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*smart  
for life*

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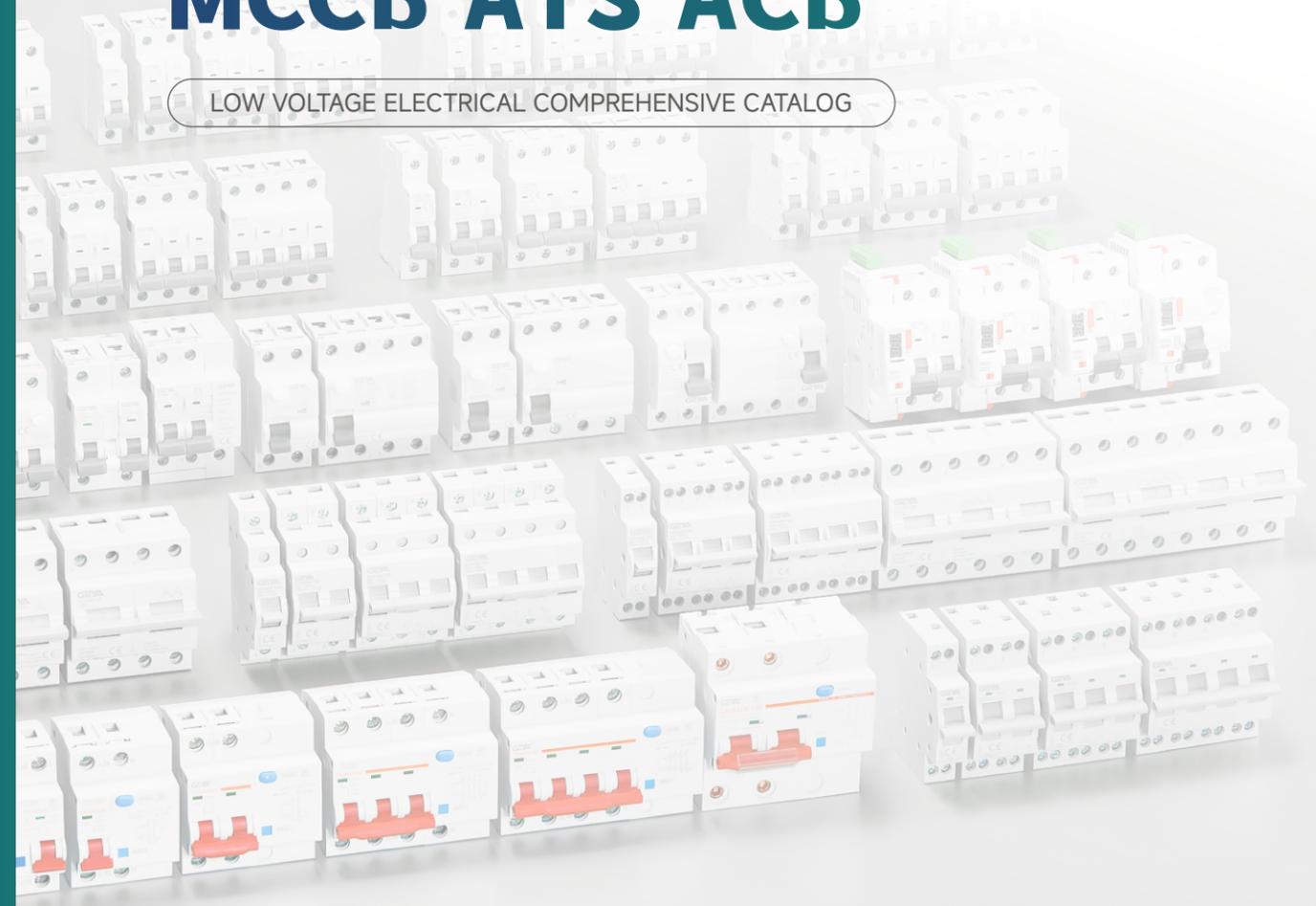
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**GEYA**<sup>®</sup>  
GEYA ELECTRICAL

# MCB Contactors MCCB ATS ACB

LOW VOLTAGE ELECTRICAL COMPREHENSIVE CATALOG



# 01

## COMPANY PROFILE

ZHEJIANG GEYA ELECTRICAL CO.,LTD

Zhejiang Geya Electrical Co., Ltd. [hereinafter referred to as: Geya Electrical GEYA]. GEYA Electrical was established in February 2007 and is located in Wenzhou City, China. It is a scientific and technological private enterprise integrating R&D, production, sales and service, focusing on the independent research and development of low-voltage electrical appliances and automation control products. After years of operation, the company's annual turnover has exceeded CNY 200 million.

The company's product series involve a variety of low-voltage electrical appliances and automation control products, including miniature circuit breakers, molded case circuit breakers, leakage circuit breakers, isolating switches, contactors, relays, timers, distribution boxes and other products and related accessories. With a wide range of products and a wide range of applications, it is widely recognized and praised by customers at home and abroad. The company currently has a comprehensive and mature online sales platform system. The four major sales regions of the products cover six continents in the world. More than 40 foreign companies choose and trust GEYA Electrical products.

Since the establishment of the company, GEYA Electrical has always adhered to the corporate motto of "Getting what you need, knowing what you are doing", adhering to the development concept of quality first and continuous innovation, and adhering to the product concept of high standards and high quality. Since then, a number of national patents have been obtained, and the GEYA brand has been deployed in most countries around the world. In addition, according to industry standards and certification requirements, the company has obtained authoritative EU certifications including CCC, CE, SAA, SEMKO, TUV, etc., and its products fully comply with European and American product quality standards. In addition to providing OEM and ODM services to global customers, GEYA Electrical has established cooperative relationships with many internationally renowned brand companies. At the same time, the company's experienced sales team is gradually promoting GEYA Electric's products to larger domestic and overseas markets, making more contributions to the world's low-voltage electrical appliances and automation control product industries and customers.



GEYA Electrical sincerely welcomes customers to act as agents to promote the GEYA brand in domestic and overseas markets. We will provide our customers with better products, better services and more competitive sales policies.

GEYA Electrical looks forward to creating a better future with you!



Founded in  
**2007** Year



Sales Revenue  
**200** million RMB



Employees  
**300** +



**4G/WIFI/RS485**  
Communication method

**IOT Smart circuit breaker**   
GBT 16917 CQC1149

**GYRC-ZN01**

Compact design, High breaking capacity; Remote monitoring for better safety ;



-   
Remote control
-   
GPRS connection
-   
International standard
-   
High breaking capacity
-   
Flame retardant materials

**Product model and definition**

GYRC	ZN	01	100	AP	2P	63A	4G+RS485
			Frame grade		Pole	Rated current	Communication method
Product number	smart circuit breaker	Design Number	100A	AP: fully automatic reclosing; APE:With PE ground fault protection	2P 4P	32 63 100	RS485 4G+RS485 WIFI+RS485 RJ45+RS485

**Main functions**

Item	Product number	
	GYRC-ZN01-100AP	GYRC-ZN01-100APE
Compliant with	GBT 16917 CQC1149	
pole number	2P/4P	
Rated voltage	Single-phase AC230V/three-phase AC400V 50Hz	
Rated current	32A, 63A, 100A	
Trip type	C type (other types can be customized)	
Short circuit breaking capacity	Icu=Ics=6KA	
Mechanical life	More than 12000 times	
Electrical life	More than 6000 times	
Closing time	Less than 1.5s	
Opening time	Less than 0.1s	
Measuring accuracy	1.0	
Leakage action value	30, 50, 100, 200, 300, 500mA Optional	

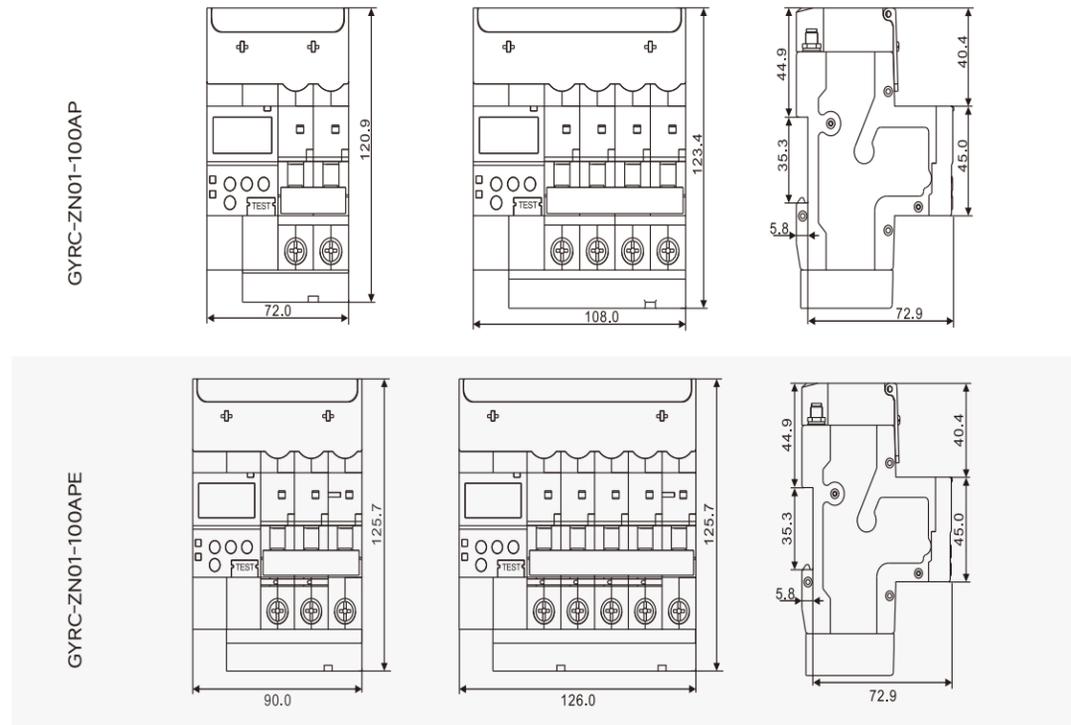
**Main functions**

No.	Protection function	trip type	GYRC-ZN01-100AP		GYRC-ZN01-100APE		parameter settings	Settings	factory default	Remark
			2P	4P	2P	4P				
1	Overvoltage protection	Turn off/Alarm/Trip	Trip	Trip	Trip	Trip	overvoltage adjustment	250-350V	280V	
							Overvoltage delay	0-10s	3s	
2	Under voltage protection	Turn off/Alarm/Trip	Alarm	Alarm	Alarm	Alarm	Undervoltage adjustment	110-200V	165V	
							Under voltage delay	0-10s	3s	
3	Phase loss protection	Turn off/Alarm/Trip	---	Turn off	---	Turn off	Phase loss adjustment	10-100V	30V	
							Phase delay	0-10s	3s	
4	overload protection	Turn off/Alarm/Trip	Trip	Trip	Trip	Trip	Overload adjustment	0.6In-In	In	
							Phase delay	0-10s	3s	
5	High temperature protection	Turn off/Alarm/Trip	Alarm	Alarm	Alarm	Alarm	high temperature adjustment	60-100°C	80°C	
							High temperature delay	0-10s	5s	
6	Early warning function	off/on	turn on	turn on	turn on	turn on	Warning ratio	90-100%	95%	
7	Alarm allowed	off/on	turn on	turn on	turn on	turn on	---	---	---	
8	Underload protection	Turn off/Alarm/Trip	Turn off	Turn off	Turn off	Turn off	Underload ratio	1-90%	5%	
							Underload delay	0-10s	5s	
9	Over power protection	off/on	Turn off	Turn off	Turn off	Turn off	Overpower value	50-50KW	2KW	
							Over power delay	0-10s	5s	
10	Under power protection	off/on	Turn off	Turn off	Turn off	Turn off	Under power value	50-50KW	2KW	
							Under power delay	0-10s	5s	
11	Timing control	Setting/off	Turn off	Turn off	Turn off	Turn off	---	---	---	
12	Leakage Protection	Turn off/Alarm/Trip	Trip	Trip	Trip	Trip	Leakage setting value	30-500mA	100mA	30/50/100/200/300/500mA
							no driving time	-/0.06/0.1/0.2s	-	
13	mutation protection	Turn off/Alarm/Trip	Turn off	Turn off	Turn off	Turn off	Leakage mutation value	30-100mA	30mA	
14	Automatic reclosing	off/on	Turn off	Turn off	Turn off	Turn off	---	---	---	
15	power failure protection	Turn off/Trip	Turn off	Turn off	Turn off	Turn off	Power-off voltage value	0-100V	80V	
							Power off delay	0-5s	2s	
16	Phase failure protection	Turn off/Alarm/Trip	---	Turn off	---	Turn off	Phase failure delay	0-5s	2s	
17	Voltage Unbalance Protection	Turn off/Alarm/Trip	---	Turn off	---	Turn off	Voltage imbalance	5%-30%	20%	
							voltage imbalance delay	0-10s	5s	
18	Current imbalance protection	Turn off/Alarm/Trip	---	Turn off	---	Turn off	Current imbalance	5%-30%	20%	
							Current imbalance delay	0-10s	5s	
19	Timed trial trip	off/on	Turn off	Turn off	Turn off	Turn off	Trial trip-day		20	
							Trial trip-hour		23	
							Trial trip-minute		30	
20	gear return	off/on	turn on	turn on	turn on	turn on				Leakage Protection
21	Open protection	Turn off/Alarm/Trip	Turn off	Turn off	Turn off	Turn off				
22	Remote control allowed	off/on	turn on	turn on	turn on	turn on				
23	Location display	off/on	Turn off	Turn off	Turn off	Turn off		5-600s	60s	
24	PE open circuit alarm	Turn off/Alarm/Trip	---	---	Alarm	Alarm	Open circuit delay	5-600s	60s	
25	PE fault alarm	Turn off/Alarm/Trip	---	---	Alarm	Alarm	Failure delay	3-20s	3s	
26	Power-on delay	off/on	turn on	turn on	turn on	turn on		0-9	0	
27	Leakage reclosing									
28	Manual and automatic control		yes	yes	yes	yes				
29	Mechanical inspection lock		yes	yes	yes	yes				

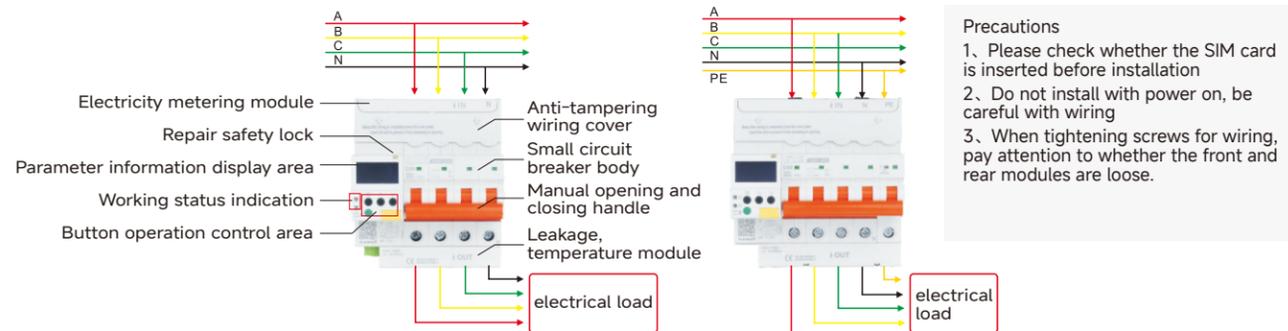
► Product appearance

GYRC-ZN01-100AP	GYRC-ZN01-100APE
4G+RS485/WIFI+RS485/RJ45+RS485/RS485	4G+RS485/WIFI+RS485/RJ45+RS485/RS485
	

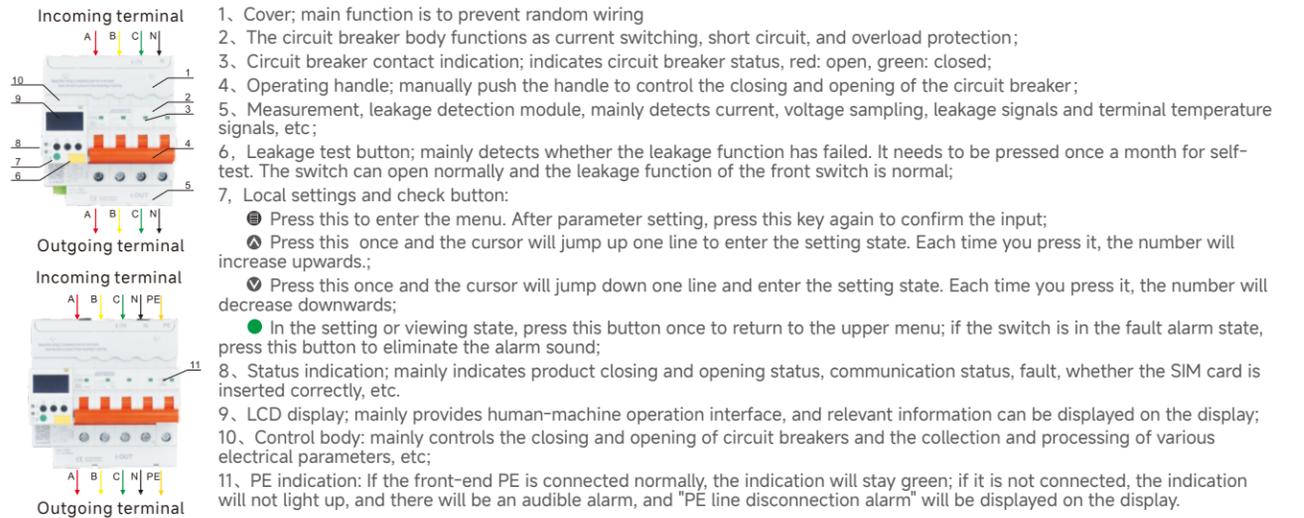
► Product Dimensions



► Product wiring and panel instructions



► Introduction to product modules and button functions



► Menu Function Operation Instructions

- Menu Function Operation Instructions
- Press **OK** to enter the menu, and you will be prompted to enter a password. The initial password of this product is "0000". If you need to change the password, press **▲** **▼** according to the cursor prompt to confirm the number you need to enter, and then press **OK** to set the next few digits with same operation.;
- After entering the confirmation password, enter the menu, which has sub-menus such as parameters, records, functions, maintenance and about. Then press **▲** to select the menu you want to enter, and then press **OK** the key to enter the lower-level menu. You can set or view relevant parameters according to your needs;
- After setting or viewing parameters, you need to exit, just press **OK**;
- Press **▲** **▼** directly to view the electrical parameters;
- Long press **OK** the green button to control the switch opening and closing, short press the button to return to the upper menu;
- Menu Description:
  - Parameters: After entering this menu, you can set parameter values, such as over and under voltage values, leakage, current, temperature, power, etc.;
  - Record: After entering this menu, you can view the switching time record, such as the cause of the fault, operation, etc.;
  - Communication: After entering this menu, you can set the communication method, such as WIFI, MOTT, RS485, etc. or communication baud rate, device type.;
  - Function: After entering this menu, the switch protection function can be set to off, alarm and trip.;
  - Display: After entering this menu, you can set the display to Chinese or English.;
  - Number of times: After entering this menu, you can query the number of times the switch has been run in each state.;
  - Maintenance: After entering this menu, you can perform maintenance on the switch, such as restoring factory settings, networking mode, restarting the device, etc.;
  - About: After entering this menu, you can view the product software version number, communication module IEMI code and SIM card code, etc.

► Product installation precautions

- Reverse connection of product incoming and outgoing lines is absolutely not allowed;
- After the product is installed, check whether the wiring is correct. Pay special attention to the fact that N and PE cannot be connected wrongly
- The leakage function of FSZN01-PE product is not allowed to be turned off. Set the leakage parameter value to 30mA (recommended). It can be set to 30mA according to the actual application scenario;
- For online version products, please download and install the APP and scan the QR code on the product;
- The RS485 communication terminal of this product is a standard configuration. It can be connected to computers and various communication devices through an RS485 to USB converter to achieve information exchange and control;
- The default baud rate of the device is 9600bps. You can view and set the required baud rate in the settings menu;
- For 74G version products, the SIM card must be inserted before use to achieve remote information interactive control;
- Product installation and debugging must be carried out by professional electricians;
- This product can be customized according to user needs. Please contact us for details;
- For special purposes, please consult us.

► Basic debugging

- The remote control does not respond:
  - Check that the two-way arrow is not displayed on the main interface. The SIM card may be in arrears, loose or damaged. Enter the menu "About" and check the SIM code (20-digit code); if you can check it, means that the card is in arrears, operation method: recharge the data according to the operator to activate it. If you can't see it, open the cover of the SIM card insertion area, take it out again (push the SIM card inward gently and release it, and the card will pop out) and then put it back in. You can see the card number, which means that the card is loose and has poor contact; if you cannot check it, it means that the card is broken, please replace the SIM card.
  - Check whether the 485 symbol is displayed on the main interface. If not, check whether the RS485 interface is loose.
- The sub-device under control does not respond. Check whether the device is online? If it is offline, re-configure the network. If the network configuration is unsuccessful, there may be a problem with the device and it may need to be disassembled for inspection or repair.

