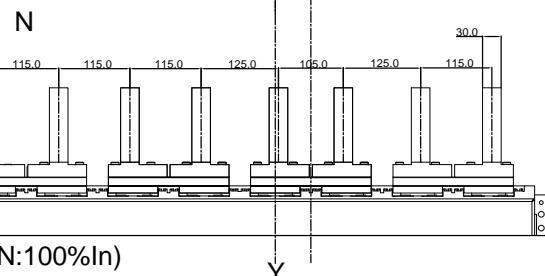
N



3P



4P (N:50%In)



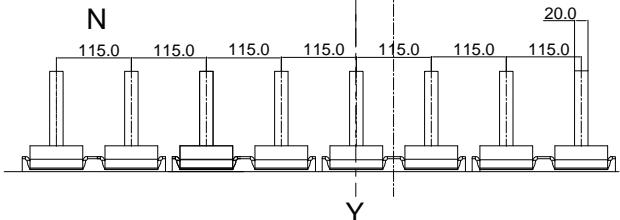
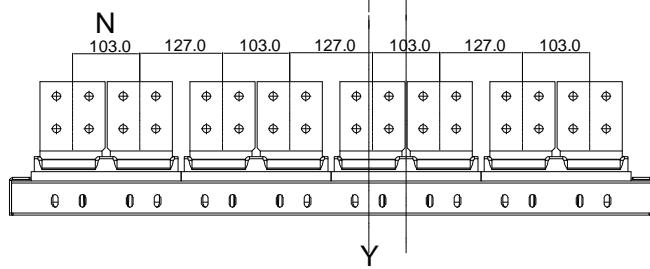
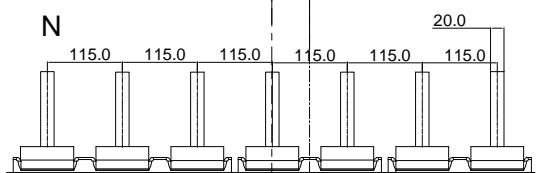
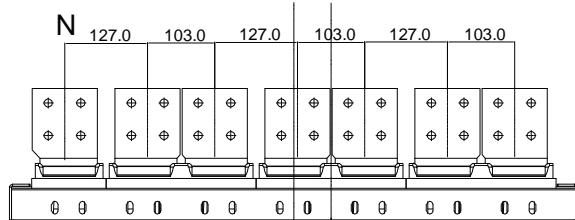
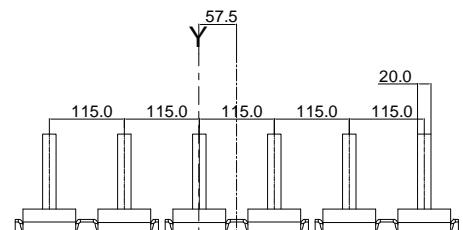
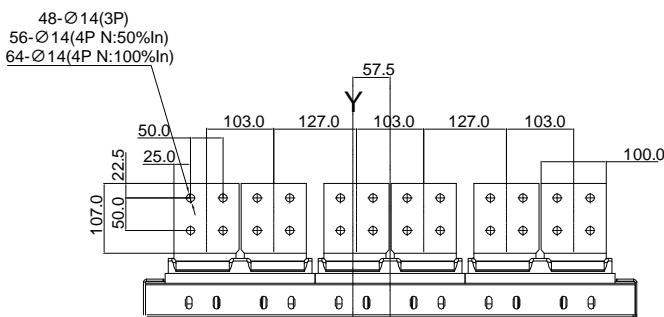
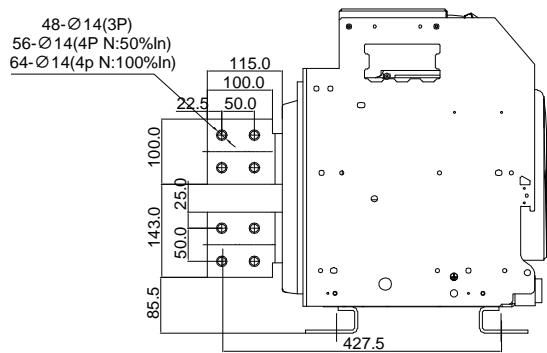
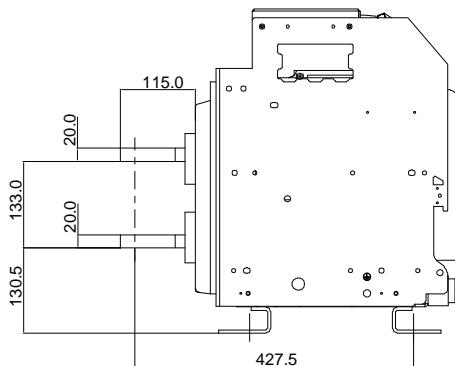
4P(N:100%In)

