RCCB SERIES

Residual Current Circuit Breaker

MR·BREAKER

SGR-100M/H Series	Residual Current Circuit Breaker
Standard	IEC/EN 61008-1
Rated conditional short-circuit current(kA)	6,10
Rated current(A),In	16/25/40/63/80/100
Number of poles	2P(1P+N),4P(3P+N)
Rated sensitivity currents(mA),I∆n	10,30,100,300(10mA max 25A)
Rated making and breaking capacity	500A or 10 × In
Rated impulse withstand voltage Uimp(kV)	4
Rated voltage(V)	2pole AC 240
	4pole AC 415
Ambient temperature (℃)	-25~+40,Max.95%humidity
Environment temperature(℃)	-40℃~+60℃
Rated residual current making & breaking capacity, I∆m	500A for In=16,25,40A 630A for In=63A 800A for In=80A 1000A for In=100A
Type of trip	Electro-magnetic release
Terminal capacity	Cables up to 35mm^2
Protection degree	IP20
Installation	35mm DIN rail
Residual current operating characteristic	AC/A/AC+S/A+S
Certification	

SGR-100H-2P

SGR-100H-4P

MR·BREAKER

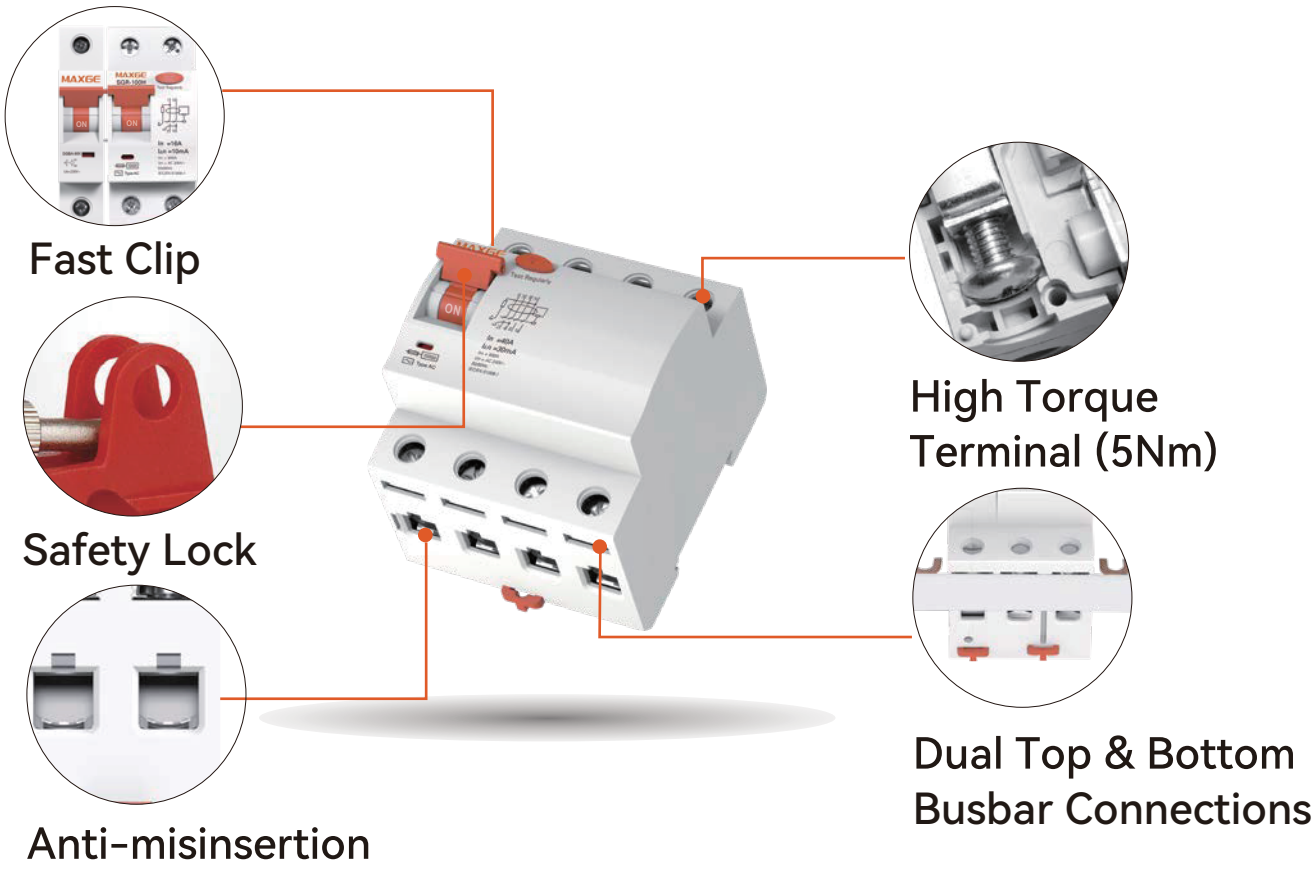
SGR-100M/H Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type AC	Type A	Type A+S + S	Packing unit
 SGR-100H-2P	16	10mA	SGR-100H/2/16/10	SGR-100H/2/16/10-A	SGR-100H/2/16/10-A-S	6
	25		SGR-100H/2/25/10	SGR-100H/2/25/10-A	SGR-100H/2/25/10-A-S	
	16	30mA	SGR-100H/2/16/30	SGR-100H/2/16/30-A	SGR-100H/2/16/30-A-S	
	25		SGR-100H/2/25/30	SGR-100H/2/25/30-A	SGR-100H/2/25/30-A-S	
	40		SGR-100H/2/40/30	SGR-100H/2/40/30-A	SGR-100H/2/40/30-A-S	
	63		SGR-100H/2/63/30	SGR-100H/2/63/30-A	SGR-100H/2/63/30-A-S	
	80		SGR-100H/2/80/30	SGR-100H/2/80/30-A	SGR-100H/2/80/30-A-S	
	100		SGR-100H/2/100/30	SGR-100H/2/100/30-A	SGR-100H/2/100/30-A-S	
	16	100mA	SGR-100H/2/16/100	SGR-100H/2/16/100-A	SGR-100H/2/16/100-A-S	
	25		SGR-100H/2/25/100	SGR-100H/2/25/100-A	SGR-100H/2/25/100-A-S	
	40		SGR-100H/2/40/100	SGR-100H/2/40/100-A	SGR-100H/2/40/100-A-S	
	63		SGR-100H/2/63/100	SGR-100H/2/63/100-A	SGR-100H/2/63/100-A-S	
