GYM9DC

DC MCB

General

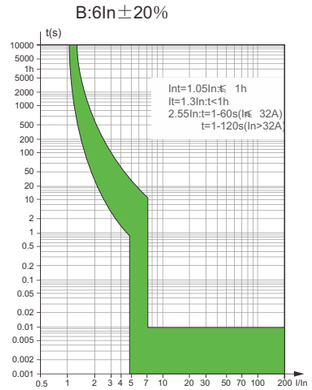
GYM9DC circuit breaker is used for DC rated voltage to 1000V, rated current to 63A line, for overload and short circuit protection, and can also be used as an infrequent operation of the line.Circuit breakers are used in DC applications such as communications and photovoltaic syst.

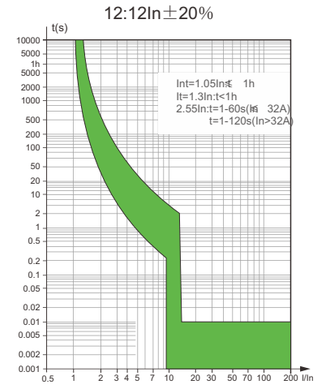
- In complicance with IEC6094.2

Data	
Rated current In	1-63A
Poles	1P 2P 3P 4P
Rated voltage Ue	1P:250V~ 2P:500V 3P:750V 4P:1000V
Insulation voltage Ui	1000V
Rated breaking capacity Ics=Icu	6000A
Rated impulse withstand voltage(1.2/50) Uimp	6KV
Thermo-magnetic release characteristic	B:6In±20% C:12In±20%
Mechanical life	20000

Installation	
Contact position indicator	yes
Portection degree	IP20
Reference temperature for setting of thermal element	30
Ambient temperature (with daily average ≤35℃)	-5~+40℃
Storage temperature	-25~+70℃
Terminal connertion type	Cable/U-type busbar/Pin-type busbar
Terminal size top/bottom for cable	25mm² 18-3
Tightening torque	3.0N*m 22
Mounting	ON DIN rail FN 60715(35mm) by means of fast clip device
Connection	Top and bottom

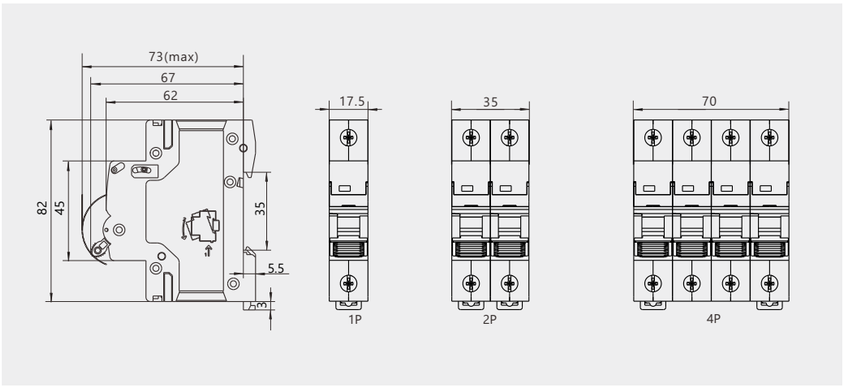
Tripping graph





Wiring diagram of DC ap

Overall and mounting dimensioned chart

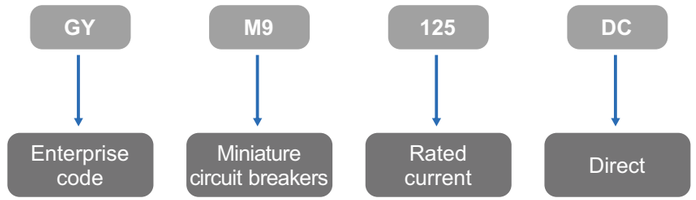


GYM9-125DC

DC Miniature Circuit Breakers

Scope of application

GYM9-125DC series DC miniature circuit breakers (hereinafter referred to as circuit breakers) are suitable for lines with a rated current of 125A and below DC and a rated DC voltage of 250V and 500V. It is used for overload and short-circuit protection of the facilities and electrics of the DC power distribution system, and can be widely used in electric power, post and telecommunications, AC, industrial and mining enterprises and other industries. This product complies with GB14048.2, IEC60947-2 standard requirements.



Product applicable working conditions and working environment

- The ambient air temperature should not exceed +40°C at the highest, and -5°C at the lowest, and the average value should not exceed +35.
- The altitude of the installation site should not exceed 2000m.
- The relative humidity of the atmosphere does not exceed 50% when the highest ambient temperature is +40°C, and can have higher relative humidity at lower temperatures. The monthly average maximum relative humidity of the wettest month is 90%, and the monthly average relative humidity of the month is 90%. The average minimum temperature is +25°C, taking into account condensation on the product surface due to temperature changes.
- The pollution level is 2.
- The installation category is Class II and Class III.
- Use TH35-7.5 steel mounting rail to install.
- The inclination of the installation surface and the vertical surface should not exceed 5°.
- Compress the wiring with screws.
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Scope of application

GYM9-125DC DC circuit breaker is composed of shell, operating mechanism, thermal release, electromagnetic release contact system, arc extinguishing system, etc. It has overload and short circuit protection functions, unique design structure and powerful permanent magnet arc extinguishing The system enables the product to have a short-circuit capacity of 10kA, a mechanical life of more than 20,000 times, and a beautiful appearance. The installation guide rail is TH35-7.5 standard steel installation rail, and has the following characteristics: The handle is designed above the front face, and it has a strong sense of safety during operation. , feel comfortable, must pay attention to the "+, -" polarity when wiring, the power supply is in and out, which is in line with the characteristics of the power supply line, easy to install and save wires.