**4G/WIFI/RS485**  
Communication method

**IOT Smart circuit breaker**   
GBT 10963 CQC1148 GBT 16917 CQC1149

**GYRC-ZN02**



1, The RS485 communication terminal of this product is a standard configuration. It can be connected to computers and various communication devices through an RS485 to USB converter to achieve information exchange and control;  
2, The system default baud rate is 9600bps. You can connect it to the computer through an RS485 to USB converter to check and set the required baud rate;  
3, For network GPRS version products, the SIM card must be inserted before use to realize Internet information exchange or remote control through GPRS;



**Product model and definition**

GYRC	ZN	02	L	63	AP	2P	32A	DC	RS485
Product number	smart circuit breaker	Design Number	With leakage; None: means no leakage	Frame grade 63A (Note: DC or AC type product 1P/2P can be 100A)	BZ: semi-automatic	Pole 1P 1P+N 2P 3P 3P+N 4P	Rated current 20 32 63A	AC: AC type DC: DC type	Communication method RS485 4G WIFI

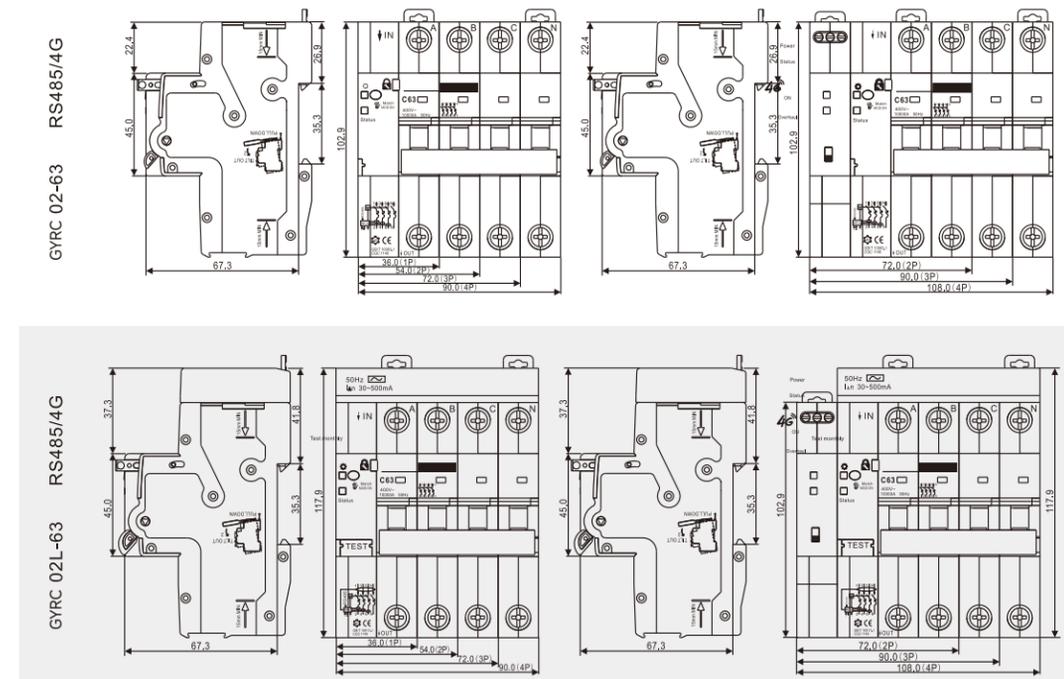
**Main functions**

Item	Product number	
	GYRC-ZN02-63	GYRC-ZN02L-63
Compliant with	GBT 10963 CQC1148	GBT 16917 CQC1149
pole number	1P/2P/3P/4P	2P/3P/4P
Rated voltage	Single-phase AC230V/three-phase AC400V 50Hz	
Rated current	20A、32A、63A(1P/2P can be customized to 100A)	20A、32A、63A
Trip type	C type (other types can be customized)	
Short circuit breaking capacity	Icu=10KA Ics=7.5KA	
Mechanical life	1P/2P more than 20000 times, 3P/4P more than 12000 times	More than 12000 times
Electrical life	More than 6000 times	
Closing time	Less than 1.5s	
Opening time	Less than 1.0s	
Measuring accuracy	1.0	
Leakage action value	-	30 50 100 200 300 500 Optional

**Main functions**

No.	Protection function	trip type	ZN02-63AP				ZN02L-63AP			parameter settings	Settings	factory default	Remark
			1P	2P	3P	4P	2P	3P	4P				
1	Overvoltage protection	Turn off/Alarm/Trip	Trip	Trip	Trip	Trip	Trip	Trip	Trip	overvoltage adjustment	250-350V	280V	
										Overvoltage delay	0-10s	3s	
2	Under voltage protection	Turn off/Alarm/Trip	Alarm	Alarm	Alarm	Alarm	Alarm	Alarm	Alarm	Undervoltage adjustment	110-200V	165V	
										Under voltage delay	0-10s	3s	
3	Phase loss protection	Turn off/Alarm/Trip	---	---	Turn off	Turn off	---	Turn off	Turn off	Phase loss adjustment	10-100V	30V	
										Phase delay	0-10s	3s	
4	overload protection	Turn off/Alarm/Trip	Trip	Trip	Trip	Trip	Trip	Trip	Trip	Overload adjustment	0.6In-In	In	
										Phase delay	0-10s	3s	
5	High temperature protection	off/on	Alarm	Alarm	Alarm	Alarm	Alarm	Alarm	Alarm	high temperature adjustment	60-100°C	80°C	
										High temperature delay	0-10s	5s	
6	Early warning function	off/on	turn on	turn on	turn on	Warning ratio	90-100%	95%					
7	Alarm allowed	off/on	turn on	turn on	turn on	---	---	---					
8	Over power protection	off/on	Turn off	Turn off	Turn off	Overpower value	50-50KW	2KW					
										Over power delay	0-10s	5s	
9	Under power protection	off/on	Turn off	Turn off	Turn off	Under power value	50-50KW	2KW					
										Under power delay	0-10s	5s	
10	Timing control	Setting/off	Turn off	Turn off	Turn off	---	---	---					
11	Automatic reclosing	off/on	Turn off	Turn off	Turn off	---	---	---					
12	Leakage Protection	Turn off/Alarm/Trip	-	-	-	-	Trip	Trip	Trip	Leakage setting value	30-500mA	100mA	
										no driving time	-/0.06/0.1/0.2s	-	30/50/100/200/300/500mA
13	mutation protection	Turn off/Alarm/Trip	Turn off	Turn off	Turn off	Leakage mutation value	30-100mA	30mA					
14	Manual and automatic controllage	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	---	---	---	
15	Mechanical inspection lock	-	available	available	available	available	available	available	available	---	---	---	

**Product Dimensions**



► **Simplified picture of the product according to the communication method**

GYRC-ZN02-63  
(RS485 communication)



GYRC-ZN02-63  
(wifi communication)



GYRC-ZN02-63  
(4G communication)



(4G communication)  
Panel style is required

GYRC-ZN02L-63  
(RS485 communication)



GYRC-ZN02L-63  
(wifi communication)



GYRC-ZN02L-63  
(4G communication)



(4G communication)  
Panel style is required

**Tuya WIFI** Communication method  
**IOT Smart circuit breaker**  
GBT 10963



**GYRC-ZN03**

Compact design high breaking capacity; remote automatic reclosing;



- Remote control
- GPRS connection
- International standard
- High breaking capacity
- Flame retardant materials

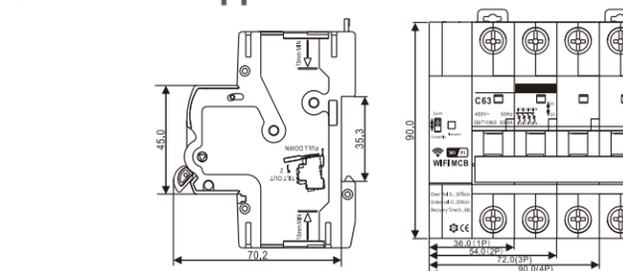
► **Product model and definition**

GYRC	ZN	03	—	100	AP	/	2P	/	63A	/	TUYA WIFI
				Frame grade			Pole		Rated current		Communication method
Product number	smart circuit breaker	Design Number	100A	AP: fully automatic reclosing; BZ: semi-automatic	1P 2P 3P 4P		20 32 63 100A		TUYA WIFI (other specifications can be customized)		

► **Main functions, technical parameters and wiring**

Compliant with	GBT 10963	Product poles	1P 2P 3P 4P
Rated voltage	single-phase AC230V/ three-phase AC400V 50Hz	Rated current	preferred 20A 32A 63A 100A
Trip type	Type C (other types can be customized)	Short circuit breaking capacity	Icu=Ics=6KA
Mechanical life	more than 12,000 times	Electrical life	more than 6000 times
Closing time	less than 1.5s	Opening time	less than 1.0s
Overvoltage protection	Overvoltage setting 250~ 35V- Default value: 280V-;Setting value 0-10s Default value: 3s (setting value APP setting)		
Undervoltage protection	Overvoltage setting 250~ 35V- Default value: 280V-;Setting value 0-10s Default value: 3s (setting value APP setting)		
Timing control	on/off Timing time APP settings		

► **Product appearance**



## ► Tuya Smart APP installation and product networking configuration

"Smart Home" mobile APP

Unlimited mobile signal coverage distance

**01 Wiring**  
Correctly connect the incoming line of the product to the power cord and power on. After 25 seconds, the product indicator will flash slowly and move as close to the WIFI router as possible.

**02 Install Tuya Smart**  
1. Search "Tuya Smart" APP on your Android phone in major application markets and click to download and install it.  
2. Search the "Tuya Smart" APP in the app store on your IPHONE and click to download and install it (wait for the download to complete and then open it)

**03 Register/Login**  
Please operate in order  
Register an account  
Enter registration account  
Enter registration password

**04 Add equipment**  
Click to Login  
Click + add device to enter the pairing state

**05 Set timing**  
Set timer  
Turn on it whenever you want

**06 Add delay**  
Delay can be set  
how long it takes to switch

**07 Tmall Genie process setting**  
Download "Tmall Genie APP" on your mobile phone (requires Tmall Genie device)  
Click to add device  
Enter WIFI password  
Network distribution successful  
After successful distribution  
Click Smart Home  
Click on Tuya Smart  
Log in to the account of Smart Life APP  
After the binding is successful, the socket can be controlled by voice

## ► Usage and precautions

1. The RS485 communication terminal of this product is a standard configuration. It can be connected to computers and various communication devices through an RS485 to USB converter to achieve information exchange and control.
2. The system default baud rate is 9600bps. You can connect it to the computer through an RS485 to USB converter to check and set the required baud rate.
3. For network GPRS version products, the SIM card must be inserted before use to realize Internet information exchange or remote control through GPRS.
4. This product must be installed and debugged by a professional electrician.
5. Products can be customized according to user needs, please contact relevant technical personnel for details

**RS485/WIFI**  
Communication method

**IOT Smart circuit breaker**  
GBT 16917 CQC1149



## GYRC-ZN05



Compact design high breaking capacity; remote automatic reclosing;



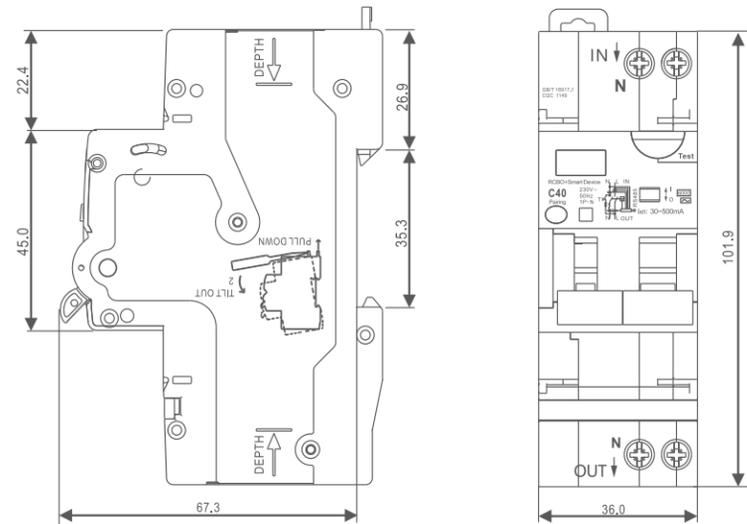
## ► Product model and definition

GYRC	ZN	05	—	40	AP	/	1P+N	/	20A	/	RS485
				Frame grade			Pole		Rated curren		Communication method
Product number	smart circuit breaker	Design Number	40A	AP: fully automatic reclosing; BZ: semi-automatic	1P+N	20 40A	RS485 WIFI				

## ► Main functions

Item	Product number
	GYRC-ZN05-40AP
Compliant with	GBT 16917 CQC1149
pole number	1P+N
Rated voltage	Single-phase AC230V 50Hz
Rated current	20A、40A(other specifications can be customized)
Trip type	C type (other specifications can be customized)
Short circuit breaking capacity	Icu=Ics=6KA
Mechanical life	more than 15000 times
Electrical life	more than 6000 times
Closing time	less than 1.2s
Opening time	less than 1.0s
Measuring accuracy	1.0
Leakage action value	30、50、100mA Optional

► **Product pictures and dimensions**



► **Main function**

NO.	Protection function	trip type	GYRC-ZN05-40AP		parameter settings	Settings	factory default	Remark
			1P	Trip				
1	Overvoltage protection	Turn off/alarm/trip	Trip	overvoltage adjustment	250-350V	280V		
				Overvoltage delay	0-10s	3s		
2	Under voltage protection	Turn off/alarm/trip	Alarm	Undervoltage adjustment	110-200V	165V		
				Under voltage delay	0-10s	3s		
3	Phase loss protection	Turn off/alarm/trip	---	Phase loss adjustment	10-100V	30V		
				Phase delay	0-10s	3s		
4	overload protection	Turn off/alarm/trip	Trip	Overload adjustment	0.6In-In	In		
				Phase delay	0-10s	3s		
5	High temperature protection	Turn off/alarm/trip	Alarm	high temperature adjustment	60-100°C	80°C		
				High temperature delay	0-10s	5s		
6	Early warning function	off/on	turn on	Warning ratio	90-100%	95%		
7	Alarm allowed	off/on	turn on	---	---	---		
8	Over power protection	off/on	Turn off	Overpower value	50-50KW	2KW		
				Over power delay	0-10s	5s		
9	Under power protection	off/on	Turn off	Under power value	50-50KW	2KW		
				Under power delay	0-10s	5s		
10	Timing control	Setting/off	Turn off	---	---	---		
11	Automatic reclosing	off/on	Turn off	---	---	---		
12	Leakage Protection	Turn off/alarm/trip	Trip	Leakage setting value	30-100mA	30mA		
				no driving time	-/0.06/0.1/0.2s	-	30/50/100	
13	mutation protection	Turn off/alarm/trip	Turn off	Leakage mutation value	30-100mA	30mA		
14	Manual and automatic controlltage		yes	---	----	---		
15	Mechanical inspection lock		yes	---	---	---		

► **Tuya Smart APP installation and product networking configuration**

**"Smart Home" mobile APP**  
Unlimited mobile signal coverage distance

**01 Wiring**  
Correctly connect the incoming line of the product to the power cord and power on. After 25 seconds, the product indicator will flash slowly and move as close to the WIFI router as possible.

**02 Install Tuya Smart**  
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2. Search the "Tuya Smart" APP in the app store on your iPhone and click to download and install it (wait for the download to complete and then open it)

**03 Register/Login**  
Please operate in order  
Register an account  
Enter registration account  
Enter registration password

**04 Add equipment**  
Click to Login  
Click + add device to enter the pairing state

**05 Set timing**  
Set timer  
Turn on it whenever you want

**06 Add delay**  
Delay can be set  
how long it takes to switch

**07 Tmall Genie process setting**  
Download "Tmall Genie APP" on your mobile phone (requires Tmall Genie device)  
Click to add device  
Follow the prompts to add Tmall Genie  
Enter WIFI password  
Network distribution successful  
After successful distribution  
Click Smart Home  
Click on Tuya Smart  
Log in to the account of Smart Life APP  
After the binding is successful, the socket can be controlled by voice

► **Typical application examples**



► **Usage and precautions**

1. The RS485 communication terminal of this product is a standard configuration. It can be connected to computers and various communication devices through an RS485 to USB converter to achieve information exchange and control.
2. The system default baud rate is 9600bps. You can connect it to the computer through an RS485 to USB converter to check and set the required baud rate.
3. For network GPRS version products, the SIM card must be inserted before use to realize Internet information exchange or remote control through GPRS.
4. This product must be installed and debugged by a professional electrician.
5. Products can be customized according to user needs, please contact relevant technical personnel for details.

# Home AC Contactors

## GYHC



GYHC series analog-digital AC contactors adopt a new technology platform and apply automated production and testing equipment to create high-end contactors with super quiet and long life. Transparent clamshell design, high-end material selection, RoHS standard, visual window, and rich models and specifications.

	GYHC-16A/20A/25A		GYHC-32A/40A/63A	
	2P	4P	2P	4P
W	18	36	36	54
D	68	68	68	68
H	81	81	85	85

### Product model and definition

GYHC	16	10	AC230
	Rated Current	Contactor Type	Control Voltage
Product model	16A/20A/25A 32A/40A/63A	1P 10:1NO/01:1NC 2P 20:2NO/11:1NO+1NC/02:2NC 3P 30:3NO/03:3NC 4P 40:4NO/31:3NO+1NC/22:2NO+2NC/04:4NC	AC24V/AC48V/AC110V AC230V/DC12V/DC24V

### Technical Specification

GYHC	
Rated operational voltage(Ue)	1P/2P:250V AC 3P/4P:400V AC
Frequency	50Hz
Electrical durability	100000 times
Maximu number of switching operation a day	100 times
Rated insulation voltage (Ui)	500V AC
Pollution class	2
Rated impulse withstand voltage (Uimp)	4kV
Protection Grade(IEC/EN 60529)	Contactor only: IP20; Contactor in modular enclosure: IP40
Operating temperature	-5°C~+60°C
Storage Temperature	-40°C~+70°C
Tropicalization(IEC/EN 60068-1)	Treatment 2 (relative humidity 95% at 55°C)
Certification	CCC/CE
ELSV compliance (extra low safety voltage) for 12/24/48V AC versions	
The product control conforms to the SELV(safety extra low voltage)requirments	
In the case of contactor mounting in a enclosure for which the interior temperature is in range between 50°C and 60°C. It is necessary to use a spacer between each contactor.	



### Technical Parameters

Tape	Rated current (In)		Control voltage(V)	Contact	Width (A multiple of 9mm)
	AC-7a	AC-7b			
1P A1 1 A1 R1 A2 2 A2 R2	16A	6A	AC(50/60Hz): 24V/48V /110V/230V DC:12V/24V	1NO 1NC	2
	20A	7A			
	25A	9A			
2P A1 1 3 A1 R1 1 A1 R1 1 A2 2 4 A2 R2 2 A2 R2 2	16A	6A		2NO 2NC 1NO1NC	2
	20A	7A			
	25A	9A			
	32A	12A			
	40A	15A		4	
3P A1 1 3 5 A1 R1 R3 R5 A2 2 4 6 A2 R2 R4 R6	16A	6A		3NO 3NC	2
	20A	7A			
	25A	9A		4	
	32A	12A			
	40A	15A			
4P A1 1 3 5 7 A1 R1 R3 R5 R7 A2 2 4 6 8 A2 R2 R4 R6 R8 A1 1 3 5 R1 A1 R1 1 3 R5 A2 2 4 6 R2 A2 R2 2 4 R6	16A	6A	4NO 4NC	2	
	20A	7A			
	25A	9A	2NO2NC 3NO1NC	4	
	32A	12A			
	40A	15A			
	63A	20A			

### Power Consumption

Type	Rated Current (In)		Control voltage (V AC)	Power Consumption		Max. Power	
	AC-7a	AC-7b		Holding	Actuation		
1P	25A	9A	230...240	2.7VA	9.2VA	1.2W	
2P	16A	6A	230...240	2.7VA	9.2VA	1.2W	
			230...240	2.7VA	9.2VA	1.2W	
	20A	7A	230...240	2.7VA	9.2VA	1.2W	
			24	3.8VA	15VA	1.3W	
			230...240	2.7VA	9.2VA	1.2W	
	3P	32A	12A	230...240	4.6VA	34VA	1.6W
				230...240	4.6VA	34VA	1.6W
40A		15A	230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
4P	16A	6A	230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
	20A	7A	230...240	4.6VA	34VA	1.6W	
			24	4.6VA	34VA	1.6W	
			220...240	4.6VA	34VA	1.6W	
	32A	12A	230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	
			230...240	4.6VA	34VA	1.6W	



AC Contactors

GLC1



With the new generation of technical platform and automatic production and testing equipment, the new GLC1 AC contact fits the customer application needs which is in a good quality.

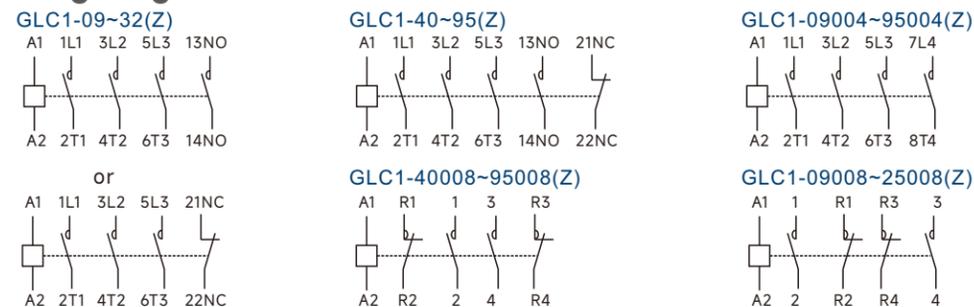
Product model and definition

GLC1	16	10	B	Z
Rated Current				
Contactor Type				
Control Voltage				
Product model	09A/12A/18A/25A/ 32A/40A/50A/ 65A/80A/95A	10:1NO, 01:1NC, 11:1NO1NC 004:Main contact 4NO (except 18A and 32A) 008:Main contact 2NO+2NC (except 18A and 32A)	B:24V C:36V F:110V M:220V Q:380V	DC Control Circuit

Technical Specification

GLC1	
GLC1 AC Contactor	9-95A, totally 10 current specifications
Accessories	FG1 dust cover, F1 top auxiliary contact, FCI side auxiliary contact, FJ1 mechanical interlock, FY1 air delayed head, FR1 surge suppressor
Certification	CCC/CE
Standards	Standards: IEC 60947-1 general provisions and IEC 60947-4-1 contactors
Installation position	The installation site shall be vertical, and inclination at all directions shall not exceed ±22.5°; installation class II.
Pollution class	Class 3
Ambient temperature	In normal operation, the ambient temperature range is between -5°C and +40°C, but average value in 24h is no more than +35°C; Storage temperature: -25°C~ +55°C, a short time (24h) is allowed with maximum +70°C.
Altitude	Altitude at normal installation position does not exceed 2000m.
Humidity	The atmospheric relative humidity does not exceed 50% when the highest ambient temperature is +40°C, it is allowed to have a relative higher humidity under lower temperature e.g. up to 90% at +20°C. For occasional dew due to the temperature change, preventive measures shall be taken.
Protection grade	IP20

Wiring Diagram



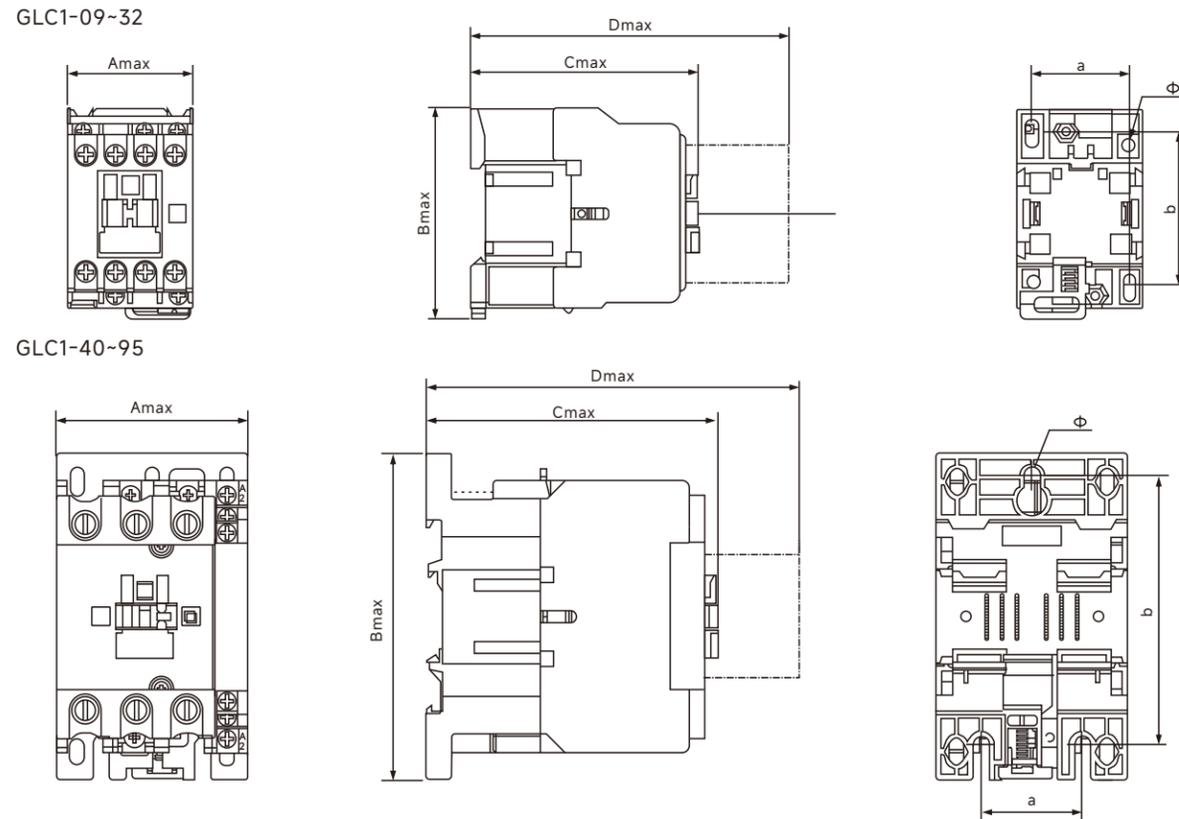
Technical Specification

Main circuit characteristics	Contactor Model	GLC1-09 (09Z)	GLC1-12 (12Z)	GLC1-18 (18Z)	GLC1-25 (25Z)	GLC1-32 (32Z)	GLC1-40 (40Z)	GLC1-50 (50Z)	GLC1-65 (65Z)	GLC1-80 (80Z)	GLC1-95 (95Z)
Rated insulation voltage (Ui)		690									
Conventional thermal current (Ith)		20	20	32	40	50	60	80	80	100	100
Rated operating current (Ie)	380V, AC-3	9	12	18	25	32	40	50	65	80	95
	380V, AC-4	3.5	5	7.7	8.5	12	18.5	24	28	37	44
	660V, AC-3	6.6	8.9	10.6	18	21	34	39	42	49	49
Rated operating power (Pe)	660V, AC-4	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
	380V, AC-3	4	5.5	7.5	11	15	18.5	22	30	37	45
	380V, AC-4	1.5	2.2	3	4	5	7.5	11	15	18.5	22
Rated operating power (Pe)	660V, AC-3	5.5	7.5	9	15	18.5	30	33	37	45	45
	660V, AC-4	1.1	1.5	1.7	4	5.5	7.5	11	11	15	18.5
Mechanical durability	10000 times	1200			1000			900			650
Electrical durability	10000 times	AC-3			110			90			65
		AC-4			22			17			11
Operation frequency	Times/hour	AC-3			1200			600			
		AC-4			300			300			

