

ACB

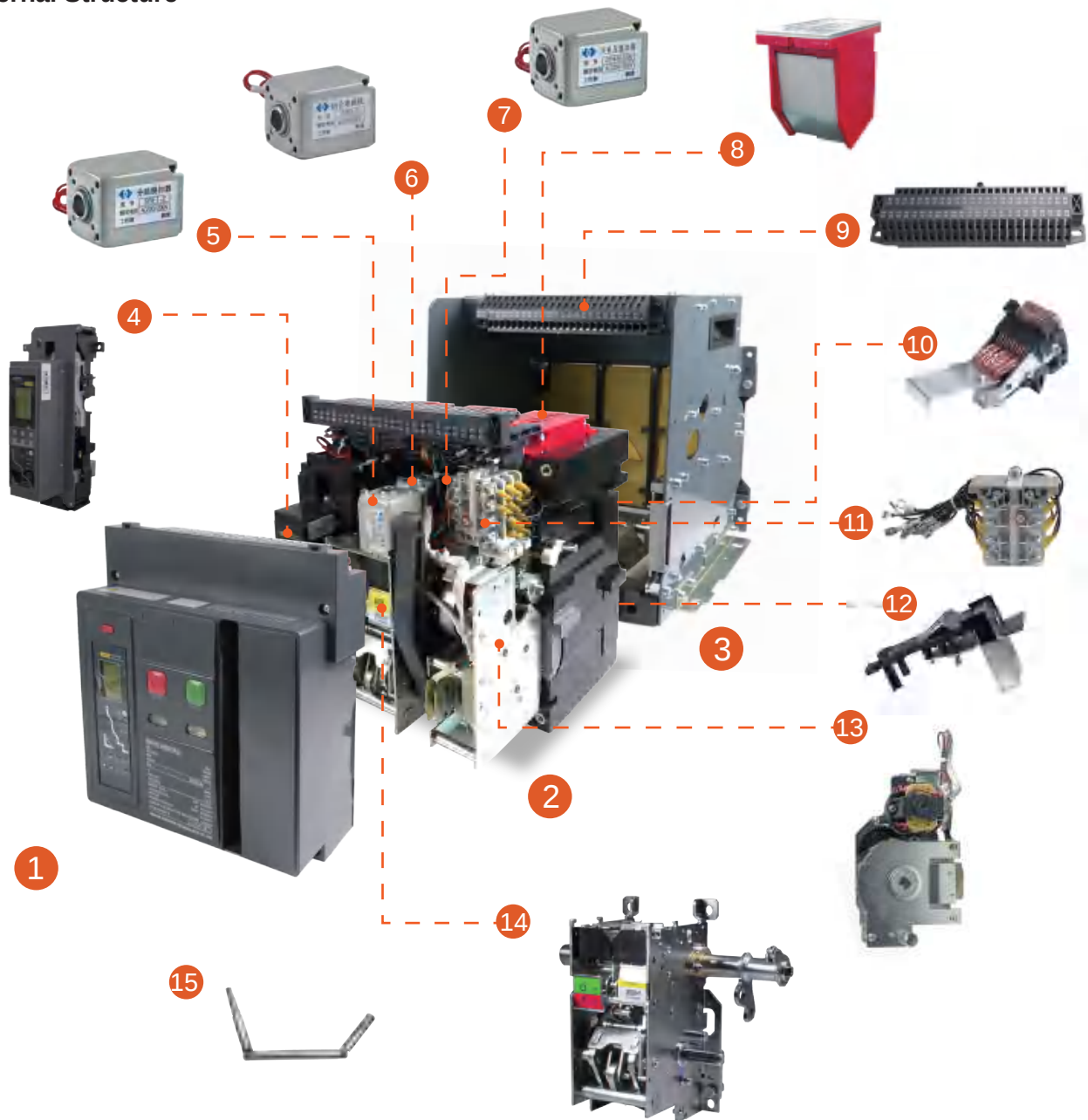
Air Circuit Breaker



Committed to becoming a world-class manufacturer of intelligent electric

<https://www.maxge.com>

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
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		—	√	√
	Self-test function: overtemperature of controller, memory fault, A/D sampling		√	√	√
Maintenance functions	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 programmable contact output		O	O	√
Data interface	Hand-held programmer interface		O	—	—

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

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	-	☐	/	☐

Synopsis Of Structure

■ External Structure



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	1600,2000,2500,2900,3000,3200	O	O	O
	Frame 4000	2000,2500,2900,3000,3200,3600,4000	O	O	O
	Frame 6300	4000,5000,6300	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	—	—	—
Communication functions	Language:Chinese/button		√	√	√
	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 (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 Zero sequence ground-fault protection	√	√	√
	Residual current protection (I Δ 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)		—	√	√