	80		SGR-100H/2/80/100	SGR-100H/2/80/100-A	SGR-100H/2/80/100-A-S	
	100		SGR-100H/2/100/100	SGR-100H/2/100/100-A	SGR-100H/2/100/100-A-S	
	16	300mA	SGR-100H/2/16/300	SGR-100H/2/16/300-A	SGR-100H/2/16/300-A-S	
	25		SGR-100H/2/25/300	SGR-100H/2/25/300-A	SGR-100H/2/25/300-A-S	
	40		SGR-100H/2/40/300	SGR-100H/2/40/300-A	SGR-100H/2/40/300-A-S	
	63		SGR-100H/2/63/300	SGR-100H/2/63/300-A	SGR-100H/2/63/300-A-S	
	80		SGR-100H/2/80/300	SGR-100H/2/80/300-A	SGR-100H/2/80/300-A-S	
	100		SGR-100H/2/100/300	SGR-100H/2/100/300-A	SGR-100H/2/100/300-A-S	
 SGR-100H-4P	16	10mA	SGR-100H/4/16/10	SGR-100H/4/16/10-A	SGR-100H/4/16/10-A-S	3
	25		SGR-100H/4/25/10	SGR-100H/4/25/10-A	SGR-100H/4/25/10-A-S	
	16	30mA	SGR-100H/4/16/30	SGR-100H/4/16/30-A	SGR-100H/4/16/30-A-S	
	25		SGR-100H/4/25/30	SGR-100H/4/25/30-A	SGR-100H/4/25/30-A-S	
	40		SGR-100H/4/40/30	SGR-100H/4/40/30-A	SGR-100H/4/40/30-A-S	
	63		SGR-100H/4/63/30	SGR-100H/4/63/30-A	SGR-100H/4/63/30-A-S	
	80		SGR-100H/4/80/30	SGR-100H/4/80/30-A	SGR-100H/4/80/30-A-S	
	100		SGR-100H/4/100/30	SGR-100H/4/100/30-A	SGR-100H/4/100/30-A-S	
	16	100mA	SGR-100H/4/16/100	SGR-100H/4/16/100-A	SGR-100H/4/16/100-A-S	
	25		SGR-100H/4/25/100	SGR-100H/4/25/100-A	SGR-100H/4/25/100-A-S	
	40		SGR-100H/4/40/100	SGR-100H/4/40/100-A	SGR-100H/4/40/100-A-S	
	63		SGR-100H/4/63/100	SGR-100H/4/63/100-A	SGR-100H/4/63/100-A-S	
	80		SGR-100H/4/80/100	SGR-100H/4/80/100-A	SGR-100H/4/80/100-A-S	
	100		SGR-100H/4/100/100	SGR-100H/4/100/100-A	SGR-100H/4/100/100-A-S	
	16	300mA	SGR-100H/4/16/300	SGR-100H/4/16/300-A	SGR-100H/4/16/300-A-S	
	25		SGR-100H/4/25/300	SGR-100H/4/25/300-A	SGR-100H/4/25/300-A-S	
	40		SGR-100H/4/40/300	SGR-100H/4/40/300-A	SGR-100H/4/40/300-A-S	
	63		SGR-100H/4/63/300	SGR-100H/4/63/300-A	SGR-100H/4/63/300-A-S	
	80		SGR-100H/4/80/300	SGR-100H/4/80/300-A	SGR-100H/4/80/300-A-S	
	100		SGR-100H/4/100/300	SGR-100H/4/100/300-A	SGR-100H/4/100/300-A-S	