Main technical parameters

Contactor Model	GLC1-09 (09Z)	GLC1-12 (12Z)	GLC1-18 (18Z)	GLC1-25 (25Z)	GLC1-32 (32Z)	GLC1-40 (40Z)	GLC1-50 (50Z)	GLC1-65 (65Z)	GLC1-80 (80Z)	GLC1-95 (95Z)
Main circuit terminal wiring capability (mm²)										
Soft wire	1 wire	1...4	1...6	1.5...10	2.5...10	2.5...25	4...50			
Without terminal	2 wire	1...4	1...6	1.5...6	2.5...10	2.5...16	2.5...35			
Soft wire	1 wire	1...2.5	1...4	1...4	2.5...16	2.5...16	4...50			
With terminal	2 wire	1...2.5	1...4	1...4	2.5...10	2.5...16	2.5...25			
Hard wire	1 wire	1...4	1.5...6	1.5...6	2.5...10	2.5...25	4...50			
Without terminal	2 wire	1...4	1.5...6	1.5...6	2.5...10	-	-			
Coil										
Rated control circuit voltage (Us)	AC 50/60Hz	24V/36V/110V/220V/380V								
	DC V	24V/110V/220V								
Allowable control circuit voltage (Us)	Operation V	85%~110%Us								
	Drop-out V	AC 20%~70% Us / DC 10%~70% Us								
Coil power	Actuation VA	70			110		200			
	Holding VA	<9		<9.5	<14	<36.6				
	Heat dissipation W	1.8~2.7			3~4		6~10			
Auxiliary contact										
Contact specification	10/01					11				
Conventional thermal current (Ith)	10									
Rated control circuit voltage (Ue)	AC V	380								
	DC V	220								
Rated control capacity	AC-15 VA	360								
	DC-13 W	33								
Certification CCC/CE										
Coil voltage code & coil frequency code										
Coil Voltage Us(V)	24	36	110	220	380					
AC (50/60Hz)	B5	C5	F5	M5	Q5					
DC	BD	-	FD	MD	-					

► **Outline Overall And Installing Dimensions**



Model(mm)	Amax	Bmax	Cmax	Dmax	a	b	φ
GLC1-09/12	47	76	86	124.5	35±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-09/12Z	47	76	116	154.5	35±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-18	47	76	91	129.5	35±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-18Z	47	76	122	160.5	35±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-25	58	86	98	136.5	40±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-25Z	58	86	131	169.5	40±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-32	58	86	102	140.5	40±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-32Z	58	86	138	176.5	40±0.5	50±0.5/60±0.6	4.5 <sup>+0.48</sup> <sub>0</sub>
GLC1-40/50/65	79	128	119	157.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-40Z/50Z/65Z	79	128	172	210.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-40004/50004/65004	86	128	116	154.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-40004Z/50004Z/65004Z	86	128	172	210.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-40008/50008/65008	86	128	127	154.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-40008Z/50008Z/65008Z	86	128	183	210.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80/95	87	128	127	165.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80Z/95Z	87	128	183	221.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80004/95004	98	128	124	162.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80004Z/95004Z	98	128	180	218.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80008/95008	98	128	136	162.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>
GLC1-80008Z/95008Z	98	128	192	218.5	40±0.5	100±0.7/110±0.7	6.5 <sup>+0.58</sup> <sub>0</sub>

► **Motor power Pe**

Motor power	Rated current Ie(A)	Auxiliary Contact		Reference
		NO	NC	
4	9	1	-	GLC10910
		-	1	GLC10901
		4	-	GLC109004
		2	2	GLC109008
5.5	12	1	-	GLC11210
		-	1	GLC11201
		4	-	GLC112004
		2	2	GLC112008
7.5	18	1	-	GLC11810
		-	1	GLC11801
11	25	1	-	GLC12510
		-	1	GLC12501
		4	-	GLC125004
		2	2	GLC125008
15	32	1	-	GLC13210
		-	1	GLC13201
18.5	40	1	1	GLC14011
		4	-	GLC140004
		2	2	GLC140008
22	50	1	1	GLC15011
		4	-	GLC150004
		2	2	GLC150008
30	65	1	1	GLC16511
		4	-	GLC165004
		2	2	GLC165008
37	80	1	1	GLC18011
		4	-	GLC180004
		2	2	GLC180008
45	95	1	1	GLC19511
		4	-	GLC195004
		2	2	GLC195008

Note: The number of poles is not reflected in the model, 3-pole contactor represents the auxiliary contacts of 10, 01,11,4-pole contactor represents 004 or 08.Only\* means coil voltage code + frequency code. If the contactor of DC control circuit voltage needs to be purchased, order code increases Z, such as GLC1 0910Z\*

**Contactor**

**GYC1**



In circuit of Ac 50/60Hz, voltage up to 1000V, current up to 600A, controlling motors of different types.

Control resistance, inductive, capacitive loads: heating, lighting, power compensation and transformer

Control distribution circuit, industrial distribution, green energy distribution.

For harsh environment and frequent operations, quick operating coils are recommend.

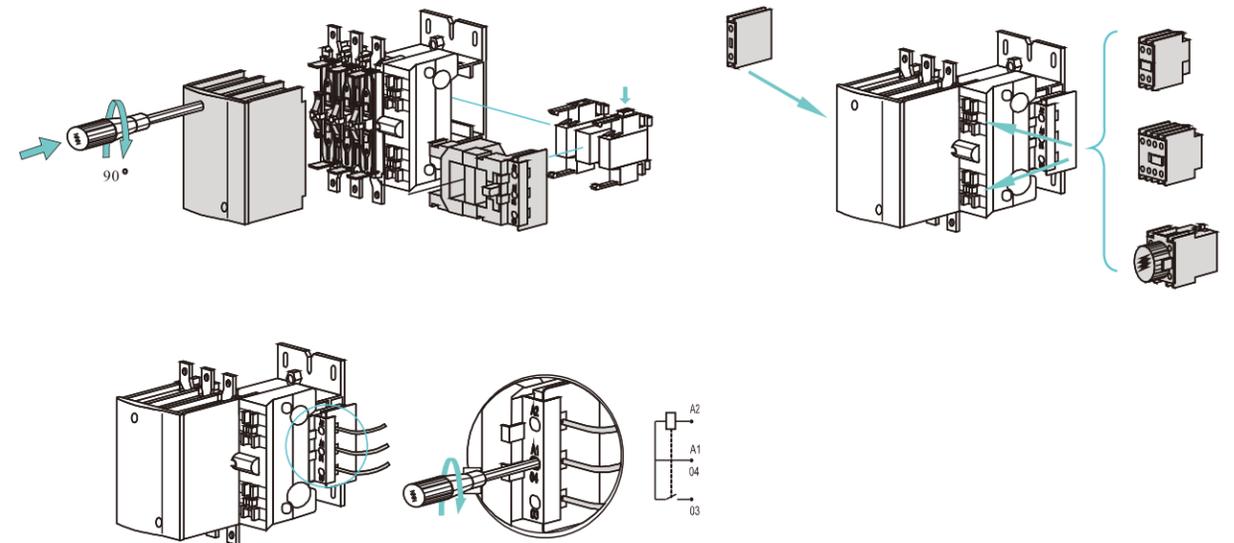
**Technical Specification**

Contactors		GYC1 115	GYC1 150	GYC1 185	GYC1 225	GYC1 265	GYC1 330	GYC1 400	GYC1 500	GYC1 630	GYC1 780	GYC1 800
Rated operational current A	le max AC-3(Ue≤440V)	115	150	185	225	265	330	400	500	630	780	800
	le max AC-1(θ≤40°C)	200	250	275	315	350	400	500	700	1000	1600	1000
Rated operational voltage V	max	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Number of contacts(N/O)		3 or 4	3 or 4	3 or 4	3 or 4	3 or 4	2、3or4	2、3or4	2、3or4	2、3or4	2、3or4	3
Rated operational power KW AC-3 3、4poles	220/240V	30	40	55	63	75	100	129	147	200	220	220
	380/400V	55	75	90	100	132	160	200	250	335	400	400
	415V	59	80	100	110	140	180	220	280	375	425	425
	440V	59	80	100	110	140	180	220	280	375	425	425
	500V	75	90	110	129	160	200	257	335	400	450	450
	660/690V	80	100	120	129	180	220	280	335	450	475	475
1000V	65	65	100	140	147	160	185	335	450	450	450	
(SCPD) Short-circuit protection by fuse	Model	RT16-1	RT16-1	RT16-2	RT16-2	RT16-2	RT16-3	RT16-3	RT16-3	RT16-3	RT16-5	RT16-4
	Rated current	200	250	315	315	400	500	500	500	630	1600	800
Optional parts		Auxiliary contact blocks: ZTCF3						Air time delay auxiliary contacts: ZTCST、ZTCRS、ZTCSS				
Weight (Kg)		3.6	3.7	4.6	4.7	7.1	8.5	8.5	10.8	17.4	40.0	19.0
Product No.	3 pole	0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010
	4 pole		0012	0013	0014	0015	0016	0017	0018	0019	0020	0021
	2 pole						0025	0026	0027	0028	0029	

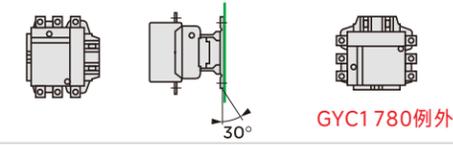
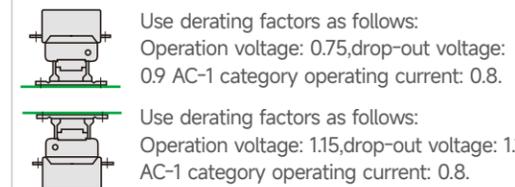
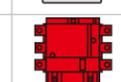
**Main technical parameters**

Contactors		GYC1 115	GYC1 150	GYC1 185	GYC1 225	GYC1 265	GYC1 330	GYC1 400	GYC1 500	GYC1 630	GYC1 780	GYC1 800	
Number of Poles		3/4or4	3/4or4	3/4or4	3/4or4	3 4/3 4	2 3 4/2 3 4	2 3 4/2 3 4	2 3 4/2 3 4	2 3 4/2 3 4	2 3 4/2 3 4	3	
Rated operational current (Ue≤400V)	In AC-3,θ≤55°C	A 115	150	185	225	265	330	400	500	630	780	800	
	In AC-1,θ≤40°C	A 200	250	275	315	350	400	500	700	800	1600	1000	
Rated operational voltage (Ue)	Max.	V 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Frequency limits	Frequency under operating current	Hz	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	16 <sup>2/3</sup>	
			...200	...200	...200	...200	...200	...200	...200	...200	...200	...200	
Conventional thermal current	θ≤40°C	A 200	250	275	315	350	400	500	700	900	1600	1000	
Making capacity	GB14048.4	A	Making current 10Xle(AC-3) or 12Xle(AC-4)										
Breaking capacity I rms	GB14048.4	A	Making and breaking current 8Xle(AC-3) or 10Xle(AC-4)										
Short time rating From cold state, no current in previous 60 minsθ≤40°C	10s	A 1100	1200	1500	1800	2200	2650	3600	4200	5050	6250	5500	
	30s	A 640	700	920	1000	1230	1800	2400	3200	4400	5600	4600	
	1min	A 520	600	740	850	950	1300	1700	2400	3400	4600	3600	
	3min	A 400	450	500	560	620	900	1200	1500	2200	3000	2600	
	10min	A 320	350	400	440	480	750	1000	1200	1600	22200	1700	
Average impedance per pole	lth 50Hz	mΩ 0.37	0.35	0.33	0.32	0.3	0.28	0.26	0.18	0.12	0.10	0.12	
Power dissipation per pole for the above operational currents	AC-3	W 5	8	12	16	21	30	42	45	48	60	77	
	AC-1	W 15	22	25	32	37	45	65	88	77	250	120	
Cablingθ≤55°C	The maximum cross-sectional area number of cables dimension of cables	mm <sup>2</sup>	2	2	2	2	2	2	2	2	2	2	
			20x3	25x3	25x3	32x3	32x4	30x5	30x5	40x5	60x5	100x5	60x5
		Cable with tabs	mm <sup>2</sup> 95	120	150	185	240	240	2*150	2*240	-	-	-
		Cables with connectors	mm <sup>2</sup> 95	120	150	185	240	-	-	-	-	-	-
Tightening torque	Cable connetion	N.m	10	18	18	35	35	35	35	58	58	58	

**Scheme**



► **Characteristic**

Contactors			GYC1 115	GYC1 150	GYC1 185	GYC1 225
Environment	Conforming to standards IEC60947					
Rated insulation voltage (Ui)		V	1000	1000	1000	1000
Rated impulse withstand voltage (Uimp)		KV	8	8	8	8
Rated operational voltage (Ue) max		V	1000	1000	1000	1000
Operational current frequency range		Hz	25-400			
Conforming to standards			IEC60947, GB14048, EN60947			
Ambient air temperature	Storage	°C	-60...+80			
	Operatio	°C	-5...+55			
	Permissible for operation	°C	-40...+70			
Maximum operating altitude		m	2000			
	Operating altitude allowed	m	3000			
Humidity			Maximum relative humidity less than 50% below 40°C, Maximum relative humidity less than 90% below 20°C			
Impact resistance capability 1/2 sine wave = 11ms	Contactor opens		9gn	9gn	9gn	9gn
	Contactor closes		15gn	15gn	15gn	15gn
Seismic performance	Contactor opens		2gn	2gn	2gn	2gn
	Contactor closes		4gn	4gn	4gn	4gn
Anti-seismic performance			Pollution degree III			
Degree of protection	Main circuit		Avoid direct contact with the finger (terminal protection cap)			
	Coil terminals		Avoid direct contact with the finger			
Mounting method	Without deratin					
	With derating		 <p>Use derating factors as follows: Operation voltage: 0.75, drop-out voltage: 0.9 AC-1 category operating current: 0.8.</p> <p>Use derating factors as follows: Operation voltage: 1.15, drop-out voltage: 1.1 AC-1 category operating current: 0.8.</p>			
	Forbidden					
Operating frequency	AC-1,AC-2,AC-3	Cycles/h	1200	1200	1200	1200
	AC-4	Cycles/h	300	300	300	300
Control circuit characteristics Rated control voltage (Uc)	50/60Hz	V	Please specify control voltage when placing orders, default voltage is 220V.			
Control voltage limits (AC) (θ≤55°C)	Operation voltage	V	0.85-1.1Uc			
	Drop-out voltage (AC)	V	0.2-0.75Uc			
	Drop-out voltage (DC)	V	0.1-0.75Uc			
Average power 50Hz	Inrush (AC)	VA	550	550	810	810
	Sealed (DC)	VA	45	45	55	55
	Inrush (DC)	VA	550	550	740	740
	Sealed (AC)	VA	4	4	4.2	4.2

GYC1 265	GYC1 330	GYC1 400	GYC1 630	GYC1 330	GYC1 400	GYC1 630
1000	1000	1000	1000	1000	1000	1000
8	8	8	8	8	8	8
1000	1000	1000	1000	1000	1000	1000
9gn						
15gn						
2gn						
4gn						
1200	600	600	600	600	600	600
300	300	300	300	300	300	300
1200	600	1000	1050	1500	1900	1600
85	10	12	16	20	45	22
660	660	920	1000	1420	1960	1450
3.7	3.7	4	4.5	6.5	42	7



Mini Contactor

GYC1M



Small volume, large capacity, high aesthetic value  
High reliability, tested according to vibration resistance standards  
Electrical performance, brass static plates and coil connectors  
Complete accessories and convenient selection

Product model and definition

GY	C	1	-	06	M	10	Z	N	24V	50
Enterprise code	AC contactor	Design serial number	Contact type: 10: 1NO 01: 1NC 03: Main contact 3NC 04: Main contact 4NO 08: Main contact 2NO+2NC	Mini	Rated current: 06A/09A/ 12A/16A	Z: DC	Interlocking reversible products Omit not written, single product Omitting: Communication	Coil voltage: AC: 24V/36V/48V/ 110V/125V/220V/ 380V/400V/415V DC: 12V/24V/36V/ 48V/110V/127V/ 220V/240	Frequency: 50Hz, 50/60Hz	

Product features

- AC contactor: 6-16A, with a total of 4 current specifications
- Certification: CCC, CQC, CE, CB
- Attachment: LA-KN Top Auxiliary Contact and Chain
- Compliant with standards: IEC60947-160947-4-1, GB14048.4, GB14048.1

Capacity reduction coefficient for high-altitude environments				Temperature reduction coefficient in abnormal working environment				
Altitude (m)	2000	3000	4000	Environmental temperature (°C)	40	50	60	70
Rated operating voltage Ui	1	0.9	0.8	correction factor	1	0.875	0.75	0.625
Rated operating current Ie	1	0.92	0.9					

Main circuit wiring/Control circuit connection

Flexible wire without wiring terminals		mm <sup>2</sup>	1x0.75-2x4
Flexible wire with wiring terminals		mm <sup>2</sup>	1x0.34-1x1.5+1x2.5
Hard wire without wiring terminals		mm <sup>2</sup>	1x1.5-2x4
Tool	Cross screwdriver		Ph2
	Flat headed screwdriver		Ø6
Tightening torque		N.m	1.2

Product features

Contactor model			GYC1-06M	GYC1-09M	GYC1-12M	GYC1-16M
Number of poles			3P/4P	3P/4P	3P/4P	3P/4P
Rated working current (Ie) AC-3	220/230V	A	6	9	12	16
	380/400V	A	6	9	12	16
	660/690V	A	3.8	4.9	4.9	4.9
Rated working current (Ie) AC-4	220/230V	A	2.6	3.5	5	5
	380/400V	A	2.6	3.5	5	5
	660/690V	A	1	1.5	2	2
Rated working voltage (Ue)		V	220V/230V、380V/400V、660V/690V			
Rated working power (Pe) AC-3	220/230V	kW	1.5	2.2	3	4
	380/400V	kW	2.2	4	5.5	7.5
	660/690V	kW	3	4	4	4
Rated working power (Pe) AC-4	220/230V	kW	0.55	0.75	1.1	1.1
	380/400V	kW	1.1	1.5	2.2	2.2
	660/690V	kW	0.75	1.1	1.5	1.5
Agreed heating current (Ith)	θ≤40°C	A	20			
Rated making capacity (380V)	Complies with IEC60947		10xle (AC-3 usage category); 12xle (AC-4 usage category)			
Rated breaking capacity (380V)	GB14048 standard		8x Ie (AC-3 usage category); 10xle (AC-4 usage category)			
Short time withstand current	10s	A	80	80	100	100
Short circuit protection	No thermal overload relay fuse gG		25			
Electrical lifespan (380V)	AC-3	10000 times	120			
	AC-4	10000 times	2			
Built in auxiliary contact module			The contactor is equipped with one normally open or normally closed contact			
Current suppressor module			Can be equipped with built-in resistance and capacitance circuits			
Applicable manual overload relay		A	0.11-16			

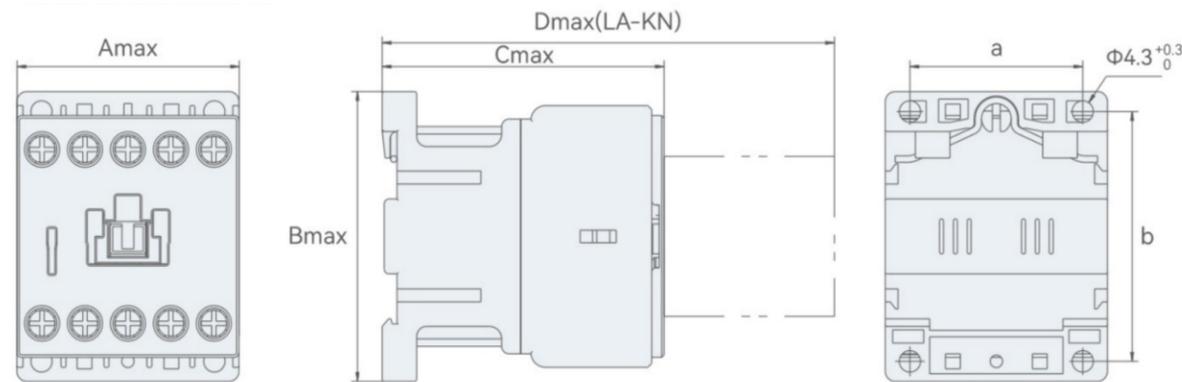
Work Environment

Rated insulation voltage (Ui)			690
Rated impulse withstand voltage (Uimp)			6
Pollution level			2
Compliant with standards			IEC 60947-1, 60947-4-1, GB14048.4, GB14048.1
Product certificate			CCC、CQC、CE、CB
Protection level			Ip20
Ambient temperature	Storage	°C	-50~+80
	Work	°C	-40~+70
	Allow to work under Us	°C	-40~+70
Vibration resistance	Contactor disconnected		8gn
	Contactor closed		10gn
Maximum working altitude	No capacity reduction	m	2000
Work location Installation category is Class III	No capacity reduction		Allow for a 22.5° angle with the normal vertical installation surface
Flame retardant performance	Complies with IEC60695-2-1 standard	°C	V0 rating for shell and base

► **Characteristics of AC control circuit**

Rated control circuit voltage (Us)	50Hz、50/60Hz	V	AC24V、AC36V、AC48V、AC110V、AC127V、AC220V、AC380V、AC400V、AC415
	DC	V	VDC12V、DC24V、DC36V、DC48V、DC110V、DC125V、DC220V、DC240V
Rated control limit	Suction	V	85%~110%Us
	release	V	AC 20%~70%Us;DC10%~70%Us
Average power consumption	start	VA	40
	release	VA	7
	Average power consumption	W	3~4
Heat loss		W	1.3
Action time	Close "C"	ms	5~15
	Open "O"	ms	10~20
Mechanical lifespan	10000 times		1200
Maximum operating frequency	Number of operations per hour (≤40°C)		3600

► **Appearance and installation dimensions**



GYC1M-16M外形及安装尺寸(mm)

Model specifications	Amax	Bmax	Cmax	Dmax	a	b
06M~16M	45.5	58.5	57.5	92	35	50
06MZ~16MZ	45.5	58.5	70	104	35	50

**DC Fuse Holder**

**GYPV-1038**



DC fuse holder is a device used to fix and protect DC fuses, which helps to ensure the safe operation of the circuit. The fuse holder is usually installed at the inlet and outlet or branch of the circuit. When the current in the circuit exceeds the rated current of the fuse holder, the fuse will melt to cut off the circuit, thus avoiding fire accidents and equipment damage caused by overload or short circuit. In low-voltage power systems, fuse holders can also serve as sensors for leakage protectors.