In=4000A 5000A Horizontal

MGW6 Series

Overall and Mounting Dimensions

■ MGW6-6300/3 Poles-4 Poles ACB Drawout Type



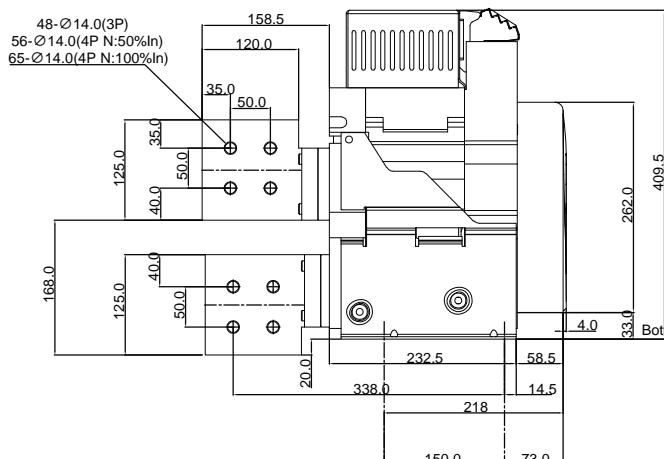
In=4000A 5000A

In=4000A 5000A

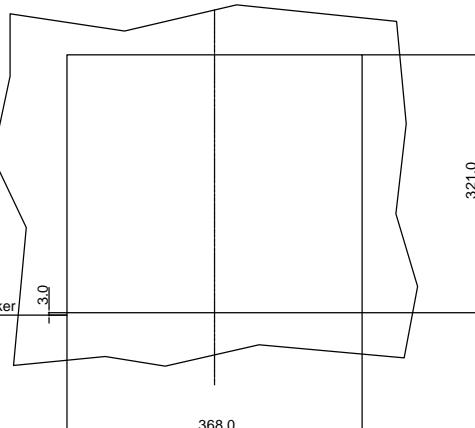
MGW6 Series

Overall and Mounting Dimensions

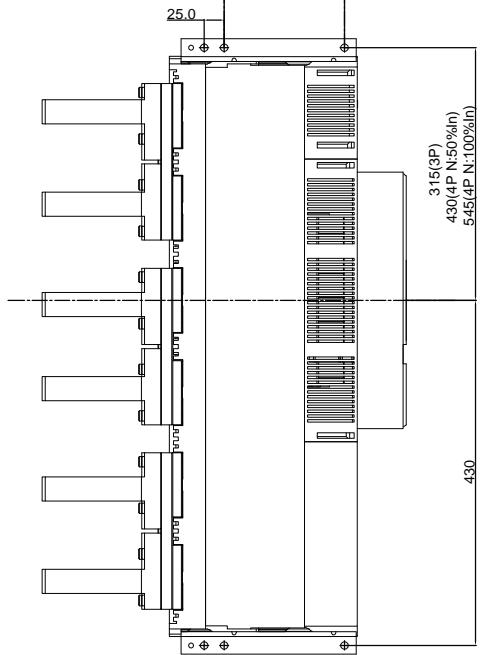
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Installation dimensions of Door frame