Ratings and Specifications

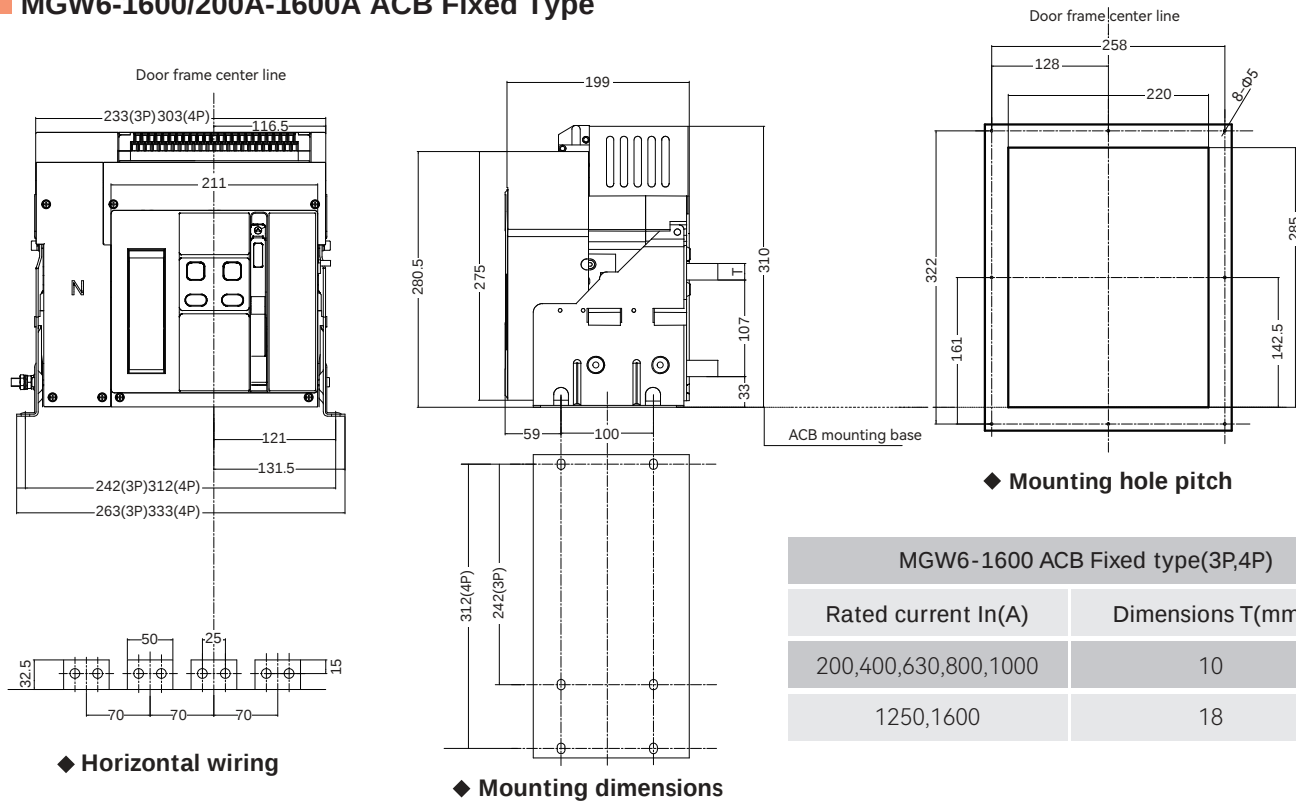
Frame Size		
Characteristics	MGW6-1600	
Frame size rated current In(A)	1600	
Number of poles	3,4	
Rated current In(A)	200,400,630,800, 1000,1250,1600	
Rated voltage Ue(V)	50/60Hz AC 380V, 400V, 415V, 440V	
Insulation voltage Ui(V)	1000V	
Impulse withstand voltage Uimp(V)	12	
Rated current of N-pole In(A)	50%/100%In	
Ultimate breaking capacity Icu(kA)	380/400/415/440	66
Operation breaking capacity Ics(kA)	380/400/415/440	66
Short-time withstand current (1s) RMS Icw(kA)	380/400/415/440	55
Max total tripping time(ms) without time delay		12-18
Closing time(ms)	60(max)	

Characteristics			MGW6-1600
Closing time(ms)	Electrical life		8000
	Mechanical life	Maintenance free	15000
		Maintenance required	30000
Connection mode			Horizontal
Overall dimension H(height)XW(width)XL(thickness)	Fixed type 3P		310X263X199
	Fixed type 4P		310X333X199
	Drawout type 3P		345X275X297
	Drawout type 4P		345X345X297

Overall and Mounting Dimensions

MGW6-1600

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



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