► **Function and performance parameters**

Model	GYPV-1038
Executive standards	IEC60947-3、GB/T14048.3
Usage category	DC-20B

installation environment	
Molten core specification	10*38mm <IEC/EN60269-6 >
Installation method	DIN rail <IEC/EN60715>
Working temperature range	-20 °C to +70 °C
Pollution level	3
Relative humidity	+20 °C ≤ 95%, +40 °C ≤ 50%
Installation level	III

Electrical characteristics	
Rated voltage	1000V.DC
Rated current	32A max
Maximum power consumption	6W

Connection and installation	
Connection and installation wire	1.5-10mm <sup>2</sup>
Terminal screw	M5
Torque	≥3Nm
Protection level	IP20

► **Product structural parameters**

Shell material	PBT plastic
Metal material	Purple copper T1 (silver plated)
External dimensions <L * W * H>	89mm * 18mm * 68mm
Trademark and font craftsmanship	Laser marking
colour	Grey white/Grey black
Net weight	61g/62g (with lamp)

► **Packaging parameters**

Packaging data	Size<cm>	Packing quantity<Pcs>	Gross weight GW<Kg>	Remarks
Middle box	18.7*9.1*7.4	10	0.64/0.65 (with lights)	Neutral+Mark
Outer box	39*39*20	200	13.36/13.56 (with lights)	Neutral+Mark

# Molded Case Circuit Breaker



## GYCM8



- Low temperature rise
- Small volume
- Integrated
- Adopting a multi blade design
- Equipped with thermal magnetic protection function

### Product model and definition

GYCM8 -	160	M	P1	/
Product code	Optional code for shell level current:	Short circuit breaking capacity optional code:	Optional operation code:	
Moulded case circuit breaker	125 160 250 400 630 800 1250 2000	C: Basic type S: Standard type M: Higher breaking type H: High breaking type  Note: 400、630、800、1250、2000A only available for M and H types	No code: direct operation P1: DC3 electric operation P2: DC6 series electric operation ZY1: Rotating handle (manual center type - circular handle) ZF1: Rotating handle (manual center type - square handle) ZY2: Rotating handle (hand operated eccentric circular handle) ZF2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)	
4	3	00	2	2
Pole number :	Optional code for release method:	Internal accessory optional code:	Usage code:	Quadrupole product optional code:
1 : 1pole 2 : 2pole 3 : 3pole 4 : 4pole	2: Only electromagnetic release 3: Thermal+electromagnetic release		No code: for distribution protection 2: For motor protection	A: The N-pole is not equipped with an overcurrent release, and the N-pole is always connected B: The N-pole is not equipped with an overcurrent release, and the N-pole is opened and closed together with the other three poles C: Install an overcurrent release on the N-pole, and the N-pole will be combined and disconnected with the other three poles D: Install an overcurrent release on the N-pole and ensure that the N-pole is always connected

1	/ P	Z	In=100A
Additional function code:	Optional installation and wiring method code:	Protective accessory code:	Rated current:
No code: regular product V: Low temperature upgrade 50K VI: Low temperature upgrade 40K	No code: Board front wiring (fixed type) P: Connection bar (extended copper bar) Z1: Rear board wiring (fixed type) Z2Q: Plug in front wiring (split type) Z2H: Plug in board rear wiring (split type) Z3Q: Plug in front wiring (integrated) Z3H: Plug in board rear wiring (integrated) DF: withdrawable front panel wiring DR: Pull out board rear wiring K: Wiring box type JK: Incoming end only: Wiring box type CK: Outgoing terminal only: Wiring box type	No code: regular product Z: Terminal cover  Note:The terminal cover only has three poles; 400, 630 points narrow length, wide length, default to wide length; 125, 2000, currently unavailable	125: 10A、16A、20A、25A、32A、40A、50A、63A、80A、100A、125A 160: 16A、20A、25A、32A、40A、50A、63A、80A、100A、125A、160A 250: 100A、125A、160A、180A、200A、225A、250A 400: 250A、315A、350A、400A 630: 400A、500A、630A 800: 500A、630A、700A、800A 1250: 800A、1000A、1250A 2000 : 1000A、1250A、1500A、2000A

### External attachments

Molded case circuit breaker:	GYCM8-125				GYCM8-160			GYCM8-250		GYCM8-400	
Number of poles	1P	2P	3P	4P	2P	3P	4P	3P	4P	3P	4P
GYCM8 External Accessories:											
Electric operation	-	-	■	■	-	■	■	■	■	■	■
Hand operation	-	-	■	■	-	■	■	■	■	■	■
Expansion copper bar	■	■	■	■	■	■	■	■	■	■	■
Mechanical interlocking	-	-	■	■	-	■	■	■	■	■	■
Insert type front split type	-	-	■	■	-	■	■	■	■	■	■
Insert type front integrated panel	-	-	■	■	-	■	■	■	■	■	■
Insert type front fixed type	-	-	■	■	-	■	■	■	■	■	■
Insert type rear split type	-	-	■	■	-	■	■	■	■	■	■
Insert type rear integrated board	-	-	■	■	-	■	■	■	■	■	■
Insert type rear fixed type	-	-	■	■	-	■	■	■	■	■	■
After the pull-out board	-	-	-	-	-	-	-	-	-	■	-

Molded case circuit breaker:	GYCM8-630		GYCM8-800		GYCM8-1250		GYCM8-2000	
Number of poles	3P	4P	3P	4P	3P	4P	3P	4P
GYCM8 External Accessories:								
Electric operation	■	■	■	■	■	■	■	■
Hand operation	■	■	■	■	■	■	■	■
Expansion copper bar	■	■	■	■	■	■	■	■
Mechanical interlocking	■	■	■	■	-	-	-	-
Insert type front split type	■	■	■	■	-	-	-	-
Insert type front integrated panel	■	■	■	■	-	-	-	-
Insert type front fixed type	■	■	■	■	-	-	-	-
Insert type rear split type	■	■	■	■	-	-	-	-
Insert type rear integrated board	■	■	■	■	-	-	-	-
Insert type rear fixed type	■	■	■	■	-	-	-	-
After the pull-out board	■	-	■	-	-	-	-	-

► Main performance indicators

Molded case circuit breaker	GYCM8-125				GYCM8-160				
Shell level current In:	10A、16A、20A、25A、32A、40A、50A、63A、80A、100A、125A				10A、16A、20A、25A、32A、40A、50A、63A、80A、100A、125A、140A、160A				
Short circuit breaking capacity code:	C	S	M	H	C	S	M	H	
Number of poles:	1P; 2P; 3P; 4P				2P (无M/H); 3P; 4P				
Rated working voltage Ue (V), AC:	AC230V AC400V AC690V	AC230V AC400V AC690V	AC230V(1P); AC400V(2P/3P/4P)	AC230V(1P); AC400V(2P/3P/4P)	AC230V AC400V AC690V	AC230V; AC400V; AC690V	AC230V AC400V AC690V	AC230V AC400V AC690V	
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC230V:	5kA	15kA	35kA (3P/4P)	50kA	7kA	10kA	25kA	35kA
	AC400V:	5kA	13kA(3P/4P)	18kA(2P/3P/4P)	50kA	10kA	13kA;	18kA	35kA (2P) 50kA (3P/4P)
	AC690V:	3kA	3kA(3P/4P)	5kA(3P/4P)	8kA	2kA	3kA	5kA	10kA
Rated ultimate short-circuit segmentation capacity Icu (kA) :	AC230V:	8kA	30kA	36kA (1P) 50kA (3P/4P)	50kA	10kA	20kA	30kA	50kA
	AC400V:	8kA	25kA(3P/4P)	36kA(2P/3P/4P)	50kA	15kA	25kA	36kA	50kA
	AC690V:	5kA	6kA(3P/4P)	10kA(3P/4P)	15kA	8kA	6kA	10kA	15kA
Selective categories:	Class A								
Type of overcurrent release:	Thermomagnetic type								
GYCM8 External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8-125				GYCM8-160			
	poles Number	1P	2P	3P	4P	2P	3P	4P	
	wide	25	50	75	100	60	90	120	
	length	130	130	130	130	155	155	155	
	height/Face cover	68	68	68	68	68/82	68/82	68/82	
height/Handle	94.5	94.5	94.5	94.5	94/108	94/108	94/108		

Note: The height from the bottom of the base to the (cover/handle)

► Main performance indicators

Molded case circuit breaker	GYCM8-250				GYCM8-400			GYCM8-630		
Shell level current In:	100A,125A,140A,160A,180A,200A,225A,250A				250A、315A、350A、400A			500A、630A		
Short circuit breaking capacity code:	C	S	M	H	S	M	H	M	H	
Number of poles:	3P; 4P				3P; 4P			3P; 4P		
Rated working voltage Ue (V), AC:	AC230V AC400V AC690V	AC230V; AC400V; AC690V	AC230V AC400V AC690V							
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC230V:	20kA	25kA	40kA	50kA	25kA	40kA	50kA	20kA	30kA
	AC400V:	10kA	15kA	35kA	50kA	15kA	35kA	65kA	35kA	65kA
	AC690V:	3kA	4kA	10kA	15kA	4kA	10kA	12kA	5kA	30kA
Rated ultimate short-circuit segmentation capacity Icu (kA) :	AC230V:	30kA	50kA	65kA	70kA	50kA	65kA	70kA	30kA	50kA
	AC400V:	15kA	30kA	50kA	65kA	30kA	50kA	65kA	50kA	65kA
	AC690V:	5kA	8kA	15kA	20kA	8kA	20kA	25kA	10kA	20kA
Selective categories:	Class A									
Type of overcurrent release:	Thermomagnetic type									
GYCM8 External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8-250				GYCM8-400			GYCM8-630	
	poles Number	3P	4P	3P	4P	3P	4P	3P	4P	
	wide	105	140	140	184	140	184	140	184	
	length	165	165	257	257	257	257	257	257	
	height/Face cover	68	88	68	88	103	103	103	103	
height/Handle	96	116	96	116	152	152	152	152		

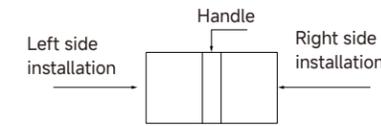
Note: The height from the bottom of the base to the (cover/handle)

► **Main performance indicators**

Molded case circuit breaker	GYCM8-800		GYCM8-1250		GYCM8-2000			
Shell level current In:	500A、630A、700A、800A		630A、700A、800A、1000A、1250A		1000A、1250A、1600A、2000A			
Short circuit breaking capacity code:	M	H	S	M	H	M	H	
Number of poles:	3P; 4P		3P; 4P		3P; 4P			
Rated working voltage Ue (V), AC:	AC230V AC400V AC690V	AC230V AC400V AC690V	AC240V; AC400V; C690V	AC230V AC400V AC690V	AC230V AC400V AC690V	AC400V AC690V	AC690V AC400V	
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC230V:	65kA	70kA	40kA	65kA	70kA	-	-
	AC400V:	50kA	65kA	35kA	50kA	65kA	50kA	85kA
	AC690V:	15kA	20kA	10kA	15kA	20kA	20kA	20kA
Rated ultimate short-circuit segmentation capacity Icu (kA) :	AC230V:	80kA	85kA	65kA	80kA	85kA	-	-
	AC400V:	65kA	85kA	50kA	65kA	85kA	50kA	100kA
	AC690V:	25kA	35kA	20kA	25kA	35kA	20kA	20kA
Selective categories:	Class A							
Type of overcurrent release:	Thermomagnetic type							
GYCM8 External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8-800		GYCM8-1250		GYCM8-2000		
	poles Number	3P	4P	3P	4P	3P	4P	
	wide	210	280	210	280	210	280	
	length	275.5	275.5	275.5	275.5	340	340	
	height/Face cover	103	103	103	103	141	141	
height/Handle	152	152	152	152	244	244		

Note: The height from the bottom of the base to the (cover/handle)

► **The inner accessories code**



- Alarm contact
- Undervoltage release
- Single auxiliary contact (one set of conversion)
- Shunt release (mechanical)
- Dual auxiliary contacts (two sets of conversions)

Note 1:

Code 50: 125, 160 require customized left undervoltage; 250 requires customized left shunt, with optional range of shunt and undervoltage voltage: DC24V, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V.

Code	Name	model											
		GYCM8-125			GYCM8-160			GYCM8-250		GYCM8-400/630		GYCM8-800/1250/2000	
	poles number	2P	3P	4P	2P	3P	4P	3P	4P	3P	4P	3P	4P
00	nothing	—	—	—	—	—	—	—	—	—	—	—	—
08	Alarm contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
10	Shunt release	<input checked="" type="checkbox"/>											
18	Shunt release+ alarm contact	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>							
20	Single auxiliary contact	<input type="checkbox"/>											
27	Dual auxiliary contacts	<input type="checkbox"/>											
28	Single auxiliary contact+ alarm contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
29	Dual auxiliary contacts+ alarm contacts	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
30	Undervoltage release	<input type="checkbox"/>											
38	Undervoltage release+ alarm contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
40	Shunt release+single auxiliary contact	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>							
41	Shunt release+dual auxiliary contacts	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>							
48	Shunt release+auxiliary alarm contact	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>							
50	Shunt release+ undervoltage release	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>							
60	Two sets of single auxiliary contacts	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
61	Single auxiliary contact+ double auxiliary contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
62	Two sets of double auxiliary contacts	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
68	Single auxiliary contact+ auxiliary alarm contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
69	Dual auxiliary contacts+ auxiliary alarm contacts	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
70	Undervoltage release+ single auxiliary contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
71	Undervoltage release+ dual auxiliary contacts	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							
78	Undervoltage release+ auxiliary alarm contact	—	<input type="checkbox"/>	<input type="checkbox"/>	—	<input type="checkbox"/>							

# Thermomagnetic Dualadjustable Plastic Case Circuit Breaker

## GYCM8RT



- Low temperature rise
- Small volume
- With thermal adjustable 0.8-1.0 In
- Magnetic adjustable 5-10In protection function
- Adopting a multi contact structure design

### Product model and definition

GYCM8RT-	160	M	P1	/
Product code:	Shell level current	Optional code for short-circuit breaking capacity:	Optional operation code:	
Optional code:				
GYCM8RT series thermal magnetic double adjustable molded case circuit breaker	125 160 250 400 630 800 1250 2000  Note: 125Only GYCM8RT/A has	C: Basic type S: Standard type M: Higher breaking type H: High breaking type  Note:Conventional production is M-type;400, 630, 8001250 and 2000 only have M and H types	No code: direct operation P1: DC3 electric operation (market standard) P2: DC6 series electric operation (as shown in the picture) ZY1: Rotating handle (manual center type - circular handle)-(Preferred for regular factory use) ZF1: Rotating handle (manual center type - square handle) ZY2: Rotating handle (hand operated eccentric circular handle) Zf2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)  (Only available in 160 and 250) Note:The electric operating voltage is divided into DC24, DC110V、DC220V、AC230V、AC400V; Conventional production is AC230V	

4	3	0	B
Pole number:	Optional code for release method:	Internal accessory optional code:	Quadrupole product optional code:
3 : 3pole 4 : 4pole	3: Thermal+electromagnetic release		A: The N-pole is not equipped with an overcurrent release, and the N-pole is always connected B: The N-pole is not equipped with an overcurrent release, and the N-pole is opened and closed together with the other three poles C: Install an overcurrent release on the N-pole, and the N-pole will be combined and disconnected with the other three poles D: Install an overcurrent release on the N-pole and ensure that the N-pole is always connected

P	Z	In=100A
Optional installation and wiring method code:	Protective accessory code:	Rated current:
No code: Board front wiring (fixed type) P: Connection bar (extended copper bar) Z1: Rear board wiring (fixed type) Z2Q: Plug in front wiring (split type) Z2H: Plug in board rear wiring (split type) Z3Q: Plug in front wiring (integrated) Z3H: Plug in board rear wiring (integrated) DF: withdrawable front panel wiring DR: Pull out board rear wiring	No code: regular product Z: Terminal cover	125:20A、25A、32A、40A、50A、63A、80A、100A、125A 160 : 25A、32A、40A、50A、63A、80A、100A、125A、160A 250 : 160A、180A、200A、225A、250A 400 : 315A、350A、400A 630 : 500A、630A 800 : 630A、800A 1250 : 1000A、1250A 2000:1600A
Note: 160 and 250 have no withdrawable type; 1250 and 2000 only have connecting bars		

### External attachments

Molded case circuit breaker:	GYCM8RT/A-125	GYCM8RT-160	GYCM8RT-250	GYCM8RT-400	
Number of poles	3P	4P	3P	4P	
GYCM8RT External Accessories:	Electric operation	■	■	■	■
	Hand operation	■	■	■	■
	Expansion copper bar	■	■	■	■
	Mechanical interlocking	■	■	■	■
	Insert type front split type	■	■	■	■
	Insert type front integrated panel	■	■	■	■
	Insert type front fixed type	■	■	■	■
	Insert type rear split type	■	■	■	■
	Insert type rear integrated board	■	■	■	■
	Insert type rear fixed type	■	■	■	■
After the pull-out board	-	-	-	-	

Molded case circuit breaker:	GYCM8RT-630	GYCM8RT-800	GYCM8RT-1250	GYCM8RT-2000	
Number of poles	3P	4P	3P	4P	
GYCM8RT External Accessories:	Electric operation	■	■	■	■
	Hand operation	■	■	■	■
	Expansion copper bar	■	■	■	■
	Mechanical interlocking	■	■	-	-
	Insert type front split type	■	■	-	-
	Insert type front integrated panel	■	■	-	-
	Insert type front fixed type	■	■	-	-
	Insert type rear split type	■	■	-	-
	Insert type rear integrated board	■	■	-	-
	Insert type rear fixed type	■	■	-	-
After the pull-out board	■	-	■	-	

► **Main performance indicators**

Molded case circuit breaker	GYCM8RT/A-125				GYCM8RT-160				GYCM8RT-250			
Shell level current In:	16A、20A、25A、32A、40A、50A、63A、80A、100A、125A、				25A、32A、40A、50A、63A、80A、100A、125A、140A、160A				100A、125A、140A、160A、180A、200A、225A、250A			
Short circuit breaking capacity code:	C	S	M	H	C	S	M	H	C	S	M	H
Number of poles:	3P; 4P				3P; 4P				3P; 4P			
Rated working voltage Ue (V), AC:	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC400V	5kA	10kA	18kA	50kA	5kA	10kA	10kA	50kA	5kA	8kA	10kA
Rated ultimate short-circuit segmentation capacity Icu (kA) :	AC400V	10kA	20kA	36kA	50kA	8kA	20kA	20kA	50kA	8kA	15kA	20kA

Selective categories: Class A

Type of overcurrent release:	Thermomagnetic type												
	Shell level current	GYCM8RT/A-125				GYCM8RT-160				GYCM8RT-250			
	poles Number	3P	4P	3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
GYCM8RT External dimensions (mm)width (W)*Length (L)*height(H)	wide	75	100	90	120	105	140						
	length	130	130	155	155	165	165						
	height/Face cover	68	68	68	82	68	82	68	88	68	88		
	height/Handle	94.5	94.5	94	108	94	108	96	116	96	116		

Note: The height from the bottom of the base to the (cover/handle)

► **Main performance indicators**

Molded case circuit breaker	GYCM8RT-40		GYCM8RT-630		GYCM8RT-800		GYCM8RT-1250		GYCM8RT-2000	
Shell level current In:	320A、350A、400A		400A、500A、630A;		630A、700A、800A		1000A、1250A		1600A	
Short circuit breaking capacity code:	M	H	M	H	M	H	M	H	M	H
Number of poles:	3P; 4P		3P; 4P		3P; 4P		3P; 4P		3P; 4P	
Rated working voltage Ue (V), AC:	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC400V	50kA	50kA	50kA	50kA	50kA	50kA	65kA	50kA	65kA
Rated ultimate short-circuit segmentation capacity Icu (kA) :	AC400V	50kA	50kA	50kA	50kA	50kA	65kA	85kA	65kA	85kA

Selective categories: Class A

Type of overcurrent release:	Thermomagnetic type											
	Shell level current	GYCM8RT-400		GYCM8RT-630		GYCM8RT-800		GYCM8RT-1250		GYCM8RT-2000		
	poles Number	3P	4P	3P	4P	3P	4P	3P	4P	3P	4P	
GYCM8RT External dimensions (mm)width (W)*Length (L)*height(H)	wide	140	184	140	184	210	280	210	280	210	280	
	length	257	257	257	257	275.5	275.5	275.5	275.5	340	340	
	height/Face cover	103	103	103	103	103	103	103	103	141	141	
	height/Handle	152	152	152	152	152	152	152	152	244	244	

Note: The height from the bottom of the base to the (cover/handle)

► The inner accessories code

Note 1:  
Code 50: 125, 160 require customized left undervoltage; 250 requires customized left shunt, with optional range of shunt and undervoltage voltage: DC24V, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V.