SAFE GREEN SMART

SGR-100M/H Series Residual Current Circuit Breaker

Core Advantages



Detailed Descriptions

1. Fast Clip
Simple and reliable modular design requiring no additional tools or accessories.

2. Enhanced Safety Lock
Integrated lock mechanism to prevent accidental operation and improve safety.

3. Flexible Busbar Configuration
Versatile design supports systems without a busbar, with a single busbar, or with dual busbars.

4. High Torque Terminal (5Nm)
Upgraded terminals allow for a maximum torque of 5Nm, ensuring superior connection integrity.

5. Anti-misinsertion
Unique terminal structure prevents incorrect wiring insertion.

Products Overview of Residual Current Protective Devices

Product name	RCCB	
Product range	SGR-100H	
Product picture		
Standard	IEC/EN 61008-1	
Number of poles	2P(1P+N)	4P(3P+N)
Electrical characteristics		
Rated current(A) In	16~100	
Rated voltage(V)	AC 240	AC 415
Rated residual current(mA)	10,30,100,300 (10mA max 25A)	
Rated conditional short-circuit current(kA)	6,10	
Tripping curve	------	
Residual current operating characteristic	AC,A,S	
Catalogue page NO.	03-07	

MAXGE

SGR-100M/H Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type AC	Type A	Type A+S	Packing unit
 SGR-100M-2P	16	10mA	SGR-100M/2/16/10	SGR-100M/2/16/10-A	SGR-100M/2/16/10-A-S	6
	25		SGR-100M/2/25/10	SGR-100M/2/25/10-A	SGR-100M/2/25/10-A-S	
	16	30mA	SGR-100M/2/16/30	SGR-100M/2/16/30-A	SGR-100M/2/16/30-A-S	
	25		SGR-100M/2/25/30	SGR-100M/2/25/30-A	SGR-100M/2/25/30-A-S	
	40		SGR-100M/2/40/30	SGR-100M/2/40/30-A	SGR-100M/2/40/30-A-S	
	63		SGR-100M/2/63/30	SGR-100M/2/63/30-A	SGR-100M/2/63/30-A-S	
	80		SGR-100M/2/80/30	SGR-100M/2/80/30-A	SGR-100M/2/80/30-A-S	
	100		SGR-100M/2/100/30	SGR-100M/2/100/30-A	SGR-100M/2/100/30-A-S	
	16	100mA	SGR-100M/2/16/100	SGR-100M/2/16/100-A	SGR-100M/2/16/100-A-S	
	25		SGR-100M/2/25/100	SGR-100M/2/25/100-A	SGR-100M/2/25/100-A-S	
	40		SGR-100M/2/40/100	SGR-100M/2/40/100-A	SGR-100M/2/40/100-A-S	
	63		SGR-100M/2/63/100	SGR-100M/2/63/100-A	SGR-100M/2/63/100-A-S	
	80		SGR-100M/2/80/100	SGR-100M/2/80/100-A	SGR-100M/2/80/100-A-S	
	100		SGR-100M/2/100/100	SGR-100M/2/100/100-A	SGR-100M/2/100/100-A-S	
	16	300mA	SGR-100M/2/16/300	SGR-100M/2/16/300-A	SGR-100M/2/16/300-A-S	
	25		SGR-100M/2/25/300	SGR-100M/2/25/300-A	SGR-100M/2/25/300-A-S	
	40		SGR-100M/2/40/300	SGR-100M/2/40/300-A	SGR-100M/2/40/300-A-S	
	63		SGR-100M/2/63/300	SGR-100M/2/63/300-A	SGR-100M/2/63/300-A-S	
	80		SGR-100M/2/80/300	SGR-100M/2/80/300-A	SGR-100M/2/80/300-A-S	