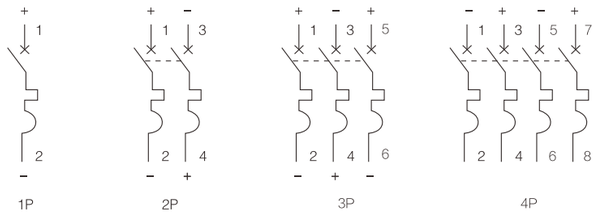
Main specifications and techical paramters

Frame rating rated current Inm (A)	number of poles	Rated voltage (V)	Rated current In (A)	Rated ultimate short-circuit capacity		Instantaneous tripping current
				Breaking current Icu (A)	Time constant T(ms)	
63	1	DC250V	1,2,3,4,6,10 16,20,25,32 40,50,63	10000	10	8In-12In
	2,3	DC500V				
	4	DC1000V				
125	1	DC250V	80, 100, 125	10000	10	8In-12In
	2,3	DC500V				
	4	DC1000V				

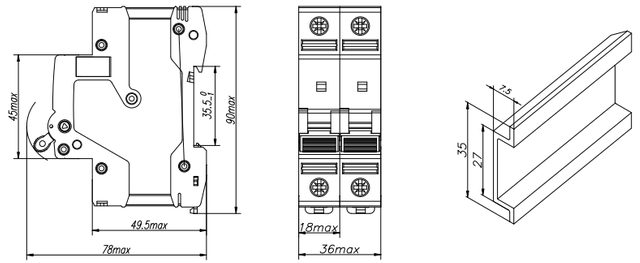
Standard Time-Current

Test	DC test current	Starting state	Trip or no-trip time limit	Expercted putcome	Remark
a	1.05In	Cold state	t≥1h(In≤63A) t≥2h(In>63A)	Does not trip	
b	1.3In	Immediately after a test	t<2h(In>63A) t<1h(In≤63A)	trip	The current rises steadily to the specified value within 5S
c	8In	Cold state	t≥0.2s	Does not trip	Close the auxiliary switch power on
	12In		t<0.2s	trip	

Wiring diagram



Dimensions



Miniature Circuit Breaker

符合标准 IEC60898-1, GB10963.1

GYM9H MCB

Scope of application

GYM9H high breaking small circuit breaker is suitable for AC 50/60Hz, rated voltage 240V/415V, rated current up to 63A for overload and short circuit protection, and it can also be used for infrequent operation conversion of lines under normal conditions .

It' s suitable for terminal distribution lines in commercial office buildings, residential and general industrial use.

Compliant with : IEC60898-1, GB10963.1, and obtained CE, CB, BV and other certifications.

Technical Parameter

Electrical Characteristics

Poles	Rated current (In)	Rated voltage (Ue)	Rated insulation voltage (Ui)	Rated frequency	Dielectric test voltage	Trip method
1P、2P、3P、4P	1~63A	240/415V	500V	50/60Hz	2000V/1min	Thermal magnetic trip

Rated impulse withstand voltage (Uimp)	Rated breaking capacity (Icn)	Operating breaking capacity (Ics)	Thermo-magnetic release characteristic		
			B:(3~5)In	C:(5~10)In	D:(10~16)In
4kV	6kA	7.5kA	■	■	■

Mechanical properties

Mechanical life	Electric life		Protection class		Reference temperature for setting of thermal element	Ambient temperature	Storage temperature
	240/h(≤below 32A)	120/h (>32A)	Direct install	Installed in distribution box			
20000	20000 (≤20A)	6000 (>20A)	Ip20	Ip40	30°C	-25°C+60°C	-25°C+70°C

Other characteristics

Wiring size		Contact Status Indication	Fault Indication	Circuit identification	Connection	Assemblable accessories
Copper/Hard Wire	Cord/Hoop Terminals					
1-25mm²	1-16mm²	■	——	■	Top and bottom	■

IEC60947-2,GB14048.2

GYM9H-Z MCB

Scope of application

GYM9H-Z DC circuit breaker is used for DC voltage up to 600V, rated current up to 63A for overload and short circuit protection, and it can also be used for infrequent operation and conversion of the line. The circuit breaker is used in DC panels, energy storage devices, etc. DC non-polar applications.

Compliant with: GB 14048.2, IEC 60947-2, IEC 60947-2 Annex P

Product Features: double busbars, transparent logo, quick closing function and independent appearance patent.

Technical Parameter

Electrical Characteristics

Poles	Rated current (In)	Rated voltage (Ue)			
		1P	2P	3P	4P
1P、2P 3P、4P	1~63A	48、60、125、150V DC	110、125、250、300V DC	450V DC	600V DC

Rated impulse withstand voltage (Uimp)	Rated breaking capacity (Icn)	Operating breaking capacity (Ics)	Trip method	Thermo-magnetic release characteristic	
				B	C
6kV	6kA	6kA	Thermal magnetic trip	5.5In±20%	8.5In±20%

Mechanical properties

Mechanical life	Electric life		Protection class		Reference temperature for setting of thermal element	Ambient temperature	Storage temperature
	240/h(≤below 32A)	120/h (>32A)	Direct install	Installed in distribution box			
20000	2500 (≤20A)	1500 (>20A)	Ip20	Ip40	30°C	-25°C+60°C	-25°C+70°C

Other characteristics

Wiring size		Contact Status Indication	Fault Indication	Circuit identification
Copper/Hard Wire	Cord/Hoop Terminals			
1-25mm²	1-16mm²	■	——	■