Code	model Name poles number	GYCM8RT/A-125		GYCM8RT-160		GYCM8RT-250		GYCM8RT-400/630		GYCM8RT-800/1250/2000	
		3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
00	nothing	—	—	—	—	—	—	—	—	—	—
08	Alarm contact	□	□	□	□	□	□	□	□	□	□
10	Shunt release	●	●	●	●	●	●	●	●	●	●
18	Shunt release+alarm contact	□●	□●	□●	□●	□●	□●	□●	□●	□●	□●
20	Single auxiliary contact	■	■	■	■	■	■	■	■	■	■
27	Dual auxiliary contacts	■	■	■	■	■	■	■	■	■	■
28	Single auxiliary contact+alarm contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
29	Dual auxiliary contacts+alarm contacts	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
30	Undervoltage release	○	○	○	○	○	○	○	○	○	○
38	Undervoltage release+alarm contact	○□	○□	○□	○□	○□	○□	○□	○□	○□	○□
40	Shunt release+single auxiliary contact	●■	●■	●■	●■	●■	●■	●■	●■	●■	●■
41	Shunt release+dual auxiliary contacts	●■	●■	●■	●■	●■	●■	●■	●■	●■	●■
48	Shunt release+auxiliary alarm contact	●■□	●■□	●■□	●■□	●■□	●■□	●■□	●■□	●■□	●■□
50	Shunt release+undervoltage release	●○	●○	●○	●○	●○	●○	●○	●○	●○	●○
60	Two sets of single auxiliary contacts	■	■	■	■	■	■	■	■	■	■
61	Single auxiliary contact+double auxiliary contact	■	■	■	■	■	■	■	■	■	■
62	Two sets of double auxiliary contacts	■	■	■	■	■	■	■	■	■	■
68	Single auxiliary contact+auxiliary alarm contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
69	Dual auxiliary contacts+auxiliary alarm contacts	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
70	Undervoltage release+single auxiliary contact	○■	○■	○■	○■	○■	○■	○■	○■	○■	○■
71	Undervoltage release+dual auxiliary contacts	○■	○■	○■	○■	○■	○■	○■	○■	○■	○■
78	Undervoltage release+auxiliary alarm contact	○■□	○■□	○■□	○■□	○■□	○■□	○■□	○■□	○■□	○■□

Thermomagnetic Leakage Plastic Case Circuit Breaker  
**GYCM8LY**



- Thermal magnetic protection function
- Residual current protection function
- Leakage alarm non tripping function optional

► Product model and definition

GYCM8LY-	160	M	P1
Product code:	Shell level current	Optional code for short-circuit breaking capacity:	Optional operation code:
	Optional code:		
GYCM8LY series thermomagnetic leakage plastic case circuit breaker	125 160 250 400 630 800 1250 Note: 125, 160, and 250 are only available for C and S types 400, 630, 800, 1250 only have M and H types	C: Basic type S: Standard type M: Higher breaking type H: High breaking type  Note: Conventional production is M-type; 400, 630, 800, 1250 and 2000 only have M and H types	No code: direct operation P1: DC3 electric operation (market standard) P2: DC6 series electric operation (as shown in the picture) ZY1: Rotating handle (manual center type - circular handle)-(Preferred for regular factory use) ZF1: Rotating handle (manual center type - square handle) ZY2: Rotating handle (hand operated eccentric circular handle) Zf2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)  (Only available in 160 and 250) Note: The electric operating voltage is divided into DC24, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V

4	3	0	2	B
Pole number:	Optional code for release method:	Internal accessory optional code:	Usage code:	Quadrupole product optional code:
2 : 2pole 3 : 3pole 4 : 4pole  Note: The second pole is only 160, and the conventional production is for the fourth pole	2: Only electromagnetic release 3: Thermal+electromagnetic release		No code: for distribution protection 2: Motor protection note: ≤ 40A 8.5In does not operate, 500A operates 700-800A No motor protection type	A: The N-pole is not equipped with an overcurrent release, and the N-pole is always connected B: The N-pole is not equipped with an overcurrent release, and the N-pole is opened and closed together with the other three poles C: Install an overcurrent release on the N-pole and connect the N-pole with the other three poles D: Install overcurrent release on N-pole and keep N-pole connected at all times

II	/ P	Z	In=100A
Additional function code:	Optional installation and wiring method code:	Protective accessory code:	Rated current:
No code: regular product I: Leakage alarm and trip II: Leakage alarm does not trip T:Communication function (Modbus protocol)	No code: Board front wiring (fixed type) P: Connection bar (extended copper bar) Z1: Rear board wiring (fixed type) Z2Q: Plug in front wiring (split type) Z2H: Plug in board rear wiring (split type) Z3Q: Plug in front wiring (integrated)Z3H: Plug in board rear wiring (integrated) DF: withdrawable front panel wiring DR: Pull out board rear wiring Note: 160 and 250 without extraction type	No code: regular product Z: Terminal cover Note: Terminal covers are only threeExtremely abundant; 400, 630Divided into narrow and long styles, wide and long stylesDefault to wide and long styles;	125: 16A、20A、25A、32A、40A、50A、63A、80A、100A、125A 160: 16A、20A、25A、32A、40A、50A、63A、80A、100A、125A、160A 250 : 100A、125A、160A、180A、200A、225A、250A 400 : 250A、315A、350A、400A 800 : 500A、630A、700A、800A 1250 : 900A、1000A、1250A

External attachments

Molded case circuit breaker:	GYCM8LY-125		GYCM8LY-160		GYCM8LY-250		GYCM8LY-400		GYCM8LY-630		GYCM8LY-800		GYCM8LY-1250	
Number of poles	2P	3P	4P	2P	3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
GYCM8LY External Accessories:	Electric operation	-	■	■	-	■	■	■	■	■	■	■	■	■
	Hand operation	-	■	■	-	■	■	■	■	■	■	■	■	■
	Expansion copper bar	■	■	■	■	■	■	■	■	■	■	■	■	■
	Mechanical interlocking	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type front split type	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type front integrated panel	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type front fixed type	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type rear split type	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type rear integrated board	-	■	■	-	■	■	■	■	■	■	■	-	-
	Insert type rear fixed type	-	■	■	-	■	■	■	■	■	■	■	-	-
After the pull-out board	-	-	-	-	-	-	-	■	-	■	-	-	-	

Main performance indicators

Molded case circuit breaker	GYCM8LY-125			GYCM8LY-160			GYCM8LY-250			GYCM8LY-400					
Shell level current In:	16A、20A、25A、30A、32A、40A、50A、60A、63A、75A、80A、90A、100A、125A			16A、20A、25A、30A、32A、40A、50A、60A、63A、75A、80A、90A、100A、125A、140A、150A、160A			100A、125A、140A、150A、160A、175A、180A、200A、225A、250A			250A、315A、350A、400A					
Short circuit breaking capacity code:	C	S	M	H	C	S	M	H	C	S	M	H	M	H	
Number of poles:	2P; 3P; 4P			2P; 3P; 4P			3P; 4P			3P; 4P					
Rated working voltage Ue (V), AC:	AC230V(2P)、AC400V(3P、3P+N、4P)			AC230V(2P)、AC400V(3P、3P+N、4P)			AC400V			AC400V					
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC400V	3kA	5kA	18kA	35kA	10kA	15kA	25kA	35kA	10kA	18kA	25kA	35kA	35kA	42kA
Rated ultimate short-circuit segmentation capacity Icu(kA)	AC400V	5kA	8kA	25kA	35kA	15kA	20kA	25kA	35kA	15kA	25kA	35kA	50kA	50kA	65kA
IΔ m:	12.5kA	12.5kA	12.5kA	12.5kA	-	-	12.5kA	12.5kA	-	-	12.5kA	12.5kA	-	16.25kA	
Rated residual action type:	AC type														
Selective categories:	Class A														
Type of overcurrent release:	Thermomagnetic type														
Leakage release type:	Electronic														

GYCM8LY External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8LY-125			GYCM8LY-160			GYCM8LY-250			GYCM8LY-400	
	poles Number	2P	3P	4P	2P	3P	4P	3P	4P	14P	3P	4P
wide		50	75	100	60	90	120	105	140	140	184	
length		130	130	130	155	155	155	165	165	257	257	
height/Face cover		68	68	68	68	68	68	68	68	103	103	
height/Handle		94.5	94.5	94.5	94	94	94	96	96	152	152	

Note: The height from the bottom of the base to the (cover/handle)

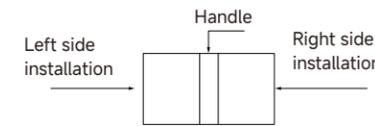
► Main performance indicators

Molded case circuit breaker	GYCM8LY-630		GYCM8LY-800		GYCM8LY-125	
Shell level current In:	400A、500A、630A		500A、630A、700A、800A		0	
Short circuit breaking capacity code:	M	H	M	H	M 1000A、1250A	
Number of poles:	3P; 4P		3P; 4P		3P; 4P	
Rated working voltage Ue (V), AC:	AC400V	AC400V	AC400V	AC400V	AC400V	AC400V
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV
Rated operating short-circuit segmentation capacity Ics(%Icu):	AC400V: 35kA	50kA	35kA	50kA	35kA	50kA
Rated ultimate short-circuit segmentation capacity Icu(kA):	AC400V: 50kA	65kA	50kA	65kA	50kA	65kA
Rated residual operating current IΔ n (mA) :	50mA、100mA、200mA、300mA、500mA、800mA、1000mA (Choose any four adjustable gears)					
IΔ m:	16.25kA	16.25kA	16.25kA	16.25kA	16.25kA	16.25kA
Rated residual action type:	AC type					
Selective categories:	Class A					
Type of overcurrent release:	Thermomagnetic type					
Leakage release type:	Electronic					

Shell level current	GYCM8LY-630		GYCM8LY-800		GYCM8LY-1250		
	poles Number	3P	4P	3P	4P	3P	4P
GYCM8LY External dimensions (mm)width (W)*Length (L)*height(H)	wide	140	184	210	280	210	280
	length	257	257	275.5	275.5	275.5	275.5
	height/ Face cover	103	103	103	103	103	103
	height/ Handle	152	152	152	152	152	152

Note: The height from the bottom of the base to the (cover/handle)

► The inner accessories code



- Alarm contact
- Single auxiliary contact (one set of conversion)
- Dual auxiliary contacts (two sets of conversions)
- Undervoltage release
- Shunt release (mechanical)

Note 1:

Code 50: 125, 160 require customized left undervoltage; 250 requires customized left shunt, with optional range of shunt and undervoltage voltage: DC24V, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V.

Code	model Name	GYCM8LY-125		GYCM8LY-160		GYCM8LY-250		GYCM8LY-400		GYCM8LY-800/1250	
		3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
00	nothing	—	—	—	—	—	—	—	—	—	—
08	Alarm contact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Shunt release	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>						
18	Shunt release+ alarm contact	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>				
20	Single auxiliary contact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	Dual auxiliary contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	Single auxiliary contact+ alarm contact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Dual auxiliary contacts+ alarm contacts	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>				
30	Undervoltage release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Undervoltage release+ alarm contact	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
40	Shunt release+single auxiliary contact	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>				
41	Shunt release+dual auxiliary contacts	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>				
48	Shunt release+auxiliary alarm contact	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>				
50	Shunt release+ undervoltage release	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>	—	<input checked="" type="checkbox"/>
60	Two sets of single auxiliary contacts	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
61	Single auxiliary contact+ double auxiliary contact	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
62	Two sets of double auxiliary contacts	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>
68	Single auxiliary contact+ auxiliary alarm contact	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
69	Dual auxiliary contacts+ auxiliary alarm contacts	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
70	Undervoltage release+ single auxiliary contact	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				
71	Undervoltage release+ dual auxiliary contacts	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>
78	Undervoltage release+ auxiliary alarm contact	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>				

# Electronic Plastic Case Circuit Breaker GYCM8E



- Low temperature rise
- Integrated
- Small volume
- Adopting a multi blade design Equipped with electronic and thermal magnetic dual protection functions

## Product model and definition

GYCM8E-	160	M	P1	/
Product code:	Shell level current	Optional code for short-circuit breaking capacity:	Optional operation code:	
	Optional code:			
GYCM8RT series electronic plastic case circuit breaker	160 250 400 630 800 1250 2000	C: Basic type S: Standard type M: Higher breaking type H: High breaking type  Note:Conventional production is M-type;400, 630, 800,1250 and 2000 only have M and H types	No code: direct operation P1: DC3 electric operation (market standard) P2: DC6 series electric operation (as shown in the picture) ZY1: Rotating handle (manual center type - circular handle)- (Preferred for regular factory use) ZF1: Rotating handle (manual center type - square handle) ZY2: Rotating handle (hand operated eccentric circular handle) Zf2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)  (Only available in 160 and 250) Note:The electric operating voltage is divided into DC24, DC110V、DC220V, AC230V, AC400V; Conventional production is AC230V	

4	3	00	2	B	G	/
Pole number:	Knob optional code:	Internal accessory optional code:	Usage code:	Quadropole product optional code:	Additional function code:	
3 : 3pole 4 : 4pole	3: 3 knobs 6: 6 knobs		No code: for distribution protection 2: For motor protection Note:Magnetic protection 14In does not operate, 20In operates 700A-2000A without motor protection type	A: The N-pole is not equipped with an overcurrent release, and the N-pole is always connected B: The N-pole is not equipped with an overcurrent release, and the N-pole is opened and closed together with the other three poles C: Install an overcurrent release on the N-pole, and the N-pole will be combined and disconnected with the other three poles D: Install an overcurrent release on the N-pole and ensure that the N-pole is always connected	No code: regular product G: With grounding protection III: Overload alarm does not trip R: Thermal magnetic protection function V: Low temperature upgrade 40K VI: Low temperature upgrade 50K VII: Low temperature upgrade 60K	

P	Z	In=100A
Optional installation and wiring method code:	Protective accessory code:	Rated current:
No code: Board front wiring (fixed type) P: Connection bar (extended copper bar) Z1: Rear board wiring (fixed type) Z2Q: Plug in front wiring (split type) Z2H: Plug in board rear wiring (split type) Z3Q: Plug in front wiring (integrated) Z3H: Plug in board rear wiring (integrated) DF: withdrawable front panel wiring DR: Pull out board rear wiring Note:160, 250 non withdrawable;1250 and 2000 only have connecting bars	No code: regular product Z: Terminal cover Note: The terminal cover only has three poles;400, 630 points narrow length, wide length, default to wide length; 2000 Not available at the moment	160:32A (adjustable from 0.4 to 1.0 In); 63A (adjustable from 0.4 to 1.0 In); 100A (adjustable from 0.4 to 1.0 In); 125A (adjustable from 0.4 to 1.0 In); 160A (adjustable from 0.4 to 1.0 In); 250 #: 250A (0.4-1.0In adjustable) 400 #: 400A (adjustable from 0.4 to 1.0 In) 630 #: 630A (0.4-1.0 In adjustable) 400 #: 400A (adjustable from 0.4 to 1.0 In) 800 #: 630A (adjustable from 0.4 to 1.0 In); 800A (adjustable from 0.4 to 1.0In); 1250 #: 1000A (adjustable from 0.4 to 1.0 In); 1250A (adjustable from 0.4 to 1.0 In); 2000 #: 1250A (adjustable from 0.4 to 1.0 In); 1600A (adjustable from 0.4 to 1.0 In); 2000A: (0.4-1.0 In adjustable)

## External attachments

Molded case circuit breaker:		GYCM8E-160		GYCM8E-250		GYCM8E-400		GYCM8E-630		GYCM8E-800		GYCM8E-1250		GYCM8E-2000	
Number of poles		3P	4P	3P	4P	3P	4P								
GYCM8LY External Accessories:	Electric operation	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Hand operation	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Expansion copper bar	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Mechanical interlocking	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type front split type	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type front integrated panel	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type front fixed type	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type rear split type	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type rear integrated board	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Insert type rear fixed type	■	■	■	■	■	■	■	■	■	■	-	-	-	-
After the pull-out board	-	-	-	-	■	-	■	-	■	-	-	-	-	-	

► **Main performance indicators**

Molded case circuit breaker	GYCM8E-160			GYCM8E-250			GYCM8E-400		GYCM8E-630		
Shell level current In:	32A(12A-32A Adjustable), 100A(40A-100A Adjustable), 160A(63A-160A Adjustable)			250A (100A-250A Adjustable)			400A (160A-400A Adjustable) (200A-400A Adjustable)		630A (250A-630A Adjustable) (400A-630A Adjustable)		
Short circuit breaking capacity code:	S	M	H	S	M	H	M	H	M	H	
Number of poles:	3P; 4P			3P; 4P			3P; 4P		3P; 4P		
Rated working voltage Ue (V), AC:	AC400V; AC690V			AC400V; AC690V			AC400V; AC690V		AC400V; AC690V		
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV	
Rated short-circuit breaking capacity Ics (kA):	AC400V	18kA	35kA	65kA	18kA	35kA	65kA	35kA	70kA	35kA	70kA
	AC690V	4kA	8kA	8kA	8kA	8kA	8kA	8kA	8kA	8kA	8kA
Rated ultimate short-circuit breaking capacity Icu (kA):	AC400V	25kA	50kA	65kA	25kA	50kA	65kA	50kA	70kA	50kA	70kA
	AC690V	8kA	8kA	8kA	4kA	8kA	8kA	8kA	8kA	8kA	8kA
Rated short-term withstand current Icw (kA)	-	-	-	-	-	-	10kA/1s	10kA/1s	10kA/1s	10kA/1s	
Applicable frequency:	50/60Hz			50/60Hz			50/60Hz		50/60Hz		
Selective categories:	Class A	Class A	Class A	Class B	Class B	Class B	Class B	Class B	Class B	Class B	
Type of overcurrent release:	Electronic										
GYCM8E External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8E-160			GYCM8E-250			GYCM8E-400		GYCM8E-630	
	poles Number	3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
	wide	90	120	105	140	140	184	140	184	140	184
	length	155	155	165	165	257	257	257	257	257	257
	height/Face cover	68/82	68/82	68/88	68/88	103	103	103	103	103	103
height/Handle	94/108	94/108	96/116	96/116	152	152	152	152	152	152	

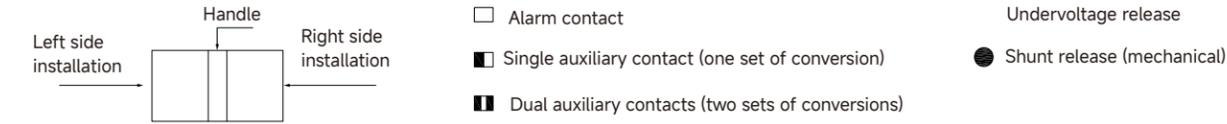
Note: The height from the bottom of the base to the (cover/handle)

► **Main performance indicators**

Molded case circuit breaker	GYCM8E-800		GYCM8E-1250		GYCM8E-2000		
Shell level current In:	630A (400A-630A Adjustable) 800A (500A-800A Adjustable)		1000A (630A-1000A Adjustable) 1250A (850A-1250A Adjustable)		1250A (500A-1250A Adjustable) 1600A (630A-1600A Adjustable) 2000A (800A-2000A Adjustable)		
Short circuit breaking capacity code:	M	H	M	H	M	H	
Number of poles:	3P; 4P		3P; 4P		3P; 4P		
Rated working voltage Ue (V), AC:	AC400V, AC690V		AC400V, AC690V		AC400V, AC690V		
Rated insulation voltage Ui (V):	1000V	1000V	1000V	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	8kV	8kV	8kV	
Rated short-circuit breaking capacity Ics (kA):	AC400V	50kA	50kA	50kA	50kA	85kA	
	AC690V	10kA	10kA	10kA	10kA	20kA	
Rated ultimate short-circuit breaking capacity Icu (kA):	AC400V	65kA	65kA	65kA	65kA	100kA	
	AC690V	20kA	20kA	20kA	20kA	20kA	
Rated short-term withstand current Icw (kA)	20kA/1s	20kA/1s	20kA/1s	20kA/1s	20kA/1s	20kA/1s	
Applicable frequency:	50/60Hz		50/60Hz		50/60Hz		
Selective categories:	Class B						
Type of overcurrent release:	Electronic						
GYCM8E External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8E-800		GYCM8E-1250		GYCM8E-2000	
	poles Number	3P	4P	3P	4P	3P	4P
	wide	210	280	210	280	210	280
	length	275.5	275.5	275.5	275.5	340	340
	height/Face cover	103	103	103	103	141	141
	height/Handle	152	152	152	152	244	244

Note: The height from the bottom of the base to the (cover/handle)

► **The inner accessories code**



Note 1:  
 Code 50: 125, 160 require customized left undervoltage; 250 requires customized left shunt, with optional range of shunt and undervoltage voltage: DC24V, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V

Code	model Name poles number	GYCM8E-160		GYCM8E-250		GYCM8E-400/630		GYCM8E-800/1250		GYCM8E-2000	
		3P	4P	3P	4P	3P	4P	3P	4P	3P	4P
00	nothing	—	—	—	—	—	—	—	—	—	—
08	Alarm contact	□□	□□	□□	□□	□□	□□	□□	□□	□□	□□
10	Shunt release	□●	□●	□●	□●	□●	□●	□●	□●	□●	□●
18	Shunt release+ alarm contact	□●	□●	□●	□●	□●	□●	□●	□●	□●	□●
20	Single auxiliary contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
27	Dual auxiliary contacts	■■	■■	■■	■■	■■	■■	■■	■■	■■	■■
28	Single auxiliary contact+ alarm contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
29	Dual auxiliary contacts+ alarm contacts	—	—	—	—	■■	■■	■■	■■	■■	■■
30	Undervoltage release	□○	□○	□○	□○	□○	□○	□○	□○	□○	□○
38	Undervoltage release+ alarm contact	—	—	—	—	□○	□○	□○	□○	□○	□○
40	Shunt release+single auxiliary contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
41	Shunt release+dual auxiliary contacts	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
48	Shunt release+auxiliary alarm contact	■□	■□	■□	■□	■□	■□	■□	■□	■□	■□
50	Shunt release+ undervoltage release	□○	□○	□○	□○	□○	□○	□○	□○	□○	□○
60	Two sets of single auxiliary contacts	—	—	—	—	■□	■□	■□	■□	■□	■□
61	Single auxiliary contact+ double auxiliary contact	—	—	—	—	■□	■□	■□	■□	■□	■□
62	Two sets of double auxiliary contacts	—	—	—	—	■■	■■	■■	■■	■■	■■
68	Single auxiliary contact+ auxiliary alarm contact	—	—	—	—	■□	■□	■□	■□	■□	■□
69	Dual auxiliary contacts+ auxiliary alarm contacts	—	—	—	—	■■	■■	■■	■■	■■	■■
70	Undervoltage release+ single auxiliary contact	—	—	—	—	□○	□○	□○	□○	□○	□○
71	Undervoltage release+ dual auxiliary contacts	—	—	—	—	□○	□○	□○	□○	□○	□○
78	Undervoltage release+ auxiliary alarm contact	—	—	—	—	□○	□○	□○	□○	□○	□○

**Electronic LCD Plastic Case Circuit Breaker**  
**GYCM8EY**



- Real time display of three-phase voltage and load current;
- Equipped with 0.5 level high-precision measurement, four remote control, overvoltage, undervoltage, and phase loss protection functions

► **Product model and definition**

GYCM8EY-	160	M	P1
Product code:	Shell level current	Optional code for short-circuit breaking capacity:	Optional operation code:
	Optional code:		
GYCM8LY series electronic LCD plastic case circuit breaker	250 400 630 800 1250	M: Higher breaking type H: High breaking type  Note:Conventional production is M-type	No code: direct operation P1: DC3 electric operation (market standard) P2: DC6 series electric operation (as shown in the picture) P3: DC6 series electrically operated LCD type Zy1: Rotating handle (manual center type - circular handle)- (Preferred for regular factory use) Zf1: Rotating handle (manual center type - square handle) Zy2: Rotating handle (hand operated eccentric circular handle) Zf2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)(Only 250 available) Note:The electric operating voltage is divided into DC24, DC110VDC220V, AC230V, AC400V;Conventional production is AC230V.