	100		SGR-100M/2/100/300	SGR-100M/2/100/300-A	SGR-100M/2/100/300-A-S	
 SGR-100M-4P	16	10mA	SGR-100M/4/16/10	SGR-100M/4/16/10-A	SGR-100M/4/16/10-A-S	3
	25		SGR-100M/4/25/10	SGR-100M/4/25/10-A	SGR-100M/4/25/10-A-S	
	16	30mA	SGR-100M/4/16/30	SGR-100M/4/16/30-A	SGR-100M/4/16/30-A-S	
	25		SGR-100M/4/25/30	SGR-100M/4/25/30-A	SGR-100M/4/25/30-A-S	
	40		SGR-100M/4/40/30	SGR-100M/4/40/30-A	SGR-100M/4/40/30-A-S	
	63		SGR-100M/4/63/30	SGR-100M/4/63/30-A	SGR-100M/4/63/30-A-S	
	80		SGR-100M/4/80/30	SGR-100M/4/80/30-A	SGR-100M/4/80/30-A-S	
	100		SGR-100M/4/100/30	SGR-100M/4/100/30-A	SGR-100M/4/100/30-A-S	
	16	100mA	SGR-100M/4/16/100	SGR-100M/4/16/100-A	SGR-100M/4/16/100-A-S	
	25		SGR-100M/4/25/100	SGR-100M/4/25/100-A	SGR-100M/4/25/100-A-S	
	40		SGR-100M/4/40/100	SGR-100M/4/40/100-A	SGR-100M/4/40/100-A-S	
	63		SGR-100M/4/63/100	SGR-100M/4/63/100-A	SGR-100M/4/63/100-A-S	
	80		SGR-100M/4/80/100	SGR-100M/4/80/100-A	SGR-100M/4/80/100-A-S	
	100		SGR-100M/4/100/100	SGR-100M/4/100/100-A	SGR-100M/4/100/100-A-S	
	16	300mA	SGR-100M/4/16/300	SGR-100M/4/16/300-A	SGR-100M/4/16/300-A-S	
	25		SGR-100M/4/25/300	SGR-100M/4/25/300-A	SGR-100M/4/25/300-A-S	
	40		SGR-100M/4/40/300	SGR-100M/4/40/300-A	SGR-100M/4/40/300-A-S	
	63		SGR-100M/4/63/300	SGR-100M/4/63/300-A	SGR-100M/4/63/300-A-S	
	80		SGR-100M/4/80/300	SGR-100M/4/80/300-A	SGR-100M/4/80/300-A-S	
	100		SGR-100M/4/100/300	SGR-100M/4/100/300-A	SGR-100M/4/100/300-A-S	

SGR-100M/H Series Residual Current Circuit Breaker

Life

In	Operating cycles	
	On-load operating cycles	Off-load operating cycles
16,25,40,63,80,100	6000	4000

Breaking time of residual current

Max.breaking time						
Residual current operating characteristic	In(A)	I△n(A)	I△n	2 I△n	5 I△n	5-500A
A/AC	16/25/40/63/80/100	0.01,0.03,0.1,0.3	0.15s	0.08s	0.04s	0.04s
AC+S/A+S		0.03,0.1,0.3	0.13~0.5s	0.06~0.2s	0.05~0.15s	0.04~0.15s

Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
16	2.5	max 5
25	4	
40	10	
63	16	
80	25	
100	35	

Features

When designing residual current devices, manufacturing technology and type of routine tests, the IEC61008-1 standards were considered.Important features are:
Up to date design
User-friendly connection of conductors and busbars
Resistance to current surges; unwanted tripping excluded
Simple and solid fixing to a 35 mm mounting rail in compliance with EN 60715
Additional colour display of main contacts position (red:contacts closed, green:contacts open)

Overall and mounting dimensions