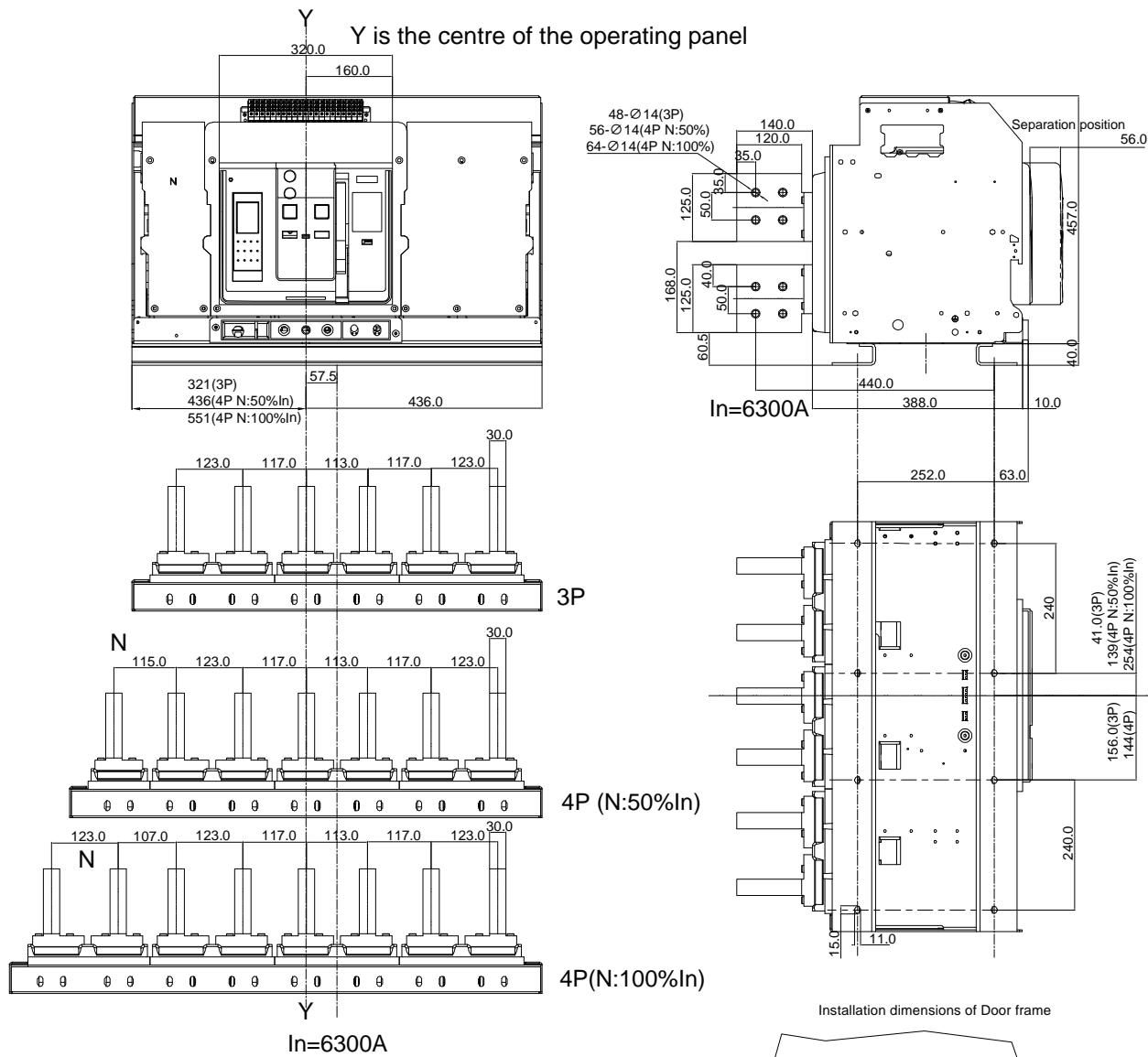
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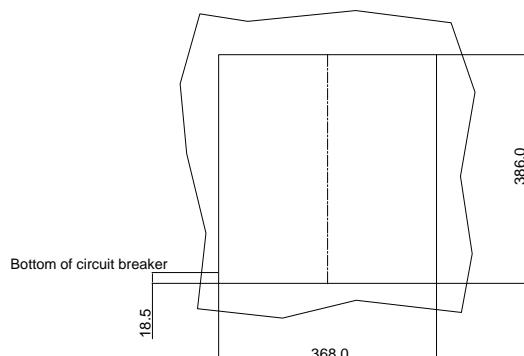
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