4	3	00	2	B	JL
Pole number:	Knob optional code:	Internal accessory optional code:	Usage code:	Quadrupole product optional code:	Additional function code:
3 : 3pole 4 : 4pole	3: 3 knobs 6: 6 knobs		No code: for distribution protection 2: For motor protection Note:Magnetic protection 14In does not operate, 20In operates 700A-2000A without motor protection type	A: The N-pole is not equipped with an overcurrent release, and the N-pole is always connected B: The N-pole is not equipped with an overcurrent release, and the N-pole is opened and closed together with the other three poles C: Install an overcurrent release on the N-pole, and the N-pole will be combined and disconnected with the other three poles D: Install an overcurrent release on the N-pole and ensure that the N-pole is always connected	No code: regular product JL: Measurement function WD: Temperature display function

P	Z	In=100A
Optional installation and wiring method code:	Protective accessory code:	Rated current:
No code: Board front wiring (fixed type) P: Connection bar (extended copper bar) Z1: Rear board wiring (fixed type) Z2Q: Plug in front wiring (split type) Z2H: Plug in board rear wiring (split type) Z3Q: Plug in front wiring (integrated) Z3H: Plug in board rear wiring (integrated) DF: withdrawable front panel wiring DR: Pull out board rear wiring Note:250 non withdrawable; 1250 only has connecting bars	No code: regular product Z: Terminal cover  Note:The terminal cover only has three poles;400, 630 points narrow length, wide length, default to wide length;	250#: 125A (0.4-1.0In) ; 250A (0.4-1.0In) ; 400#: 400A (0.4-1.0In) ; 630#: 630A (0.4-1.0In) ; 800#: 630A (0.4-1.0In) ; 800A (0.4-1.0In) ; 1250#: 1000A (0.4-1.0In) ; 1250A (0.4-1.0In) ;

► **External attachments**

Molded case circuit breaker:	GYCM8EY-250	GYCM8EY-400	GYCM8EY-630	GYCM8EY-800	GYCM8EY-1250	
Number of poles	3P 4P	3P 4P	3P 4P	3P 4P	3P 4P	
GYCM8EY External Accessories:	Electric operation	■	■	■	■	■
	Hand operation	■	■	■	■	■
	Expansion copper bar	■	■	■	■	■
	Mechanical interlocking	■	■	■	■	-
	Insert type front split type	■	■	■	■	-
	Insert type front integrated panel	■	■	■	■	-
	Insert type front fixed type	■	■	■	■	-
	Insert type rear split type	■	■	■	■	-
	Insert type rear integrated board	■	■	■	■	-
	Insert type rear fixed type	■	■	■	■	-
After the pull-out board	-	-	■	-	-	

► **Main performance indicators**

Molded case circuit breaker:	GYCM8EY-250	GYCM8EY-400	GYCM8EY-630	
Shell level current In:	125A (0.4-1.0In) ; 250A (0.4-1.0In) ;	400A (0.4-1.0In) ;	630A (0.4-1.0In) ;	
Short circuit breaking capacity code:	M H	M H	M H	
Number of poles:	3P, 4P	3P, 4P	3P, 4P	
Rated working voltage Ue (V), AC:	AC400V	AC400V	AC400V	
Rated insulation voltage Ui (V):	1000V	1000V	1000V	
Rated impulse withstand voltage Uimp (kV):	8kV	8kV	8kV	
Rated operating short-circuit breaking capacity Ics (kA):	AC400V 35kA 65kA	50kA 70kA	50kA 70kA	
Rated ultimate short-circuit breaking capacity Icu (kA):	AC400V 50kA 65kA	50kA 70kA	50kA 70kA	
Rated short-term withstand current Icw (kA):	-	-	10kA/1s 10kA/1s 10kA/1s 10kA/1s	
Selective categories:	Class B			
Type of overcurrent release:	Electronic			
GYCM8EY External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8EY-250	GYCM8EY-400	GYCM8EY-630
	poles Number	3P 4P	3P 4P	3P 4P
	wide	105 140	140 184	210 280
	length	165	257	275.5
	height/ Face cover	88	103	103
height/ Handle	116	152	152	

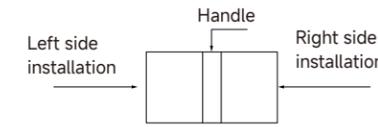
Note: The height from the bottom of the base to the (cover/handle)

► **Main performance indicators**

Molded case circuit breaker:	GYCM8EY-800		GYCM8EY-1250		
Shell level current In:	630A (0.4-1.0In) ; 800A (0.4-1.0In) ;		1000A (0.4-1.0In) ; 1250A (0.4-1.0In) ;		
Short circuit breaking capacity code:	M	H	M	H	
Number of poles:	3P, 4P		3P, 4P		
Rated working voltage Ue (V), AC:	AC400V		AC400V		
Rated insulation voltage Ui (V):	1000V		1000V		
Rated impulse withstand voltage Uimp (kV):	8kV		8kV		
Rated operating short-circuit breaking capacity Ics (kA):	AC400V	50kA	65kA	50kA	65kA
Rated ultimate short-circuit breaking capacity Icu (kA):	AC400V	50kA	85kA	50kA	85kA
Rated short-term withstand current Icw (kA):	20kA/1s	20kA/1s	20kA/1s	20kA/1s	20kA/1s
Selective categories:	Class B				
Type of overcurrent release:	Electronic				
GYCM8EY External dimensions (mm)width (W)*Length (L)*height(H)	Shell level current	GYCM8EY-800		GYCM8EY-1250	
	poles Number	3P	4P	3P	4P
	wide	210	280	210	280
	length	275.5		275.5	
	height/Face cover	103		103	
height/Handle	152		152		

Note: The height from the bottom of the base to the (cover/handle)

► **The inner accessories code**



- Alarm contact
- Single auxiliary contact (one set of conversion)
- Dual auxiliary contacts (two sets of conversions)
- Undervoltage release
- Shunt release (mechanical)

Note 1:

Code 50: 125, 160 require customized left undervoltage; 250 requires customized left shunt, with optional range of shunt and undervoltage voltage: DC24V, DC110V, DC220V, AC230V, AC400V; Conventional production is AC230V.

Code	Name	model		GYCM8EY-250		GYCM8EY-400/630		GYCM8EY-800/1250	
		poles number	3P	4P	3P	4P	3P	4P	
00	nothing	—	—	—	—	—	—	—	—
08	Alarm contact	<input type="checkbox"/>							
10	Shunt release	<input checked="" type="checkbox"/>							
18	Shunt release+ alarm contact	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Single auxiliary contact	<input type="checkbox"/>							
27	Dual auxiliary contacts	<input type="checkbox"/>							
28	Single auxiliary contact+ alarm contact	<input type="checkbox"/>							
29	Dual auxiliary contacts+ alarm contacts	—	<input type="checkbox"/>						
30	Undervoltage release	<input type="checkbox"/>							
38	Undervoltage release+ alarm contact	—	<input type="checkbox"/>						
40	Shunt release+single auxiliary contact	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	Shunt release+dual auxiliary contacts	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48	Shunt release+auxiliary alarm contact	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50	Shunt release+ undervoltage release	—	—	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>	—	<input checked="" type="checkbox"/>	<input type="checkbox"/>
60	Two sets of single auxiliary contacts	—	<input type="checkbox"/>						
61	Single auxiliary contact+ double auxiliary contact	—	<input type="checkbox"/>						
62	Two sets of double auxiliary contacts	—	<input type="checkbox"/>						
68	Single auxiliary contact+ auxiliary alarm contact	—	<input type="checkbox"/>						
69	Dual auxiliary contacts+ auxiliary alarm contacts	—	<input type="checkbox"/>						
70	Undervoltage release+ single auxiliary contact	—	<input type="checkbox"/>						
71	Undervoltage release+ dual auxiliary contacts	—	<input type="checkbox"/>						
78	Undervoltage release+ auxiliary alarm contact	—	<input type="checkbox"/>						

**< 50ms**  
Conversion Time

## Automatic transfer switch

Environmental Compliance: RoHS 2.0



## G2R



G2R-63 automatic transfer switch is a PC class infrequent change-over switch, with two-station design (commonly used for A and standby for B), suitable for AC systems with AC 50-60Hz and rated current 6A-63A. The main function of the automatic transfer switch is when the main power (common power supply A) fails, the ATS will automatically switch to the backup power (Backup power supply B) to continue working, which can effectively solve the troubles caused by power outages.

### Product model and definition

G	2	R	—	63	□	□
Company code	Product Category	Installation method		Case grade	Pole	
ZHEJIANG GEYA ELECTRICAL CO.,LTD	PC class automatic transfer switch (two stations)	Din-rail installation		63	2P/4P	Rated working voltage: AC230V, AC110V Rated operating current: 6A/10A/16A/20A/25A/32A/40A/50A/63A

### Working Conditions

The temperature range of the operating environment is -5°C~+40°C, and the average temperature within 24 hours shall be lower than +35°C, and the temperature range of the storage environment is -25°C~+55°C, which can be reached +70°C in a short time (within 24 hours)

The altitude of the installation site should be lower than 2000m.

The relative temperature at the installation site shall not exceed 50% when the ambient air temperature is +40°C. Higher relative humidity is possible at lower temperatures. For example: when the average minimum temperature of the wettest month is +20°C, the monthly average maximum relative humidity of that month can reach 90%. Appropriate measures should be taken to prevent condensation due to temperature changes.

Pollution level 3 (conductive pollution, or dry non-conductive pollution becomes conductive due to condensation). ATS can be installed vertically or horizontally in the cabinet, if there are special installation requirements, contact us.

The protection grade of ATS case is IP30.

Overvoltage category: Main circuit category III; control and auxiliary circuit category II.

### Technical Specification

	63								
Rated operating current Ie(A)	06A	10A	16A	20A	25A	32A	40A	50A	63A
Rated insulation voltage Ui	690V								
Rated impulse withstand voltage Uimp	8kV								
Rated operating voltage Ue	AC230V/AC110V								
Rated frequency	50/60Hz								
Class	PC class: can be switched on and loaded without generating short-circuit current								
Pole number	2P				4P				
Rated short-circuit current Iq	50kA								
Short circuit protection device (fuse)	RT16-00-63A								
Control circuit	Rated control voltageUs:AC220V/110V,50/60Hz Normal working conditions:85%Us~110%Us You must use an inverter with a power output of at least 3000W (please use a sine wave Severe electromagnetic interference may cause the product to malfunction.)								
Auxiliary circuit	AC230V/110V 50/60Hz Ie=5A								
Mechanical life	≥8000 times								
Electrical life	≥1500 times								
Usage category	AC-31B								

Working voltage	Working frequency	Under-voltage action value	Under-voltage recovery value	Overvoltage recovery value	Overvoltage action value	Action delay	Recovery delay
110V	50/60Hz	85V	90V	135V	140V	10S	30S
230V	50/60Hz	175V	190V	250V	270V		

**Function description**

Dual power supply automatic switching (I channel priority). Overvoltage and undervoltage protection. When the voltage is normal, the LED remains constantly lit. When the voltage is abnormal: Overvoltage state: The LED flashes twice every 2 seconds. Under-voltage state: The LED flashes once every 2 seconds. When the voltage is abnormal, there is a 10-second delay in the action stage. The LED light shows a breathing light effect (default 10 seconds): when the voltage is low, the light changes from bright to dark; when the voltage is high, the light changes from dark to bright.

### Notes

#### Non-professionals are prohibited from operating in electrified environments

The input power supply must be connected in the correct phase sequence. A single-pole (1P) circuit breaker must not be used to independently control the neutral (N) line and live (L) line. To switch the power supply, both the N and L lines must be operated simultaneously. Otherwise, product malfunctions may occur.

The dual power supply serves as an emergency transfer switch, and its switching speed and frequency should not be too high. If testing is required, the switching interval must not be less than one minute per operation.

The dual power switch incorporates a built-in spring interlock mechanism. Non-professionals are strictly prohibited from manually operating the switch while energized, as improper handling may cause contact wear and reduced service life.

**When connecting the power supply, neutral (N) and live (L) wires must be terminated according to product labeling. The input power supply must strictly adhere to the correct phase sequence.**

An inverter with a rated output power of at least 3000W must be used (pure sine wave inverters required. Severe electromagnetic interference may cause product failure).

During manual operation, the opening/closing speed cannot be guaranteed due to differences in operator speed. Excessive loss of silver alloy may occur during manual operation. Therefore, the selector switch should only be pulled to the Manual position after all power has been cut off to inspect and maintain the operating system and contact information. Normally, keep the toggle switch pulled to the Electric position.

When manual operation is required, pull the toggle switch to the Manual position. After manual operation is completed, pull the toggle switch from the Manual position to the Automatic position.

## ► Installation

The installation and debugging of ATS should be carried out by professionals and personnel familiar with the switchgear, and corresponding protection and preventive measures must be considered during the work. The wiring method of the main circuit of the switch must ensure that the leads are not subjected to any pressure or strong force. Before installation and debugging, the switch should be checked for any damage or other harmful environmental effects. At the same time, any loose wire heads that may be caused during transportation should be checked to remove dirt, especially on the surface of insulation parts. These dirt may be caused by passing through packaging materials during transportation or during storage. When connecting the primary circuit, attention should be paid to ensuring that the phase sequence of the two power sources is consistent. When connecting the secondary circuit, strict adherence to the wiring diagram listed in this manual should be followed, and attention should be paid to controlling the voltage level of the power supply; The switch must be installed with good grounding. Considering personal safety and the speed of switch switching, the debugging handle is only for trial use. Users should not use the debugging handle to operate under load. When debugging, the switch should be operated with a handle first. If there are no abnormalities, the manual button should be used for electric operation. After there are no abnormalities, the official operation can be carried out.

Installation environment: Install ATS on a clean, dry, and well ventilated surface.

Electrical connections: Ensure that all connections are secure to prevent overheating and fire hazards.

Comply with local regulations: Ensure compliance with applicable local electrical codes to ensure safety and reliability.

Adhering to these guidelines can ensure the safe operation of ATS,

## ► Maintenance and upkeep

Maintenance and inspection should be carried out by professionals. In order to ensure the good performance of the ATS, the first maintenance and inspection should be carried out within 6 months after use. Then do the maintenance and inspection at least once a year. In harsh installation conditions, the frequency of maintenance and inspection should be increased.

a: If the maintenance and inspection items fail, please remove the dust.

b: Please check whether the electrical contact parts are deformed and damaged, and clean the surface.

c: metal particles and burnt around it. Rust, acidification and dust on the contact surfaces can cause poor contact, so do some manual work and measure the necessary contact resistance.

d: If the ATS is wet or left unused for a long time, please dry it before turning on the power. After removing the dust, use a 500V megohmmeter to measure the insulation resistance of the normal power supply and the AC power supply. The load side and two poles, including the insulation resistance, when using live parts and metal plates, the insulation resistance should not be less than 10MQ.

Professional Inspection: Engage qualified personnel to regularly inspect the ATS, verifying proper operation.

Routine Cleaning: Periodically remove dust and debris to ensure optimal performance.

Electrical Contact Check: Inspect electrical contacts for wear or damage and tighten any loose connections to maintain reliable operation.

Humidity Control: Maintain a dry environment to prevent moisture-related malfunctions

Insulation Testing: Routinely test insulation resistance to verify adherence to safety standards.

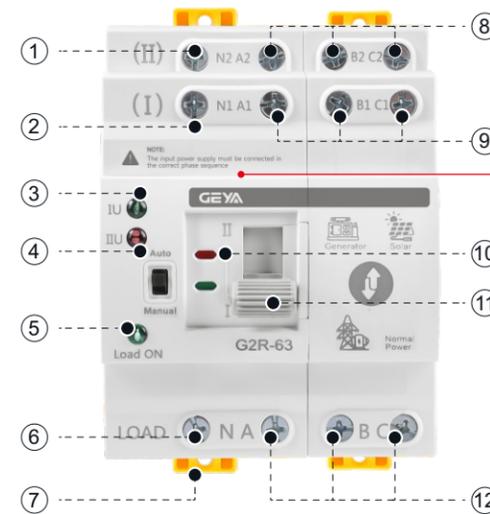
Proper Storage: Store the ATS in a protected environment, shielded from dust, humidity, and physical harm when not in use.

Adhering to these refined maintenance procedures ensures the safe and effective functionality of ATS.

## ► Wiring

1. The ATS is equipped with screw-type terminals, each with a width of 7.4 mm, suitable for copper wires with a cross-sectional area of 1 to 16 mm<sup>2</sup>
2. When wiring, strip the wire to a length of 12 to 13 mm; it is recommended to use a duckbill-shaped terminal for secure connection.
3. Tighten the screws with a recommended torque of 2.5 Nm to ensure proper tightening without damaging the terminals.

## ► Wiring instructions



**注意 NOTE:**  
输入电源必须按照正确相序接入  
The input power supply must be connected in the correct phase sequence

### 电源指示灯状态 Power indicator light status

当电源处于欠压状态时，指示灯闪烁（每两秒闪一次）；  
当电源处于过压状态时，指示灯闪烁（每两秒闪两次）；  
当电源切断时，指示灯熄灭。

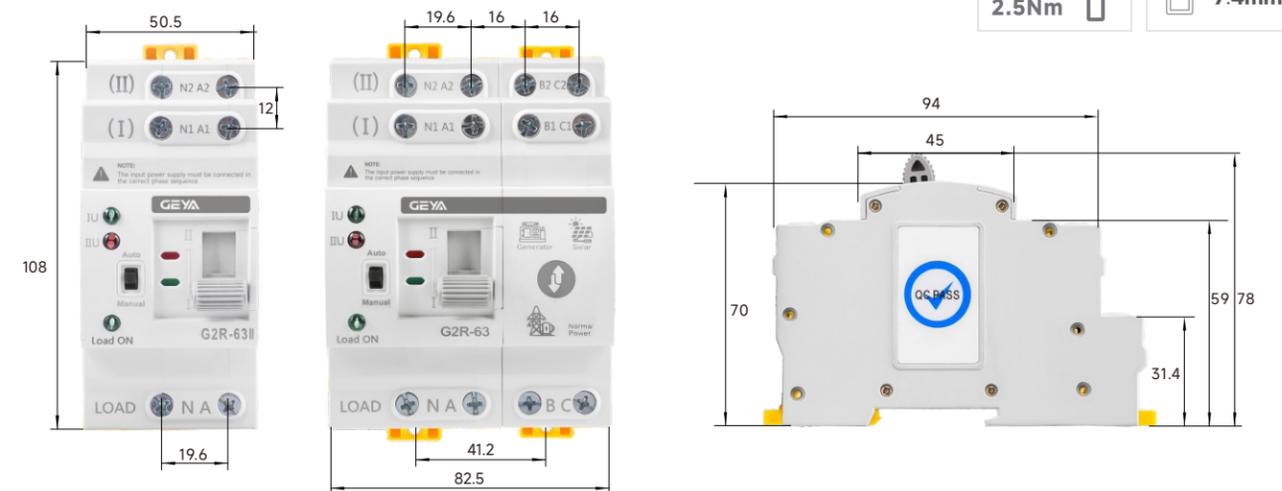
When the power supply is under voltage, the indicator light flashes (Flashes every two seconds);  
When the power supply is in an overvoltage state, the indicator light flashes (Flash twice every two seconds);  
When the power is cut off, the indicator light goes out.

- |                                       |                                      |   |
|---------------------------------------|--------------------------------------|---|
| ① 备用电源零线<br>Backup power neutral wire | ⑤ 负载电源<br>Load power                 | ⑨ 常用电源火线<br>Common power live wire                                |
| ② 常用电源零线<br>Common power neutral wire | ⑥ 负载输出零线<br>load output neutral wire | ⑩ 合闸指示(绿色:工作ON红色:断开OFF)<br>Closing indication (Green:ON, Red:OFF) |
| ③ 常用电源指示灯<br>Common power supply      | ⑦ 导轨卡扣<br>Din-Rail buckle            | ⑪ 手动操作手柄<br>Manual operation handle                               |
| ④ 备用电源指示灯<br>Backup power supply      | ⑧ 备用电源火线<br>Backup power live wire   | ⑫ 负载输出火线<br>load output live wire                                 |

## ► Size

Product size: 108X50.5X78(2P)  
108X82.5X78(4P)

螺丝扭力 Screw torque	接线柱宽度 Terminal width
2.5Nm	7.4mm





## Isolated automatic transfer switch

GB/T14048.11-2016



# GATS-GA



Dual power automatic transfer switch is a new type of automatic transfer switch that integrates switch and logic control in one and truly realizes mechatronics integration. It is suitable for rated insulation voltage to 1000V, rated frequency 50Hz, rated voltage to 400V, and agreed heating current to 800A power distribution equipment of industrial enterprises. The automatic conversion of the main power supply and the standby power supply used as a power supply system or the automatic conversion pole of two load devices are safely isolated; Widely used in hospitals, shopping malls, banks, high-rise buildings, coal mines, telecommunications, iron ore, highways, airports, industrial assembly lines and military facilities do not allow power outage important occasions.

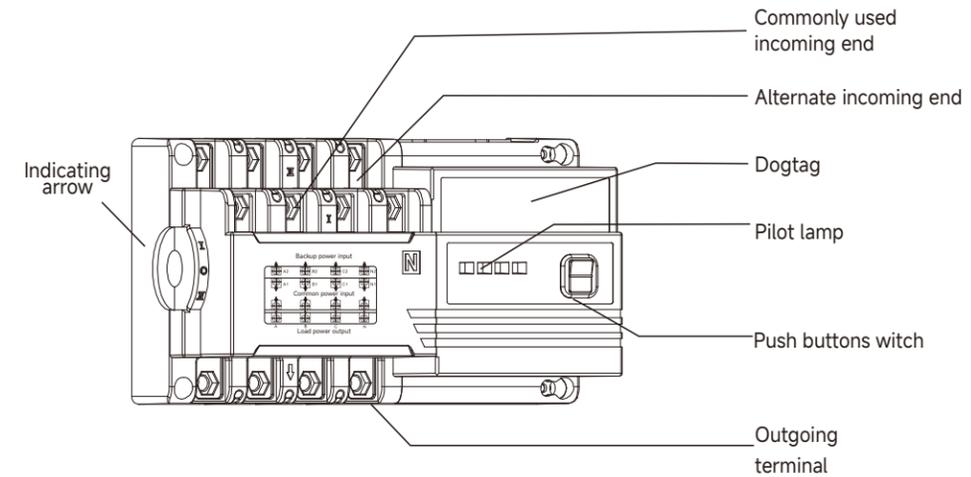
### ► Technical Specification

GATS-GA	
Product shell	125 250 800
Product current	16 20 32 40 50 63 80 100 125 160 180 200 225 250 300 315 400 500 630 800A
Product classification	Load switch type
Product standard	GB/T14048.11-2016
ATSE	PC grade
Switch attachment	IEC947-6-1 GB14048.11
Rated operating voltage(Ue)	AC400V
Rated switching capacity(AEms)	10Ie
Rated Breaking capacity(AEms)	8Ie

### ► Switch control type and corresponding function (automatic switching)

- 1).Basic type: self-recovery, I route priority, with starting generator signal;
- 2).Fire type: self-recovery, I priority,DC24V strong cutting, with start generator signal;
- 3).Intelligent type: split external wiring intelligent controller, with overvoltage, undervoltage, lack of phase, broken equal detection protection, can set I priority, II priority, no priority (self-throw not self-recovery) automatic fire 24V double, fire broken line double, fire feedback signal, start generator signal.
- 4).Self-recovery: when the usual power is off (or out of phase), the switch automatically switches to the standby power supply, and when the usual power supply returns to normal, the switch automatically returns to the usual power supply.
- 5).Fire double: In an emergency or equipment maintenance, start the fire power supply (constant voltage), the switch automatically switches to "0" to cut off the power:
- 6).With generator (oil engine): when the mains power supply is off (or out of phase), it sends a signal to start the oil engine, so that the oil engine automatically starts, such as normal power generation, the switch will automatically convert to the power supply and when the mains power supply returns to normal, the double power switch will automatically return to the mains power supply, and the generator signal will automatically turn off and start, the generator will stop generating power.

### ► Switch structure description



Electrical button switch: control switch internal control line power supply, button switch open, switch to achieve automatic conversion;

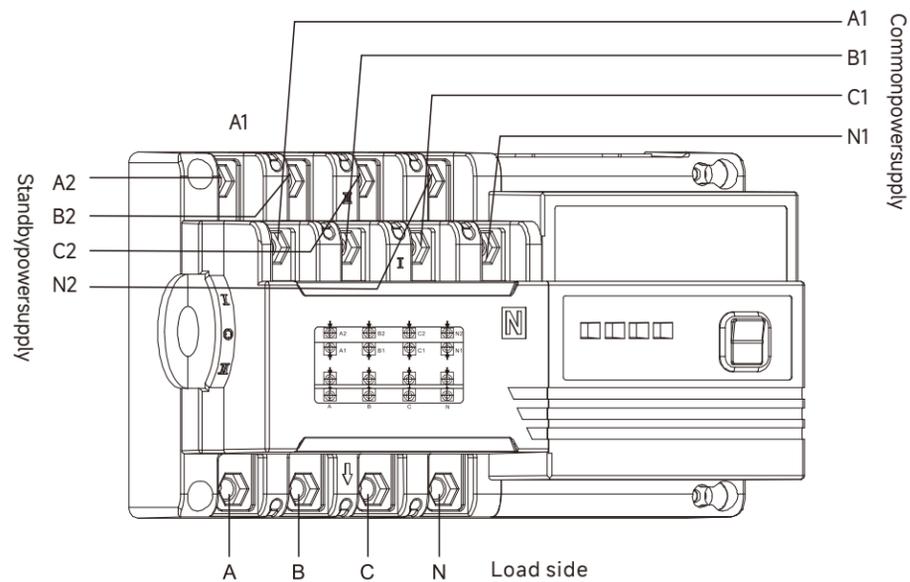
Operating handle: When manually operating with the operating handle, the button switch must be turned off first;

Indicator: Indicates the position of the three states (I, O, and II) of the arrow, indicating that the arrow pointing to "I" indicates that the switch I is on, indicating that the arrow pointing to "II" indicates that the switch II is on, indicating that the arrow pointing to "O" indicates that the switch I and the switch II are off (fire fighting).

### ► Switch instruction

- 1、 non-professionals, do not install; Do not open it without our permission to avoid damage.
- 2、 Please read this manual carefully before installation to avoid improper use.
- 3、 the rated voltage of the internal control power supply of the switch is 220V, from the C1.N1 of the common power supply and the C2.N2 of the standby power supply, within the rated control voltage range of 85%-110%, the switch can work normally.
- 4、 the switch into the wire end power supply should have overvoltage protection, so as not to damage the internal circuit board control motor.
- 5、 the switch outlet power supply should have short-circuit protection, so as not to short-circuit the current is too large and burn the switch body.
- 6、 when using the installation, please turn off the electric button switch, and switch to: "0".
- 7、 When wiring the switch, please measure and distinguish the A.B.C.N of the power input line and connect it to the corresponding pole of the switch.
- 8、 before power use, please measure again whether the C.N voltage is within the rated control voltage range of 85%-110%, and then turn on the electrical button switch and formally put into work.

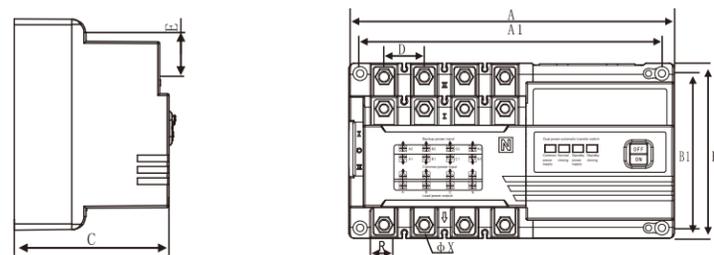
► Switch connection method



► Switch debugging instruction

1. use the operating handle, repeatedly operate the switch three times, the switch should operate flexibly
2. automatic debugging: according to the wiring diagram to connect the corresponding line, confirm and then open the button switch and switch on the dual power supply, the switch should be switched to "I" : then disconnect the common power supply, the switch should be switched to "II" : then switch on the common power supply, the switch should return to "I".
3. fire debugging: in any case, start the fire power button, the switch should be turned to "0" file
4. detection signal indicator: normal/standby power on/off, switch "I/II" when the signal indicator should be given the corresponding indication.
5. after debugging, please turn off the power first, and then use the handle to switch to "0".

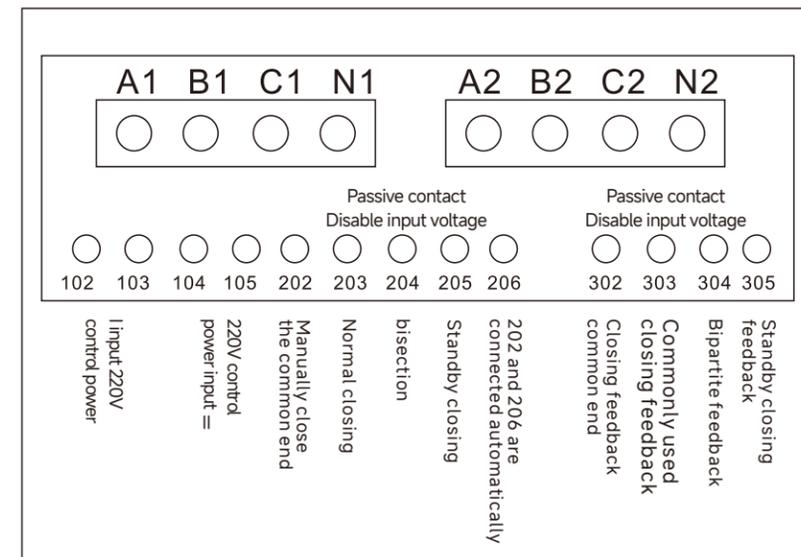
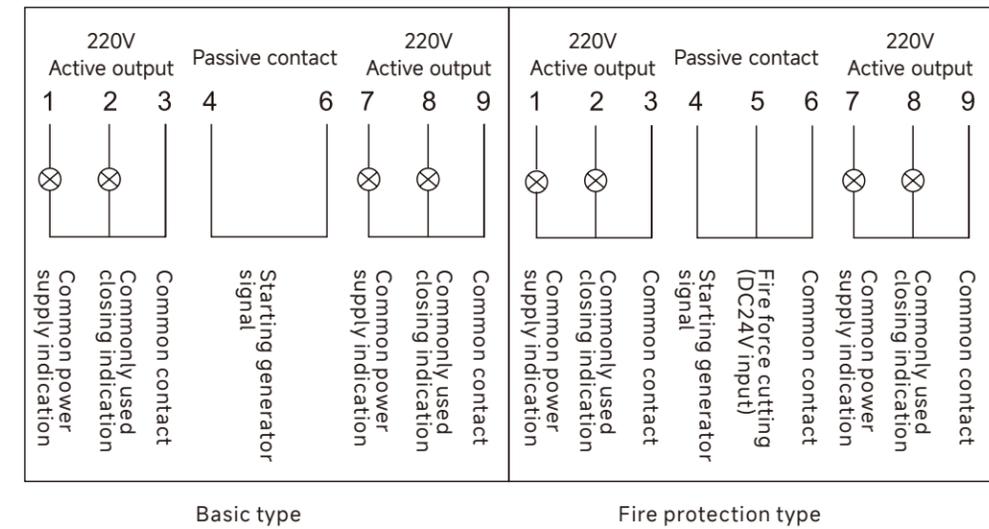
► Outline Overall And Installing Dimensions



Mounting size table Unit (mm)

Type dimension specification	A	A1	B	B1	C	D	R	φX
125/4P	235	217	129	113	95	29	14	6
250/4P	310	291	176	150	131	46	25	8
630/4P	452	429	255	221	199	65	40	12

► External terminal wiring diagram



intelligent



## Automatic Transfer Switch

GB/T14048.11-2016



# GATS-G



This product is a PC-class automatic transfer switch (hereinafter ATS). It is mainly used for AC 50Hz/60Hz, rated voltage of 400V and below, and rated working current of 1250A in a two-neutral grounded power supply system. Switch between them to ensure the reliability and safety of power supply. The ATS has "normally closed", "backup closed" and "two-way open" positions. It is widely used in automatic conversion of common power supply and backup power supply of power supply system or automatic conversion and safety isolation of two load devices. The product is compliant with the standard of GB/T14048.14 "Low-voltage switchgear and control equipment - Part 6-1 Multifunctional electrical transfer switch electrical appliances".

### Product use precautions

- 1) This device can only be installed, tested and maintained by professionals.
- 2) Before installation, testing, setting and maintenance, the two power supplies of the device must be cut off.
- 3) It must be checked with a voltmeter to confirm that the power supply has been disconnected.
- 4) The device must be grounded reliably as required.
- 5) Before the device is powered on, the cabinet door and arc extinguishing cover (sheet) should be reset.
- 6) Illegal operation may result in electric shock, burning or explosion.

### Working conditions

- ✓ Ambient temperature: The ambient temperature is -5°C~+40°C, and the average temperature should not exceed +35°C within 24 hours.
- ✓ Atmospheric humidity: When the maximum temperature is +40°C, the relative humidity should not exceed 50%, and the monthly maximum relative humidity is 90%. Higher relative humidity can be allowed at lower temperatures. Special measures should be taken for the occasional condensation caused by temperature changes.
- ✓ Installation height: The altitude of the installation site should not exceed 2000 meters.
- ✓ Pollution level: The environmental pollution level of the installation site is level 3.
- ✓ Usage category: The use category is: AC-33B.
- ✓ Electromagnetic environment: Applicable to environment A. The use of this product in environment 8 will cause harmful electromagnetic interference, in which case the user needs to take appropriate protective measures.

### Transportation and storage conditions

- ✓ The product shall not be affected by rain and snow during transportation.
- ✓ The storage environment temperature is between -25°C~+55°C, and the relative humidity should be lower than 95% (at 25°C).

### Model and Meaning

G	ATS	G	□	□
Firm code	Product name			Poles number
GEYA ELECTRICAL	automatic transfer switch		A basic type (not shown) C basic type (with fire-fighting power generation) D basic type (with three-phase detection + fire-fighting power generation)	3P 4P

### Product functions

Controller code	Features
type A	1.Common power indication and closing status indication 2.backup power indication and closing status indication 3.Single-phase(A-phase)phase loss detection
Type C	1.Common power indication and closing status indication 2.backup power indication and closing status indication 3.Single-phase(A-phase)phase loss detection 4.Fire-fighting linkage, power generation start and stop function
Type D	1.Common power indication and closing status indication 2.backup power indication and closing status indication 3.Fire protection linkage, power generation start and stop function, three-phase phase loss detection

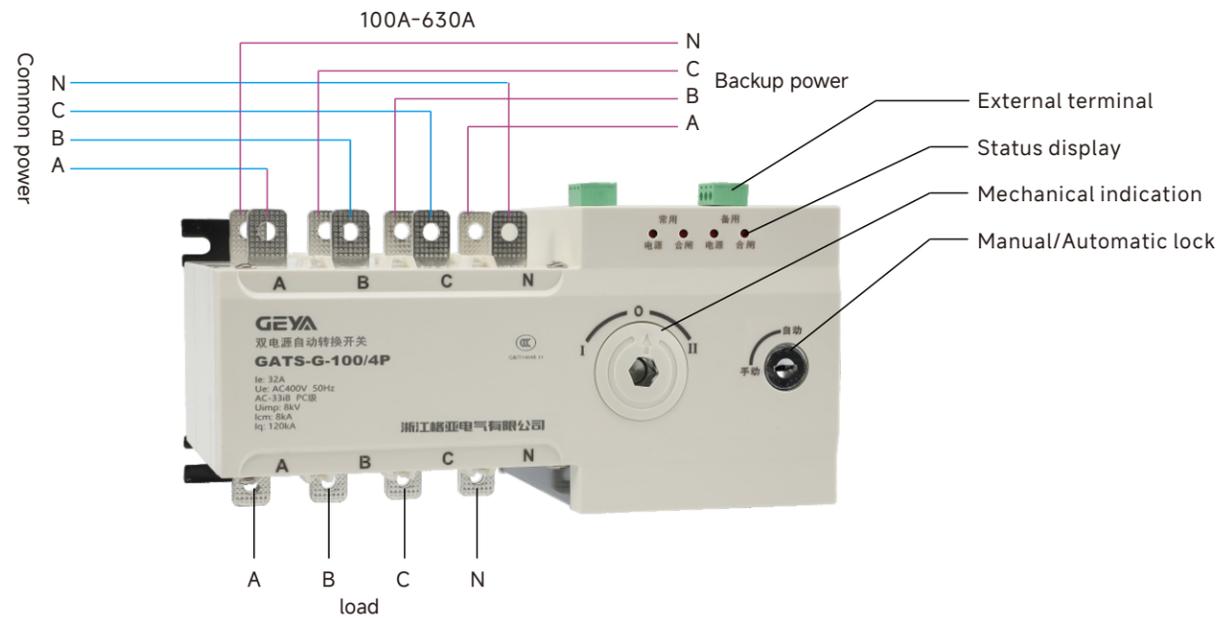
### Function parameter sheet

Item	Function code	Type A	Type C	Type D
Working power		AC230V 50/60Hz		
Auxiliary working voltage		AC230V		
Power consumption		≤10W		
Working positions		Three working positions		
Operation		Automatic, manual and manual remote control operation		
Working mode		automatic switching and automatic recovery/automatic switching without automatic recovery		
Display		Only the power supply and closing signal LED display integrated single-phase detection		
Installation		All-in-one		
Voltage monitoring		Single phase detection	Single phase detection	Three-phase phase loss detection
Generator control		--	✓	
Fire-fighting linkage control		--	✓ (Passive contact input)	

### Technical Specification

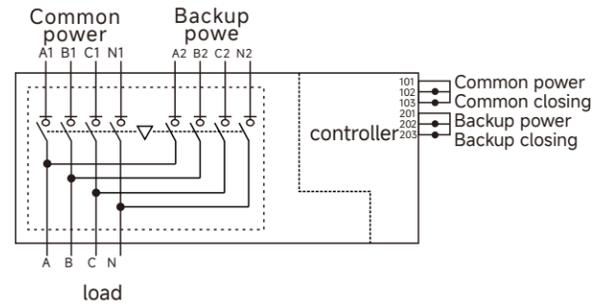
Frame current(A)	100	150	250	400	630	1000	1250
Rated insulation voltage	690V						
Rated impulse withstand voltage	8KV						
Rated working current(A)	16A,20A,25A,30A 32A,40A,50A,60A 63A,70A,75A,80A,100A	125A 140A 160A	200A 225A 250A	315A 350A 400A	500A 630A	800A 1000A	1250A
Rated short-circuit making capacity	8KA	17KA	26KA	50KA			
Rated limited short-circuit current	120KA						
Control voltage	AC230V						

► Wiring diagram



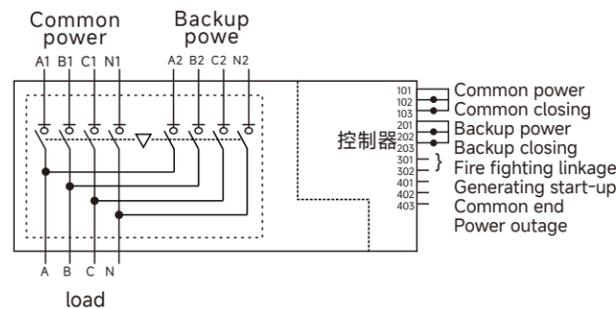
► Terminal definition

100A~630A type A wiring diagram



- 101-103: Common power supply external status indicator signal output (active AC220V0.5A)
- 101---Common neutral line for signal light
- 102---Common power signal output
- 103---Common closing signal output
- 201-203: External status indicator signal output of backup power supply (active AC220V0.5A)
- 201---Common neutral line for signal light
- 202---Backup power signal output
- 203---Backup closing signal output

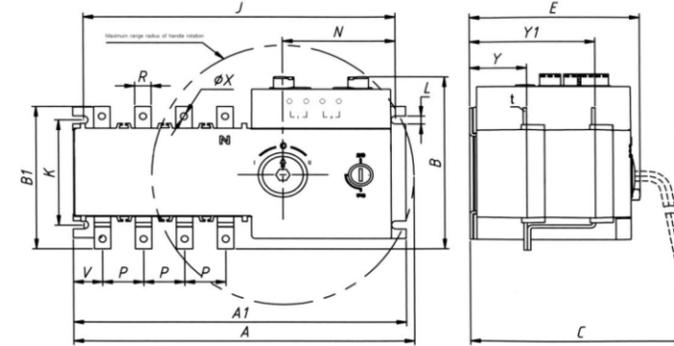
100A~630A type C/type D wiring diagram



- 301/302: Fire linkage signal input passive short-circuit
- 1. When the load fire occurs, the 301 and 302 short-circuit control switch to zero and cut off the load power supply
- 401-403: The generator starts and stops the passive output of the control signal.
- 1. When the mains is faulty 402.401 closes, start the generator
- 2. When the mains returns to normal, 402.403 closes and the generator stops working.

► Outline Overall And Installing Dimensions

100A~630A



Specification	Product and Installation Dimension																
	In	A	A1	B	B1	C	E	J	K	L	N	P	R	V	X	Y	Y1
100A/4P	330	244	142	123	165	125	228	85	6.5	83	30	14	21	6.5	41.5	91.5	2.5
160A/4P	374	301	175	140	200	166	285	102	7	94	36	20	32	8.5	55.5	125.5	3.5
250A/4P	436	373	175	178	250	198	350	108	6.5	105	50	24	37	11	72	157	3.5
630A/4P	502	433	260	260	295	244	416	180	9	101	65	40	47.5	12	83	193	5
1000A/4P	1050	636	365	355	373	320	612	220	11	83.5	120	60	71	13	109	241	8
1250A/4P	1050	636	375	366	373	320	612	220	11	83.5	120	80	71	13	109	241	8

► Use and Maintenance

1. Working voltage  
The rated working voltage of this product is: AC230V 50/60Hz.
2. Wiring  
When wiring the product, it should be strictly in accordance with the wiring mark, and the neutral wire should be connected to the neutral terminal for three-pole products. Carry out the wiring of fire linkage and power generation control according to the actual situation. Finally, make sure that the product is well grounded.
3. Inspection and maintenance  
During the use of the product, general inspection should be carried out regularly, and the power supply should be manually or automatically converted once to check whether the product is running normally. Regular maintenance to remove dust and maintain the insulating properties of the product



## Isolation Switches

IEC60947-1(1998) GB/T14048.1-2000



HGL



Modular design structure with flexible and diverse combinations, using glass fiber reinforced unsaturated polyester resin to manufacture the shell, with high dielectric performance, protective ability, and reliable safety.

The operating mechanism is an acceleration mechanism with spring energy storage and instantaneous release. The speed of the operating handle is independent of the instantaneous connection and disconnection double break point contact structure. The switch has multiple structures and operating modes, including a window for directly observing the on/off status of the contacts, operations inside, outside, and behind the cabinet, front and side operations, and wiring in front and behind the board.

### ► Applicable scope

The personnel load isolation switch is mainly used for AC 50Hz, rated voltage 660V, DC rated voltage 440V, and rated current up to 3150A. Used for infrequent connection and disconnection of circuits and lines for isolation purposes.

### ► Product Feature

- ✓ The acceleration mechanism with instantaneous release of spring energy storage achieves fast connection or disconnection (13.8 meters/second), independent of the speed of the operating handle, greatly improving the ability to extinguish arcs.
- ✓ The shell made of glass fiber reinforced unsaturated polyester resin has good flame retardancy, dielectric properties, carbonization resistance, and impact resistance.
- ✓ Parallel double break point contacts have self-cleaning effects.
- ✓ All contact materials are copper plated silver alloy with two separate contact surfaces.
- ✓ Large isolation distance.
- ✓ When in the "O" position, three locks can be used simultaneously to lock the handle, reliably avoiding accidental operation.

### ► Model and Meaning

□		—	□A	/	□	□	K	□	B	H
Isolation switch		Agreed heating current	Number of poles: 3 levels, 4 poles	J: Operation outside the cabinet C: Side operated isolation switch	Directly observe the contact window without paying attention	Auxiliary contact code (see table), does not need to be specified	Rear board wiring, front board wiring not noted	Operation behind the cabinet, not in front of the cabinet		
One normally open and one normally closed	F11	F1NO+F1NC								
Two normally open and two normally closed	F22	F2NO+F2NC								

### ► Compliant with standards

- ✓ International standard  
IEC60947-1(1998) "Low voltage switchgear and control equipment Part 1 General principles"  
IEC60947-3(1999) "Low voltage switchgear and control equipment, switches, isolators, isolating switches, and fuse assemblies"
- ✓ National standards  
GB/T14048.1-2000 General Principles for Low Voltage Switchgear and Control Equipment  
GB/T14048.3-2002 "Low voltage switchgear and control equipment, switches, isolators, isolating switches, and fuse assemblies"

### ► Usage environment

The load isolation switch can work reliably under the following conditions:

- ✓ The altitude does not exceed 2000 meters;
- ✓ The ambient temperature shall not be higher than 40 °C, not lower than -5 °C, and the relative humidity shall not exceed 95%;
- ✓ No explosive hazardous media;
- ✓ No rain or snow invading the environment.

**Note:** If it is expected to be used under conditions where the ambient air temperature is above+40 °C or below -5 °C~45 °C, the user should explain to the manufacturer.

### ► Main Technical Parameters

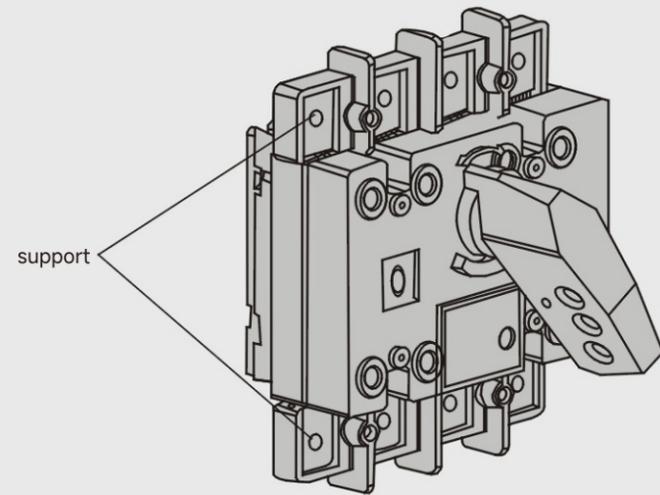
Rated Thermal Current Ith (A)	63A	100A	160A	250A	400A	630A	1000A	1250A	1600A	2000A	2500A	3150A		
Rated Insulation Voltage Ui(V)	750		800		1000									
Dielectric Strength(V)	3000				3500									
Rated Impulse Withstand Voltage Uimp(kV)	6		8		12									
Rated Operational Voltage Ue(V)	AC400、600													
Rated Frequency	50Hz													
Utilization Category	AC-21、22、23													
Rated Operational Current Ie(A)	AC440V	AC-21	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
		AC-22	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
		AC-23	50	80	160	250	400	630	800	1000	1250	1250	2000	2500
	AC660V	AC-21	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
AC-22		63	80	100	200	315	400	630	630	800	1000	1000	1250	
AC-23		40	63	63	125	200	250	250	400	500	/	/	/	
Rated Making Capacity(A)	10Ie													
Rated Breaking Capacity(A)	8Ie													
Rated Short-Circuit Making Capacity Icm(kA Rms)	1.7	1.7	12	17	30	40	70			70				
1S Short-Time Withstand Current Icw(kA Rms)	3	3	10	12	20	25	50			50				
Mechanical Life (Times)	5000	5000	5000		3000		2000			1000				
Electrical Life (Times)	1000	1000	1000		600		300			/				
Operating Torque (N·m)	3.5	3.5	6.5	10	15		27			60				
Weight kg (excluding handle)	3Pole	0.32	0.39	0.88	1.6	3.8	4.2	10.5	10.5	16	31	31	42	
	4Pole	0.34	0.41	1.1	2	4.6	5	13	13	20	40	40	49	

### ► 63-3150A compliant with isolating switch

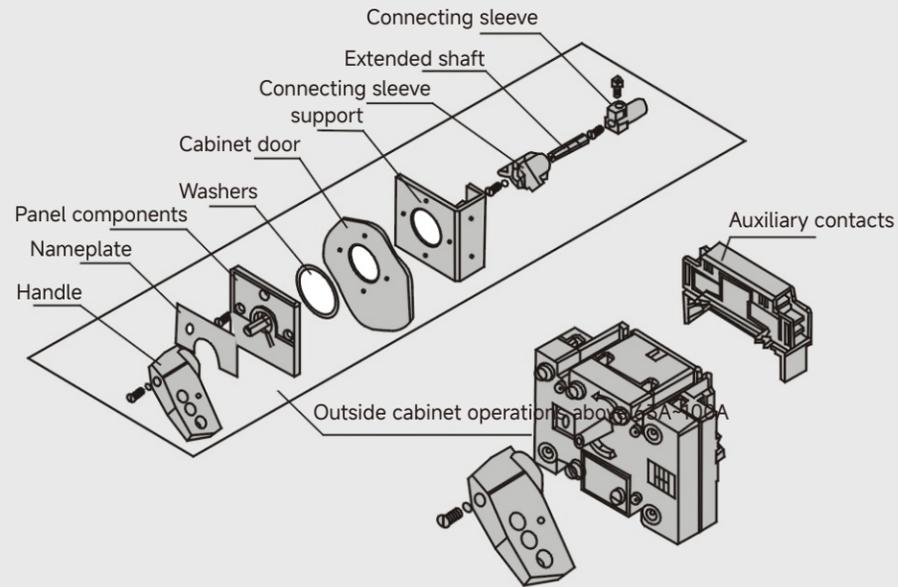
- ✓ The load isolation switch is divided into 7 specifications from 63 to 3150A, which is a modular design basic type with three poles and four poles (three poles+neutral pole that can be turned on or off). It is mainly used for circuit connection and disconnection or electrical isolation, and only for electrical isolation above 1000A.
- ✓ There is a marking window on the front to indicate the on/off status of the contacts.
- ✓ According to the needs, a rear observation window can be provided to directly observe the on/off status of the contacts. The window style can be found in the operating load isolation switch behind the 160A-1600A/H cabinet.
- ✓ Can be equipped with two sets of auxiliary contacts.
- ✓ Cable insulation cover can be configured.

► 63~100A load isolation switch

- 63A~100A is suitable for making and breaking circuits or electrical isolation.
- 63A~100A have three poles and four poles (three poles+neutral pole that can be turned on or off).
- Two sets of auxiliary contacts can be installed as needed.
- Side cabinet inside and outside operations can be provided as needed.

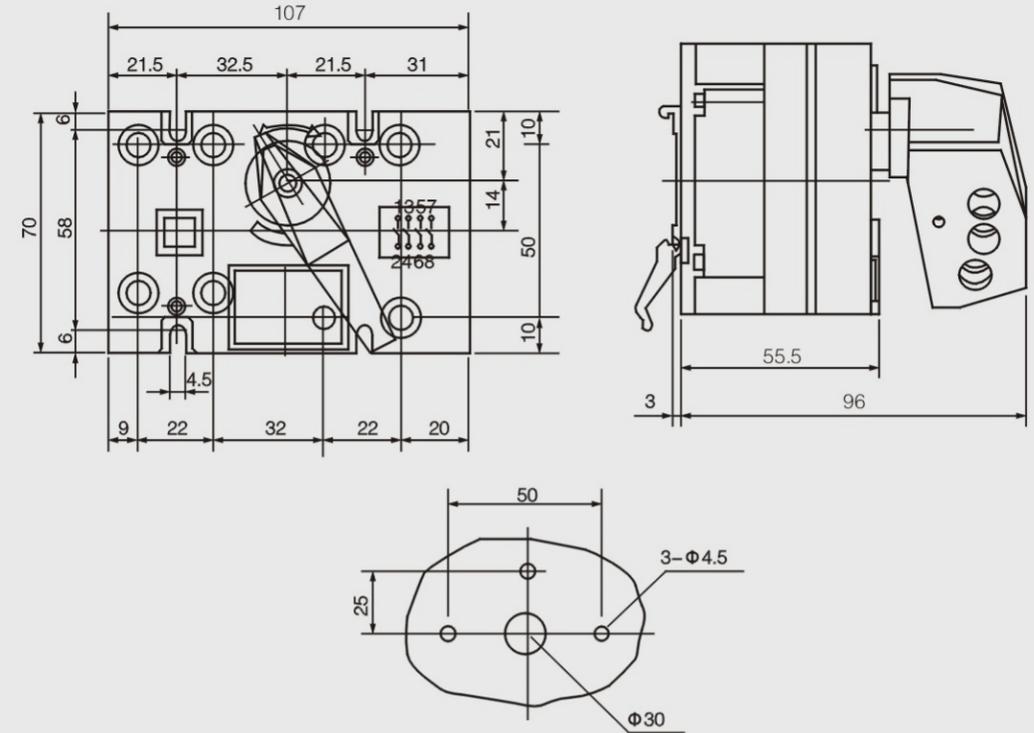


Note: Remove the bracket to create a 40A~63A load switch



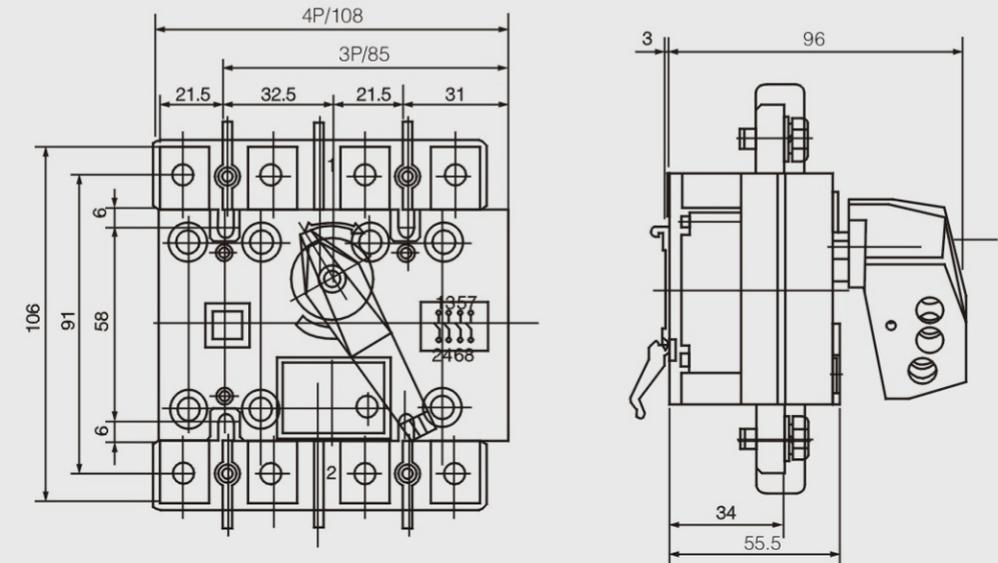
► Outline and installation dimensions of 63~100A load isolation switches

■ 63A direct operation

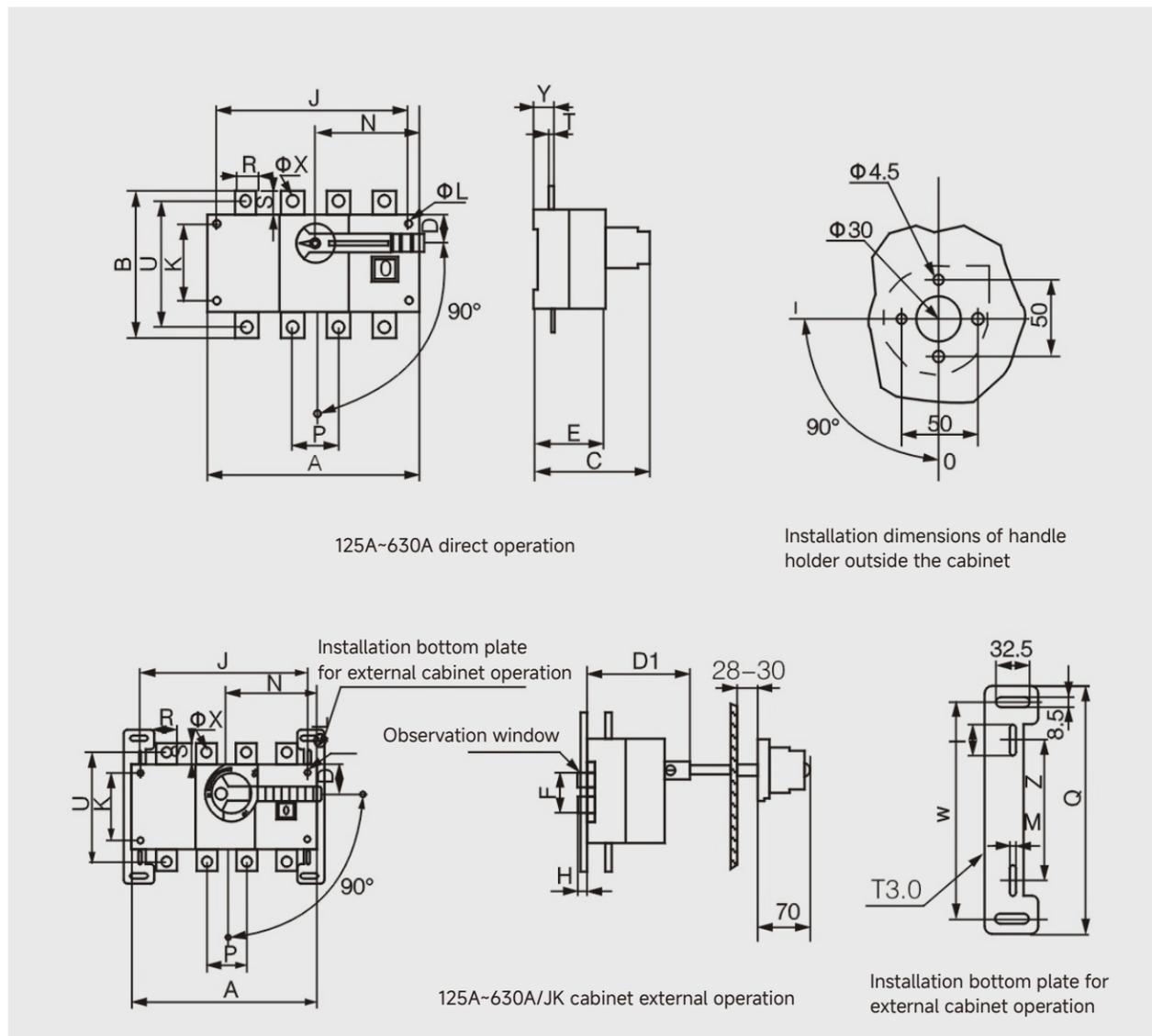


Installation dimensions for external cabinet operations

■ 100A direct operation



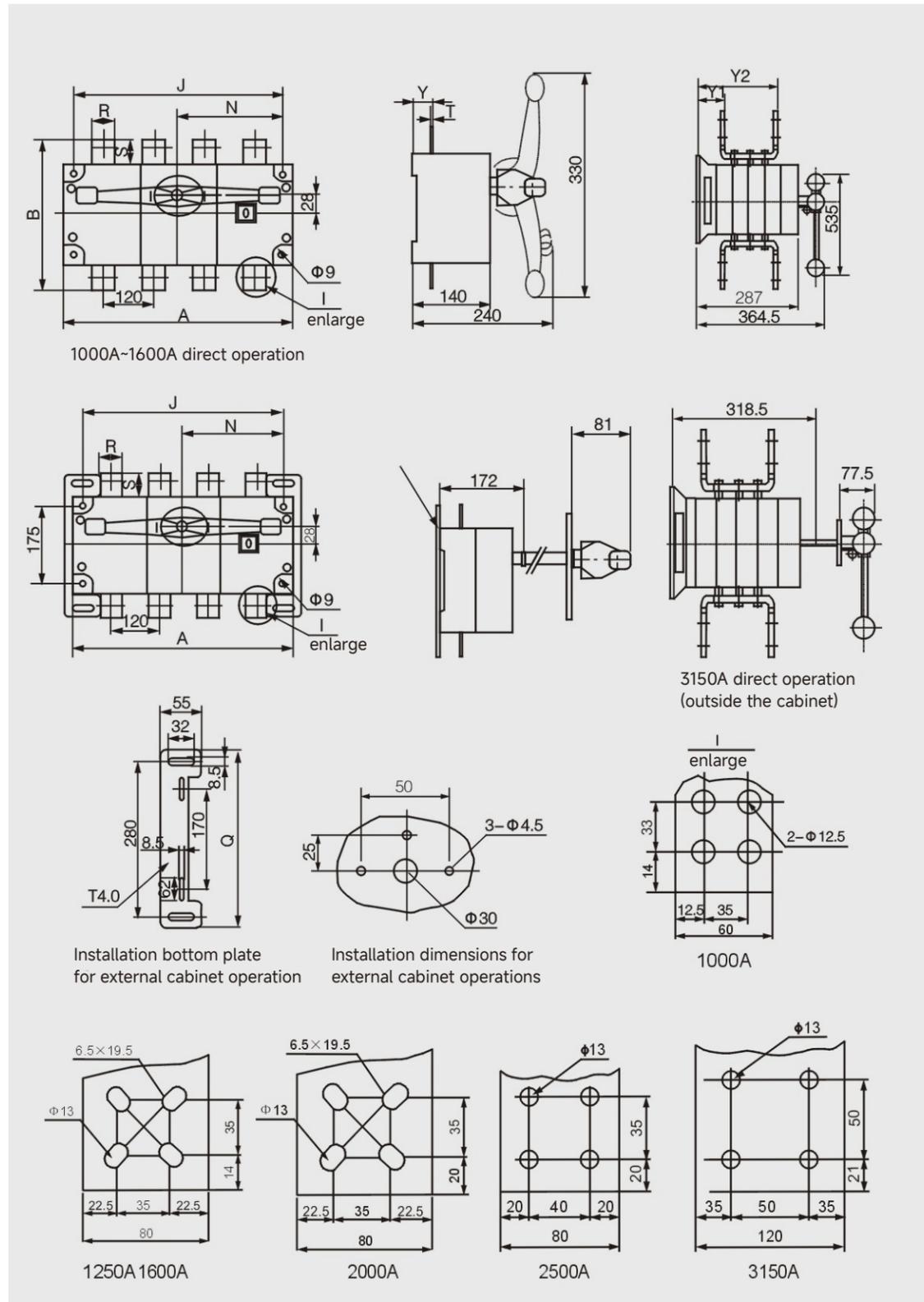
► Appearance and installation dimensions of 125~630A load isolation switches



specifications	plate size				
	I	M	Z	W	Q
125~630A					
125A	55	5.5	85	190	218
160A	55	5.5	85	190	218
200A	55	5.5	85	190	218
250A	55	5.5	85	190	218
315A	60	6.5	130	240	270
400A	60	6.5	130	240	270
500A	60	6.5	130	240	270
630A	60	6.5	130	240	270

specifications	External dimensions and installation dimensions																					
	In	A	A1	B	C	D	D1	E	ΦL	J	J1	K	N	P	R	S	T	U	ΦX	Y	F	H
125A/3	140	50	50	135	116	27	92	71	5.5	120	120	65	85	36	20	235	3.5	85	9	24	52	10
125A/4	170	50	50	135	116	27	92	71	5.5	150	150	65	85	36	20	235	3.5	85	9	24	52	10
160A/3	140	50	50	135	116	27	92	71	5.5	120	120	65	85	36	20	235	3.5	85	9	24	52	10
160A/4	170	50	50	135	116	27	92	71	5.5	150	150	65	85	36	20	235	3.5	85	9	24	52	10
200A/3	180	60	60	170	128	35	104	83	5.5	160	160	90	115	50	25	290	3.5	110	11	25	79	13
200A/4	230	60	60	170	128	35	104	83	5.5	210	210	90	115	50	25	290	3.5	110	11	25	79	13
250A/3	180	60	60	170	128	35	104	83	5.5	160	160	90	115	50	25	290	3.5	110	11	25	79	13
250A/4	230	60	60	170	128	35	104	83	5.5	210	210	90	115	50	25	290	3.5	110	11	25	79	13
315A/3	230	85	85	240	169	50	133	113	7	210	210	140	145	65	30	400	5	160	11	36	100	24
315A/4	290	85	85	240	169	50	133	113	7	270	270	140	145	65	30	400	5	160	11	36	100	24
400A/3	230	85	85	240	169	50	133	113	7	210	210	140	145	65	30	400	5	160	11	36	100	24
400A/4	290	85	85	240	169	50	133	113	7	270	270	140	145	65	30	400	5	160	11	36	100	24
500A/3	230	85	85	260	169	50	133	113	7	210	210	140	145	65	40	400	6	160	12	36	100	24
500A/4	290	85	85	260	169	50	133	113	7	270	270	140	145	65	40	400	6	160	12	36	100	24
630A/3	230	85	85	260	169	50	133	113	7	210	210	140	145	65	40	400	6	160	12	36	100	24
630A/4	290	85	85	260	169	50	133	113	7	270	270	140	145	65	40	400	6	160	12	36	100	24

► Appearance and installation dimensions of 125~630A load isolation switches



specifications		External dimensions and installation dimensions																	
		In	A	A1	B	D	E	F	G	J	J1	N	R	S	T	U	Y	Y1	Y2
	1000A/3	378	105	105	312	-	-	-	-	353	186	60	480	8	200	48	-	-	311
	1000A/4	492	105	105	312	-	-	-	467	246	60	480	8	200	48	-	-	311	
	1250A/3	378	105	105	338	20	40	16	35	353	186	80	480	8	200	48	-	-	311
	1250A/4	492	105	105	338	20	40	16	35	467	246	80	480	8	200	48	-	-	311
	1600A/3	378	105	105	338	20	40	16	35	353	186	80	480	10	200	49	-	-	311
	1600A/4	492	105	105	338	20	40	16	35	467	246	80	480	10	200	49	-	-	311
	2000A/3	378	-	-	455	20	40	20	40	353	186	80	560	10	200	-	75.5	227.5	311
	2000A/4	492	-	-	455	20	40	20	40	467	246	80	560	10	200	-	75.5	227.5	311
	2500A/3	378	-	-	455	20	40	20	40	353	186	80	560	10	200	-	75.5	227.5	311
	2500A/4	492	-	-	455	20	40	20	40	467	246	80	560	10	200	-	75.5	227.5	311
	3150A/3	378	-	-	505	25	50	25	50	353	186	100	560	14	200	-	78	230	311
	3150A/4	492	-	-	505	25	50	25	50	467	246	100	560	14	200	-	78	230	311



**Intelligent Circuit Breaker**  
IEC60947-2,GB14048.2



**GYW1**



Intelligent circuit breakers are used to control and protect low-voltage distribution networks, and are generally installed in low-voltage distribution box as the main switch for overall protection.  
AC rated current 200A-6300A; short-circuit breaking capacity 80KA-120KA(effective value);rated working voltage AC690V and below;

**Technical Specification**

Model	2000					
Frame rating current rating Inm(A)	2000					
Rated current In(A)	200/400/630	800	1000	1250	1600	2000
Rated working voltage Ue	AC400,690 50Hz					
Rated insulation voltage Ui	AC1000,50Hz					
Rated impulse withstand voltage Uimp	8000					
Power frequency tolerance voltage U	AC350V/1min,50Hz					
Poles	3/4					
Pole N rated current IN(A)	50%In 100%In					
Rated ultimate short-circuit segment capacity Icu(kA)(RMS)	AC400V	80				
	AC690V	50				
Rated operating short-circuit segment capacity Ics(kA)(RMS)	AC400V	50				
	AC690V	40				
Rated short-circuit connecting capacity Icm(kA)(peak)	AC400V	176				
	AC690V	105				
Rated short-time tolerance current(1s)Icw(kA)(RMS)	AC400V	50				
	AC690V	40				
Full breaking time (without additional delay)	25-30					
Closing time	Max70					
Operational performance	Electric life	AC400V	500			
		AC690V	500			
	Mechanical life	No maintenance	2500			
		Have maintenance	10000			

**Technical Specification**

Model	4000				6300			
Frame rating current rating Inm(A)	4000				6300			
Rated current In(A)	2500	2900	3200	3600	4000	4000	5000	6300
Rated working voltage Ue	AC400,690 50Hz							
Rated insulation voltage Ui	AC1000,50Hz							
Rated impulse withstand voltage Uimp	8000							
Power frequency tolerance voltage U	AC350V/1min,50Hz							
Poles	3/4							
Pole N rated current IN(A)	50%In 100%In							
Rated ultimate short-circuit segment capacity Icu(kA)(RMS)	AC400V	100				120		
	AC690V	65				75		
Rated operating short-circuit segment capacity Ics(kA)(RMS)	AC400V	65				100		
	AC690V	20				65		
Rated short-circuit connecting capacity Icm(kA)(peak)	AC400V	220				264		
	AC690V	143				165		
Rated short-time tolerance current(1s)Icw(kA)(RMS)	AC400V	65				85		
	AC690V	50				65		
Full breaking time (without additional delay)	25-30							
Closing time	Max70							
Operational performance	Electric life	AC400V	500					
		AC690V	500					
	Mechanical life	No maintenance	2500				2000	
		Have maintenance	10000				8000	

**Normalo Perating Conditions**

The ambient temperature is -5°C or +40°C, and the dally average maximum temperature is +35°C.  
The altitude of the installation sit should be lower than 2000m.  
Relative humidity: The maximum value is 50% at 40°C, and the maximum value is 90% at 25°C.  
Considering the condensation on the surface due to temperature changes, special measures should be taken.  
The pollution level is 3  
The installation category of the main circuit of the circuit breaker, the voltage trip coil, and the primary coil of the power transformer is IV, and the installation category of the remaining auxiliary circuits and control circuits is III.  
The vertical inclination of the circuit breaker should be smaller than +5.